Innovation the Great Opportunity

CQI Webinar 18/09/18

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Presentation Plan

- Definitions: What is Human Design Thinking

- The Competency Framework Applied to Innovation
  - Context
  - Governance
  - Assurance
  - Improvement
  - Leadership

- Leveraging team capability
  - Interpersonal Skills

- The challenge

Definitions

Innovation is the implementation of a new or significantly improved product, service or process that creates value for business, government or society.

Creativity is the act of turning new and imaginative ideas into reality.

It's
- perceiving the world in new ways
- finding hidden patterns
- connecting between seemingly unrelated phenomena
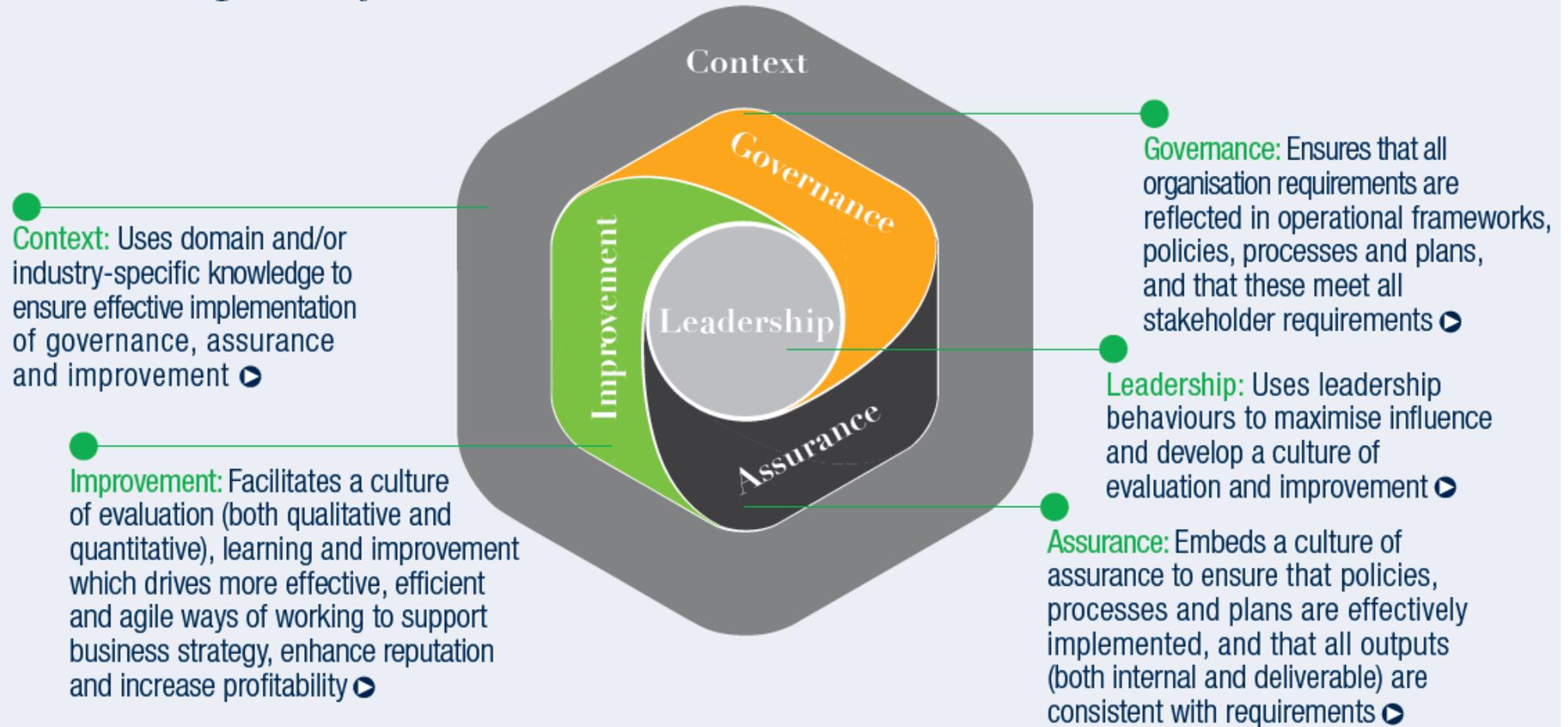- generating solutions

What is Human Design Thinking?

- customer focussed **empathetic** strategic **observation**
- a mind-set for **curiosity and inquiry**
- **system level thinking**
- uses **visualisation** to understand, exploration & experiment
- **deep understanding** of customers: Human Centred
  - context,
  - identity,
  - insights

- Key words:
Human-centric, creative, connected, speed and agility, adaptable and flexible, inspired, disruptive, passionate, purposeful, fun and playful, committed, high energy, risk taking.

The CQI Competency Framework

The Competency Framework

Context

Governance

Improvement

Leadership

Assurance

Context: Uses domain and/or industry-specific knowledge to ensure effective implementation of governance, assurance and improvement ◐

Improvement: Facilitates a culture of evaluation (both qualitative and quantitative), learning and improvement which drives more effective, efficient and agile ways of working to support business strategy, enhance reputation and increase profitability ◐

Governance: Ensures that all organisation requirements are reflected in operational frameworks, policies, processes and plans, and that these meet all stakeholder requirements ◐

Leadership: Uses leadership behaviours to maximise influence and develop a culture of evaluation and improvement ◐

Assurance: Embeds a culture of assurance to ensure that policies, processes and plans are effectively implemented, and that all outputs (both internal and deliverable) are consistent with requirements ◐

Context

|	
Product, service, process expertise	Has detailed knowledge of customers' specific requirements and expectations, ensuring that the appropriate plans, specifications, reviews and controls are in place. Establishes effective lines of communication with the customer as required. Has knowledge of the market, competition and potential peers to establish quality differentiators and benchmarking opportunities with respect to the products and services of the organisation. Has experience and understanding of specific assurance and improvement tools and techniques relevant to the product/service delivery, and how to deploy these tools and techniques successfully.
Compliance management	Uses appropriate methods to establish legal, regulatory, societal and standards-related compliance requirements. Ensures that these are coherent with the organisation's policies and processes, and are effectively linked to the business strategy. Ensures requirements for governance, according to stakeholders' needs, are effectively communicated throughout the organisation.

Question

Is it enough to purely understand the final customer needs & expectations? Which other areas of expertise are becoming essential beyond current & past customer enquiry processes such as market research, consumer insight? Please choose from the following:

