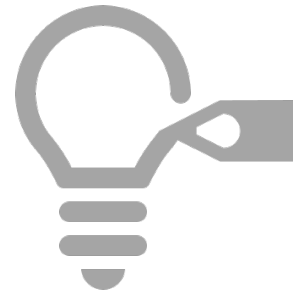




**What is Innovation?**



New Ideas



Creative processes



Improved  
outcomes





Incremental changes could lead to radical innovation





# Drivers of Innovation

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- **Critical Components**

- Prima facie problem
- Sandbox for ideation
- Culture of collaboration
- First principle thinking
- Social Cohesion
- Alliance & Demographic Diversity
- Macro-economic stability & outlook

- **Non-Critical Components**

- Physical infrastructure
- Extrinsic motivation factor
- Applied research
- Entrepreneurial culture
- Digital connectedness
- Policies inducing innovation
- Globalisation & extent of localisation

- **Challenges**

- Formalising open innovation
- Thin markets for urban challenges
- Absence of commercial incentives
- High premium on failure
- Access and barriers to information
- Crowding out
- Non-sequential policies
- Regulatory Capture
- Certainty of leadership & policy
- Dedicated push and channels for funding

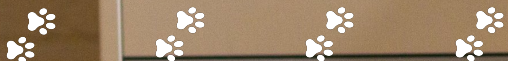






**NEAR-ABSENCE OF  
DEDICATED ECOSYSTEMS TO  
PROMOTE AND SUSTAIN  
INNOVATION**

**INEFFECTIVE  
COLLABORATIVE  
GOVERNANCE REGIME FOR  
SOLVING URBAN  
CHALLENGES**





# Theory of Change

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Problem  
Statement



Stakeholders



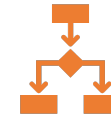
Outreach



Process



Output



Outcome



Impact

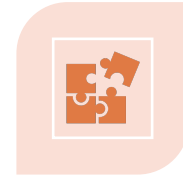




# Long Term Impacts of Innovation in Urban Areas



**KNOWLEDGE  
ECONOMY**



**ENHANCES  
LEGITIMACY OF  
INSTITUTIONS**



**DISTRIBUTED  
RISK AND  
REDUCED  
UNCERTAINTY IN  
TRANSACTIONS**



**INNOVATION IS  
INSTITUTIONALIS  
ED**



**CULTIVATION OF  
APPLICATION  
BASED  
RESEARCH**



**INCREASED  
URBAN  
RESILIENCE**



**INFORMATION  
SYMMETRY  
WITHIN  
STAKEHOLDERS**



**CITIES ACT AS  
LEADERS FOR  
INNOVATION  
GLOBALLY**





# Innovation in India

57<sup>th</sup>  
out of 126

Global Innovation  
Index 2018  
ranking

0.7 %	2.3 %
(India)	(World)

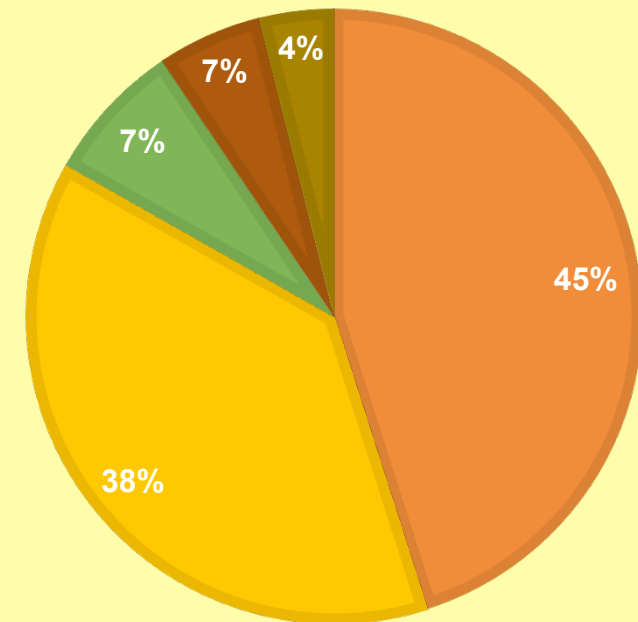
Percentage GDP  
in R&D

12k +	1.4 m
(India)	(World)

Patents Granted

## ANNUAL R&D SPENDING IN INDIA

- Central Government
- Private sector
- State Government
- Public Sector Units
- Institutes of Higher Learning







# Global Trends





A global innovation foundation which backs new ideas to tackle the big challenges of our time



Helps cities to develop pragmatic solutions that are new and sustainable and that integrate economic, social and environmental urban topics



**What Works Cities** | Bloomberg Philanthropies

Help local governments improve residents' lives by using data and evidence effectively to tackle pressing challenges



Designed to be a collaborative hub for businesses, academics, city leaders and entrepreneurs to connect, develop and create smart city solutions



# Quadruple Helix

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Critical actors of feedback loop

- Industry/ Business
- Government/ Institutions
- Academia
- Citizen Organisations/ Civil Society



# Stack Operation for QH

**Problem  
Statement**

How can we increase rate of EV adoption in the city?

