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How do non-innovative firms start innovation and build legitimacy? The case of professional service firms

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**How do non-innovative firms start innovation and build legitimacy?
The case of professional service firms**

ABSTRACT

As clients' needs change, firms need to adapt and innovate, but how do firms innovate if they have not done it before? We study law firms as novice innovators. Law firms are generally conservative and averse to exploration-based innovation. We show that law firms face two challenges in starting innovation: developing innovation capacity and gaining legitimacy for innovative behavior. Employing a qualitative comparative analysis approach, we used 50 in-depth interviews with innovating multinational law firms headquartered in the United Kingdom to present six configurations of factors leading to service innovation in law firms. Clients and competitors play a key role both as innovation stimuli and legitimizing actors. We demonstrate that knowledge-based networks are important for service innovation, but legitimizing strategies are important for novice innovators to ensure innovation is recognized, approved, and diffused.

Keywords: professional service firms; service innovation; process innovation; legitimacy; law firms; qualitative comparative analysis.

Article Type: Research paper

INTRODUCTION

Innovation fuels economic progress (Schumpeter, 1934) and thus has become a necessity—even for traditional firms (Erdogan, Rondi, & DeMassis, 2020). However, the literature is unclear on how firms can innovate as first-timers, that is, as novice innovators? Here, we define novice innovators as those firms that lack experience in innovation activities and have only recently started to invest themselves. Continuous innovation has become an especially pressing challenge for professional service firms (PSF) due to increasingly sophisticated consumer demands (Malhotra, Smets, & Morris, 2016). Consequently, PSFs not only represent one of the fastest-growing sub-sectors in the new millennium (Coeuré, 2019; Feldstein, 2017; Galesi & Rachedi, 2019; Løwendahl, 2005; Ostrom et al., 2010; Witt & Gross, 2020), but one that is also crowded with novice innovators.

Among PSFs, lawyers are known to be conservative, inexorable, and routine-adherent. Law firms have been associated with black suits and long working hours rather than exciting creative brainstorming activity. They are known for basing their service on previous academic knowledge and reputation, not new technological ideas (Harvey & Mitchell, 2015). Accordingly, PSFs in the legal sector are averse to radical or exploration-based innovation and usually privilege transactions entailing small adaptations of pre-existing solutions (Carlborg, Kindström, & Kowalkowski, 2014; Malhotra et al., 2016). Nevertheless, the past decade has seen increasing global demand for legal services due to economic growth, increased international trade, and greater economic links between countries. Today's companies need lawyers to not only resolve legal issues, but also support their business efforts. Thus, the legal services industry plays a key role in facilitating and sustaining markets (Malhotra et al., 2016). For example, the energy sector has recently faced unprecedented industry developments that have called for complex financial and legal infrastructures that prompted far-reaching legal innovations (Malhotra et al., 2016). Accordingly, the legal profession has undergone substantial changes, compelled to revise

processes and policies in order to achieve goals and objectives while better serving clients. In this vein, we refer to service innovation as either a new development process or as the outcome of an existing process that is new to the firm.

While some current law firms are innovative, we know very little about how these law firms innovate (Calborg et al., 2014; Malhotra et al., 2016). How are law firms, as novice innovators, capable of establishing innovation practices? And how can law firms innovate by changing their behavior without losing their reputation because of a lack of legitimacy for this new behavior? In other words, there is a need to understand how novice innovators become legitimate innovative actors.

A fully legitimate actor is one whose behavior is unquestioned (Deephouse et al., 2017). While we know little about service innovation in law firms, we know even less about how that innovation gains legitimacy (Anand et al., 2007; Tsinopoulos, Sousa, & Yan, 2018). Indeed, innovation is the result of combining and coordinating resources and legitimizing new products and processes to make them proper and appropriate for others (Gardner, Anand, & Morris, 2008). Accordingly, we seek to not only understand the key factors that lead to innovation in law firms (Kuester et al., 2013; Storey et al., 2016), but also determine how innovation is legitimized within a socially constructed system of norms and values (Suchman, 1995; Tsinopoulos et al., 2018; Zhang & Li, 2010). Consequently, we aim at answering the following research questions: *Which set of antecedent factors enables law firms as novice innovators to become innovative? And how does the introduced innovation obtain legitimacy?*

To answer the first question, we applied a fuzzy-set qualitative comparative analysis (QCA) to identify the specific configurations of factors that work better in law firms that were not previously innovative (i.e., novice innovators), but have increased their efforts in the last decade. Through qualitative data based on 50 in-depth interviews with nine multinational firms in the United Kingdom (UK), we arrive at six configurations through which law firms

innovate. Consistent with our focus, these firms are novice innovators. To answer the second question, we analyzed the data from the semi-structured interviews to determine the factors that contributed to the legitimization process of law firms' innovation, taking into account the scale adopted by Deephouse et al. (2017) (i.e., accepted, proper, debated, and illegitimate).

Thanks to a novel conceptualization, our study makes some theoretical contributions and managerial implications that are discussed thoroughly at the end of the paper. First, we show the significance of complexity in the service sector. Complexity not only affects service sectors in terms of different innovation antecedents, but also determines the various paths (i.e., configurations) that firms can pursue to derive innovation outputs. Thus, we demonstrate that different sets of organizational aspects lead to similar innovation outcomes in law firms. Relatedly, we also provide evidence that a combination of organizational aspects is responsible for innovation in law firms. Second, we highlight that attaining legitimacy for the adopted innovation is crucial to getting that innovation recognized, approved, and diffused for novice innovators. Accordingly, we show how the innovation introduced is legitimized, both internally and externally. As a novel insight for this sector, we provide evidence on the vital role of clients and competitors, not only as stimuli for innovation, but also as sources of legitimacy. In the case of competitors, the diffusion of an internal innovation culture helps generate legitimacy from the inside. In the case of clients, legitimacy is tied to dedicated structural units that signal the firm's voluntary effort. Finally, we confirm that knowledge-based networks are important for service innovation, with innovation produced through a tight connection between knowledge acquisition and knowledge creation.

THEORETICAL BACKGROUND

Innovation and legitimacy in law firms

Following the synthesis perspective that views service innovation as both the development process and its outcome (Witell et al., 2016), we consider innovation by law

firms to be any “creation of new value propositions by means of developing existing or creating new practices, or by means of integrating practices in new ways” (Skålén et al., 2015, p. 137; see also, Organisation for Economic Co-operation and Development [OECD], 2005; Snyder et al., 2016). In line with this interpretation, service innovation can be a new development process or an outcome of said process that is new to the firm and creates value in use. Accordingly, innovation in service firms occurs whenever (a) a new or a significantly improved product is introduced or (b) a new or significantly improved organizational process is designed (Amara, Réjean, & Doloreux, 2009; Johnson & Gustafsson, 2003; Skålén et al., 2015; Witell et al., 2016). One major topic in this domain is how firms organize themselves for service innovation (Blindenbach-Driessen & Van den Ende, 2014; Drejer, 2004; Stevens & Dimitriadis, 2004) when they are a novice innovator, i.e., they lack structured innovation processes and have always relied on conservative and routinized solutions (Maister, 1993; Malhotra et al., 2016). In this situation, typical questions include how organizations are or should be configured to succeed in their service innovation activities and which factors might help increase a law firm’s performance in relation to its service innovation.