1. Political Science
2. Social Science
3. Psychology
4. Early Adopters
5. Adjacent Technologies

Customer Micro Spheres of Interest

- **Micro Personal**
- **Interests Groups**
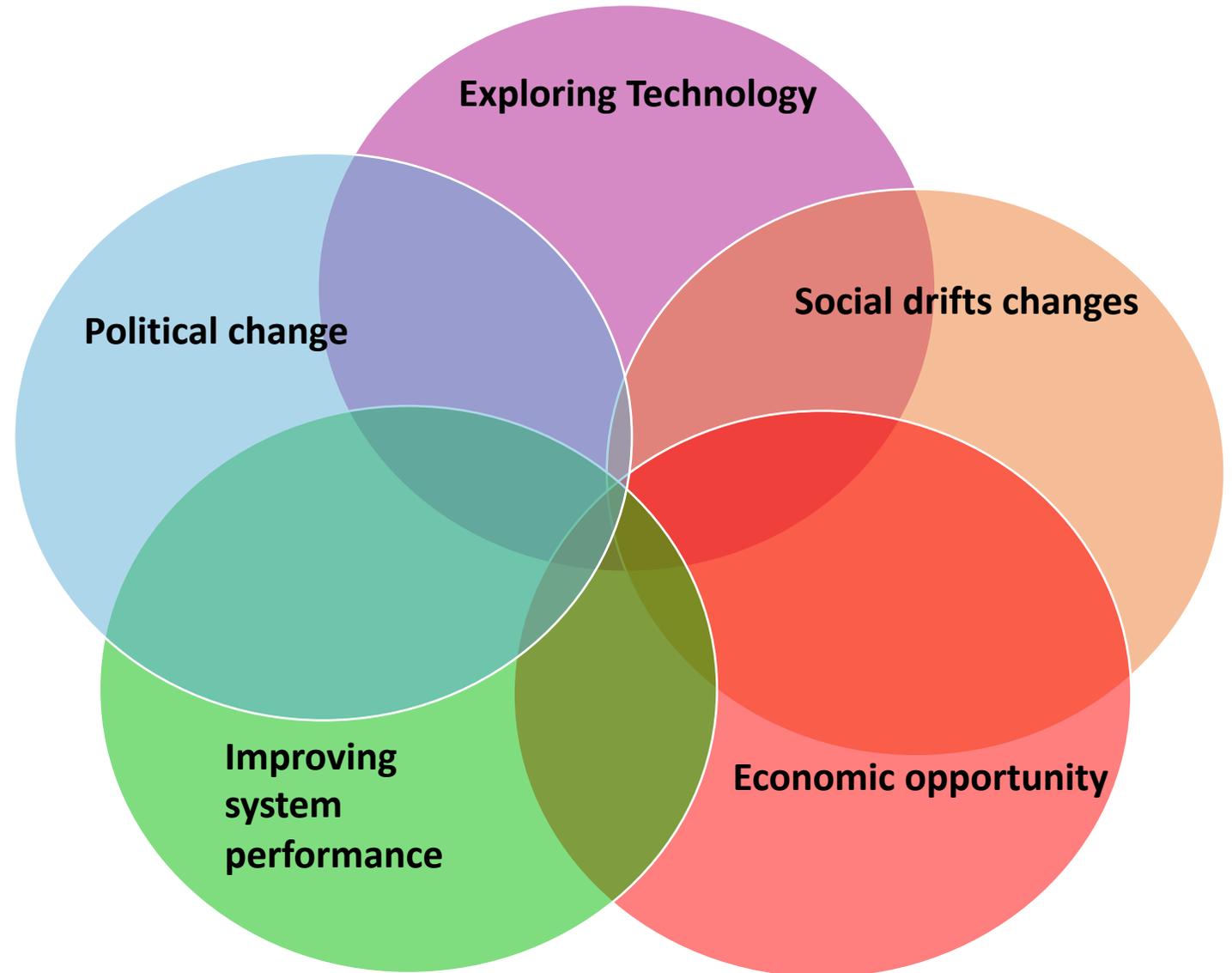- **Encompass Diversity**
- **Unbiased understanding**
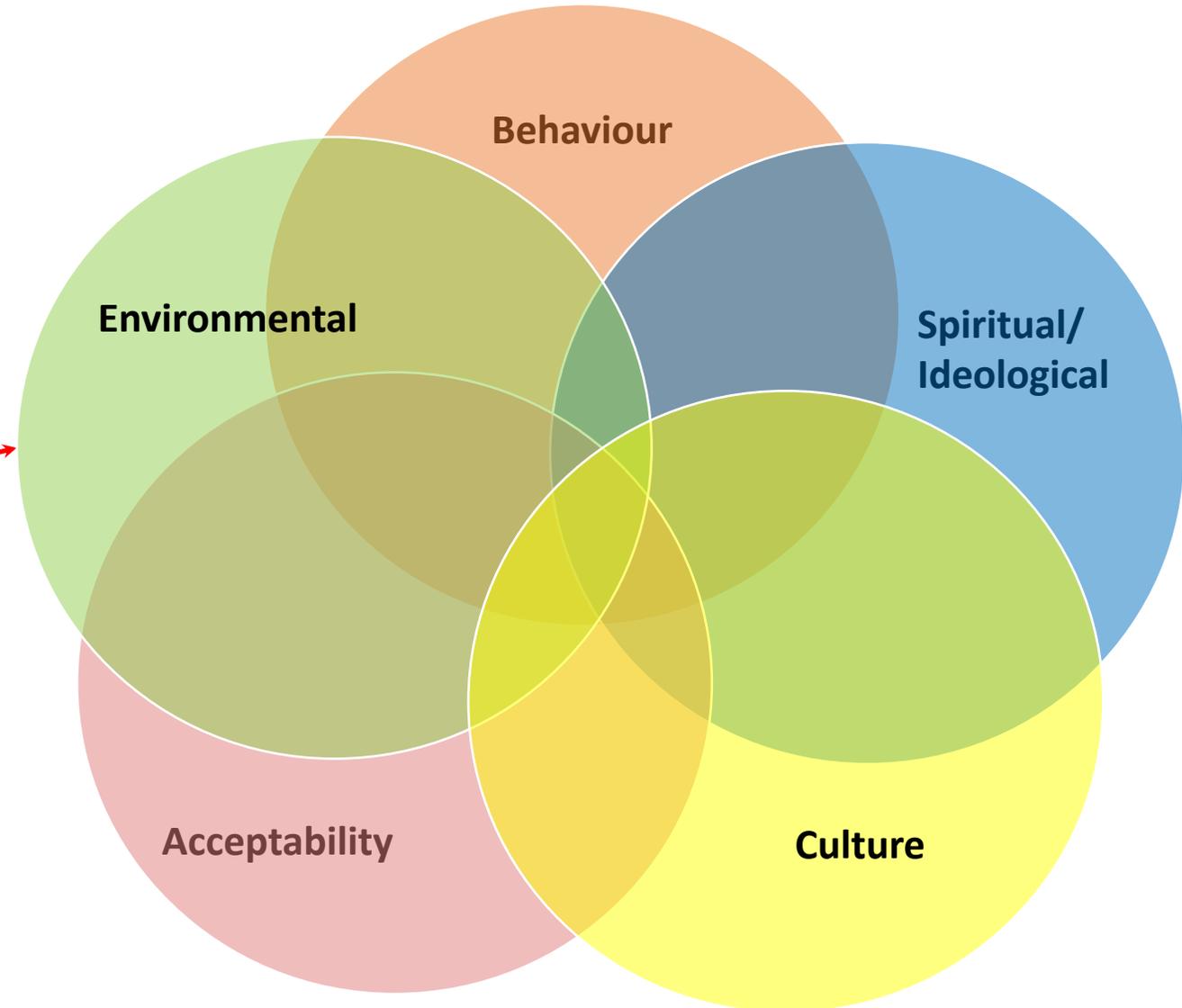
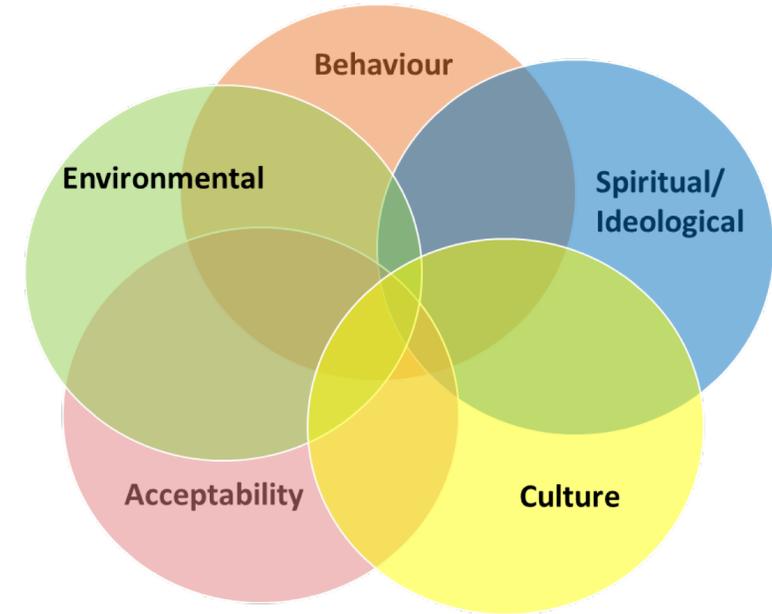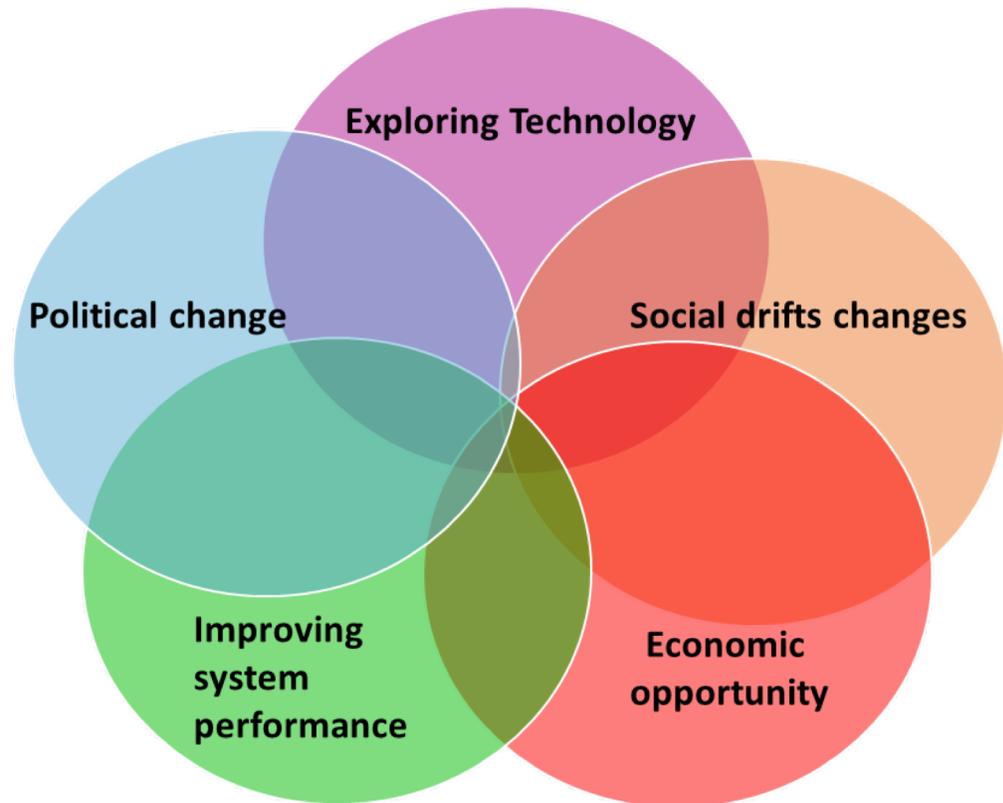# Context of Customer Needs: Macro Spheres of Interest

