Individual strategies as interaction modes for handling institutional logic diversity over time: A case study on a public-private collaboration project

Emilene Leite a,1,*, Mads Bruun Ingstrup b,2

a Orebro University School of Business, Orebro, Sweden
b Department of Entrepreneurship and Relationship Management, University of Southern Denmark, Denmark

1. Introduction

Public–private collaboration—defined by Quelin, Kivleniece, and Lazzarini (2017) as a hybrid organizational arrangement pursuing social and economic goals through various forms of formal and informal relationships between public, private, and civil society organizations—can be difficult to realize due to institutional logic diversity. Such diversity has been addressed in several papers and in different contexts (see, e.g., Ingstrup, Aarikka-Stenroos, & Adlin, 2021; Jay, 2013; Öberg & Shih, 2014). Institutional logics stem from actors’ practices, assumptions, values, beliefs, and rules, which influence the actors’ cognition and behavior (Thornton & Ocasio, 1999). Therefore, institutional logics, among other things, influence actors’ decision-making and rationality (Thornton, Ocasio, & Lounsbury, 2012) as well as their identity (Lok, 2010).

Existing research on institutional logic diversity highlights that multiple logics can lead to different outcomes (see, e.g., Binder, 2007; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Jay, 2013; Tracey, Philips, & Jarvis, 2011). Brantnell and Baraldí (2020) stress that institutional logic diversity can cause logic conflicts, lead to logic coexistence, support organizational survival, and initiate organizational decline. However, the research has greatly focused on how organizations experience and deal with institutional logic diversity (see, e.g., Greenwood et al., 2011; Pache & Santos, 2010) and has devoted less attention to addressing this topic from an individual perspective (see, e.g., Goodrick & Rey, 2011; Pache & Santos, 2013; Thornton et al., 2012). Some researchers advocating an individual perspective have outlined strategies for individuals to handle multiple institutional logics. Pache and Santos (2013) highlight ignorance, compliance, defiance, compartmentalization, and combination, and Smets, Jarzabkowski, Burke, and Spee (2015) emphasize segmenting, bridging, and demarcating.

Despite the findings of these and similar papers, it remains unclear how individuals operationalize these strategies over time when dealing with institutional logic diversity. To fill this gap and to promote the individual perspective in the institutional logic diversity research, we address the following research question: how do individuals use different strategies as interaction modes to foster institutional logic convergence in a public–private collaboration project? In this setting, individuals are understood as persons employed at a public, private or civil society organization. According to Lok (2010), how individuals perceive themselves impacts how they relate to and later deal with...
diverse institutional logics.

We approach our research question by building on research on public–private collaboration (Kim & Mahoney, 2010; Mahoney, McGahan, & Pitelis, 2009; Rybniec, Plakolm, & Baumgartner, 2020) and institutional logics (Pache & Santos, 2013; Smets et al., 2015; Thornton & Ocasio, 1999). Moreover, we rely on a single case study on a smart city development project involving multinationals, a city administration, and civil society organizations. The project ran from 2014 to 2017, and its main goal was to transform the Brazilian city of Aguas into a digital hub with advanced technological public services. This particular context offers a unique possibility for investigating individuals’ institutional logics and assessing how these logics converge through the use of several strategies over time.

The above-described approach enables us to contribute to the research on institutional logic diversity in three ways. First, we outline that individuals use different strategies as interaction modes to achieve institutional logic convergence and that these strategies serve diverse purposes over time in a project. Second, we show how balancing organizational and individual goals eases institutional logic convergence in a project. Third, we highlight that individuals can be facilitators of institutional logic convergence. Such individuals share at least two characteristics: they are able to unite diverse institutional logics and they are perceived to have a central position in a project.

The remainder of this paper is organized as follows. Section 2 introduces the research on public–private collaboration and Section 3 outlines the research on institutional logics. Section 4 explains the research strategy, data collection, and data analysis and Section 5 presents the case study. Section 6 launches the analysis and discussion of the case study. Section 7 concludes the paper, offering practical implications and highlighting research limitations that may serve as future research topics.

2. Public–private collaboration

Mahoney et al. (2009) explain that hybrid organizational arrangements, such as public–private collaboration, emerge at the intersection of public, civil, and private spheres of economic activity. The aim of such collaboration is to deliver benefits that go above and beyond the economic realm and contribute to achieving social goals and societal well-being (Kivleniece & Qelin, 2012). However, this type of collaboration also faces several challenges mainly because it is characterized by both market and non-market governance structures as well as dissimilar coordination and control mechanisms. Kim and Mahoney (2010) highlight that public–private collaboration requires alignment between public-like supervision from the public sphere and market-like autonomy from the private sphere.

Traditionally, economic research has emphasized the notion of economic profits and focused on the formal economic exchange mechanisms governing public–private collaboration. Such studies have been dedicated to comprehending the risks inherent in public–private collaboration and the associated exchange hazards (Rybniec et al., 2020). Management and marketing research, by contrast, has predominantly centered on the relationships, informal exchange mechanisms, and managerial capabilities of actors engaged in public–private collaboration (Jay, 2013; Kivleniece & Qelin, 2012; Leite & Bengtson, 2018). Along these lines, various studies have emphasized the social dimension of public–private collaboration and the different organizational logics that appear when different actors operating within distinct decision-making and legal boundaries interact (see, e.g., Gerard, McGahan, & Prabhu, 2012; Vurro, Dacin, & Perrini, 2010). Such complex multi-stakeholder relationships inherent in public–private collaboration, thus, bring together not only firms but also non-profit organizations with mission-driven demands to address the needs of groups or communities (Vurro et al., 2010). Hence, in the pursuit of achieving economic benefits with a social purpose, firms have embedded themselves in collaborations aimed at serving public, private, and social interests (Jay, 2013; Leite, 2022). Consequently, there is an emerging consensus that given the interdependencies between public, private, and civil society actors (Kim & Mahoney, 2010), research must move beyond contractual considerations to accommodate broader organizational, relational, and contextual factors that may promote both economic and social goals.