Many studies have tried to categorize innovation in PSFs, differentiating between radical and incremental innovation (Gallouj & Weinstein, 1997), and product and process innovations (Ostrom et al., 2015; Vaux Halliday & Trott, 2010) concerning some other aspects (i.e., technology, financing, etc.) (Snyder et al., 2016). Other attempts have sought to better identify the critical success factors for service innovation (De Jong & Vermeulen, 2003; Papastathopoulou & Hultink, 2012; Snyder et al., 2016). Different meta-analytic studies (Kuester et al., 2013; Storey et al., 2016) have identified innovation culture, the involvement of front-line staff, formal service development practices, interdisciplinary teams, top management support, and technology as key antecedent factors for service innovation. Similarly, Storey and Hull (2010) have discussed the importance of technology, structured and formalized processes, and supportive management and cross-functional teams for service

innovation. Meanwhile, Oke et al. (2009) showed the pivotal role played by leadership in service innovation. More recently, some scholars have started to more thoroughly examine the impact of organizational structure (i.e., formalization, centralization, and standardization) on service innovation; Jaakkola & Hallin, 2018).

Although the focus on service innovation has increased tremendously in recent years, current research has considerably overlooked the role of legal services innovation in the effective functioning of market economies (Malhotra et al., 2016). While we know some factors are generally pivotal for service innovation, we still know very little about which specific factors are crucial for legal service innovation (Kuester et al., 2013; Malhotra et al., 2016). Moreover, we do not know whether a combination of specific antecedents makes legal service innovation more likely than a single factor in isolation. Accordingly, our aim here is to analyze and provide evidence on innovative paths in law PSFs (Kuester et al., 2013). Following previous research, this paper relies on the distinction between product and process innovation (Malhotra et al., 2016; Skálén et al., 2015; Snyder et al., 2016).

However, new services that emerge in the face of existing dominant solutions are usually considered problematic and tend to be interpreted as illegitimate or irrelevant (Anand et al., 2007; Deephouse et al., 2017; Sherer & Lee, 2002). Law firms often try to look alike and avoid too much differentiation in order to maintain their reputation and legitimacy (Anand et al., 2007; Malhotra et al., 2016). Thus, due to innovation uncertainty, building legitimacy for innovative behavior is a critical aspect in the theorizing and labeling phase of the innovation process (Gardner et al., 2008; Peeters, Massini, & Lewin, 2014). For novice innovators, innovation is a deviant behavior that lacks organizational and social legitimacy. Following Deephouse et al. (2017), we refer to legitimacy as the perception that the actions of an entity are appropriate and accepted in its social context. Hence, the legitimacy of an actor is evaluated and granted by other actors (Bitektine, 2011; Sherer & Lee, 2002) according to “socially constructed systems of norms, values, beliefs, and definitions”

(Suchman, 1995, p. 574). Legitimacy differentiates between appropriate and inappropriate actors in a social context (Tost, 2011). Any new actor entering a social context—in this case, becoming an innovative actor—is questioned due to the liability of newness (Stinchcombe, 1965). Legitimacy can assume four different states: accepted, proper, debated, and illegitimate (Deephouse et al., 2017). Thus, at one boundary, an organization is legitimate because it has demonstrated its appropriateness and can pursue its activities without being questioned (Suchman, 1995; Tost, 2011). At another boundary, illegitimate actors are those who are so questioned that radical reform or termination is needed. In between these extremes are organizations whose legitimacy is questioned to varying degrees. And debate usually occurs when an organization attempts to introduce innovative solutions into its accepted domain (Deephouse et al., 2017).

Once legitimacy is acquired through a series of actions, it becomes relatively persistent—even almost unalterable in the case of cognitive legitimacy (Suchman, 1995). In law firms that are conservative and take certain standards for granted, there are huge challenges in legitimizing innovative services. But if legitimate actors can achieve social acceptance, then their actions will appear to be aligned with the community's interest, even when they are driven by the actor's own interests. In the context of law firms, attaining legitimacy means that external stakeholders clearly understand and approve the service being offered—and equally, that organizational members accept the creation of a new service as an appropriate way to deliver that service (Gardner et al., 2008). In short, legitimacy for innovative behavior needs to be gained internally and externally.

In the case of innovation initiated by law firms that do not have structured internal innovation processes, the liability of newness is linked to actors' lack of legitimacy (Zhang & Li, 2010). To gain legitimacy, actors undertake actions to comply with or alter a community's expectations (Suddaby & Greenwood, 2005). For instance, following the International Organization for Standardization signals to external parties that the firm adheres to regulatory

requirements and implements standards of good practice (Tsinopoulos et al., 2018).

Accordingly, law firms that change their services or processes aim to position themselves within accepted institutional regimes and then signal their success in doing so.

Legitimacy can flow from sources either internal or external to the firm. Thus, our second aim in this paper—in addition to understanding which set of antecedents drives innovation in law firms—is to know how debated innovation becomes accepted and legitimized in law firms. Firms that lack consolidated innovation processes and adhere to routinized services and practices do not innovate out of the blue. To avoid being evaluated as illegitimate, innovations are increasingly triggered by extrapolating or borrowing ideas and solutions from other close domains (Cheng & Krumwiede, 2012; Malhotra et al., 2016). As we adopt the concept of innovation as new to the firm and not necessarily new to the world (Skálén et al., 2015, p. 137; Snyder et al., 2016; Witel et al., 2016), we focus on two sources as the stimulus for innovation. First, in a more proactive approach, law firms can try to innovate by interacting with clients to alter their service offer or processes. Second, in a rather reactive approach, firms can imitate competitors. Therefore, the interesting dimensions for innovation in law firms are the type of innovation (i.e., service or process), source for the innovation stimulus (i.e., clients or competitors), and how the law firm obtains legitimacy for innovation. Consequently, the attempt to produce innovative services is a question of how to configure a law firm's innovation pursuit, rather than searching for a sole driver of innovation (Sihvonen & Pajunen, 2019).

METHODS

With this theoretical lens, our research questions demand a method for developing theories that can address complex causal patterns, rather than an analytical strategy for testing theory (Ragin, 1987). Thus, we chose QCA because this approach allows us to identify how law firms organize theoretically relevant factors to realize service innovation. Moreover, unlike correlation-based methods, QCA is capable of analyzing qualitative cases. Thus, it allows us

to take full advantage of the in-depth case knowledge necessary to develop a new theory. We followed Ragin's (1987, 2006, 2008) recommendations and applied QCA in the methodological framework for which it was initially designed. Our interest centers on the set of relations between management practices, such as fostering an innovation culture, creating mixed teams and structural units, partners' leadership styles, and technology usage. By applying QCA, we seek to identify the necessary and sufficient conditions associated with innovation (Ragin, 2008). Further, QCA identifies the necessity of causal conditions: That is, this approach allows us to identify those conditions without which innovation cannot occur. Moreover, QCA detects the sufficiency of causal conditions: The conditions (or combinations thereof) that are always followed by an outcome. Accordingly, a configurational approach aligns with our main theoretical argument: Innovation outcomes in law firms are best stated in terms of sets and their relations, rather than correlations or net effects (Fiss, 2007). The advantage of QCA is that it facilitates the exploration of complex models. In line with our theorizing, these configurations are difficult to specify a priori, which calls for a two-step inductive inquiry. First, the theory is used to identify a set of factors to study, and second, QCA is used to reveal the empirical configurations of those factors (Ragin, 2008). In addition to QCA, we used qualitative data from in-depth interviews to strengthen and corroborate the QCA results for the issue of legitimacy.