Macro Level of interests

Critical behaviour:

- **Empathetic observation**
- **Develop customer focussed narrative / story**
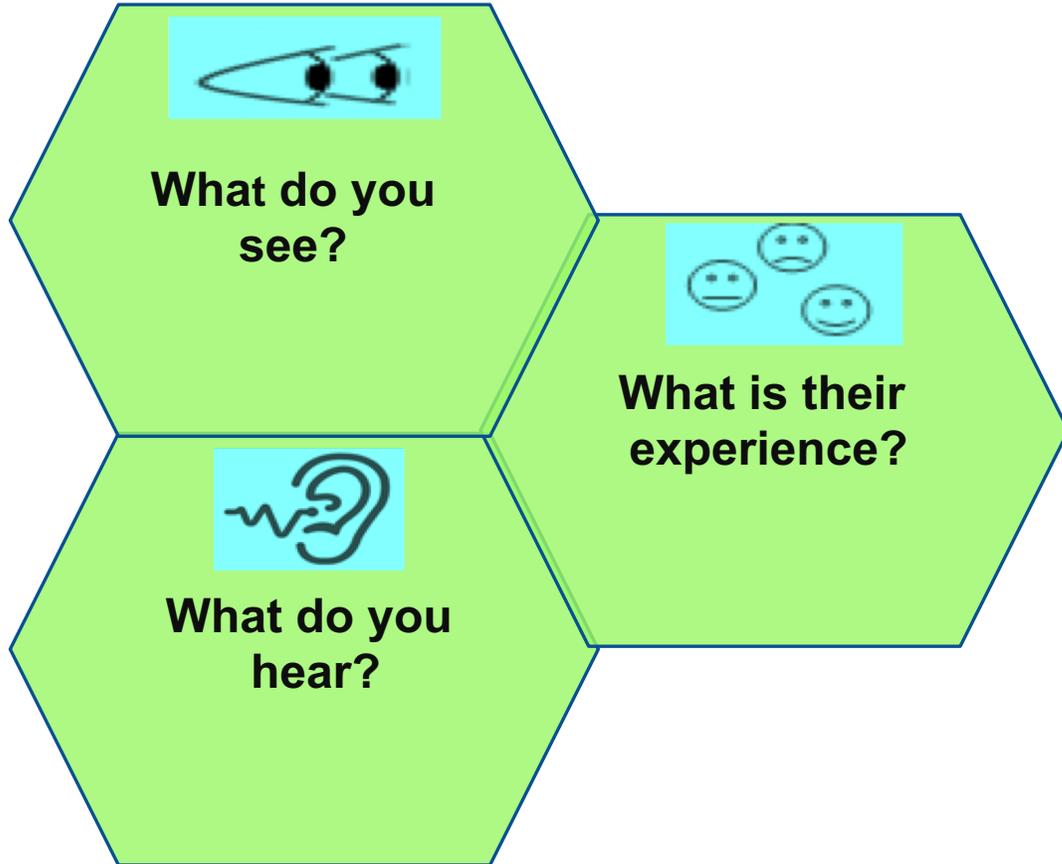- **Embrace economic opportunity, necessity**

Combining Spheres of Interest

Converge Individual attributes with the societal attributes.
Maximise the potential opportunity combinations

Learn From Customer Experience

Human Centred Story drives Human Centred Design

What do you see?

What do you hear?

What is their experience?

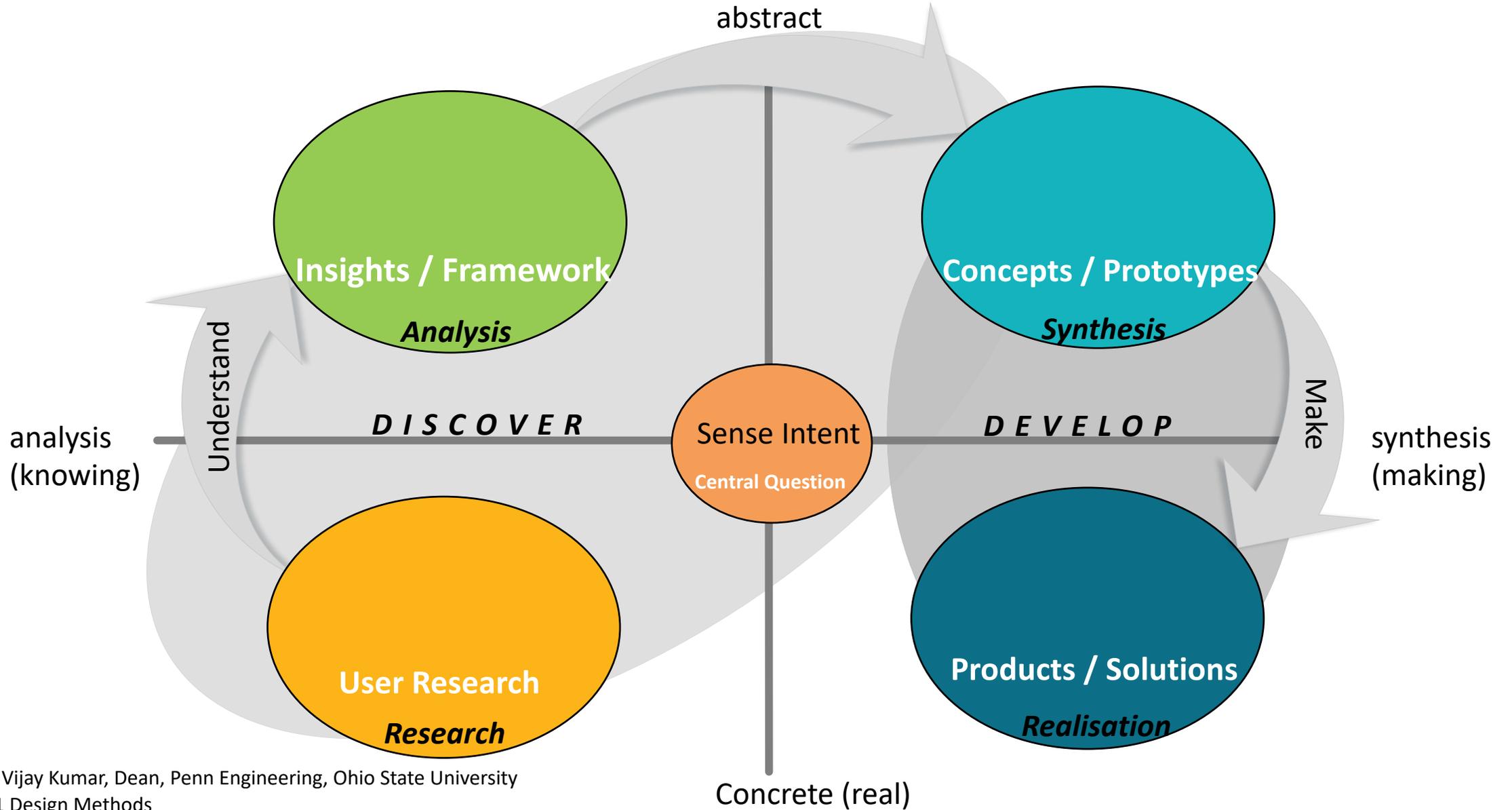**What is the Potential opportunity?**

Governance

External focus	Uses appropriate methods to establish customer/stakeholder needs/expectations and views. Ensures that the organisation's policies, processes and plans reflects these needs. Evaluates risks, problems and potential solutions from a customer/stakeholder point of view.
Internal focus	Develops process management capability (ownership, definition, implementation and improvement) across the organisation to deliver consistent results. Ensures the organisation's policies, processes and plans are effective in meeting stakeholder expectations, removing variation, minimising operational risk and maximising efficiency. Supports the senior management team in ensuring that the operational approach and system of business management are continually assessed and improved.

