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Orchestrator legitimacy in a nascent ecosystem: The case of Atos and fintechs**ABSTRACT**

In ecosystems where collaboration between firms is advantageous or even necessary to progress firm innovation, buy-in must be won from stakeholders to enable operative actors to do so. Flashy ideas and big promises may carry weight in the process of winning them over, but convincing stakeholders of the legitimacy of the proposed collaboration is paramount. In this paper, we investigate how actors within a firm engage in a bifurcated legitimacy campaign to coerce internal and external stakeholders into supporting an innovating orchestration system. Drawing on a unique case study at one of Europe's leading IT service integrators, and drawing on institutional theory and ecosystems literatures, we specifically look at shifting motives, expectations, and legitimacy-building strategies through a process lens to shed light on how an incumbent's internal and external stakeholders can be cleverly made to work for each other.

Keywords: Orchestrator; nascent ecosystem; High-tech industries; Institutional Theory; Collaboration Motives; Case Study; Uncertainty

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In high-tech business ecosystems, managers must strike a key balance between exploring new innovation opportunities that will allow their firms to access strategic ecosystemic positions and simultaneously adhering to the expectations set upon them by their stakeholders. Especially due to a high degree of interaction between ecosystem participants (Jacobides, Cennamo, & Gawer, 2018), this can be a tricky process for firms such as large MNEs with a variety of stakeholders - through complementary partnerships, client relationships with long histories, key positions with regulators, investors who have invested in the firm's past performance and future expectations built thereupon, and so on. Scholars studying how incumbent firms respond to threatening innovations elsewhere in their ecosystems (e.g. Ansari, Garud, & Kumaraswamy, 2016; Bitektine, Hill, Song, & Vandenberghe, 2020; Khanagha, Ansari, Paroutis, & Oviedo, 2020) have pointed out that while technological advancements within firms are important for ensuring their survival in the face of disruptive innovations, the perceived *legitimacy* of those innovations as well as the firms and individuals pushing them forward are necessary for their adoption.

External judgments are consequential for how innovating teams within firms can feasibly implement responsive strategies going forward. Recent work on legitimacy-building for a new firm in a nascent industry (e.g. Zuzul & Edmondson, 2017) identify the interrelationship between the firm's external successes and its internal failures as predictive of legitimacy-building success.

Indeed, research in nascent industries has theorized the importance of this task, typically described as one of *legitimacy building* (e.g., Aldrich & Fiol, 1994; Navis & Glynn, 2010; Wry et al., 2011). Scholars have described how firms in nascent industries face a legitimacy vacuum (Dobrev & Gotsopoulos, 2010).

(Zuzul & Edmondson, 2017: 304)

Recent empirical work further helps us understand how legitimacy correlates with the nature of the new offering in question (Zhao, Fisher, Lounsbury, & Miller, 2017) and the importance of narratives and rhetoric in legitimacy-building to outside parties (Garud, Gehman, & Giuliani, 2014; Patala, Korpivaara, Jalkala, Kuitunen, & Soppe, 2019).

Furthermore, we have notable works concerning extraordinary cases of legitimacy-building in unlikely settings, such as that of Uber's rise (Garud, Kumaraswamy, Roberts, & Xu, 2020). Yet, what is missing is a close look at how managers balance legitimacy campaigns to external *as well as internal* stakeholders, especially when exploring ventures with no precedent and past performance from which these stakeholders can make quick judgments of institutional alignment. Thus, the question we pose is *how do managers legitimize their innovation strategies to internal and external stakeholders?*

Drawing on institutional theory (e.g. Meyer & Rowan, 1977; Suchman, 1995) and ecosystems literature (e.g. Jacobides et al., 2018), our case study findings offer several contributions to the broadening understanding of legitimacy and the process of legitimization in nascent or transforming ecosystems. Through following an operative team's actions in deciding how to address their firm's legitimacy challenges, establishing bifurcated strategies to enlist the support of internal and external stakeholders, and adjusting their legitimacy management practices over time, we illustrate how discourses concerning value capture in one direction and those concerning value creation in another direction diverge. We then discuss how they are received by various stakeholders and highlight some of the pitfalls the actors we study encountered, which is an important inclusion to counterbalance the rose-tinted narratives that actors vying to legitimize their own proposed actions must tell to garner support. We round out

by showcasing a novel dynamic: that when ventures are legitimized to internal stakeholders with valuable resources necessary for the venture's functionality, this gives ventures the capability of legitimacy accumulation with external stakeholders who then support the venture's value creation, in turn satisfying internal stakeholders' expectations for value capture. These stakeholders might then be encouraged to dedicate further resources to the venture, lending it further capabilities, further increasing the venture's value creation potential, and so on. This nearly self-sustaining cycle can be an attractive one for practitioners seeking out such a position in an innovation ecosystem, as well as for scholars probing for a further understanding of interfirm collaboration in innovative settings.

In terms of academic contribution, we firstly put forth an understanding of how value capture and value creation strategies are created and related to stakeholders who do not have a substantive performance history to look at when considering whether to support or reject ventures. This emphasizes the importance of stakeholders in literature concerning value capture and creation in ecosystems (e.g. Adner & Kapoor, 2010; Ceccagnoli, Forman, Huang, & Wu, 2012; Cennamo & Santaló, 2019). While this provides valuable insight in and of itself, it further speaks to the heterogeneity of internal and external stakeholders, whereby we offer another contribution: theoretical insight on how managers must engage in separate discourses concurrently for both types to garner support for their ventures.

Secondly and to extend on work concerning the importance of rhetoric and narratives in responding to institutional expectations concerning firms (e.g. Garud, Gehman, et al., 2014; Garud, Schildt, & Lant, 2014; Kuratko, Fisher, Bloodgood, & Hornsby, 2017; Patala et al., 2019), the process we reveal shows that managers must sometimes engage in legitimacy-building strategies that relay future states of ventures to stakeholders as though they are occurring

presently, so that they may receive support required to actualize those future states. This means that some strategies are action-based, and others - future-state ones - are symbolic. Our focus on the orchestrator role is especially instrumental in introducing the importance of ambidexterity or simultaneity in doing so. We further highlight how a successful legitimacy-building campaign provides for a future drawing-together of these actual and symbolic strategies that appeases the motives of internal stakeholders, external stakeholders, and the orchestrator negotiating with them separately.

Thirdly, looking through a process lens at the stakeholder-responsive strategies of individual actors in innovative ecosystem collaboration yields valuable insights on changes in strategic states for process research concerned with the link of micro to macro (e.g. Kouamé & Langley, 2018; Paquin & Howard-Grenville, 2013). Legitimacy processes are context- and time-dependent; thus the strategies actors engage in to build legitimacy are at the mercy of the constantly shifting technological and institutional landscapes. Our submission of this actor-level view is necessary for a better, processual understanding of the legitimacy-building dynamics at play in nascent or transforming ecosystems.

In the following section, we will discuss where notable dialogues concerning legitimacy have led our field, interspersed with how these pertain to a firm in an orchestrating position and the issues it could face. Following that, we will introduce our research site, the data we collected therefrom, and our analytical steps. Finally, our findings and discussion section will conclude with conceptual insights for academics and practitioners with paths for future research.

Conceptual Background

Legitimacy

As scholars have argued for some time (Bitektine & Haack, 2015; Deephouse, Bundy, Tost, & Suchman, 2017; DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Suchman, 1995), institutions and the patterns they encourage persist even through large-scale change. A manifestation of this is legitimacy and its process form, legitimization. Legitimacy in this paper uses Deephouse et al.'s (2017: 32) definition: "the perceived appropriateness of an organization to a social system in terms of rules, values, norms, and definitions." Legitimacy and legitimization activities can occur at various levels: within firms, between firms, and between fields of firms (Aldrich & Ruef, 2006). In our study, we focus on the former two since the actions of individuals are most apparent at and within the boundaries of firms. Furthermore, as the rules, norms, and so on applicable in a highly technological ecosystem generally follow the progress of technological innovation, legitimacy criteria as they pertain to such can change over time and the ways for a firm to achieve, maintain, and manage legitimacy change over time as well.

