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Francesco Chirico and Mattias Nordqvist
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Dynamic capabilities and trans-generational value creation in family firms: The role of organizational culture

Francesco Chirico
Texas A&M University, USA and University of Lugano (USI), Switzerland

Mattias Nordqvist
Jönköping International Business School, Sweden

Abstract
While some research on entrepreneurship in family businesses has focused on transgenerational value creation, a gap exists in understanding how such value is generated across generations. The present research offers insights through the lens of dynamic capabilities, which are created by knowledge and in turn generate entrepreneurial performance and value creation. A model is built based on literature and case research. The crucial role of the organizational culture emerges through the empirical study. Family inertia is considered to be a factor preventing the creation of dynamic capabilities. We find that family inertia depends on characteristics of the family business culture, where paternalism and entrepreneurial orientation influence family inertia positively and negatively, respectively. Family firms from Switzerland and Italy active in the beverage industry represent the empirical context. Theoretical and practical implications are offered.

Keywords
dynamic capabilities, value creation, organizational culture, family firm

Introduction

Family firms throughout the world are the most common form of organization, especially among small and medium-sized enterprises (Gersick et al., 1997; Westhead and Howorth, 2007). While family firms play crucial roles in the creation of economic and social wealth, they face significant challenges to survive and prosper across generations. Some family firms, however, have a striking ability to achieve longevity and maintain a competitive edge for many generations. This makes them a vital and important area of study with relevance also for other types of businesses (Miller and

Corresponding author:
Francesco Chirico, Texas A&M University, Mays Business School, Department of Management, College Station, TX 77843-4221, USA
Email: fchirico@mays.tamu.edu; francesco.chirico@usi.ch

LeBreton-Miller, 2005). In particular, there is a strong interest among scholars to gain a deeper understanding of the role of entrepreneurship for long-term growth and longevity of family firms. Entrepreneurial family firms are able to foster competitive resource allocation processes towards value creation across generations (Habbershon and Pistrui, 2002; Sirmon and Hitt, 2003). They form a specific organizational context for entrepreneurship research as a result of the systemic interactions between the family, its members and the business (Habbershon and Williams, 1999). Investigating entrepreneurial family firms as a 'type' is thus important for our advancement of knowledge, since family firms are not a homogeneous group (Westhead and Howorth, 2007).

While an increasing amount of research on entrepreneurial family businesses has focused on transgenerational value creation (e.g. Hall, Melin and Nordqvist, 2001; Habbershon and Pistrui, 2002; Kellermanns and Eddleston, 2006), a gap exists in understanding how such value is generated across generations, especially in dynamic markets – that is, markets in which the competitive landscape shifts quickly and change must be promoted to survive (Eisenhardt and Martin, 2000). The resource-based view of the firm has been a useful framework to study the determinants of value creation (Barney 1991). However, possessing valuable, rare, inimitable and non-substitutable resources alone does not automatically lead to a sustainable competitive advantage (for a reasonable period). Rather, the firm's resources "must be managed appropriately to produce value" (Sirmon and Hitt, 2003: 341). Accordingly, Eisenhardt and Martin (2000) suggest new value-creating strategies are generated by the recombination process of resources. This is captured in the dynamic capabilities approach, which examines how entrepreneurial change is promoted and new value is created in organizations over time (Teece et al., 1997), including in family businesses (Chirico and Salvato, 2008; Salvato and Melin, 2008).

The present article contributes to the literature on entrepreneurship and family firms with an examination and conceptualization of the process through which dynamic capabilities are generated by knowledge and create entrepreneurial performance in terms of product innovation and strategic adaptation, thereby allowing a family firm to compete in situations of rapid change and create new value over time. A model of knowledge and value creation in family firms is built based on previous literature and extended through qualitative research. Focusing on entrepreneurial family firms we also contribute to a deeper understanding of one important `type' of family firm, thereby enhancing our knowledge about the heterogeneity of such ventures (c.f. Westhead and Howorth, 2007). The article is based on case research into four family firms from Italy and Switzerland. The empirical research shows how the family business culture impacts on the relationship between knowledge, dynamic capabilities and entrepreneurial performance. Family inertia is observed to be a factor constraining the creation of dynamic capabilities. It can be a result of the family business culture, where paternalism promotes family inertia and entrepreneurial orientation (EO) counteracts it. We contribute to the entrepreneurship and the family business fields of research with theoretical and empirical insights on the characteristics and challenges of sustained entrepreneurship in family businesses.

The paper is organized as follows: After a review of the literature on the determinants of family firm value creation, we present the methodology followed by the findings from the case research. Next, the conceptual model is presented and discussed. Implications for research and practice constitute the final section.

Theoretical framework

Entrepreneurial performance and transgenerational value creation

Entrepreneurship is about creating new services, entities or products with reference to specific markets or industries (Davidsson and Wiklund, 2001). The process directed to develop new products or to improve existing ones can be a dynamic capability (Eisenhardt and Martin, 2000). New or improved products stem from the knowledge of the firm and are associated with innovation and adaptation to markets, thus leading to entrepreneurial performance (Sharma and Chrisman, 1999). Particularly in rapidly changing environments, when the firm's products may go out of fashion or become obsolete a product development process that becomes a dynamic capability is important. This dynamic capability needs to be designed to acquire, exchange, transform and at times shed resources in order to create new products according to the demand of customers.

There is a close relationship between knowledge, dynamic capabilities and entrepreneurial performance (Teece et al., 1997). To examine and conceptualize how this relationship is linked to transgenerational value creation in family businesses – in terms of financial outcomes, we focus on both product innovation and strategic adaptation to the market which constitute the firm entrepreneurial performance – i.e. product-line extension, product diversification, expansion to new markets and adoption of new technology (Barney, 1991; Zahra and George, 2002).

