Please, cite this post-print as
Bianchi, C., & Vignieri, V. 2020. Dealing with "abnormal" business growth by leveraging local area common goods: an outside-in stakeholder collaboration perspective. ***International Journal of Productivity and Performance Management***, 0(0): 1–22. https://doi.org/10.1108/IJPPM-07-2019-0318

Dealing with abnormal business growth by leveraging local area common goods: an *outside-in* stakeholder collaboration perspective.

Carmine Bianchi
Professor in Business and Public Management
Department of Political Sciences, University of Palermo, Italy

Vincenzo Vignieri, *Ph.D*
Research Assistant in Business and Public Management
Department of Political Sciences, University of Palermo, Italy
IBAM – National (Italian) Research Council, Catania, Italy

Abstract

This paper questions the capability of the 'Silicon Valley" model as an only working approach to explain sustainable business development. Among the "abnormally-grown" small and micro businesses, the paper identifies "dwarf" and "small giant" firms as typical examples of context-based organizations. In these business environments, an *outside-in* perspective may support sustainable development since local area common goods can be leveraged to pursue collaborative strategies to generate value in the local area.

To enable such firms to build up a capability to survive and grow in their contexts, education may play a crucial role. To this end, results from a fieldwork focused on the design and use of an educational package are illustrated.

The analysis shows that a change in decision-makers mental models is a prerequisite to introduce the use of 'lean' Dynamic Performance Management systems as a method to implement an "outside-in" perspective to pursue sustainable development in such organizations.

1. Introduction

Since the late 90's, the Silicon Valley model (Teece, 1996: 212) has described how high-tech/high-growth businesses have managed long-term competitiveness in a rapidly changing world (Steiber & Alänge, 2016), based on their ability to build a strong "changing culture" (Teece, 1996: 212). Indeed, high-tech/high-growth businesses show an entrepreneurial dynamism, flowing from the development and application of new technologies, leading to the design of new organizational forms. These features have been affecting the profile of business education (Welter, 2011) and research (Saxenian, 2014; Steiber & Alänge, 2016).

Among these technology-enabled ventures, tech platforms – such as Facebook, Google, Apple, Amazon, Airbnb, and Uber – have captured research attention (Aznar, Sayeras, Segarra, & Claveria, 2018; Choudary, 2016; Choudary, Parker, & Van Alystne, 2015; Evans David & Schmalensee, 2010; Garcia-Swartz & Garcia-Vicente, 2015; Parker, Van Alstyne, & Choudary, 2017) and large media coverage. This hype determined that these "unicorns" have been assumed as the apex of entrepreneurship.

Around the world, the mantra for many entrepreneurs has been to design their business models to fit with the "Silicon Valley" stereotype. Also, the literature has been inclined to conceive the concept of "entrepreneurship" as an only attribute of growing companies, rather than also of small/micro firms and their own owners (Carland, Hoy, Boulton, & Jo Ann, 1984; Stanworth & Curran, 1976).

There are a number of limitations in this perspective.

First, the entrepreneurial function should not only be associated with the leading role played by the "gurus" of large companies (Welter, Baker, Audretsch, & Gartner, 2016), like in the "Silicon Valley" model.

Second, the different profile of the context where a business is located is relevant to the paradigm according to which business survival and development are conceived. "Silicon Valley" firms are located in contexts where they can either nurture available supportive relationships with local stakeholders or can autonomously operate their own boundary spanning to set their "living space" (e.g. through takeovers or partner selection along the value chain). However, not all firms can be profiled as "gazelles" (Birch, 1979), since other socio-economic and institutional contexts – different from those which are implicit in the "Silicon Valley" model – may not allow a business to deliberately set its own "living space". They may, rather, require that collaborative strategies be developed to overcome the lack of shared strategic resources (e.g., human capital, number of firms in the community, networks), so to generate as an outcome a change in the "common goods" (e.g., image, social capital, trust, quality of life).

Such outcome is crucial for the survival and development of each business located in contexts of this type (Begg, 1999; Porter, 2011). As remarked by Welter et al. (2016), the "(c)ontext can be an asset and a liability for the nature and extent of entrepreneurship, but entrepreneurship can also impact contexts" (Welter, 2011: 165).

The context to which a firm belongs is a local area where different institutions, groups and individuals interact as a system, to affect public value generation and quality of life. Such interaction is carried out in a framework of roles, regulations, rules of conduct, communication and collaboration mechanisms, rewards and accountability systems, territorial attributes (e.g., natural resources and local production), and cultural norms in a community. Though such factors are usually perceived as external (i.e. outside the control of a business), pursuing collaboration with other private and public organizations in the area may contribute to redesign them, so to sustain the endurance and balanced development of each institution.

How does context impact entrepreneurship? How does it affect outcomes at the level entrepreneur (e.g., income, satisfaction, wellbeing) and organization (financial and social performance)? How such organizational outcomes in turn affect context (e.g., image, quality of services, tourism)?

This paper aims to illustrate how for a business located in a local area that does not portray the characteristics of the "Silicon Valley" stereotype, developing a strategy that pretends to autonomously set its boundary spanning may lead to unsustainable growth. Leveraging common goods through collaborative strategies aimed to generate value in the local area can sustain business competitive strategies, so to make them consistent with the context (Samuelson, 1954).

This *outside-in* perspective supports contextualized entrepreneurship since local area common goods are seen as instrumental in building a context-based competitive advantage that in turn improves outcomes for entrepreneurs, organizations, and the entire local area.

Such view challenges not only the "Silicon Valley" model, but also the dichotomy between internal and external growth (Lechner & Dowling, 2003), e.g. through strategic networks (Jarillo, 1988). or external acquisitions leading to vertical integration.

An "abnormal growth" model can be outlined to discuss alternative growth paths, particularly for small and micro businesses. While context does not necessarily affect business growth in the "Silicon Valley" model, it may profoundly affect the aptitude of a business to bud and grow in its *milieu* in the "Abnormal growth" model. To claim the need for an "outside-in" balanced growth perspective, particularly for those small and micro-sized organizations, this concept will be discussed in the next two sections.

Section four will suggest Dynamic Performance Management (DPM) as a method to implement an outcome-based view of sustainable development of small and micro-sized organizations in their own context. A case study will be illustrated to show how collaboration between the public and the business sector may improve local area's outcomes and develop common goods in the context. The last section will use the case to illustrate how building shared strategic resources in a context through collaboration may provide a sound basis to sustain organizational development. Concluding remarks will underpin the need for an *outside-in* perspective in approaching context-based entrepreneurship.