Sample characteristics and data collection

QCA is a case-based method suitable for in-depth case analysis. Because cases are not variables, our data collection and sampling strategy followed the notion that variables can be ranked but cases cannot (Ragin, 2013). Instead, cases entail a complex combination of several set-memberships. These sets have distinct membership criteria; cases are entities that satisfy different set-membership criteria to a different degree. The core of QCA is to collect as much information as possible to understand the relevant sets (i.e., conditions, such as partners' leadership in our study, and what constitutes a high membership value in this set). Afterward,

all set-membership combinations are reduced to the most necessary and sufficient configurations. That is, we combine an embedded, multiple-case approach with QCA where the law firms are our cases, and the interviewees are representative parts of the cases who gave us an accurate picture of the firms.

Given our configurational methods and the associated need to analyze cases instead of variables, we turned to multinational law firms headquartered in the UK that had not previously consolidated their innovation processes. One major reason for choosing these firms is that the UK holds the largest share of the European legal services market (IMD World Competitiveness Yearbook, 2012; The Economist, 2005). Indeed, UK law firms are considered global market leaders, with professionals in other countries following their procedures. Moreover, the UK's regulatory framework for legal services provision has changed to allow greater openness and competition. The UK Legal Act, which allows alternative business structures to provide legal services, came into force in October 2011. In conjunction with the recent financial crisis, this new regime has presented new challenges and innovation possibilities. Since our research question relates to understanding the key factors that influence the innovation process in law firms, we focused on firms that had not only started consolidating their service innovation activities, but also been recognized as currently innovative by professional media sources. We also ensured that they had no previous track record of innovation practices, but nonetheless had a long-term commitment to a service innovation strategy (Kandampully, 2002). In short, our study focused on these novice innovators. Within this context, we identified nine law companies that served as the sample for our QCA analysis. They each had 12–39 offices and 170–500 partners, managing 2,300–5,500 employees. To corroborate the QCA results, we conducted 50 interviews in those firms. We interviewed people across all main roles within the law firm—that is, partners, associates, and administrative staff—who were explicitly and formally involved in the innovation process. One central line of inquiry involved asking interviewees to provide examples of the innovations their firm had developed in the last 12–24

months; explain how previous innovations were thought of and how the ideas were implemented; explain the main sources of new ideas and the processes leading to them; and provide evidence of overall innovation acceptance. Data collection took more than eight months between September 2013 and July 2014. Qualitative data from interviews were used to strengthen the QCA results and find explanations for emerging processes. Moreover, they were vital to identifying and understanding the innovation legitimization process. Table 1 provides a description of the law firms in our sample.

Insert Table 1 around here

Qualitative comparative analysis

Since our theoretical framework builds on the literature on service innovation, we referred to that literature and meta-analytic studies (Kuester et al., 2013; Storey et al., 2016) to identify the key determinants for service innovation in PSFs. Five have been identified: *fostering internal innovative culture*, *using mixed teams*, *structural internal units*, *partners' leadership*, and *technology innovation* (Oke, Munshi, & Walumbwa, 2009; Storey & Hull, 2010). Meanwhile, client collaborations (Barrett & Hinings, 2015; Malhotra et al., 2016) and competitor imitation (Dev, Zhou, Brown, & Agarwal, 2009) are the sources of innovation stimulation. Our purpose in this paper is to understand the role all of them have in law firms, not in isolation but when combined—and therefore, how they account for innovation in that sector.

Outcome variables—*Service and process innovation*. As service innovation involves new and/or improved service offerings, service processes, and service business models (Johnson & Gustafsson, 2003), we referred to Malhotra et al. (2016) in considering two specific kinds of innovation in PSFs: *service innovation* that relates to legal innovation (i.e., innovation in legal solutions, especially for the provision of new services) and *process innovation* that relates to operational innovation (i.e., refinements and enhanced efficiency at the

organizational level). All of the law firms included in the study have been acknowledged as innovators by experts in the field and consider themselves innovators as well. Specifically, Cluster S contained firms that mainly concentrate on legal service innovation, while Cluster P contained firms focusing on process innovation. We formulated a membership score for each case and calibrated the data accordingly. For these outcome dimensions, we relied only on crisp-sets, rather than the fuzzy calibration in Table 3. This allowed us to make a clear distinction between different strategies and outcomes. However, the antecedent conditions were calibrated as fuzzy-sets.

Antecedent conditions in terms of internal resources. Below we report the operationalization of the five internal resources identified in previous literature and a description of the calibration process we followed for each of them.

Fostering internal innovative culture. We operationalized the internal innovation culture dimension as a set of norms that emphasize flexibility to change, openness in communication, and future orientation focused on staff development and learning (Kuester et al., 2013; Storey et al., 2016). Subject to the full membership set are those companies with various policies and related firm-level actions that refer to these dimensions to make people more innovative inside the firm.

Using mixed teams. This dimension pays attention to the fact that there is wide evidence that work teams' heterogeneity accounts for innovative output (Storey & Hull, 2010; Storey et al., 2016). Accordingly, a full membership requirement was having mixed teams to work on innovative practices that can influence firm policies. The contrast was "no mixed teams" or "mixed teams on a very low decision-making level" in the organizational chain, which were coded in the non-membership set.

Structural internal units. This condition means that innovation effort is formally supported through ad hoc structures (Kuester et al., 2013; Storey & Hull, 2010). This is perceived as a kind of organizational commitment (Rutherford & Holt, 2007) toward

innovation. Thus, having an internal unit concerned with innovation activities is an intrinsically proactive sign of firm innovativeness. Accordingly, we assigned those firms with internal innovation councils to the full membership set and all others to the non-membership set.

Partners' leadership. Since there is broad evidence that leadership is associated with innovation (Oke et al., 2009), we evaluated the level of partners' actual examples of leading some innovation development through to completion. We consider groupthink (Janis, 1982) and power promoters (Witte, 1977) as the main consequences of a strong leadership approach. We assigned cases to each set accordingly: one with examples of a partner's leadership clearly indicating a focus on innovation and one without these examples.

Technology innovation. This dimension is concerned with technology as a means to solve practical problems, reduce costs, find more time for creativity and skills development, and improve client relationships (Kandampully, 2002; Storey et al., 2016). We assigned those firms that use technology to innovate their services to the full membership set.

Calibration. Here, we followed Basurto and Speer's (2012) suggestions and transferred our data into sets, using theory-based and case-specific knowledge to choose meaningful cut-off values (Ragin, 2008). Since qualitative data provide much more information on the dialog between theory and evidence than quantitative data, the definition of set membership was based on our knowledge of the cases. We used the interviews to establish set membership degrees. For example, we used the interviews to assess the extent to which a firm uses technology as part of the innovation process. Thus, some interviewees consistently stated that technology is an important part of their job to increase effectiveness and competitiveness and, therefore, to help with innovation. Accordingly, we concluded that technology innovation is real in those law firms. Other informants from different firms considered the lawyer profession in more traditional terms, and we clearly understood from their words that technology does not play a real role in their law firms. For all mixtures between these extremes, we made use of the fuzzy logic in QCA. Specifically, we associated

anchor points for full membership, the crossover point, and non-membership for each of the five factors (Ragin, 2008). Table 2 shows how exemplary quotes were assigned to different sets. Importantly, we used data from interviews to triangulate findings. However, the quotes alone were not sufficient for determining set membership. Thus, we cross-checked answers against theory, interviews in the respective firm, and further available external and internal documents. We ensured the high reliability of our data calibration with this approach (Basurto & Speer, 2012). Since we are differentiating between service and process innovation as output variables, we had to assign the cases to two different clusters: Cluster S (service innovation) and Cluster P (process innovation).

