Public health challenges and evaluative thinking

Rapid responses in the time of COVID-19

Professor Katina D'Onise Executive Director Prevention and Population Health



Supporting your state of wellbeing.



Challenges we face in public health

- Corporations have money and power
- Low income and high cost of living
- Equity

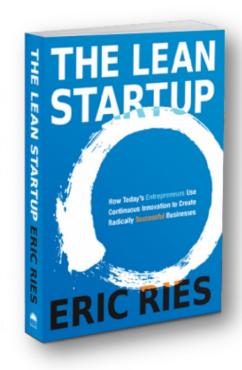






What can we learn from the corporate world?

- Successful corporations sell products/services to the market, fitting into an already complex market and making increasing amounts of money.
- One approach in the context of extreme uncertainty is the Lean Start-Up model for entrepreneurship.









OFFICIAL

FAILING FAST PIVOT

WELL KNOWN TERMS

MINIMUM VIABLE PRODUCT

AGILE



What can we learn from the corporate world?

- Principles of lean manufacturing, to make a framework for innovation.
- Favours:
 - experimentation over elaborate planning
 - customer feedback over intuition
 - iterative design over traditional 'big design up front' development







Lean Start-Up model | Pillar 1 the vision

- Starts with a Vision with a product/service, and a strategy to get to the vision the product and strategy can and do change in the process of reaching the vision).
- Importance of learning as we go in particular from interactions with real customers about what would and would not work, and adapting the product or service to better suit.







Lean Start-Up model | Pillar 1 the vision

- Repeated experiments specifically designed to understand
 the effectiveness of each component of the product or
 service being offered through testing the assumptions made
 about the product or service.
- Focus on testing how people actually behave rather than how they report they would behave.







Lean Start-Up model | Pillar 2 build, measure, learn

- Deliberate strategy of learning directly from the customer about how they find the product or service, using both quantitative and qualitative information.
- Important to get feedback early in the process of product or service development as they can be tailored to the customer as quickly as possible, allowing the most rapid path to an effective product or service i.e. Minimum Viable Product (MVP).







Lean Start-Up model | Pillar 2 build, measure, learn

- Deliberate strategy to identify actionable metrics rather than 'vanity metrics'.
- Assumptions inbuilt into the MVP are systematically tested, measuring the baseline state in addition to the actionable metrics defined in this stage.
- Performance measured within different cohorts of people, and this information is also collected for the process of refinement of the product or service.







Lean Start-Up model | Pillar 3 scale

- Scale and an ongoing process of adapting to the information which is continuously collected to refine and enhance the product or service.
- Divergence with public health here due to context:
 - Lean Start-Up includes marketing, customer feedback.
 - Relevant to public health but the scale in our context generally involves government intervention (e.g. ongoing funds, legislation, policy) rather than the market.









Goal

Profitable business with minimal cost and fast growth, through tailoring to what the customer actually wants.

Why?

Conditions of uncertainty, seeking **sustainable business** and profits.

Customers

People who would purchase the product – individual customer or organisation (business to business model).

Population Health

Sustainable population health outcomes, including meaningful partnerships, policy and legislation.

Conditions of complexity, seeking sustainable health improvement.

Australians or organisational stakeholders.

How to better connect with consumers?

- Focus groups
- Consumer groups
- Citizen's jury (generally either very early or very late in the process)
- Social media and other new media to reach people



Agile

Tight feedback loops between development of product, testing with consumers, redevelopment and so on in an iterative process.

Validate quickly and cheaply, early.

The vision is stable, the product may change, and strategy is often the same but may need to pivot.

Population Health

Seek feedback from consumers early, before substantial funds expended.

Important to be clear about the wide range of stakeholders – wider the range consulted, more likely of success in the implementation.

Know the vision, create a theoretical model based on the literature or community knowledge systems, identify assumptions, and test assumptions systematically using actionable measures.



Experimentation

Systematically identify assumptions and explicitly test them (e.g. split test) and ensure measurements taken reflect the fundamentals.

Examine sub-groups or cohorts for effectiveness (pivot could include change to new focus, new population etc).

Test behaviour not what people say they will do (opportunity to pre-order a product not yet built).

Population Health

Foster experimentation, while remembering the fundamentals of human behaviour change evidence.

Clarity about populations and subgroups. **Identify cohorts within the whole group** to tailor tightly to communities, rather than a blanket approach.

Important to use the metric of behaviour change and not what people say.

Look for ways to pilot on a small scale.



Segment

Take a large job and break it up into individual components,
allows for improvement to be
made iteratively over time.

Measures used

Vanity metrics versus actionable metrics – demonstrates clear cause and effect.

Customer focus

Good service, focus on the customer and their needs.

Population Health

Importance in public health of the long term view, but broken down into small steps to allow small wins, perseverance being critical.