However and somewhat puzzlingly, firms also run the risk of over-conforming at which point they may blur the lines that delineate their offerings from those of their competitors (Zhao et al., 2017). This can be especially damaging, as external stakeholders might not be able to then coherently discern the legitimacy (or lack thereof) of one firm apart from the next (Durand & Kremp, 2016; Kim & Jensen, 2011; Martens, Jennings, & Jennings, 2007). For internal stakeholders, this could affect whether they will choose to support the proposed actions by, for instance, lending resources under their control - an unlikely outcome if these stakeholders see the endeavor as unimpressive or unimaginative. Firms that go the other direction run the risk of

legitimacy rejection, forcing them to walk a tightrope that Zhao et al. (2017) term optimal distinctiveness. The risks with internal stakeholders might be even more severe in this direction, as they might be inclined to distance themselves from initiatives that clearly depart from managerial expectations - as could easily be the case for ventures exploring entirely new ecosystems or seeking to create offerings with no precedent in the firm. An incumbent purposefully seeking a position among these firms that is somewhat reliant on their offerings' client attractiveness must walk this same tightrope. The novelty of fintechs as participants in the financial services ecosystem bring these legitimacy challenges to the surface. In this context, we additionally answer Zhao et al.'s (2017) call for research that views firms' strategic balancing as dynamic rather than fixed through time, and as we will highlight empirically in the findings section, complications such as technological bottlenecking (Masucci, Brusoni, & Cennamo, 2020) can arise.

The efforts a firm must undertake to achieve legitimacy may similarly come with trade-offs. Lee, Hiatt, and Lounsbury (2017) find that organizations could leverage those trade-offs to achieve cognitive legitimacy in an ecosystem. Cognitive legitimacy occurs when an organization's venture or methods become institutionalized within the ecosystem (Aldrich & Ruef, 2006) and become taken for granted by key stakeholders (Suchman, 1995), such that these stakeholders are aware of and understand their activities (Aldrich & Fiol, 1994). One way to build cognitive legitimacy is "by creating a knowledge base in their own organization" (Aldrich & Ruef, 2006: 186). This is crucial for conveying the legitimacy of the firm's actions to external stakeholders - essentially showing that the firm and its actors know what they are doing - but this is also a very important step for enlisting internal stakeholders as well. Firms oftentimes employ this method by hosting blogs on their own websites where they invite their own experts as well

as others to discuss ongoing and future exploratory projects.

It is important to remember that these ventures “do not substantively pre-exist themselves, except and only in terms of the imaginings, expectations and visions that have shaped their potential” (Borup, Brown, Konrad, & Van Lente, 2006: 285). Relating to Bitektine, Hill, and Song’s (2020) delineation of reputation versus legitimacy - detailed in a moment - past performance in a proposed operation cannot be showcased to these audiences and rhetorical strategies must adjust accordingly. Garud, Schildt, and Lant (2014), extending on this, argue that an entrepreneur who communicates the narrative of his or her venture’s future runs the risk of losing legitimacy prior to a stakeholder’s onboarding, due to a perceived overselling of the venture; or losing legitimacy after the stakeholder’s onboarding, due to disappointments in actual performance.

For a large firm with a long history, its past legitimacy in other fields may be compromised by new entrants and falling-out of old partners; therefore, it must contend for legitimacy alongside startups, though admittedly with greater reserves of reputation and capital. Bitektine and colleagues (2020) discuss the interrelatedness of reputation and legitimacy, and while this is not the core focus of this paper, it is worth clarifying here. They assert that the differentiating factor is that the former concerns future expectations based on past actions and sometimes alongside the esteem of a firm compared to others of its group (Deephouse & Carter, 2005), whereas the latter concerns acceptability within a living socially constructed framework. We focus on legitimacy herein, but Atos’ positive reputation among its clients contextualizes why they continue doing business with it through times of ecosystemic uncertainty.

Orchestration

An important aspect of ecosystem orchestration as a legitimization strategy is that incumbents can explore for innovative purposes without outright risking their own aforementioned legitimacy, upon which they rely to uphold their reputation and trust (Bitektine et al., 2020). Previous research of these approaches include the use of outbound open innovation strategies (Masucci et al., 2020) and experimental spaces (Cartel, Boxenbaum, & Aggeri, 2019). These approaches are valuable for incumbent firms that have ample resources and time to ambidextrously create and explore their own solutions to innovation demands.

To tie legitimacy into orchestration, recall that as orchestrating firms build their collaborative offerings in an attempt to assert a critical position for themselves, they need to gather a series of complementors to whom they must convey that what they are doing is legitimate. These terms and dynamics are highly similar to platform ecosystems, where recent literature has shown that the steps towards accumulating legitimacy with external stakeholders are slippery (Khanagha et al., 2020; Ozalp & Cennamo, 2017). As ecosystems lack hierarchical governance (Jacobides et al., 2018; Shipilov & Gawer, 2019), participants must conform to socially constructed norms to achieve legitimacy and, as mentioned previously, these norms can change over time.

For internal stakeholders, this strategy might be an attractive risk buffer. On the other side, the orchestrator is an interesting point of focus from a value capture point of view because the orchestrator identifies firms within said set whose offerings, when combined, can create a new offering of ostensibly increased value (Dhanaraj & Parkhe, 2006). Of course, these values and configurations of firms must adapt to the evolving meaning of legitimacy, necessitating a change in orchestration strategy over time that must remain somewhat aligned between

orchestrated components.

An interesting qualitative study of (network) orchestration is that of Paquin and Howard-Grenville (2013). In this study, an organization embedded in an industrial ecosystem sought to orchestrate a network of various other ecosystem participants, and their longitudinal examination showcased three major phases and dilemmas the organization encountered while doing so. These phases and dilemmas were the construction of its network from discordant parts, with the dilemma being how to canvas a diverse array of audiences; the leveraging of said network for innovative purposes, with the dilemma being whether to allow network participants to coalesce by chance and seize their inherent innovative potential or to (perhaps overly) control said encounters and assume superior knowledge of their capabilities; and the growth of the network, with the dilemma being how to strategically balance between network advancement and network utilization - similar to the question of optimal ambidexterity in inter-firm partnerships (Aoki & Wilhelm, 2017; Luger, Raisch, & Schimmer, 2018). This study focuses on a network of firms orchestrated by one entity. Our research focuses on the financial services ecosystem, but even within that, we focus on a hub firm that builds networks of other firms in the ecosystem for innovative, and thereby competitive, purposes. Paquin and Howard-Grenville's study then provides interesting conclusions that are relevant here: notably, the learning of how to efficiently build such a network is crucial in highly innovative settings, and in this, there is a risk of "over-engineering" (2013: 1648) that process, thereby constricting the network's potential or "bottlenecking" technological innovation (Masucci et al., 2020).

Relatedly, Fisher and colleagues (2016) consider legitimacy in entrepreneurial settings and specifically how it must be managed across stakeholders, their perspectives, and time in what they term *active legitimacy management*. They also interestingly discuss an upper threshold

of usefulness for legitimacy, where surpassing it can give an organization trouble in its next life cycle stage as onlookers essentially lock it in to institutions conformed to in the previous one. A major component of our paper is an embedded program that takes on its own life cycle; we see a similar phenomenon therein and comment on it accordingly.

Following Milliken's (1987) definition of *effect uncertainty*, where individuals within a firm cannot reliably predict how ecosystemic or super-ecosystemic changes will affect their firm, we investigate the financial services ecosystem as changing and the ecosystem of fintechs within it as nascent and growing significantly. The broader financial services ecosystem's new entrants (whether fintechs, orchestrators, or otherwise) and incumbent participants are not immune to these forces and there seems to be a general understanding that collaboration buffers against them (Navaretti, Calzolari, Mansilla-Fernandez, & Pozzolo, 2017). However, the story we will soon tell strongly relies on questions of whether value can be captured and created reliably, and that these questions come from internal and external stakeholders and necessitate a long campaign of action to answer suggests that this is still a strong force with which actors in the ecosystem are constantly negotiating.