Insert Table 2 around here

Legitimacy. As our second research question addresses legitimacy for law firms that initiated service/process innovation, we used qualitative data collected with our interviews to understand how that innovation has been approved and accepted by other actors and finally considered legitimate. We reference the legitimacy measure proposed by Deephouse et al. (2017). Thus, the interview data were used to interrogate the legitimacy of these novice innovators. Accordingly, we considered the following as possible states for legitimacy: accepted, proper, debated, and illegitimate (Deephouse et al., 2017).

RESULTS

We tested set membership for all possible combinations of the five key factors with regard to the outcome variables. In addition, we asked which combination, in particular, is sufficient for one or the other type of innovation if law firms collaborate with clients or imitate competitors. By doing so, we generated six configurations: three in which the clients were the stimulus for innovation and three in which innovation came from imitating competitors.

QCA is a small-N method that is very powerful for analyzing configurations with at least one case in the setting. Accordingly, we set the frequency threshold of the analysis to 1,

as commonly accepted in small-N QCA studies (c.f. for application, Aversa, Furnari, & Haefliger, 2015; c.f. for method Greckhamer, 2015). In the logic of QCA analysis, a condition is sufficient for firm innovativeness if the occurrence of the factor is always accomplished or accompanied by the output (i.e., service/process innovation under the condition of clients or competitors' orientation) (Skarmeas, Leonidou, & Saridakis, 2014). Thereby, consistency indicates how closely a perfect subset relation is approximated (Ragin, 2008). We refer to the 0.80 threshold for minimum consistency, as commonly suggested (Fiss, 2011). This approach allows us to identify those factors that are central core conditions, denoted by ● (present) or ○ (absent). Table 3 shows six consistent paths to service or process innovation for law firms in client cooperation and competitor imitation, respectively.

Insert Table 3 around here

In Table 3, we first present three configurations (I and II for Cluster S and III for Cluster P) that represent factor configurations in the case of collaboration with clients. In addition, we find three configurations (IV and V for Cluster S and VI for Cluster P) that are sufficient combinations of factors in the case of competitor imitation. Below we report the consistencies and coverage for the overall solutions and each configuration (Rihoux, 2006). Consistencies exceed the threshold of 0.80 in all configurations on both the individual level and solution level. The raw coverage expresses the proportion of memberships in Clusters S or P that are accounted for by each particular combination of factors (Fiss, 2011; Greckhamer, 2015). This measure expresses the empirical relevance and is analogous to R squared in multiple regression analysis. As Table 3 shows, the coverage appears to be sufficient. Further, we disclose the unique coverage as the proportion of membership in the outcome that is attributable only to the particular configuration (Ragin, 2006), which is an expression of the relative importance of each particular configuration (Schneider & Wagemann, 2010). Again, this measure exceeds the recommended threshold. Finally, we identify four main fields for further discussion that

appeared to be stable patterns throughout the interviews and hold meaningful theoretical implications.

How do law firms, as novice innovators, gain legitimacy for innovative behavior? It basically depends on whether the innovation is targeted at new services or internal processes and whether the main source for innovation is clients or competitors. As can be expected, even in firms without an innovation history, mixed teams are vital. One main finding refers to the widely acknowledged relationship between innovation and team composition (Jensen et al., 2007). Specifically, we find evidence in the data that team composition—as well as shared values, norms, and vision toward innovation—are crucial elements for success. Accordingly, all configurations for Cluster S involve heterogeneous teams in terms of professions. Indeed, no configurations with respect to clients' collaboration or competitors' imitation lead to service innovation without involving mixed teams as a central element.

How does service innovation differ if the main source for innovation is clients or competitors? The combination of factors in configurations I and IV are practically identical, except that the structural units play no role in imitating competitors. However, configuration II shows the simple, three-element solution for organizing collaboration for service innovation: mixed teams, responsibilities for innovation organized in a structural unit, and the ability to include technology solutions for improving services. Further, configuration V refers to the interaction of innovation culture, mixed teams, and specialized innovation units when the innovation stimulus is competitor imitation. Notably, while we can highlight the importance of mixed teams for service innovation in both client and competitor orientations, the team composition did not play a role in process innovation. Finally, we find that technology as a driver of innovation plays no role when a law firm focuses on competitor imitation. Technology is only a relevant factor for innovation when combined with mixed teams and a structural unit dedicated to innovation. We discuss these results below.

We also found that law firms' innovative capacity requires partners' leadership for process innovation, while this is not necessarily the case for service innovation. Indeed, partners' leadership appears to be an essential component in configurations III and VI. It also plays a role in service innovation, mostly when it is not combined with technology use (configurations I and IV). Instead, when technology is used to develop new services (configuration II), a specialized innovation unit is more relevant than partners' leadership.

DISCUSSION

Central configurations description

We find that different configurations of factors are associated with service and process innovation for novice innovators. Further, these configurations vary according to whether the law firm is collaborating with clients or imitating competitors. We performed both a necessary condition analysis and a truth table analysis for identifying sufficient configurations. This enabled us to demonstrate how configurations of factors are necessary for observing service or process innovation. Necessary conditions imply that we would not observe service or process innovation without one of the factors included in the single configuration. However, necessary conditions do not guarantee that the outcome will occur in all cases in which that specific factor occurs, only that the outcome service or process innovation is possible (Dul, 2016). Thus, our study valuably shows how the combination of factors—such as “structural internal units” for collaboration with clients and “innovation culture” for imitating competitors—establishes central building blocks to sufficient causes that ensure the emergence of the service or process innovation. For instance, we explain below that mixed teams and innovation culture need to appear together in all S-clusters; as central building blocks, they are necessary, but not sufficient for service innovation. However, if technology innovation exists in addition, as is the case in configuration II, we have a sufficient condition to observe service innovation.

Partners' leadership. It is worth highlighting the different role partners' leadership has for service and process innovation. We find that partners' leadership plays an important

role in process innovation, but not service innovation. Service innovation relies on (a) professionals' knowledge and competencies (Kandampully, 2002), (b) the way knowledge is combined, or (c) the way professionals deal with the development of practices in everyday work (Malhotra et al., 2016). Service innovation is characterized as incremental and mostly emerges from a practice-driven change where new practices are improvised from the bottom-up (Smets, Morris, & Greenwood, 2012). Accordingly, one of the main negative effects of a leader's strong influence in an organization is groupthink (Janis, 1982). Groupthink expresses the tendency to reduce questioning and discussions, avoid conflicts, and rely on past achievement. Consequently, a strong leader might reduce the beneficial role of teams (Gardner, 2015; Kor, 2003). Indeed, a strong leader inclines teams to discuss fewer options and defer to the leader's solution (Leana, 1985). Thus, even though managerial capabilities and the partners' approach both play a role in supporting professionals' work, service innovation mostly comes from the relationship between professionals and clients. In line with that, the feelings of professionals—the people doing the job—on the new needs and changing requirements, and their ability to explore new ways of putting together their knowledge, are the most important drivers for service innovation. A lawyer in firm Red said:

In the last year my partner completely changed his behavior. His leadership style before was very much bossy and oppressive ... we did not have very much choice, indeed! Currently, we really have meetings and discussion to share ideas and opinions on issues. I think that the change we are passing through has had a big influence on that.

