SERVITIZATION IN FAMILY FIRMS: A CASE FROM THE ITALIAN LIFT INDUSTRY

Elena Casprini, Mario Rapaccini & Alessandro Marelli

ABSTRACT

Purpose: We study how family firms can overcome their innovation-related barriers thanks to a strategic alliance. In particular, we focus on the interorganizational factors that facilitate the development of servitization strategies. These are of paramount importance for the competitiveness of SMEs operating in the elevator industry.

Design/Methodology/Approach: we conducted a longitudinal case study, exploring some firms in a consortium of 20 small- and medium-sized Italian family firms operating in the elevator industry.

Findings: Although preliminary, our findings confirm that small and medium-sized family firms can innovate their service-orientation thanks to strategic alliances; we found that it is relevant the role played by the 'boundary spanners' and the pressure to protect their business and family from rivalries. **Originality/Value:** This is a first attempt to shed lights on how networks can help innovation and servitization of small- and medium-sized family firms, thus helping them in overcoming their ability-willingness paradox.

KEYWORDS: ability-willingness paradox; family firms, servitization, SMEs.

1. INTRODUCTION

The research exploring the pros and cons of servitization strategies in small- and medium-sized enterprises (SMEs) is growing rapidly (Confente et al. 2015). As well known, these firms are highly vulnerable to competitive pressures (Man et al. 2002), and have little resources to sustain radical transformations, such as business model innovation (Madrid-Guijarro et al. 2009). In addition, SMEs are in most cases constituted by family firms.

Family firms face a unique paradox, known as *ability-willingness* (Chrisman et al. 2015). It has been in fact shown that family firms have a peculiar interplay of opposite forces. On one side, family business could have a good predisposition (*ability*) to innovate since their discretion to act. This originates directly from the fact that top managers are the main shareholders. On the other side, innovation and business decisions in family firms could not always stem from grasping profit opportunities and pursuing economic goals, but also the preservation of the socioemotional wealth of the family members.

While analysing these dynamics, we encountered a particular case of an Italian consortium (as a peculiar form of strategic alliance) among family firms in the elevator industry (Rapaccini et al. 2019), that irrespective of their size has successfully carried out several innovation initiatives, in order to pursue servitization. This pushed us to address how this form of strategic alliance facilitates overcoming the ability-willingness paradox of each affiliates. Using the lens of servitization as the innovation strategy that the firms in an alliance have tried to elaborate and pursue, this paper aims at answering the following research question: how does a horizontal alliance (consortium) help family firms in overcoming the ability-willingness paradox?

In an argumentative form, this paper presents some of the preliminary findings coming from this research, and is therefore structured as follows: the next section revises the literature on the ability-willingness paradox. Then, Section 3 describes the research methodology. Section 4 presents the findings and Section 5 draws some conclusions and implications from this research.

2. ABILITY-WILLINGNESS PARADOX, FORMAL RELATIONSHIPS AND SERVITIZATION IN FAMILY FIRMS

2.1 The ability-willingness paradox

Family firms have governance models and decisional processes that are more effective than larger organizations. This should lead to greater innovativeness (Bennedsen and Foss 2015). At the same time, it is said that in these contexts, innovation can be hindered by the company's strong regulative network, which is informed by heritages and family values that are often reluctant to changes (Bennedsen and Foss, 2015: 78). To explain this interplay, the literature has introduced the *ability-willingness paradox* (Chrisman et al. 2015). In short, this tells that family firms are more able (*ability*) to arrange their resources according to what they want, and simultaneously their willingness to innovate is greatly influenced by non-economic goals, such as the family socioemotional wealth preservation and intergenerational succession.

Another factor that since so far has been considered by the literature addressing innovation of SMEs, is the importance of establishing strong relationships with strategic partners (Casprini et al. 2017, Feranita et al., 2017) and of social capital (Pearson et al. 2008, Zahra 2010). However, little is known on how the imprinting/DNA of the firm can evolve/mutate across generations as a consequence of the innovation experiences developed through the network (Dieleman, 2019). In other terms, the literature addressing the role of external partners in overcoming the ability-willingness paradox of family firms, is scant.