Knowledge and dynamic capabilities

Knowledge is an asset which enables an organization to be innovative and remain competitive in the market (Grant, 1996). Knowledge in family businesses is defined as explicit and tacit knowledge which family members have gained and developed through education and experience within and outside the organization (Zahra et al., 2007; Chirico, 2008). Living in the family and working in the business from an early age allow family members to develop deep levels of firm-specific tacit knowledge. We mostly emphasize tacit knowledge because of its centrality within an organization (Grant, 1996; Cabrera-Suarez et al., 2001). Prusak (1996: 6) suggests that "the only thing that gives an organisation a competitive edge - the only thing that is sustainable - is what it knows, how it uses what it knows, and how fast it can know something new" (see also Nonaka et al., 2000). Firms with superior knowledge can combine traditional resources and assets in new and distinctive ways, be innovative, enhance their fundamental ability to compete and do better than rivals (Grant, 1996; Teece et al., 1997). Cabrera-Suarez et al. (2001) emphasize the importance of knowledge as a source of competitive advantage in family business; and Bjuggren and Sund (2001) indicate a form of family idiosyncratic knowledge which makes intergenerational succession within the family firm more profitable than other types of succession.

However, having knowledge is crucial but not enough to remain competitive over time (Grant, 1996). An organization needs dynamic capabilities to make better use of its resources (Eisenhardt and Martin, 2000; Teece et al., 1997). The term 'dynamic' refers to the capacity of renewing the organization to better suit the changing environment; while 'capabilities' refers to the ability to build and combine internal and external resources so as to achieve congruity with a changing environment. Following Teece et al. (1997) and Eisenhardt and Martin (2000) dynamic capabilities are processes embedded in firms designed to acquire, exchange and transform internal and external resources in new and distinctive ways and, at times, shed them. Thus, they consist of specific "organizational processes like product development, alliancing, and strategic decision making that create value for firms within dynamic markets by manipulating resources into new value-creating strategies" (Eisenhardt and Martin, 2000: 1106). Accordingly, over time family firms need to develop entrepreneurial change capabilities in order to shed or redeploy resources which erode in value and become obsolete quickly in changing markets (Habbershon and Pistrui, 2002; Chirico and Salvato, 2008). Dynamic capabilities are idiosyncratic in family business since they result from the strong interaction among the family, its individual members and the business. Indeed, the interaction of the two interrelated social systems – i.e. the family and the business – allows family members to participate at the same time in the family and business life, thus influencing both positively and negatively resource-recombination processes.

However, what really differentiate dynamic capabilities across firms are the mechanisms through which they are sustained. Basically, mechanisms of knowledge acquisition and sharing, collective learning, experience accumulation and transfer guide the evolution of dynamic capabilities. Without knowledge and learning, it would be hard to realize from where a firm's unique capabilities come. Eisenhardt and Martin (2000) point out that dynamic capabilities rely on the existing knowledge and the creation of new knowledge. Similarly, Zollo and Winter (2002) refer to experience accumulation, knowledge articulation and codification as generators of dynamic capabilities.

Knowledge creation can be well developed in family firms due to the high level of emotional involvement of family members and the socially intense interactions fuelled by trust between family members and with external parties (Cabrera-Suarez et al., 2001; Chirico, 2008). Tagiuri and Davis (1996) argue that emotional involvement, the lifelong common history and the use of a private language in family businesses enhance communication between family members. This allows them to exchange knowledge more efficiently and with greater privacy compared to non-family firms and to develop idiosyncratic knowledge and specific dynamic capabilities for resource-recombination which remain within the family and the business across generations (Chirico and Salvato, 2008; Salvato and Melin, 2008). Certainly, family firms also face challenges for the creation of dynamic capabilities that support entrepreneurial performance. In our research we particularly observed how these challenges were associated with the organizational culture.

Organizational culture and family inertia

Research on family firms has observed the influence of organizational culture on either promoting or constraining entrepreneurial activities (Hall et al., 2001; Zahra et al., 2004), including the reasons which force family firms to remain within the boundaries of their current strategy despite drastic changes in the environment (see e.g. Salvato, Chirico and Sharma, 2010). Some family firms tend to develop cultures that make their organizations inflexible, resistant to change and inclined to stick to path-dependent traditions, hence becoming less favourable to new proactive entrepreneurial strategies (Hall et al., 2001). Alvesson (1993: 2,3) defines organizational culture 'as a shared and learned world of experiences, meanings, values and understandings which inform people and which are expressed, reproduced and communicated in a partly symbolic form'. The family business culture stems from the combination of different behavioural patterns which result from the history of the family business, the social relations within it and the beliefs and values embedded in the family (Schein, 1983; Dyer, 1986). In our case research, we observed how these behavioural patterns promoted resource-recombination processes, thus leading to positive entrepreneurial performance. However, we also saw how such behavioural patterns could counteract change as a result of what we refer to as family inertia (see Hannan and Freeman, 1984; Larsen and Lomi, 2002). More specifically, we noted how the impact of family inertia was associated with the existence of two organizational cultural aspects: paternalism and EO. Although the importance of these two aspects emerged in the case research together with the role of organizational culture, we describe these concepts below.