**Quadruple  
Helix**

**Industry/ Business**

**Government/  
Institutions**

**Academia**

**Citizen Organisations/  
Civil Society**

**Alliance  
contribution  
and gains**

**EV Vehicle**

**Battery  
Management**

**Charging  
Infrastructure**

**Policy  
enforcement/  
Design**

**Policy  
Regulations**

**Technical  
Optimization**

**New Trends**

**Adoption Push**

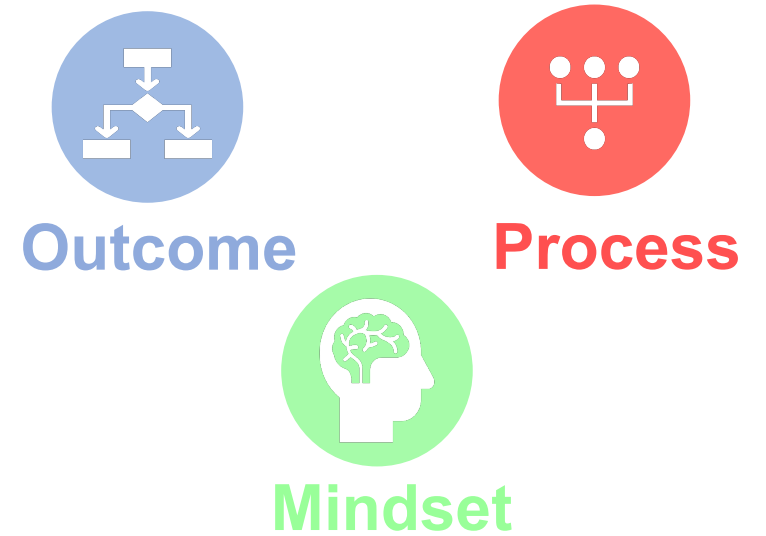
**Behavioural  
Change**

**Feedback**



# Innovation Hubs

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Experiment

Developing and testing  
Making case studies



Sustain

Learning and  
behavioural  
change



Ideate

Opportunities and  
challenges  
Generating ideas



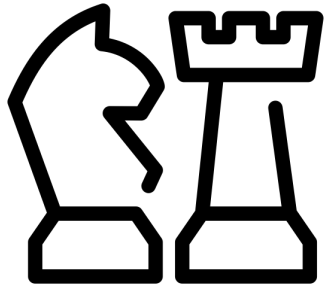
Scale

Growing and Spreading  
Policy Push



Innovation Hubs





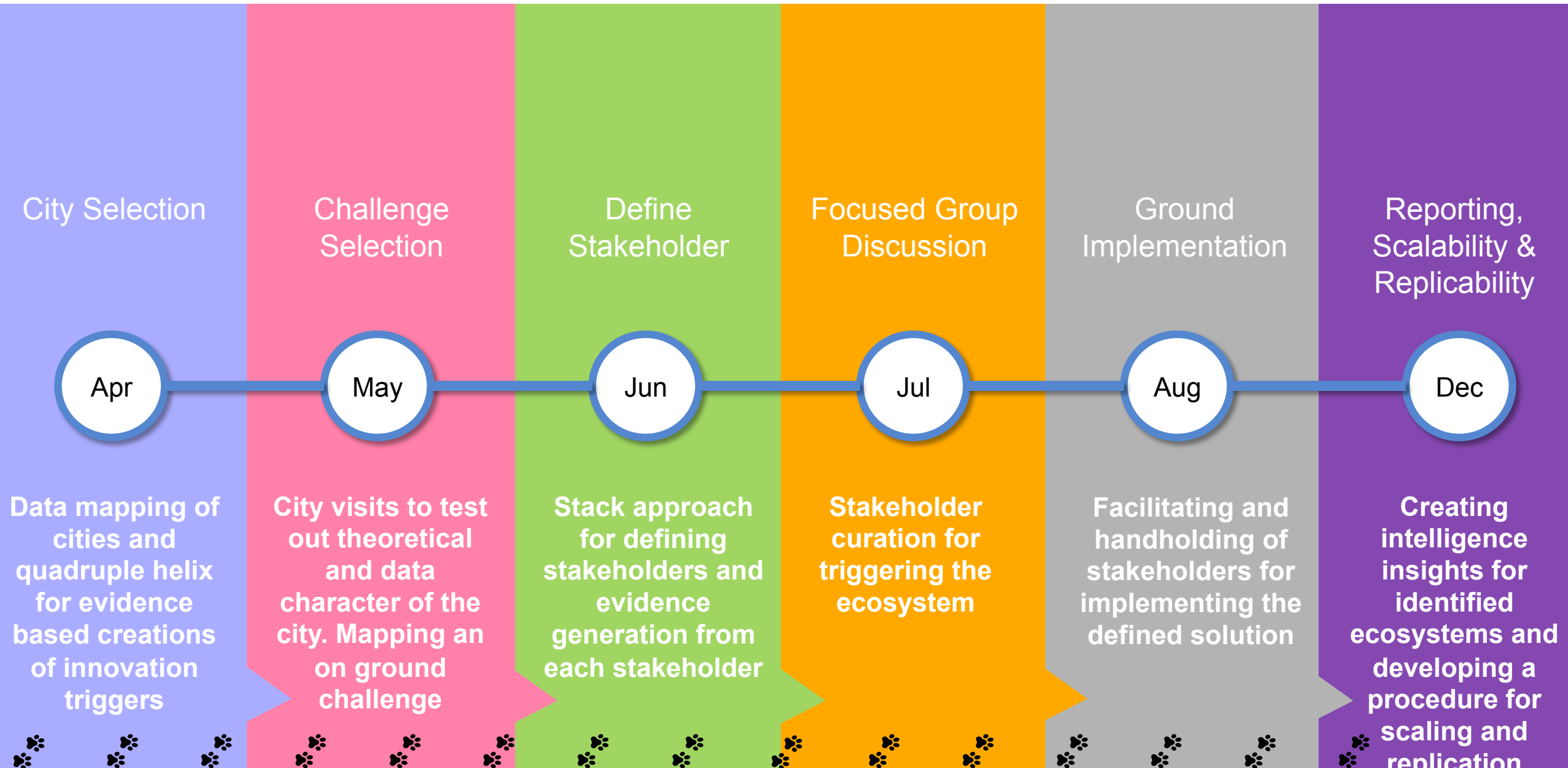
## Key Institutional Design Elements

- Functional metamorphosis of ecosystem
- Norms & Rules of engagement
- Incentives/Power dynamics
- Behavioural motivation for contribution
- Risk pooling of innovation
- Reduced leakage of intellectual property among partners





# Steps Ahead





" When you are trying to design and implement a new way of working, you really need a feedback loop...and not just what senior management thinks is the right thing to do. This helps to foster a culture of innovation. "

