Firm legitimacy in the face of nascent ecosystemic uncertainty

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When a large-scale change hits a natural ecosystem, it upends the existing order of organisms and their interrelationships. Those that adapt to new uncertainty generally survive and might form stronger - or weaker - reconfigured partnerships as a result. “From financial services to manufacturing” (Jacobides et al., 2018, p. 2256), organizational scientists have been keenly aware of the “clear parallels” (Moore, 1993, p. 76) between natural and organizational ecosystems. Accordingly, the implementation of PSD2, a European directive that opens banking processes to third party service providers, strips legacy firms from their oligarchical control over financial services. This has drastically upended the European financial services ecosystem - arguably reshaping the extant into a whole new one - and incumbent firms must competently adapt to this and the uncertainty it brings, often forming new strategic partnerships underpinned by trust in each party’s legitimacy.

Exemplary of a more general tendency of entrepreneurs in ecosystems with high levels of technological novelty facing greater legitimacy demands in accessing resources (Audretsch et al., 2019; Colombelli et al., 2019; Denoo & Yli-Renko, 2019), this upheaval has allowed a litany of innovative financial technology firms - “fintechs” - to move in as third parties and rub shoulders with incumbent firms such as banks, IT service providers and insurance providers. These fintechs specialize in specific functions and therefore are likely able to innovate those functions faster than incumbent firms can innovate their holistic systems. Fintechs are fundamentally “disrupting banking markets” (Navaretti et al., 2018, p. 63), destabilizing both the standing legitimacy incumbent firms held until recently as well as the accuracy with which decision-makers in these firms are able to strategically predict their firms’ futures in this new landscape. Incumbents, then, must strive to (re)gain legitimacy alongside highly technological startups that are competitively vying for their own and, given the turbulence of the constantly developing ecosystemic conditions, cannot reliably communicate to stakeholders what their firm’s future in such a setting will look like. This is an undertheorized matter of particular relevance to the further study of the emergence of highly entrepreneurial ecosystems.

This has also created an unlikely bridge between two camps: large, incumbent firms require the agility and competence that small fintechs provide, whereas the latter need the legitimacy-by-association and network effects that large firms can provide. This coalescence is considered in management literature an ecosystem (Cennamo & Santaló, 2019; Jacobides et al., 2018). As rich literature on the paradox of new venture legitimation within an entrepreneurial ecosystem has started to point out, survival in these settings is determined in part by entrepreneurs' ability to not only establish but also diffuse their legitimacy for effect (Kuratko et al., 2017). However, these efforts and the relationships they create can be torpedoed by unpredictable or hard-to-predict futures; legitimacy, then, is a dynamic trait.

Legitimization processes are context- and time-dependent. In nascent ecosystems, where uncertainty is ever present, truth and reliability become paramount in interfirm engagement - as they do in the interpersonal engagements entrepreneurs undertake both within and outside of their firms to gain support for their ventures. Contributing to the wider entrepreneurship literature, and to recent work on nascent ecosystems (e.g. Santos & Eisenhardt, 2009) in particular, we investigate *how a firm, faced with uncertainty, establishes legitimate roles and relationships in a nascent ecosystem*. We do so in a single-case process study that focuses on the actions of a large, incumbent firm, Atos, as it navigates through a post-PSD2 fintech ecosystem in pursuit of legitimacy and collaborative innovation.

Atos is a large, multinational enterprise comprised of many different units that engage in many different industries. We focus on its global financial services unit (hereafter GFS), which has embedded itself in an ecosystem of fintechs in order to create digital-financial solutions that it can modularly market to its clients: banks, payment systems providers, insurance underwriters, and the like. The firm is a potent site for the investigation of internal legitimacy challenges over time, as a major change in the top management team and a high turnover rate in the middle- and upper management tiers mean instability tenure and individual-led ventures.

The paper will proceed with a literature overview that ties legitimacy and uncertainty to ecosystem discourse. Data collection and analysis measures will follow. As these two steps are still ongoing, we will provide only preliminary findings to preamble the full paper, which will be ready by the July EGOS conference and the contributions of which we will conclude with.

Legitimacy

As firms interact and engage in competitive, cooperative, or co-opetitive relationships with each other, they must barter with *legitimacy*. Legitimacy, in a broadly cited sense, is a socially and politically "generalized perception… that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). Recent literature has shown that, in an ecosystemic environment with high collaboration between firms, the steps towards legitimacy achievement are slippery. In ecosystems, usually lacking hierarchical governance (Jacobides et al., 2018; Shipilov & Gawer, 2019), participants must conform to socially constructed norms to achieve legitimacy. Firms run the risk of over-conforming, however, at which point they may blur the lines that delineate their offerings from those of their competitors. This can be especially damaging, as 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 et al., 2007). Firms that go the other direction - over-distinguishing themselves - run the risk of ecosystemic rejection, forcing them to walk a tightrope that Zhao et al. (2017) term *optimal distinctiveness*. Atos, as an incumbent firm experiencing integration in a fintech ecosystem among competitors in the turbulent wake of regulation-related ecosystemic change, must walk this same tightrope. Thus, we further build on Zhao et al.'s (2017) call for research that views firms' strategic balancing as dynamic rather than fixed through time.

