The Sky is Full of Good Intentions

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ABSTRACT

The aim of this paper is to illustrate how System Dynamics can beneficiate small and medium international nongovernmental organisations (hereafter NGOs). As the majority of small NGOs are based on voluntary work, few adopt strategic and professional management to enhance and guarantee their sustainability. Such context rises several challenges which NGOs must learn to recognise and to face. A System Dynamics model will be presented and used as a decision-making-tool to help these organisations understanding part of the complexity surrounding them as well as some long term consequences of their actions. A case study will be presented.

Introduction

The World Bank defines nongovernmental organisations (hereafter NGOs) as "private organisations, independent from any government or state, that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development". Such definition comprises a large and rich variety of NGOs. Up to date, there is no consensus on how to segment the organisational field of NGOs (Vakil, 1999). Indeed, organisations can be distinguished by size, thematic scope (health, education, sport, etc), geographic scope, level of action (national versus international NGOs), capabilities in pursuing a commercial activity (nonprofit versus profit NGOs), diversity of donors (Moore, 2000), and, finally, level of professionalism, i.e. percentage of paid employees within the organisation (Celeste et al, 1991). When focusing on NGOs involved in cooperation and development issues, it should be noticed that the majority of these organisations tend to be small, do not conduct economical activities capable of generating sufficient revenues to finance their social projects, do not have the financial capacities to hire professional workers or consultants to enhance their performance and therefore entirely rely on voluntary work from its board members and personnel. Under such social context, these organisations face several great challenges.

First, it should be noticed that the majority of NGOs are international organisations which operate in at least two countries. International NGOs tend to be organised in the following way: the headquarter is responsible for fundraising activities and for elaborating appropriate strategies, while the registered office provides the social services to local 'clients'. Such structure forces the organisation to develop adequate coordination and communication systems as well as shared decision making processes across the different offices. Achieving the previous is not a simple or trivial task. It is actually a great challenge to be faced, especially when geographic distances, different cultures, and different objectives (financial versus social) must be taken into account.

Second, the survival of small NGOs is highly dependent on different stakeholders (funders, board of directors, volunteers, donors, people who benefit from the social programs, and general public) who all contribute to the organisation's operations, financial sustainability, and legitimisation (Crittenden, 2000; Moore, 2000). Indeed, small NGOs could not pursue their activities without the involvement and devotion of their directors and volunteers; they could not survive without the financial support provided by its donors; and they would not gain legitimacy without donor and public's support and recognition. Stakeholders do more than sustaining the organisation by different means, they also play an active role in the organisational decision making and therefore influence NGOs' operations (Moore, 2000). Under such context, as each stakeholder defends particular interests, assessing measures of performance and elaborating new operations and strategies becomes a difficult task (Akingbola, 2006).

Third, NGOs evolve in highly competitive environments. In fact, NGOs compete for funds, volunteers, board members, and legitimacy (Greenberg, 1982). Competition may take place at a local, state, or national levels depending on the scared resource the organisation wants to acquire. As an example, competition for volunteers usually takes places at local levels while competition for grants allocated by foundations occur at a national level. The previous suggests that small NGOs "operate in multiple and complex competitive systems" (Stone et al, 1999).

The last difficulty small NGOs face is their inability to implement strategic and managerial approaches capable of dealing with all the challenges mentioned above and guaranteeing the organisation's long term sustainability. Two reasons may explain why they fail in doing so. First, as operations are based on voluntary work, small NGOs often lack the skills, knowledge and time required to deal with the complex system in which they are embedded. Second, it has been noticed that NGO "leaders may regard traditional business values and approaches as conflicting with their social mission and may feel uncomfortable with treating their management decisions as 'business' decisions", i.e. organisational culture could also represent a barrier to the implementation of managerial approaches.

Managing a social business under such level of complexity is not an easy task. When coupled with limited resources and skills, unstable environments, and a strong desire to change society for the better, assuring a small NGO's long term sustainability becomes a real challenge. In the last decade, several academic fields applied their expertises and knowledge to help NGOs, and nonprofits in general, planning and implementing the social change they promote. Social marketing, which is "the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research" (Kotler and Zaltman, 1971) represents a major stream of research in that area. Moreover, facing the evidence that many nonprofits do not use strategic planning (see Stone et al., 1999 for extensive references), the field of strategic management recognised the "need for strategy to reflect the unique operating environment" of the nonprofit sector (Akingbola, 2006; Backman et al, 2000; Stone et al, 1999). Finally, literature in social entrepreneurship emphasised how vision (perceived social needs), resources (people willing to help) and leadership (enterprise and leadership skills as well as development and training) must be combined in an efficient way for an organisation to achieve their social goals (Thompson et al., 2000).

Interestingly, all the previous methodologies do not integrate all the complexity mentioned earlier. They focus on particular aspects of the organisation (marketing, planning, strategy) without understanding the entire system in which the organisation evolves. System Dynamics, a methodology for studying and managing complex feedback systems, has therefore great potentials in the context of small-NGOs. System Dynamics forces policymakers 1) to reveal and share their mental models with other members of the organisation, 2) to understand organisational decision processes, 3) to make explicit the underlying feedback processes regulating a social system, 4) to understand the general behaviour of the system, and 5) to assess potential consequences of different strategies. All the previous help decision makers to understand the complexity surrounding them and to learn how to manage it. Organisational learning can therefore be enhanced by allowing small-NGOs leaders, as well as their teams, to beneficiate from System Dynamics' powerful insights. To our knowledge, Tucker et al. (2005) work represents the only attempt to apply systems thinking and dynamic modelling in the context of nonprofits. The field of nonprofits, and NGOs, therefore opens great opportunities for research and applied work for System Dynamists.