Recent studies show that firms establishing close relationships with civil society organizations and public actors may benefit from the exchange of resources, for example, by obtaining preferential treatment or gaining access to insider information (Li & Zhang, 2010). Firms can also influence public policy in their favor (Pecorino, 2001). Yet it is relevant to point out that public actors—more specifically, governments—are dependent on firms. In other words, firms need political support, and governments need firms for job creation and economic growth (Kim & Mahoney, 2010; Leite, 2020). In a city context, public–private collaboration has been widely used as a means to improve public infrastructure, promote economic growth, and deliver quality services to citizens (Hadjikhani, Leite, & Pahlberg, 2019). This involves engagement with, or the participation of, firms and public actors in the financing and provision of infrastructure projects, such as toll roads, ports, and water utilities (Hodge & Greve, 2007). This implies that an interdependent relationship exists between public and private actors. Hence, the theoretical view of this paper goes beyond mainstream management and marketing research and assumes that firms are interwoven in a network containing both public and private actors (Keillor & Hult, 2004). At the outset, nurturing business relationships with governments is beneficial for firms, but this is also challenging owing to the difficulties in coordinating different goals, demands, expectations, and interests. While firms aim for profit maximization and are driven by economic goals, governments are motivated by social goals and maximizing societal well-being. Indeed, private and public actors are embedded within “multiple normative orders, and/or constituted by more than one cultural logic” (Kraatz & Block, 2008, p. 243) that may affect collaboration positively or negatively. Accordingly, divergent institutional logics must be investigated in relation to public–private collaboration.

3. Institutional logics

Institutional theory has, over the years, focused on institutional change. Initially, the research dealt mainly with how external shocks foster change, whereas later, change was explained by shifts in institutional logics at multiple levels (Kroezen & Heugens, 2019). Institutional logics are typically framed as “the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (Thornton & Ocasio, 1999, p. 804), and they are demonstrated at the societal, field, organizational, and individual levels (Besharov & Smith, 2014; Friedland & Alford, 1991). According to Besharov and Smith (2014), this definition rests on four assumptions: (1) the display of societal-level institutional logics happens within organizations but in different ways due to both internal and external forces, (2) organizations typically apply multiple institutional logics, (3) organizations’ understanding and implementation of institutional logics are affected by actors and their practices and nature, and (4) institutional logics are dynamic and the logic that dominates in an organization will change over time and space.

Along with this understanding, Thornton et al. (2012) highlight seven ideal-typical societal-level institutional logics: community, corporation, family, market, profession, religion, and state. For this paper, the community, market, and state logics are important. The community logic that civil society organizations follow relies on emotional connections based on, for instance, trust, reciprocity, values, and ideology, and these connections enforce the behavior of group membership and cooperative capitalism (Thornton et al., 2012). The market logic, in which firms are embedded, aims at achieving the economic goals of
that of Pache and Santos (2013), who outline five strategies for individual-centered strategies. One of the key studies in this regard is Greenwood et al., 2011; Kraatz et al., 2011; Thornton & Ocasio, 1999). Besharov and Smith (2014) and Pache and Santos (2010) stress that such institutional logic diversity is observed in several fields, such as healthcare, cultural industries, life sciences, and professional services. In zooming in on institutional logic diversity in public–private collaboration, Jay (2013) outlines in his study on the Cambridge Energy Alliance that re-meshing is helpful in the process of transforming and combining different institutional logics within an organization and that it can lead to new innovative organizational practices. Ingstrup et al. (2021) instead adopt an interorganizational perspective in their investigation of a Finnish circular economy cluster and highlight that fits and misfits among the institutional logics of firms, government bodies, and academic organizations foster alignment and misalignment at the actor-type, relationship, and system levels. They mention that to create alignment at the system level, only goals that embrace all present institutional logics should be pursued. Along the same interorganizational lines, Oberg and Shih (2014) emphasize in their study on drug development in Taiwan that firms and the national government possess diverse institutional logics that affect their interests, priorities, and goals when collaborating. Whereas the firms aim at developing and selling drugs, the government focuses on strengthening the life science sector for the good of the national economy, ensuring the efficient use of national resources and making sure that patients get safe treatments.

However, the consequences of institutional logic diversity is subject to debate. Brantnell and Baraldi (2020) highlight that diversity can lead to logic coexistence (Binder, 2007; McPherson & Sauder, 2013), can support organizational survival (Jay, 2013; Kraatz & Block, 2008), can initiate organizational decline (Pache & Santos, 2010; Tracey et al., 2011), and can cause logic conflicts (Greenwood et al., 2011; Thornton & Ocasio, 1999). Both internal and external forces can foster institutional logic conflicts (DiMaggio & Powell, 1983; Fiss & Zajac, 2004), and to comprehend and categorize diverse levels of conflict, Besharov and Smith (2014) offer a framework that builds on two dimensions: the degree of centrality—that is, whether one or more dominant logics are crucial for the functioning of organizations—and the degree of compatability—that is, whether the dominant logics argue for compatible or contradictory actions. They ultimately emphasize that organizations with multiple dominant institutional logics that prescribe contradictory actions are home to extensive conflicts, whereas organizations with one dominant institutional logic that suggests compatible actions are known for having no conflicts. In between these poles are two other levels of conflict: moderate conflict and minimal conflict.