Instead, process innovation is about internal change processes. Literature on change processes emphasizes the role of leadership support and how leadership “lives” the change as a primary example (Gill, 2002; Oke et al., 2009). Leadership is sufficient for litigating initiatives for changing a firm's internal processes. Process innovation requires a strong partner's leadership, intended as a pronounced partnership ethos (Empson, 2012) toward instilling an innovative culture inside the firm. Indeed, process innovation relies on top

management capability, which heavily affects the coordination of firm members' activities, mediation of dispute among team members, development of necessary firm-specific human capital, and decisions on the firm's strategic direction (Sherer & Leblebici, 2015). This means professional service workers are the subjects of change (through the change of processes that affect them), and they need reputation triggers from top management to accept the change process (Gill, 2002). In this sense, to initiate and incentivize such innovation, partners have to lead and influence others. They are in a senior position; they know the firm much better than the others because they have been employed there longer, and they have formalized authority and control to lead and influence. As a manager in firm Green said:

This is a partnership ... There isn't a management dictator that says: 'here is big change everybody does it!' You need to convince people. Lawyers don't tend to buy into dictates; they need to be convinced on individual level. So, you pick a friendly face, a supporter and test the idea ... if it works, the effort required to make the change is less than benefit; this is the best way to drive change.

Concerning service innovation, process innovation asks more for managerial competencies than knowledge specificities and a partner's approach that first diffuses and then supports innovative organizational processes. It has to be kept in mind that partners are also firm owners, so they can only be real drivers of a structural change that implies internal restructuring, both for the power they have inside the firm and the reputation they benefit from at lower levels (Harvey & Mitchell, 2015). Thus, it appears that power promoters—key people from a higher hierarchical level—are important for process innovation (Witte, 1977).

In this respect, no relevant difference exists between client or competitor orientation because the importance of partners' leadership is essentially linked to the type of innovation being analyzed, not the type of innovation stimulus. Thus, a bottom-up approach that fosters knowledge sharing and creates more solution options is positively associated with service innovation; whereas a strong partner's leadership (top-down approach) in initiating and supporting the change of internal processes is more impactful for process innovation.

Mixed teams and innovation culture in service innovation and competitors'

imitation. Imitating competitors is a reactive approach that also depends on the inflow of external information. Thus, mixed teams for service innovation are crucial in each configuration. Generally, organizations without an innovation track record face the liability of newness when they want to introduce innovations. They lack legitimacy, both internally and externally, for undertaking innovation endeavors. Firms that imitate competitors have an advantage and disadvantage for enabling innovation. As a reactive strategy, imitating competitors signals a lack of innovation culture. To close the innovation gap, law firms need to foster an internal innovative culture that is open to learning from competitors. Based on the literature concerning learning in PSFs (Robertson, Scarbrough, & Swan, 2003; Storey et al., 2016), we argue that such a culture depends on two factors: the capacity and the openness to learn. While the capacity to learn from competitors' innovative solution is a quality of the organization and subject to the team's knowledge (e.g., the capability to understand processes, routines, or patterns behind the competitors' services), openness or willingness to learn implicitly requires the acceptance that solutions can be found outside the internal knowledge base or co-created. Lawyers belong to a profession that searches for creative and sophisticated solutions for clients in situations in which they need assistance. Imitating others—like the professions in arts, science, or engineering—is not central to one's self-concept as a creative and sovereign lawyer. One partner from firm Blue expands on this idea:

For fostering innovation culture, competitors' imitation is the easiest way to get ideas that other good professionals already selected; that is where people look first. Especially, if you think that establishing close relationships with other stakeholders represents the easiest way to threaten the knowledge and the competencies that you have acquired in many years of hard work.

Conversely, imitating a competitor largely resolves the legitimacy problem: competitors serve as external legitimization for innovative behavior inside the firm. As one partner of firm Red explained:

Our people ask why should we change and innovate? Outside Firm X does the job

differently and they have a stronger reputation than we have. If they move that way ... do we risk missing out? Firm X is a good reason to legitimate our changing approach and innovation.

Another partner of firm Orange said:

You know, if you take already-existing solutions and customize them according to your organization, then you cannot be questioned for that ... external actors already know the solutions and they have already largely approved them. This is the easiest way to introduce new services, get them easily accepted and satisfy your customers... if you try to proceed with completely new solutions, then you start to be questioned and you risk to lose many clients.

Many other interviewees treated the legitimacy issue in relation to various organizational problems. An employee from firm Green reported:

It is not just a problem of being accepted by our clients, most of the times the biggest concerns come from inside ... promoting and supporting an innovation mindset then is fundamental because, you know, you do not have to explain every time why you're trying to introduce something that others already do ... we're dealing with innovation, innovation is important for us, so it is normal it is like that. With this approach we have dramatically reduced conservative behaviors and sponsored a change attitude, much more open toward the outside.

As highlighted by one informant:

How can colleagues still question that we're taking the wrong direction, if other law firms are appreciated for that? Ok, we're not first mover, but at the end of the day what counts is that our clients trust us, and we believe in what we offer. In this respect, imitating others cuts all the problems related to our social recognition.

Configurations IV and V disclose paths to successful competitor imitation based on teams and culture. The partner in firm Orange saw competition as a source for fostering learning and implicitly accepted that competitors may be ahead with their solutions:

I think that competition is good, we benefit from people trying to deliver services faster or better or cheaper than we do, because it improves the market and we can learn from it.

Accordingly, mixed teams are a key factor for making service innovation possible in law firms.

Mixed teams and a structural internal unit in service innovation and client collaborations. As explained above, at the heart of service innovation in PSFs is how practice-based knowledge can be captured, combined, and exploited (Barrett & Hinings, 2015). In order to sell knowledge, law firms need highly qualified professionals with a high

level of expertise and reputation (Empson, 2012; Harvey & Mitchell, 2015). For this reason, law firms depend on professionals for success and are constantly competing in the market for talent and clients (Maister, 1993; Malhotra & Morris, 2009). The previously popular “up-or-out” talent management techniques are becoming “relationship-based lawyer” or “innovate-or-out” policies. While it could be argued that people choose a professional career to avoid being entrepreneurial, internal competition within and among firms is now being influenced by how strategy-oriented their professionals and leaders are. However, innovation in law firms’ services is usually considered challenging due to lawyers’ depiction as people who fear losing control of their knowledge when pushed to work with others. As a result, firms need to implement appropriate mechanisms for exploring and exploiting professionals’ knowledge.

To design new services, a partner in firm Green mentioned two factors they considered crucial: “the tacit knowledge owned by professionals” and “the relationship with clients.” Our results reveal that the combination of mixed teams and structural internal units in client collaborations is a condition *sine qua non* for service innovation to happen. Since clients’ issues and projects are becoming too complex, uncertain, and non-routine to be managed by a single person (Gardner, 2015), professionals are increasingly called upon to work in teams—sometimes in multiple teams simultaneously (O’Leary, Mortensen, & Woolley, 2011). However, the major challenge is combining different forms of expert knowledge—that is, normative, syncretic, and technical (Malhotra & Morris, 2009)—to increase the negotiation of competencies among practitioners for innovative outcomes. Indeed, the most interesting service innovations usually come from a combination of different perspectives. A partner in firm Yellow reported on the recognition of different know-how:

We don’t tend to treat people differently; we were one of the first firms who created a role of associate director. So, the non-lawyer ... can get to a partner level. Well historically, they couldn’t become partners because they were not legally qualified, but now, here, the associate director is at the same status as a salary partner.