Paternalism is the practice of excessively caring for others so as to interfere with their decisions and autonomy. Paternalistic owner-managers tend to 'protect' the family-business employees while denying them responsibility and the freedom to express their ideas and make autonomous choices and changes, thus promoting family inertia (Dyer, 1986). In paternalistic cultures, decisions are often taken in the realm of family rather than in the realm of the business with a strong attitude to preserve traditions. Paternalism is perhaps most common when the organizational culture reflects its founder (Schein, 1983). Davis and Harveston (1999) refer to 'generational shadow' as the enduring effect of previous business patterns on the subsequent evolution of the family firm. This means that paternalism can be a cultural characteristic in later generation family firms as well. In our case research we also found how the concept of EO sheds light on the attitudes and practices to keep the family business changing through new initiatives and innovation. EO refers to the attitudes and practices within an organization that makes it innovative, proactive and risk-taking in its strategic behaviours (Miller, 1983). This allows a firm to achieve entrepreneurial performance through the development of capabilities needed to manage change and shed or redeploy unproductive resources. Family businesses constitute a specific organizational context with impact on the characteristics and outcomes of EO (e.g. Kellermanns and Eddleston, 2006; Naldi, Nordqvist, Sjöberg and Wiklund, 2007). Although rarely examined in-depth, it also has been noted that the extent to which an organization has an EO is associated with its organizational culture (Lumpkin and Dess, 1996). In our case research we observed how EO counteracted family inertia, thus facilitating entrepreneurial performance and transgenerational value creation.

Methods

Empirical setting

Our research is a longitudinal, multiple-case study. Multiple cases permit replication logic where each case is viewed as an independent research study which may confirm, reject or extend the theoretical background through new insights. The replication logic yields more precise and transferable results compared to single case studies. We relied on informants from two generations to yield a broader analysis. The study used several levels of analysis, i.e. an embedded design, including family, business and industry (Yin, 2003).

We analysed two private Italian family firms from Apulia (Alfa) and Tuscany (Beta) regions and two private Swiss family firms from canton 'A' (Gamma and Delta).[1] We define a family business as a company where a family has a majority of shares, has one or more of its members in key management positions, and has members of more than one generation involved in the business. The companies had the potential of yielding interesting insights based on both commonalities and differences amongst them (Table 1). All firms belong to the beverage sector. Alfa operates in the spirits industry, and Beta, Gamma and Delta belong to the wine industry. In this dynamic manufacturing sector, which is very important in Italy and Switzerland, family-business knowledge and traditions have been prolific for generations, thus enabling the businesses to stay competitive

Table 1. Description of Cases*

Family Business	Founded	Latest Active Generation	Industry	Country
Alfa	1840	3rd**	Beverage - Spirits	Italy
Beta	19xx***	3rd	Beverage - Wine	Italy
Gamma	1944	3rd	Beverage - Wine	Switzerland
Delta	19xx***	3rd	Beverage - Wine	Switzerland

* For a more detailed description of the case studies refer to Chirico (2008).
** We consider only the last three generations of Alfa starting from the point when the artisan activity turned into an industrial business.
*** Some information is not available for confidentiality reasons.

over time. Another important aspect is that, in each generation, family members of at least two generations have always been involved in all four firms. Names given to firms and some other information have been disguised for confidentiality reasons. Table 1 reports basic information.

Data collection

Data were collected through personal interviews, questionnaires, secondary sources (newspaper and magazine articles, internal documents, slide presentations, press releases, websites and balance sheets), conversations and observations in 2005/2006. Semi-structured interviews were conducted separately with two respondents from each firm, an active family member of the latest generation – Generation 3 (G3) – and another one of the previous generation – Generation 2 (G2) – chosen on the basis of their central role within the organization. Interviews were conducted during several formal and informal meetings with an average length of three hours. During informal meetings, we had the opportunity to talk extensively with several family and non-family members as well as to observe their interaction. Participation in informal meetings is considered important, especially to be able to understand the organizational culture. After each meeting, the research team discussed impressions and observations, taking notes to crystallize ideas[2] (see Bryman and Bell, 2007). The interviews were taped and transcribed within six hours after the meetings. Following Bryman and Bell (2007)'s suggestions for the internal reliability of a study, interviews were listened to by two or three members of the research team in order to check for consistency of interpretation. The interviews were conducted in two parts. First, open-ended questions were asked without telling respondents about the constructs of interest in order not to influence them. They had the opportunity to relate their stories of how transgenerational value has evolved over time. Probing questions were asked to obtain more details related to the stories. Second, closed-ended questions were asked about the transgenerational value creation process and the role played by specific factors on the process as a whole. After interviews, telephone calls were made to confirm our understanding of the answers given by the respondents.

Data analysis

We created a database where interview data were integrated with information from secondary sources to triangulate the data. Four case descriptions were written to maintain the independence and the replication logic. Guided by the initial theoretical framework, we coded and analysed each case description individually and then in comparison. Some results were consistent with the initial theoretical framework, but new observations and insights also emerged. Whenever a new insight emerged, we went back to the theoretical framework to read more literature. This way we could successively code the new observations into themes and expand our original theoretical framework. We soon realized that the identified themes were mainly associated with organizational culture. We observed the importance of family inertia, paternalism and EO for the character of the relationship between knowledge, dynamic capabilities and entrepreneurial performance. Integrating these concepts we managed to extend the understanding of how transgenerational value was promoted or inhibited in the family firms. For instance, we saw the appropriateness of interpreting the family-business culture as either open or closed, as well as the three dimensions of EO, to understand the impact of culture on dynamic capabilities. The data analysis was therefore undertaken using a systematic interplay between theory and data (Alvesson and Sköldberg, 2000; Suddaby, 2006). For readability reasons, we have chosen to introduce some theoretical concepts prior to the results section although the relevance of these concepts emerged during process data analysis. The research process was thus not as linear as it might appear from the structure of this article, but this is normal in most qualitative research (Suddaby, 2006).To ensure a good match between observations and theoretical ideas developed (i.e. internal validity), we relied on two techniques: respondent validation and triangulation (Bryman and Bell, 2007). We submitted research findings to the respondents to ensure that there was a good correspondence between findings and research participants' perspectives. Moreover, we triangulated multiple sources of evidence so as to improve the quality of the study conducted.