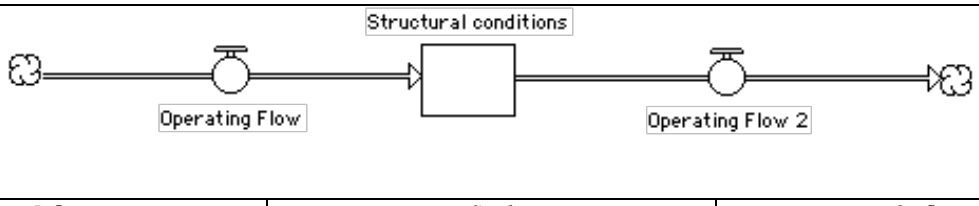
2. Context-based collaborative strategies as a lever of survival and development of "abnormally grown" businesses

Size is a controversial concept in entrepreneurial studies. A dimensional (quantitative) and developmental (qualitative) perspective can be identified as two sides of a same coin. The first perspective – which is mainly considered by the "Silicon Valley" model – implies a quantitative focus on the aptitude of performance to increase the value of individual variables or sectoral components of the business system in a given time span. Examples of such measures are: profits, cash flows, sales, customers, employees, and investments. The second dimension – which is primarily taken into account by the "Abnormal growth" model – implies a qualitative focus on the aptitude of performance to enable a balanced development of the endowment and mix of strategic resources. For example, the change in company reputation and in the level of environmental pollution generated by production processes may denote a reduced aptitude of a firm to sustain its quantitative results in the future. While quantitative growth may not necessarily lead to business development, qualitative growth ensures such development, which may generate a dimensional growth in the future.

As figure 1 shows, the two dimensions of business growth are complementary each other, since operating flows represent the changes occurred in strategic resources in a given time period. Such resources are gauged through stock variables, which measure their size at a given time. Their

endowment and mix are able to affect future growth, so to feedback on further changes in strategic resources. So, organizational performance is gauged in terms of effects of management decisions on the flows that change business structural conditions (resources) in a given time (Forrester, 1992; Morecroft, 2015).

Figure 1 - The operating and structural dimensions of quantitative business growth



Inflow	*Stock*	*Outflow*
Decisions	**Resource**	**Decisions**
Results	Potential for future results	Results

The "Silicon Valley" model tends to consider as a normal growth trajectory an s-shaped curve. It begins from a start-up phase and evolves into a development. Then it moves through a sustained growth phase towards a maturity stage, often implying that the firm becomes a public company. This "normal" pattern follows the same trajectory of the five stages business growth model described by Lewis and Churchill (1983), though the transition from one stage to the next often implies changes that may show crisis symptoms (Scott & Bruce, 1987). The "Abnormal growth" model describes a pattern of development that does not necessarily imply a change in business size over time (Holmes & Zimmer, 1994). Examples have been identified by (Bianchi & Winch, 2006) and Bianchi and Winch (2009); (Bianchi, Winch, & Cosenz, 2014), in relation to "dwarf", "overgrown", and "small giant" firms. Particularly in relation to the first two typologies, dysfunctional developmental patterns are due to a lack of capability of small and micro business performance management systems to depict the dynamic structure and behavior relationships that connect the strategic resource system to short and long-term results. Due to this weakness, a partial, static and unbalanced view of strategic resources has proven to be a major cause of failure for such businesses. To overcome this weakness, the use of 'lean' dynamic performance management systems has been suggested Bianchi, Winch, and Cosenz (2017).

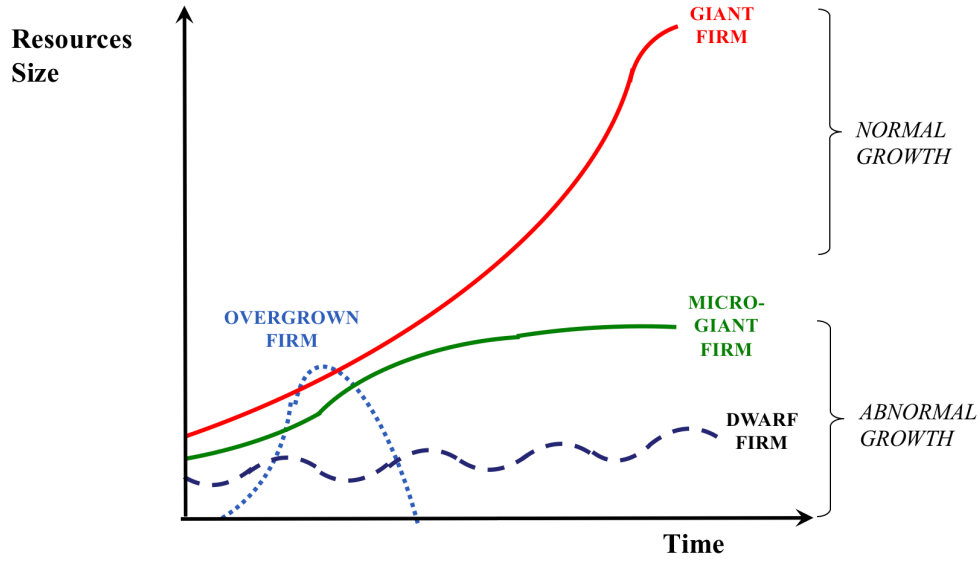


Figure 2 - Normal and abnormal growth trajectories

As figure 2 shows, when stunted growth occurs, a firm's performance stabilizes around a given value, without the intention of business-owners to pursue further growth. On the other hand, inflated growth implies that business-owners erratically pursue a too large growth rate in a very short time, which is unsustainable for their own micro-company: this causes sudden failure.

Small-giant firms, in spite of their own bounded scale, are able to compete against multinational companies, although on a local basis. This allows them to follow an "s-shaped" curve, similarly to what one can find in the "Silicon Valley" model. However, the logics behind such path are usually remarkably different from high-growth firms. In fact, "small-giant" business-owners do not "intend for their businesses to grow beyond what they consider to be a controllable size" (Vesper, 1980) which may also imply their reluctance to lose business ownership. Also, such firms are – by their own nature – structurally embedded in their own context.

Common patterns, related to a context-based view of sustainable business development, can be found for the survival of both "stunted growth" and "small giant firms".

"Stunted growth" firms implicitly pursue their own survival by looking inside their institutional boundaries and by focusing on a limited set of stakeholders in their competitive system (e.g. customers and suppliers). Although this strategy may ensure a long endurance of such organizations, ignoring the context may isolate them, so that their myopic behavior may cause an inertial erosion of their strategic assets, culminating with apparently sudden failure.

"Small-giant" firms strongly rely on their context (e.g. in terms of relationships with other stakeholders in the competitive and social system) to maintain their position, and possibly to pursue further development.

Therefore, for the survival of both "stunted" and "small giant" firms, it is vital they may contribute through the collaboration with other (public and private-sector) stakeholders to create the conditions that may ensure a context that sustains their stability and future development.