The aim of our paper is to help a small-NGO to take important decisions at a crucial time of its organisation's life, i.e. when it has experienced a rapid growth in term of the number of people beneficiating from its social programs. To do so, decision-makers from a small European NGO will be introduced to System Dynamics and involved in the modelling process of a policy-design model, i.e. a model which "designs new decision-making strategies or organisational structures and evaluates their effects on the behaviour of the system" (Sterman, 1991). More precisely, the model shall explore the 'capability trap' into which small NGO are likely to fall (Repenning and Sterman, 2001). To increase organisational performance, companies have two choices: they can increase the time they spent working (work harder) or their organisational capabilities (work smarter). Organisational capabilities, i.e. abilities to perform actions (Kay, 1993), are built on several resources: tangible (financial, physical), intangible (reputation, technology, culture), and human resources (knowledge and skills, communication and interactive abilities, motivation) (Grant, 1998). Capabilities determine the organisation's efficiency and effectiveness and therefore its performance. While increasing organisational capabilities requires long amount of time (it takes time before new knowledge gained in training programs can be used on a routine basis to improve organisational capabilities), rising working hours positively impacts performance almost immediately. However, the benefits generated by such strategy are short-lived. Indeed, "with less time devoted to improvement, capability gradually erodes, eventually more than offsetting the increased time spent working. Working harder creates a "better-before-worse" situation" (p.73 Repenning and Sterman, 2001). At that point, the organisation felt into a vicious cycle of declining capabilities called the 'capability-trap'. The aim of the paper is to help small NGOs recognising and understanding the challenges created by the capability trap and taking actions against it.

This paper is structured around two axis. First, we review the advantages System Dynamics could bring to the NGO sector. Then, similarly to Tucker et al., we shall present a case study "demonstrating the utility of using systems thinking and dynamic modelling as decision-making tools for analysing the impact of various strategies on the financial well being of" a small-NGO (Tucker et al., 2005).

How Can System Dynamics Beneficiate the NGO Sector?

Small NGOs are confronted with high levels of complexity. These organisations are run by volunteer administrations and therefore suffer from the lack of time, managerial skills and knowledge. Dealing with such constrains, they still need to face great challenges: unclear objectives, diverse stakeholders active in the system, limited financial resources, intense competitions for several limited resources. In such settings, evaluating possible organisational actions and assessing their consequences becomes a difficult, even impossible, task for the human mind. Human cognitive capacity is indeed bounded (Simon, 1972): decision makers tend to rely on heuristics (Tversky and Kahneman, 1974), past experiences and expertises to make decisions. Under time and capacity constraints, they cannot integrate and proceed all the information available to them to take adequate actions. Moreover, policymakers cannot take into account all the interconnected elements involved and affecting their decision-making. It is under these conditions, i.e. complexity characterised by interrelated elements and bound rationality, that System Dynamics deploys its full potential as a tool for making strategic decisions.

Challenging Mental Models

Human cognitive capacity cannot integrate all the complexity present in the real world. Facing such limitation, individuals create their own mental model of the world surrounding them. Mental models are therefore sets of believes about reality and are aimed to help individuals making decisions and taking action. They "are deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting" (Senge, 1990). Doyle and Ford suggest a more narrow definition and define a mental model of a dynamic system as "a relatively enduring and accessible, but limited, internal conceptual representation of an external system whose structure maintains the perceived structure of that system" (Doyle and Ford, 1998). "Because we see what our mental models permit us to see, we do what our mental models permit us to do" (Arango, 1998). As mental models are simplification of the reality, they are also personal, subjective, context-specific, incomplete, fuzzy, implicit, highly adaptable, not communicated to others, not always accurate, and fail to take into account the main feedback processes and delays ruling a system (Sterman, 1994; Ford and Sterman, 1997; Richardson and Pugh, 1981). Very often, individuals are not consciously aware of their mental models or the effects they have on their behaviour and decisions (Senge, 1990).

System Dynamics forces people to elicit how they perceive the environment surrounding them, how they make their decisions (information used, rules, assumptions, decision criteria, objectives), and how they construct their behaviour. In an organisational context, it also implies sharing personal mental models with other actors in the organisation. As people often incorrectly assume that every one shares their understanding of how one thing affects another and how decisions are taken, sharing different mental models of the same system is a great source of insights. Insights emerge as a common understanding of the system is built, as individual mental models

are improved, and as quality of dynamic decisions is raised (by recognising biases and inadequate decision making rules involved in the decision process).

