



# Combined Naval Event

Technology Sessions

23 May 2023

## How the RN is anticipating disruptive technology developments

Brig Jaimie Roylance RM, Royal Navy – CTO

# Global Innovation Index



## Global Innovation Index 2022

What is the future of innovation-driven growth?

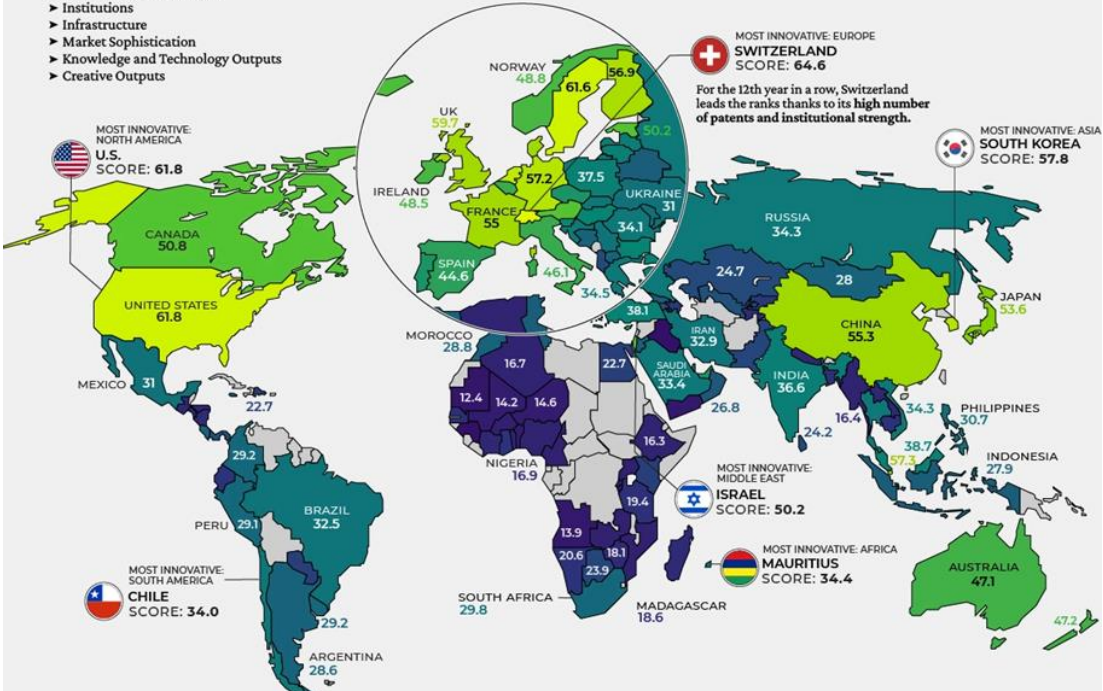


WIPO

# Global Innovation Index 2022

Below, we show the most innovative economies in the world, based on analysis from the WIPO Global Innovation Index.

- Scores are based on the following 7 categories:
- ▶ Business Sophistication
  - ▶ Human Capital & Research
  - ▶ Institutions
  - ▶ Infrastructure
  - ▶ Market Sophistication
  - ▶ Knowledge and Technology Outputs
  - ▶ Creative Outputs



TOP 10 COUNTRIES:



SOURCE: Global Innovation Index 2022



Facebook icon /visualcapitalist | Twitter icon @visualcap | Instagram icon visualcapitalist.com

## The RN's Strategic Technology Change Agent



**We understand the future first**

*bringing the horizon closer*



**We challenge 'the system'**

*to do things differently/ better*



**We work with others to deliver change**

*working with the whole RN in tech*



# OCTO Values & Principles

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OCTO are problem ,  
delivering frequently  
and adapting to  
ensure relevance  
and impact.

**Problem  
over  
Product**

OCTO enables a  
growth mindset with  
leadership, trust and  
empowerment at all  
levels. Combatting  
'learned helplessness'.

**Learning  
over  
Inertia**

**OCTO  
Values**

OCTO values  
individuals and their  
interactions over  
processes and  
transactions.

**People  
over  
Process**

OCTO tolerates  
failure in order to  
learn from it and  
rapidly progress. No  
blame culture.

**Action  
over  
Failure**

'You do not rise to the level of your goals, you fall to the level of your systems'.