2.2 Formal relationships among family firms

Frequently family firms participate to networks and communities to develop new forms of organizational knowledge that can reduce industry-specific (inter-organizational) uncertainties (Miller et al. 2008). To handle these relationships, it is key the role of specific figures that assume inter-firm responsibilities in order to facilitate innovation dynamics. Relationships with external partners are clearly built upon trust (Casprini et al., 2017, Lester and Cannella 2006). In fact, while in general it has been acknowledged the importance of formal relationships - such as joint ventures and cooperation contracts – it is claimed that trust is of paramount importance in the case of family firms (Bouncken et al. 2020). Niemelä (2004) shows also that the reasons why family firms embrace interfirm cooperation can be explained by the concept of power. This is dictated by the extent of control each firm has over those resources that are perceived to be beneficial to the network. Power then originates by formal agreements (commitment), trust (network structure), and learning opportunities. These latter explain the way each family firms owners can learn from the others allies of a collaborative network. While the mentioned constructs are relevance to explain why and how family firms establish network collaboration, they do not show in depth how participating to the alliance and relying on partners allows the family firm to overcome its ability-willingness paradox.

2.3 Servitization of small- and medium-sized family firms

Servitization can be beneficial not only to larger firms, but also to SMEs (Kowalkowski et al. 2013, Kowalkowski et al. 2017, Coreynen et al. 2017), in numerous industries (Ambroise et al. 2018). These moves are pushed by the lowering of product margins, higher competition and searching for new business opportunities (Michalik et al. 2019). Smaller firms could also benefit from their ability to better cope with the factors that hinder servitization in larger companies (Tauqueer and Bang 2018). About the controversy over whether family firms are better or worse places to innovate than are nonfamily firms we follow the idea that the socioemotional wealth theory highlights: family owners strive to protect and enhance their socioemotional endowments by fostering stronger perceptions of organizational caring among their employees compared to those working for non-family firms and this can help the rapid implementation of an innovation in the servitization if strongly decided by the family owners (Christensen-Salem et al 2021).

Among these challenges, the service paradox indicates the risk of missing the return on the service investment (Gebauer et al. 2005). For this reason, Malleret (2006) claims that some critical threshold

could be required before reaching a satisfactory profitability from services. Another issue to be tackled pertains to the lack of time and commitment to develop a service culture (Dubruc et al. 2014, de Jesus Pacheco et al., 2019). Servitization in fact requires new culture, mindset and greater customer orientation (Dahmani et al. 2016). To compete with services, SMEs had to change their structure. This latter is frequently ossified around the product business (Hsieh and Chou 2018, Michalik et al. 2019). In addition, they have to face higher complexity that typically originates from delivering service operations (Baines et al. 2009, Coreynen et al. 2017).

3. RESEARCH METHOD

This paper adopts a longitudinal case study approach (Yin, 1994), in which we have multiple units of analysis. These are small- and medium sized Italian family firms, operating in the elevator industry. The term "family" has been variously defined in previous studies. Senftlechner and Hiebl (2015) suggested three main approaches that can define family firms: "ownership" (firm when a person or family holds at least 20-50% of its shares), "management" (if it is managed by or if the decision process is controlled by a single person or family) and "self-perception" (whether the firm is perceived as a family or not by the informant). This research mirrors a combination of the three approaches: in our cases the family represents the dominant shareholder the family is the main decision maker and the people feel to work in a family firm.

Now the consortium has 18 firms plus 3 subsidiaries. So if we want to count those too they are 21, and they have a strong need to grow, to increase the number of companies that are part of the consortium. The peculiarity of this research is the focus on micro level about individual family firms' intention/willingness as well as abilities/limitations of all those family firms that, having a long term relationship since 1980s, in the last decade have established a new horizontal alliance in the form of a *consortium*. At the same time, it is possible to investigate the initiatives and arrangements developed at a consortium level (meso), to unveil the interfirm dynamics and address the research question of this paper. Data have been collected through primary and secondary data sources in different times. In particular, we have conducted numerous interviews with different informants in a long time interval (late 2018- early 2021); in three cases, we did multiple interviews over the three years. Each interviews lasted between 60 and 120 minutes, were recorded and then transcribed. Table 1 presents a summary of the informants, their position and representativeness and other elements that qualified the sources (type, length and year of interviews).

