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Beyond the veil — The real value of Foresight

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ABSTRACT

The wide application of foresight would benefit from a common assessment framework that hardly exists. This would require a higher level of reference, i.e. pursuing more generic goals. This is offered by the two concepts of "knowledge society" and "participatory governance". The aim of the research is to develop an impact assessment framework of foresight programmes in developing more participatory "knowledge societies" beyond their specific aims.

Research shows that the major impacts of foresight belong to three groups, i.e. in relation to knowledge, network creation, and promoting public engagement in policy-making. At the same time, the major features of modern societies are of three types, i.e. related to knowledge value, to innovation-driven growth and to consequences of a "risk society". Thus, the relevant areas where foresight might contribute are: knowledge, networking, and coping with a 'risk society'.

The new framework is built on the features and pre-conditions of more participatory societies and draws upon existing evaluation approaches and concepts ("theory-based evaluation", "knowledge value framework", "behavioural" and "cognitive capacity additionality") to tackle short-comings of earlier evaluation efforts. It is then tested in a case study that demonstrates its feasibility and comprehensiveness and further refines the assessment criteria it is based on.

1. Introduction

The term 'foresight' has been increasingly used since the late 1980s. Numerous definitions exist, emphasising the one or the other element of foresight. For instance Coates [33] puts an emphasis on scanning and forecasting but not specifically oriented to science and technology. Slaughter [34] on the other hand, relates foresight to decision-making and organisations. Several accounts exist describing foresight activities dating back to the first application of foresight programmes which in essence reflect the actual aims of the specific programmes [21].

Across the various attempts to define foresight and identify its fundamentals, certain elements are repeated. Foresight is seen as an action-oriented instrument for policy-making facilitating structured anticipation, considering alternative futures [23], requiring creative thinking and multi-disciplinarily perspectives, enabling collective learning [11]; proactive and path-breaking, interactive and participatory; enabling mediation and alignment, forging new social networks, guiding strategic visioning, creating, and committing actors to shared visions [17], and supporting deliberative democracy [14].

These major characteristics governing foresight can be grouped in three major building blocks, i.e. in relation to building knowledge, building networks and building participation and action:

- Building knowledge: as leading to the development of strategic visions and anticipatory intelligence considering alternative futures based on a multidisciplinary base and through evidence-based approaches, interactive and participatory methods of analysis and collective interactions enhancing collective learning;
- Building networks: as a process of co-production of communities of stakeholders and as an instrument of transaction, dialogue, negotiation, cooperation and alignment among them;
- Building participation and action: as bringing more stakeholders and points of view into the decision-making process with an orientation to inform present-day decisions, coordinate agents and policies and shape behaviours and routines in view of taking concrete actions towards the realisation of a jointly defined future vision.

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Foresight has been increasingly acknowledged in the past two decades as a valuable policy-making process. Despite the considerable investment in foresight exercises in several countries, not many attempts have been made so far for a thorough evaluation of the process, outcomes and impacts of foresight programmes [30]. Most evaluations of the few conducted so far are post hoc, working with hindsight and with a tendency to focus on effects, rather than on the processes and on the choices made inside the foresight projects comprising a foresight exercise.

Most foresight activities, although sharing some methodological characteristics and similarities in terms of time horizons and audiences addressed, usually have different aims, scopes and levels of implementation. Thus, evaluations typically focus on assessments of whether or not these goals have been attained while there is no common evaluation and assessment framework of foresight exercise or programmes [2].

Foresight evaluation also faces a number of challenges. The wide range of situations where foresight is applied hinders the development of a common evaluation approach. The systemic and distributed nature of foresight also makes it necessary to assess impacts across a variety of actors and systems, which poses another challenge in its evaluation [18]. The intangible and long-term nature of several of its benefits causes attribution problems [5].

The wide spread application of foresight would benefit from such a common evaluation approach. It would facilitate the identification of good practices irrespective of their specific objectives and levels of implementation while it would also allow for benchmarking of foresight programmes. A common approach to foresight evaluation would require a higher-level of reference in terms of goals and objectives. It would also need to take into consideration the challenges faced in foresight evaluation.

