A System Dynamics model to explore Strategy Renewal Process in Family Firms

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Introduction

The aim of the paper is to investigate strategy renewal process inside family firms characterised by a top management team that includes family members belonging to two different generations. In particular we are interested in understanding how the strategy renewal process can be affected by dynamic tensions that emerge between representatives of different generations: young and senior members of the top management team. To address our topic we built, grounding on relevant literature, a System Dynamic process model. The elaboration of our theory was supported by System Dynamics logical-analytical tools [Forrester, 1961, 1968]: the use of the feedback concept and the distinction between stock and flow variables [Sterman, 2000]. We think that the use of SD will contribute to enhance internal consistency in theoretical models as well as it allows to analyse the temporal evolution of strategic choices and the dynamic links between organization, resources and strategic positioning. Long-term effects coming from decision-making process dynamics are particularly relevant for family businesses as these organisation forms tend to be more long-term oriented than non-family firms having their raison-d'être in the family-firm continuity across generations.

The paper is structured as follow: the first session is dedicated to the definition of the strategy renewal process and to describe the model. The second part is dedicated to the analysis of critical resources and organizational attributes that determine the strategy renewal process. In the third part we discuss main feedback loop structure of the model.

1. A process model of strategy renewal process

The central variable of our model is represented by strategic initiatives that form the basic unit of the strategic process, they are innovative projects created within firms, typically designed with the aim of strengthening or changing the strategic positioning of the firm, proposed by young generation members of the top management team, that are not necessarily aligned with the strategic intent of senior family members. Strategic initiatives drive strategic change inasmuch as they transform the firm's competitive position and help instigate and

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sustain profitable growth processes since they allow the firm to develop sales and, at the same time, improve operating margins through cost reduction or improvements in the price position [Hamel and Prahalad, 1989; Markides, 1999].

The firm's strategy can be seen as a bundle of strategic initiatives. When strategic initiatives are aimed towards strengthening strategic positioning, they can be defined as organic strategic initiatives that fall within the scope of defending current competitive advantage. When the objective is to generate new forms of positioning, they can be defined as radical.

Incremental strategic initiatives are aimed at improving penetration of a market segment or improving the value proposition of the firm, implemented to maintain the current position and the ensuing performance. Radical strategic innovations are intended to change current positioning through, for instance, entry into new markets, developing new customer segments, expanding the product range. Radical strategic initiatives are those that more accurately represent the concept of strategic innovation because they imply the redefinition of the strategic positioning and can entail changes in the scope of the business and can affect the firm's value proposition.

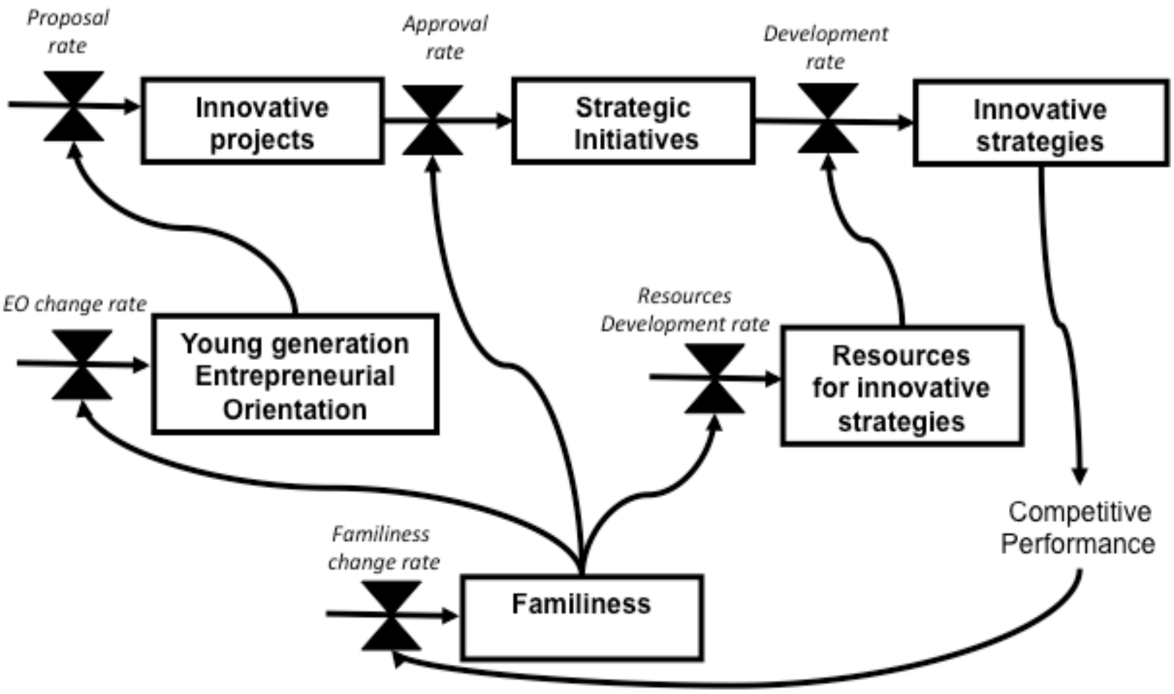
Redefining strategic positioning requires the introduction of substantial changes in the scope of the business and the firm's value proposition. The redefinition of the value proposition affects the relationship between non-monetary value for the customer and the firm's cost structure and entails the reconfiguration of the value chain.