Small NGOs, as all organisations, have many mental models which shape the organisational decision making and outcomes.. These mental models are likely to be built around the people served, around the role of the organisation and its identity, and around the nature of the activities performed by the organisation (Arango, 1998). Revealing and sharing the mental models which implicitly rule the organisation represents a great source of organisational learning. Two aspects of that learning should be emphasised. Firstly, mental models may represent a limit, a constrain for the organisation. Tucker et al. (2005) suggest that NGO "leaders may regard traditional business values and approaches as conflicting with their social mission and may feel uncomfortable with treating their management decisions as 'business' decisions". Revealing and sharing information, knowledge, and visions can therefore help policymakers to identify, understand, and change their own faulty assumptions and biases about the organisation (Tucker et al., 2005). The previous is stimulated through an dialogue and debate with other members of the organisation. Secondly, in order to explore future strategies, it is essential to develop an overall understanding of current organisational decision processes and routines, i.e. to know what the status-quo of the organisation is. However, it is difficult for small NGOs to acquire such global vision and comprehension of their activities as volunteer-administrations do not have the skills, nor the time, to get such understanding. Making explicit mental models is therefore vital for defining the organisation's actual strengths and competencies, for building a shared understanding of reality the organisation is facing, and for improving organisational decision making (Senge, 1990).

Thinking in Dynamically

Complex systems have several properties that make their complete understanding difficult for the human mind. Complex systems are composed of highly interconnected parts. If isolated, each part is well understood. However, when combined with other parts, comprehension of the behaviour of the entire system becomes difficult, even impossible: "it is because we cannot describe the whole without describing each part, and because each part must be described in relation to other parts, that complex systems are difficult to understand" (Bar-Yam, 1997). Complex systems have another characteristic: they are ruled by feedbacks and delays. Feedbacks regulate the system's behaviour. Positive feedbacks reinforce behaviours while negative feedback stabilize behaviour. Identifying feedbacks allows 1) to understand the diverse mechanism regulating a system, 2) to recognize potential undesired, or unexpected, side-effects generated by one's own decisions, and 3) to identify potential leverage variables (the latter shall be investigated ounce the simulation model is completed and validated). Delays are interruptions between actions and its consequences. They regulate the diverse feedback paths active in a system. Delays are especially important because they are a major source of system instability (Sterman, 1991).

Recognising the importance of feedbacks and delay is therefore essential for policy-making. However, making explicit properties of complex systems is not a trivial exercise as human minds are not trained to think in dynamic terms (Sterman, 1991;

Meadows, 1982). To help them in this process, an adequate methodology must be applied. System Dynamics achieves that goal as it establishes the link between the dynamic behaviour of a system and its structure. System Dynamics does more that elucidating policymakers' mental models. It also challenges their mental models by forcing them to search and identify the feedbacks and delays ruling their system. Guided by the modeller through a facilitation process, decision makers represent their social system by using a causal loop diagram which highlights the elements composing the system, as well as the feedback loops and delays regulating it.

Small NGOs must sustain their social activities in the long run while dealing with unclear objectives, diverse stakeholders and offices, limited financial resources, and intense competitions for several scared resources. Confronted with such complexity, NGOs tend to make day-to-day decisions and fail in adopting strategic planning nor management, which would imply establishing a organisation-wide clarity and acceptance of mission, vision, goals, objectives and challenges (see Stone et al., 1999 for extensive references). This situation therefore "increases the likelihood of poor decisions with unintended consequences" being taken (Tucker et al., 2005). For example, few NGOs are aware of the long term consequences of choosing a particular funding-source. Many researches proved how types of donors have a significant impact on the organisation's operations and strategies (Moore, 2000; Akingbola, 2005). Under such conditions, making light on the diverse dynamics ruling a small NGO and identifying feedback processes and delays allows for a better understanding of the complexity ruling the world of a small NGO.

Rising Quality of Decision Making

The debate environment for the sharing of knowledge and information, coupled with facilitating tools such as causal-loop diagrams and feedback analysis, allows to create a simulation model which can be used for policy debate (Morecroft, 1988). The simulation model increases the quality of decision making in several ways. First, formal model allows policymakers to gain a deeper understanding of the feedback loops involved in the system by visualising results over time on a graphical display. Especially, when simulation results differ from the expected outcomes predicted by the managerial team, outcomes also represent a good discussion basis for continuing exploring and understanding the system (or checking for the model's validity and accuracy). Second, simulation outcomes generate further reflection, exchange and learning. Indeed, simulation results do more than forcing policymakers to realise, understand and discuss the short and long term consequences of current decision processes. They also force them to reflex on the assumptions, heuristics, and biases they use in their organisational decision making (Tucker et al., 2005). Third, simulation models can perform 'what-if' analysis, which provides a considerable advantage when compared to purely qualitatively mapping techniques (Morecroft and van der Heijden, 1994). So, simulation models are insightful and powerful managerial tools: not only they create shared understandings of processes and of change (Senge and Sterman, 1992) but also they allow the investigation of different strategies and of their future implications for the organisation. Evolving in virtual laboratories and by 'learning-by-doing', decision makers learn to understand how the system properties influence the outcomes of their decisions (Tucker et al., 2005).