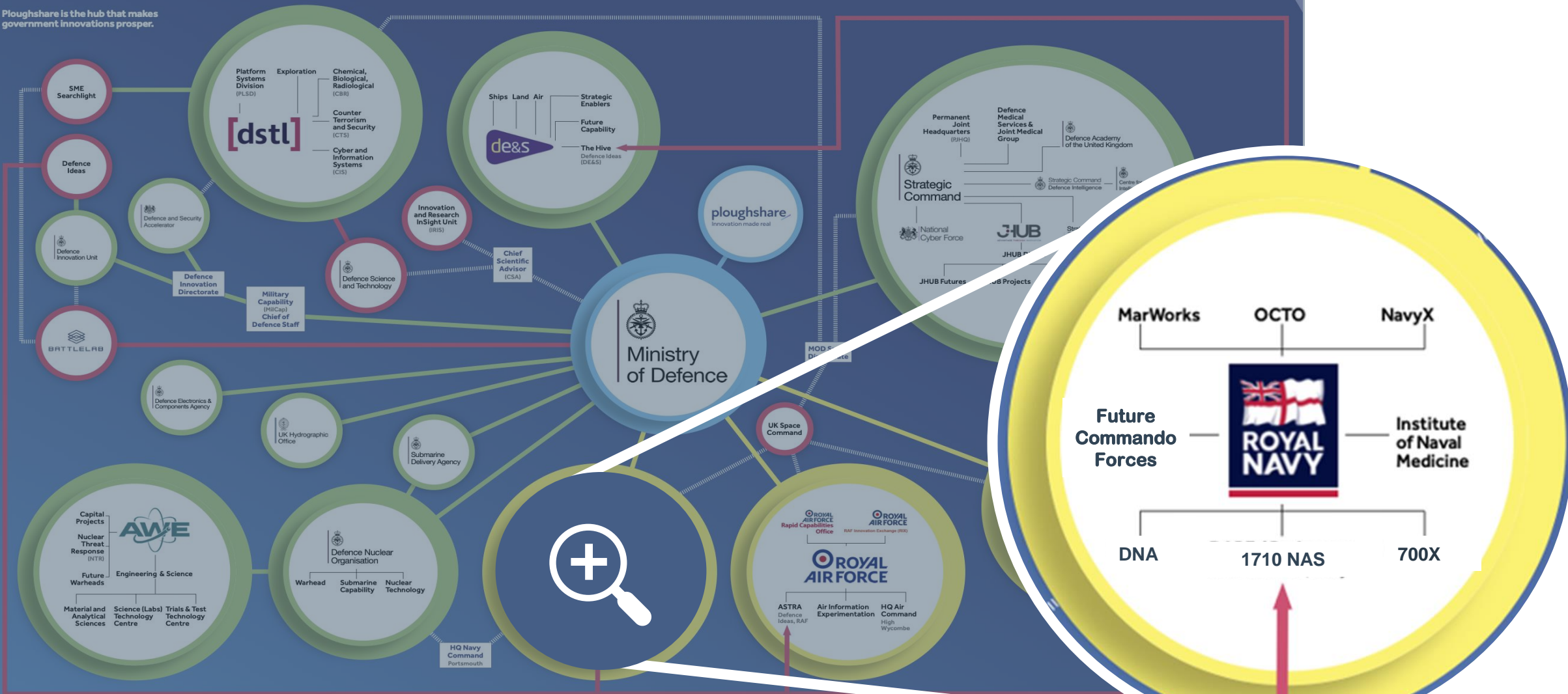
James Clear, *Atomic Habits*

# MOD Innovation Landscape – Royal Navy

**ploughshare**  
Innovation made real

## MOD Innovation Landscape

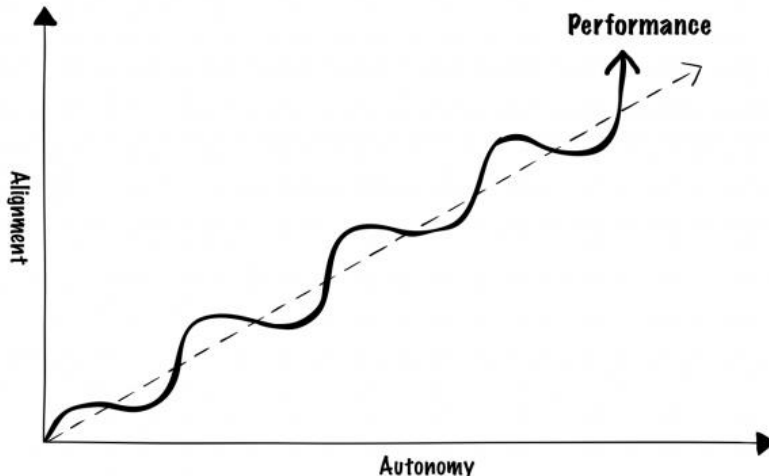
Ploughshare is the hub that makes government innovations prosper.



