SaxInstitute

Decision Analytics factsheet

The Sax Institute's Decision Analytics team uses dynamic simulation modelling to develop evidence-based decision-support tools that help decision makers solve complex problems.

Our models provide a virtual representation of the real world, characterising detailed pathways and interactions within specific contexts. Using advanced modelling software and user-friendly interfaces, our models allow decision makers to test the effects of different interventions and scenarios, and they become powerful tools to help develop, implement and optimise services, policies, and programs.

We apply a unique participatory and transparent process, enabling us to draw on real-world knowledge and build consensus for action. We work in partnership with government departments, policy agencies, program planners, academic experts, non-government organisations, and community representatives across health and social sectors.

What we offer

Policy and planning decision support

- Advanced simulation models that identify where best to focus limited resources and build a compelling case for investment
- An interactive dashboard to test policy and operational changes in a virtual environment before making changes in the real world
- A participatory model building process that integrates implicit knowledge into our models, strengthens relationships and builds consensus for collaborative actions
- Expertise in analysing and understanding complex systems
- Bespoke solutions and tools for your most challenging problems.
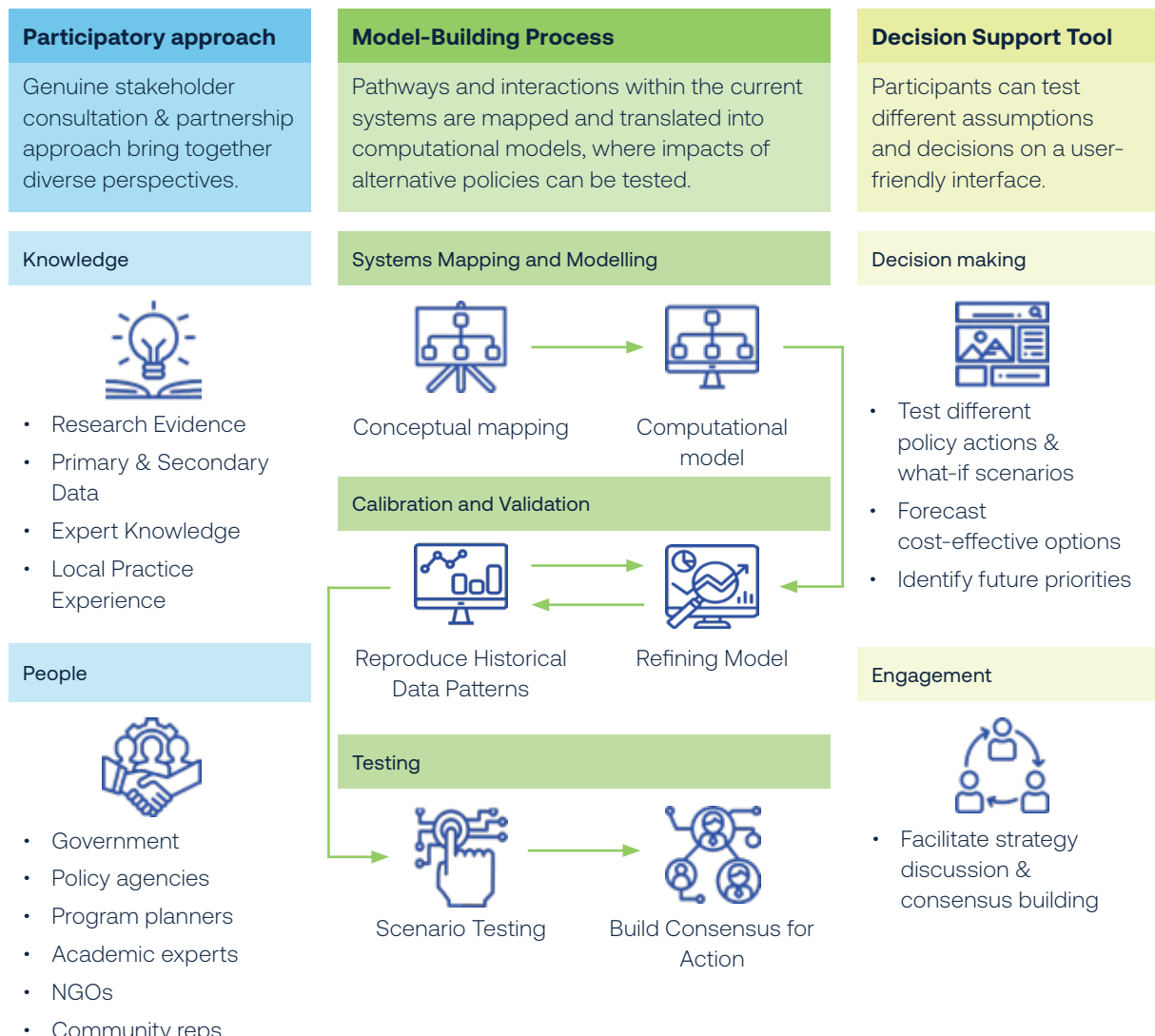
Research partnerships

- Innovative methodologies and technical expertise that can be applied to any content area
- A partnership approach that covers problem conceptualisation through to study design, analysis and research dissemination
- A track record in translating research evidence to actionable insights for policy experts and decision makers
- Scenario analysis that identifies and makes a case for future research investment.
- Building an investment case for primary prevention of lifestyle related chronic disease.

Examples of our work

Since 2015, we have built over 30 models addressing a diverse range of needs:

- Health system service planning at state level and for individual facilities
- Suicide prevention and mental health service planning at national and regional levels
- Strategic planning to improve the uptake of digital health technologies in aged care

- Healthy ageing strategies, tailored to the specific needs of different regions
- Strategic decisions to reduce cardiovascular disease mortality, at state and national levels
- Building an investment case for primary prevention of lifestyle related chronic disease.

Our Decision Analytics process

Participatory approach

Genuine stakeholder consultation & partnership approach bring together diverse perspectives.

Model-Building Process

Pathways and interactions within the current systems are mapped and translated into computational models, where impacts of alternative policies can be tested.

Decision Support Tool

Participants can test different assumptions and decisions on a user-friendly interface.

Knowledge

- Research Evidence
- Primary & Secondary Data
- Expert Knowledge
- Local Practice Experience

Systems Mapping and Modelling

Conceptual mapping

Computational model

Calibration and Validation

Reproduce Historical Data Patterns

Refining Model

Testing

Scenario Testing

Build Consensus for Action

Decision making

- Test different policy actions & what-if scenarios
- Forecast cost-effective options
- Identify future priorities

Engagement

- Facilitate strategy discussion & consensus building

People

- Government
- Policy agencies
- Program planners
- Academic experts
- NGOs
- Community reps

Get in touch early so we can understand your needs and design a bespoke solution. Please contact:

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