In our representation model of the strategic innovation process (Figure 1), strategic initiatives progress according to a top-down logic, expressing a deliberate top management strategy and fully developed in a process that consists in three phases [Burgelman, 1983 and 1984].

- Proposal. This is the stage where the initiatives are presented in the form of innovative projects from representatives of young generations. The presentation of initiatives is generated and driven by top management.
- Development. Innovative projects, once approved, become strategic initiatives and are developed into pilot projects and are tested to verify their potential impact on the strategic positioning under the guidance of middle management.
- Implementation. Strategic initiatives are fully developed thanks to specific resource commitment and become an integral part of the strategy as innovative strategies.

The generation, development and implementation of strategic innovations is determined by the behaviour of three stocks: Young Generation Entrepreneurial Orientation represents the actions and contribution of the young family members to the strategy renewal process, Familiness is the pool of resources that the family provides to the company and that, in our model, is captured by the weight of tradition that determines the choices of senior family members, Resources for Innovative Strategies represents resource allocation mechanisms specifically devoted to strategy renewal process.

Figure 1. A System Dynamics stock and flow model that represents the strategy renewal process in family firms



2. Determinants of the strategy renewal process: main stock variables

Young Generations Entrepreneurial Behaviour. In our model the process of developing strategic initiatives is determined by the entrepreneurial behaviour of young generation family members, in particular the stock Young Generation Entrepreneurial Orientation determines the innovative projects proposal rates. To model this variable we adopted a measure of entrepreneurial behaviour applied not to a single individual but to an organizational unit, more specifically we consider a group of family members belonging to the young generation of the family that are part of the top management team, composed mainly by senior family members. According to corporate entrepreneurship studies [Guth and Ginsberg, 1990; Sharma and Chrisman, 1999; Covin, Ireland, and Kuratko, 2003; Kuratko et al., 2005; Ireland et al., 2009] a new business idea is developed and implemented by an organization unit that acts entrepreneurially as a new venture start-up within a larger organization [Beer, Eisenstat and Spector, 1990].

The entrepreneurial orientation (EO) of the young generation members involved in the top management of the firm can be analysed according to the key dimensions that have been developed to measure the EO of an organizational unit [Covin and Slevin, 2002; Lumpkin and Dess, 1996]:

- *innovativeness*, that is referred to the willingness of the firm to introduce new products and services;

- *risk taking* is the tendency to implement initiatives for the creation of new products and new services with an uncertain return or an high level of risk;
- *proactiveness* that is the tendency to be aggressive toward competitors and proactive to marketplace opportunity;
- *competitive aggressiveness* captures the distinct idea of "beating competitors to the punch" suggested by Miller's definition of an entrepreneurial firm [1983]. It refers to the type of intensity and head to head posturing that new entrants often need to compete with existing rivals.
- The last key component of EO is the trend toward independent and autonomous actions. Start up firm must operate intentionally to carry forward those specific actions required to launch new ventures. Large organisations characterised by a high level of bureaucracy rarely contribute to the new entry activities in existing firms. Instead, entrepreneurial orientation requires the exercise of autonomy by a strong leader, unfettered teams or creative individuals who are disengaged from organisational constraints to lead to new entry.