Research Site

This research project involves close collaboration with an incumbent firm, Atos, and specifically its Alpha Team industry directors, the core team in charge of handling financial service client accounts as well as Atos' engagement with fintechs. Atos has a long history in the ecosystem and, in the modern age, has typically offered IT and digital transformation (Verhoef et al., 2021) solutions to firms in various ecosystems - financial services included. However, it is currently undergoing a large-scale verticalization to broaden the solutions it can offer, thus leading it to be an ideal firm to focus on for our research endeavor.

Additionally, we worked closely with the founders of TechQuartier (at times notated as TQ), a startup incubator in Frankfurt, Germany with a strong fintech presence. Atos developed a partnership with this incubator for reasons we will explain in our findings, but it became an important space for observational data collection. This hub is a gateway to many dozens of fintechs, and the collection of them form a network managed by the founders. This management involves the control of entry as well as orchestration of collaborative ties, but the fintechs are also free to build their own partnerships. The orchestration as it takes place in TechQuartier can happen for a variety of ends: the founders are occasionally approached by outside parties in search of a chained solution that the founders know, through their deep knowledge of the TechQuartier community, can be orchestrated amidst it; the founders may be requested to orchestrate by a sponsor - which Atos currently is - for that sponsor's own needs; or the founders may orchestrate fintech-fintech partnerships purely for the benefit of the fintechs. This elaboration is not central to the research question herein but serves instead to show the potential value that the TechQuartier partnership has for Atos.

Convincing the TechQuartier founders of Atos' legitimacy is its key to accessing the fintechs that populate the hub's space. Though this control point is not all-encompassing, as tools like LinkedIn allow the circumvention of such a barrier, it is still with Atos' interests to present itself as a legitimate partner to the hub and, by extension, a legitimate potential partner for the fintechs. Doing so, as a condition of the sponsorship, gives Atos the opportunity to host networking events within TechQuartier's physical space. A few of these events have been critical to our data collection, as they have allowed us to engage in participant and unobtrusive observation episodes alike, as will be discussed further in the next section.

Data Collection

Data collection for this research began in August 2019. Our primary window into the firm was through Alpha Team's industry directors. The directors typically have between 10 and 20 years of industry experience, and are specialized in various fields related to finance: insurance, compliance, finance technology, et cetera. They are assigned stewardship over the accounts of the firm's largest clients, such as well-known banks, payment providers, and the like. With their specializations and the clout that comes from having close ties with large players in financial ecosystems, the directors are major actors in the research site, entrusted by their organization with a fair amount of autonomy to act on behalf of their organization within the ecosystem. These directors have made a concerted effort to build strong ties to the ecosystem of fintechs that has blossomed over the past six years in order to gain an understanding of and provide innovative solutions to their clients' needs.

We have so far conducted fourteen semi-structured interviews with seven mid- to top-level directors, two of whom have moved on to other companies since. These interviews range from 18 to 53 minutes. Some are recorded and transcribed, and others were rigorously notated, depending on interviewee preference. We intend to continue interviewing these informants until we have achieved theoretical saturation and no more new, significant data arise. Augmenting interview data are notes from sitting in weekly strategy meetings among the Alpha Team directorate. We have notated these meetings for relevant themes since August 2019 and will continue to do so through this paper's submission. Additionally, we have made use of various reports and regulatory documents from European institutions engaged in and overseeing the financial services ecosystem that we investigate.

[Insert Table 1 here]

Data Analysis

As this research is a qualitative investigation of a series of phenomena concerning a socially constructed concept, this is a subjectivist-constructivist process study. Close contact with actors in the field means capturing their narratives, both historical and ongoing, as they experience ecosystemic change and the challenges endemic to legitimization. Capturing these processes as experienced (Garud, Berends, & Tuertscher, 2018) involves a series of interviews with actors in the firm, those who assess their legitimization efforts as external stakeholders, and non-partisan observers who provide triangulating perspectives. At each step, the dialogues that happen between actors within the firm and those who observe them - the researcher included - form co-created ideas of the firm's collective legitimacy. Engaging in ethnographic methods as the actors engage in relevant legitimization activities will shed light on the peripheral activities necessary to answer how managers legitimize their innovation activities to various stakeholders.

As laid out, process is an inevitable instrument of this investigation. Organization scholars (Langley, 2007; Van de Ven & Poole, 2005) have followed Heraclitus, Democritus, and Whitehead (1929) among others in establishing a weak and strong process view for organization studies. We use a weak process view in this study, where organizations are more or less stably identifiable across time. Process, then, comprises the multiplicity of interactions between them that are necessary for them to remain in action (Langley, 2007). The alternative strong process view, which could elicit its own interesting conclusions, views organizations as constellations of processes without a strict delineation between processes and the entities that are subject to them (Langley, 2007). This would overcomplicate the phenomena we examine here, but could be a promising angle for future research on, for example, understanding the depths of entanglement between seemingly unrelated innovation activities that happen in embedded entities.

Therefore, with a weak process view in mind, a useful starting point in this research is a historical and retrospective account by actors of what existed prior to the large-scale ecosystemic change. This research began inductively and the first 11 interviews primarily helped in building a picture of a firm experiencing change but not yet clearly understanding what, exactly, it was experiencing within that change - nor what it was responding with. We recorded these interviews, transcribed them, and coded them in Nvivo as is the protocol for all subsequent interviews. For these particular interviews, we coded them thematically whereas for the next stage of interviews, we code along lines of incidents and events (Poole, Lambert, Murase, & Asencio, 2016). As the project has evolved, these initial interviews and the thematic codes elicited from them have proven useful in providing cultural insights as well as discordant accounts of what the firm's priorities are at various stages of ecosystemic change. The various reports and other regulatory documents we collected along the way allowed us to corroborate our findings via content analysis (Duriau, Reger, & Pfarrer, 2007).

Findings and Discussion

The European financial services ecosystem has mostly been dominated by a relatively small group of powerful firms, many of them national flagships such as ING (from The Netherlands) and Deutsche Bank (from Germany). The sheer size and status of these firms gives them significant institutional clout and could, for a while, blockade the disruption of their control over consumer financial data. At a certain point, however, technological and especially data-centric developments in the financial services industry advanced far enough that they escaped jurisdiction laid out in the original Payment Services Directive - advised by banking institutions - laid out by the European Commission in 2007. This and the "legal uncertainty, potential security risks in the payment chain, and a lack of consumer protection in certain areas"

(European Commission, 2016) dictated action at the governmental level and the European Commission updated its inaugural directive with PSD2, writing into law that these incumbent firms - most notably banks - *must* share consumer data with third party service providers with the consent of the respective consumer. Diffusing data under a regulatory scope watered down the incumbents' hegemony while giving regulators greater oversight to ensure greater compliance and fraud prevention. This is a notable change in the ecosystem's *sociopolitical legitimacy* (Aldrich & Ruef, 2006; Deephouse et al., 2017), to the extent that if even a powerful incumbent unbudgingly maintained its previous course of action, this would be a *de facto* refusal to comply¹ and would stand a great chance of jeopardizing the incumbent's legitimacy.

Customer data is a highly valuable asset for banks (Sorrentino, 2020). It gives them the opportunity to examine customer spending habits, run non-invasive risk assessments, and generally get close to their customers. To now be directed to open those databanks to the surging population of fintechs likely meant to many bank strategists a severe loss of control over their customer relationships. It was not strategically sound to sit idly by while fintechs seized new innovation opportunities. It was well within the interests of these incumbent firms to competitively innovate.

Many did. As the European Banking Authority, or EBA (2018: 29) reported, there was at the time a “growing focus on the R&D of new and emerging technologies,” with most of that “usually conducted through internal accelerators.” Other incumbents engaged in an open innovation (Masucci et al., 2020) type of approach that we referenced previously, but “alliance with peer institutions is not an easy task within the financial services sector, given its highly competitive nature ” (EBA, 2018: 29). The EBA concluded that “the predominant way of

¹ It is worth noting that the enforcement of PSD2 is ongoing and inconsistent throughout Europe.

interacting with [fintechs] is through partnerships with new entrant [fintech] firms and other firms that aim to actively follow and embrace [fintech] developments” (2018: 25).

