



Realizing the value from digital health

Dr. Alan Forster

Director, Innovation, Transformation, and Clinical Performance
MUHC

McGill Professor of Health Innovation

Outline



- The situation
- Enabling technologies
- Transformation management skills and practices
- Establishing transformation and innovation in an organization
- Creating a digital culture

Challenges



- Demographic trends
- Workforce limitations
- Financial sustainability
- Climate change
- Social unrest

Results

- Patients experiencing poor care

The hope: Digital tools will create a new future



- Patient engagement and empowerment
- Effective, efficient, safe, and patient centered
- Improved population health
- Sustainable: financial and environmental
- Healthy, supported, and engaged workforce

The reality



- Digital tools rarely achieve desired impact
- Create extra work for staff and associated with burn out
- Expense related to implementations
- Disillusionment

Key success factors



- Focus on the business needs first, technology second
- Develop innovative business model
- Establish and strengthen key transformation capabilities

Technologies and foundations



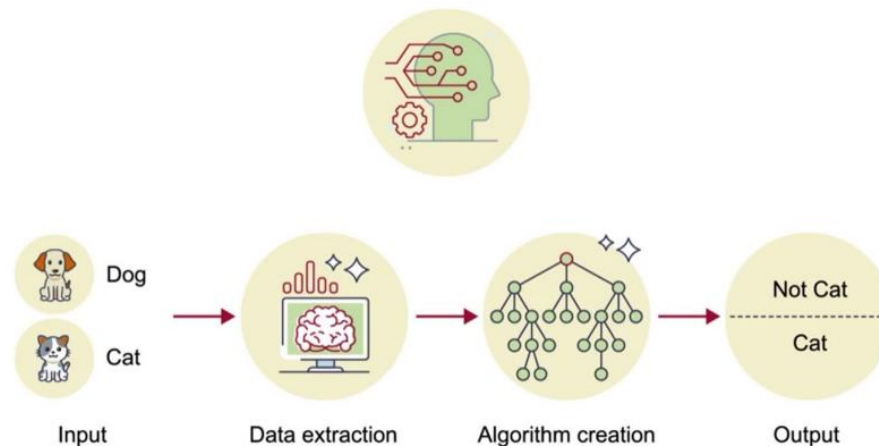
- Internet of things
- AI
- Blockchain

- Cloud
- Big data
- Platforms
- Interoperability

Artificial Intelligence



- Artificial intelligent comprises computer systems that perceive their environments in some manner and respond with actions to maximize their chances of success (activities generally associated with intelligent beings)



- Robotic process automation: uses machine-based logic and input data to monitor and guide healthcare processes

Supporting change



Board leadership

Clinical
ownership

Methodologically
sound
partnerships

Patient inputs in
the design

Example of transformation goals



- Support elective recovery
- Establish digital care plans
- Establish virtual wards and remote monitoring

- Improve digitization of workflows
- Establish cross-system EHR access
- Integrate heterogeneous data platforms

Principles to support change



- **Design:** It is not about the technology, but the problem that the technology is supposed to solve.
- **Adoption:** To motivate adoption, it is essential to have data and evidence that prove the value of the technology.
- **Implementation:** Implementation can be carried out across departments, organizations or even the entire health care system.

Approach



- Understand the users
- Communicate the purpose clearly
- Involve the individuals who're being affected by this technology
- Start small if you can

SMART Health Tech



- S- Simple
- M- Modifiable
- A- Actionable
- R- Relevant
- T- Trust



- The organization is perceived as being objective and fair.
- The organization is efficient and makes timely decisions.
- The authority is clear.
- The governance changes as the organization's circumstances and competitive dynamic change

Governance process



- Strategy development
- Prioritization and budgeting
- Project management
- Change management
- Innovation and experimentation
- Digital Architecture and infrastructure management

During an implementation



- Establish a balance between central and local authority
- Maintain discipline in the management of the initiative.
- Understand, define and enforce the digital architecture.

Addressing burnout



- Identify provider pain points
- Map pain points to existing solutions or develop new solutions
- Repeat the whole process
- Scale and support the solutions, including sunsetting those that have accomplished their job
- Pilot, implement and evaluate the solutions iteratively

Pain points



The five C's of pain

- Care delivery
 - Collaboration
 - Cognitive overload
 - Cost
 - Coherence
-
- Identification
 - Analytics
 - Listening tours
 - Help desk tickets

Building a business case



- The plan to achieve the value
- The Phases of work
- The resources required
- Governance
- Risk, if any

What is innovation?