To address logic conflicts and the presence of multiple institutional logics in general, existing research points at a few strategies (Greenwood et al., 2010; Kraatz & Block, 2008; Oliver, 1991; Pache & Santos, 2010). Since this paper focuses on how individuals, employed in organizations, handle institutional logic diversity, we will take a closer look at individual-centered strategies. One of the key studies in this regard is that of Pache and Santos (2013), who outline five strategies for how individuals can handle multiple institutional logics: (1) ignorance is when individuals do not deal with a logic because they have overlooked its existence and relevance; (2) compliance is when individuals buy completely into a logic, including its practices, assumptions, values, beliefs, and rules; (3) defiance is when individuals purposely reject a logic and thus its underlying practices, assumptions, values, beliefs, and rules; (4) compartmentalization is when individuals deliberately separate competing logics, and (5) combination is when individuals bring together selected practices, assumptions, values, beliefs, and rules of competing logics. Additionally, on the basis of an ethnographic study on Lloyd’s of London, Smets et al. (2015) introduce three other strategies or balancing mechanisms, as they call them: (1) segmenting is used to isolate competing logics to secure their coexistence, (2) bridging aims at linking different characteristics of competing logics, and (3) demarcating seeks to avoid certain logics being over-privileged. This overview of strategies evinces that compartmentalization and segmenting as well as combination and bridging, respectively, overlap to a great extent.

4. Research methods

This paper is based on an explorative, single case study (Yin, 2017) to understand how individuals use different strategies as interaction modes to foster institutional logic convergence in a public–private collaboration project. We chose the case study approach for three reasons. First, it enables us to grasp how a complex phenomenon like institutional logics evolves over time and in situations where the contextual setting is important (Easton, 1995; Halinen & Törnroos, 2005). Second, using a case study to examine how a project unfolds over time allows the inclusion of processual dynamics and complexities inherent in such a relationship (Jarzabkowski, Bednarek, & Le, 2014). Third, this approach allows us to refine existing theory through analytical generalizations (Eisenhardt & Graebner, 2007; Yin, 2017). Our case study is a smart city development project involving multinationals, a city administration, and civil society organizations. The project ran from 2014 to 2017, and its main goal was to transform the Brazilian city of Aguas into a digital hub with advanced technological public services.

4.1. Case selection and data gathering

Concerning case selection, we decided that the case should contain at least two competing institutional logics, we should have access to the case over a lengthy period, and the case should be information-rich regarding problems in public–private collaboration. The data gathering involved two rounds of semi-structured personal interviews. The first round included 26 interviews conducted from 2014 to 2017, while the second round included three interviews done in 2020 (see Table 1).

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The interviewees were selected employees working for the multinationals, the city administration, and the civil society organizations involved in the project. Besides choosing interviewees for their familiarity with the project, we employed snowballing (Patton, 2002). The interview questions were divided into the following themes: (1) project setting, including motivations for the collaboration and coordination of activities and resources among the actors; (2) institutional setting, including practices, assumptions, values, beliefs, rules, knowledge of technology, and the city context; and (3) changes in the project and institutional setting, including changes in the political agenda and willingness of political actors to offer public digital services to their citizens. The average time spent per interviewee was 60–80 min and the interviews were recorded and later transcribed. In addition to the interviews, we reviewed and analyzed secondary data, such as local and international newspaper articles, firm reports, and videos, to triangulate information across and within data sources (Gibbert, Ruigrok, & Wicki, 2008), and as with most qualitative research on interorganizational matters, the data were gathered both in real time and retrospectively (Halinen, Medlin, & Tornroos, 2012).

4.2. Data analysis

The data analysis followed the abductive process involving an ongoing interplay between data and theory (Van Maanen, Soerensen, & Mitchell, 2007). We conducted a processual analysis to observe the forces shaping individuals’ practices, assumptions, values, beliefs, and rules (Petigrew, 1997) and carried out data-driven coding (Ryan & Bernard, 2003), of which some codes were defined a priori, such as collaboration and conflict. In line with Le Ber and Branzei (2010), we expected that the presence of different institutional logics would lead to both collaboration and conflict in a public–private collaboration.

We used NVivo to code the data systematically, and this helped us grasp emerging themes and observe that complex public–private collaboration contains mixed governance features and operating logics. We structured the data coding in two steps. In step one, we developed first-order open codes using the interviewees’ own words. Our aim was to identify emerging themes regarding collaboration with actors with different institutional logics (Gioia, Corley, & Hamilton, 2013). This resulted in an analysis of motivations and coordination of the project. We also included the interviewees’ relationship development and their interaction in different phases of the project in the analysis. In step two, we generated second-order codes with a specific theoretical background in mind, such as institutional logic diversity in public–private collaboration. Thus, we focused on differences in individuals’ practices, assumptions, values, beliefs, rules, knowledge of the technology, and knowledge of the city context. This step resulted in a more abstract level of coding in which conflict, negotiation, and convergence emerged as key elements explaining institutional logic convergence in a public–private collaboration project.