Review Know – Make Framework

abstract

Insights / Framework
Analysis

Concepts / Prototypes
Synthesis

Understand

D I S C O V E R

analysis (knowing)

Sense Intent
Central Question

D E V E L O P

Make

synthesis (making)

User Research
Research

Products / Solutions
Realisation

Concrete (real)

Recognise Prof. Vijay Kumar, Dean, Penn Engineering, Ohio State University
Publication: 101 Design Methods

Managing Innovation

Understanding of action alternatives

Low ambiguity

High ambiguity

Understanding of issues

Low ambiguity

Directional innovation measurement

- **Input, output and process measures:** specific and unidirectional
→ *Largely top-down attentional engagement*

Mixed innovation measurement

- **Input and process measures:** multiple and ambiguous
→ *Bottom-up attentional engagement regarding action alternatives*

- **Output measures:** specific and unidirectional
→*Top-down attentional engagement regarding issues*

High ambiguity

Mixed innovation measurement

- **Input and process measures:** specific and unidirectional
→ *Top-down attentional engagement regarding action alternatives*

- **Output measures:** multiple and ambiguous
→ *Bottom-up attentional engagement regarding issues*

Conversational innovation measurement

- **Input, output and process measures:** multiple and ambiguous
→ *Largely bottom-up attentional engagement*

Managing When Ambiguity is Low

When ambiguity is low focus is generally more important
Attributes:
- Understanding and clarity of the problem and potential actions
- Managers have a clear understanding of their goals and alignment to opportunity

Challenges:
- Can jump to solutions – organisational pressure
- Miss system integration opportunities

Actions:
Use integration tools, simple focussed problem solving tools, use of designed experiments, organised design processes
Clear understanding of resources time and finance

Managing When Ambiguity is High

When ambiguity is high managers need to prioritise flexibility over focused processes

Attributes:

- impossible to know which answers and action alternative actions are optimal
- multiple issues and actions alternative actions must be considered simultaneously

Challenges to Points of View:

- Short vs long term
- Private vs organisational level
- Tangible vs intangible benefits

Action:

Develop a Deep Understanding / Deep Learning about critical customer needs & value propositions

Metrics: Potentially complex with measurements generated from cross organisational outcomes

Simple metric like resource needs, costs, timing whilst important are often too simplistic

Assurance

|	
Business (internal) assurance	Ensures the flow-down of customer and stakeholder requirements across the organisation. Uses understanding of requirements management, process implementation and tailoring principles, risk management and performance measurement to ensure effective planning and internal controls are in place. Uses appropriate methods to ensure an effective balance of self assurance vs independent assurance. Ensures management intent, as reflected in its policies, processes and plans, is effectively implemented. Identifies risks, failures and non-conformances associated with customer and stakeholder requirements, and ensures effective action is taken to resolve any issues and identify the root causes.
Supply chain assurance	Ensures appropriate methods are used to select suppliers and to ensure flow-down of customer and stakeholder requirements to the organisation's supply chain. Uses appropriate methods to assess supplier performance and to identify risk, failure and non-conformance. Supports the organisation in evaluating any problems and risks, and in the development of appropriate mitigation and solutions. Ensures solutions are managed to closure.

Confirm Business / Resource Focus

Business (Competitors)

Customer

Technology

Politics

Social Change

Region of opportunity
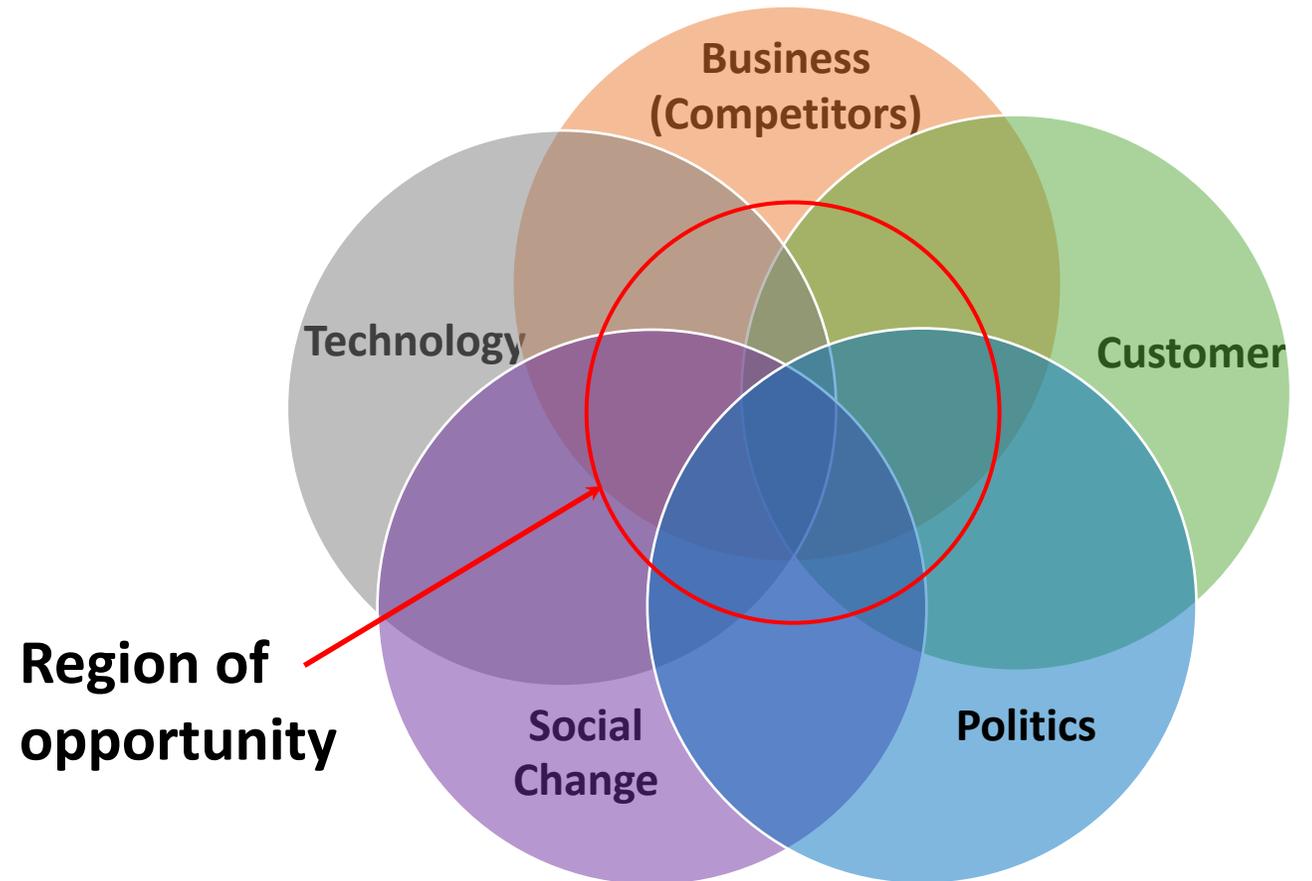
Innovation and Integration

Innovation

Use the Know-Make Framework to establish new solutions based on knowing the context people and opportunity
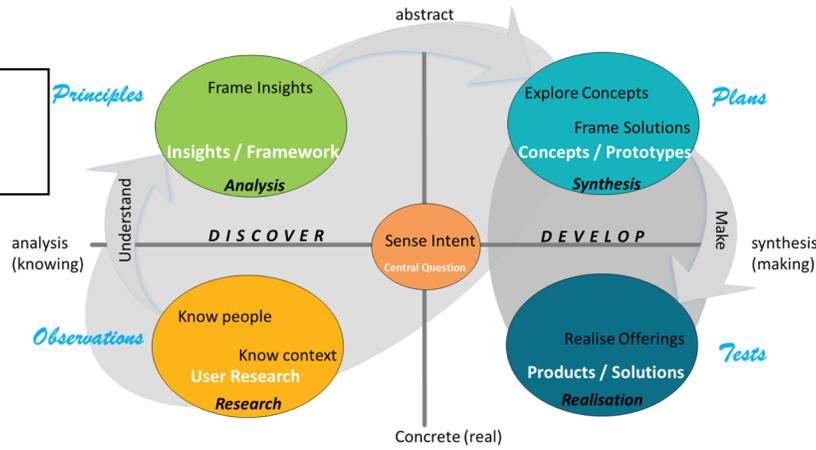
Innovative Business Solution

Thorough quantified innovative solution, business plan, introduction plan.

