Simulated Action Analysis for Sustainable Impact

scaling4good

Vision: Decisions and transition strategies of societal relevance will be reached through transparent collaboration based on facts, stated goals, and declared values.

What does it offer

Consultancy for decision support, transition planning, and impact reporting, serving business and sustainability goals consistently, for and beyond sustainable finance. It combines a comprehensive decision support model with a method for impact creation.

What will the consultancy provide
- **Decision support** for businesses, governments, and organizations serving sustainability and business goals consistently, anticipating the future impact of today's decisions.
- Deep **client** and **stakeholder engagement** across entire value chains leading to faster, better and longer-lasting market solutions.
- A method to model **multiple use cases, target quantities** (KPIs), and **time horizons** consistently

What kind of model will make this possible
- **Simulation model**, consistently calculating future states of a system from the present state considering possible future interventions
- **Comprehensive meta model**, bridging between relevant scales and domains

How does the model work

Meta model
- Combines existing structural models for various domains
- Action module formalizes an agenda to be probed
- Impact module aggregates model results onto relevant KPIs

Simulation model
- Calculates the state of a system / country / world in the future from the current state under the influence of actions
- Back test: Would the model have predicted the past? Are results from different component models consistent?

Networks
- Provide the "glue" between the domain-specific models
- Connect numbers with narratives, answers with reasons

How does the impact creation work

The model includes perspectives of all actors along the value chain and therefore offers and requires client and stakeholder collaboration. This enables unique product creation and customer testing right from the beginning.

Application: Holistic investment performance
- **Reason for companies to act:** Currently companies are exposed to financial and non-financial risks arising from short-term performance expectations at stock-exchange markets.
- **Vision:** Corporate investment paves the way for a sustainable economy while being economically viable
- **Goal:** Investment portfolio optimizing risk-adjusted economic and non-economic performance across time horizons
- **Intended effect:** Economically, environmentally, and socially sustainable investments
- **Value of using simulated action analysis**: Through the model is possible to determine which investment will have the maximum impact on risk-adjusted business KPIs and on SDG-related KPIs across time horizons