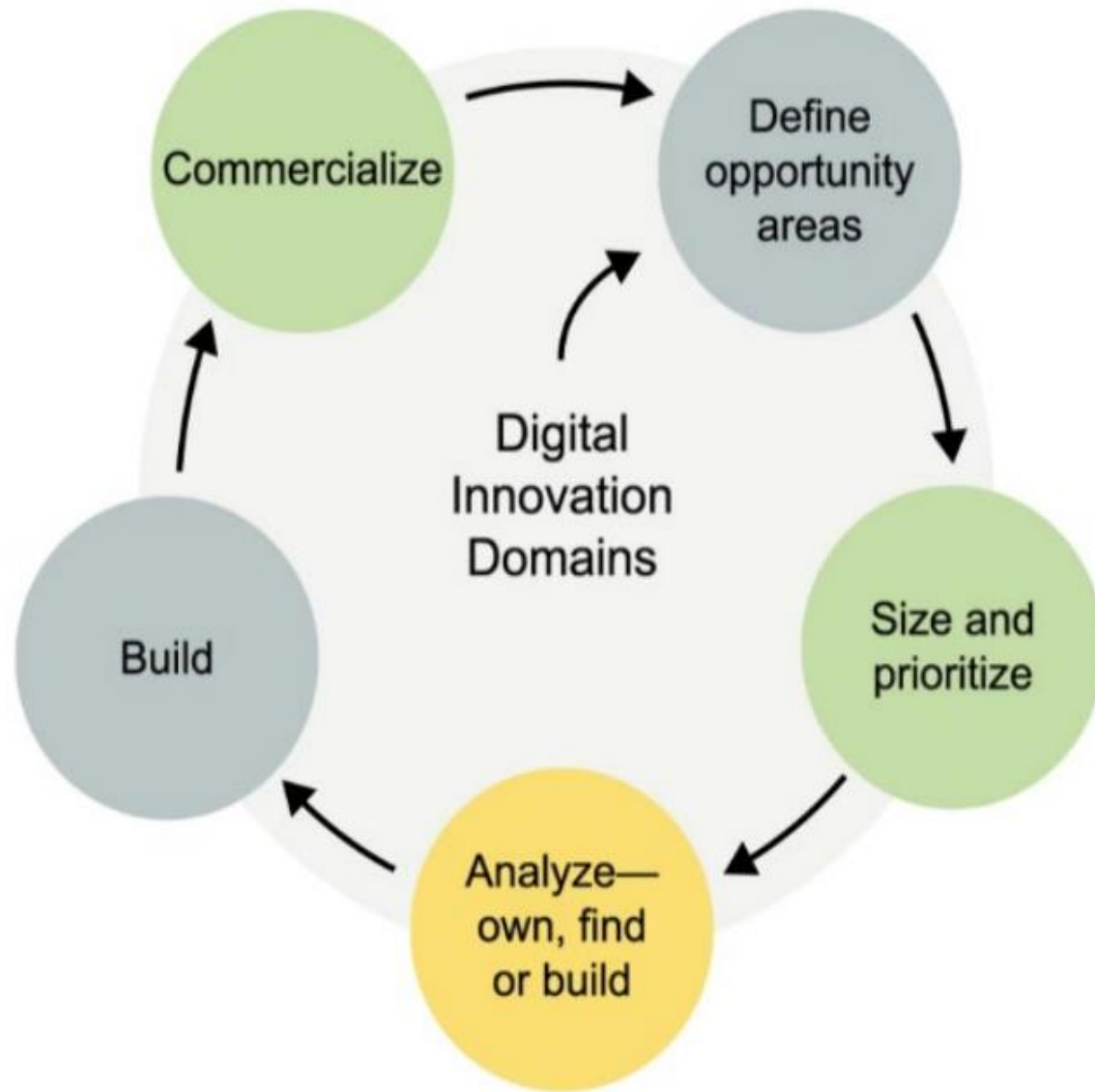


- Innovation is taking a **novel idea** and **solving customer pain points** and **creating value**.