Findings

Entrepreneurial performance and transgenerational value

Alfa, Beta and Gamma grew well, but Delta has, during the third generation, entered a more difficult situation. ***Alfa's*** entrepreneurial performance – i.e. product-line extension, product diversification, expansion to new markets and adoption of new technology – has increased over time, as a result of resource-recombination processes. Alfa has been able to maintain transgenerational value creation across generations through new continuous investments in knowledge development. They advanced from one product in G1 to about 25 products in G3. Products were sold in Taranto and in some other towns of Apulia during the first generation. In G2 they were sold mainly in Apulia and in Campania and Basilicata. In the 1970s distribution spread throughout Italy. G3 also export to the US, Germany, Ireland, Australia and Japan.

Alfa has started a diversification process adding unrelated products to the core business over the last ten years, maintaining 'the philosophy to produce and commercialise products of quality of excellence' (Giuseppina Alfa, G3). Alfa's Limoncello product has won quality awards.

Cutting-edge technologies have been adopted in Alfa in particularly in G2 and G3. For instance, working cycles are programmed and controlled by computers and there is a fully equipped laboratory for R&D and quality control. Giuseppina (G3) says:

> My father invested in technology from the beginning. Now, we invest even more because the market requires so.

Net income increased considerably from the foundation of the business and reinvestments in the company have been made. Goodwill has also increased in G3, due to the acquisition of the Astrelio chocolate brand. Giuseppina (G3) notes that:

> Liqueur is a luxury good, it is a fashion and it is hard to be competitive over time. Anyway, net income has been increasing in the last 20 years. Product-line extension, diversification and expansion to new markets enable the company to maintain good sales figures.

Beta has been able to increase its transgenerational value and reinvest money to develop the firm. Net income has increased 400% from 1995 to 2005 as a result of the strong entrepreneurial performance. For instance, new and different technologies have been continually adopted, including a state of the art control system. The product-line extension and the expansion to new markets remarkably increased in the shift from G1 to G2 and from G2 to G3:

> We are now market-oriented, we must adapt the wines of our land to every market. When I started we had an importer in the US, UK, Australia and Belgium. Now we cover 68 countries and we employ export managers, accountable for each macro-region. The expansion to new market segments and countries continues today. (Filippo Beta, G2)

Gamma's entrepreneurial performance reached its maximum in G2 and G3 with a strong orientation towards new markets. Resources exchanged inside and acquired outside the firm are transformed and utilized for growth. Entrepreneurship has increased across generations. Claudio Gamma (G2) reports:

> I always need to learn more from outside about 'the wine world', in order to improve the quality of my products, expand the market and adapt my firm to changes. New wines are continually conceived and produced according to customers' demand which always evolves. Diversification is taken into high consideration. In the first generation it was not necessary to update resources. Every six months I personally check that firm resources are not obsolete so as to be competitive in the market. New technologies were adopted in the second and third generations through huge investments for improving the production process and the quality of wine, the production of white wine and the distillation of Grappa. Innovation is important for our business.

Sales have increased from one million to 15 million Swiss francs a year from 1968 to 2004. Sales have decreased in 2005 because of a new law introduced in Switzerland to avoid car accidents caused by the use of alcohol. Claudio (G2) claims:

> Net income increased by four times from the first to the third generation even though the amount of work increased by fifteen times. The goodwill of the firm increased by ten times during the same period owing to the acquisition of the Tenuta Vallombrosa, the higher value of its brands and the huge investments in technology and innovation. The total of the balance sheet increased by seventeen times from G1 to G3. Income is always reinvested, for instance, in knowledge.

In ***Delta***, the creation of value has remained low in the last generation as well as the firm's entrepreneurial performance. New products are sometimes launched including products unrelated to the core family business. The expansion to new markets decreased in the shift from G2 to G3. Carlo Delta (G3) says:

> The harvest is always the same, 1 million Merlot grapes a year, and production is stable. We had the opportunity to do business abroad in the 1970s but we were not successful. We do not have the capacity. We mainly focus on producing wine for our main market in Switzerland.

Delta's net income rose two-fold from the start-up of the business to the 1960s. It increased until 1985 and has remained stable over the last 25 years, leading to stability in G3. The firm runs the business and the family owns the real estate used for the firm. The family does not invest money outside the business and profits are reinvested in the firm. The future for Delta appears uncertain:

> I am not married, I do not have children, and my cousins and their sons are not interested in the firm. Maybe the business will shut down after this generation (Carlo, G3)

The importance of knowledge and dynamic capabilities

In ***Alfa,*** knowledge accumulation and resource-recombination processes have substantially increased from G1 to G3. Knowledge was a key factor for Alfa's original success. The secret recipe of Elisir San Marzano Alfa has been passed on from generation to generation since 1840, maintaining its uniqueness and originality. Knowledge has always been updated to avoid obsolescence across generations:

> Our success depends on the knowledge gathered and handed down through the generations and acquired from outside. Each generation brings something more which creates value in the business. The second generation was able to teach us directly and indirectly all the tricks of the trade. We have learned how to communicate with each other thanks to them. The second generation did a great job of building and maintaining a positive and friendly environment within the family and the business. There is an easy flow of information within and between generations. (Guiseppina Alfa, G3)

Although Egidio (G3) is the distiller, the creation of new liqueurs is always a knowledge team project: the flavour of the liqueur, customer survey, shape of the bottle and the label. Egidio usually asks the opinion of the other family members and non-family employees for ideas of new liqueurs.