This is akin to measures of outcome or actionable metrics.

Goes to **tailoring to the stakeholder** – includes decision makers and the general population and understanding their motivations/limitations.

Lean Start-Up and evaluative thinking

- The Lean Start-Up model has a deliberate manner in which data are collected specifically to enable adaptation of the product or service.
- Familiar territory for those working in adaptive evaluation practice. Those commissioners and evaluators who work not only on evaluation (the 'what') but use evaluative thinking (the 'how'):

Evaluative thinking:... "questioning, reflecting, learning, and modifying...conducted all the time. It is a constant state-of-mind within an organization's culture and all its systems"

Bennett, G. & Jessani, N. (Eds). 2011. The Knowledge Translation Toolkit: Bridging the Know-Do Gap: A Resource for Researchers. New Delhi, India: Sage. Page 24.







Lean Start-Up and evaluative thinking

- In Michael Quinn Patton's recent YouTube presentation: Why so damn many options? The 10 competing values that explain the panoramic evaluation landscape
 - The many ('101 and counting') evaluation approaches available, and the reasons they have emerged.
 - 10 'tensions' in evaluation which have led to these wide-ranging approaches.
 - The most pertinent to the Lean Start-Up approach is the 'command and control vs complexity' tension.







Vaccine hesitancy project a case study of complexity and speed







Lean Start-Up and evaluative thinking

- South Australian Population Health Survey (SAPHS)
 - ongoing
 - takes a random sample of South Australians of all ages using a landline and mobile phone platform
 - around 7000 participants a year in a normal year









Lean Start-Up and evaluative thinking

- In April 2020, SAPHS was adapted to collect real-time data with a focus on syndromic surveillance and other COVID-19 safe behaviours.
- Reporting included risk factors for chronic disease and mental wellbeing indicators.
- In January 2021, questions on willingness to be vaccinated were added.

