The Innovation Ambition Continuum

Journalist: Mr. Coppola, you've produced and directed a lot of movies in your time. By your own admission, some of them are great and some of them not so great. How do you know whether you are making a good movie?

Francis Ford Coppola: Oh, that's easy. You know it's going to be a good movie when everyone on the set is making the same movie.

Some preliminary & scrappy thoughts from Mark Cabaj & Keren Perla

Photo: Valente, Creative Commons Attribution 2.0 Generic (CC BY 2.0). Detail

Context

To make progress on climate change, economic inequities, and racism requires a lot more than blood, sweat, and tears. Absent an ability to **innovate**, to **change systems**, and to **transform**, these and other pressing challenges in today's world remain intractable.

Yet, change-makers are often hampered in their efforts by differences of opinion – even outright confusion – over these three terms: what they mean; how they relate to each other; and the implications they hold for the practice of change-making.

The Three Innovations Ambition Continuum is a mash-up of four of the most popular resources and frameworks currently floating around the field of change-making:

- Getting to Maybe: How the World has Changed. This ground-breaking work by Westley, Zimmerman and Patton (2005) presents a widely accessible introduction to the complex nature of societal challenges. It offers insights into the dynamics of social innovations (rather than technology or business innovations) to address these challenges.
- Three Orders of Change. This table, prepared by Waddell (2005), distinguishes between different types of systems change, ranging from "improving systems," to "changing systems" and "transforming systems."
- The Three Horizons Framework. Originally developed by Bill Sharp (International Futures Forum) and adapted by the McKinsey Consulting Company, this is a strategic foresight tool. It helps people think about and invest in three types of futures, from the more immediate "business-as-usual" future to a distant, emerging and visionary one.
- The Water of Systems Change Framework. Kania, Kramer and Senge (2018) have distilled decades of systems thought into a simple visual that change-makers around the world use to make sense of their work.

The Three Innovation Ambitions Continuum expands on these tools so that change-makers can think more clearly and collectively about their work, how to plan it and how to evaluate it.

It is a work in progress that captures some basic insights that have emerged from scores of social innovation initiatives.

Three Innovation Ambitions

"All models are wrong, but some are useful." George E.P. Box

The Three Innovation Ambitions Continuum distinguishes between three types of innovation:

- Incremental Innovation focuses on improving, rather than changing the performance of existing systems.
- Reform-oriented Innovation aims to change aspects of an existing system that entrench specific societal challenges.
- Transformative Innovations seek to transform systems and/or create new ones based on radically different ideas, in order to do things in unprecedented ways.

Each innovation ambition has a unique, interrelated set of characteristics:

Impact

The extent to which an innovation can make a positive difference on a complex societal challenge.

Feasibility

The extent to which an innovation can be implemented with the existing capabilities in a system and/or requires the development of new ones.

Viability

The extent to which an innovation can be supported by the larger systems of institutions, polices and power structures.

Risk

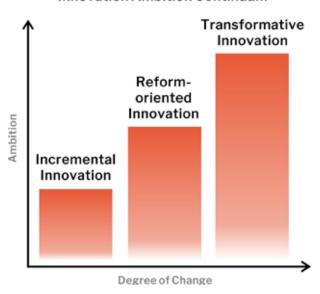
The extent to which an innovation is likely to experience implementation failure and/or generate unintended and/or negative consequences.

Resistance

The extent to which system actors and broader society are likely to embrace or resist an innovation.

The next ten pages describe each of the innovation ambitions in greater detail.

Innovation Ambition Continuum



1: Incremental Innovation

Incremental innovations are novel solutions to complex challenges that can be implemented with little or no disruption to existing systems and do not challenge mainstream worldviews, values and narratives.

All systems have an endless list of innovations that have emerged due to a commitment to "continuous improvement." These might be new or enhanced services and programs, more efficient ways of making decisions, or shifts in regulations and policies.

Incremental innovations are likely – but not guaranteed – to generate relatively quick results. Typically they are quite feasible to implement. The capabilities required to make them work are readily available and/or can be developed without great effort.