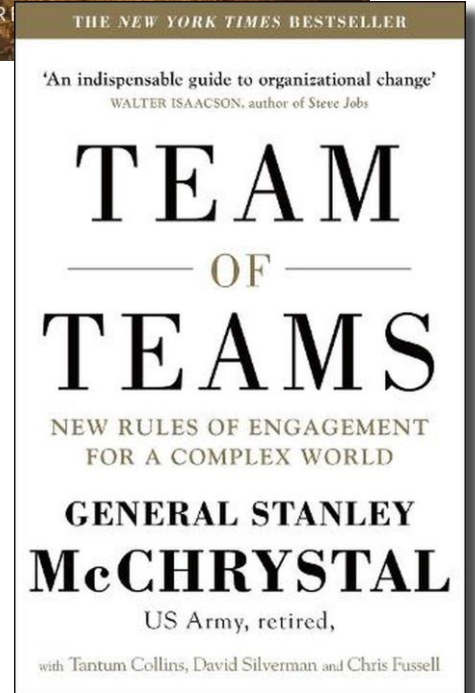
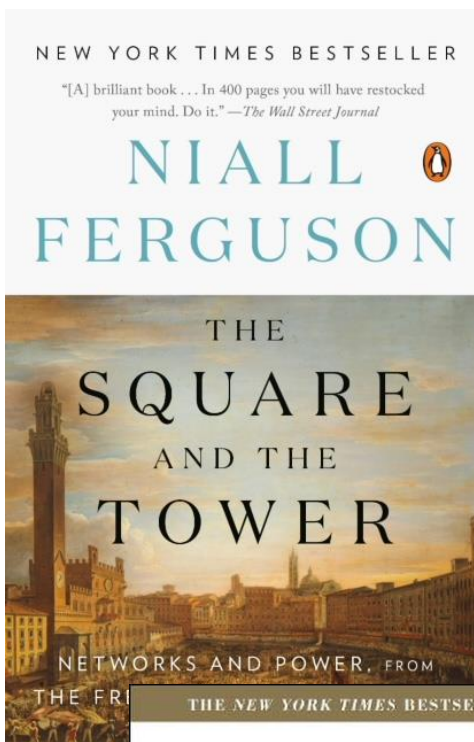
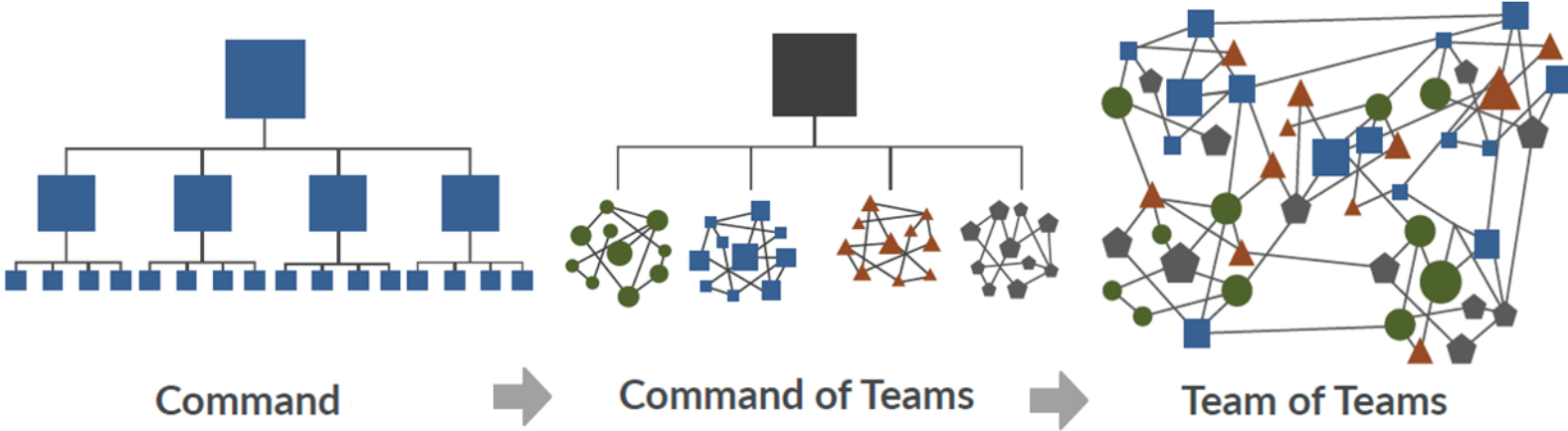
Executive Agencies and Public Bodies of MOD  
Front Line Commands  
Defence Initiatives, Programmes & Enterprises