Entrepreneurial orientation stimulates active, innovative and creative behaviour within the firm [Baron, 1998; Meyer and Heppard, 2000; Hitt and Reed, 2000] thus sustaining the development and implementation of innovative strategies.

In our model we consider that young generation family members have: a strong propensity towards adopting innovations, an extensive proactivity towards the market and a risk-taking attitude will more easily generate and develop strategic initiatives. Entrepreneurial orientation of young family members has significant implications on the strategy renewal process. In particular, the ability to act independently from the senior family members is crucial in the innovative projects proposal phase.

Resources for innovative strategies. The development of strategic initiatives requires resource commitment by the top management team. These are tangible, intangible and physical resources used by to develop strategic initiatives. Resources fuel strategic renewal processes. The strategic innovation process, generating strategic initiatives that may change competitive positioning, cannot take place without a specific set of initial resources. Furthermore, to develop and implement strategic initiatives requires developing new resources that advance the strategic innovation process. Scholars converge on the idea that business model evolution and reconfiguration can be explained by looking at resource integration and combination [Jacobides, Kundsen and Augier, 2006; Johnson, Christensen and Kagermann, 2008; Teece, 2010]. Resources are generated over time as a result of firm performance, especially profitability, and are the result of a complex accumulation process. In our model we defined a specific set of resources dedicated to innovative strategies that are derived, bud distinct from firm's general resources. The stock, dedicated to innovative strategies, is created thank to specific allocation decisions taken by the top management team.

Familiness. "Familiness" is the unique bundle of resources a particular firm has because of the interaction of the family, its individual family members, and the business with one another. Habbershon, Williams, and MacMillan (2003) define familiness as the set of resources controlled by a firm resulting from a continuous overlap of a family system with the business system in a firm. Scholars have identified several unique resources in family firms that are broadly referred to as the "familiness" of the firm (Cabrera-Suarez, De Saa-Perez, & Garcia-Almeida, 2001; Habbershon & Williams, 1999). Human capital, social capital, financial capital, and patient capital are examples of what can be unique resources for family firms (Pearson, Carr, & Shaw, 2008; Sirmon & Hitt, 2003).

The Familiness in our model represents the behaviour of senior generation of family member of the top management team, in particular it represents the weight of the family tradition and of inertia to change the *status quo*. Familiness contributes to determine the EO of young family members. The presence of relevant family tradition represented by an old and traditional firm that allowed family member to increase the personal and family wealth and to build a network of relations with relevant stakeholders mitigates the EO of young family members that prefer to remain in the "comfort zone" of the familiness and are less proactive in proposing new projects to rejuvenate the strategy of the firm. Furthermore Familiness influences decisions of senior member on resource allocation to develop strategic initiatives jeopardizing the strategy renewal process. Firm's strategic resources are strictly controlled by senior members and usually are oriented to the realization of the deliberate strategy of the firm. Strategic initiatives proposed by young generation members sound, for senior members, as emerging strategies that can modify the *status quo* of the firm, eventually generating threats for the actual positioning, for this reason they are reluctant to allocate a relevant amount of resources to these initiatives thus determining their failure.