Through collaborative governance (Bovaird & Löffler, 2009; Osborne, 2010), a region may enhance a set of shared strategic resources (i.e., common goods like a town image, social capital, and trust) which may, in the long run, feed-back on both the attractiveness of the area and the performance of businesses in the context. Although common goods are not owned by any of the stakeholders – and therefore are not under their direct control – they are important levers to build and sustain the survival of "abnormal growth" companies.

For instance, the tourism industry – particularly in rural areas – is strictly dependent on the way businesses, public organizations and stakeholders together plan and implement local development (Bianchi & Tomaselli, 2015; Savage, Nix, Whitehead, & Blair, 1991; Sheehan, Ritchie, & Hudson, 2007). In this setting, local area players should collaborate in a way that specific services provided to tourists (e.g. logistics, accommodation, safety) may turn into key success factors for the entire destination, as a source of competitive advantage for individual local firms.

Traditional performance management systems – particularly in small and micro "abnormal growth" firms – are not able to support business owners and other stakeholders to couple business with context performance. This is a potential drawback for the survival of such firms. The need of 'lean' and "intelligent" performance management systems helping entrepreneurs to assess their organization performance under a multi-dimensional profile is advocated.

3. Outlining a balanced view of context-based organization performance: the need for an "outside-in" view of stakeholder collaboration.

As figure 3 shows, performance can be assessed under an internal, external, and time perspective (Bianchi, 2016). Under the internal perspective, sustainable business performance should portray a balanced profile showing consistency between the different subsystems, sectors, and departmental/functional areas of an organization. Under the external profile, social and competitive dimensions of performance should be designed consistently to ensure that financial performance is achieved (Coda, 2010). Under a time perspective, business performance sustainability should be gauged and assessed in a way that trade-offs in the short and long term can be considered. Such a triadic model provides a basis to perceive the mutual dependencies between a business and its context.

To this end, a fourth dimension of 'lean' performance management systems for "abnormal growth" firms could be added, as an extension of the internal dimension, previously commented. This can be defined as an "inter-organizational" (or multi-agency) perspective. The focus of this view is on community performance, i.e. the aptitude of stakeholders in a local area to collaborate for developing common goods that may generate public value, which may provide better conditions for local organizations to pursue sustainable development. This value may affect social, competitive and financial performance for both a local area and its individual organizations. It implies that not only short-term effects of policies (output measures) but also long-term results (outcomes) are gauged. Such outcomes both relate to common goods as generated by collaborative strategies and to intermediate outcomes, as those generated by each organization in the context, possibly with the collaboration of other stakeholders. For instance, the change in the image of a place (final community outcome) can be affected by each organization through policies aimed at improving the customer base, customer satisfaction, and the quality of local environment.

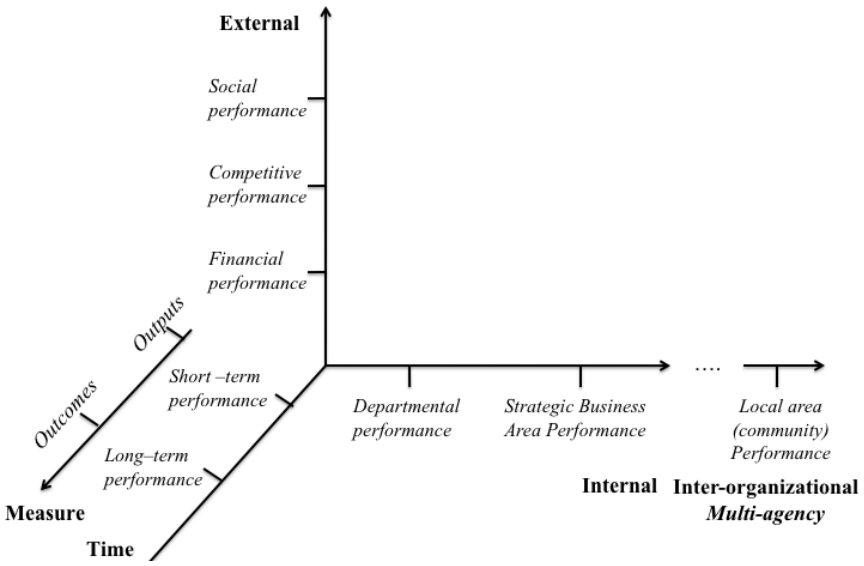


Figure 3 - A balanced view of performance in context-based organizations.

By integrating the multiple dimensions of sustainable organizational development, local businesses should embrace together with other stakeholders an *outside-in* perspective. This implies that different stakeholders should collaborate to outline and implement together policies that might primarily generate public outcomes at community, rather than agency, level. Such outcomes would change the stock of shared strategic resources (e.g. air pollution, civic mindedness, participation in civic life,

respect of the environment, human capital, social capital, crime rate, and social conflicts) in an area. When the contexts where single organizations operate are characterized by structural deficiencies, improving such resources is not only a means to pursue societal sustainable development, but is also a pre-condition for pursuing resilience and sustainability at organizational level. In these environments, performance at community and organizational level are strongly linked with each other. Through this perspective, planning and policy design are first about a local area (i.e. the context), rather than individual organizations.

To implement the described balanced view of performance of context-based organizations through an "outside-in" perspective, 'lean' dynamic performance management systems can be used (Bianchi et al., 2017).

4. Dynamic Performance Management as a method to implement an "outside-in" perspective to pursue sustainable context-based organization development.

Dynamic Performance Management (DPM) challenges traditional, static and sectoral performance analysis by adopting a three-layer framework (Bianchi, 2016). Performance management systems should not focus only on the end-results, such as outcomes and outputs generated by implemented policies. They should also identify performance drivers, i.e. the critical success factors for achieving these end-results. Performance drivers provide decision makers with measures of possible weak signals of future change in the end-results: this allows them to perceive the effects of discontinuity on performance, and to counteract them. Therefore, the dynamics of such measures should be continuously monitored and possibly improved, to influence the achievement of desired outputs and outcomes in the long run.

To affect performance drivers, decision makers should identify the strategic resources to build up and deploy through their policies. Such resources are stocks of tangible or intangible assets available to pursue the performance targets. Their endowment is affected over time by inflows and outflows, which can be – either directly or indirectly – influenced by decision makers.

The end-results are flow variables, underlying outputs and outcomes, where the former measures affect the latter. Outcomes gauge the aptitude of output measures to change the endowment of those strategic resources that cannot be purchased in the market. For instance, more services and infrastructures (outputs) may affect a change in regional image, quality of life and trust in government (outcomes).