Incremental innovations have a "business-as-usual" nature. This means that they are quite viable in current systems and therefore encounter only modest resistance:

- The "new" ideas are easy to communicate and understand across a system because they are meant to improve what already exists.
- The risk of them generating unintended consequences is often quite low.
- They create only minor disturbances in the ways that things currently get done. They do not fundamentally threaten existing power structures and merely require the "tweaking" of policies, relationships and resource flows.

Characteristics

Results tend to be quicker, more predictable, yet lower in impact

Risks of unintended consequences are low

Feasibility of implementation is high

Viability in current systems is high

Resistance from mainstream stakeholders is low

Incremental innovations are attractive to 1) social innovators who want to see tangible change quickly; 2) funders eager to see a "return on their investment"; 3) evaluators who prefer something they can track and measure; and 4) system stewards who are not interested in "rocking the boat." In many cases, the impact of incremental innovations can be significant and widespread.

Clearly, incremental innovations have limitations. Their impact is often modest. After all, they are not designed to alter the deeper, systemic conditions underlying a societal challenge (e.g., structural racism, inequitable employment outcomes, unbridled consumption patterns). For those who are most eager to achieve big change in the status quo (especially persons who are most disadvantaged by it) incremental innovations may be "too little, too late" at best. At worst, they may be a deliberate attempt distract attention from "what is really wrong."

For these reasons, incremental innovations often are the "quick wins" that change-makers require in order to create initial momentum, rather than the "big wins" that lead to sustained and durable change over time.

Example of Incremental Innovation

Innovators in Alberta's energy system are watching the launch of Canada's first geothermal plant in Estevan Saskatchewan closely.* The \$50-million facility has the potential to power 5,000 homes, reduce carbon dioxide emissions by an impressive 27,000 tonnes per year and create a new source of jobs through economic spinoffs. While the project is still considered "high risk," the pilot will go along way to demonstrating how to create an economically feasible plant and the kinds of public infrastructure required to make it work.

The potential impact of a vibrant geothermal industry in-province is significant. It would assist the government to meet its targets for reductions in GHG emissions, diversify its large, traditional oil-and-gas energy sector and help power up to 600,000 single family homes in one of North America's coldest regions.

To realize the potential, government officials and industry entrepreneurs are working together to modernize Alberta's regulatory framework for energy producers. This includes making a variety of important, yet manageable adjustments: clarifying who has jurisdiction over the resource, streamlining the licensing process, and designing administrative practices that are better suited to smaller scale geothermal operations, instead of the mega-projects that currently dominate the sector.

^{*}S. Rieger. (2019, January 21). *Canada's 1st geothermal plant is being built in Sask*. CBC News. https://www.cbc.ca/news/canada/calgary/alberta-geothermal-potential-1.4986104

2: Reform-Oriented Innovation

Reform-oriented innovations aim to change, not tweak, the systems that hold societal challenges in place.

Characteristics

Results are potentially significant, but slower to arrive and less predictable

Feasibility is mixed as new capabilities are required

Viability in the current systems is mixed as those systems need to change

The risk of unintended consequences is medium to high

Resistance to the innovation is broader and deeper

"Programmatic interventions help kids and families beat the odds. Systemic interventions change their odds."

Karen Pittman, CEO, Forum on Youth Investment

Reform-oriented innovations may be narrowly or broadly focused. Narrow efforts seek to address one or a few elements in a system. They might change a significant piece of legislation (e.g., an increase in minimum wage) or introduce a new model of services (e.g., a "housing first" approach to supporting people living on the streets). They may even change powers of decision-making (e.g., a municipal budgeting process in which local residents decide where to invest in neighbourhood improvement).

Reform-oriented innovations may also have a broader focus. They may seek to change interrelated elements a system in order to produce a greater impact. For example, a network of agencies that works with young offenders might introduce a roster of changes in its policy, legislative and planning in order to reduce the number of children unnecessarily involved in the court systems. Similarly, a coalition of public sector, community and private sector leaders may carry out a comprehensive overhaul of the region's workforce development systems in an effort to better prepare employees for future jobs.

Because they are about changing systems, reform-oriented innovations are much more difficult to get off the ground and sustain. This is particularly true for comprehensive reforms dependent on capabilities that currently are not in place, and must be developed from scratch. Moreover, the "machinery" of the broader systems in which the reforms are embedded often require significant restructuring.