Alfa has always been open to acquiring knowledge from outside, especially today. Alfa has cooperated with a supplier in order to obtain the best flavour for one of their best liqueurs. Giuseppina (G3) explains:

> Some entrepreneurs from the South of Italy think they know everything; but it is not possible. We continually invest money in acquiring knowledge from outside. Research is important and the best place for it is the university. We have good relations with some universities and we draw advantage from their studies into what we produce…I have acquired knowledge and developed new capabilities working with external people. Today, the sales director and managing director are non-family members. They are truly an important asset. We also learn a lot through training courses and working and cooperating with external experts.

In Alfa, the strong social capital (Nahapiet and Ghosal, 1998) within and outside the family firm and the high level of emotional involvement of family members in the family firm have played a crucial role for the accumulation process of knowledge across generations (Chirico, 2008).

Alfa's dynamic capabilities are evident. Resources exchanged inside and acquired from outside are continually recombined: new products related and not related to the core business are constantly conceived according to customers' changing demand. For instance, at the end of the 1970s financial problems arose due to a rapid change in the market. The boom of the liqueur sector was followed by a drastic decline in consumption. Alfa went through business restructuring in terms of resource-recombination processes. The business was incorporated into a new legal form and the third generation joined. Skilled non-family members were employed. New product development activities started and step-by-step the commercialization of Alfa products was expanded to the North of Italy.

Alfa has been able to use the knowledge accumulated to avoid its capabilities becoming 'core rigidities' (Leonard-Barton, 1992) when the environment was changing so as to support adaptation for growth.

Beta is also growing well. Knowledge has advanced from G1 to G3 mainly thanks to the high level of social capital within and outside the family firm and the high level of family members' emotional involvement in the business (Chirico, 2008). This has allowed the firm to recombine resources over time. Filippo (G2) says:

> My father was convinced that capable employees are the key to sustainable success. He hired young and brilliant professionals to bring in new energy and ideas. The internal capabilities of the firm dramatically increased and advanced processes were implemented to change existing capabilities and adapt our business to the dynamic market.

Daniela Beta (G3), who studied at the University of California at Davis adds:

> The experience in the US enriched my network around the world. When I am abroad, I always find somebody else who studied at the same university. It's a community, a club, you learn from them. The collaboration with my relatives has also worked really well.

Gamma experienced significant improvement of knowledge from G1 to G3. Claudio (G2) says:

> A lot of work has been done to achieve such results. I learned from my mistakes how to produce wine of high quality.

The ability to acquire, exchange and transform internal and external resources has risen substantially over time, including the ability to shed resources:

> We use family and outside knowledge to generate new firm capabilities, for instance, in marketing and production. We operate in a dynamic market where we need to continually combine resources to produce new products according to changing demands. It is a continuous changing process where knowledge and capabilities are updated over time. (Claudio, G2)

Mattia Gamma (G3) adds:

> I am developing knowledge working in the firm every day, in a learning-by-doing process. My uncle, Claudio is helping me a lot and I help him understand the administrative side of the business better".

Delta is in the third generation and problems are growing mainly because of the stagnation in knowledge. Moreover, social relations between third generation family members are weak and their emotional involvement in the business quite low, meaning signs of a disintegrated family firm (Chirico, 2008).

The founder of Delta's main business was blending wine and marketing it. The technology and quality of grapes used to produce wine were not the best. In G2, the founder's sons made investments to improve quality and the overall knowledge in wine making. Growth started in the 1960s when the family created a new brand called 'xxx'[3] which is still well known in Switzerland. Knowledge increased from G1 to G2 but has not enhanced much in G3. Carlo (G3) who is still very emotionally attached to the business and considers himself part of the second rather than the third generation, remarks:

> Most of the knowledge is in the hands of the second generation. My father worked with my grandfather for 15 years learning all the 'tricks of the trade' from him. I am still learning a lot from my father. I have acquired new knowledge in business and wine making. I do my best to share and transfer all my know-how to my cousins in the third generation even if it is not always easy. Young people are more disorganized and have a lot of interests…Our relations are not very good. They do not own the business, they just work for it".

Level of trust is low between Carlo and his cousins. Resources are not well acquired, exchanged and transformed for growth. Dynamic capabilities are hardly developed, mainly as a result of a rigid cultural pattern.

The role of organizational culture and family inertia

We observed in each firm how the family business culture played a central role in the resource-recombination process, thereby either preventing or supporting entrepreneurial performance and value creation across generations. We noted that the family firm's ability to benefit from change depended in part on how well they were able to create and maintain a climate that minimized resistant behaviour and encouraged creativity, acceptance and support during the recombination process of resources. The notions of open and closed cultures shed light on this phenomenon (Hall et al., 2001).

The ***Alfa*** culture is very open, and not paternalistic. Open cultures tend to promote entrepreneurial activities. Family and non-family members are encouraged to freely express their ideas, act proactively and promote changes. Giuseppina (G3) recognizes the work done by the third generation to build and maintain a positive and friendly culture:

> Our culture is very clear and transparent and we all have the possibility during formal and informal meetings to make suggestions and express ideas. We need to thank G2…My nephew who joined the business recently is a very innovative and clever person. We expect great things from him, new ideas and fresh knowledge and inputs.

