

Sustainability - Tool for Future Readiness

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Sustainability has become the tool for future readiness. An assessment of the baseline scenario of material sustainability aspects, a look into the potential future scenarios from risk and opportunity point of view and identifying the interventions that ensures sustainability in a longer time horizon is the key.

Today's businesses are cognizant of the same. Initiatives are getting discussed and designed by some of the leading organizations around the same. For example:

- Reinventing the business wheel: Undertake a circular and science-based approach to reinvent and innovate thereby optimizing costs and generating new revenue streams
- Impact based investment: Conduct a comprehensive Social Return on Investment (SROI) study to quantify the sustainability benefits of the existing /proposed investments
- Aligning to SDGs
- Capital accounting

Though initiatives lead to strategic thought process and a roadmap, the gap remains with a holistic look at all the determinant variables which are going to impact business sustainability in the longer run. How do we prepare for the future amid this fuzziness? How do we link sustainability with business outcomes?

Herein comes the role of scenario analysis and a framework of looking into the crystal ball and connecting the sustainability parameters to the business goals.

Operational Framework

The operational framework for such a scenario analysis is based on sustainability principles which include a set of measurable indicators for -

- Developing resilient systems to manage complex and evolving socio-ecological systems
- Operational analysis for risk mitigation strategies and finding leverage in the system
- Sustainability matrix of the present with provisions of sensitivity and meeting needs of the present without adverse impacts in future

Sustainability science deals with ever-increasing complex and dynamic challenges in organizations and policy making. To put it to work, a scenario analysis framework through modelling and data analytics can help in drawing out the interlinkages among the various input variables and their linkages with the business parameters.

The basic premise:

- A holistic (rather than a siloed) approach to problem-solving
- Systematic way of representing non-linear behavior of complex systems
- Solution-orientation that studies the complex inter relationships between business, nature, social and political dimensions of decision making
- Reconciling short, medium, and long-term strategies
- Finding leverage in the system by identifying interventions with high impact
- Learning faster, smarter and together

Analytical steps

Scenario analysis is about using technology and prescriptive analytics to quickly determine both small and large “what-if” outcomes from a particular set of inputs. The aim is to evaluate risk for a particular plan of action according to different scenarios or situations that could arise as our plan unfolds. These analytical steps helps to make a scenario analysis for ensuring sustainability.

- Mapping the mutual feedback and interactions between environmental and socio-economic systems
 - Identifying the trends and behavior of the variables of interest
 - Identifying the components of the systems
 - Mapping the underlying causalities and structure of the symptoms
- Modeling
 - Formulating the structure with System dynamics modeling approach
 - Quantifying the intrinsic fuzziness of social, cultural and political economy perceptions
- Scenario Analysis
 - Assessment of scenarios with a probabilistic approach for decision making choices
 - Decision making based on -
 - thresholds and benchmark
 - short, medium and long term impact of interventions

These steps may unfold in different ways (scenarios) to help people be more ready to deal with what the future will bring.

Scenarios provide an organized way for foreseeing, exploring and improving decisions. Risks and uncertainties can be identified along with ways of dealing with them at the hypothetical level and thus reduce the likelihood of making grave mistakes. This approach can help in a great way to achieve the Sustainability Development Goals (SDGs). It can help in estimating the implementation of SDGs in terms of both gap between past conditions and future goals. With businesses now more focused on managing risks, this kind of analysis can provide intricate ways to deal with the complex and challenging situations arising from sustainability. This can also help in strategy development, implementation planning and bridging long-term perspectives with short-term priorities.