As previously mentioned, NGOs evolve in a complex world. It is therefore difficult for these organisations to understand the system in which they evolve. Defining and evaluating different strategies in such context is equivalent of walking in the dark. System dynamics has the potential to bring light to managers of small NGOs by allowing them to learn how their social system works and how its structure can influence the organisation's outcomes. Simulation models can "strengthen understanding of feedback loops, generate information to challenge mental models, help identifying limiting factors, and heighten awareness of possible unintended consequences of various courses of factors" (Tucker et al., 2005). Moreover, an exploration of the model should reveal, or confirm, leverage variables which have strong impacts on the system's behaviour. Identifying such variables is crucial: decision makers should realise and learn how to influence them in order that the system do not work against them.

To sum up, simulation allows policymakers not only to complete their understanding and learning from their system but also to investigate various policy designs and to realise their consequences. Such achievement represents a great source of organisational learning as it 1) brings light on the dynamics ruling the system, 2) leads to radical changes in the way people understand reality (Sterman, 2000), 3) allows exploring the effects of different strategies and scenarios, and 4) enables policymakers to adapt their decision rules, and even objectives, depending on the system's structure.

System Dynamics Applied to
the Case of a Small NGO

The next section of this paper will present a case study of a small European NGO active in development issues in Africa. After describing the social context of the organisation and identifying the main issues the organisation is facing, a System Dynamics model will be presented. Finally, main insights and challenges shall be discussed.

Social Context

The organisation was founded in 2001 and is run by two offices: a headquarter and an office based in Africa. The African office carries out development projects (schooling, health, culture and sports) that are primarily aimed at very young children. The number of children beneficiating from education, health and recreation programs increased from 500 in 2005 to 2000 in 2007. The African office is supervised by a strategic committee, wholly volunteer, managed on a daily basis by an executive committee, and employs 12 people. On the other hand, the executive committee of the European headquarter is responsible for achieving two main goals: 1) to guarantee the general financing of the organization, and 2) to encourage all forms of cultural exchanges between Africa and Europe. Up to date, the NGO collected revenues from private donors and from a large foundation, which financed the largest part of the organisation's budget. However, the contract linking both organisations will end in a short period of time, which leaves the organisation is great financial peril. The

headquarter must therefore find other sources of funding capable of sustaining the NGO's social mission in the short and long terms. As the NGOs is responsible for an increasing number of children and as no concrete solution has been elaborated yet to solve the financial situation, high levels of uncertainty and stress is experienced by the volunteers active in the headquarter. A year ago, in order to increase organisational efficiency and effectiveness, and therefore to free extra-time to discuss and implement fundraising strategies, the headquarter was restructured. However, implementing the defined changes did not eliminated the problems volunteers were facing: people were still dedicating all their time to perform day-to-day activities. People perceived that their amount of work was increasing and that less time was dedicated to discuss with other departments on important issues. Such situation created a type of 'mushroom management' in which staff were evolving in the dark. As the headquarter was running without precise, and shared long-term vision, it was clear that a System Dynamic model would be beneficial to help members of the headquarter through the importance of strategy and long-term goals.

Causal Loop Diagram

The issue faced by that particular small NGO is relatively common to many businesses as discussed by Repenning and Sterman (2001). The authors note that, over the last decade, as the number of tools and techniques capable of improving performance grew rapidly, little improvements have been done in implementing such techniques in organisations. "The ability to identify and learn about new improvement methods no longer presents a significant barrier to most managers. Instead, successfully implementing these innovations presents the biggest challenges" (p. 65, Repenning and Sterman, 2001). To understand such paradox, light should be brought on the general mechanisms ruling it. To increase organisational performance, companies have two choices: they can increase the time they spent working (work harder) or their organisational capabilities (work smarter). Organisational capabilities, i.e. abilities to perform actions (Kay, 1993), are built on several resources: tangible (financial, physical), intangible (reputation, technology, culture), and human resources (knowledge and skills, communication and interactive abilities, motivation) (Grant, 1998). Capabilities determine the organisation's efficiency and effectiveness and therefore its performance. While increasing organisational capabilities requires long amount of time (it takes time before new knowledge gained in training programs can be used on a routine basis to improve organisational capabilities), rising working hours positively impacts performance almost immediately. However, the 'work harder' strategy can revealed itself as being a 'fixe that fails' in solving the problem (Senge, 1994). Indeed, as employees work harder to increase performance, they reduce the time spent on improving their capabilities. As lower amount of time is spent developing skills and knowledge, capabilities start eroding, which forces employees to work even harder in order to maintain the level of performance achieved. The organisation then falls into a vicious cycle, called the 'capability trap' by the authors, in which working hours continue increasing while capabilities erode. The small NGO studied in this paper has exactly fallen into that trap.

The higher the number of projects, the higher was the pressure to invest in capabilities. Indeed, as the organisation was experiencing an exponential growth in its