Performance drivers are gauged in relative terms: their numerator is an expression of the condition (depending upon the level of one or more strategic resources) affecting an end-result; its denominator

portrays a reference value (or benchmark) for such condition. For instance, hotel staff skill level (in respect to a benchmark) could be a driver of the change in service quality; furthermore, the scope, reliability of transportation infrastructure and services in a region (compared to a benchmark) could be a driver of the change in the perceived quality of a destination by tourists.

Using DPM charts (fig. 4) may allow decision makers to learn – with the support of a facilitator – on how resources, drivers, and end-results are reciprocally linked in affecting their own organizational performance.

To foster strategic learning in small and micro businesses, the adoption of 'lean' DPM systems can be useful (Bianchi et al., 2017). A 'lean' DPM system is able to combine the advantage of a structured with a flexible and selective approach in modeling, measuring, simulating, and managing the causal chains affecting sustainable business growth. The 'lean' attribute is used here in order to characterize a different perspective in designing and implementing performance management systems in small and micro firms, compared to larger organizations. In fact, such systems may fit with the characteristics of small and micro firms. They are able to exploit the tacit knowledge of the entrepreneur and key-stakeholders, and to build on their own competencies and experience, by incorporating such individual attributes into organizational routines. Also, 'lean' DPM systems are able to frame how collaboration may affect the shared strategic resources profiling the structure of the context. As a result, the use of 'lean' DPM systems may contribute to improve entrepreneurial capabilities and decision-making.

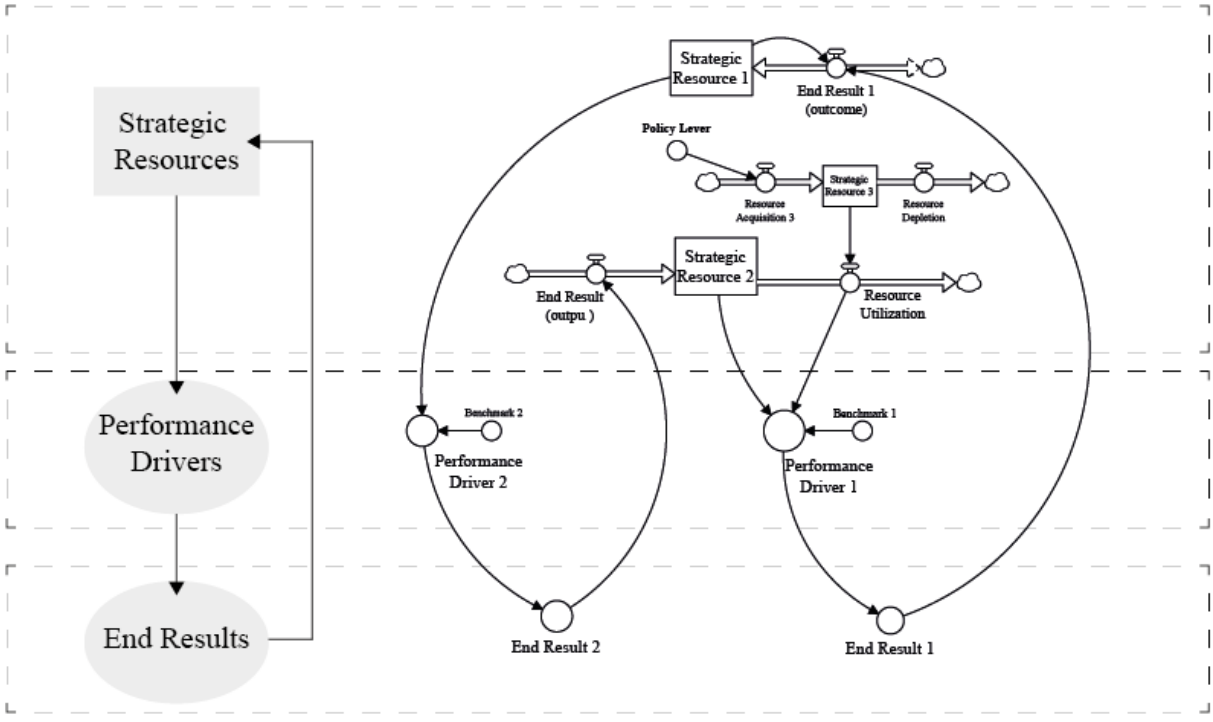


Figure 4 - A generic DPM chart

Implementing the described approach to pursue sustainable "context-based" organizational development is not an easy task, because of the specific dynamic complexity characterizing "abnormally grown" businesses. In particular, policy maker's mental models are often major barriers to such implementation. In fact, the "lenses" entrepreneurs and key-stakeholders in their context may use to frame sustainable growth are often different and misaligned with each other. For instance, an individualistic and opportunistic behavior may arise from mental models prioritizing personal interest, dimensional business growth, and a perception of the context as an independent variable or as a mere potential source of benefits provided by the public sector. Mental models prioritizing short-term goals (e.g. maximizing sales turnover and cash flows) at the expense of community outcomes in the long-run (e.g. polluting the environment) are also associated with such behavior.

To foster a change in mental models, the use of DPM-based interactive learning environments in the education of small and micro business-owners and local policy makers can play a crucial role. This may lead businesses and their context stakeholders to adopt collaborative strategies that generate common goods to sustain organizational development.

5. A DPM-based interactive learning environment for small and micro business-owners and local policy makers in tourism planning and development in the area of Castelbuono (Italy).

5.1. The context

Interactive learning environments (ILEs) are simulation models which act as a tangible aid to imagination and learning, and to help people make better sense of a partly understood world (Morecroft, 2015: 374). Through the use of a "transitional object", providing a virtual world to play with, a learning facilitator may support a group of policy makers to elicit and compare their mental models with the goal to: 1) improve the quality of their understanding of a dynamic and complex world, 2) gain a common shared view of why, how and when performance is affected, and 3) improve the quality of decisions. The combination of transitional objects, learners, and learning process is what Papert (1980) calls a "microworld". The use of such simulators, supported by learning facilitators, provides ILEs where they can test their hypotheses and evaluate possible effects of their strategies without bearing the costs and risks of experimenting with them in the real world (Morecroft, 1988; Sterman, 1994). ILEs are effective if they enable learners in practicing "reflective thought", i.e. an ability to exercise a reflective conversation with the situation. Through the use of ILEs each individual carries around an image of the context taken from the real world and filtered through his

or her own mental models. Such images of the real world may vary according to the experience, values, role, ambitions, and objectives of each person.

In this section, results from a fieldwork focused on the design and use of an educational package – consisting of a case-study, a DPM-based simulator, teaching notes, and debriefing guidelines – will be described.