- ↓ X Rays
- ↓ Doctor Visits
- ↑ Compliance
- ↓ Surgery
- ↑ Health

Providence's Digital Innovation Model



Realizing value

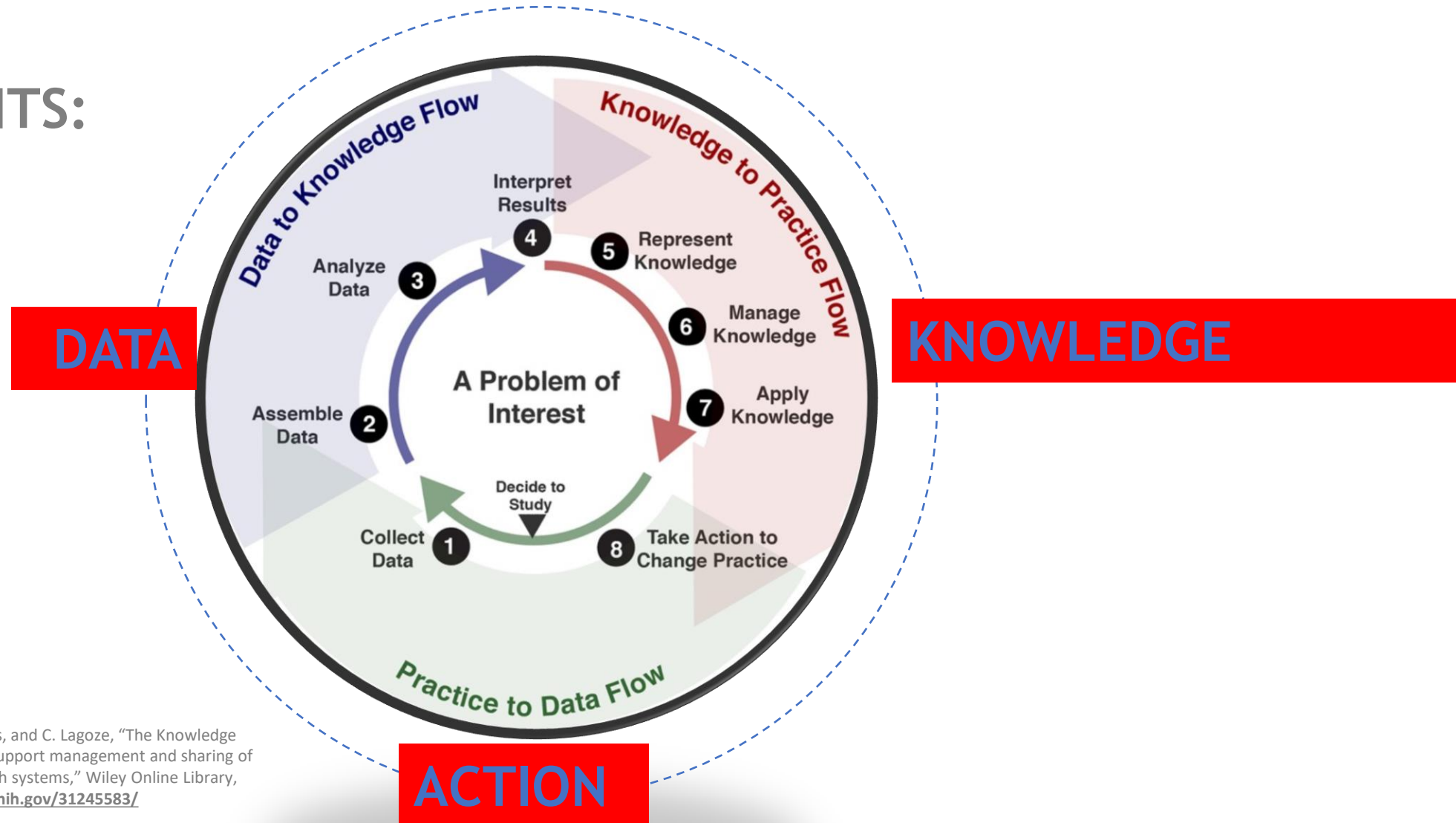


- Value - better outcomes, more service, less cost
- Incremental versus transformational



Importance of culture

3 INGREDIENTS:



Key success factors



- Focus on the business needs first, technology second
- Develop innovative business model
- Establish and strengthen key transformation capabilities

Questions?