Consider the opportunity in the wider context of integrating any solution by considering the wider implications of any opportunity

Integration

Understand, characterise, verify all the interactions at all levels of a chosen final solution

Integrated Solution

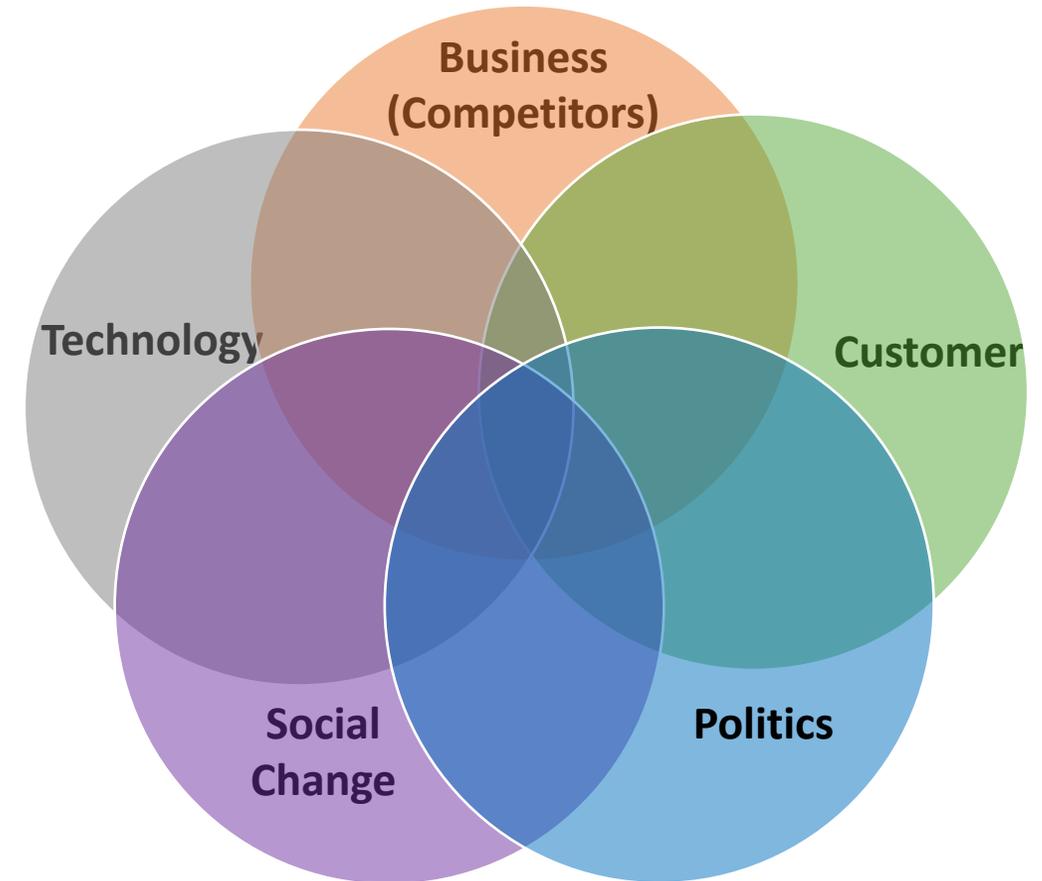Effective Integrated Customer Introduction

Improvement

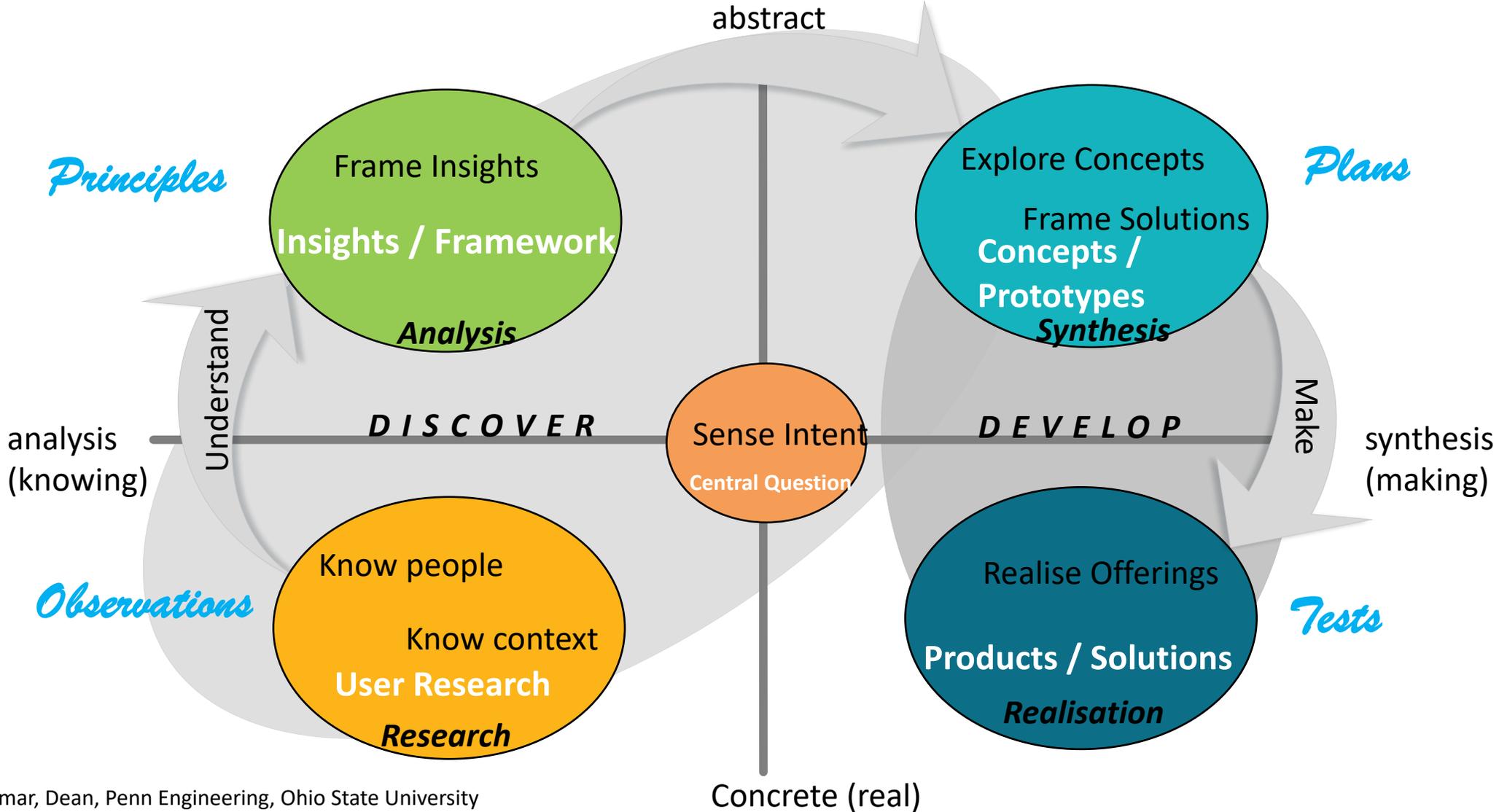| Gathering insight	Uses appropriate methods to understand all stakeholder needs and to identify any changes to the organisation's context including changes to the market, customer requirements and other factors impacting on the organisation. Uses benchmarking and other appropriate tools and techniques to evaluate performance and improvement priorities.
Evaluating measures/ results	Facilitates the development and use of appropriate measures of operational performance and product/service quality across the organisation to ensure fact-based decision-making. Helps establish priorities for change.
Implementing change	Evaluates the nature and magnitude of change required (incremental, step change, transformational) and how to achieve the required changes through the development of the organisation's people, processes, tools, technologies and/or infrastructure. Identifies any issues associated with the organisation's culture with respect to achieving and sustaining the desired levels of operational performance and product/service quality.