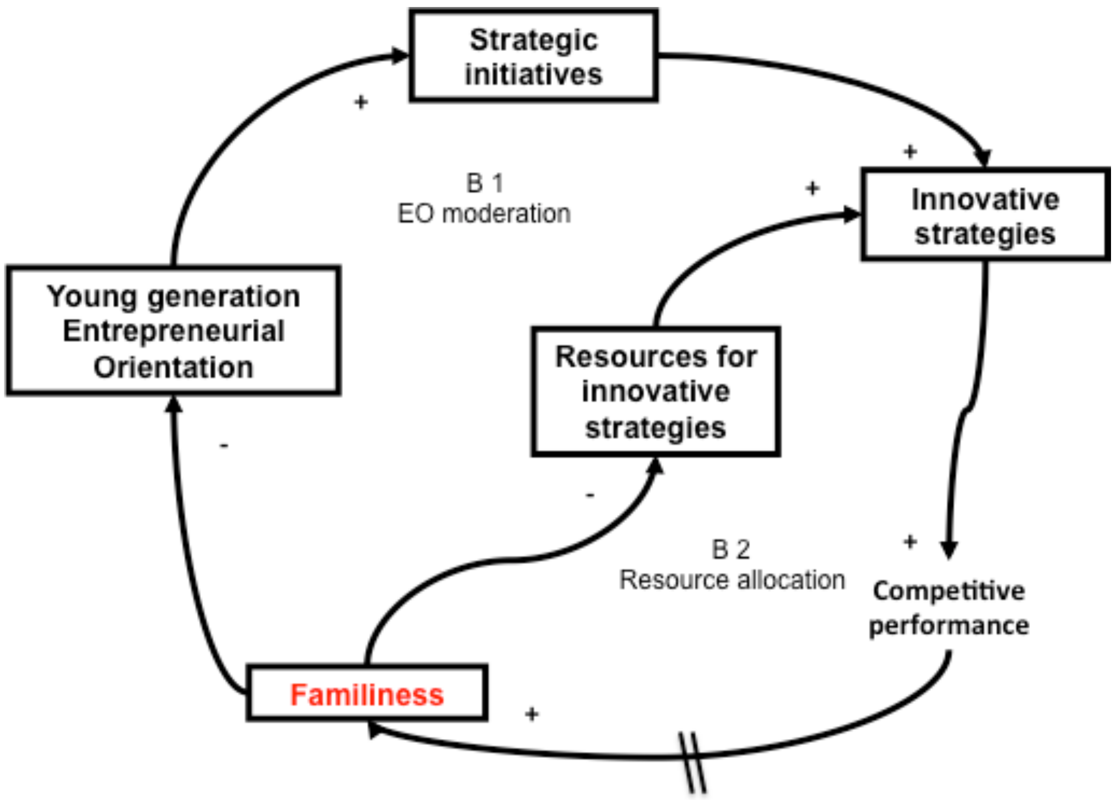
3. Model discussion: main feedback loop structure

Familiness is a powerful moderator of strategy renewal process, it acts in two ways as depicted on the B1 and B2 balancing loops (Figure 2) The EO of young generation members determines the development of strategic initiatives that become innovative strategies and contributes to the firms' competitive performance. The competitive success allows young family members to be part of the top management team sharing certain relevant strategic decision and finally to become part of the top management team at the same level of the senior family members. In this way they enter in the "comfort zone" of the *Familiness* and start to defend the actual firm's positioning, and, finally, reduce their level of EO and their contribution to the strategy renewal process (Figure 2, feedback loop B1).

The *Familiness* acts also as a moderator in resource allocation process. High level of *Familiness* discourages resource allocation to innovative strategies also if these strategies could contribute to improve firm's competitive performance (Figure 2, feedback loop B2).

In the B1 and B2 balancing loops (Figure 2) perception delays play a fundamental role. Senior family members tend to recognize with a significant delay the loss of competitiveness of the firm: the higher is the *Familiness* the higher will be the perception of being in a safe position and they will be more reluctant to realize that the company is in a danger zone, for this reason a lack of competitive performance will not stimulate a reaction reducing the role of *Familiness* in favour of young generation contribution. Only when the situation will be seriously compromised senior members could allow the young generation members to take the helm of the firm starting strategy renewal process, but could be too late.

Figure 2. The role of Familiness as entrepreneurial orientation and resource allocation moderator



In our model we introduced a third loop that is characterised by a positive behaviour, it links Young Generation Entrepreneurial Orientation and *Familiness*. If the *Familiness* prevents the

EO of young generation members, certain level of EO of young generation members can reduce the *Familiness* (Figure 3). The behaviour of the two variable tend to diverge according to an exponential function (positive or negative) however is difficult to say what variable can prevail (Figure 4). From a logical point of view a significant change in the status of one of the two stock can ignite the dynamic process; for example: the departure (in case of death of voluntary exit) of a senior family member that brings with him know-how, relations, economic resources, can determine a significant change in the state of the stock. On the other side the introduction of a new young family member with a certain degree of education and managerial experience can stimulate a substantial change in EO thus contributing to reduce the *Familiness*.

