

## Chapter 8

# Enterprise Architecture of Sustainable Development: An Analytical Framework

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### ABSTRACT

*The Outcome Document of the recent international diplomatic conference on sustainable development, Rio+20, portrays it as a multi-stakeholder process aimed at increasing the wellbeing of present and future generations in a dynamic, inclusive, equitable, safe, lasting, and environmentally balanced fashion, emphasizing that it should lead to poverty eradication, social development, the protection of all human rights and the elimination of human-provoked damage to the natural environment and resource-base. This reflects a highly complex process. Whereas the wording of its features and purposes exhibits considerable progress in the international policy dialogue, it appears that, among analysts, policy-makers, and practitioners around the world, there could be still large dispersion in the precise understanding of many underlying notions, the main issues, and their interrelationships. Consequently, there is not yet enough clarity among all stakeholders as to how to proceed on the implementation of coherent and coordinated strategies and policies for sustainable development. This chapter presents an analytical framework to look at these matters from a systemic perspective, with the intention of inspiring non-specialists to consider the advantages of the Enterprise Architecture approach to generate more clarity, facilitate communication, enhance policy coherence, and foster cooperation and partnerships for improving sustainable development. Some practical uses of the systems approach to enhance strategy, organization, and management for sustainable development are suggested.*

### 1. INTRODUCTION

Sustainable development can be described for the purposes of this paper, in non-technical language consistent with the notions of the *Outcome Document* of Rio+20<sup>2</sup>, as the process through which

human beings improve over time their standards of living, with all people benefiting in equitable terms, including the persons in poverty and others that have chronically been at a disadvantage—like women, rural inhabitants, indigenous populations, etc.—from expanding production activities that make available to them more numerous and bet-

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ter jobs as well as more abundant and affordable higher quality goods and services to satisfy their needs, and from social development activities that increase their individual and social capacities—health, education, cohesion, solidarity, etc.—and warranty their enjoyment of all human rights, in ways which can be continued into the more distant future and thus benefit both present and future generations, because technical and socio-economic innovation secure that such activities do not create imbalances and permanent damage in the natural environment and resource base, and also because the overall process is conducted effectively and reliably through societal and government institutions that facilitate coherent decision-making and coordinated implementation of actions by all stakeholders, while being collectively prepared to cope with and recover from economic and sociopolitical crises and from natural disasters that may occur and negatively affect the process over time. Thus, sustainable development is a highly complex multi-stakeholder process, with economic, social and environmental aspects, which is influenced not only by diverse factors in each of these dimensions but also by the evolution of technology and public institutions adopted by the people and government.

The understanding of sustainable development in these terms emerged along several decades in the international development forums, reflecting an evolving socio-economic and environmental context in diverse countries and at the world level, combined with an increasingly multi- or interdisciplinary conceptualization from academic and research communities<sup>3</sup>. Initial views that highlighted in the past the interactions between economic activities and the natural environment and resulted in concepts like green economy, have been progressively enriched with a variety of notions from different scientific disciplines and professional practices to arrive at the more complete and meaningful understanding described above<sup>4</sup>. Yet, whereas the diverse empirical and cognitive backgrounds of analysts, policy-makers,

practitioners and stakeholders involved positively contribute to interpreting and weighting differently the core notions encompassed in this complex process and their action-oriented implications—in its three main dimensions, namely economic, social and environmental—duly acknowledging the different contexts they operate in, that same diversity presents the risk of overlooking the numerous inter-linkages between the many specific issues relevant for sustainable development, hence losing to some degree the integrated vision on the process altogether, which is essential to its current understanding in the international policy dialogue.

A systemic vision of the process of sustainable development is ultimately necessary for the design of coherent public policies, as well as for their effective implementation, to pursue economic growth, poverty eradication, social development, human rights and a continuous improvement in the standards of living of all people in inclusive and equitable terms, while maintaining a stable and lasting balance between human activities and the natural environment, at the local, national, regional and global levels<sup>5</sup>. Moreover, a systemic view is also needed to facilitate communication among the different types of stakeholders at all these levels and to bring together their roles and actions in ordered and synergetic fashions, promoting effective partnerships and cooperation<sup>6</sup>. A systemic vision is indispensable as well to assess progress towards sustainable development overtime, at all levels, with due consideration to all its particular aspects. And last, but not least, a systems visualization of the overall process is fundamental for the sake of public governance, or in other words, for the people and their organizations—in the private sector, civil society and in government—to make adequate collective decisions and effectively enforce these to secure over time the gradual consolidation of sustainable development. In sum, a systemic approach is useful and necessary in these several respects, whose importance has been underscored at *Rio+20*<sup>7</sup>.

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