

“Multi-view SDI assessment framework”

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The task of assessing SDI is difficult due to complex, dynamic and constantly evolving nature of SDI. SDIs are also not the same in different regions of the world and sometimes differ considerably depending on political, economic and cultural circumstances. Therefore there is still a need for a multidisciplinary framework that could assess SDIs worldwide in all their extent.

Before proposing SDI assessment framework, we explore four SDI related issues that have strong impact on its assessment strategy: complexity, many definitions, vague objectives, and dynamic nature. Additionally we acknowledge that the assessment framework should consider three purposes of the evaluation: accountability, knowledge and development. Those three purposes of the evaluation are crucial for assessing SDI. There is a demand to monitor the efficiency and effectiveness (accountability) of SDI initiatives. We need to increase our knowledge of the mechanisms and forces behind SDI implementations (knowledge). There is also a need to monitor the transitions and directions of development of SDI initiatives (developmental). To deal with the complexity of SDI in its assessment we acknowledge SDI as Complex Adaptive System (CAS) and use the principles of evaluating CAS to build SDI assessment framework.

We propose multi-view framework to assess SDI. The framework consists of multiple assessment approaches: (1) Generational approach, (2) Program evaluation, (3) CAS approach, (4) SDI-readiness, (5) Cadastral approach, (6) Performance based approach, (7) Organizational approach, (8) Clearinghouse suitability approach, and (9) State of play approach. Each approach uses various methods to collect assessment data such as case studies, longitudinal studies, surveys, country reports analysis etc. This guarantees the variety of data collected and therefore reduced bias in case some methods create worse results than others. We argue that the strength of such assessment design lies in its flexibility, reduced bias of the assessment results, multidisciplinary and thus holistic view on SDI. It acknowledges multifaceted, complex and dynamic nature of SDI and includes approaches for accountability, developmental and/or knowledge assessment purposes. We also indicate some points of attention in future application of the framework such as integration of the approaches, measurement timing issue and availability of data for various approaches. The scope of this research is the presentation of the assessment framework model followed by its theoretical grounding in complexity theory and evaluation research. The intention of the authors is to apply the assessment framework in their future research to evaluate National SDIs.