Table 1: Summary of interviews

Interviewee's Role in the Consortium and	Type of	Length of	year
(eventually) as a Consortium "partner"	contact	interview	2010
i) Former President of the Board of Director of the			2018
Consortium of the Consortium,	Face-to-face	90 minutes	
ii) CEO of one ally			
i) New President of the Board of Director of the			2018
Consortium of the Consortium,	Face-to-face	120 minutes	
ii)CEO of one ally			
i) Member of the Board of Director of the	Call and face		2021
Consortium	Call and face	90 minutes	
ii) CEO of one ally	to face		
i) Actual CEO of the Consortium,	Call	80 minutes	2018
ii) consultant			2021
ii) consultant	Call	120 minutes	2021
i) Former CEO of the Consortium,	Face-to-face	120 minutes	2018
ii) consultant	Face-to-face	120 minutes	2021
Responsible of technical assistance and training	CO:	2018	
of the Consortium,	Call	60 minutes	

Casprini, Rapaccini, Marelli

ii) consultant			
i) Project Manager,	Call	60 minutes	2018
ii) consultant			

Additionally, we tap into archival data such as internal surveys and financial reports. This manuscript, in particular, focuses on the findings coming from these interviews, and shed lights on the key facts and motivation that, time by time, convinced these family businesses to enter and remain in the alliance.

4. FINDINGS

About 10 years ago, some entrepreneurs and managers of less than twenty Italian family firms, operating in the elevator industry, decided to establish a consortium. The network relationships and initiatives were of paramount importance in the transition to the service business of these firms, that was collectively undertaken in the last years. Originally, the consortium was constituted with the aim of sharing technical knowledge and industry-specific practices, in order to protect their small business from the threats of global leaders such as Otis, Schindler, Thyssen Krups and Kone, that were dominated that industry worldwide and had invested heavily to develop their service business. Conversely, these SMEs had very narrow markets, at metropolitan or at least regional level. Although the good reputation with their local clients (building managers), contrary to larger firms they could rely on neither financial resources nor skilled managers (e.g. operations, sales or service directors). Therefore, these entrepreneurs faced a relentless competition that in most cases overwhelmed their own strengths.

At the same time the local completion is characterized by sufficient margin of profit generated by a rigid demand. This positive earnings reduce the willingness to change and innovate their business model, in particular when the decision should be taken by second or third generations. Actual CEO of the Consortium underline that the next generation is more conservative than the previous one, thus having difficulties in pursuing innovation. This is because of the fear of doing mistakes. The current situation, with the pandemic that has impeded, for example, condominium assemblies, has not helped in that respect.

In particular, the consortium was key in setting up the capabilities required for increasing the sales of contractual maintenance services, and this led to a generalized increase of revenues, and helped the affiliates to face the economic downturn of the construction industry in the years following the crisis of 2008. Our analysis shows that long-standing relationships among the entrepreneurs of the involved family firms, even before the consortium constitution, have been important for building trust. However, prior to joining the consortium, any affiliate had a product-centric business models. Business priorities were the sale of new units (elevators), and only minor revenues came from selling renovation services, repairs, spares and maintenance services. Consequently, key competencies consisted in the design, production and installation of elevators/escalators for commercial and residential buildings. Basically, no one of the smaller firms could believe to be able to establish a service business and to develop all those new capabilities. Actually, in some cases these firms had a very limited range of innovation possibilities, and most of their efforts were devoted to keeping the pace of technological innovation in products, imposed by the market leaders.