Typically, the intended impacts of reform-oriented innovations are greater than those imagined for incremental innovations. That means their full ramifications take time to manifest and often are less predictable. It is difficult to project the whole range of effects – the "splatter" of positives and negatives – that might emerge before the reforms are actually implemented.

Example of Reform-Oriented Innovation

In the early 2000s, approximately one-half of the young people in the New York State's juvenile offender systems were there for relatively minor offences. Soon after their release, nine out of ten offenders were detained again. The costs of supporting each child was approximately \$250,000 USD a year. While there were "pockets" of reform across the state, these efforts were isolated from each other and sometimes poorly aligned.

In 2010, a large and diverse state-wide coalition of leaders came together to develop a new vision for this system and strategies to help them make it a reality. With the assistance of skilled facilitators, they agreed that the focus of reform should concern assisting individual youth to achieve success, rather than punishing them for each mis-step.

The coalition successfully reformed multiple parts of their systems. They met regularly to share common data and align activities. Changes they made to police practices caused juvenile arrests to drop by 25%. They passed Close to Home Legislation so that young people who were detained would be served by a local program and close to natural supports, and not shipped up state to another facility. They successfully lobbied to raise the criminal age of responsibility from 16 to 18.

The cumulative effect of these multiple reforms was measurable. Within several years, the number of youth in custody declined by nearly half without a concurrent increase in the rate of crime. As a result, a number of juvenile detention centres were closed.*

Even when the case for reform-oriented innovations is powerful, system actors and members of the general public may resist them. This resistance is due to (at least) three reasons:

- Risk Aversion the unpredictability of results and the consequences of failure make people cautious.
- Conflict the reforms may threaten the power, resources or legitimacy of certain actors and/or conflict with their deepest values and beliefs.
- Inertia the level of effort and complexity involved in understanding,
 disentangling and re-arranging the
 systems to make the reform work can
 be overwhelming.

Reforming systems can be like "moving a mountain." It is unavoidably messy, grinding and long-term work. Still, the possibility of success and magnitude of the payoff may be so great that reform-oriented innovations represent a "good bet" to people committed to correcting obvious shortcomings in the status quo.

^{*} FSG. (n.d.). Reforming New York's Juvenile Justice System. https://www.fsg.org/projects/collective-impact-approach-delivers-dramatic-results-new-yorks-juvenile-justice-system

3: Transformative Innovation

Transformative innovations represent radical solutions to problematic situations. Such innovations involve substantial changes in the worldviews, values and "narratives" of the dominant cultures.

Characteristics

The possibility of impact is high, but the range of impact is extremely unpredictable

The feasibility of implementation is low

The viability in existing systems is low

The risk of implementation failure and/or unintended consequences is high

Resistance from system stakeholders is high

"Only a crisis — actual or perceived — produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable." Milton Friedman

Despite their magnitude transformative innovations are surprisingly common. Examples are the introduction of the 40-hour work week, the creation of publicly-funded health care, the legalization of samesex marriage, and the emergence of cleaner energy technology and systems.

The prospects for the success of transformative innovation depend on the capacity of social movements (but also disruptive events, like COVID 19 or disasters triggered by climate change) to shift entrenched world -views and push institutions to accept the inevitability of change.

When societal cultures and systems are rigid, the prospects for transformation are very limited. Change-makers spend their time encouraging the public and system actors to consider big ideas and, when and where possible, to test them in the real world. Transformative innovations are so far ahead of mainstream systems that they are difficult to demonstrate convincingly. Nevertheless, these attempts make visionary ideas more tangible. Instead of "crazy ideas," they become solutions-in-waiting, to which society may be willing to turn in the future.

When dominant cultures and systems are already in transition, the potential for transformative innovation increases substantially. More actors are eager to embrace radical alternatives and the enormous, complex and messy work of building the capabilities and systems necessary to support them.

Example of Transformative Innovation

From 1975 to 1979, the federal government of Canada carried out a radical experiment in social reform in Dauphin, Manitoba. "Mincome" provided a guaranteed annual income of roughly \$16,000 to about 2,000 families drawing on traditional social assistance or employment insurance programs.

The results were encouraging. Researchers discovered that families were better able to cover their most basic living expenses, to use fewer health services and to increase their rate of employment and self-employment. Moreover, the graduation rates of young adults in the home increased because they no longer had to join the workforce early to help supplement the family income.