The aim of the present paper is to present a new evaluation framework for foresight programmes allowing a common approach in evaluating foresight and overcoming the shortcomings of earlier attempts in foresight evaluation.

The methodological approach applied is to consider the challenges and needs in foresight evaluation that have to be met in creating a common evaluation framework. This is done by exploring the basic features of the higher-level of goals that have to be set and by exploiting the wider field of evaluating socio-economic development programmes. The methods applied are literature reviews and interviews with experts[1] in the respective fields of interest, i.e. evaluation of socio-economic development programmes, foresight, and major socio-economic and governance features of modern societies. The new evaluation framework is then tested by assessing FNR Foresight a national foresight programme from Luxembourg.

The paper unfolds in the following six sections. Section 2 discusses the challenges that this new higher level of reference would imply for foresight evaluation. It also reviews the challenges in foresight evaluation that have emerged in earlier evaluation efforts as the new framework would need to tackle both types of challenges. Section 3 explores the specific areas where foresight might contribute in developing more participatory "knowledge societies" while Section 4 reviews relevant evaluation theories and concepts that may help overcome the identified challenges in evaluation. Drawing on the result of the previous sections, Section 5 presents the new framework and Section 6 puts it in practice through the assessment of FNR Foresight. The last section discusses the conclusions both in terms of the applicability of the framework as well as its novelties, limitations and further areas for research.

[1] A total of 19 experts were interviewed.

2. Implications for foresight evaluation

For a common evaluation framework to be feasible a higher level of reference is needed, i.e. the attainment of higher level, generic goals. Amanatidou and Guy [2] showed that this "higher", generic level of reference is offered by the two concepts of "knowledge society" and "participatory governance". The course towards *the most competitive and dynamic knowledge-based economy*[2] *in the world was set as a target by the EU* (Lisbon European Council — March 2000).

The specific emphasis on "knowledge-based economies" enabling economic and social development has been retained in the EU strategic orientation all through the decade. The latest EU 2020 Strategy [13] puts forward three mutually reinforcing priorities. The role of knowledge and innovation is explicit in relation to one of them, "smart growth: developing an economy based on knowledge and innovation". Being at the core of the EU strategies, research and innovation acquire a more crucial role in the framework of dealing with the so-called 'global' or 'major' societal challenges spanning from over-exploitation of natural resources, to food, water or energy shortages, or ageing populations (Boden, 2010 as referred to in [8]).

The nature of societal challenges, where current EU policies focus on, is complex and difficult to describe as they are usually interrelated and their causes and consequences are yet to be completely understood. In addition, they are boundary-spanning in several respects, requiring, for example, interdisciplinarity, cross-departmental coordination and coherence of policies, multi-level governance approaches at global, regional (e.g. European), national, and sub-national levels, technology convergence or fusion in finding solutions, cross-sectoral collaboration between various industries as well as longer-term time horizons in policy-making and business planning practices [8].

At the same time "participatory governance" has also gained importance over the years. Since the European Commission's White paper on European governance [12] in 2001, the importance of participatory processes in policy making has been increasingly acknowledged especially in complex cases with uncertain, yet far reaching, consequences. This is exactly the nature of societal challenges being targeted by the EU and

[2] There are no established definitions of either a 'knowledge-based economy' or a 'knowledge society'. At a first sight the two terms, even though lacking a broadly accepted definition, seem to be used interchangeably in the literature. However, several scholars agree that a 'knowledge society' is a broader and more holistic concept including, apart from a more pronounced role of knowledge in the economy with products and services of increased knowledge-related added value, changes in the area of governance like the re-birth of the populi against questionable scientific and industrial purposes [4] or the growth of social movements [24], or changes in the social and cultural spheres including the increasing significance of 'social learning' as well as the changes in demographic structures, social values and life-styles [26].