The consortium had a crucial role in overcoming the ability-willingness paradox of the affiliates. In fact, with the help of common projects and initiatives, all the firms have been able to shift towards servitization. This has been possible because the "ability" sphere of each family firm has been influenced by the belongingness to a wider alliance of other family firms. Some "innovators" belonging to the consortium have been able to show how a more service-oriented business model could benefit the firm: this has allowed the other firms to overcome their ability towards innovation since they acted as "followers" of what the consortium has decided to pursue.

Actual CEO of the Consortium underlines the importance of long lasting relationships among the affiliates. Family firms belonging to the consortium have reciprocal esteem and are mutually available. The Consortium has never imposed decisions. However, from the analysis, it two main dimensions have been identified as important in helping firms to innovate and overcoming the ability-willingness paradox.

The first dimension is the role of the consortium CEO as a "boundary spanner", that acted on the ability side. The CEO of the consortium is external to the family firms since he is an "anomalous" professional consultant. He was deeply involved in supporting the development of the consortium's activities and in determining the hardware, procedural, contractual and software/license components on which to feed the system for collecting, processing and determining performance indicators. The approach followed by the consultant was a "learning by doing". He fuelled a debate to help questioning the traditional approaches and business models. This debate was facilitated by the predisposition to discussing common issues such as market threats and organizational difficulties, as well as sharing also revenues and cost data of financial reports. This is achieved because the companies of the consortium needed to evaluate the convenience of developing the provision of new services that could thus integrate the turnover generated by their original business model. The work of the consultant has allowed the firms of the consortium to focus on the development of contractual services - such as emergency and standard and / or scheduled maintenance - to be provided on plants both installed directly and on those produced by competitors but acquired for maintenance. The consultant provided information and reports relating to the management of quality, management control, and human resources of the companies of the consortium. The consultant has created a fiduciary relationship with consortium's firms and he has acted as a "boundary spanner" in the sense that he was able to collected, analysed and shared data among the several affiliates.

The second dimension has been the family firms' willingness to protect their companies from fierce competition, that acted on the willingness side. The companies joined the consortium since they recognized their difficulty in competing against larger businesses. To a certain extent, we can say that the affiliates are coopetitors since they are both competing and cooperating. The actual CEO of the consortium describing the innovation coming from the servitization processes underlines that:

"... it is a model that has been effectively adopted in all these evolutions: i) the chief technical managers, ii) the new commercial managers, iii) the Internet of things (IoT), iv) the automation of processes.... these are all virtuous examples where we have not imposed anything on the consortium members but we have left each consortium member the possibility of maturing this innovation within his organization and therefore bringing his organization to be able to accept it in the least painless way possible!".

5. CONCLUSIONS

This paper presents a preliminary work aimed at explaining how and why family firms form horizontal alliances to innovate and overcome their ability-willingness paradox. The study aims at contributing to three streams of research. First, the paper focuses on the ability-willingness paradox (Chrisman et al., 2015) showing how a new type of governance mechanism (i.e. strategic alliance) could influence the ability sphere. Second, due to a paucity of research showing how family firms ally, (Feranita et al. 2017), the paper aims at contributing to strategic alliances of family firms. The case is a particular example of horizontal strategic alliance, thus contributing to previous research that has usually investigated other types of alliances (e.g. López-Cózar-Navarro et al. 2017). Finally, the paper contributes to the servitization literature since it represents a case of family firms that have changed their business model towards a service-oriented one. As noticed by some recent contributions (e.g. Casprini 2019), there is a paucity of studies about servitization in family firms.

The Consortium has facilitated the servitization process of the several firms affiliated. From producing elevators, they move towards a service first, service only business model. The case analysed

presents preliminary interesting insights such as the role played by professional consultant and the willingness to compete (Devece et al., 2017) to face external, bigger competitors.