# Autonomy vs. Alignment

Autonomy and Alignment



## From Command to Team of Teams

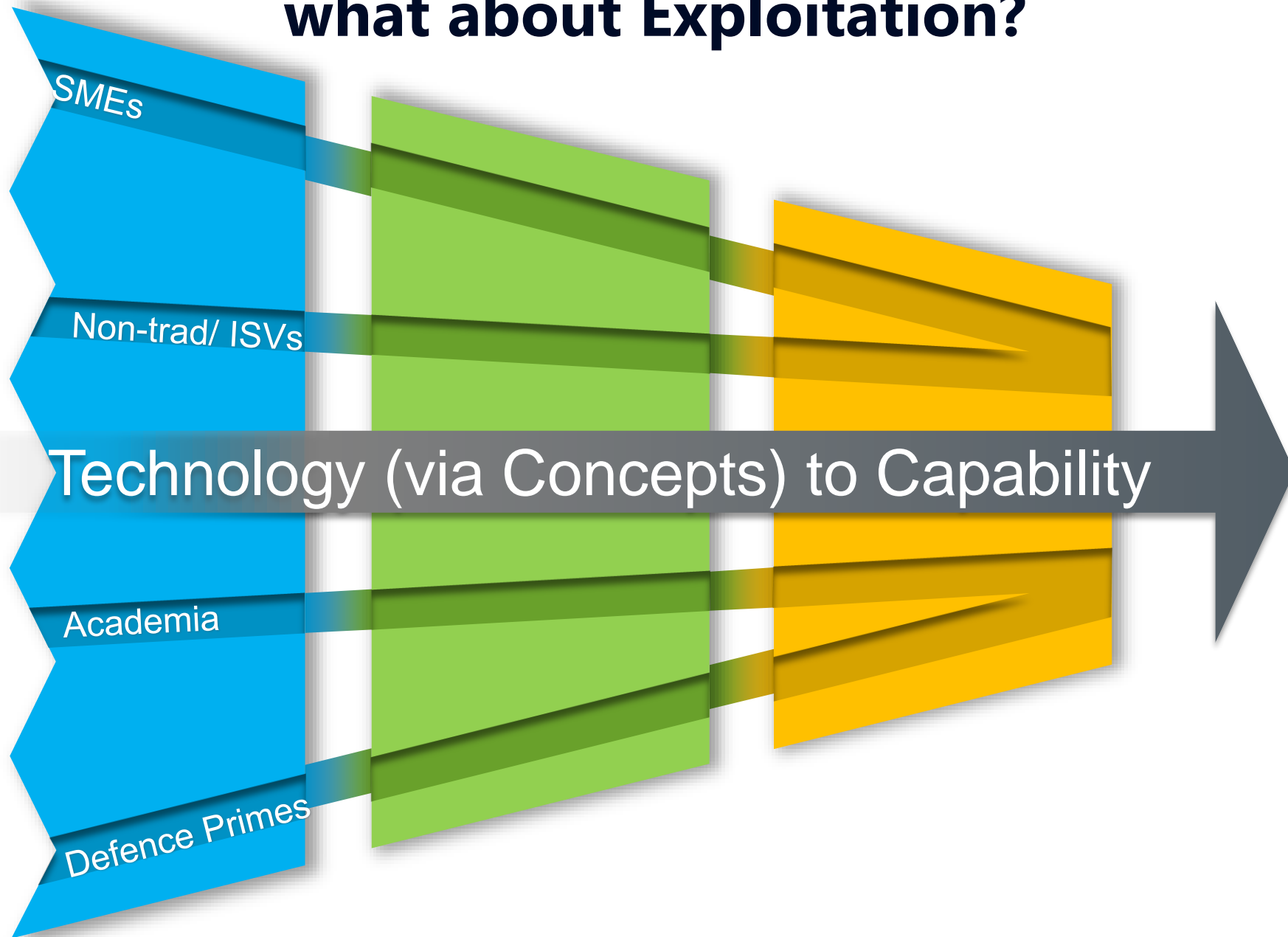