By clustering these codes, we first noticed a period of conflict (phase 1) due to the coexistence of market and state institutional logics. Then two other phases emerged when we returned to the case narratives and second-order themes as well as when we mapped the aggregated dimensions to the most important project events (Petigrew, 1997): a period of negotiation (phase 2) when individuals notice the potential rewards from collaborating and a period of convergence (phase 3) where the project is successfully implemented.

5. Case study

The case study takes its point of departure in Aguas, Brazil, which is a small urban city located 187 km from Sao Paulo. It is home to around 3000 citizens (IBGE, 2013) and is characterized by a high human development index of 0.854. Due to its manageable size and the low level of investment required for smart city development, Telefonica/Vivo chose Aguas to test technologies with the potential to improve their public services while serving as a showcase to generate business opportunities. Telefonica/Vivo is a Spanish telecom operator that provides connectivity between devices and is the largest telecommunications firm in Brazil. However, Telefonica/Vivo did not possess all technologies necessary for the smart city development project and invited Ericsson, Huawei, and ISPM along. These multinationals represent a broad range of competencies. Ericsson is a Swedish developer of hardware and software for telecommunications services, Huawei is a Chinese manufacturer of telecommunications equipment, and ISPM is a Brazilian developer of Internet of Things (IoT) platforms based on 4G technology. Other project partners were the city administration and two civil society organizations: Vanzolini Foundation and Telefónica Foundation.

Based on a collaboration agreement with the city mayor and acting as project leader, Telefonica/Vivo decided to invest over USD 560,000 to replace the city’s old cable network with a fiber-optic network. In the meantime, the city administration performed a public consultation by asking citizens about their needs and wishes concerning public services. The citizens identified digital services in parking, street lighting, safety, health, and education as focus areas, and for each of these focus areas, a sub-project was initiated.

To address parking, Ericsson installed 300 sensors and, in combination with smart street devices, they made it possible to inform drivers about vacant parking spaces in the city. Ericsson also installed smart street lighting solutions that helped to reduce electricity costs. To address safety, Huawei installed 15 surveillance cameras and alarms, allowing the police to better monitor and improve the city’s safety. Additionally, ISPM integrated these services on an IoT platform that allowed the city administration to provide a better public service by using information gathered to allocate public resources more efficiently. To address health, ISPM developed an e-health solution to replace paper versions of medical records and an app to reduce cases of mosquito transmission of dengue. Dengue is a mosquito-borne virus, which is typical in tropical locations, and the app allowed citizens to act as health agents by sending photos of potential sources of outbreaks. GPS was used to recognize the locations in the photos, allowing the city administration to then check the reported locations and use insecticide if needed. After the app was implemented, the number of cases reduced from 86 cases in 2015 to 0 cases in 2016. To address education, Telefónica/Vivo customized its digital technologies to the public library and classrooms, where students were given tablets. As part of this sub-project, the Telefónica Foundation and the Vanzolini Foundation trained schoolteachers on how to navigate the new educational interactive platform. Hence, digital services were also developed to reduce the amount of paperwork and bureaucracy among the school management.