number of projects over the last three years, the headquarter realised that volunteers needed further training in project management and in fundraising skills. Such pressure increases the time spent on developing skills, which positively impacts, with a significant delay, organisational capabilities, which enable volunteers to become more efficient at what they do (work smarter). Parallely, as the number of social projects increased, all of which requiring more day-to-day work to be taken care of (especially concerning fundraising activities which guarantee project's realisation and maintenance), the organisation experienced a significant pressure to work on projects, which increased the time spent working which positively impacted, at least in short term, the number of projects was running (work harder). At this point, it should be noticed that no clear objective in terms of performance has been defined by the NGO. The absence of precise objective resulted from the 'mushroom management' expressed earlier and from the difficulties to discuss strategic issues with the African office. Such situation was highly problematic as it left decision makers without precise mission to accomplish. So, as the number of social projects increased, numbers could not be compared to an objective and so each new project was interpreted as a source of pressure to work harder. Finally, as the financial situation of the organisation was problematic, every new project created a pressure to raise funds. Such pressure would increase the time spent on projects to the detriment of improving capabilities.
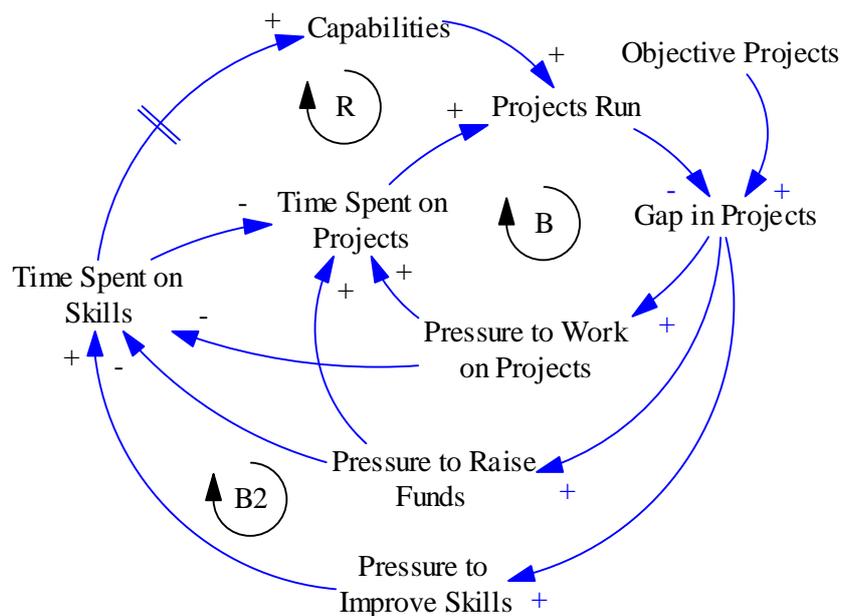
Figure 1 – Causal Loop Diagram, Capability Trap of a small NGO

What happened to this particular organisation is that members failed in implementing the reinforcing loop involving capabilities. Stressed by the financial pressure to sustain the entire NGO, by managing an increasingly large number of social projects, and by not having clear objectives in terms of performance, the headquarter could not wait for the effect of investing into capabilities to take place. Instead, they focused their attention in performing day-to-day work, and therefore got trapped into the capability-trap.

Simulation Results

From the above discussion, a simulation model was built. The model suffers a limitation as it is pretty generic and closely reproduced the results showed by Repenning and Sterman (2001). Indeed, modelling a well-defined problem was an impossible task as members of the headquarter could not focus on a specific problem and had difficulties in elucidating and describing precise decision-making processes taking place within the organisation. However, we believe that the model's results shall generate insights which shall force the executive committee realising the crucial challenges and trade-off it needs considering.

Table 1 exemplifies the situation faced by the NGO studied in this paper. As the number of project increases, higher attention, energy and time are immediately dedicated into running them. In the short term, such strategy seems effective: the more time spent on working, the more the number of projects. However, "the benefit of working harder is, however, short-lived. With less time devoted to improvement, capability gradually erodes, eventually more than offsetting the increased time spent working. Working harder creates a "better-before-worse" situation" (p.73 Repenning and Sterman, 2001). At that point, the organisation felt into the 'capability-trap'. However, as mentioned by the authors, the situation is reversible. A single and simple solution does not exist on how to solve such organisational problem. Indeed, raising capabilities requires investments in terms of efforts and time, which provoke further

