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A pragmatic way of achieving Highly Sustainable Organisation: Governance and organisational learning in action in the public French sector ☆

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ABSTRACT

Sustainability is becoming more and more the key challenge for organisations. Sustainability depends on internal and external characteristics of the organisation that should or must be preserved within the time and depends on the definition of what is a suitable state of the system (organisation and its environment) within medium and long terms as safety can be seen as feature of sustainability. The concept of sustainability is a key concept for safety researchers and practitioners. The reverse is true as safety concepts are useful to think sustainability which is still rather new. They share common research grounds on management and organisations sciences.

In France, as exemplary organisations, public organisations are working on issues related to both the assessment and governance of sustainability. In this paper we propose a "proactive-based assessment" designed to measure an organisation's ability to govern and achieve sustainability.

The proposed assessment method relies on three new concepts: "critical capital"; Highly Sustainable Organisation (HSO), and learning stages within an HSO.

Although there are some elements of unpredictability in complex systems, sustainability for an organisation is based at least on its ability to learn and adapt. There are different ways of conceiving sustainability for public organisations. Even though there is no consensus on the way public organisations are conceived, there is still a philosophical and political agreement on the need for more sustainability. However, it is still unclear and sometimes not even pointed "what should be sustained for public organisations?". We suggest that the "critical capital" is characterised by internal and external aspects of the organisation that should be preserved within the time such as (i) the way of functioning of the organisation, (ii) the way the missions are performed or exercised by the organisation to meet what is contextually referred as being of public and common needs and (iii) the "organisational memory" that represents the identity of the public organisation and the assets of the public organisation. The term "Capital" does not refer to its definition in economy but to its given definitions in sociology (see for example Ferragina, 2010) and ecology (see for example Jansson, 1994). Criticality is fixed "according to the way public service is conceived, to the contextual constraints (such as economical, environmental, social, cultural and ethical) and according to the degree and the nature of threats (natural and manmade hazards).

We suggest that organisational sustainability is the ability of the system to preserve and to maintain, within the time, a critical capital and to adapt to its ecosystem. Accordingly, a loss of organisational sustainability indicate whether the organisation is prone to shift to an undesirable organisational state that would decrease the ability or even cease to provide services to the ecosystem and to maintain its identity. In other words, it is an organisation that loses part of its critical capital.

☆ Landry et al. (1983) suggested that there is four aspects that should be considered when validating a model (or a framework): (i) the conceptual validation, (ii) the validation of the logical consistency of the model, (iii) the experimental validation by using data coming from real life situations, and (iv) the operational validation that consists in following the daily life of the model. Indeed, by "Pragmatic" we mean that the proposed framework to achieve a highly sustainable organisation is mainly based on experimental and operational validations by the observation of the practices and the implementation of the framework.

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Accordingly, we have proposed a development stage model to make explicit the way we have observed in these organisations a common progression in the initiatives they have taken to address sustainability challenges and build learning and innovation capabilities.

The three concepts arise from a four years investigation and observation of more than 60 public organisations in France and the coordination, at a national level, of the French working group on "governance of public organisations" that end up with the publication of four national guidelines in March 2013.

1. Introduction

As a concept and as tool, sustainability is still at an early stage of development. For instance, there is little consensus on which aspects of systems and of organisations this concept is the most relevant (such as environmental, social and economical), except all.

In the public sector, sustainability is sometimes thought of as being synonymous with having a public mission. In other words, the work done by a government and its agencies is sustainable per se because it facilitates society. Accordingly, some fundamental questions are not asked and practical difficulties in dealing with sustainability are not tackled. For example, it is not clear what should be sustained within these organisations and why it should be? Or why environmental considerations (e.g. reduce CO_2 emissions) should be considered as more important than social considerations (e.g. Improving working conditions, reducing risks for workers and neighbours, etc.) and economical considerations (e.g. higher returns for shareholders and higher wages for workers)?

In the public sector, sustainability is not defined coherently. Instead it is a mélange of guidelines, norms and definitions arising from a variety of scientific disciplines. This creates a reductionist vision of sustainability that can be resumed in the fact of achieving some goal criteria (e.g. reduce $C0_2$ of 20% at 2015 horizon) or a blind respect of procedures and regulations.