Improve Initial Solutions: Initiate Review for Further Opportunities

Identify further opportunity:

- Re-examine data/understanding
- Review current solution performance
- Review Competitors
- Create new value propositions
- Develop new customer solutions
- Reduce risks

Review Know – Make Framework

abstract

Principles

Frame Insights

Insights / Framework

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Explore Concepts

Frame Solutions

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analysis (knowing)

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Sense Intent

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synthesis (making)

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Know people

Know context

User Research

Research

Realise Offerings

Products / Solutions

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Tests

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Leadership

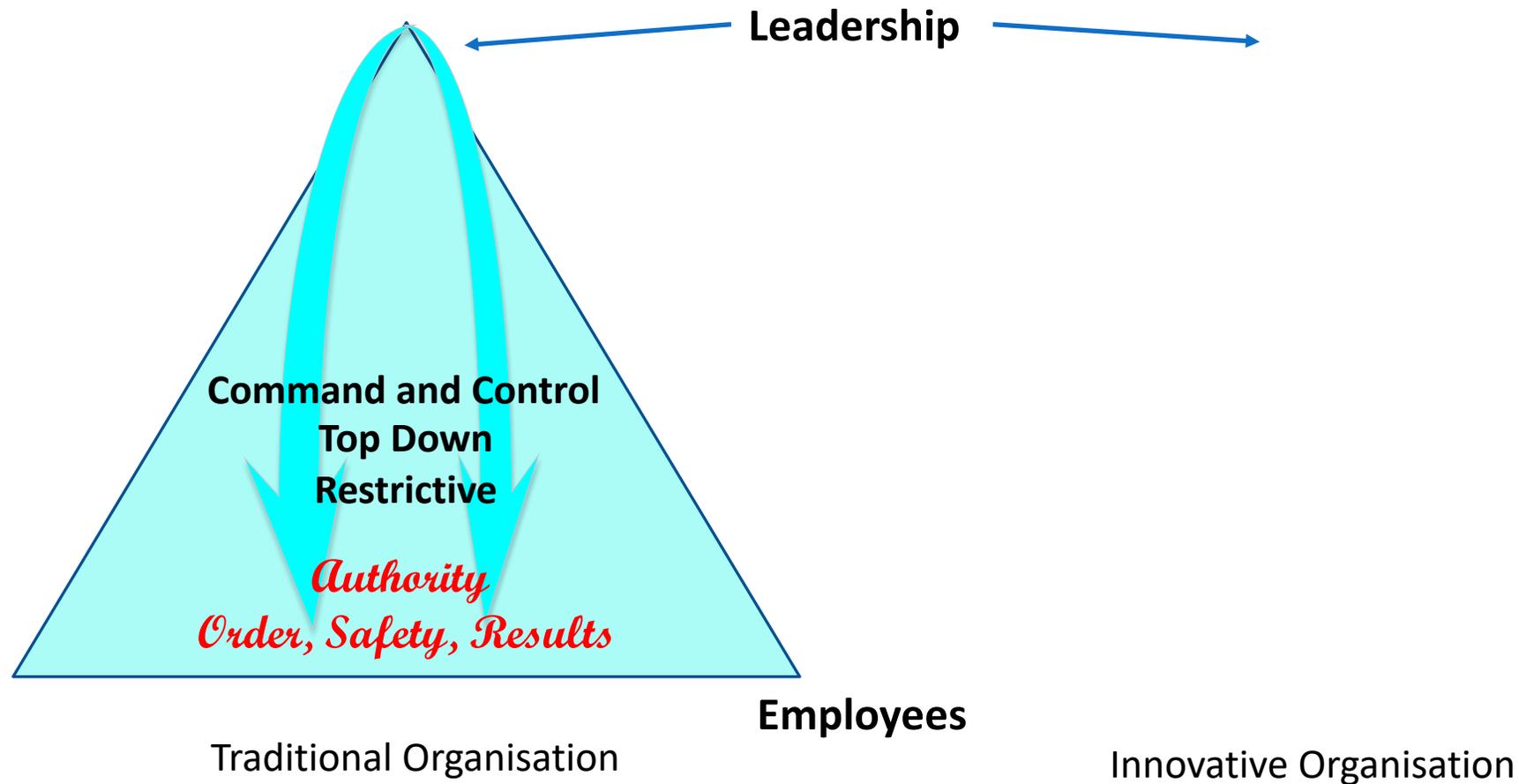|	
The quality advocate	Articulates a clear vision for quality as a strategic imperative that supports the organisation's broader aims and objectives. Develops and implements strategies to maximise the contribution of the quality profession within the organisation.
The stakeholder advocate	Acts as the conscience in the organisation, making interventions whenever necessary to ensure customer and stakeholder requirements are addressed.
The systems thinker	Looks across business functions and hierarchies to promote a holistic view of the organisation and its requirements.
The fact-based thinker	Promotes a culture of decision-making based on factual evidence and the measurement of performance.
The quality planner	Advocates the principle of planning for quality to prevent potential problems with product and service quality.
The quality coach	Develops knowledge of quality principles and capability in quality tools, techniques and approaches throughout the organisation.
The quality motivator	Motivates and empowers others to take accountability for achieving and improving standards of performance.
The quality collaborator	Works with all internal and external stakeholders to resolve issues associated with organisation performance, and delivery of quality products/services.

Question?

Corporate Culture in Support of Innovation:

Which of these business attributes do you think is the most important for a successful innovative business?