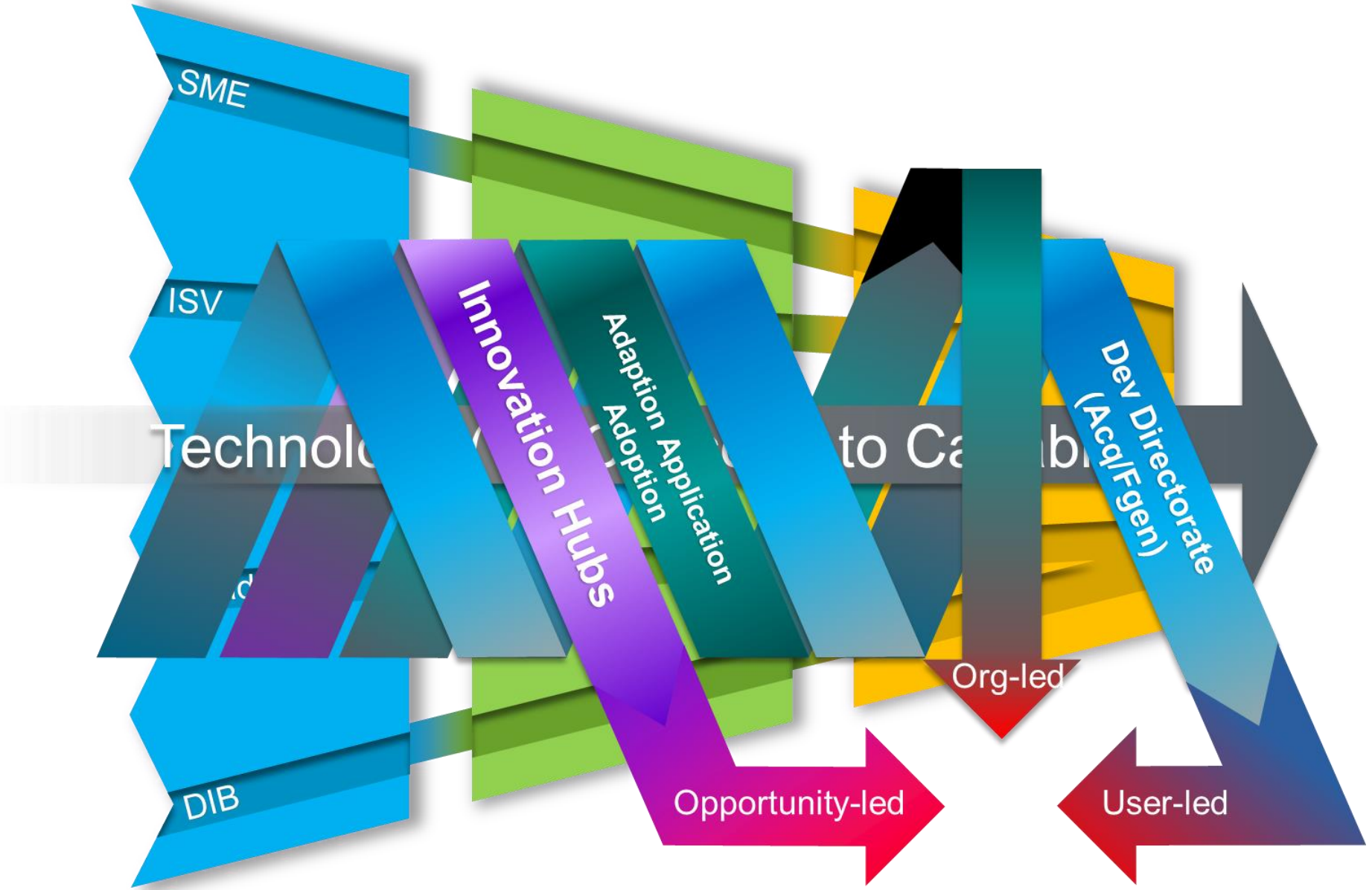


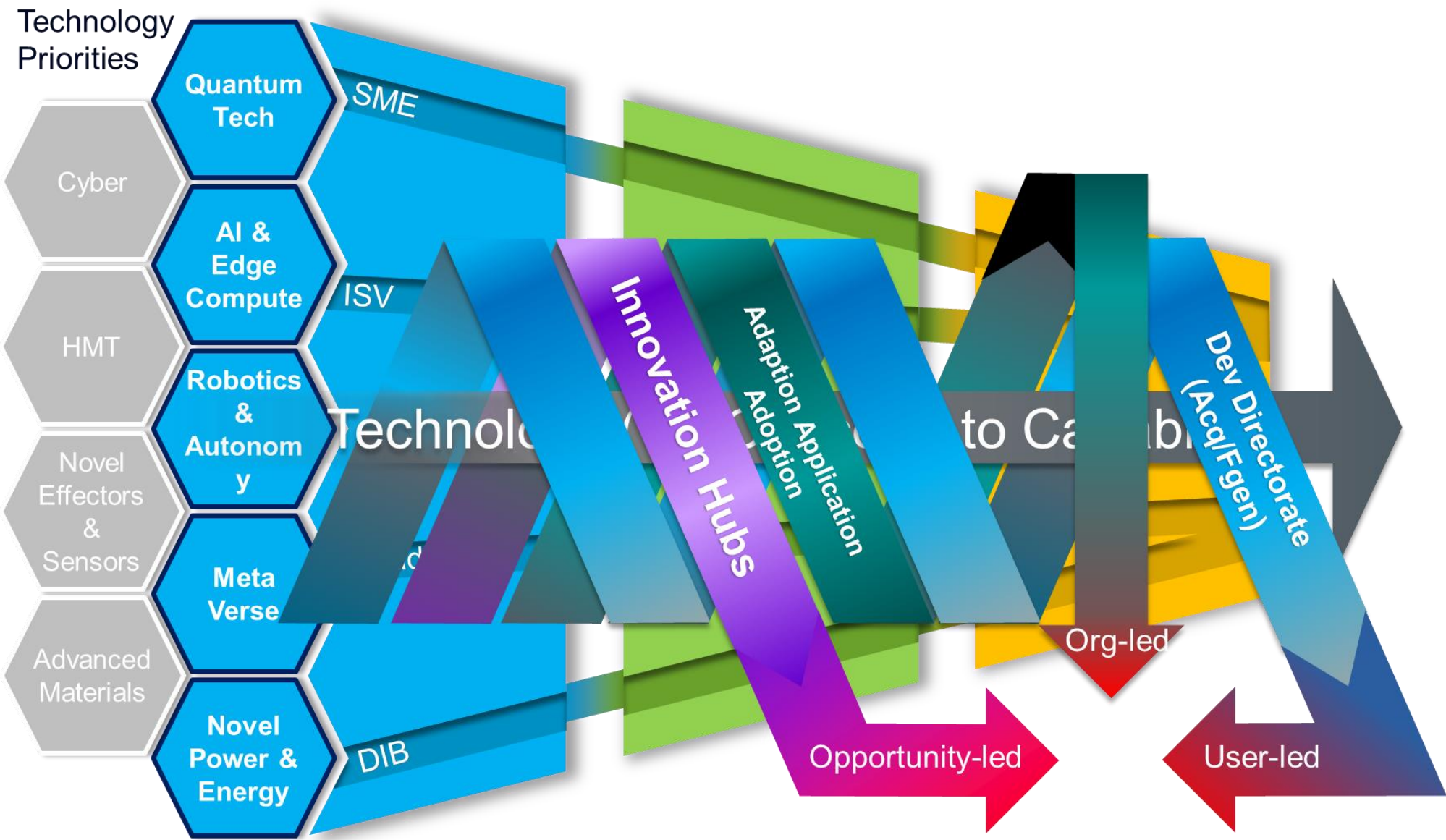
But...