Engaging in these partnerships directly is a risky business, however. As of yet, there is no concise figure for the failure rate of fintechs which is likely due to the fact that boundaries for what constitutes a fintech proper are not entirely clear, as can be seen by any cursory Internet search of the term, and therefore establishing boundary conditions to any such analysis would be dependent on any one non-universal definition. However, if many or most fintechs are startups or scaleups as we consider them in this paper, they are plagued with challenges we see in research concerning novel firms: challenges inherent to experimenting with new organizational forms as part of their operating model (Tracey, Dalpiaz, & Phillips, 2018), the possibility of failure to diffuse their offerings through the ecosystem (Kuratko et al., 2017), trouble successfully legitimizing their narratives (Fisher, Kuratko, Bloodgood, & Hornsby, 2017) which could be especially foreboding in the highly institutional financial services ecosystem, and so forth.

Premise.

Meanwhile, Atos - already providing a variety of necessary IT solutions for many incumbent firms in the financial services ecosystem and therefore very much a member of this ecosystem for its high entanglement - was not in an optimal position to do much about the fintech wave sweeping over its clients. On one hand, this is due to having been overdue for a verticalization of their prior industry-specific set of offerings. “Atos has been somewhat lagging. So most of their competitors have verticalized in the past, and continue to be so today. So in that sense, Atos is a follower, not a leader” (Interview with a senior-level analyst in a research firm, October 2020). Verticalization in this sense means being able to offer clients the entirety of a given solution rather than just specializing in certain components of it. This makes the

verticalized service-provider essentially a one-stop shop and eliminates the need for the clients themselves to go to several different service providers and piecemeal together their own mobile banking solution, for instance. “So far, the strategy of [Atos] has been to invest in the important assets of tomorrow in terms of [specifically] IT... which is a very different approach from what our competitors have... like Accenture” (interview with an Atos industry director, December 2019).

Putting this strategic approach next to Atos’ acquisition history starts to paint a troubling picture, especially in terms of how acquisition costs can affect a firm’s ability to bring fresh talent in.

If you see the trend in Atos, we have acquired a lot of companies. And with these acquisitions, we have also acquired a lot of people who were not exactly in the early years of their careers. So even when we are taking over businesses... we are taking people who are quite old. So we are building our own legacy situation. And the pace of hiring new talent has been very very slow. Why? Because we’ve been in an environment which is a cost-cutting environment.” (Alpha Team industry director, December 2019)

The high mean age of a given workforce might usually be a nonfactor, but as this informant indicates (and as the leader of the team and the first author of this paper discussed in informal chats), Atos wanted to convey the idea to clients that it could be an origin point for innovative digital transformation, but an enduring lack of fresh talent was inhibiting that at a fundamental level. A heuristic needed to be found - quickly.

Leaders in Alpha Team saw this as early as 2014. At that time, Alpha Team was mostly engaged in providing horizontal solutions for large-scale clients. This meant that the contracts per client were for large sums of money, but the services Atos provided to one client were not always easily modified to fit another client’s demands, overall making the provision of separate

solutions time- and resource-intensive. One manager on this team experimented with the idea of creating more modular solutions that required less tailoring between clients. Even if each solution's revenue returned were more modest, his assumption was that the lower cost of production per solution sold would maximize gross profit. Notably, this was at odds with the institutionally derived standard for contract-based revenue generation.

However, Atos needed to make up for time and organic innovation lost in following a horizontal path, and potential partnerships with a new type of financial service providers, the rising popularity of which at the time was unavoidable, seemed to be an answer.

The concept is very simple: we have the scale in sales capacity, [fintechs] have the technology and are very smart and know how to do this, we can scale [offerings] also on technology. (Alpha Team lead, December 2019)

The hope was that by creating working partnerships with, and orchestrating the functions of, fintechs who specialized in a specific financial technology, Atos could bypass the high cost of organically created digital solutions for its clients. On the outward-facing side, this narrative could be cast in a light that appeases all manner of risk mitigation strategies: Atos could provide clients with the advantageous solutions of fintechs alongside the services Atos clients already knew and trusted, while at the same time functioning as a screener for the risks that come with close partnerships. An orchestrator was born.

[Insert Figure 1 here]

Figure 1 shows the triphasic process that follows from this point. In the subsequent subsections, we will discuss each in further detail. A concise summary is as follows: actors in the core team of our focus understood the nature of their MNE to be one where enlisting support from internal stakeholders necessary to launch an innovating orchestration system necessitated

the image that such a system already existed. Thus and as indicated in the first phase, they opted to simultaneously campaign to internal stakeholders using a mock-up of the system while also beginning discourses with external parties in manners that implied such a system was already operational. These bifurcated efforts, indicated in the second phase, gained traction with internal stakeholders such that they received the necessary support to stand up the firm's capability to systematically orchestrate fintech offerings alongside their own, and while they also gained traction with external stakeholders such as a key partnered startup incubator and clients, the reception from fintechs was lukewarm. However, and as indicated in the third phase, these efforts enabled an easier development of future projects reliant on the orchestrated architecture.

Phase 1: Laying an orchestration foundation, getting ahead of legitimacy issues.

At the beginning, significant intra-firm entrepreneurship was required to secure enough resources to build the capability to integrate fintech solutions into Atos' total set of offerings. This section describes the initial conditions actors were facing as well as the coming together of a more systematic orchestration strategy. We will begin with our analyses of the legitimacy push to enlist internal stakeholders and will follow that with the tactics used to recruit external stakeholder support.

I always start outside-in, right, so brochures, website, the whole thing and then I build all the internal stuff because you need to create a kind of perception in order to make [stakeholders in the company] believe that it's there, right, and then I went to the different divisions and my manager... basically saying 'this is what's happening in the market, this is the addressable market, this is what we want to do, this is what we need from you, and this is going to be the [return on investment] for your department.'... That's the story we pitched, and all of them bought in, so we got the 4 million... (Alpha Team lead, December 2019)

The different stakeholders this informant refers to are ones needed to technically pull off such an orchestration - such as software engineers within the firm who would eventually need to pair

fintech software with Atos' own software, cybersecurity specialists who would need to protect the firm's cybersecurity reputation from potentially harmful vulnerabilities in the partner fintechs' systems, and so on - as well as more social stakeholders such as marketing, legal, and communications teams. There is an interesting theoretical significance in this order of actions, especially for actors within large, discordant firms who are seeking to pioneer an orchestration activity. The rise in stakeholders of an orchestration activity comes with a more intense variety of stakeholder institutions with which to align; in other words, "different legitimacy sources have different criteria that [might] sometimes conflict (Fisher et al., 2016; Ruef & Scott, 1998)" (Deephouse et al., 2017: 39). To deconflict, actors may need to tell a variety of narratives in a variety of stages to enact certain processes in time for subsequent, dependent ones to take shape.

A concurrent discussion with internal stakeholders concerned how to capture value in the proposed orchestration strategy. The answer proffered by the core team's leadership involved adjusting how, in a practical sense, Atos was to generate revenue going forward.

In 2014, I was part of... an executive leadership program... and in the end you need to make a strategic [proposal] to a board in Atos, and I was allocated a couple of people, maybe five or six, to do a study, make a recommendation. There, I thought hey, I could build incremental revenues for Atos if I set up a program to work... big Atos with smaller parties. (Alpha Team lead, December 2019)

Up until this point, this team had generated revenue by servicing time-consuming contracts where the offerings between clients were not necessarily modular or, in another sense, modularity of the offerings was secondary to servicing each contract. This informant indicates that the opportunity cost of working on each contract in such a time-consuming manner could be substituted with a more modular approach for more total revenue per contract and, we assume, less cost per contract - a similar dynamic to platform ecosystems and therein why we draw strong

analogies to such.

A key feature of this approach that seems to have been understated in the data we collected is that this also protects revenues via diversification of sources. In other words, the risk of one deal falling through and thus wiping out a significant fraction of revenue is mitigated by dispersing offerings among several deals, each providing a comparatively smaller dividend of the team's total revenue. This combined with various other internal mechanisms that were implemented into the system at or near its inauguration, such as committing to hold onboarded fintechs' IPs in escrow in case of their failure and establishing a standardized due diligence check for each potential new fintech, addressed the risk concerns of prudent institutions governing the team - a key step to legitimization in this realm.