- Results
- Enjoyment
- Learning
- Authority
- Purpose

The Tale of Two Organisational Triangles

Leadership

Command and Control
Top Down
Restrictive

Authority
Order, Safety, Results

Employees

Traditional Organisation

Innovative Organisation

Potential conflict between strategy and culture

Integrated Culture to Sustain Strategy

Flexibility

LEARNING   PURPOSE

HOW PEOPLE RESPOND TO CHANGE

Independence   ENJOYMENT   CARING   **Interdependence**

HOW PEOPLE INTERACT

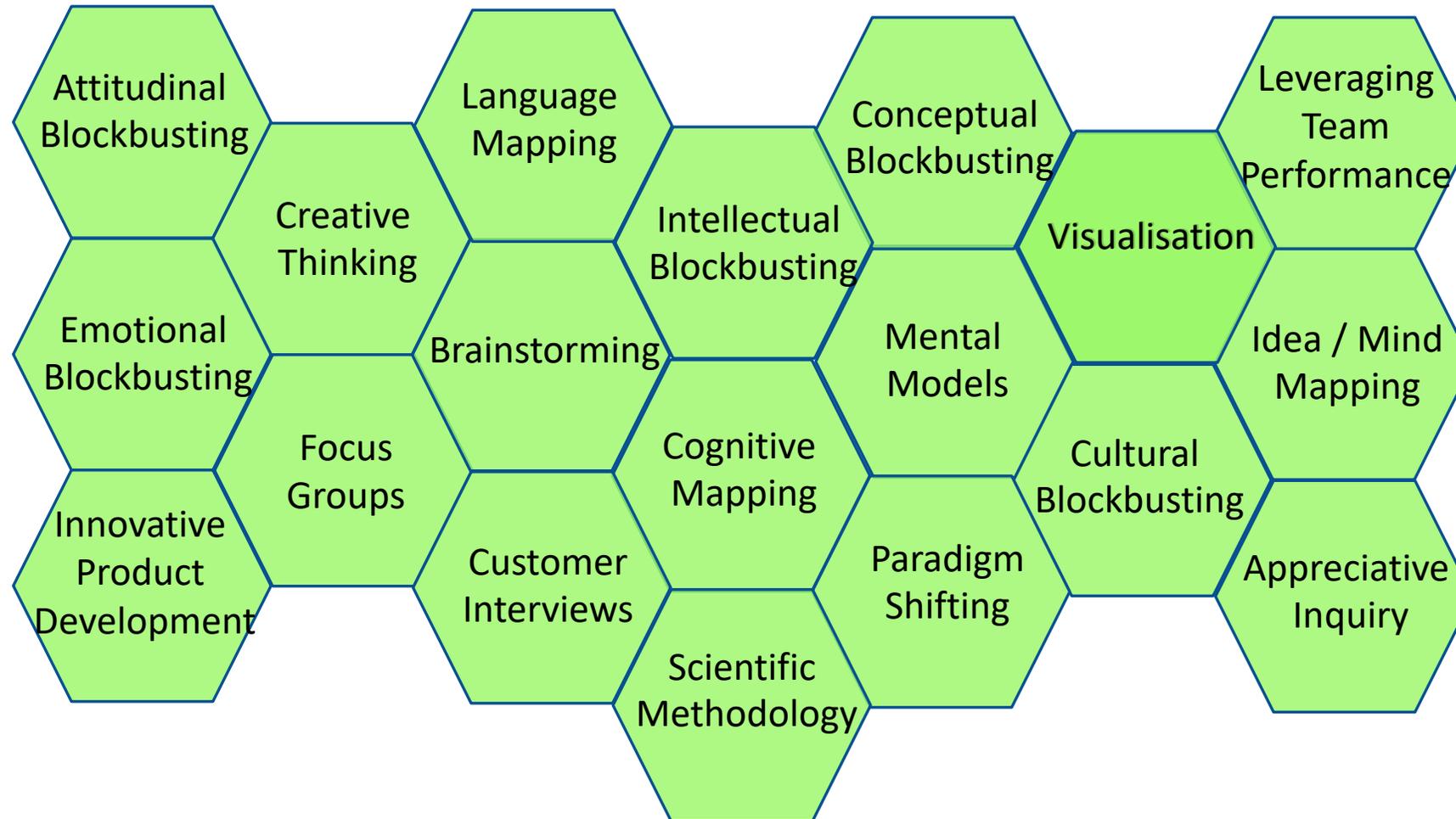RESULTS   ORDER

AUTHORITY   SAFETY

Stability
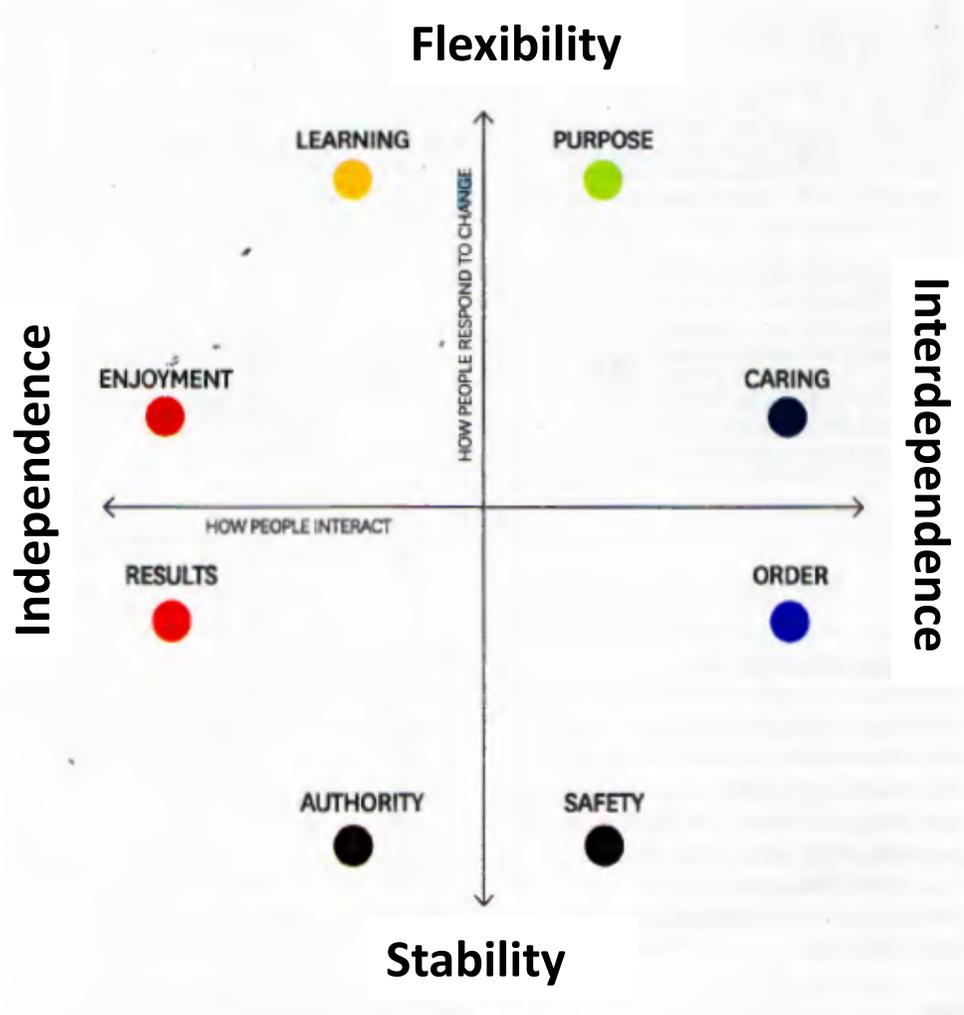
From the Harvard Business Review - Jan / Feb 2018

- Effective change in corporate aspirations requires cultural review change & alignment
- Culture needs to address all aspects of the illustrated landscape.
- When strong culture is aligned to strategy and leadership it delivers positive organisational outcomes.
- Results, authority, safety, order are strong.
- Can enjoyment, learning, purpose and caring be enhanced to create greater flexibility
- Drive initiatives in place such as

  Employee Engagement/Empowerment
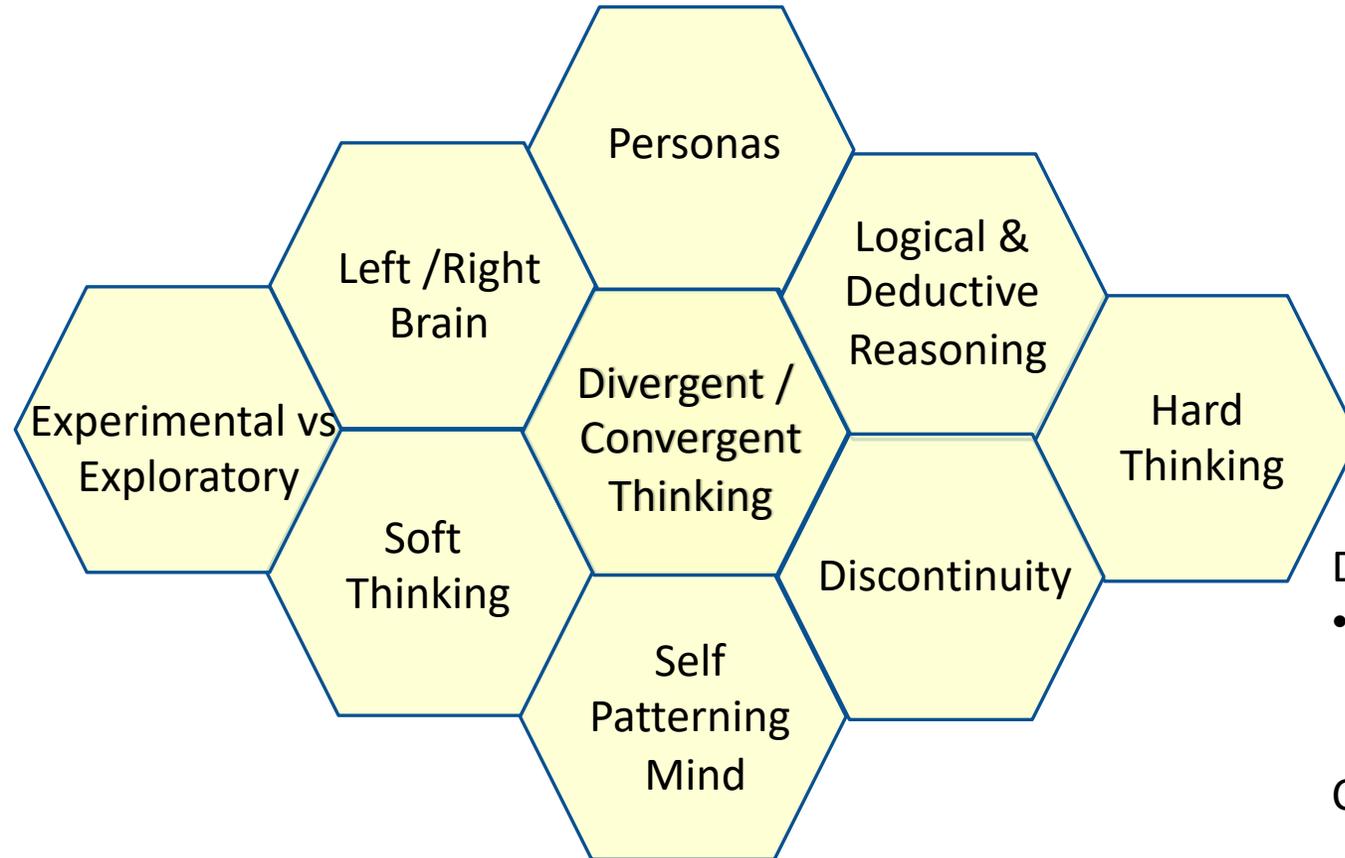
Interpersonal Skills