An added difficulty today after years of privatisation in France, when considering sustainability in public organisations, is basically how to identify which organisations are in the public sector. In the simplest case, a public organisation is one created by statute and funded by the State. However, other attributes can also determine whether a body is a public organisation. Firstly, if the mission of the organisation fits the State's definition of *common* and *public utility* (e.g. education, health, security, and safety) then it will be considered by everyone to be a public organisation. Secondly, the status of its employees (whether public agents or not) can also be taken as basis for defining an organisation as public or private.

1.1. Sustainability: some elements of definition and some open questions

For us, sustainability for an organisation (or a system) depends on internal and external characteristics of the organisation that should or must be preserved within the time and depends on the definition of what is a suitable state of the system (organisation and its environment) within medium and long terms. Based on these first statements, we have noticed that considerable contributions were made by the political and the economical worlds, and the scientific community to clarify what are the essential characteristics of sustainability. Among these characteristics, different concepts are mobilised and used in ecology sciences: 'resilience', 'reliability' and 'safety' are the most prevalent ones.

Based on complexity and information theories, the theoretical ecologist and philosopher Robert Ulanowicz (Ulanowicz et al., 2009) suggests that the long term sustainability of a system depends on its ability to maintain an equilibrium between its three main characteristics: resilience, efficiency and reliability. We would add, safety although from helicopter view: in some definitions in French (see for example Laprie, 1995) reliability includes safety, availability and maintainability. Indeed, safety is a long term issue with low probability and high consequence events and it question sustainability of trade-offs between production and safety.

Among the several definitions, resilience seems to be "an intrinsic ability of a done system to adjust its functioning prior to or following changes and disturbances, so that it can sustain operation even after a major mishap or in presence of continuous stress" (Steen and Aven, 2011). This definition seems to gather the vision of the ecological resilience suggested by Grimm and Vissel (1997), where resilience is "the capacity of an ecosystem to resist disturbance and still maintain a specific state" and the ecological resilience vision suggested by Folke (2006) that insists on the capacity of an ecosystem to renewal, reorganise and develop its self. As we can notice, resilience is here still a mean for a system to an end (achieving sustainability). Indeed, a sustainable system must:

(i) be *reliable* by maintaining and by being *performent and efficient* in its functions or missions,
(ii) *preserve the integrity of stakeholders in and out the system* (even if it is not clearly stated in the anterior definition of resilience) by insuring their *safety* and;
(iii) *balance its trade-offs in a new way* considering environmental, social and economical dimensions;
(iv) promote and maintain the ability of the system to *learn and innovate* due to the fact that problems faced today are not the ones that we will show-up tomorrow. But some will be similar and failures to learn are around the corner (e.g. see BP and NASA accidents repeat (Dechy et al., 2013; CSB, 2007 and CAIB, 2003). The ability to think beyond the limits and make choices and decisions should and must be stimulated.

It is interesting to point out the fact that sustainability in practice is often presented as a *goal that is achieved by specific characteristics of the system* (that are its resilience, its reliability and its safety) (see Fig. 1A). But at the same time public opinion and extra-financial scoring agencies tend to perceive sustainability as a *characteristic of a system* (especially for firms and most largely for organisations) and try to capture it (see Fig. 1B).

Whatever sustainability is perceived there is a fundamental problem to tackle which is *the ability to predict*: (i) what are the characteristics of the system that should or must be preserved within the time? and (ii) what is a suitable state of the system within medium and long terms?

Predictability of complex socio-technical systems and their diagnosis are paradoxal challenges and matter of debate especially from a safety standpoint (Dechy et al., 2011, 2012). Indeed, it is a challenge because by doing it, it will be possible to deploy a large set of proportionate actions to achieve or to maintain sustainability and to deal with the side effects of these actions diachronically. It is also a paradox because it remains deeply uncertain and ambiguous based on the illusion of controllability of complex systems although one may disagree with the idea of inevitability of acci-