Alfa's family members lead new initiatives and promote risk-taking, and are able to keep the business in change through innovative and proactive attitudes (Miller, 1983). The firm's EO has increased over time, and has become a key aspect of the culture, thus positively influencing the creation of dynamic capabilities and entrepreneurial performance across generations. Antonio (G1) was the first entrepreneur, who understood how to transform his father's knowledge into an entrepreneurial venture. Antonio is listed as one of the most proactive entrepreneurs in Italy.[4] He sold off his father's land and built a factory in San Marzano. G2 was proactive in understanding that their original factory was too small. In 1964, they built a bigger and more efficient factory. The family is still proactive; examples of this include several new products and acquisitions that have involved high degrees of risk. Giuseppina (G3) points out:

> The history of Alfa entrepreneurs is continuing. After the second generation family businesses usually start to maintain what they already have. We did the opposite.

Beta's culture is open and not paternalistic. Many people contribute and reinforce the creation of dynamic capabilities and entrepreneurial performance. For instance Daniela (G3) says:

> I have spent my life working in this company in a fair environment where I always have the opportunity to express my thoughts and bring and realise new innovative ideas.

The EO has always been high and instances of inertia to change have not been observed. For example, the European FEUGA project opportunity was exploited by Vittorio in the late 1960s in order to receive funds to reconvert the company's production to wine. The company has always accepted high risk to improve performance. For instance, recently the firm has formed new joint ventures and acquired new lands with positive effect on growth.

Gamma is involved in several entrepreneurial activities and its propensity to make changes is very high. For instance, the company bought new lands and recently acquired a new firm. They plan to make a significant investment to buy new wine-making machineries. Claudio (G2) explains how to support growth:

> The owner must not be autocratic but innovative, proactive and alert in order to be competitive in a changing market. In the first generation there were not so many risks to face. Now risks are high but so is the willingness to face them. The desire to grow is very strong. We operate in a fair internal environment where everyone is encouraged to present ideas and introduce changes when needed…Inertia does not belong to our family, otherwise we would not exist today.

In ***Delta*** however, change is harder to implement. Decisions are always made by the three brothers (G2) and Carlo (G3). The organization is rigid and slow to react, with a preference for established routines. The static component of capabilities lies in the 'inability of organizations to change their familiar "ways of doing" when confronted with new developments' (Schreyögg and Kliesch-Eberl, 2007: 916).

The Delta EO decreased in the shift from G2 to G3. Today a closed and paternalistic culture hampers the resource-recombination processes, innovation and adaptation to the market. The culture is closed because many family and non family employees feel discouraged to make suggestions, or challenge existing ways of doing things. Closed family-business cultures tend not to encourage entrepreneurial activities and renewal, and instead lead to inertia (Hall et al. 2001). Interviewees claim there are not many opportunities, and Carlo (G3) says:

> I do not like risks…risks must be very calculated…I always wonder how far we can go without burning our fingers.

Young generation members feel entrapped in the previous generation's routines and opinions. This causes resistance to change:

> It is difficult to implement changes. I care a lot of my father's opinions who still is in control and my cousins depend much on me and their parents' decisions. This can be dangerous (Carlo, G3)

Stefano Delta (G2) explains that there are more family members operatively involved in Delta today than there used to be. Consequently, relationship conflicts emerge more which hampers collaboration:

> Working efficiently together within the organization has always been our great power through knowledge sharing across generations. I am afraid that today the third generation is not well-organized. Conflicts arise too often (Stefano, G2)

Discussion

This article contributes to current debate with an examination and conceptualization of the processes through which dynamic capabilities are generated by knowledge and create entrepreneurial performance regarding product innovation and strategic adaptation to the market thereby, allowing a family firm to compete in situations of rapid change. The findings from our case research show that knowledge – principally enhanced by high levels of social capital and emotional involvement in the business – and features of the organizational cultural – i.e. EO or paternalism and its relation to family inertia – are crucial for family businesses' transgenerational value creation.

In Figure 1, we propose a model of transgenerational value creation in family businesses. Here, knowledge and organizational culture are enablers or inhibitors of resource-recombination processes through which entrepreneurial performance is facilitated and transgenerational value is created to be partially reinvested in knowledge. A closed culture based on paternalistic