Previous studies have addressed the issue of decreasing creativity by over-organizing: They have found that certain levels of professional autonomy are considered significant in PSFs (De Jong & Vermeulen, 2003; Maister, 1993). All levels of professionals (including partners) and employees in our study indicated that to foster innovation, firms need to engage differently skilled people, create internal structures, recognize people for their ideas, and have collaborative cultures. Notably, the new UK Legal Act follows this pathway by allowing UK law firms to employ non-lawyer managers who can become partners as well. A partner from firm Green elaborated on mixed teams and the importance of their value recognition within the firm:

I don't think [name of the firm] is the world's most innovative firm and has totally realized its potential ... But, I'm sure it is slowly affecting change in the firm, and it's slowly affecting the way people think about their role and think about the firm and it's giving people the self-confidence to think that they can, that it's actually part of their role to think differently and imaginatively about what they do.

Even though individual professionals are the location of knowledge and practices, and service innovation comes from redesigning the different ideas and practices combined in mixed teams, it seems important to have a structural unit that pushes for this to be truly put in place when collaborations with clients occur. A manager of firm Red stated, "Quite often there is a danger that if a partner leaves the firm, certain processes can be stopped." This is why developing certain systems to prevent that from happening is fundamentally important. Firms can enhance innovative outcomes by creating internal processes that maintain innovative processes and retain clients, even when a partner leaves the firm.

Although "the most important drivers for services innovations are clients' demand for new services and executives' desire to create new services for existing markets or find new market niches for existing services" (Barrett & Hinings, 2015, p. 245), innovations need structured procedures and formally assigned budgets. While mixed teams usefully

combine tacit and tailor-fit insights about client and market needs (Malhotra & Morris, 2009), specialized innovation units serve as structuring elements (Pearce & Ensley, 2004; Storey & Hull, 2010). Especially in collaborations with clients, effective organizational knowledge transfer depends on the organizational actors' (i.e., teams and units) ability to maintain, structure, and transform exchanged knowledge, experience, and information from the outside (van Wijk, Jansen, & Lyles, 2008). Since this particular inflow requires the integration of differentiated knowledge, structural units are the force that regulates the absorptive capacity of a heterogeneous team (Argote et al., 2000). As our informants stressed, the role of this special unit is "extremely important because one body is needed that collects communication and receives all feedback in the complex process of professionals-clients interaction" (manager, firm White). In the case of competitor imitation, the competitors act as sources of legitimacy, but how can innovative behavior gain legitimacy in the case of clients being the source of innovation? A partner of firm White recounted:

You know, when you produce an innovative solution with your client, it is done, you do not have to pay effort to get it appreciated and approved by the market. However, inside the problem could remain if you do not work appropriately on ideas. Until a few years ago it was a mess, because everyone thought to have the right of questioning something. Our "new" unit helped a lot in this respect, we are now able to diffuse the right message at the right time, so that it convinces everyone about the appropriateness of the new solutions developed.

Unlike with competitor imitations, dedicated structural units are critical in client collaborations. Clients are interested in exchanging ideas and knowledge with law firms because it may benefit them in the provision of better and/or additional services. In this sense, service innovation resulting from a relationship with clients is a voluntarily undertaken and formalized process that law firms initiate: "the structural internal unit that is responsible for capturing ideas is a conscious effort to develop innovative activities inside the firm" (manager, firm Yellow). Another partner in firm White said:

If you talk about innovation and ideas developed with clients, it just remains a

purpose...a good one, but an intention. Only when a dedicated unit for innovation is created, then people start thinking that we are devoting resources and taking it seriously...lawyers working in the unit are regarded as legitimate actors for producing innovation and what they do is appreciated and not questioned anymore. It's much easier to make innovation and get accepted.

In the words of one informant:

It is part of our organizational history to collaborate closely with our clients: they are always part of our strategic decisions. However, that approach did not turn to be successful per se ... you know, it is always a problem of combining the point of view of people outside and inside our firm ... The big change occurred at the time we decided that collaborations with clients were not to be intended purely as suggestions and voluntary activities, instead ideas needed to be collected and properly formalized by ad hoc units, devoted to experimentation and innovation ... you know, now it is clear what we are doing and people believe that we are doing it in the right way.

Thus, firms need to create structure as recognized places of innovation. These structures become symbols for innovation.

Technology innovation. Technology has been found to directly affect both the speed of new service development and the general effectiveness of the firm's innovation activities (Storey & Hull, 2010). It also plays an important role as an enabler of intra- and inter-team communications. Today, law firms commonly use technology to assist with document management, knowledge management, client relationship systems, online services for clients, and litigation-assisting tools. However, our interview data showed that law firms mainly apply standard systems without developing them further to get distinctive services. The simple application provides less potential for sustainable competitive advantage, as these systems are available for every PSF. This finding again confirms the traditional business model orientation in our sample, which a manager from firm Blue corroborated:

We've got very sophisticated systems here we use ... But I don't think for law firms, it would really be worth it to develop some technology.

However, if law firms organize for innovation, two different strategies are possible. The first strategy is incrementally improving the provided legal services by incorporating technology into the service process or radically introducing new technology-based services

(Cluster S). For example, a partner in firm Yellow said:

We know technology is an important help today for most of the services we offer. We are adapting very slowly in this sense.

The second strategy increases efficiency by applying technical solutions to redesigning organizational process and routines (Cluster P). Notably, we did not find a path to process innovation that includes the application of technology.

Beyond the object of innovation, we can distinguish according to the source of knowledge that leads to service improvements (i.e., client or competitor orientation). Accordingly, there is an important stream of literature addressing such catching-up through imitation as a common practice to achieve convergence among products and services (Fagerberg & Verspagen, 2002). Such imitation depends on the transferability and imitability of technical knowledge (Kogut & Zander, 1992). Necessary factors for successfully imitating technology-based services processes include the observability of technical infrastructure, the ability to structure knowledge into a set of identifiable rules for processes, the relationship between technology and other organizational dimensions (Prahalad & Hamel, 1990), and the potential imitator's ability to deal with this complexity. We found evidence that the law firms in our sample either do not have this ability or did not actually organize for it.

As a result, the only strategic option to improve services through technology integration is collaborating with clients. The biggest and most important commercial transactions may still require the highest levels of expertise from experienced lawyers in terms of intellectual input and client relationships. However, as configuration II indicates, even in these cases, technology integration provides a path to service improvement, but it is not a stable one. Table 4 summarizes the means of legitimization per configuration.