Work on a Daily Basis

Capabilities

Time Working on Projects

Measure of Performance - Number of Projects Run
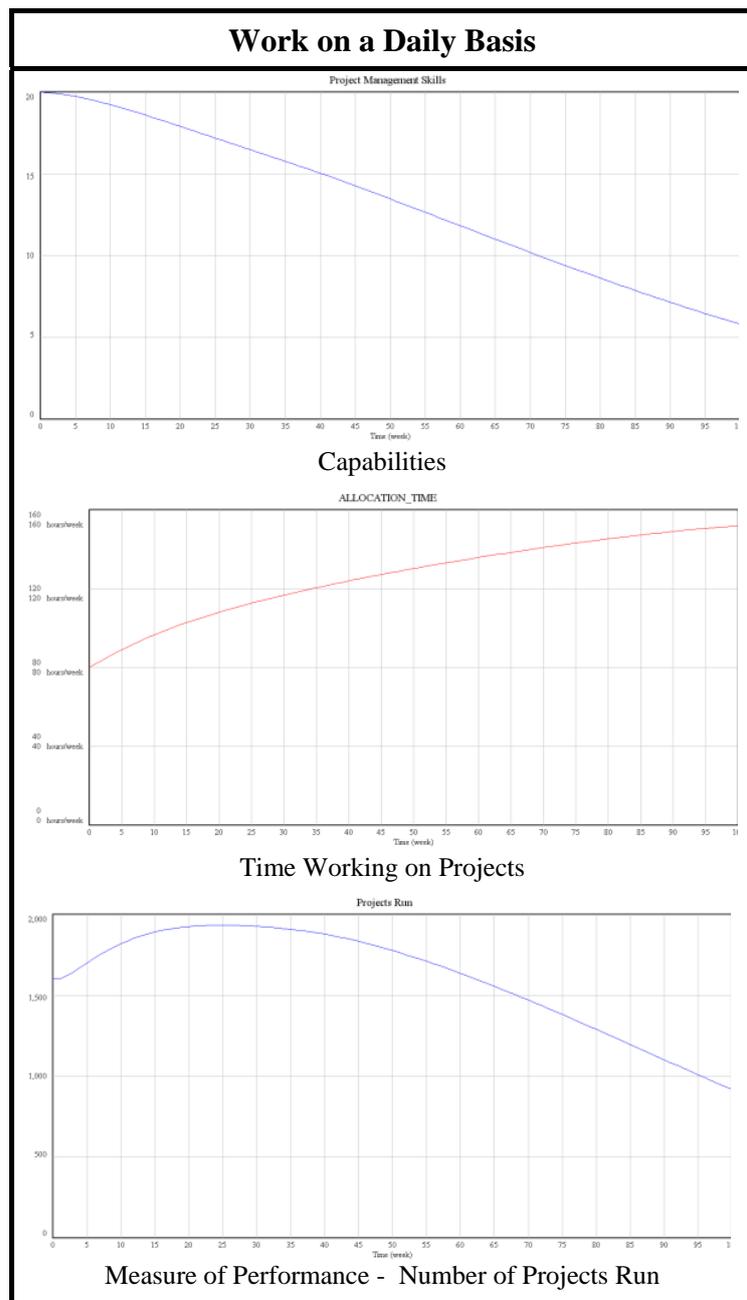
Table 1 – Simulation Result, Work Harder

short-term drops in performance as less time is spent on working. Only ounce expertise and knowledge will be gained, the organisation shall increase be capable of increase its performance. It is up to the management to be inventive and try diverse strategies to solve it.

Improve Capabilities

Capabilities

Time Working on Projects

Measure of Performance - Number of Projects Run
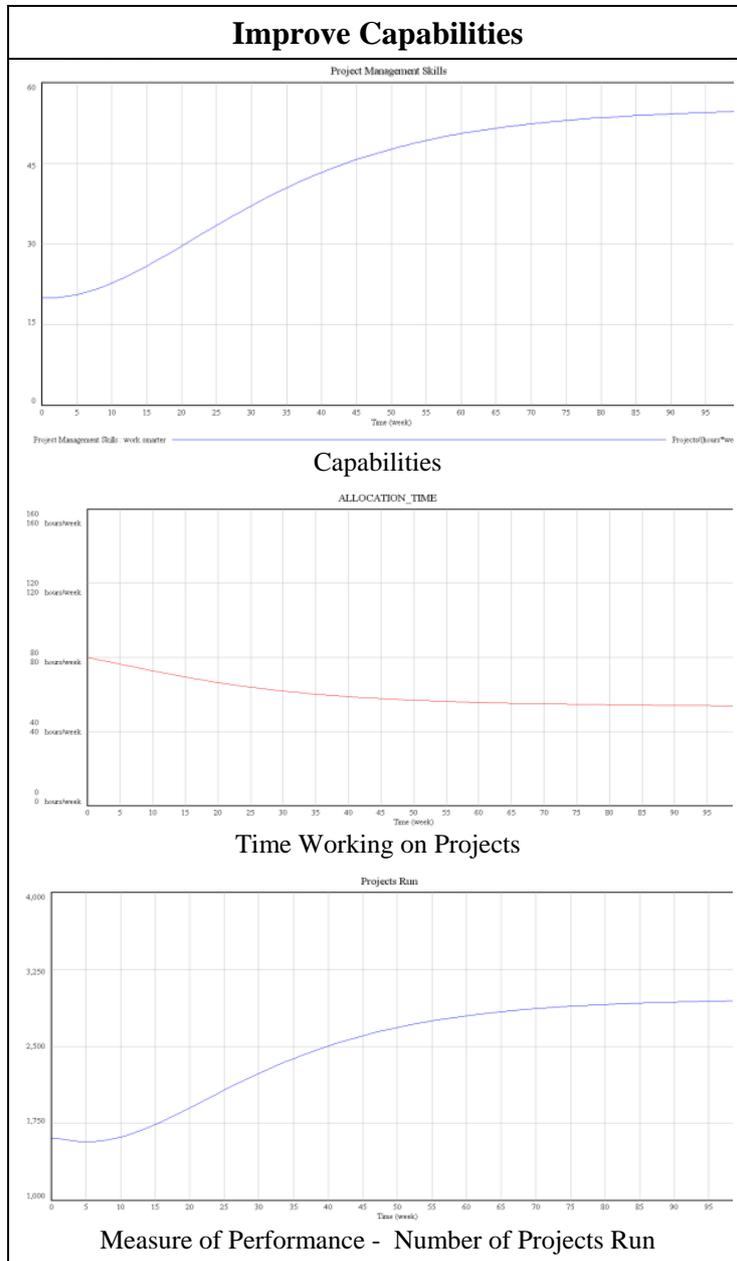
Table 2 – Simulation Results, Improve Capabilities