The question that naturally follows is how this comparatively higher value captured could be dispersed among internal stakeholders. After all, Atos, like many MNEs, comprises several different units, each with their own particular missions, key performance indicators, and institutions governing their expectations and activities. We gleaned useful answers to this question in the previously cited interview with the core team lead, but perhaps a more telling source of answers are the strategy meetings the first author sat in on. Invites to these meetings, hosted by the core team, were often sent out to key personnel of other units within Atos for various reasons: to present a mission profile of their unit for general knowledge, to pitch a project proposal that might involve the core team's resources, and so on.

What became apparent over time was that the core team was, through its orchestration efforts, pushing for wider visibility throughout the firm. This coincided with a CEO change as well as the previously mentioned verticalization of the company, which, if not proactively managed, could have jeopardized the core team's security of position in the firm's new

landscape. What we gleaned from several of these meetings, then, and witnessing the offering of the core team's services to (potentially) complementary units in the firm is the idea of an implicit expectation of returned support. In other words, the core team invited strategically significant actors from other units and seemed to make their services - some of which would be substantiated by the orchestration in process - available for these units, but a recurrent notion was that this could only be done if those units supported the initial orchestration effort. Thus, the need to actualize a mock-up of the system was crucial to enlisting this support and thus we include this as a legitimization step here.

The third legitimization strategy for internal stakeholders we took note of in an autoethnographic sense is the partnership with parties assumed to be legitimate, such as universities. We were initially hesitant to include this for not wanting to feature ourselves in the story, but it must be known that Atos has its own knowledge-creation body, termed the Scientific Community, which we will discuss further later in this section. The Scientific Community is a highly respected body within the firm and it became evident over time that vetting strategic ideas, such as that engaging head-on with fintechs could be a profitable future for the company, through the Scientific Community carries a lot of weight when trying to implement subsequent, related business endeavors, such as building the means to industrialize an orchestration of fintech offerings and integration of them into Atos offerings.

It also must be known, however, that the Scientific Community is not an independent research agency, and the pitfalls of a scientific body being subordinate to a for-profit company seem to be known to its members. We included this section, then, after witnessing how the partnership with this university project was brandished as a legitimizing tool towards members of the Scientific Community as well as various other units within the firm as though to suggest

that the nature of the endeavor itself was legitimized by an outside, independent agency.

External stakeholders - such as the fintechs that the core team intended to have in the orchestration system - have significantly less of a stake in Atos' success, as their offerings could just as easily be incorporated in any other firm's system with presumably the same or similar potential for returns. In a sense, these stakeholders had to be wooed with more firepower. The core team, understanding this, embarked on a multi-year campaign to make their presence known throughout the budding fintech ecosystem, with a regional European emphasis.

In 2016, TechQuartier, the previously mentioned fintech-heavy startup incubator based in continental Europe's financial capital, was established. At about the same time, Atos committed an annual sum of €50,000 to a type of TechQuartier sponsorship package that gave Atos certain access to the working space in which starting and scaling fintechs were collaborating and figuring out their business models and offerings, as well as the ability to host up to two events per year in that same space (interviews with several Atos personnel, September through December 2019). This gave the core team an opportunity to leverage Atos' extant legitimacy by way of hosting knowledge-sharing events such as the Compliance Navigator. This event responded to the assumption that many fintechs were, of their own accord, intending to scale their offerings globally without being experts on the regulations that they would incidentally fall under in doing so.

... fintechs usually want to approach the global market, but if you want to collect data of over 50,000 Canadians, even if you're in Germany, you immediately fall under the jurisdiction of the Canadian government, and a lot of the fintechs don't think that way. (Alpha Team industry director, November 2020)

Naturally, rubbing elbows with the exact group the team wanted to populate its budding orchestrated system with had inherent benefits. By simply being in the space, Atos was able to

signal to the fintechs that it was willing and eager to work with them. We include this as an important legitimacy tactic in a discursive space, especially when we consider what the alternative could be. Consider, for instance, that a more stereotypical startup entrepreneur might have to dedicate significant effort to finding her- or himself face-to-face with actors from an MNE who *might* be willing to engage in some kind of lucrative partnership. In this case, however, the MNE has flipped the script and committed effort as well as resources - personnel and the €50,000 sum per annum - to be at the fintechs' front door. We consider this a legitimizing strategy specifically because Atos was certainly not the only firm to have done this; in fact, several other firms, from the local Frankfurt football club to IBM, did the same - some at a much greater cost than €50,000. This indicates to us that the script-flipping strategy is *generally perceived* to be not only appropriate, but effective as well.

As a component to this, we included diversity and inclusion displays as a legitimization strategy. The notable events that highlighted the importance of this were the two Female Fintech Competitions that Atos led in the TechQuartier space during our data collection phase, wherein women-led fintechs were pitched and evaluated by a panel of various industry experts for merit and business viability. This step, however, can easily backfire if not followed through and as a legitimization strategy agnostic of the research site, we cannot understate that enough. Two separate interviews with entrepreneurs from two separate fintechs featured in one of these competitions suggested that this might have been an initiative powered more by zeitgeist than anything else, due to a perception from both that communications with Atos fell off behind closed doors.

Phase 2: Legitimacy accumulation.

As Figure 1 depicts, the outward flow of legitimacy-building initiatives (indicated in the

model as “signaling” to represent that the outbound initiatives do not at launch take into account how they are received) is followed by a drawn out enlistment of internal and external stakeholders’ support. In this section, we will first discuss the consequences of accumulating legitimacy with internal stakeholders followed by those with external stakeholders.

The alignment of internal stakeholder resources was contingent upon these stakeholders’ belief that the value capture opportunities that the core team conveyed were feasible. In some cases, this was done because the commitment of resources could turn around and net these stakeholders an easy return. For instance, enlisting the marketing department’s support was instrumental in advancing the orchestration narrative to broader audiences than the core team alone could achieve.

... for them it’s all about lead generation... So if some of their campaigns... [lead] to a lead or opportunity, that’s good for them because they can sign the lead to their contribution in the sales force, right, so the opportunities then to act came via marketing. That’s not ever fully the case, because always then another person from my team is involved, or the sales team, et cetera. It’s more a collaboration between people and creating the right circumstances with these people. But a campaign or an event could trigger a lead. (Alpha Team lead, December 2019)

For other internal stakeholders, however, such as higher management charged with the authority and decision on whether or not to allocate more human resources to the core team at their request to broaden the team’s capabilities, this required much more. We know that the legitimacy campaigns in the first phase towards internal stakeholders were at least partially successful because, despite the previously mentioned verticalization of the company existing as some kind of threat to the team’s relevancy in the firm’s continually developing future, the team leader made several announcements in weekly strategy meetings of successful acquisitions of new personnel on both temporary and permanent bases. These personnel came almost

exclusively from other units within the firms, rather than being new, “off the street” hires. We do not have access to the dialogues concerning the circumstances of these individual hires, but we know that the creation of positions for them at least speaks to higher management’s belief that the team needed more biopower. Additionally, there seemed to be few legitimacy obstacles in the team’s campaign to secure more practical assets like software development, which we derive from the fact that the team had continued support from Atos’ Global Delivery Center, essentially its development powerhouse, in the form of a dedicated specialist there.

For external stakeholders and for the reasons we led with in the last subsection, the picture gets muddier. For this section, fintechs are the primarily relevant group of external stakeholders, so we will mainly focus on them with a slight exception towards the end of this subsection. To begin, the actual foot-soldiers in charge of populating the orchestration system were the industry directors. As specialists in their respective industries, they were charged with researching and networking with fintechs that they would find useful in procuring offerings for the clients that they cater to. Since the purpose of creating this system as a response to the old form of revenue generation was modularity, the industry directors were then charged by the team leader with compiling these fintechs and their relevant metadata into a formal interface for the orchestration system that became known as the Fintech Engagement Program. This program, which initially was an Excel spreadsheet but then was upgraded to a more tailored interface hosted by StartupFlow, was then meant to be accessible by all of the industry directors, who could access it to explore ways in which they could bundle complementary services into their own industry solutions using what had already been found by their peers, avoiding the need to pave new relationships with unknown contacts - a time-consuming endeavor.