The actors’ goals of participating in this smart city development project differed. The firms were interested in showing that their technology could function in a real-life context to help them sell solutions to other cities. The firms also expected that the project could be a reference case allowing them to expand into the Latin American region. Telefónica/Vivo’s project manager explained, “As a telecom firm, it is important to leverage the development of a smart city while creating the market that we want for Telefonica/Vivo’s core business.” At the beginning of the project, Telefónica/Vivo noticed that 25% of its clients in the city upgraded their broadband, and its market share in the city increased by 16%. Ericsson envisioned an opportunity for corporate market legitimacy. The firm’s marketing manager highlighted, “If a pilot project has a good story, it creates trust in the market and in the government’s eyes.” In addition to this statement, the head of government relations affirmed that “Developing a relationship with the government is different than between firms since it is done to create a market for the firm.” For Huawei, the main goal was brand awareness. Huawei’s solution manager emphasized the following: “Huawei is not yet well-known in the Brazilian market, and we are interested in legitimizing our technology.” In contrast, the main goal for ISPM was learning. For instance, the city administration and citizens reviewed the e-health...
solutions and they were subsequently improved. ISPM’s innovation di-
rector affirmed that “At ISPM, we want to learn more about the concept
and create our know-how in cities, but we need not only to develop
technologies; we also need to understand the people.” Managers from
the firms, in general, also had individual goals for engaging in the
project. Participating in a successful project with international visibility
and increased revenue could support their career aspirations.
For the Vanzolini Foundation, the main goal was to be part of a
project that could increase its brand visibility and help it develop a
customized solution in education. The sustainable project manager
stressed, “Our participation in this project was a great opportunity to
show the usage of technologies in education while fulfilling our orga-
nizational mission.” Managers from the Vanzolini Foundation also had
their individual goals for working on a project like this. Not only did
they represent the organizational interests but they also served their
individual interests.
Different from the civil society organizations, the public adminis-
tration was interested in the branding that such a project could bring to
the city as well as improving public services. The tourism secretary
affirmed the following: “Our main motivation, from the public sector,
was the visibility that the project could bring to the city, and of course,
the possibility to increase the quality of public service while reducing
costs.” The tourism secretary envisioned keeping his job if the project
was successful. This type of position is temporary and depends on a
political nomination. Therefore, presenting a successful project would
bring him visibility and increase his chance of continuing at least as the
secretary of tourism in Aguas or perhaps in a larger city in Brazil.
This project was implemented at the end of 2015 and received
massive national media coverage. More than 70 mayors and ministers
visited the city, and their main interest was in the efficiency and better
use of public resources that the technological solutions could offer.
Subsequently, seminars and workshops were held nationally and inter-
nationally. The main goal was to communicate the implemented solu-
tions and benefits of having a digital city to public authorities and
decision-makers. At some of these seminars and workshops, the secre-
tary of tourism was invited to talk about his experience with the smart
city development project. Besides national recognition, the project
received international visibility; for instance, it was recognized as an
innovative project at the TM Catalyst Forum in 2015. At Futurecom
2015 – Latin America’s largest information and communications tech-
nology (ICT) event – all major firms cited the project. Finally, the project
was mentioned in Connected Smart Cities in 2015, which is an event that
brings together firms and city administrations for roundtable discussions
about the future of smart cities in Brazil.
6. Analysis
To understand the different strategies individuals used as interaction
modes to foster institutional logic convergence in this public–private
 collaboration project, we decided to structure the analysis around the
three phases derived from the coding process: conflict, negotiation, and
convergence. At the end of this section, the analysis findings are sum-
marized for the sake of providing an overview.
6.1. Period of conflict (Phase 1)
At the beginning of the smart city development project, we identified
three main episodes: (1) misalignment of goals, since the firm managers’
goals for participating in the project clashed with some of the goals of
the public officials; (2) cognitive misalignment, as the firm managers
and the public officials thought differently about whether it was fair to
charge citizens for some of the services developed and implemented in
the project; and finally, (3) misalignment of practice, since differences in
accountability created tensions between the firm managers and the
public officials. These three episodes illustrate an interplay between
institutional logics but also between organizational and individual
goals.
The goal misalignment episode happened when the managers from
Telefonica/Vivo presented the project idea to the public officials from
the city administration. Most of the public officials were skeptical about
how the project firms could address the complex societal issues in the
city, based upon their current technological expertise and resources. The
Secretary of Healthcare, for example, viewed the project as a window to
get more ambulances in the city rather than new smart city solutions. He
could not see the long-term benefits of the project, but he knew that
more ambulances to Aguas would be associated with better healthcare,
which the citizens deemed very important. Thus, providing more am-
bulances would increase the secretary’s reputation for being committed
to improving community well-being, which could later be transformed
into political capital. This suggests that the secretary’s action was
influenced by public opinion and his own interest in increasing credi-

bility. However, the firms were not ambulance manufacturers and the
managers argued that this goal was outside the scope of the project and
the firms’ technological domains. This lack of goal alignment demoti-
vated, among others, the Secretary of Healthcare. Conversely, the Sec-
tary of Tourism saw great potential in the project and was eager to get
involved. According to him, the lack of knowledge of ICT and its applicability, especially in small cities in Brazil, caused mis-
understandings with some of the other public officials. He affirmed that
“Some of the public officials did not know how the technology could
help them and for that reason, they were not very interested in this
project.”
During the interviews, the Secretary of Tourism expressed several
individual goals that had stimulated his interest in the project. First, he
mentioned that the project could enable him to contribute more to the
city by showing how to spend fewer public resources while delivering
better public services. Second, the project could bring visibility to both
the city and himself. His short-term goal was to maintain his position as
Secretary of Tourism in Aguas, which is a temporary position based on a
political nomination. In addition, a successful project would allow him
to access a broader network and increase his visibility. He envisioned
becoming the tourism secretary of a big city in Brazil and believed the
project could help him achieve that. Overall, this shows how individual
goals, such as career advancement or improved reputation, shape an
individual’s actions, which influence how institutional logics are
expressed.
The second episode concerned cognitive misalignment, and it arose
when the firm managers wanted to charge for some of the services
developed and implemented in the project. Generally, the public offi-
cials did not share the view that citizens should pay, for example, for the
smart parking solution while it was being tested in the city. They
thought that this short-sighted firm focus on profit would increase the
number of complaints from citizens. The Secretary of Tourism high-
lighted the following: “You are multinationals and should better un-
derstand the responsibilities of this city. We have much more to lose
than you. We are a small city. Both of us can win but if not, you will leave
while the city stays and has to deal with the problems. After presenting
my arguments, the firms understood the rules of the game.” When
confronted with this point of view, the managers from Ericsson argued
that the smart parking solution had been developed originally for pri-
ivate clients and that this was the first time it was being applied to public
parking spaces. Hence, the managers’ behavior suggests that some in-
dividuals will justify their actions with an activated market logic in mind
as a means to influence the social world around them.
This highlights the interplay between institutional logics and in-
dividuals’ goals. The tourism secretary was concerned that a lack of
successful project implementation would negatively affect the city
administration and his reputation. Consequently, he could lose legiti-
macy and even his position. Similarly, a manager at Ericsson was
interested in the monetization of the service, which would highlight his
performance to his peers within the firm. As a result, this would increase
his reputation as a subsidiary manager and support securing new
mandates from the headquarters. Interestingly, this example suggests that the Secretary of Tourism acted as a facilitator, since he connected the market and state logics. His argument helped other actors make the necessary concessions for the project’s progress and implementation.