An educational package has been tailored to the small town of Castelbuono, a quite-famous destination in Sicily, Italy. Castelbuono has 10,000 inhabitants and is located in the province of Palermo, Sicily. It is particularly famous for the castle from which its name derives and around which the city grew from the beginning of the 14th century. Since the early 1990s, tourism has been the utmost economic sector of the town, and the local community has been improving consequential cultural events and attractions, reinforcing growth. The typical food production has been increasing, and the number of restaurants, as well as hospitality and tourism facilities, have been rising during the last thirty years. The accommodation capacity is solely made up of bed-and-breakfasts, agritourism, and home holidays. Such a destination is a classical model of a small area with a strong tourism potential due to its natural resources, culture, traditions, food, and local products. Local area decision-makers are aware of the potential of the context, and they strive for improvement. The municipality has run several projects aiming to market the destination better. Many cultural events have been carried out, and the civic museum has planned exhibitions, while restaurants have improved the quality of dining. In spite of the positive intentions to promote the context, business, non-profit and public policy-makers seem to adopt a "silo thinking", which disregards an inter-organizational perspective, as described in the previous sections of this paper.

Figure 5 displays historical data of tourism arrivals, average holiday length, and the tickets sold by the local museum from 2007 to 2014.

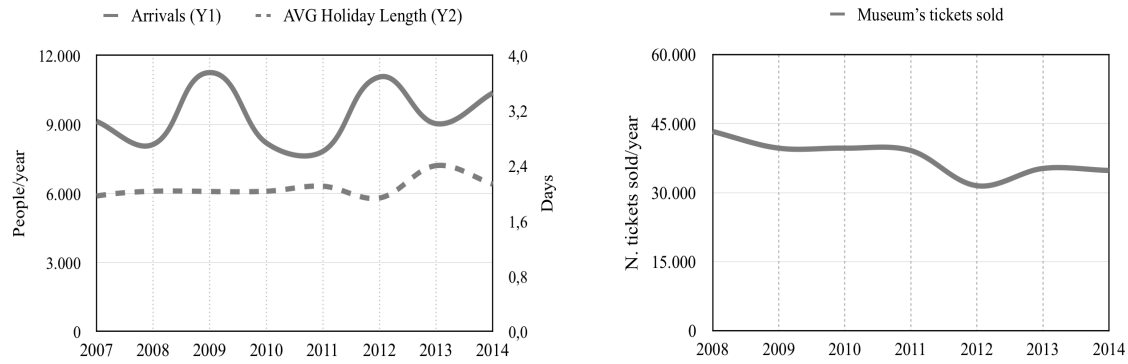


Figure 5 - Historical data (Source: Municipality of Castelbuono)

By looking at the dynamics of the graphs in fig. 5, it emerges that there is a room for performance improvement. Arrival oscillations may have been affected by lack of coordination among local players. To attract tourism, public organizations and private entrepreneurs might align their objectives and refrain from adopting drastic and sudden changes in their strategies to attract tourists. Each local key-actor has been used to individually increase efforts to counteract perceived drops in tourism performance, and to reduce such efforts once the benefits of previous policies had been generated. Lack of policy coordination and consistency in sustaining tourism development may have taken an important role in generating the sustained oscillations illustrated in fig. 5. Moreover, time delays between decisions and results may have amplified oscillations.

In the described setting, the educational package aims to challenge the consolidated mental models, so to foster policy coordination and collaboration, and to generate public value as a basis to sustain the growth of local context-based micro businesses.

5.2. The structure of the Interactive Learning Environment

The educational package has been developed with the purpose of addressing a specific governance task: decision-makers must increase tourism in the small town through coordinated and sustainable policies that may sustain the development of organizations. At the same time, they have to manage trade-offs among opportunistic and collaborative behavior.

The design of the DPM-based ILE includes main local actors that have a stake in tourism governance: the Mayor of the town, the director of the civic museum, and a restaurant owner (as a meaningful sample of the entire hospitality sector).

The ILE consists of three sectors and decision-makers: “Municipality”, “Museum”, and “Restaurant”. Community outcomes are generated by the interplay between each decision-maker policies. Through the ILE interface, decision-makers set their policies for the next three years. Simulation is extended over a twelve years time horizon. Table 1 shows the policy levers available to each decision-maker. Before launching a simulation run for the next three years, each policy maker is also asked to make personal expectations on system outcomes explicit. This is in order to compare such expected outcomes with actual simulation results from adopted policies. The role of the learning facilitator is essential to challenge decision-maker mental models, based on which implicit (and sometimes simplistic and static) hypotheses about the system feedback structure were adopted.

For instance, postponing the renewal or maintenance of equipment by restaurant owners may perhaps increase cash flows or profits in the short run, but may also generate on a longer time horizon unexpected reductions in service quality, which may also contribute to deteriorate the destination image. This can, in turn, reduce the inflow of new potential tourists, and would therefore make it more difficult for restaurants to maintain their own customer base and sales revenues.

Another example of how mental models can be challenged through this ILE relates to garbage collection and sanitation policies at municipal level. An emerging increase in tourism presences may require that the municipal administration increase garbage collection capacity. This would imply a rise in taxation (with a consequential drop in the level of consensus from restaurants and citizens); otherwise, quality of sanitation services would drop, with a consequential decline in the local area attractiveness over a longer time horizon, leading to a loss in tourism presences. Over an even longer time perspective, this may even lead to a reduction in the stock of businesses and population in the area.

As Figure 6 shows, the ILE combines the system structure and behavior through both the perspective of the context (external or inter-organizational view) and each institution (internal view). This framework supports an “outside-in” view of stakeholder collaboration.

Table 1 - Decision-makers and policy levers

Player	**Policy Lever (unit of measure)**	**Key**
Municipality	Events (n. of events)	Number of cultural/touristic events hosted on average by the municipality
	AVG Event Contribution (euro/event *per* year)	The average supply of funds per event per year
	Cleaning, Urban space planning and garbage collection (n. of people)	The level of services provided to keep the town clean, safe, and well organized
	Resources to museum (euro/year)	The supply of funds to local museums

	EU-Based projects (n. of projects)	The number of projects through which apply for EU call for tenders
	Surplus allocation (%)	Fraction of cumulative surplus (if any) to current expenditure
Museum	Exhibition (n. of exhibitions)	The number of exhibitions organized on average by the museum
	Per-Exhibition Contribution (euro/exhibition *per* year)	The average resources spent per exhibition per year
	Concert (n. of concerts)	The number of concerts organized on average by the museum
	Per-concerts Contribution (euro/concerts *per* year)	The average resources spent per concert per year
	Networking expenses (euro/year)	Resources invested in brochures, flyers, and projects with local partners
	Surplus allocation (%)	Fraction of cumulative surplus (if any) to current expenditure
	Project with school (n. of Projects)	The number of projects run by the museum
Restaurants	Unit Price (euro/customer)	The average price paid per customer
	Mark-up (dimensionless)	The ratio between the price of and its cost
	Working days per year (days/year)	The average number of working days in a year
	Networking expenses (euro/year)	Resources invested in brochures, flyers, and projects with local partners
	Personal Income (euro/year)	Amount of resources taken per year (from a bank account) as personal income by the owner
	Maintenance reduction fraction (%)	The percentage of obsolescence tolerated by the owner
	Fraction of bank account to invest (%)	The fraction of new investment financed through restaurant funds (the rest fractioned through the back loan).
	New investment switch	Decision to invest in expanding capacity