On the topic of time, it is worthwhile to pause and consider that fintechs themselves (as

collections of entrepreneurs managing them) are agentic, and therefore what makes sense for them must be accounted for in this system. Recall as well that Atos' previous mode of generating revenue structures until now involved long, intense contracts which take significant time - a very consequential resource for small, novel fintechs - to order out. To depart from that institutional revenue-generating method also means to depart from institutional practices that convene to create it:

"I try to replace [bureaucratic] processes [with] some pragmatic business development. When a fintech comes to us, they don't want to fill out one paper for the [non-disclosure agreement], one paper for the framework elements... What they want to do is work on opportunities. That's how I try to keep them working with us; it's for the business. Bringing opportunities to them, bringing exposure to our work clients, and so on." (Alpha Team industry director, December 2019)

From the fintechs' point of view, this approach can be incredibly valuable for a few reasons.

Notably, the time saved in getting client exposure can be diverted towards product and offering improvement.

The fintechs want to work within Atos because they want to work sales, right? [If I, as a fintech,] don't make any sales, I don't survive... If I'm doing everything right, I'm really trying to develop a better experience which means I have a lot of software developers, which means who has the money to hire a lot of sales people? But if I have a partnership with Atos, even better if they've made an investment into me, then they're pushing my product. (Senior analyst in an independent research firm, October 2020)

This interviewee quickly points out the other side to this, though:

And it's not enough, right, so that type of a fintech, that's what they say to Atos and they also say that to the next ten competitors of Atos. (Senior analyst in an independent research firm, October 2020)

To relate to some concepts from the first phase as we examine the process of a maturing partnership, once a potential fintech passes the due diligence checks that risk mitigation

protocols necessitate and in order to show a continued eagerness to work directly with these fintechs, the core team integrates its offering into demo solutions, oftentimes alongside other functions. Functions in this case can be other fintechs' offerings, or they can be capabilities that Atos itself provides. These demos serve as a way to prove to current and potential clients the value creation potential of the total solution, which intrinsically means a proof of the fintech's proportionate value. A successful demo also shows clients the robustness of the solution offered, and according to one interviewee, this is especially important to more risk-averse clients.

Deutsche Bank likes that you've done it before for another major bank before they'll trust you, so particularly on innovative, new topics where it's new solutions, potentially one driven by a startup or through a partnership or Google... it's not something you can convince Deutsche Bank on. (Former Alpha Team industry director, January 2020)

If the alignment of the fintech's offering with Atos' orchestration system is continually useful for client expectations, it can result in a state of legitimacy that goes beyond the bounds of piecemeal contract fulfillment.

Either a stronger bond continues to improve, strengthening the bond as trust grows, and so this fintech will more often be chosen as a solution partner for more and more clients. [The] other result can be that if Atos and the fintech grow really close, an M&A is initiated. We've done this in the past with several fintechs. (Alpha Team industry director, April 2020)

However, an important sentiment arose in interviews with two industry directors. That is that this is not a linearly scalable tactic, because the onus of researching new fintechs still rests with the industry directors - who are simultaneously busy as frontline responders to client demands. As one director put it, having a handful of fintechs with a track record of proven performance is preferable to having a litany of them, if just for the fact that maintaining relationships with the individuals running each fintech (for instance, having calls with them to

adjust existing offers towards new client demands, to renegotiate terms of partnerships, and so on) is a continually time-consuming process.

Phase 3: Orchestration maturity.

By this point in the process, the core team has amassed the resources it required from internal stakeholders as well as the capabilities necessary to engineer comprehensive, orchestrated offerings from external stakeholders. Recalling that modularity was a key feature of this offering, other projects that originated outside of the need to provide baseline offerings but that could use the architecture of the products created by this process started to form.

There is no value in being something like a fintech database... it doesn't bring any value to our company; what we want is to grow, to help the company grow with this collaboration with fintechs. So for us, the number one KPI is sales. So if we want to be more efficient in terms of sales, we need to focus more... And the most important is that they also find value in the cooperation, otherwise they wouldn't spend their scarce resources on this" (Alpha Team industry director, February 2020)

As this industry director reflects, simply gaining the capability to orchestrate or components of an orchestration system does not do much by itself.

In terms of value capture, internal stakeholders - those leveraging sales expectations on the core team, those relying on previously mentioned implications of returned support, and so on - relied on an idea of continued value creation. In terms of value creation, external stakeholders - mainly the fintechs who had lent their offerings to Atos' orchestration system - relied on Atos' continued value capture. We see this in several lateral projects that have sprung up with some componential point of origin residing in the system orchestrated in the above process. These are ongoing processes at the time of this paper's submission, and as such there are confidentiality concerns preventing us from detailing them.

All the same, where the two types of stakeholders' expectations meet and then cross to the point where they rely on each other's continued support is perhaps the most satisfying part of this process, at least for the orchestrators. There is not a clearly identifiable point at which this happened, but it seems to have emerged some time in early 2020. Considering that the process began in 2016 to respond to an issue that emerged even earlier in 2014, the mutual understanding between stakeholders that finally allowed the orchestrators to move from legitimacy building to legitimacy management (Suchman, 1995) freed up time for the individual actors to tend to other projects or, as became increasingly relevant during the COVID-19 pandemic that erupted midway through our data collection process, adjust to major global events unrelated to their jobs.

Conclusion

Firms are in a constant search for valuable innovations, whether for survival or bunker-busting². Managers, as the footsoldiers of these efforts, often seek collaboration with other ecosystem participants to jumpstart this process. The reality is that many of these collaborative endeavors fail to reach set objectives, with shifting landscapes and subsequent legitimacy concerns hampering their progress. In this paper, we investigate how actors within a firm engage in a bifurcated legitimacy campaign to coerce internal and external stakeholders into supporting an innovating orchestration system. Using ethnographic methods and interviews as well as drawing on legitimacy-specific institutional theory and ecosystem innovation literatures, we looked at the evolving motives, expectations, and legitimacy-building strategies actors in a keystone, orchestrating firm employ through a process lens to shed light on how these stakeholders can be made to work for each other.

² Bunker-busters are explosives, usually air-dropped bombs, specially engineered to destroy heavily fortified structures that are otherwise difficult to penetrate. This is an analog for new innovations that are specifically designed to dethrone dominant ones.

We discovered that actors on the core team initiating the intent to catch their firm up with its outpacing competitors had to woo internal stakeholders with the idea that its innovative orchestration was already underway and vetted by knowledgeable, outside agents, while simultaneously convincing the external stakeholders whose buy-in it needed to power the system that it would be a lucrative endeavor in which to participate. We thus add to literature streams concerning value creation in ecosystems (Adner & Kapoor, 2010; Ceccagnoli et al., 2012; Cennamo & Santaló, 2019) by shedding light on internal stakeholders as important actors to consider and removing the *de facto* assumption from these streams that firm managers who engage in novel ecosystem ventures can rely on *ex ante* internal stakeholder support.

Where these discourses happened in a temporal sense relative to each other also places focus in a story of narratives (adding to Garud, Gehman, et al., 2014; Garud, Schildt, et al., 2014; Kuratko et al., 2017) to actual and symbolic discourses. At times, symbolic discourses were meant to relay future states, which would conditionally become actual pending the stakeholder's support. This makes the orchestrating manager's role especially difficult, in that he or she must keep track of to whom what was promised and whether those expectations will be met on time and with any necessary, dependent support from others in place.

Time is a recurring theme in this work, and as a process work, we add to the broadening and respectable field of scholarship seeking temporal understandings of firm innovation (Kouamé & Langley, 2018; Paquin & Howard-Grenville, 2013). Researching the actions of managers in a firm who are dealing with a rapidly shifting landscape allowed us to observe a fascinating diversity of environmental factors that these actors were made to deal with. We believe that insights from these are useful for process literature as well as for practitioners who find themselves in settings of accelerating change.