The third episode concerned a misalignment of practices and differences in handling accountability. While the firm managers were driven by their ambition to satisfy shareholders, the public officials were driven by the responsibility to ensure citizens’ well-being, the local politicians’ ambitions, and compliance with the law. The latter was especially important in the situation with the smart parking solution. First, what the public officials and firm managers agreed upon was an informal collaboration set-up rather than a traditional public–private partnership, which requires a bidding process. Therefore, the legal setting did not allow public services to be monetized. Second, a bidding process would require investments from the city administration, and it would take months before the project could be implemented. Third, the firms needed to be in a competitive process with other firms developing similar technologies in the market. If the public officials allowed charging for such a service, they would violate the law. The Secretary of Tourism said, “Only a pioneer technology can be bought without following a bidding process. Only if no other firms offer such a solution, the bidding process can be excluded. With the smart parking solution, it was not the case. For that reason, we needed to follow the rules.” The Secretary of Tourism’s interpretation of his institutional logic shaped his actions. He was aware of which steps to take and what the regulations would permit. By communicating the state logic to the firm managers, he arguably tried to build a consensus between the managers and the public officials. His focus was on finding a common ground for successful project development and implementation. His action reinforced what Thornton et al. (2012) highlight regarding the existence of situations, episodes, and logics as mechanisms to explain behavior as individuals seek to manage ongoing institutional contradictions.

In the above, we observed that diverse practices, assumptions, values, beliefs, and rules among individuals could cause institutional logic conflicts. This follows Greenwood et al. (2011) and Thornton and Ocasio (1999), who highlight that institutional logic diversity can lead to logic conflicts. From the three episodes, we can see that firm managers’ actions are justified by the market logic; that is, they want to develop a client service and monetize the service in a short period to shorten the sales cycle. Public officials, however, following the state logic, are focused on their responsibilities regarding citizens’ well-being and the law. As they each adhered to their institutional logic, we witnessed that the strategies firm managers and public officials used as interaction modes were either ignorance or defiance (Pache & Santos, 2013), since they either overlooked each other’s institutional logic or expressly rejected it. Furthermore, we noticed that individuals’ goals shaped their actions, which again influenced how institutional logics were expressed. All the individuals involved in the project knew that exhibiting a strong performance would improve their career advancement, reputation, etc.; therefore, concessions were necessary for project development and implementation. This suggests that under multiple institutional logics, individuals determine which actions to take on the basis of how they can maximize their own goals.

6.2. Period of negotiation (Phase 2)

We observed that negotiations to handle conflicts in the smart city development project took place between the firm managers and public officials. Both the firm managers and public officials knew that without some initiative, no common ground would be found, and the project would not progress. The importance of the project for the firms was emphasized by Telefonica/Vivo’s president in the local media: “A pilot project, such as the Aguas City case, serves as a living lab for the development of future public–private partnerships, mainly in more populated areas.” This episode exemplifies a situation in which individuals tried to understand rather than ignore or defy each other’s institutional logics while trying to respond through balancing organizational and individual goals.

One of the identified negotiations concerned Huawei’s installation of 15 surveillance cameras to monitor the city. Huawei’s innovation department faced difficulties with the public officials after installing the cameras. The managers expected that the public officials would use the solution, but it did not happen right away. They told the mayor, “We provided you with the technology. You need to have a team to operate it.” However, the main problem was that the mayor did not know who had the knowledge to operate the cameras, and for that reason, the public officials were indifferent to the use of the solution. Consequently, Huawei’s managers realized that staff training should be part of any smart city development project, even though they had previously held the position that such training is a public sector responsibility. In this episode, the market logic of Huawei’s managers was challenged, and an understanding of the goals and institutional logic of the public officials was needed. Instead of a singular focus on economic goals, the managers had to consider the needs of the city. However, the public officials also had to realize that they had a responsibility to get the surveillance cameras working, not only for their own sake but also for the sake of Huawei. The tourism secretary played an important role in achieving this joint understanding. When he was informed that the technology was not being used, he helped the firm managers understand that the public officials did not have previous knowledge of how to use this new technology. The only way to solve the problem was for the managers to set up a short training program. Through this effort, the Secretary of Tourism tried to establish a dialogue and lay the foundation for better understanding between the involved actors.

Based on the above, we observed how diverse practices, assumptions, values, beliefs, and rules among individuals can coexist as a result of negotiation. This adds to the findings of Binder (2007) and McPherson and Sauder (2013), who stress that institutional logic diversity can lead to degrees of logic coexistence. From the outlined negotiation, we can see that the firm managers’ practices, assumptions, values, beliefs, and rules, justified by the market logic, could be stretched to also embrace societal needs and that the public officials, following the state logic, could take on greater responsibility, beyond the citizens’ well-being and the law, and include firms’ economic goals. In this process of better understanding and approaching each other’s institutional logics, we witnessed that the firm managers and public officials used the strategy of combination (Pache & Santos, 2013) as an interaction mode. We also learned that if individuals want to pursue their own goals, they need to understand their bargaining power as well as the situation in which they are embedded and how to best respond to it.

6.3. Period of convergence (Phase 3)

In the wake of the negotiation, we identified some situations where the institutional logics of the firm managers, the public officials, and the project managers from the civil society organizations converged. Such situations were facilitated by open communication and democratic participation. Thus, these factors influenced individuals’ practices, assumptions, values, beliefs, and rules and shaped and changed the institutional logics present in the smart city development project.

