

Part III

Towards a Cloud-Based Adaptive Learning Environment

The combination of the field of Futures Studies and Soft Computing offers a refreshing route to make long-term strategic reflection processes have three attributes: anticipation, learning, and adaptation. Although these three notions are not new in the literature of both disciplines, it is an opportunity to develop a path of decision-making models centered on man and the culture of collective construction. That is, thanks to notions as social action, in a world that can be called hyper-complex, the development of cloud-based modeling and simulation systems offers new opportunities that could be explored.

Therefore, offering a path of dialogue based on knowledge of the system under study for the future, which allows building knowledge about the future of the same system, it could be recognizing as anticipation. The need to recognize the internal meaning of the system, from the perspective that a cognitive model helps to express and rationalize a strategic design, it could be recognizing as learning. To move the system from a current one to a new type of behavior patterns, which can be expressed in emerging properties, offers the opportunity for long-term strategic reflection process, to indicate the way in which the system should behave, that is, develop “unique” behaviors that contribute to the system having adequate adaptive responses to the growing complexity of its environment.

The present proposal hopes to strengthen the combination of anticipation + learning + adaptation. The use of cloud-based simulation can be welcomed. The recognition of the legitimacy of the proposed model, is a critical issue. This is, that it does what it should, as a response to its design and preserves the features of the conceptualization that has developed throughout the preceding chapters. Next, two key issues are developed.

The first one has to do with the strategic prospective toolbox. It is convenient to recognize among multiple alternatives, the different possible routes of interaction between the present proposal and the traditional methods from strategic prospective toolkit, and in general to identify potential integrations of methods and techniques from both Soft Computing and from other disciplines. In this regard, the first issue

that will be addressed is an exposition on the parametric sensitivity of the Meta-Pro prospective proposal.

The second has to do with the implementation of one of two experimental applications. The development of a demonstrative and therefore very preliminary version of a modeling and simulation platform based on the cloud, which, by combining Soft Computing and Futures Studies, makes it possible to build a cloud-based platform that contributes to the realization of computational processes required in a long-term strategic reflection process. Although the demonstration is still simple, the last chapter of this book could aim to point out some of the functionalities that can be added in a collaborative environment based on cloud services. Of course, without forgetting that the traditional methods of the strategic prospective toolbox can be added, and the integration of multiple and diverse methods and techniques from different disciplines is a task still to be explored.

The possibility of integrating multiple proposals of methods and techniques is a path that must be explored. Therefore, if the challenges of strategic categorization are addressed, it is possible to achieve that the findings obtained from the use of new proposals of methods and techniques can be translated into a cognitive model, which represents a strategic design. The Meta-Pro prospective framework proposal could be used as a configurable environment, where methods and techniques can be added at the discretion of the designers and futurologists who help build future.