On the note of practical implications, our findings suggest that management can actually harness the process of seeking legitimacy for the separate but subordinate process of ecosystem-building. Orchestrators need to build an ecosystem of complementors who are all convinced of the hub firm's legitimacy, which the managers we focused on achieved in the process of venture creation. Crucial to this synchronous result was the bifurcated legitimacy campaign to coerce internal and external stakeholders into supporting an innovating orchestration system.

Limitations and future research avenues.

Our study is not without some limitations, but these also present opportunities for future research to advance our work. We have no reason to believe that the dynamics we discussed are specific to this ecosystem. The advantage to researching a relatively mundane case rather than a highly extraordinary one is that the very dynamics we walk away from this research site with are mundane - in the sense that they could happen in any setting where an orchestration strategy requiring resources to build and participation of unbound, other parties to power. However, the single case nature of our study invokes the common lack of generalizability that comes even with researching mundane cases. Future research, then, can explore the veracity of our claims by applying more systematic, large-*n* research methods to explore keystone variables that our qualitative research could not. Additionally, we have a thorough understanding of what went on within Atos during this time, but research on field-level perspectives of such an event could greatly support further theorization concerning a role that we believe to be valuable for high-tech ecosystems.

Ecosystem legitimation processes in our digital enabled setting are structured in quite a unique way, and tech-savvy fintech actors might yet have to learn how to better integrate non-traditional actors in their traditional value chains. We argue, however, that the problems we address in our study – such as the necessity to deal with legitimization building and maintenance, are universal to all collaborative innovation initiatives. Nevertheless, we highlight the need to extend the study of our ecosystem legitimacy-building framing to more industry contexts to further increase the external validity of the concept.

References

- Adner, R., & Kapoor, R. 2010. Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. *Strategic Management Journal*, 31(3): 306–333.
- Aldrich, H., & Fiol, C. M. 1994. Fools rush in? The institutional context of industry creation. *Academy of Management Review*, 19(4): 645–670.
- Aldrich, H., & Ruef, M. 2006. *Organizations Evolving* (2nd ed.). London. <https://doi.org/10.4135/9781446212509>.
- Ansari, S. (Shaz), Garud, R., & Kumaraswamy, A. 2016. The disruptor’s dilemma: TiVo and the U.S. television ecosystem. *Strategic Management Journal*, 37(9): 1829–1853.
- Aoki, K., & Wilhelm, M. 2017. The Role of Ambidexterity in Managing Buyer–Supplier Relationships: The Toyota Case. *Organization Science*, 28(6): 1080–1097.
- Bitektine, A., & Haack, P. 2015. The “macro” and the “micro” of legitimacy: Toward a multilevel theory of the legitimacy process. *Academy of Management Review*, 40(1): 49–75.
- Bitektine, A., Hill, K., Song, F., & Vandenberghe, C. 2020. Organizational Legitimacy, Reputation, and Status: Insights from Micro-Level Measurement. *Academy of Management Discoveries*, 6(1): 107–136.
- Borup, M., Brown, N., Konrad, K., & Van Lente, H. 2006. The sociology of expectations in science and technology. *Technology Analysis & Strategic Management*, 18(3–4): 285–298.
- Cartel, M., Boxenbaum, E., & Aggeri, F. 2019. Just for fun! How experimental spaces stimulate innovation in institutionalized fields. *Organization Studies*, 40(1): 65–92.
- Ceccagnoli, M., Forman, C., Huang, P., & Wu, D. 2012. Co-Creation of Value in a Platform Ecosystem: The Case of Enterprise Software. *MIS Quarterly*, 36: 263–290.
- Cennamo, C., & Santaló, J. 2019. Generativity Tension and Value Creation in Platform Ecosystems. *Organization Science*, 30(3): 617–641.
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. 2017. Organizational Legitimacy: Six Key Questions. *The SAGE Handbook of Organizational Institutionalism*: 27–52. London: SAGE Publications Ltd.
- Deephouse, D. L., & Carter, S. M. 2005. An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies*, 42(2): 329–360.
- Dhanaraj, C., & Parkhe, A. 2006. Orchestrating Innovation Networks. *The Academy of Management Review*, 31(3): 659–669.
- DiMaggio, P. J., & Powell, W. W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2): 147–160.
- Durand, R., & Kremp, P.-A. 2016. Classical deviation: Organizational and individual status as antecedents of conformity. *Academy of Management Journal*, 59(1): 65–89.
- Duriau, V. J., Reger, R. K., & Pfarrer, M. D. 2007. A content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational Research Methods*, 10(1): 5–34.
- EBA. 2018. *Report on the impact of Fintech on incumbent credit institutions’ business models*. European Banking Authority.

- <https://eba.europa.eu/sites/default/documents/files/documents/10180/2270909/1f27bb57-387e-4978-82f6-ece725b51941/Report%20on%20the%20impact%20of%20Fintech%20on%20incumbent%20credit%20institutions%27%20business%20models.pdf?retry=1>.
- European Commission. 2016. *Payment services (PSD 2)—Directive (EU) 2015/2366*. https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366_en.
- Fisher, G., Kotha, S., & Lahiri, A. 2016. Changing with the times: An integrated view of identity, legitimacy, and new venture life cycles. *Academy of Management Review*, 41(3): 383–409.
- Fisher, G., Kuratko, D. F., Bloodgood, J. M., & Hornsby, J. S. 2017. Legitimate to whom? The challenge of audience diversity and new venture legitimacy. *Journal of Business Venturing*, 32(1): 52–71.
- Garud, R., Berends, H., & Tuertscher, P. 2018. Qualitative approaches for studying innovation as process. *The Routledge Companion to Qualitative Research in Organization Studies*. London: Routledge, 226–247.
- Garud, R., Gehman, J., & Giuliani, A. P. 2014. Contextualizing entrepreneurial innovation: A narrative perspective. *Research Policy*, 43(7): 1177–1188.
- Garud, R., Kumaraswamy, A., Roberts, A., & Xu, L. 2020. Liminal Movement by Digital Platform-Based Sharing Economy Ventures: The Case of Uber Technologies. *Strategic Management Journal*. <https://doi.org/10.1002/smj.3148>.
- Garud, R., Schildt, H. A., & Lant, T. K. 2014. Entrepreneurial Storytelling, Future Expectations, and the Paradox of Legitimacy. *Organization Science*, 25(5): 1479–1492.
- Jacobides, M. G., Cennamo, C., & Gawer, A. 2018. Towards a theory of ecosystems. *Strategic Management Journal*, 39(8): 2255–2276.
- Khanagha, S., Ansari, S., Paroutis, S., & Oviedo, L. 2020. Mutualism and the dynamics of new platform creation: A study of Cisco and fog computing. *Strategic Management Journal*.
- Kim, B. K., & Jensen, M. 2011. How product order affects market identity: Repertoire ordering in the US opera market. *Administrative Science Quarterly*, 56(2): 238–256.
- Kouamé, S., & Langley, A. 2018. Relating microprocesses to macro-outcomes in qualitative strategy process and practice research. *Strategic Management Journal*, 39(3): 559–581.
- Kuratko, D. F., Fisher, G., Bloodgood, J. M., & Hornsby, J. S. 2017. The paradox of new venture legitimation within an entrepreneurial ecosystem. *Small Business Economics*, 49(1): 119–140.
- Langley, A. 2007. Process thinking in strategic organization. *Strategic Organization*, 5(3): 271–282.
- Lee, B. H., Hiatt, S. R., & Lounsbury, M. 2017. Market Mediators and the Trade-offs of Legitimacy-Seeking Behaviors in a Nascent Category. *Organization Science*, 28: 447–470.
- Luger, J., Raisch, S., & Schimmer, M. 2018. Dynamic Balancing of Exploration and Exploitation: The Contingent Benefits of Ambidexterity. *Organization Science*, 29(3): 449–470.
- Martens, M. L., Jennings, J. E., & Jennings, P. D. 2007. Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50(5): 1107–1132.
- Masucci, M., Brusoni, S., & Cennamo, C. 2020. Removing bottlenecks in business ecosystems: The strategic role of outbound open innovation. *Research Policy*, 49(1): 103823.
- Meyer, J. W., & Rowan, B. 1977. Institutionalized Organizations: Formal Structure as Myth and