An example of this was when the practices, assumptions, values, beliefs, and rules of the project managers from the Telefonica Foundation and Vanzolini Foundation and of the public officials from the city administration aligned. The managers from the Vanzolini Foundation experienced resistance from schoolteachers in using the technology, such as tablets. To act upon that, the managers applied the tactic of using inclusive and friendly communication rather than forcing the schoolteachers and parents to adopt the technology. Such an attitude turned resistance into acceptance, and this enabled students, the foundation project managers, schoolteachers, and parents to collaborate. According to the managers from the Vanzolini Foundation, such communication was also present during other episodes in the project, for instance, at
governance meetings where ideas were discussed in a collaborative spirit. When questioned about the overall perception of the collaboration, the Secretary of Tourism affirmed that it was good: “Good communication was established. Sometimes, we had to negotiate and say what we wanted, but once the understanding was achieved, there was room for compromises.” When asked about the overall individual goals of participating in such a project, one of the foundation project managers said that her main goal was to make a societal impact. Another individual goal was to demonstrate to her colleagues her ability to solve a societal problem. According to her personal beliefs, participating in such a project gave her a sense of well-being and personal satisfaction or what she described as a rewarding feeling of having contributed to society.

In this episode, we observed how the community and state logics converged. The foundation project managers and public officials cognitively aligned around values of inclusiveness, trust, and reciprocity, and regarding goals, they aligned around community well-being and collaborative citizenship. Due to this degree of alignment, the two institutional logics converged and it was no longer possible to see how they differed.

This revealed how institutional logics converge and, consequently, how the coexistence of different institutional logics—market, state, and community—can foster economic, social, and community benefits. This not only adds to the findings of Binder (2007) and McPherson and Sauder (2013) on logic coexistence but also to those of Besharov and Smith (2014), who discuss the importance of compatibility among different institutional logics. They underscore that a certain degree of compatibility needs to exist, and this can influence collaborative and

### Table 2
Overview of organizational and individual goals during the three project phases.

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<tr>
<th>Period of Conflict (Phase 1)</th>
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<td><strong>Positions on sub-projects</strong></td>
<td><strong>Goals</strong></td>
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<td><strong>Key individuals</strong></td>
<td><strong>Goals</strong></td>
<td><strong>Logic affiliation</strong></td>
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<td>Secretary of Tourism</td>
<td>Organizational goal - Reduce costs via the implementation of new technology and services.</td>
<td>State logic</td>
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<td></td>
<td>Individual goal - Bring visibility to the city and himself. This should help advance his career.</td>
<td></td>
</tr>
<tr>
<td>Secretary of Healthcare</td>
<td>Organizational goal - Improve the well-being in Aguas by introducing more ambulances.</td>
<td>State logic</td>
</tr>
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<td></td>
<td>Individual goal - Increase his reputation and advance his career.</td>
<td></td>
</tr>
<tr>
<td>Telefonica/ Vivo’s project manager</td>
<td>Organizational goal - Show how their technology can impact society and create new market opportunities.</td>
<td>Market logic</td>
</tr>
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<td></td>
<td>Individual goal - Successful project implementation will improve his recognition within the firm.</td>
<td></td>
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<tr>
<td>Vanzolini Foundation’s project manager</td>
<td>Organizational goal - Implement new technology solutions in education.</td>
<td>Community logic</td>
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<td>Individual goal - Contribute to a better society.</td>
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</tr>
<tr>
<td>Huawei’s project manager</td>
<td>Organizational goal - Improve brand awareness in Brazil and implement security solutions in Aguas.</td>
<td>Market logic</td>
</tr>
<tr>
<td></td>
<td>Individual goal - Career advancement and increase the possibility of new mandates.</td>
<td></td>
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</table>
conflictive relationships. Furthermore, we saw that individuals’ goals influence and are influenced by the prevalent institutional logics. During this phase, we witnessed that the firm managers, public officials, and project managers from the civil society organizations used the strategies of compliance and compartmentalization (Pache & Santos, 2013) as interaction modes. They either adopted an entire institutional logic or parts of it or kept a particular institutional logic or parts of it separate from other logics. To summarize the phases, Table 2 provides an overview of the organizational and individual goals during each of the three project phases. With this, it becomes transparent which positions affect the sub-projects in each phase and how these positions evolve over time.