Then, a recession intervened. The number of Dauphin residents eligible for the programs swelled. Policy makers determined that Mincome was too expensive to sustain and scale. Despite the positive findings, the experiment was discontinued.*

Forty years later, a pandemic has made millions of people realize the vulnerability of their jobs and social safety net. The "Mincome" pilot is now a prominent exemplar case study informing mainstream policy debate among policy-makers, business leaders and the electorate in Canada, and in many other countries around the world.

While resistance may be stubborn, social visionaries and their allies are likely to be driven by a much deeper commitment to overcoming a status quo that is no longer acceptable or sustainable.

Yet, even when a transformative innovation has been thoroughly considered, the unpredictability of its results – and the risk of negative consequences – remains high. For example, the inventors of today's social media are by and large surprised to discover how by these systems have contributed to social polarization, electoral rigging, and distrust of science and public institutions. Similarly, committed advocates of electrical vehicles are having to address the environmental hazard presented by millions of depleted batteries, and the dependence of many electrical grids on coal.

Transformative innovations are the "moonshots" of social change. They are ambitious, exploratory and ground-breaking. While their chances of success are low, such initiatives can help to move societies closer towards a "tipping point" of fundamental change.

^{*}D. Cox. (2020, June 24). *Canada's forgotten universal basic income experiment*. BBC. https://www.bbc.com/worklife/article/20200624-canadas-forgotten-universal-basic-income-experiment

In Summary

The Three Innovation Ambitions

	Incremental Innovation	Reform-Oriented Innovation	Transformative Innovation
Type of Change	To improve the performance of existing systems	To change systems to address significant shortcomings	To build entirely new systems based on radically different worldviews, values and narratives
Impact: The extent to which an innovation can make a positive difference on a complex societal challenge.	Predictable, typically modest	Less predictable, typically significant	Even less predictable, possibly game-changing
Feasibility: The extent to which an innovation can be implemented with the existing capabilities in a system and/or requires the development of new ones.	High	Medium	Low
Viability: The extent to which an innovation can be supported by the larger systems of institutions, polices and power structures.	Higher	Mixed	Low
Risk: The extent to which an innovation is likely to experience implementation failure and/ or generate unintended and/or negative consequences.	Lower	Mixed	Higher
Resistance: The extent to which system actors and broader society are likely to embrace or resist an innovation.	Lower	Medium	Higher

Implications

The unique framing of these three ambitions of social innovation leads to (at least) three sets of questions that change-makers should carefully consider as they go about their work.

I. What is your own level of comfort and ambition for innovation?

Social innovators and their allies should "get on the same page" about the degree of change they are seeking by answering three questions:

- 1. What is the level of ambition for change in your organization, constituency or network?
- 2. Are you clear about the nature of impact, feasibility, viability, risk and resistance that those ambitions entail?
- 3. Are you ready for the possibility that the more ambitious your innovation - and the more successful it becomes - the more you will need to change your own organization?

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II. How can you make your innovations as "strategic" as possible?

Change-makers can increase the value and contribution of their innovation efforts by taking stock of what else is going on around them.

- 1. How rigid, disruptive and/or transitioning are the systems and cultural context in which you are operating? Where are the greatest opportunities for change?
- 2. What other social innovations are already underway? How might you enhance, complement and/or avoid duplicate them?
- 3. Where can you and your allies make a unique contribution to a larger constellation of change efforts?

III. Are you able to work on a portfolio of innovations?

Larger organizations and networks of change-makers that can pursue more than one innovation should consider a portfolio of them, with different levels of ambition.

- 1. What innovative ideas (1-3 in number) are you interested in developing? Given early signs of promise, could you help create momentum around them?
- 2. Where do these ideas lie on the continuum of innovation ambition? (See p. 3.)
- 3. To what extent are you willing to pursue less ambitious innovations that, in time, serve to create the foundations for more ambitious ideas?

The answers to these questions can improve the chances that change-makers and their allies are "making the same movie" together.

Resources

Books & Articles

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Websites

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https://medium.com/activate-the-future/the-three-horizons-of-innovation-and-culture-change-d9681b0e0b0f

Enduring Ideas: Three Horizons of Growth

https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/enduring-ideas-the-three-horizons-of-growth







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