Table 2 illustrates the scenario in which a management team recognises the importance for improving capabilities. When confronted with a higher number of projects to be run, the organisation does not over react by allocating all its available time to work on projects. On the contrary, it maintains a significant proportion of time to perform continuous investments in capabilities (for example, offer professional workshops, create appropriate indicators of performance, align organisational structures, strategies, systems and cultures etc.). Under such circumstances, staff's skills, knowledge, and expertises are stimulated, organisational processes are revised and improved, and so capabilities start slowly rising. In the long term, the organisation to work in a more efficient way: people work better while spending less time working. Such positive outcome can be reach only if management keeps focusing on capabilities whatever the circumstances. However, the management team should be aware that such strategy has a short-term negative-effect: as the organisation does not focus all its time and energy on running projects but on improving capabilities, in short term, performance slightly drops. As capabilities are slowly built, they "eventually rise more than enough to offset the drop in work effort and performance is permanently higher, a "worse-before-better" scenario" (p. 73 Repenning and Sterman, 2001).

Discussion and Conclusion

Organisational Learning

Simulation results demonstrate that, in order not to fall into the capability trap, a close understanding of the mechanisms and decisions responsible for causing it should be gather. After being taken through a facilitated discussion, all members of the NGO's headquarter implicitly recognised that they had fallen into the capability trap. Indeed, volunteers were totally submerged by day-to-day work and could not allocate time to discuss long term planning or fundraising strategies. Moreover, the financial threat surfing upon their organisation only reinforced people's tendency to work, especially concerning fundraising (it should be noticed that no professional fundraiser is involved in the organisation and that only one person has some business background). To sum up, people were lacking the ability to step back and analyse what was the cause of such stressful situation.

System Dynamics, by forcing decision makers to share information and discuss the general feedback loops active in their system, helped them realising that their own behaviour and reactions were responsible for such situation. Two main insights can out from the facilitation. Firstly, volunteers realised that the situation was reversible and that they could make a difference, especially by being less reactive to pressures to work harder. They recognised the urge to develop organisational capabilities and several potential solutions to rise competences and expertises have been suggested. Secondly, they also realised that people across the different parts of the organisation had different visions, opinions, and goals concerning the organisation. The headquarter understood that the organisation had no shared vision capable of uniting and coordinating people's actions, a situation that needed to be quickly changed. As the problem was clearly identified, members were inspired and regained motivation to face their situation. They were able to take a step back at their day-to-day troubles and gained a global vision of their problem. Discussing the issue helped decision makers realising that, before giving great attention to any specific mission (example: fundraising strategies), it was first vital to gather a common understanding of where they were going, i.e. a long term vision had to be defined in order that people align their day-to-day activities. They also realised that their initial attempt to restructure their organisation could lead to tangible results but that they needed to be patient and to keep investing efforts into it. They also noticed some of the failures in their new organisational structure: communication and interactive abilities had to be developed so that information would flow easily not only across departments but also across offices. The committee ordered a future meeting to formulate strategies to build on the organisation's strengths, fix its weaknesses, grasp opportunities and stave off threats (Hussey, 1992). Especially, how to outcome the capability-trap shall be largely discussed. Such meeting shall involve all members active in the headquarter as well as representatives from the African office, decision maker who, unfortunately, were absent from the consultancy.

Conclusion

NGOs evolve in a complex world and face many challenges not only in achieving their social mission but also in managing their own organisation. As NGOs tend to be

run by volunteers, it is therefore difficult for these organisations to understand the complete system in which they evolve and therefore to take efficient decisions. System Dynamics allows policymakers not only to complete their understanding of the dynamics ruling their system but also to investigate various policy designs and to realise their consequences. Such achievement represents a great source of organisational learning as it 1) brings light on the dynamics ruling the system, 2) leads to radical changes in the way people understand reality (Sterman, 2000), 3) allows exploring the effects of different strategies and scenarios, and 4) enables policymakers to adapt their decision rules, and even objectives, depending on the system's structure.

In this paper, attention had to be given to a particular problem that small NGOs face: to be trapped in day-to-day work and not being able to invest in organisational capabilities. Non-profit organisations, especially because they are run on a voluntary basis and because they tend to refuse adopting strategic management concepts to their social activities, may have a higher propensity to fall into the 'capability trap'. It is therefore important for them to recognise the threat they are facing and to be pro-active in challenging it. The simulation model illustrates the stakes involved ounce an organisation fall into the capability trap. The 'capability trap' is evitable but it requires developing and sharing a long-term strategy which promotes organisational learning through the constant improvement of capability. Such strategy must then be followed up by defining precise missions and objectives as well as a consistent allocation of resources (Hussey, 1992). As noticed by Amatori (2001), **"**the choice to develop organisational capabilities is one that must be continuously reiterated and preserved over the course of time. This critical entrepreneurial act materializes itself into a strategy which avoids dispersion into unrelated fields, maintaining the organizational capabilities on a favorable terrain because this is the way they have practiced for a long time".