Insert Table 4 around here

CONTRIBUTION

Theoretical implications

Even though the phenomenon of the “innovative lawyer” has received significant attention in recent years, it has not been framed as novice innovators overcoming the liability of newness and introducing successful innovation activities in law firms (Jaakkola & Hallin, 2018; Kuester et al., 2013; Malhotra et al., 2016; Thakur & Hale, 2013). Due to the sustained global growth in the legal services market over the past decade, alongside increased international trade and greater economic links between countries, law firms need to remain competitive to meet clients’ changing demands. Accordingly, it becomes extremely important to understand how they adapt and change their services by taking advantage of some specific resources (Desyllas et al., 2018). How do law firms that previously had a conservative and routinized approach to building internal structured innovation processes introduce new services? Two elements need to come together: (a) develop a service offer or process that is new to the firm, and (b) get this new offer or process accepted as legitimate internally and externally. The first element refers to innovation capacity and development, and the second to legitimacy for innovative behavior. This new, deviant behavior from the firm’s past reputation undermines the organization’s legitimacy. Our results suggest it is neither a single factor nor a universal approach, but a combination (i.e., configuration) that increases the likelihood of introducing service or process innovation in law firms. We demonstrate there is no single optimal configuration, as firms can build or create several distinct patterns on which to base their innovation activities. This embodies complexity and contingency (Furnari et al., 2020). Consequently, the attempt to produce innovative services is a question of how to configure a law firm’s innovation pursuit, rather than the search for a sole driver of innovation (Sihvonen & Pajunen, 2019).

Our arguments in this paper open up a new conversation about innovation capacity and legitimacy in law firms. While our study focused on law firms, our insights have broad application. Drawing on the innovation literature in PSFs to build a conceptual backdrop, we

advance the existing understanding of innovation mechanisms in law firms specifically, and service firms more generally. First, we provide evidence for the importance of sectoral heterogeneity when considering the determinants of innovation in the service sector (Kuester et al., 2013; Malhotra & Morris, 2009). Further, we show that service innovation is potentially achievable through the adoption of strategic solutions that present high complexity and heterogeneity, as they account for different configurations of factors. Accordingly, the complexity of the service industry is tangible both at the sector level in terms of different innovation antecedents, and at the firm level in terms of different paths (i.e., configurations) determining innovation outputs. While both external innovation stimuli aim at the same outcome, reaching this particular goal is co-determined at the organizational level by building specific configurations of factors that allow for both innovation capacity and legitimacy. Since we focus on two different innovation outcomes (i.e., service innovation and process innovation), we provide evidence that different configurations of factors are more likely to lead to one or the other. Specifically, a bottom-up approach—involving team composition and cultural adjustment toward innovation—mostly leads to service innovation. In this case, legitimacy is tied strongly to internal, dedicated structures for innovation. Conversely, a top-down approach—taking advantage of strong leadership—is more effective for process innovation in law firms, such as new structures, processes, or routines. In general, though, building innovation processes is important for breaking with conservative behaviors.

Second, our study highlights that legitimizing said innovations is critical to their full availability and effectiveness. The interviews illustrated how these novice innovators underwent a process whereby innovation activities moved from being questioned internally and externally to being accepted. Existing literature has focused on service innovation success factors (Kuester et al., 2013; Storey et al., 2016) and business models (Kindström & Kowalkowski, 2014), but has largely ignored the way innovation is recognized, approved, and diffused. Indeed, new services cannot surface on their own because they tend to be

considered illegitimate or irrelevant (Anand et al., 2007; Gardner et al., 2008; Tsinopoulos et al., 2018). They need recognition through legitimacy (Fosstenlökken, Løwendahl, & Revang, 2003). While mixed teams are the necessary locus for service innovation in law firms, competitors' behavior also serves as a legitimating factor for accepting innovation within and outside the organization. However, firms' pursuit of the reactive approach typically indicates a lack of innovativeness, which can be countered by fostering an innovative culture. By contrast, interacting with clients as an innovation approach is already a sign of a more open and innovative culture. That said, legitimacy is gained through signaling innovation commitment through dedicated internal structures. Moreover, we extend previous literature by demonstrating that clients and competitors are not only important stimuli for innovation (Anand et al., 2007; Malhotra et al., 2016), but are, in fact, fundamental sources of legitimacy. The external references for innovative behavior appear to signal that the innovation attempts are not an isolated break-away from past behavior, but rather an adaptation to a changing environment where the rules of the game have already shifted. In this sense, the specific PSF's innovative behavior becomes compliant with other legitimate actors' behaviors.

Our study also confirms that knowledge-based networks are important as a stimulus for innovation in firms that do not have an innovation track record. New knowledge emerges out of learning from nearby contacts. For example, Anand et al. (2007) reported that strong client relationships are important for co-creating new market offerings and expanding new practice areas. Similarly, Malhotra et al. (2016) asserted that innovation in PSFs, and law firms particularly, is based on the skillful deployment of knowledge in networks with clients. We advance existing evidence by showing that law firms may either go for strong relationships and high-intensity collaborations in a proactive approach (Malhotra et al., 2016; Miozzo et al., 2016), or acquire knowledge from competitors in a reactive approach (Cheng & Krumwiede, 2012). Thus, law firms' innovation process needs to be built on the diffusion

of the new knowledge that is produced through a tight connection between knowledge acquisition and creation. In saying that, we support the idea that innovation is co-created in law firms (Barrett & Hinings, 2015; Patrício et al., 2011). However, co-creation is mainly important because firms based on conservative mechanisms and routinized processes need external sources as innovation stimuli. Thus, to be effective, co-creation needs opportunity-seeking and opportunity-exploiting behaviors at the organizational level. Moreover, we also provide evidence that different knowledge-based networks (i.e., clients or competitors) require a different combination of resources for service innovation.

Managerial implications and limitations

The study also has some important managerial implications for novice innovators. First, it may guide those service firms that want to start innovative activities, but do not have innovation as a core skill. Creating innovation matters, but legitimizing this innovation is also important for success. Accordingly, firms should know that adequate network strategies are essential for reaching the desired outcome. Second, our study provides some generally practical information about innovation processes to managers in the service sectors. Specifically, innovation does not come from a single factor; instead, it is a combination of conditions that account for service and process innovation. Also, managers may learn that different configurations of factors can lead to the same outcome. Accordingly, even though their firm may lack some resources, managers can work to combine other factors effectively. Recognizing these factors can facilitate managers' evaluations of their firms' own positions and better understand the major changes that need to occur to prompt innovation activities. In this way, managers can design better strategies at the organizational level.

The knowledge obtained from this study can be used by currently emerging new phenomena of innovation in the public service sector. This sector holds foundational importance for the European Union, and thus there is value in extending our study to other domains to see if the results apply outside of law firms. Moreover, it would also be

interesting to apply a configurational approach to other service sectors to compare the results and attain additional empirical evidence on this phenomenon.

Naturally, this study features some limitations. First, while law firms are critical in today's economy, they represent just one type of service sector. Future research should broaden the scope. Second, we focused on multinational firms that fell only under UK jurisdiction. Because that country's context could impact the innovation design, future scholars should see how the results compare across countries.