6.4. Analysis findings

Our analysis of the smart city development project suggests that public–private collaboration is a complex, nonlinear, and dynamic phenomenon characterized by multiple institutional logics (Leite, 2022; Mahoney et al., 2009; Quelin et al., 2017). Moreover, in line with existing research, we confirm that institutional logic diversity can lead to logic conflicts (Greenwood et al., 2011; Thornton & Ocasio, 1999) as well as logic coexistence (Binder, 2007; McPherson & Sauder, 2013). Besides these confirmations, other findings are novel to the research on institutional logic diversity and particularly to the strategies individuals use to handle multiple institutional logics (Pache & Santos, 2013; Smets et al., 2015). During the smart city development project, we noticed that the individuals achieved institutional logic convergence because of their use of strategies as interaction modes. At the start of the project, conflicts occurred because the firm managers and public officials either ignored or defied (Pache & Santos, 2013) each other’s institutional logics. We observed that clashing logics fostered three conflicts related to three different types of misalignment: misalignment of goals, practice, and cognition. Later in the project, the firm managers and public officials acknowledged that to move forward and meet their individual goals, they needed to find some common ground and minimize conflict. With this realization, they began to negotiate to reach a consensus. That included negotiating about dissimilar practices, assumptions, values, beliefs, and roles as well as how they should be met and with what resources. For this to happen, the individuals relied on the strategy of combination (Pache & Santos, 2013) as an interaction mode where certain aspects of the firm managers’ and public officials’ institutional logics were linked. It lowered the degree of logic conflicts and, in some instances, fostered degrees of logic coexistence (Binder, 2007; McPherson & Sauder, 2013). Finally, at the end of the project, there were episodes where the firm managers’, foundation project managers’, and public officials’ practices, assumptions, values, beliefs, and roles converged. The strategies of compliance and compartmentalization (Pache & Santos, 2013) were valuable as interaction modes in this connection. In terms of compliance, the firm managers’ institutional logic or parts of it were adopted by the public officials and the foundation project managers, and vice versa, and regarding compartmentalization, they kept particular institutional logics or parts of them away from each other, since they would never work together. That further lowered the degree of logic conflicts and created a state of logic convergence. In light of this, we can challenge the present understanding of individuals’ strategies advanced by Pache and Santos (2013) and Smets et al. (2015) by highlighting that these strategies serve diverse purposes over time and that several strategies are needed to create institutional logic convergence. The theoretical effect of this is that it becomes problematic to consider the strategies as single, isolated interaction modes with equal importance. Instead, they should be seen as a group of interdependent interaction modes with dissimilar importance when fostering institutional logic convergence.

Additionally, we found evidence that institutional logic convergence is fostered when organizational and individual goals are balanced. In the smart city development project, a range of individual goals, such as career advancement and improved reputation, were present, and when these goals were satisfactorily met while realizing the organizational goals, it worked in favor of institutional logic convergence. Despite not always being the case in studies on institutional logic diversity in public–private collaboration (see, e.g., Ingstrup et al., 2021; Oberg & Shih, 2014), we argue that considering individual goals and their interaction with higher-order goals is essential in explaining why institutional logic convergence is or is not achieved. This finding contributes to the discussion regarding the extent to which the levels at which institutional logics are demonstrated—society, field, organization, and individual (Besharov & Smith, 2014; Friedland & Alford, 1991)—should be seen as separated or interlinked.

Finally, we expose that individuals can play the role of facilitator and ease the process toward institutional logic convergence. Our investigation of the smart city development project shows that individuals who perform this role have at least two characteristics in common: they can unite diverse institutional logics and they are perceived to occupy a central position in a project. The Secretary of Tourism is an example of a facilitator of institutional logic convergence due to his ability to build consensus between the firm managers and other public officials by finding a common ground where the market and state logics can coexist and where their individual goals can be met. Moreover, the other project actors saw the secretary as reliable and as a problem solver, which enabled him to scope the project, including its activities, resources, and actors.

7. Conclusion

In this paper, we have explored how individuals use different strategies as interaction modes to foster institutional logic convergence in a public–private collaboration project. We drew from research on public–private collaboration and institutional logics as well as a single case study of a smart city development project in the city of Aguas, Brazil.

7.1. Theoretical contributions

Within this theoretical and empirical arrangement, we contribute to research on institutional logic diversity in three ways. First, we outline that individuals use different strategies as interaction modes to achieve institutional logic convergence and that these strategies serve diverse purposes over time in a project. They should, therefore, be regarded as a group of interdependent interaction modes of dissimilar importance, instead of single, isolated interaction modes with equal importance, when fostering institutional logic convergence. This finding extends the present knowledge regarding how individuals can handle multiple institutional logics; see, for example, Pache and Santos (2013) and Smets et al. (2015). Second, we show how institutional logic convergence is fostered when organizational and individual goals are balanced in a project. This interplay between goals is often neglected in studies on institutional logic diversity in public–private collaboration (see, e.g., Ingstrup et al., 2021; Oberg & Shih, 2014), but it is vital when explaining why institutional logic convergence is achieved or not. Third, we highlight that individuals can be facilitators of institutional logic convergence. Individuals who play this role have at least two characteristics in common: they are able to unite diverse institutional logics and they are perceived to have a central position in a project. This not only indicates who is best suited to handle multiple institutional logics but also how the process toward logic convergence can be eased.

7.2. Practical implications

Besides these theoretical contributions, this paper has some practical implications. It can help individuals, such as firm managers and public officials, participating in public–private collaboration projects better understand how they can contribute to institutional logic convergence. In addition, we highlight how public–private collaboration per se accommodates institutional logic diversity and that understanding the
interplay between these logics is vital to avoid conflicts and instead build constructive and sustainable relationships. The foundation of such relationships is understanding and committing to each other’s differences and emphasizing how collaborating and striving for the same goals can help in solving several problems simultaneously. Then actors go from having separate and competing institutional logics to having more converging institutional logics.

7.3. Limitations and future research

Finally, this paper suffers from at least three limitations, which may serve as future research topics. First, the case study focused on a specific public–private collaboration project and a particular city in Brazil. Additional studies could investigate to what extent the listed findings are relevant in other geographical and institutional contexts to challenge their analytical generalizability. Second, we did not incorporate how actors external to the project, such as, but not limited to, trade organizations and national government bodies, can influence the project actors’ practices, assumptions, values, beliefs, and rules, and ultimately their decisions. This can be done in future studies by including project-external actors in the data gathering. Third, the paper only briefly considered citizens. Other studies could, for example, observe how this actor type can affect the market logic of firm managers, the state logic of public officials, and the community logic of project managers from civil society organizations, including building bridges across these three institutional logics.

References