- Eddie Copland, Director of Government Innovation,  
Nesta

**Anindita | Kuhan | Punit | Sukhbeer**  
**Innovation Hubs**  
**India Smart Cities Fellowship**



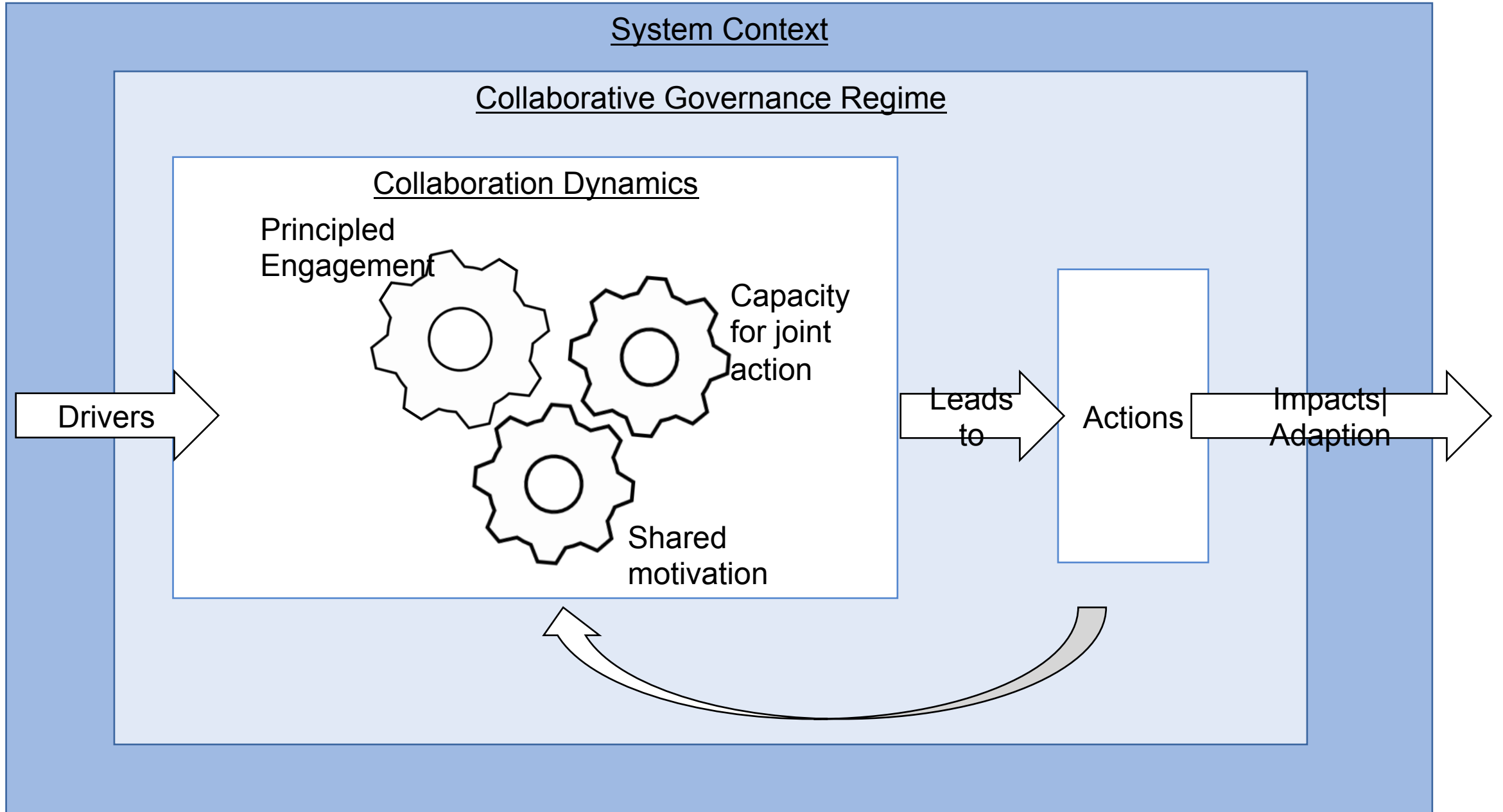
The End

# Understanding Innovation

Element	Strategic Focus	Strategic question	Considerations
Innovation is an outcome	Ends	What do you want to happen?	<ul style="list-style-type: none"><li>- Product Innovation</li><li>- Process Innovation</li><li>- Marketing Innovation</li><li>- Business Model Innovation</li><li>- Supply Chain Innovation</li><li>- Organisational Innovation</li></ul>
Innovation is a process	Ways and Means	How will you make it happen?	<ul style="list-style-type: none"><li>- Innovation Process</li><li>- Product Development Process</li></ul>
Innovation is a mindset	State	What should be instilled and ingrained to prepare for the what and the how?	<ul style="list-style-type: none"><li>- Individual mindset</li><li>- Organization culture</li></ul>



# The Integrative Framework for Collaborative Governance



# THEORY OF CHANGE

## PROBLEM STATEMENT

- Lack of networking among knowledge actors for innovation
- Inactive ecosystem for solving urban challenges
- Lack of systems thinking & design thinking to address urban public goods & services
- Conflict & turf war within actors creating hindrances in innovat<sup>n</sup>
- kneejerk/piecemeal approach

## KEY AUDIENCE

- Urban Admin. (URB)
- Pvt. & Industry
- NGOs
- Citizenry
- Central & State Gov.

As per Quad. Helix, above are the stakeholders

## ENTRY POINT TO REACH AUDIENCE

- Challenge mechanism