# what about Exploitation?

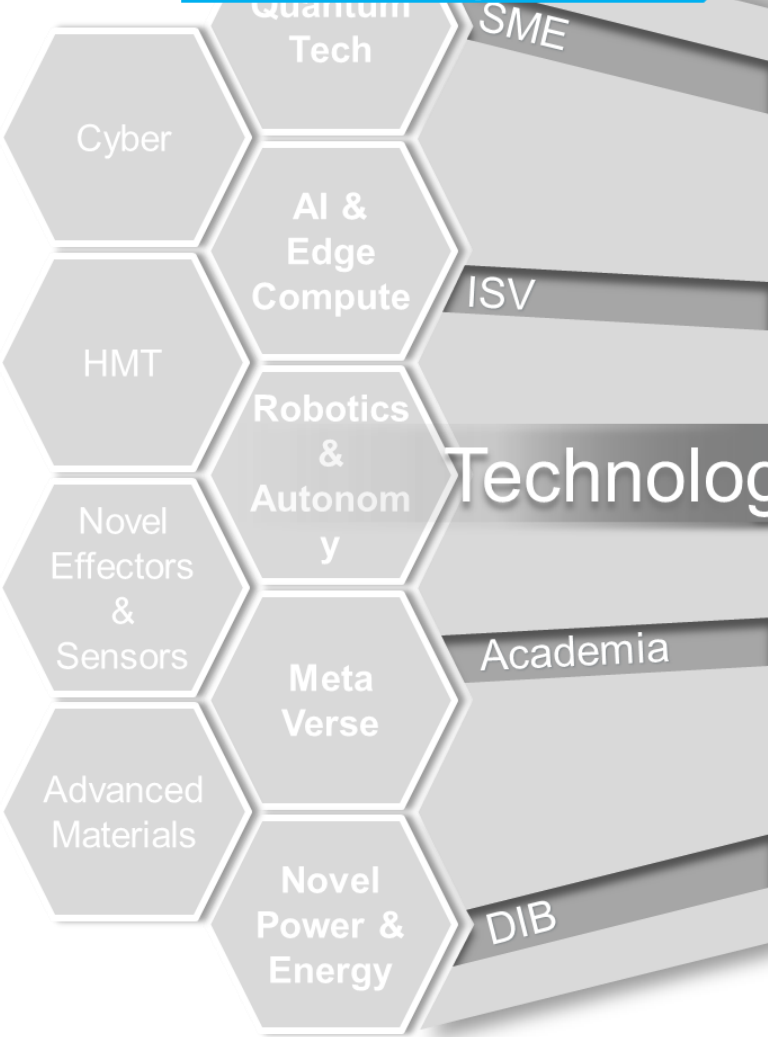


# But... what about Exploitation?





**RN Strategy Design Principles**

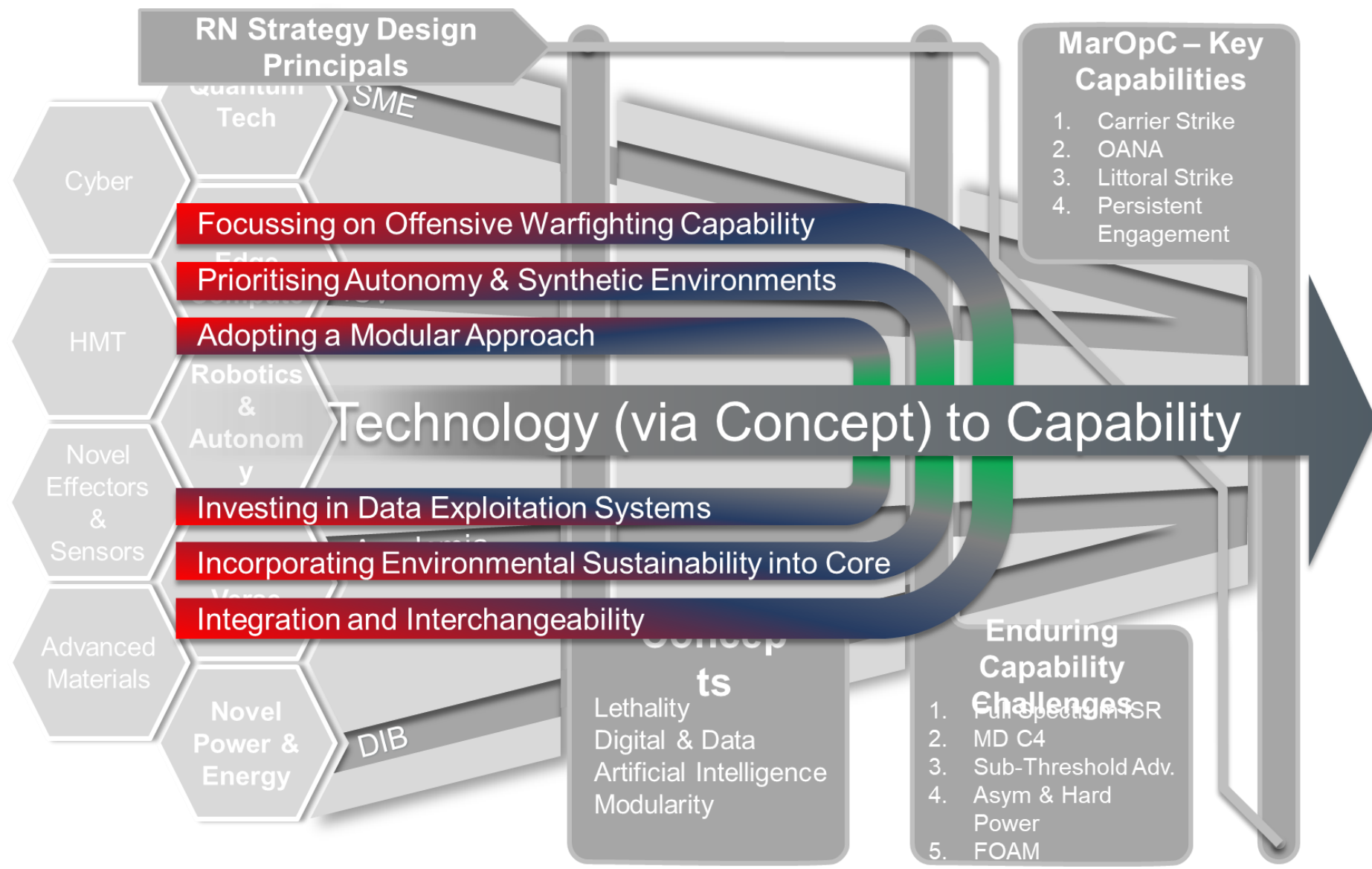


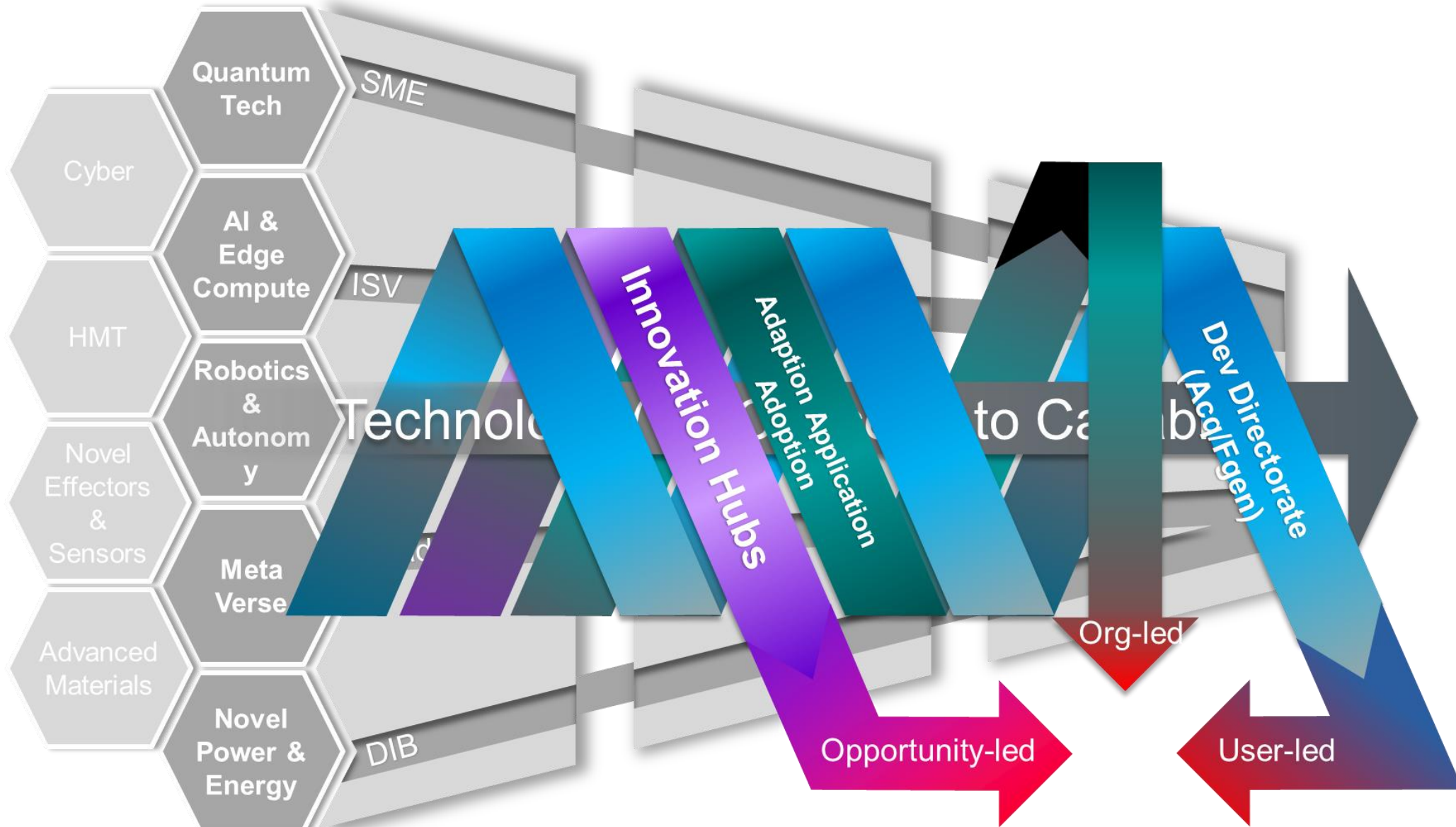
Technology (via Concept) to Capability

- MarOpC – Key Capabilities**
1. Carrier Strike
  2. OANA
  3. Littoral Strike
  4. Persistent Engagement

- Concepts**
- Lethality
  - Digital & Data
  - Artificial Intelligence
  - Modularity

- Enduring Capability Challenges**
1. Full Spectrum ISR
  2. MD C4
  3. Sub-Threshold Adv.
  4. Asym & Hard Power
  5. FOAM





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## Questions