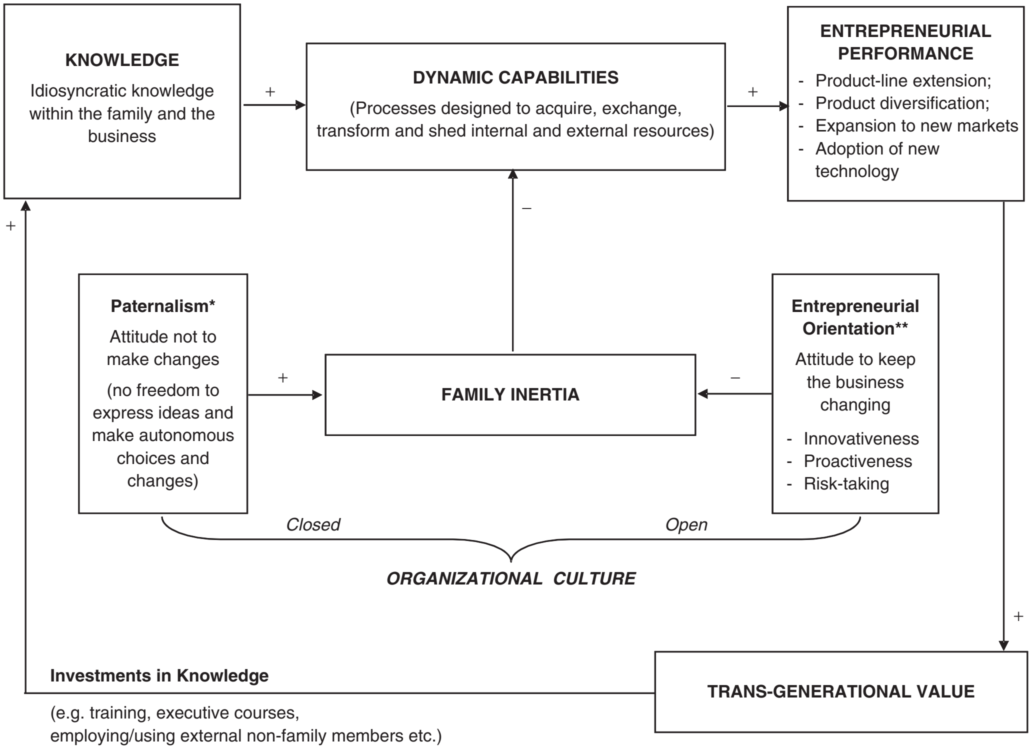

Figure 1. Dynamic Capabilities and Transgenerational Value Creation in Family Firms
*Paternalism influences dynamic capabilities negatively.
**Entrepreneurial orientation influences dynamic capabilities positively.

behaviours fosters family inertia so as to negatively impact on resource-recombination processes. An open culture based on EO counteracts family inertia so as to positively affect resource-recombination processes.

The concepts in the upper part of the model (i.e. knowledge, dynamic capabilities and entrepreneurial performance) represent our initial theoretical framework. The concepts in the lower part of the model (i.e. paternalism, family inertia and EO) related to organizational culture emerged through the case research.

A main finding is that any capability contains dynamic and static components which may lead to change or inertia, respectively, in the face of changing environments. In line with Schreyögg and Kliesch-Ebert's (2007) work on paradox implications for capability management, on the one side, organizations have to develop resource-recombination processes to foster change but on the other side this endeavour may be contrasted by cultural issues which lock the firm into past capabilities as in the case of Delta. The dynamic dimension of capabilities is designed to overcome the risk of becoming rigid and trapped.

An EO in terms of innovativeness, proactiveness and risk-taking may allow a firm to overcome the rigidity trap of organizational capabilities by updating them repeatedly as in the case of Alfa, Beta and Gamma. As the environment changes, organizational adaptation becomes more necessary and past patterns and behaviours less appropriate. Previous research has found that firms focusing on knowledge creation and exploitation as the source of advantage are indeed more likely to develop learning skills useful for adaptation and growth in new environments (Grant, 1996). In Alfa, Beta and Gamma, we observed efforts to reinvest financial resources to acquire new knowledge or implement the existing ones through training, executive courses, employing/using external non-family members and so forth.

In Alfa, Beta and Gamma family members were very committed and proactive to create new value. We characterize these companies as having high levels of knowledge and an open culture which fosters entrepreneurial action, thereby positively affecting the recombination of internal and external resources.

The Delta case reveals instead that where family involvement means stable levels of knowledge and a closed culture, the firm is not able to foster change and generate value over time. Hence, family inertia is sustained. In Delta, G3 seems to be in the shadow of the previous generations including Carlo (Davis and Harveston, 1999), and strategic decisions are always taken by them in a non-participative atmosphere. This is a common characteristic of paternalistic cultures, where decisions are usually taken by one or very few top family members, who share a common idea about which direction the firm should be heading. These owner-managers exercise strong control over the decision-making process, as in the case of Delta even during several generations. Strong feelings and emotions may shape and limit family members' innovative initiatives and directly or indirectly restrict their choices so as to cause inertia (Salvato et al., 2010).

In Delta, the third generation seems to passively accept the ideas of prior generations. This is particularly dangerous in environments of rapid change where firms need to manage internal and external resources to stay competitive. In Delta, Carlo has assumed the role of leader among siblings probably because of his long involvement in the business and the age gap between him and his cousins. It is hard to sustain this form for many years, because the rising cousin generation will feel less comfortable with a disparity in power among the various subfamilies (Gersick et al., 1997: 42). The high number of family members of the third generation may already have contributed to relationship conflicts among them, thereby weakening their ability and willingness to promote change and recombine resources collectively (Chirico, 2008).

Family inertia can thus be seen as a cultural tendency of some family firms to resist change even when it is needed to match a changing environment. Paternalism seems to lead to family inertia and prevent the development of dynamic capabilities and new entrepreneurial strategies. Conversely, EO seems to counteract family inertia and instead facilitate the creation of dynamic capabilities that support entrepreneurial performance and transgenerational value creation.

Although we recognize the importance of family firms' culture and traditions, we suggest that it is essential for these firms to unlearn, relearn and adopt new ways of thinking and doing business, especially in dynamic markets. This does not mean that change is always the best option to family firms. To our cases, developing dynamic capabilities was not an option, but a necessity in the environment in which they operate. In these markets, path-dependent firms may experience traps and rigidities so that capabilities lose their 'dynamic' component.