Innovation Interpersonal Skills Landscape

Attitudinal Blockbusting

Creative Thinking

Language Mapping

Intellectual Blockbusting

Conceptual Blockbusting

Visualisation

Leveraging Team Performance

Emotional Blockbusting

Brainstorming

Mental Models

Idea / Mind Mapping

Focus Groups

Cognitive Mapping

Cultural Blockbusting

Innovative Product Development

Customer Interviews

Paradigm Shifting

Appreciative Inquiry

Scientific Methodology

Uses Mindfulness & meditation processes to sharpen:
- Visual awareness
- Projecting imagination forward
- Associating self awareness with the system
- Reframing opportunities, concepts, solutions
- Use imagination to challenge current practice.
- Dystopia

Thinking Styles

Personas

Left /Right Brain

Logical & Deductive Reasoning

Experimental vs Exploratory

Divergent / Convergent Thinking

Hard Thinking

Soft Thinking
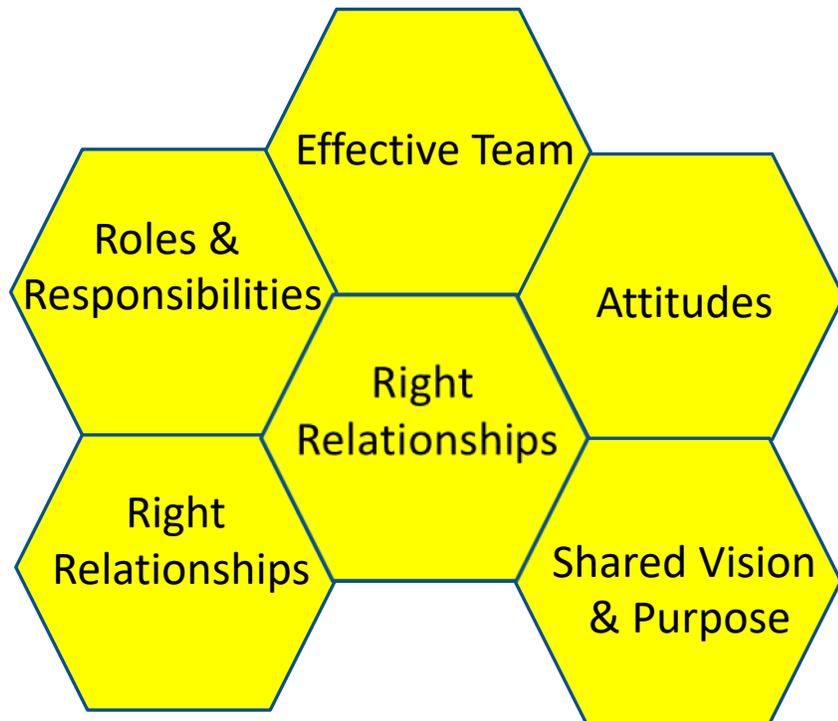
Discontinuity

Self Patterning Mind

Divergent thinking:
- encourages many solutions,
  - frames of reference,
  - morphing and synergising ideas

Convergent thinking:
- converging on a specific interest, idea or solution

Team Process

Right Relationships:
- Self awareness and appreciation of self
- Awareness and appreciation of others
- Appreciation of similarities / differences
- Make contact
- Meaningful communication
- Respect for self and others
- Trust
- Synergy, collaboration

Changing Business Landscape
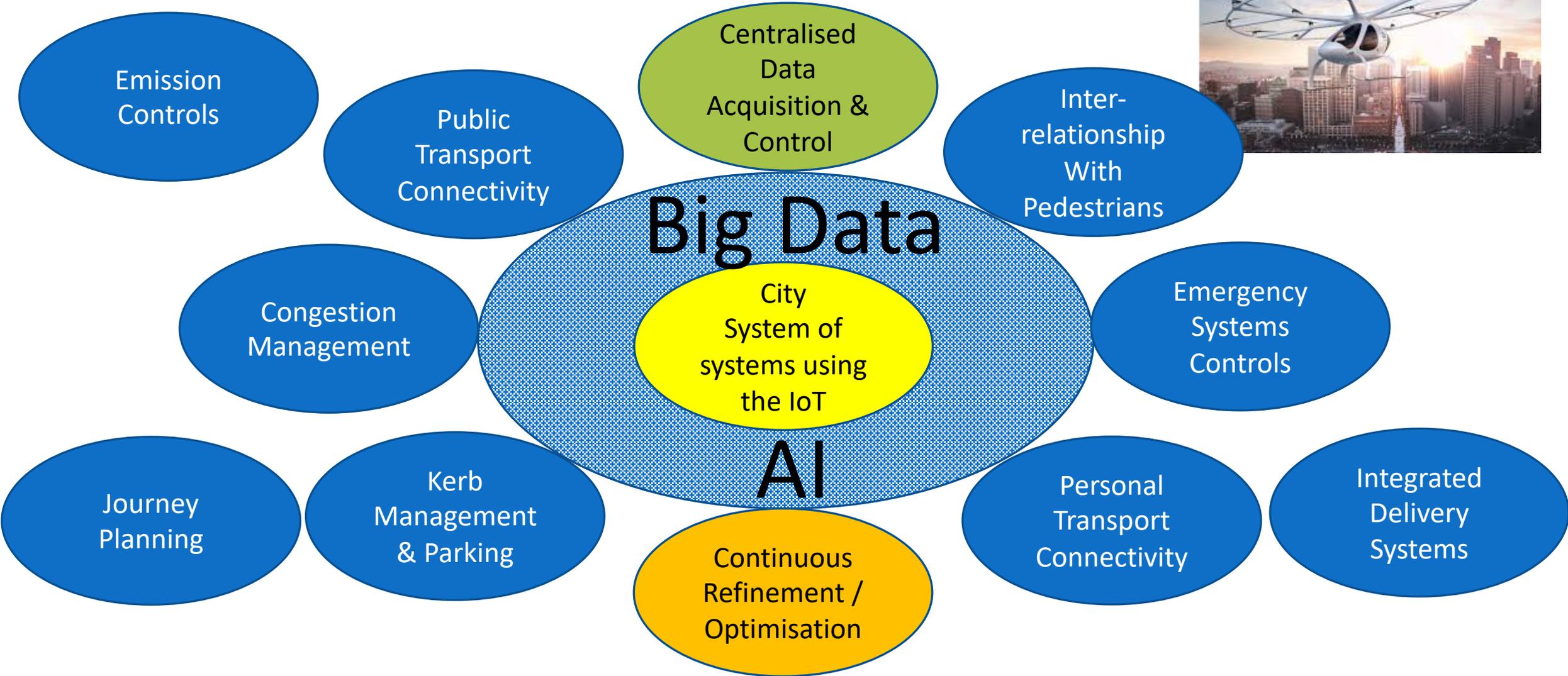
Past Paradigm of the Transport World

Personal Vehicle

Personal commuting

Independent systems

Apparent Ineffective
Public Transport

Separate development
of transport systems

New Paradigm - Integrated Systems

Emission Controls

Public Transport Connectivity

Centralised Data Acquisition & Control

Inter-relationship With Pedestrians

Big Data

City System of systems using the IoT

AI

Congestion Management

Emergency Systems Controls

Journey Planning

Kerb Management & Parking

Continuous Refinement / Optimisation

Personal Transport Connectivity

Integrated Delivery Systems

The Challenge! – The opportunity!

The source of information in this Mind Map comes from http://www.mckinsey.com/insights/business_technology/disruptive_technologies

Summary

Engaging the full capability of teams & individuals and empathetic understanding of end users are the keys to successful innovation