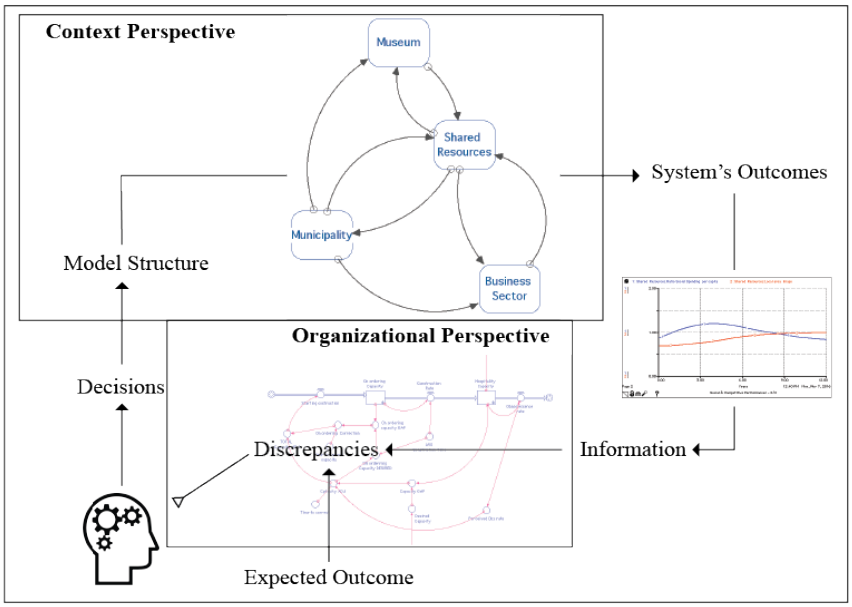


Figure 6 - How the ILE fosters the learning process

5.3. Portraying the model through Dynamic Performance Management.

Figure 7 shows a simplified version of the model through a DPM view [1].

Two final outcomes, which are mutually linked each other, can be identified: (1) the change in tourism presences, and (2) the change in town image.

The change in tourism presences affects the stock of average presences over the last three years. This stock identifies an important strategic resource in the area that constitutes a "common good", i.e. a factor affecting the survival and development of organizations in a community.

The change in town image affects the endowment of another "common good" in the area.

A third (intermediate) outcome is the change in service quality. It affects the average service quality level in the area (e.g. sanitation and transportation services, services provided by businesses). This is another community strategic resource that, together with the stock of tourism presences and town image, affects destination attractiveness.

Destination attractiveness is a performance driver, which in turn influences both town image and tourism presences. In fact, it generates word-of-mouth effects from tourist direct experiences, leading to further changes in both perceived town image and tourist presences.

The change in town image is affected by two other performance drivers, i.e. those related to cultural attractions and events hosted in the town, and the quality of service provided by restaurants. The second driver is affected by another performance driver, i.e. the "Restaurant equipment average age".

[1] The figure depicts outcomes also in the upper section of the DPM chart, which shows strategic resources. They are modeled (by using a "chessboard" symbol) as co-flows of the corresponding variables in the "end-results" section. Also, to distinguish "common goods" from other strategic resources, they are modeled as grey filled boxes.

This variable measures the obsolescence level of business structures. The more such structures are frequently updated through business investments, the lower their average age will be (other conditions being equal). Funding for such investments, as well as for cultural attractions and events, could be indirectly affected by cash flows generated by the stock of tourist presences.

The change in service quality is also affected by two other performance drivers which exclusively pertain the public sector, i.e.: "public service adequacy" and "public spending per /.000 residents". The first driver provides an estimation of the adequacy of the capacity ("urban sanitation services") allocated by the municipality to keep the town clean despite the garbage, water needs, and traffic that growing tourism presences imply. The second driver helps policy makers to estimate the aptitude of available municipal budget to provide the other services (e.g. crime prevention, assistance to households, parks and roads maintenance) that shape community quality of life.

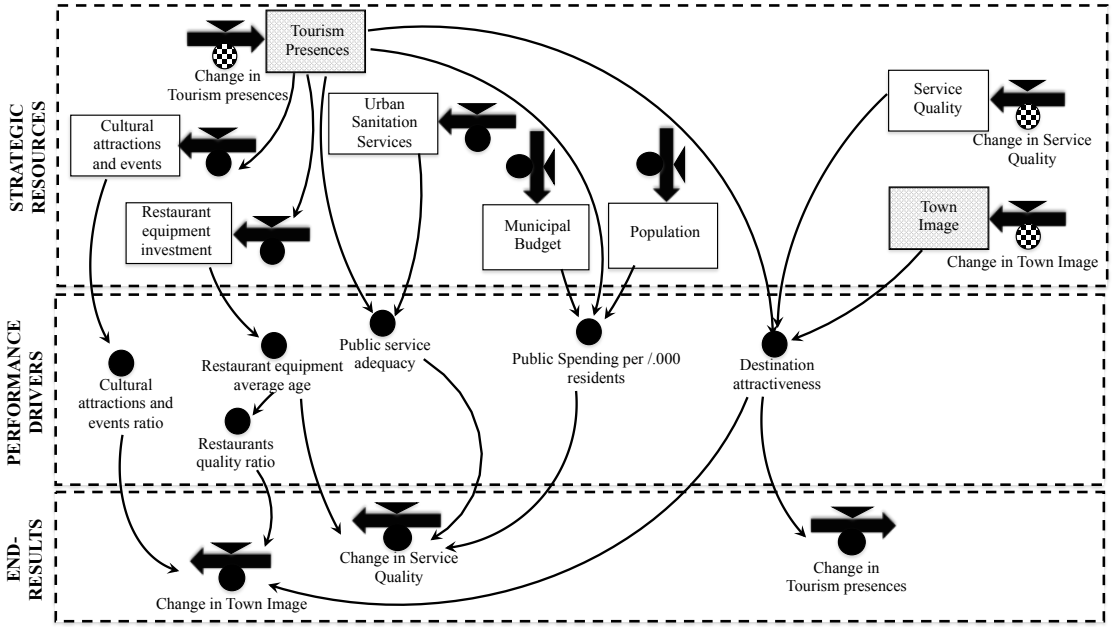


Figure 7 – A DPM chart portraying a simplified version of the model.