To conclude, it could be said that the sky is full of good intentions. Small NGOs play an active role in making these intentions reality. Providing access to education, heath treatments and prevention, sports, and new technologies significantly helps local communities in developing countries. Multinational institution as the United Nations, countries, local communities, and the general public, all recognise and support the contribution small NGOs make in raising people's quality of life. However, it is sometimes not enough to be filled with good intentions: social programs must be run, operations must be coordinated, activities must be sustained (social responsibility makes it difficult for NGO to abandon its beneficiaries by stopping its activities), funds must be constantly raised in order to guarantee the NGO's activities, donors must receive feedbacks on their investments, volunteers as well as organisational growth must be managed in an adequate way etc. Dealing with all that complexity is a difficult task and NGOs could beneficiate from the adoption of managerial techniques. However, the implementation of such techniques require an adequate mobilisation and use of resources must be performed. Investing in capabilities necessitates significant investments in terms of time and effort, and must be guided by a long term vision which promotes organisational learning and efficiency. NGO leaders should not regard business approaches as conflicting with their social mission, on the contrary, such techniques can only beneficiate in the long run the people they are trying to help.

Literature

Akingbola K. 2006. Strategic choices and change in non-profit organizations, *Strategic Change* **15**: 265-281.

Amatori F. 2001. Working Paper - A Firm's Success and Organizational Capabilities in a Long-Term Perspective: Fiat between the Twenties and the Fifties. Paper presented at the 5th European Business History Association (EBHA) Conference, 31st August - 1st September, in Oslo, Norway.

Arango J.B. 1998. Helping non profits become more effective, Material from http://www.algodonesassociates.com/

Backman EV, Grossman A, Rangan VK. 2000. Introduction. *Nonprofit and Voluntary Sector Quarterly* **29:** 2–8.

Bar-Yam Y. 1997. Chapter 0 – Overview: the dynamics of complex systems – examples, questions, methods and concepts, In: Perseus Books Group *Dynamics of Complex Systems*

Crittenden W. 2000. Spinning straw into gold: the tenuous strategy, funding, and financial performance linkage. *Nonprofit and Voluntary Sector Quarterly* **29:** 164–182.

Doyle J.K. and Ford D.N. 1998. Mental models concepts for system dynamics research, *System Dynamics Review* **14** (1): 3-29.

Grant R. M. 1998. *Contemporary Strategy Analysis*, Third Edition, Oxford, Blackwell

Greenberg E. 1982. Competing for scared resources, *Journal of Business Strategy* **2** (3): 81-87.

Hussey D.E. 1992. Glossary of Management Techniques. In D.E. Hussey (Ed.), *International Review of Strategic Management,* Vol. 3, John Wiley & Sons, Chichester

Kay J. 1993. *Foundations of Corporate Success*, Oxford, Oxford University Press.

Kotler P, Zaltman G. 1971. Social Marketing: An Approach to Planned Social Change, *Journal of Marketing* **35** (3): 3-12.

Moore M. 2000. Managing for value: organizational strategy in for-profit, non-profit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly* **29:** 183–208.

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

Morecroft J.D.W. 1989. Strategic microworlds and system dynamics modelling *Transactions of the Institute of Measurement and Control* **11**: 180-186.

Morecroft J.D.W. and van der Heijden K.A.J.M., 1994. Modeling the oil producers: capturing oil industry knowledge in a behavioural simulation model. In *Modeling for Learning Organizations*, ed. Morecroft J. and Sterman J., Productivity Press. Portland OR., USA

Repenning N.P. and Sterman J.D. 2001. Nobody ever gets the credit for fixing problems that never happened: Creating and Sustaining Process Development, *California Management Review* **43** (4): 64-88.

Roberts N., et al, 1983. Introduction to Computer Simulation . Reading, MA: Addison-Wesley, p. 16

Senge P.M. 1990. The Fifth Discipline: The art and practice of the learning organization, *Doubleday Currency.*

Senge P.M. and Sterman J.D., 1992. Systems thinking and organizational learning: acting locally and thinking globally in the organization of the future. *European Journal of Operational Research* **59** (3): 137–145.

Simon, H. 1972, 'Theories of Bounded Rationality'. In *Decision and Organization*, ed. McGuire C.B. and Radner R., 161-76, North-Holland Publishing Company.

Sterman, J. D. 1991. A Skeptic's Guide to Computer Models. In Barney, G. O. et al. (eds.), *Managing a Nation: The Microcomputer Software Catalog*. Boulder, CO: Westview Press, 209-229.

Sterman J.D. 2000. *Business Dynamics: System thinking and modeling for a complex world*. New York: McGraw-Hill.

Stone MM, Bigelow B, Crittenden W. 1999. Research on strategic management in nonprofit organizations. *Administration and Society* **31:** 378–423.

Thompson J, Alvy G, Lees A. 2000, Social entrepreneurship - a new look at the people and the potential. *Management Decision* **38** (5): 328-338.

Tucker J, Cullen JC, Sinclair RR, Wakeland WW. 2005. Dynamic systems and organizational decision-making processes in nonprofits, *The Journal of Applied Behavioral Science* **41** (4): 482.

Tversky, A., and Kahneman, D. 1974. Judgment under uncertainty: Heuristics and biases. *Science* **185**: 1124-1131.

Vakil A.C. 1997. Confronting the Classification Problem: Toward a Taxonomy of NGOs. *World Development* **25** (12): 2057-2070.