Figure 3.   Relations between Young Generation Entrepreneurial Orientation and Familines

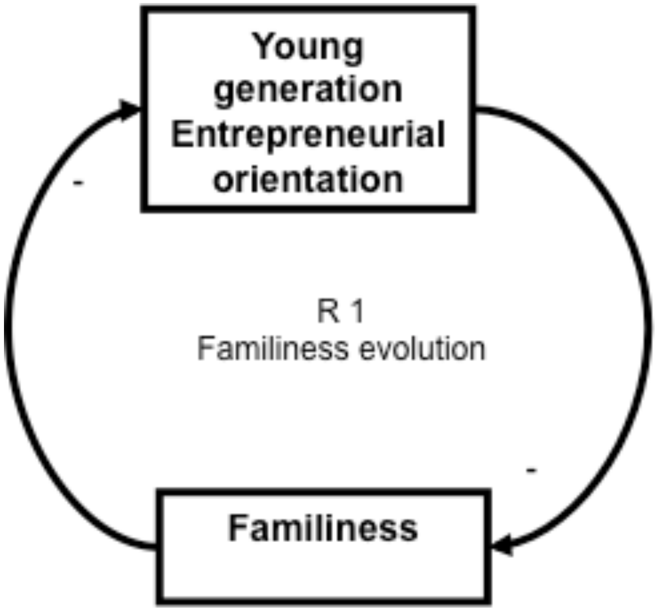
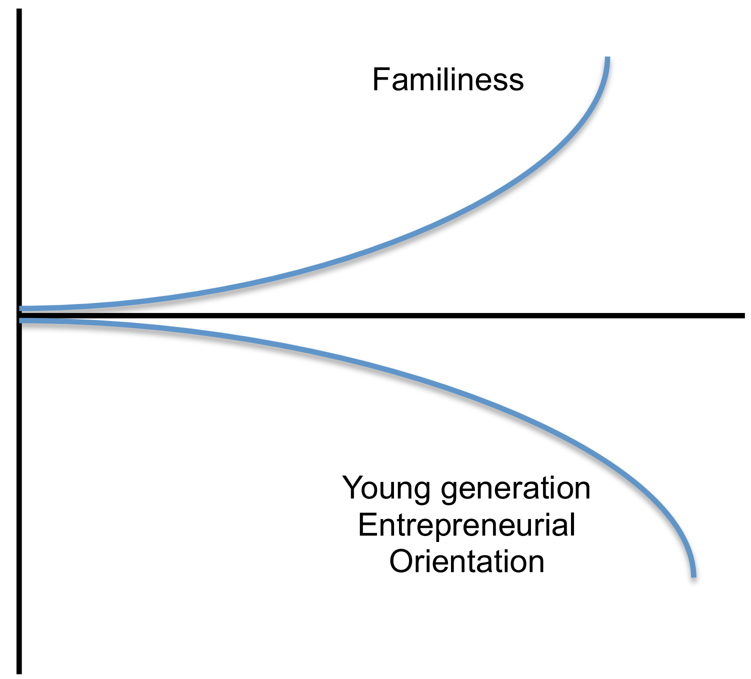


Figure 4. Expected behaviour of stock variables: Young Generation Entrepreneurial Orientation and Familiness



Conclusions

The present work represents a first attempt to investigate the dynamic tension between different family generations within the strategy renewal process. The description of *Familiness* as a stock variable allows us to represent the inertia that delay the strategy renewal process in family firms characterised by a long and articulates history. On the other side the EO captures the real essence of young generation family members contribution to established family firms: the proactiveness and innovativeness that allow to develop innovative strategies contributing to the renewal of firms' positioning.

Our future research agenda includes the full model implementation, that will be done working primary of an in-depth analysis of *Familiness*, eventually sizing the concepts in different variables that could be easily modelled.

Furthermore specific empirical investigation, eventually through a multiple case study, will be conducted to understand how *Familiness* evolves and what are the conditions that allow Young Generation Entrepreneurial Orientation to overcome it, igniting the strategy renewal process before the firm looses irreparably competitiveness.

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