5.4. What one can learn from simulation through the ILE.

Simulation can help policy makers to learn how to design and implement policies that may combine the sustainable development at community with organizational level. Collaboration and policy alignment are needed to pursue such outcomes.

Intensive policies adopted by the municipal administration to improve the image of Castelbuono may generate an increase in tourism presences, which would increase value for local area organizations. This would encourage the Municipality and the Museum to produce more events and exhibitions, and the restaurants to provide fine dining. These factors, in turn, improve the image of the town. An

improved image determines – all other conditions being equal – a further increase in tourism presences. The described reinforcing loop is sensitive to service quality, which can be enhanced by improving the quality of accommodation services. The growth of tourist presences encounters a limit in the saturation of the available capacity. On the other side, events production decreases the municipality budget and, thus, the services to the community. A lower level of services to the community causes a reduction in service quality. At the same time, the higher the tourism presence is, the lower the service adequacy will be, whenever the decision-makers do not increase the cleaning and urban planning service level. The quality of accommodation services and the investments in capacity by businesses, are strongly affected by the desired business-owner personal income, which drains business resources. Capacity saturation can be reduced through private sector capacity investments that, in turn, increase the possibility to accommodate more tourists. On the other side, Municipality may increase attractions – by making investments – in order to enhance the attractiveness of the town.

Figure 8 shows results from four simulation runs.

Players have been asked first to run the model under a non-cooperative mode, by acting on their own policy levers reported in table 1. So, in each of the first three simulation runs, only a single player was asked to make decisions individually, while the simulator was 'self-serving' predefined decisions for the other two players. Such preset decisions were based on a hypothesis that the other two players were trying to maximize their individual short-term goals, independently from community sustainability. For instance, the Mayor was only interested in maximize consensus from residents, with no major consideration for investments to promote the destination as an appealing target for tourists. Likewise, the restaurant-owner was interested to maximize short-term cash flows and dividend withdrawals, regardless from investments in quality of provided services.

The first three graphs in fig. 8 illustrate the effects on community outcomes and the related strategic resources generated by Municipality, Museum and Restaurant individual runs. They portray unsustainable behaviors of the three strategic resources associated with the main system outcomes.

The fourth simulation run was made under a cooperative setting. This implied that, based on a facilitated plenary discussion of the possible causes underlying the unsustainable outcomes generated by non-cooperative simulation runs, each player was asked to make decisions together with the other two players, so to align policies.

The fourth graph in fig. 8 illustrates how a simulation run performed under a cooperative mode was able to generate sustainable outcomes.

Using the ILE, through the facilitation of instructors, may contribute to question decision-maker mental models. In particular, it may enable each player to understand the value of the context (and

particularly of "common goods") to sustain the development of individual organizations. The relevance of the context can be embodied in organizational policy-making by first understanding how collaboration is able to foster a stable community development, to provide the basis for organizational sustainable growth.

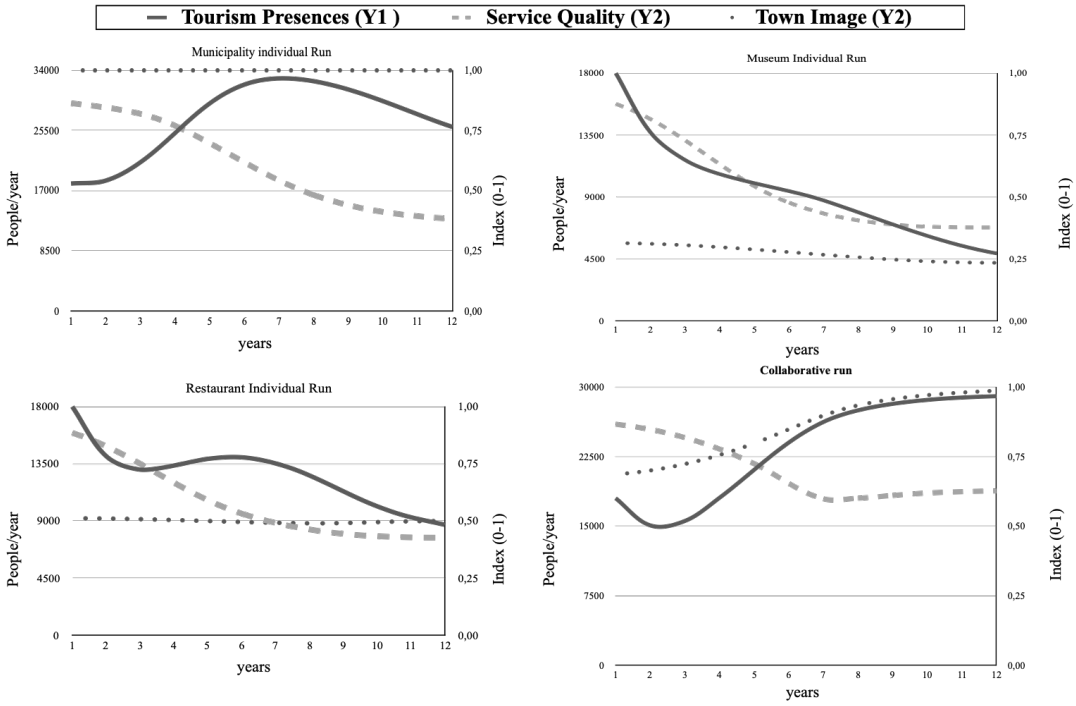


Figure 8 – Outcomes from three non-cooperative and a cooperative simulation runs.

6. Conclusions

Although collaboration may look as commonsense, at a superficial level of analysis, it is not so because of the hidden mental models of local actors. In particular, as remarked in the first part of this paper, "abnormally grown" business owners are often inclined to consider the context as an exogenous variable, and to consider the survival and growth of their companies as mainly dependent from business-only factors. This aptitude is often a main cause of failure for context-based businesses. To enable such firms to build up a capability to survive and grow in their context, education may play a crucial role. A change in decision-makers mental models is a prerequisite to introduce the use of 'lean' DPM systems as a method to implement an *outside-in* perspective to pursue sustainable development in such organizations.

This paper has tried to question the "Silicon Valley" model as an only working approach to explain sustainable business development. Among the "abnormally grown" small and micro businesses,

“dwarf” and “small giant” firms have been identified in this paper as examples of context-based organizations. For such firms, leveraging common goods is fundamental to sustain their continuity and development in context to which they belong.

We are conscious of the limitations of the fieldwork we have developed so far on the topic, which tries to outline a research area which is relatively new in the field of entrepreneurship, also in consideration with its connection with public policy studies. In particular, more fieldwork will be needed to investigate on how ‘lean’ DPM systems may help entrepreneurs to implement an *outside-in* stakeholder collaboration approach to sustain business growth.