Implications for theory

Our purpose was to broaden existing theory on entrepreneurship in the family business context with a particular focus on the antecedents of transgenerational value creation. Although organizations are made up of individuals, the growing focus on other levels of conceptualization such as organizational capabilities and culture has reduced researchers' attention on how those individuals compose the whole (Felin and Foss, 2005). As shown here, this is especially relevant in family firms where family members play a central role within the organization, thereby constituting a key force that either promotes or inhibits entrepreneurial behaviours. The origin of capabilities and their heterogeneity are rooted in the culture and knowledge of people working in a company. In family businesses a dynamic component of capabilities can be found in the personal characteristics of family owners and managers, and their way of behaving, but also in their interaction with each other and with non-family employees and advisors. Allowing, for instance, people from outside the family to contribute to entrepreneurial performance seems to be crucial in order to sustain competitiveness in dynamic markets. Dynamic capabilities are thus embedded in the culture of each family business.

While the construct of dynamic capabilities has received considerable research attention in the strategic management literature (e.g. Teece et al., 1997; Eisenhardt and Martin, 2000; Zollo and Winter, 2002), only few works have been devoted to the study of dynamic capabilities in family firms (Chirico and Salvato, 2008; Salvato and Melin, 2008). This study extends the literature by moving beyond the static emphasis on family resources inherent for instance in the concept of 'familiness' (Habbershon and Williams, 1999) and examines not only the endowment of resources, but also their actual use in value creating activities (c.f. Eddleston, Kellermanns and Sarathy, 2008).

Exploring the antecedents of value creation in family firms also allowed us to expand entrepreneurship and family business research by focusing on the role played by the family business culture as facilitating entrepreneurial change or tending to preserve the traditional way of doing business. This is an important contribution to the growing literature that examines the characteristics and challenges for entrepreneurial family businesses as a type of family business.

Moreover, research on knowledge, dynamic capabilities, entrepreneurial performance, organizational culture and value creation is fragmented both in the strategic management and the organization theory literature. We put together these pieces derived from existing research and our empirical studies, and propose an integrated conceptual model.

Implications for practice

Effective resource-management processes are essential for family business survival across generations. Family members need to understand that markets change. They have to develop entrepreneurial dynamic capabilities in order to acquire and combine new resources and shed existing ones. Family members should support open relations to foster creativity. Indeed, when the older generation does not allow the new generation to participate in decision-making, change is prevented and inertia promoted. Hall et al. (2001: 205-206) argue that 'in turbulent and changing environments, traditional ways of thinking and acting will not be of much help to the organization'. To foster radical change, 'it is, instead, essential to question old patterns of strategic action and to explore new ones in a process of continuous learning'.

Accordingly, previous and new generations need to mutually explore and accept the way of doing business and managing resources of the other generation. They should be able to recognize even weak signals from the environment when it is time to implement changes and raise issues arising from authoritarian behaviours. Leading family members need to be open-minded and not feel threatened in their position by a new way of doing business. This is of vital importance in developing new dynamic capabilities to modernize the organization. Family meetings may help this process by developing shared values after discussion and debate among participants, so as to lead to renewed collective actions.

Limitations and future research

Our research has limitations. First, the small sample size, a feature of the chosen research strategy, means that our model cannot be generalized to all family firms. It is also important to keep in mind that family firms do not constitute a homogeneous population of firms. There are in fact many different types of family firms (Westhead and Howorth, 2007).

Second, we did not consider that an authoritarian approach can also cause *rebellion* rather than inertia. In some family firms young generations may react to paternalistic behaviours by rejecting the authority of the older generation and creating change by revolutionary behaviours.

Third, we have not given specific attention to leadership styles in relation to organizational culture and resource-recombination processes. Future researchers should directly integrate the effect of leadership styles on how the relationship between knowledge, dynamic capabilities, entrepreneurial performance and culture can foster or inhibit value creation in family businesses.[5]

Fourth, it is well established that many family firms seek to create both financial and non financial values. Our choice to focus on only financial value creation is a limitation.

Empirical studies are needed to test the model on a large representative sample. Its implications should be extended to help explain why some family firms survive through generations and others do not, especially within changing environments. Moreover, since the model has been developed through an interactive dynamic feedback loop, it would be exciting to formalize it in a proper computer simulation through system dynamics to test the findings of this research and look for further new insights (see Larsen and Lomi, 2002).

Cultural differences between family firms in different countries could also be considered. For example, Switzerland as a culture might be more paternalistic than Italy. Thereby, the model could be used to explore cultural differences in family businesses across regions or countries. Non-family businesses have much to learn from the strengths and weaknesses of family firms (Miller and LeBreton-Miller, 2005). Non-family businesses should be analysed in future research so as to compare to what extent the model presented here is transferrable beyond the family business context.

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Notes

1. Some information is not available for confidentiality reasons.
2. The research team was composed of three persons. While the first researcher was asking questions, the second one was recording and taking notes. Lastly, the third researcher was coordinating the activities of the first two (see Bryman and Bell, 2007).
3. The label name has been disguised for confidentiality reasons.
4. See, http://www.treccani.it/Portale/sito/english/mainEnglish.html
5. We thank one of the anonymous reviewers for these insightful comments.

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Francesco Chirico, PhD is a Visiting Professor at Texas A&M University, Mays Business School (Texas, US), currently working with Duane Ireland, Michael Hitt and David Sirmon. He has participated in different international research projects between the University of Lugano (Switzerland), Bocconi University (Italy), University of Jvaskyla (Finland), Wilfrid Laurier University (Canada), Concordia University (Canada) and Texas A&M University (US). He is member of the review board of *Family Business Review*. His research interests focus on strategy and entrepreneurship, family business, knowledge management, entrepreneurial innovation and resource shedding.

Mattias Nordqvist, PhD is Associate Professor in Business Administration at Jönköping International Business School (JIBS) in Sweden where he also serves as the Associate Dean for Doctoral Programs, and Co-Director for CeFEO – Center for Family Enterprise and Ownership.