

Developing an Innovation Ecosystem for Minnesota State

Possible models and approaches

Definitions of innovation

- Definitions of innovations are as various as there are authors that write about the topic.
 - A novel solution to an important problem
 - The profitable application of creativity to improve products and services, processes, or business models
 - Technical innovations (new technologies, products and services) and administrative innovations (new procedures, policies, and organizational forms)



Approaches to Innovation Systems

- Business and industry
- Health care
- Social and educational institutions



The Innovation Landscape Map

Requires New Business Model

Leverages Existing Business Model

Disruptive

Requires a new business model but not necessarily a technological breakthrough. But it does disrupt the business model of other companies.

Examples:

- ✓ Open Source Software for Software Companies
- ✓ Video on Demand for DVD Rental Services
- ✓ Ride-sharing Services for Taxi and Limo Companies

Routine

Builds on a company's existing technological competences and fits with its existing business model – and its customer base.

Examples:

- ✓ Next Generation BMW 3 Series
- ✓ New Vanguard Index Fund
- ✓ New Pixar 3-D Animated Film

Leverages Existing Technical Competences

Architectural

Combines technological and business model disruptions. These are the most difficult for incumbents to pursue.

Examples:

- ✓ Personalized Medicine for Pharma Companies
- ✓ Digital Imaging for Kodak
- ✓ Internet Search for Newspapers

Radical

Challenge is purely technical which requires significant original R&D.

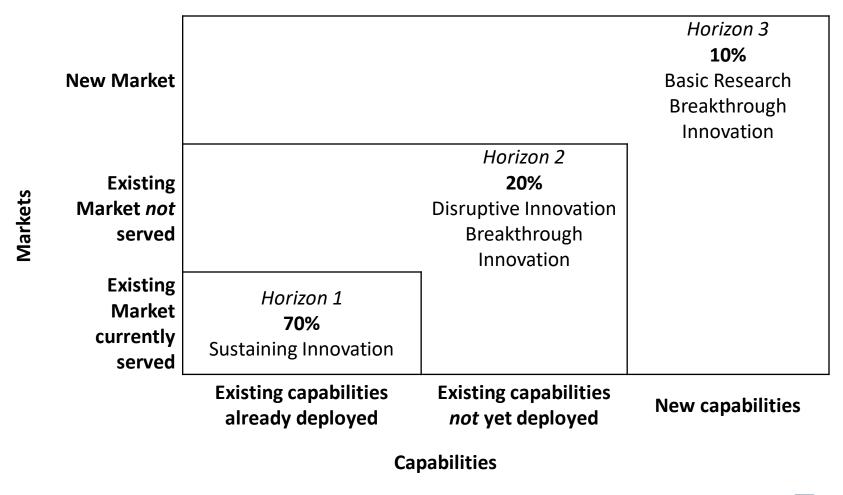
Examples:

- Biotechnology for Pharma Companies
- ✓ Jet Engines for Aircraft Manufacturers
- ✓ Fiber-Optic Cable for Telecommunications Companies

Requires New Technical Competences



Three Horizons Framework





Old vs. New Mental Models of Innovation

Old Mental Model	New Mental Model
Inventers invent	Innovation is a disciplined process grounded in an understanding of need, based on close observation
Innovation is everyone's job	Innovation requires dedicated resources
Leadership commissions innovation and then awaits its products	Leadership conscientiously links innovation and operations together to ensure implementation and adoption of proven new ideas
There is a specific way to innovate and create value	Organizations use multiple innovation methods, matched to customer needs
Innovations are found and developed within an organization	The organization is open to new ideas from anywhere





Developing an Innovation System

Determine the Innovation System Architecture	 Establish the Aims/Goals of the Innovation System Determine Innovation Priorities Dedicate Resources for Innovation Prepare the Environment for Change
Create a Disciplined Innovation Process	 IHI's Innovation Process: 90-Day Learning Cycles, 90-Day Testing Cycles Link Learning and Testing Cycles
Establish Ongoing Management of the Innovation System	Innovation DriversMainstay ProcessesSupport Processes





IHI 90-Day Cycles

90-Day Learning Cycle



90-Day Testing Cycle







Improvement Science Networks

- Brings scientific discipline to social learning
- Leverages the social intelligence of a group to accelerate a whole professions/organizations capacity to learn and improve
- Represent a new organizational form, deliberately designed to enable effective collective action on solving complex problems and for developing complex products
- Accumulate practical knowledge generated from multiple tests, making reform work reliably across various contexts



Improvement Science Network Hub

- Play a critical role in structuring and supporting Improvement Science Networks:
 - Detailing the problem and maintaining the framework
 - Establishing processes and norms
 - Establishing evidentiary standards for warranting claims
 - Providing technical resources
 - Supporting the communication mechanisms to accelerate learning





Collective Impact



Functions of a backbone organization

- Guide vision and strategy
- Support aligned activities
- Establish shared measurement practices
- Build public will
- Advance policy
- Mobilize funding





Principles of Practice

- Design and implement the initiative with a priority placed on equity
- Include community members in the collaborative
- Recruit and co-create with cross-sector partners
- Use data to continuously learn, adapt, and improve
- Build a culture that fosters relationships, trust, and respect across participants
- Customize for local context
- Cultivate leaders with unique system leadership skills





Senge's key capabilities of system leaders

- Commitment to the health of the whole
- Ability to see reality through the eyes of people very different from themselves
- Build relationships based on deep listening and networks of trust and collaboration
- Do not wait for a fully developed plan
- Encourage learning by doing
- See intractable problems as opportunities for innovation







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