Aznar, J. P., Sayeras, J. M., Segarra, G., & Claveria, J. 2018. Airbnb landlords and price strategy: Have they learnt price discrimination from the hotel industry? Evidence from Barcelona. ***International Journal of Tourism Sciences***, 18(1): 16-28.

Begg, I. 1999. Cities and competitiveness. ***Urban studies***, 36(5/6): 795-809.

Bianchi, C. & Winch, G. W. 2006. Unleashing growth potential in 'stunted' SMEs: insights from simulator experiments. ***International Journal of Entrepreneurship and Small Business***, 3(1): 92-105.

Bianchi, C. & Winch, G. 2009. ***Small business "gigantism" and "dwarfism": a contradiction in terms or two sides of the same coin? Towards a theory of "abnormal" growth in SMEs***. Paper presented at the AGSE, Adelaide.

Bianchi, C., Winch, G., & Cosenz, F. 2014. Strategic Asset Building and Competitive Strategies for SMEs which Compete with Industry Giants. In T. Kiril & S. David (Eds.), ***Handbook of Research on Strategic Management in Small and Medium Enterprises***: 77-96. Hershey, PA, USA: IGI Global.

Bianchi, C. & Tomaselli, S. 2015. A dynamic performance management approach to support local strategic planning. ***International Review of Public Administration***, 20(4): 370-385.

Bianchi, C. 2016. ***Dynamic Performance Management***. Cham, Zurich: Springer International Publishing.

Bianchi, C., Winch, G., & Cosenz, F. 2017. Experimenting Lean Dynamic Performance Management Systems Design in SMEs. ***International Journal of Productivity and Performance Management***: 00-00.

Birch, D. 1979. ***The job generation process***. Cambridge, MA: MIT Program on Neighbourhood and Regional Change.

Bovaird, T. & Löffler, E. 2009. ***Public management and governance*** (2nd ed.). London: Routledge.

Carland, J. W., Hoy, F., Boulton, W. R., & Jo Ann, C. C. 1984. Differentiating Entrepreneurs from Small Business Owners: A Conceptualization. ***The Academy of Management Review***, 9(2): 354-359.

Choudary, S. P., Parker, G. G. P., & Van Alystne, M. 2015. ***Platform scale: how an emerging business model helps startups build large empires with minimum investment***: Platform Thinking Labs.

Choudary, S. P.; A platform thinking approach to builiding a business; http://platformed.info/a-platform-thinking-approach-business-engine-scale/; 7 December, 2017.

Coda, V. 2010. ***Entrepreneurial Values and Strategic Management: Essays in Management Theory***. New York: Palgrave Macmillan.

Evans David, S. & Schmalensee, R. 2010. Failure to Launch: Critical Mass in Platform Businesses, ***Review of Network Economics***, vol. 9.

Forrester, J. W. 1992. Policies, decisions and information sources for modeling. ***European Journal of Operational Research***, 59(1): 42-63.

Garcia-Swartz, D. D. & Garcia-Vicente, F. 2015. Network effects on the iPhone platform: An empirical examination. ***Telecommunications Policy***, 39(10): 877-895.

Holmes, S. & Zimmer, I. 1994. The Nature of the Small Firm: Understanding the Motivations of Growth and Non-Growth Oriented Owners. ***Australian Journal of Management***, 19(1): 97-120.

Jarillo, J. C. 1988. On strategic networks. ***Strategic Management Journal***, 9(1): 31-41.

Lechner, C. & Dowling, M. 2003. Firm networks: external relationships as sources for the growth and competitiveness of entrepreneurial firms. ***Entrepreneurship & Regional Development***, 15(1): 1-26.

Lewis, V. L. & Churchill, N. C. 1983. The Five Stages of Small Business Growth. ***Harvard Business Review***, 61(3): 30-50.

Morecroft, J. D. W. 1988. System dynamics and microworlds for policymakers. ***European Journal of Operational Research***, 35(3): 301-320.

Morecroft, J. D. W. 2015. ***Strategic Modelling and Business Dynamics: A feedback systems approach***. Cornwall, UK: Wiley.

Osborne, S. P. 2010. ***The new public governance? Emerging perspectives on the theory and practice of public governance***: Routledge.

Paich, M. & Sterman, J. D. 1993. Boom, bust, and failures to learn in experimental markets. ***Management Science***, 39(12): 1439-1458.

Papert, S. 1980. ***Mindstorms: children, computers, and powerful ideas***: Basic Books, Inc.

Parker, G., Van Alstyne, M., & Choudary, S. P. 2017. ***Platform revolution : how networked markets are transforming the economy and how to make them work for you***.

Porter, M. 2011. The competitive advantage of the inner city. ***The city reader***: 282-295.

Samuelson, P. A. 1954. The pure theory of public expenditure. ***The review of economics and statistics***, 36(4): 387-389.

Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. 1991. Strategies for assessing and managing organizational stakeholders. ***The executive***, 5(2): 61-75.

Saxenian, A. 2014. The Silicon Valley Model: Economic Dynamism, Social Exclusion, ***Reconceptualizing Development in the Global Information Age***. Oxford: Oxford University Press.

Scott, M. & Bruce, R. 1987. Five stages of growth in small business. ***Long Range Planning***, 20(3): 45-52.

Sheehan, L., Ritchie, J. R. B., & Hudson, S. 2007. The Destination Promotion Triad: Understanding Asymmetric Stakeholder Interdependencies Among the City, Hotels, and DMO. ***Journal of Travel Research***, 46(1): 64-74.

Stanworth, M. J. K. & Curran, J. 1976. GROWTH AND THE SMALL FIRM — AN ALTERNATIVE VIEW. ***Journal of Management Studies***, 13(2): 95-110.

Steiber, A. & Alänge, T. 2016. ***The Silicon Valley Model, Management for Professionals,***. Switzerland: Springer International Publishing.

Sterman, J. 1994. Learning in and about complex systems. ***System Dynamics Review***, 10(2-3): 291-330.

Teece, D. J. 1996. Firm organization, industrial structure, and technological innovation. ***Journal of Economic Behavior & Organization***, 31(2): 193-224.

Vesper, K. H. 1980. ***New Venture Strategies***. New York: Pearson.

Welter, F. 2011. Contextualizing Entrepreneurship—Conceptual Challenges and Ways Forward. ***Entrepreneurship Theory and Practice***, 35(1): 165-184.

Welter, F., Baker, T., Audretsch, D., B., & Gartner, W., B. 2016. Everyday Entrepreneurship—A Call for Entrepreneurship Research to Embrace Entrepreneurial Diversity. ***Entrepreneurship Theory and Practice***, 41(3): 311-321.