However, this study has several limitations since it is an ongoing project. The first limitation is linked to data analysis. The data presented here are mainly descriptive, not supported by quotations and codes. This is due to the fact that the researchers are collecting additional data over multiple levels of analyses. The researchers are codifying quotations on the basis of the ability and willingness dimensions and, in particular, they are distinguishing for each company analysed which have been their "ability" (in terms of discretion to act) and their "willingness" (in terms of disposition to act) (Chrisman et al., 2015). Finally, the researchers are re-reading the data collected and advancing their understanding through additional interviews moving from a social capital perspective. In particular, considering the framework proposed by Pearson, Carr, and Shaw (2008), the researchers are trying to investigate how belonging to a consortium helps the development of social capital that influences the family firms' resources and capabilities and, consequently, their competitive advantage and family wealth creation over time.

REFERENCES

Ambroise, L., Prim-Allaz, I., Teyssier., C., and Peillon, S. (2018). The environment strategy-structure fit and performance of industrial servitized SMEs. *Journal of Service Management*, 29(2): 301-328.

Baines, T. S., Lightfoot, H. W., Benedettini, O., and Kay, J. M. (2009). The servitization of manufacturing: A review of literature and reflection on future challenges. *Journal of Manufacturing Technology Management*, 20(5): 547–567.

Bennedsen, M., and N. Foss, 2015, Family Assets and Liabilities in the Innovation Process. *California Management Review*, 58 (1): 65–81.

Bouncken, R.B., M. Hughes, M. Ratzmann, B. Cesinger, and R. Pesch, 2020, Family Firms, Alliance Governance and Mutual Knowledge Creation. *British Journal of Management*, 31 (4): 769–91.

Casprini, E. 2019. Beyond servitization. New managerial challenges for manufacturing firms. *CEDAM Wolters Kluwer*, ISBN: 9788813368128

Casprini, E., De Massis, A., Di Minin, A., Frattini, F. and A. Piccaluga, 2017, How Family Firms Execute Open Innovation Strategies: The Loccioni Case. *Journal of Knowledge Management*, 21 (6): 1459–85. Chrisman, J. J., Chua, J.H., De Massis, A., Frattini, F. and M. Wright, 2015, The Ability and Willingness Paradox in Family Firm Innovation: Family Firm Innovation Future Agenda. *Journal of Product Innovation Management*, 32 (3): 310–18.

Christensen-Salem A., Mesquita L. F., Hashimoto M., Hom P. W., Gomez-Mejia L.R., Journal of Family Business Strategy, https://doi.org/10.1016/j.jfbs.2020.100412, in press.

Confente, I., Buratti, A., and Russo, I. (2015). The role of servitization for small firms: Drivers versus barriers. *International Journal of Entrepreneurship and Small Business*, 26(3): 312–331

Coreynen, W., Matthyssens, P., and Van Bockhaven, W. (2017). Boosting servitization through digitization: Pathways and dynamic resource configurations for manufacturers. *Industrial Marketing Management*, 60:42–53

Dahmani, S., Boucher, X., Peillon, S., and Besombes, B. (2016). A reliability diagnosis to support servitization decision-making process. *Journal of Manufacturing Technology Management*, 27(4):502-534.

de Jesus Pacheco, D. A., ten Caten, C. S., Jung, C. F., Sassanelli, C., and Terzi, S. (2019). Overcoming barriers towards Sustainable Product-Service Systems in Small and Medium-sized enterprises: State of the art and a novel Decision Matrix. *Journal of Cleaner Production*, 222: 903–921.

Devece, C., Riberiro-Soriano, D.E. and D. Palacios-Marqués, 2017, Coopetition as the new trend in inter-firm alliances: literature review and research patterns, *Review of Managerial Science*, 13: 207-226

Dieleman, M., 2019, Reaping What You Sow: The Family Firm Innovation Trajectory. *Journal of Family Business Strategy*, 10 (4). https://doi.org/10.1016/j.jfbs.2018.03.003.

Casprini, Rapaccini, Marelli

Dubruc N., Peillon S., and Farah, A. (2014). The impact of servitization on corporate culture. *Procedia CIRP*, 16:289-294.

Feranita, F., Kotlar, J., and De Massis, A. (2017). Collaborative innovation in family firms: Past research, current debates and agenda for future research. *Journal of Family Business Strategy*, 8, 137–156.