What could the results look like

*) In this example: Capital redeployment
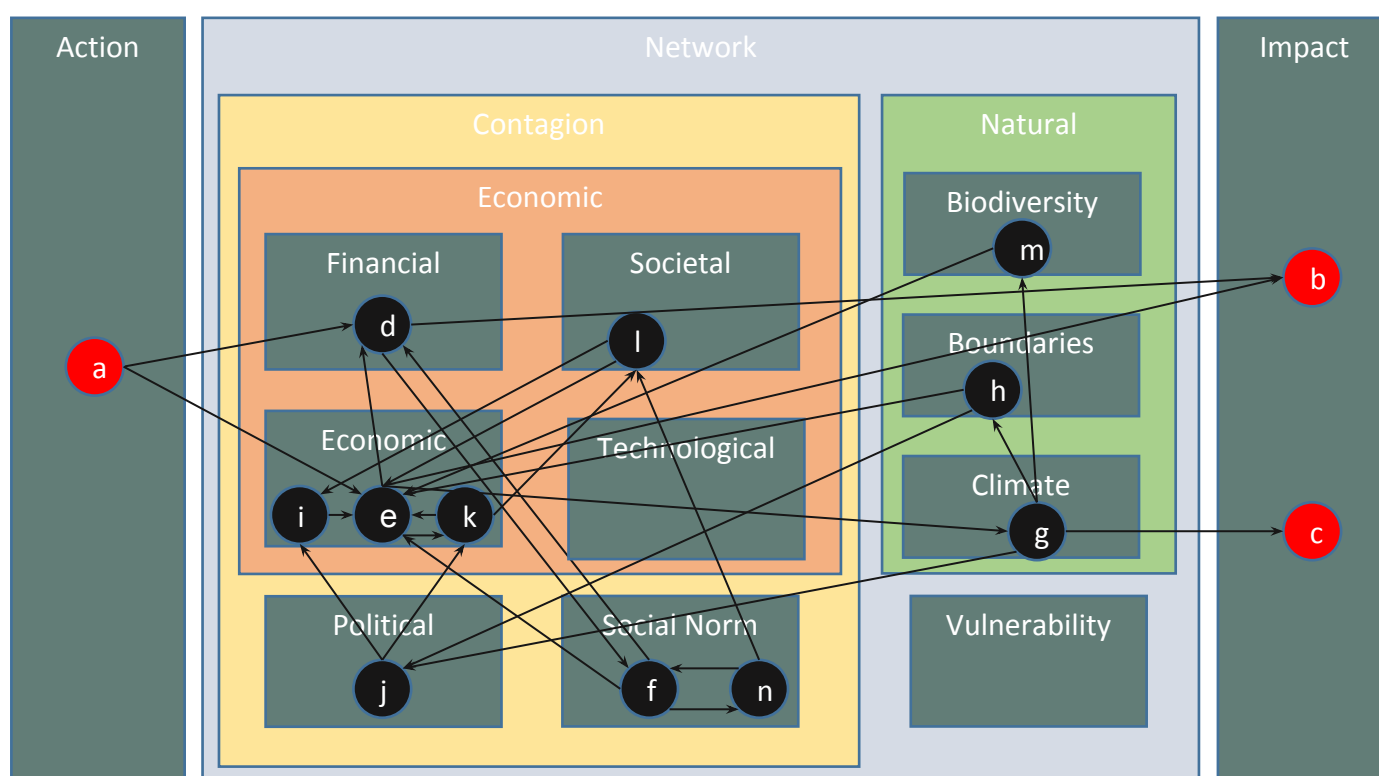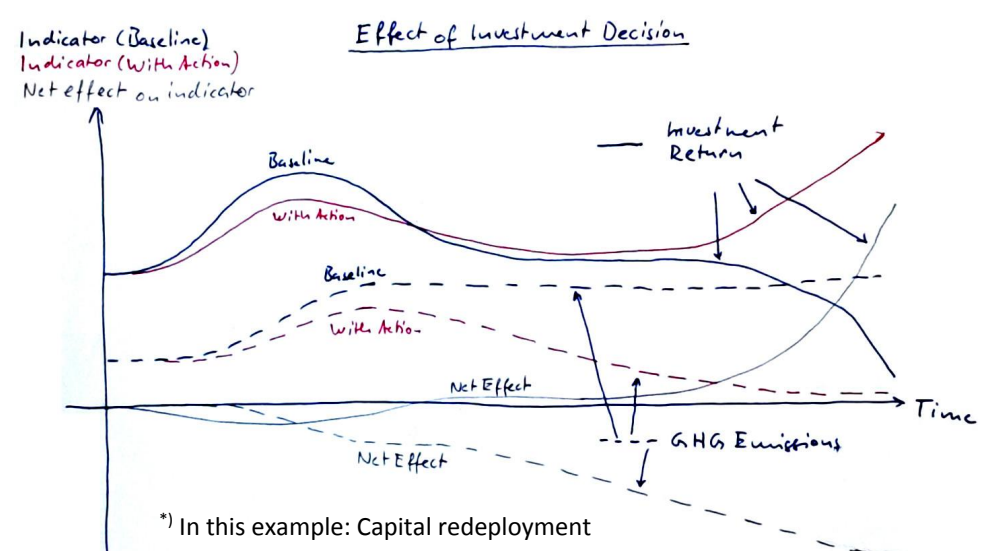
Issue Nodes:

a. Investment decision
b. Investment performance
c. GHG emissions
d. Valuation
e. Economic performance
f. Following investors
g. GHG emissions
h. Natural resources
i. Economic opportunities
j. Regulator response
k. Price levels
l. Consumption
m. Natural resources
n. Acceptance

Illustrative chains only

Further applications

First use cases pursued:
- Energie-efficient real estate at scale
- Climate finance disruption

Other important use cases:
- Sustainable food supplies for all
- Prevent conflicts caused by water scarcity
- Education (gamification)
- … (20+ more cases)

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