- Local networks
- Organisat<sup>n</sup> Support
- Social media
- Town Hall meetings and FGDs

Identified as optimal ways of reaching the audience  
availability of facilitation experts & physical infra.

## STEPS NEEDED TO BRING ABOUT CHANGE

- Problem + Stakeholder identification
- Utilising stake approach to analyse problem
- Facilitate interaction between stakeholders on ideating towards problem solving
- Piloting the ideated process
- Feedback loop process
- Identifying success factors & pain points for scaling

Stakeholders will interact to ideate for urban problems  
Financial risk pooling  
Power dynamics & incentives

## MEASURABLE EFFECT OF WORK

- Agenda setting of problem by stakeholders  
- GH Resolution, REGISTRY
- Taxonomy creation & indexing  
- STD. DOCUMENT
- Outcomes & processes defined  
- MOU/ CONTRACT
- Stakeholder Information Exchange  
- GROUNDING OF PILOT
- Recommendations  
- LESSONS LEARNED DOC

Capacity for documenting processes  
Digital Infra availa-  
-bility  
Digital awareness/literacy

## WIDER BENEFITS

- Platform to prioritise & address urban challenges
- Standardisation of datasets & template solutions
- Awareness building & cross-functional capacity building
- Scaling & replicability
- Strengthening of R&D investment

Political & Economic stability at regional level.

## LONG TERM CHANGE - GOAL

- Knowledge Economy
- Innovation is institutionalised
- Cultivation of application based research
- Increased city resilience.
- Information symmetry among stakeholders
- Cities act as torch bearers.

Macro-economic stability