Gebauer, H., Fleisch, E., and Friedli, T. (2005). Overcoming the service paradox in manufacturing companies. *European Management Journal*, 23(1), 14-26.

Hsieh, Y.H., and Chou, Y.H. (2018). Modeling the impact of service innovation for small and medium enterprises: A system dynamics approach. *Simul. Model. Pract. Theory*, 82, 84–102.

Kowalkowski, C., Gebauer, H., and Oliva, R. (2017). Service growth in product firms: Past, present, and future. *Industrial marketing management*, 60:82-88.

Kowalkowski, C., Witell, L, and Gustafsson, A. (2013). Any way goes: Identifying value constellations for service infusion in SMEs. *Industrial Marketing Management*, 42(1): 18-30.

Lester, R.H., and A.A. Cannella, 2006, Interorganizational Familiness: How Family Firms Use Interlocking Directorates to Build Community-Level Social Capital. *Entrepreneurship: Theory and Practice*, 30 (6): 755–75.

López-Cózar-Navarro, C., S. Benito-Hernández, and M. Platero-Jaime, 2017, The Influence of Cooperative Relations on Geographical Expansion and Diversification Strategies in Family Firms. *International Business Review*, 26 (4): 764–73.

Madrid-Guijarro, A., Garcia, D., and Van Auken, H. (2009). Barriers to innovation among spanish manufacturing SMEs. *Journal of Small Business Management*, 47(4), 465–488.

Malleret, V. (2006). Value creation through service offers. *European Management Journal*, 24(1):106-116.

Man, T. W. Y., Lau, T., and Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123–142.

Michalik, A., Besenfelder, C., and Henke, M. (2019). Servitization of small- And medium-sized manufacturing enterprises: Facing barriers through the Dortmund management model. *IFAC-PapersOnLine*, 52(13), 2326–2331.

Miller, P., Kurunmäki, L. and T. O'Leary, 2008, Accounting, Hybrids and the Management of Risk. Accounting, *Organizations and Society*, 33: 942-967.

Niemelä, T., 2004, Interfirm Cooperation Capability in the Context of Networking Family Firms: The Role of Power. *Family Business Review*, 17 (4): 319–30. https://doi.org/10.1111/j.1741-6248.2004.00021.x.

Pearson, A. W., Carr, J.C. and J. C. Shaw, 2008, Toward a Theory of Familiness: A Social Capital Perspective. *Entrepreneurship Theory and Practice*, 32 (6): 949–69. https://doi.org/10.1111/j.1540-6520.2008.00265.x.

Rapaccini, M., Mauro, S. G., Cinquini, L., and Tenucci, A. (2019). Servitization of SMEs through Strategic Alliances: a Case Study. *Procedia CIRP*, 83, 176-181.

Senftlechner D., Hiebl M.R.W. (2015), Management accounting and management control in family businesses: past accomplishments and future opportunities, Journal of Accounting & Organiza-tional Change, 11(4), 1-48.

Tauquer, M. A., and Bang, K. E. (2018). Servitization: A model for the transformation of products into services through a utility-driven approach. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4).

Yin, R.K. 1994. Case Study Research: Design and Methods. 2nd ed. Vol. 5. Applied Social Research Methods Series. Thousand Oaks: SAGE Publications

Zahra, S.A., 2010. Harvesting Family Firms' Organizational Social Capital: A Relational Perspective. Journal of Management Studies 47, 345–366

ACKNOWLEDGEMENTS

We thank the anonymous informants of the consortium who have taken part to the study.

Casprini, Rapaccini, Marelli

AUTHORS

Assistant Professor Elena Casprini Dipartimento di Studi aziendali e giuridici University of Siena (IT) elena.casprini@unisi.it

Professor Alessandro Marelli Faculty of Political Science University of Teramo (IT) amarelli@unite.it Professor Mario Rapaccini Dipartimento di Ingegneria Industriale University of Florence (IT) mario.rapaccini@unifi.it