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TABLES

Table 1

Descriptive law firms' characteristics

Case	Headqu arter	Number of offices	Number of partners	Number of employees	Number of interviews	Partner	Business developers	Associates	Trainees	Lawyers' consultants	External experts
Blue	UK	28	<450	<4500	4	1	1	1		1	
Green	UK	28	<450	<5500	5	2	2	1			
Red	UK	34	<400	<4000	6	2	2	2			
Yellow	UK	39	<400	<4800	6	2	2	1	1		
Purple	UK	23	<430	<4200	5	2	2	1			
Orange	UK	23	<250	-	5	2	2	1			
Black	UK	12	<170	<2300	5	2	2	1			
White	UK	42	<500	<5000	8	2	2	2	1	1	
Brown	UK	21	<350	<2500	4	1	1	1		1	
Total					50	16	16	11	2	3	2

Table 2
Data calibration

Fuzzy-set Calibration

	<i>Fully in</i>	<i>Crossover</i>	<i>Fully out</i>	
Measure	<i>(Example quotes for set-membership in the fully in set)</i>	<i>(Example quotes for set-membership in the crossover set)</i>	<i>(Example quotes for set-membership in the fully out set)</i>	
Set membership requirement	Consistency between all interviewees' responses regarding the condition in question, consistency with other published material	Mixed findings regarding the condition in question, tendency either toward fully in or fully out but not clear picture	Contradicting and/or conflicting interview results, which does not allow to establish a clear membership value, or a clear and consistent indication that the condition in question is not given	
Fostering internal innovative culture	“And when you come up with an idea you are genuinely admired for it produces the environment where people can generate things. This is not so much for me to say. But I also hope that we also have a culture of in fact that there was no monopoly the idea amongst the partners and everybody who works in whatever function whatever department is capable of generating ideas as other people.” <i>(Partner, Orange)</i>	“But the other thing that we tend to shy a little from that a little bit is to say that it is something bizarre or something strange that people come up with ideas. People are expected to innovate and come up with new ideas all the time, it's kind of your job description.” <i>(Partner, Red)</i>	“And I think, one of the reasons we are innovative is we think we're pretty good and we think of ways to add value so we can continue to do what we do and continue to get hired.” <i>(Partner, Purple)</i>	Mean =0.66 S.D. =0.08 Max = 0.95 Min. = 0.18
Using mixed teams	“We try to be very inclusive, you see it's not just lawyers, business services, it could be anybody that would come up with an idea of how we could do something differently for the benefit of the firm, for the benefit of our people, for the benefit of our clients.” <i>(Manager, Green)</i>	“It is positive in terms of different perspectives and different skills. Taking the best out of it, it is not necessarily always the legal ways and the legal mind-set taking the best way skill for our areas. So, I think it is a good positive step in terms of skills that they bring to the table as long as it keeps central discipline to the core discipline of the provision of the legal service.” <i>(Senior Associate, Black)</i>	“No, I mean, we have the officer managers. They are not lawyers. All the admin staff that deal with personnel, with, I suppose, all these conference rooms work, none of them are lawyers. So, if you like, all the back office that we have.” <i>(Senior Associate, Purple)</i>	Mean =0.57 S.D. =0.14 Max = 0.95 Min. = 0.00
Structural internal units	“And so M is the chairman of the innovation council and he has set up a council of which I'm one of the members to look at all kinds of aspects of innovation whether it's sort of—a gain whether it's input focus or whether it's slightly more outward focus.” <i>(Partner, White)</i>	<i>No findings</i>	<i>No findings</i>	Mean =0.82 S.D. =0.02 Max = 0.95 Min. = 0.82

Partners' leadership	<p>“This is a partnership, you know law firm is a partnership. There is rarely a sort of three line rip. There is rarely a management dictator that says here is big change everybody do it. You need to convince people. Lawyers, partners in the top law firm in the world, are one of the brightest people in the world. They don't tend to buy into dictates, they need to be convinced on individual level.” (Manager, Green)</p>	<p>“the way the pyramid works, yes, there is someone at the top but unless the people at the bottom really do the work all pyramids collapse, and unless the people at the bottom feel that a) there is growth, that people appreciate them, that people are actually listening to their ideas.” (Senior Associate, Blue)</p>	<p>“It is very challenging to work with lawyers—because they are extremely competent people. What we have got here, we have people that are prepared to listen about how the things could be improved and change—I really think it's a strength of firm Black.” (Manager, Purple)</p>	<p>Mean =0.70 S.D. =0.11 Max = 0.95 Min. = 0.18</p>
Technology innovation	<p>“I think law firms aren't or have not historically been—some have been actually quite innovative, I think, over a longer period of time, but now—and have looked at different ideas on the management side of doing things more efficiently and have actually probably done that consistently over a period of time. But I think nowadays it's much—there's much more focus on it. I think there's much more emphasis on it.” (Partner, Yellow)</p>	<p>“However, other innovation based on technology for example like e-billing, now you don't necessarily produce hard copy bills, they go through the pack of your systems, but also the clients have access to all that information behind the billing; of how many hours you worked, how many lawyers worked on it, which jurisdictions, which rates and this is across the firms now, because some of our clients now no matter which part of firm Blue, whether in London or internationally whether its corporate, real estate, finance, they would be able to see all the matters that we are running in any one times. So actually some of them are specific to some products and some are spread across the whole firm.” (Partner, Blue)</p>	<p>“I guess it is all a part of being a progressive and dynamic organization, that filters through all the organization and to me you can kind of feel whether people have this dynamism and energy level and the enthusiasm to come up with the solutions, but the thing is that what is innovation and how far does it go? You should not forget that. Because at the end of the day, it is a profession and you know we draft contracts, and there are certain limitations to how innovative you can be. We are not going to suddenly become a sandwich company, we are only at our edges, we have certain limitations [relevant] to the fact that we are a profession. So you are trying to innovate but you do it within the narrower sort of boundaries than in a broader service or other commercial organization.” (Partner, Purple)</p>	<p>Mean =0.67 S.D. =0.09 Max = 0.95 Min. = 0.18</p>

N=50 interviews in nine law firms. Please note, the table contains exemplary quotes only. For each of the nine law firms, we used several interviews to establish set membership values. We further used other published material to triangulate our findings.

Table 3

Configurations for service and process innovation in law firms

Factors	Clients collaboration				Competitors Imitation			
	<i>Cluster S*</i>		<i>Cluster P**</i>		<i>Cluster S*</i>		<i>Cluster P**</i>	
<i>Configuration</i>	<i>I</i>	<i>II</i>	<i>III</i>		<i>IV</i>	<i>V</i>	<i>VI</i>	
Fostering internal innovative culture	●	-	○	-	●	●	●	-
Using mixed teams	●	●	○	-	●	●	○	-
Structural internal units	●	●	○	-	○	●	○	-
Partners' leadership	●	-	●	-	●	○	●	-
Technology innovation	-	●	-	-	-	-	○	-
<i>Raw coverage</i>	0.67	0.70	0.57		0.67	0.70	0.57	
<i>Unique coverage</i>	0.11	0.13	0.57		0.11	0.13	0.57	
<i>Consistency</i>	0.90	0.94	0.91		0.90	0.90	0.97	
<i>Solution coverage</i>	0.81		0.57		0.81		0.57	
<i>Solution consistency</i>	0.88		0.91		0.91		0.97	

N=50 interviews among nine law firms

Central conditions are represented by ● (presence) and ○ (absence).

* Cluster S contains law firms that concentrate on service innovation to increase effectiveness.

** Cluster P contains law firms that focus on innovating internal organizational processes and procedures to increase efficiency.

Table 4

Summary of means of legitimization

Configurations	Collaboration vs Imitation	Process vs. Service	Summary of means of legitimization
I	Collaboration	Service	Legitimization is built on soft factors such as culture, teams and leadership
II	Collaboration	Service	Legitimization is built around new technologies by focusing on teams and structural internal units
III	Collaboration	Process	Legitimization is the result of a strong partner's leadership
VI	Imitation	Service	Legitimization is built around culture and teams coordinated by structural internal units
V	Imitation	Service	Legitimization is built around culture and teams coordinated by partner's leadership
VI	Imitation	Process	Legitimization is the result of a strong partner's leadership and an innovation culture