The efforts a firm must undertake to achieve optimal distinctiveness may similarly come with trade-offs. Lee, Hiatt, and Lounsbury (2017) explore this notion and 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). Though Atos seems to be doing this "by creating a knowledge base in their own organization" (Aldrich & Ruef, 2006, p. 186), this is exceedingly difficult for entrepreneurs (within both new and incumbent firms) attempting an entirely new venture that lacks a clear ecosystemic predecessor.

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 et al., 2006, p. 285). Garud et al. (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 Atos as a large firm, ecosystemic turbulence means that its past legitimacy 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. Regardless, these difficulties are compounded by the broad landscape change that comes with ecosystemic uncertainty.

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 this ecosystem as new and highly subject to external forces. Its entrants and incumbent participants seem to see themselves as similarly subject to these forces and unable to reliably envision their firms' futures past significant ecosystemic events. This coidentity affects the barriers to partnership they enforce, as some firms adopt higher ones than their competitors in order to insulate their firms from the uncertainty of a potential partner's failure. The implications of this on their roles and relationships are particularly interesting and will be explored deeply in the forthcoming paper's findings.

Data Collection

[Figure 1. Diagram of Atos' organizational matrix]

Data collection for this research began in August 2019. We have so far conducted seven semi-structured interviews with four current and one past mid- to top-level directors. 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 conduct one more round of focused interviews with the current directors as well as an additional director recommended by one of the original informants. Provided no new, significant data arise in this round, we will conclude this method of collection. Augmenting interview data are notes from sitting in weekly strategy meetings among the GFS directorate. We have notated these meetings for relevant themes since August 2019 and will continue to do so through this paper's submission.

Data Analysis

We import all interview transcripts, interview notes, meeting notes, and web publications into the computer-assisted qualitative data analysis software Nvivo. We use Nvivo to perform iterative coding and recoding of these data as new theoretical concepts emerge, akin to the Gioia methodology (Gioia et al., 2012). Accordingly, we are coding for first-order concepts - what informants consider important to them - and subsequent second-order concepts - those that relate first-order concepts to academic concepts. Reaching a point of completion between these orders involves iteratively bouncing back and forth as new data arrive, and the result will be “a sensible visual aid… [that] also provides a graphic representation of how [we progress] from raw data to terms and themes in conducting the analyses” (Gioia et al., 2012, p. 20).

Findings and Discussion

To industrialize the process of rapid partnership building and seemingly in order to bolster its internal knowledge generating capability and thereby *build* and *maintain* ecosystemic legitimacy, Atos created an abstract platform called the Fintech Engagement Program. Atos also began an annual, €50,000 “sponsorship” of TechQuartier, a German fintech incubator. Through both the platform and the sponsorship, key agents within GFS attend various fintech-related events (many of which are at TechQuartier) in order to network with fintech startups, attempting to recruit them as complementors (Cennamo & Santalo, 2013), *as well as* potential clients: other large firms investing in TechQuartier. This diverse, modular collection of complementors can then be used by Atos for the purposes of

1. internal-use and public market research generation,
2. end-to-end solution-building for clients (which it might find at TechQuartier), and
3. experimentation bundles that Atos can offer to clients in conjunction with regular contracts.

The first point relates to Aldrich and Ruef’s (2006) description of cognitive legitimacy building. Interestingly, the platform’s key originator had to orchestrate Atos-branded publication of fintech market research in order to gain trust, support, and capital from within the firm for the platform’s creation. Now, the platform serves as a networking tool for continued market research. The second point is the core of GFS’ basic revenue-generating model. Related to that, the final point is particularly interesting as it ropes the client into the innovation process. This concept, which Atos calls its “FinLab,” allows clients to (with Atos’ hands on the actual orchestration) exploratively stack fintechs and other digital components together to see how they fit into the client’s needed solution or perhaps entirely new ones. This additionally removes the onus of innovation from Atos’ organic capabilities, which alleviates pressure on the highly leveraged firm.

However, the barriers to this platform's entry are trust-based and high. The leader of GFS only collaborates with fintechs in the later funding stages as a risk mitigation strategy. TechQuartier also seems to have a selection mechanism in place for fintechs that can enter its space based on whether or not the enterprise fits within its culture. This potentially doubly bottle-necked gate, while in the interests of protecting firm resources, likely significantly limits the potential field of fintechs and therefore innovative functions Atos can be exposed to. While these findings are only preliminary, this suggests a case of a firm responding to uncertainty with high walls of institutional reticence, inhibiting its capability to optimally distinguish itself from ecosystemic competitors.

Conclusion

We expect our further findings to have a threefold contribution: first, despite a long-standing tradition of studying various aspects of entrepreneurial and new-entry opportunity, little attention has been paid to the role of legitimacy at the intersection of institutional and technological change and subsequent uncertainty. As we focus on an incumbent firm enduring through regulatory change, our research will further frame legitimacy as a dynamic trait, adding to research that explores how firms differentiate their offerings in increasingly networked ecosystems (Shipilov & Gawer, 2019; Zhao et al., 2017). Finally, as we focus primarily on the interactions of individuals within and between firms, it will contribute to the rising topic of trust and emotion-based human mechanisms in organizational strategy (Dassen, 2019; Dillon & Manz, 2015; Klüppel et al., 2018; Maitlis & Ozcelik, 2004).

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