- Ceremony. *American Journal of Sociology*, 83(2): 340–363.
- Milliken, F. J. 1987. Three Types of Perceived Uncertainty about the Environment: State, Effect, and Response Uncertainty. *The Academy of Management Review*, 12(1): 133–143.
- Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J., & Pozzolo, A. F. 2017. Fintech and Banking. Friends or Foes? *European Economy*. <https://doi.org/10.2139/ssrn.3099337>.
- Ozalp, H., & Cennamo, C. 2017. Platform Architecture, Multihoming and Complement Quality. *Academy of Management Proceedings*, 2017(1): 12276.
- Paquin, R. L., & Howard-Grenville, J. 2013. Blind dates and arranged marriages: Longitudinal processes of network orchestration. *Organization Studies*, 34(11): 1623–1653.
- Patala, S., Korpivaara, I., Jalkala, A., Kuitunen, A., & Soppe, B. 2019. Legitimacy Under Institutional Change: How incumbents appropriate clean rhetoric for dirty technologies. *Organization Studies*, 40(3): 395–419.
- Poole, M. S., Lambert, N., Murase, T., & Asencio, R. 2016. Sequential analysis of processes. *The SAGE Handbook of Process Organization Studies*: 254–270. London: SAGE Publications Ltd.
- Ruef, M., & Scott, W. R. 1998. A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly*, 877–904.
- Shipilov, A., & Gawer, A. 2019. Integrating Research on Inter-Organizational Networks and Ecosystems. *Academy of Management Annals*. <https://doi.org/10.5465/annals.2018.0121>.
- Sorrentino, F. 2020, January 27. Banks Are Sitting On The Digital Economy's Most Valuable Resource: Data. *Forbes*. <https://www.forbes.com/sites/franksorrentino/2020/01/27/banks-are-sitting-on-the-digital-economys-most-valuable-resource-data/>.
- Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3): 571–610.
- Tracey, P., Dalpiaz, E., & Phillips, N. 2018. Fish out of Water: Translation, Legitimation, and New Venture Creation. *Academy of Management Journal*, 61(5): 1627–1666.
- Van de Ven, A. H., & Poole, M. S. 2005. Alternative Approaches for Studying Organizational Change. *Organization Studies*, 26(9): 1377–1404.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., et al. 2021. Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122: 889–901.
- Whitehead, A. N. 1929. *Process and reality*.
- Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. 2017. Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, 38(1): 93–113.
- Zuzul, T., & Edmondson, A. C. 2017. The advocacy trap: When legitimacy building inhibits organizational learning. *Academy of Management Discoveries*, 3(3): 302–321.

Appendix

Interview data	<i>Role</i>	<i>Relevance</i>	<i>Interviews</i>
	A-Team firmr. Lead	- Oversaw team as it headed into ecosystemic change; - departed at the onset of PSD2	2
	A-Team Lead	- led team through the bulk of change; - position made redundant towards the end of data collection	3 + several informal chats
	A-Team Industry Directors	- Primary curators of client accounts (demands and solutions); - Research new fintechs and maintain existing fintech relationships	8 + several informal chats
	A-Team Marketing Director	- In charge of broadcasting firm messaging for public and internal consumption; - has a broad view of firm-wide strategic goals	2
	TQ Founders	- Oversee fintech incubator community - Accepted Atos sponsorship near inception of the hub	2
	Senior Level Market Analyst	- Able to provide a triangulating perspective, external of both Atos' and TQ's orbit - insights have strong consequences for firm valuation considerations	1
Participant Observation	<i>Type</i>	<i>Relevance</i>	<i>Tally</i>
	Weekly Atos strategy meetings	Allows an examination of the weekly routines, challenges, and expressions of the team VP and members	48
	<i>Ad hoc</i> Atos meetings	Allows an examination of how the firm reacts to challenges encountered in the formation of fintech partnerships, such as failure to deliver contract items	7
	Atos/TQ events	Allows for field observations of Atos & TQ cultures, as well as how actors interact with int. and ext. parties	3

Table 1. Data sources and relevance.

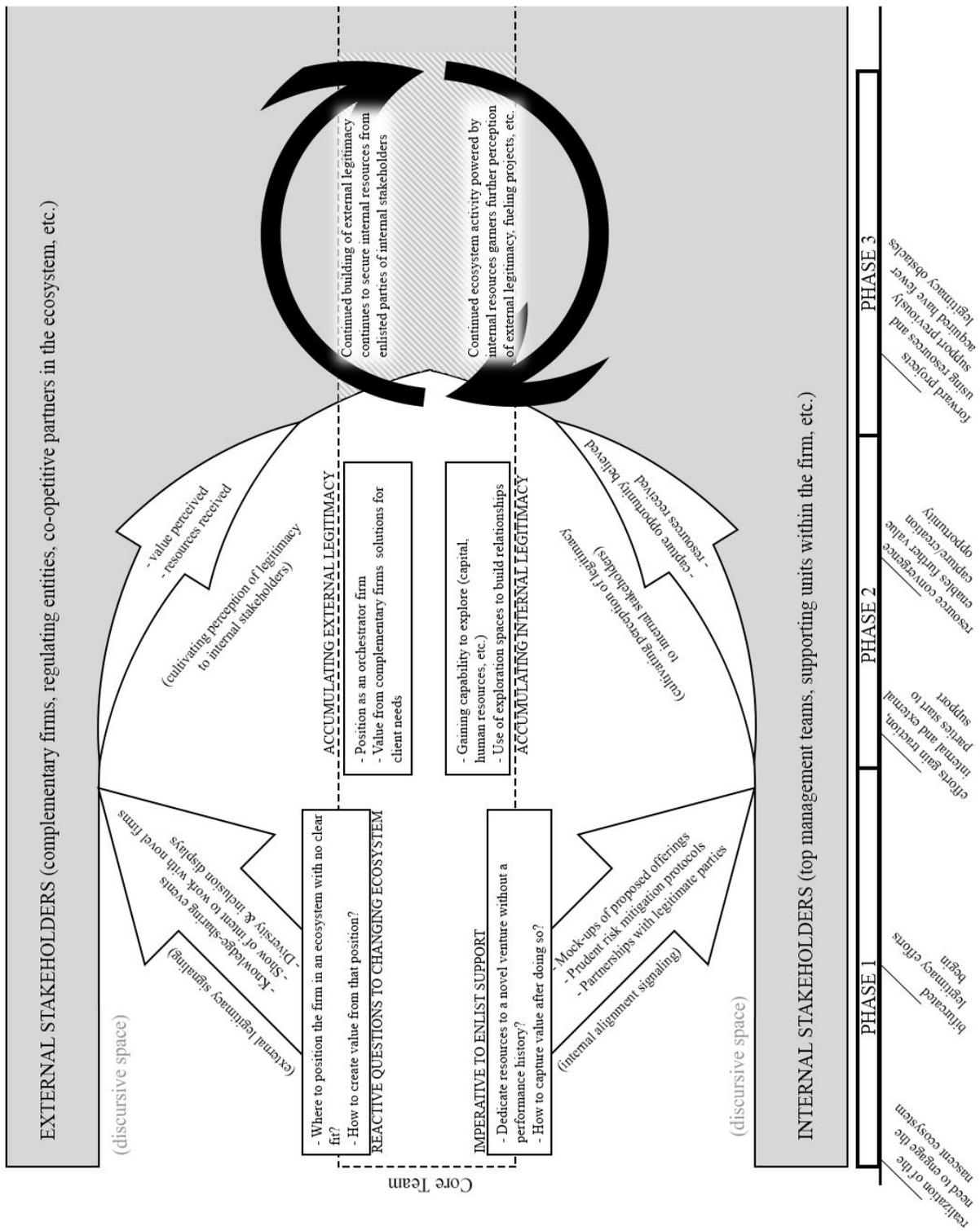


Figure 1. Conceptual model depicting the process of bifurcated legitimacy campaigning.