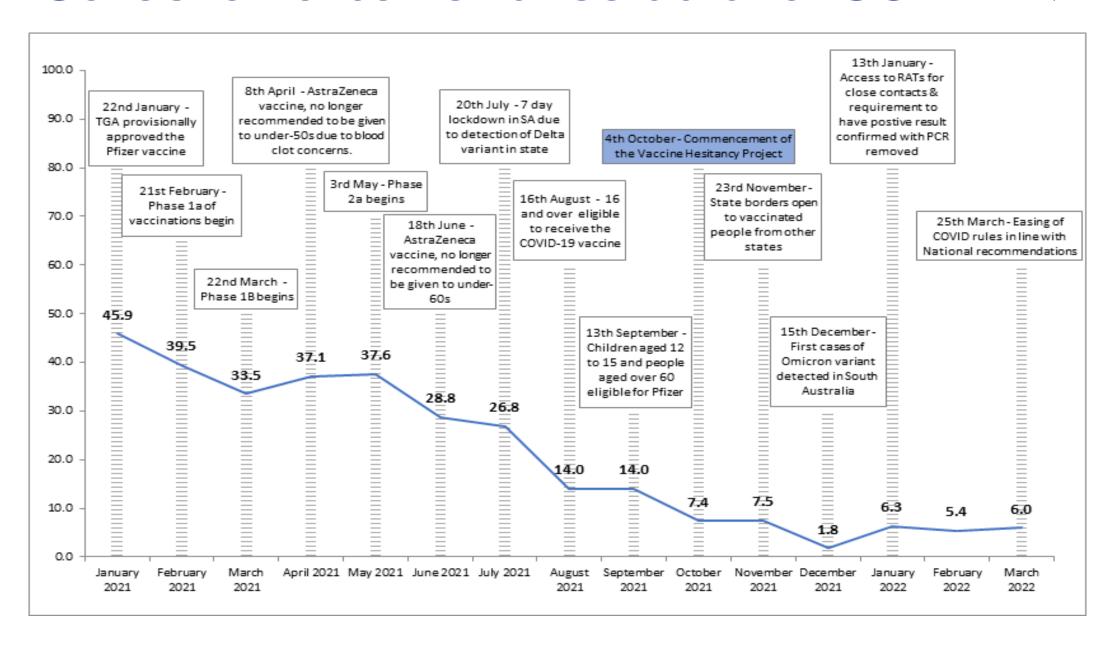








Collection of surveillance data for COVID-19

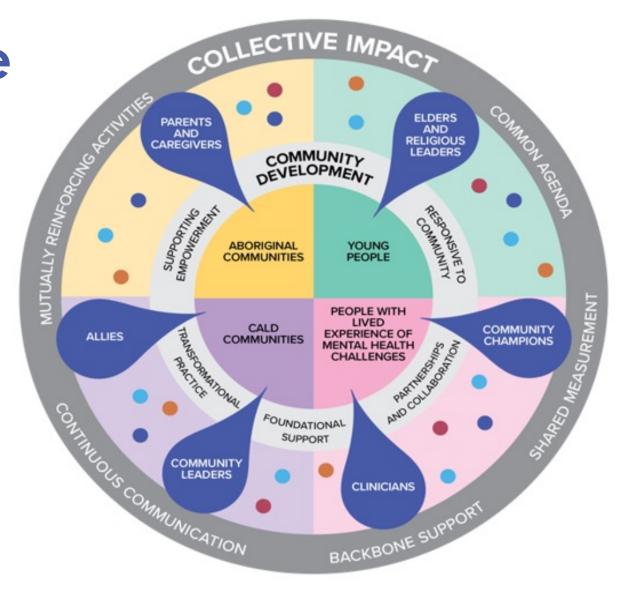




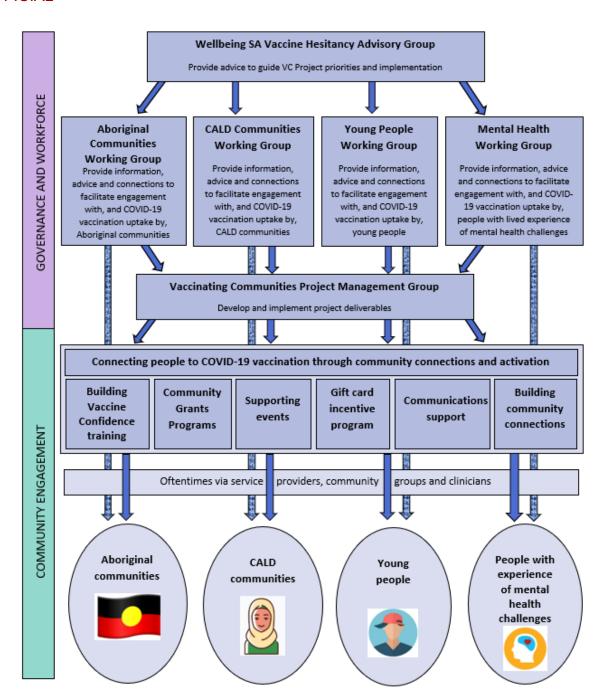
COVID-19 vaccine hesitancy project

Stakeholders engaged

- Government agencies and services (state, local, commonwealth)
- NGOS and other service networks
- Education and training providers
- Research institutes



COVID-19 vaccine hesitancy project





ensure everyone had access to vaccination so they had a choice about whether to be vaccinated or not.

- Using the literature for what works to reduce vaccine hesitancy and the frameworks provided by a community development approach, a strategy was designed.
- This, in reality, was a series of hypotheses on what we thought would work.







• Each element of the strategy was 'built' in what Patton (2010) describes as Developmental Evaluation's "action in the muddled middle" (p 177):

a combination of "top-down change processes centred on best practice models and effective principles" plus using "local knowledge, grassroots innovation, adaptation and emergence".

This enabled a responsiveness to local conditions and needs.

- Patton, M.Q. (2010) Developmental Evaluation: Applying complexity concepts to enhance innovation and use. The Guilford Press, New York.
- Bennett, G. & Jessani, N. (Eds). 2011. The Knowledge Translation Toolkit: Bridging the Know-Do Gap: A Resource for Researchers. New Delhi, India: Sage. Page 24



Wellbeing SA
Supporting your
state of wellbeing



Our Minimum Viable Products:

TRAINING PACKAGE



GRANT SCHEME



GOVERNANCE









- Tested our products with early adopters.
- Actionable metrics: vaccination rates, sourcing better data.
- Evaluative thinking in each governance meeting and at routine intervals within the team, weekly cadence:
 - Quantitative
 - Qualitative
- Lead to tailored responses to different communities.







What can we learn?

- Adapting as conditions changed.
- The speed and lack of detailed preparation before starting the project meant we were driven to learn and adapt as we went using and privileging the available data knowing that we would likely not have it right from the start.
- This had the consequence of tailoring early to the different communities in a way we may not have if we had started off in the traditional way of extensive planning before deployment (the Control and Command approach).







What can we learn?

- Enhance the quality of our work:
 - Explicit approach to valuing and testing early
 - Authentic views of different community cohorts on our products or services in public health
 - Adapting these to better suit in a timely way
- Early explicit experimentation to collect actionable metrics, that is evaluative thinking, can only improve the quality of what we do and enhance the health and wellbeing of the population.







What can we learn?

- For government departments, as elsewhere, there is an imperative to use the available funds in the most efficient and equitable way to meet the complex challenges that face society.
- The model we have presented has demonstrated the value of evaluative thinking, particularly as complexity rises, and learning from models such as the Lean Start-Up to improve our practice and better serve the community.







Thank you

Katherine Pontifex, Manager Evaluation Services

wellbeingsa.sa.gov.au



