

Water Innovation in the UK: History and a View Forward

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Why do we need to Innovate?

We need to innovate to ensure we can provide sustainable, resilient services long into the future at affordable prices with the minimum impact on the environment.

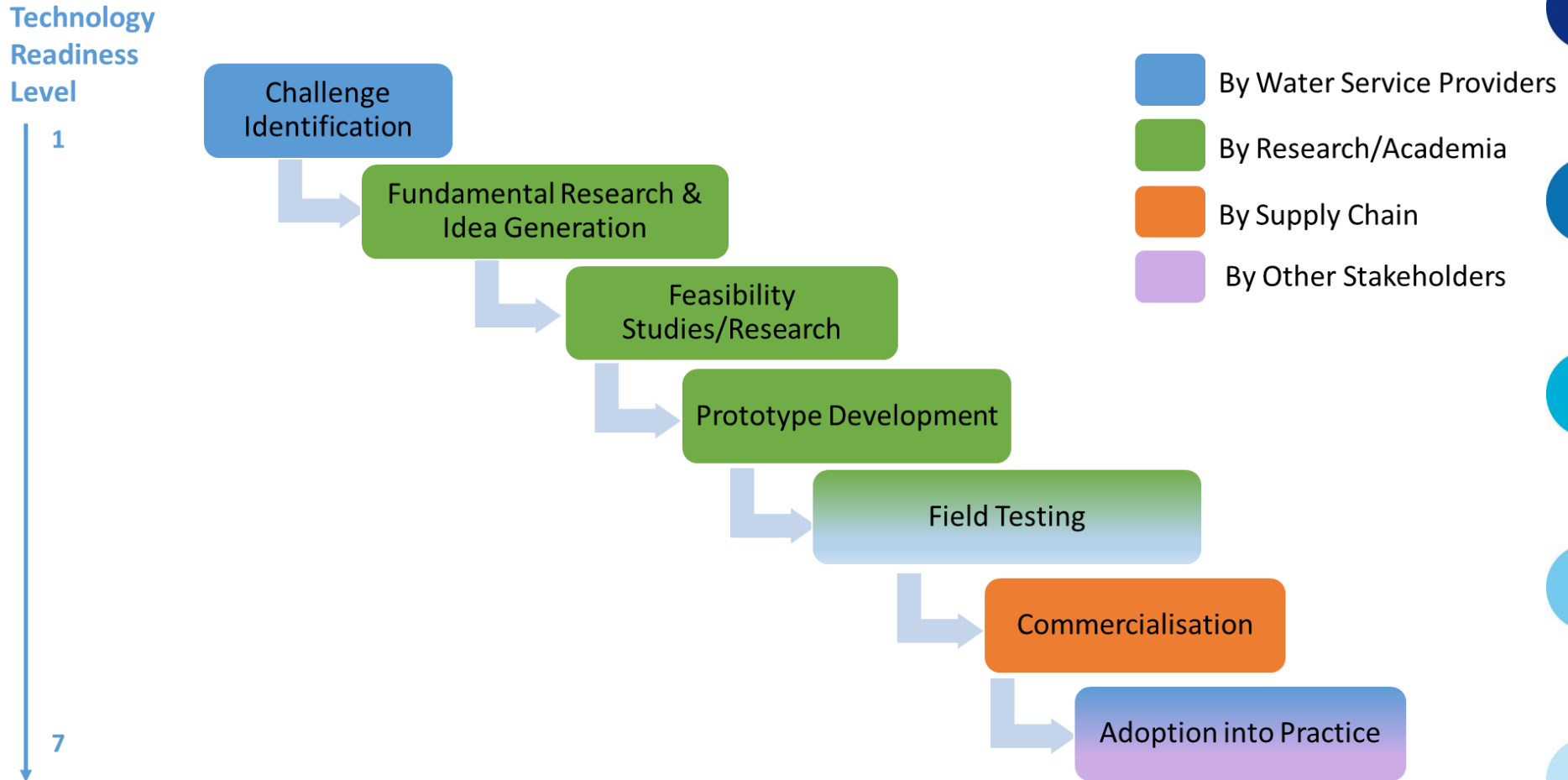
To succeed, we must be able to predict:

- The needs of our customers and business
 - Changes in population size and location
 - Infrastructure maintenance and replacement needs
 - Changes to our climate
 - The changing impacts of our modern day lives on the environment
 - And the resulting growing needs of our environment in which we work, live and play
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- Develop solutions (services, technologies, processes or tools)

Innovation

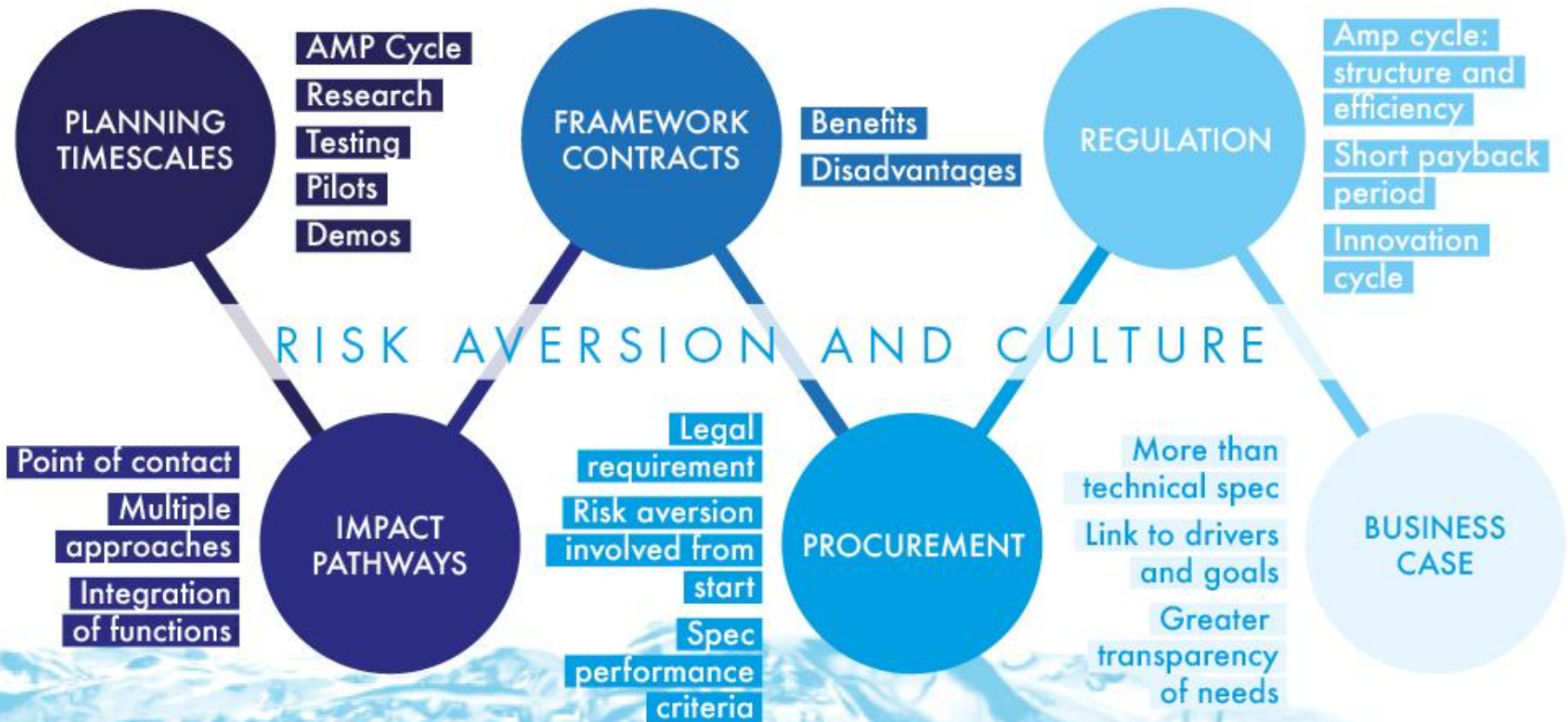
Innovation results in the conversion of an invention or new idea into a profit (gains in efficiency and affordability), sustainability (longevity of assets, supply and impact on the environment), and resilience of supply (adaptability of systems, processes and stakeholders to the changing environment, needs and expectations).

Historical Approach to Innovation



Adapted from: Speight et al., Collaborative innovation in the water sector: approaches and advantages, Proceedings of the IWA World Water Congress, Brisbane, Australia, 2016.

Barriers to Innovation

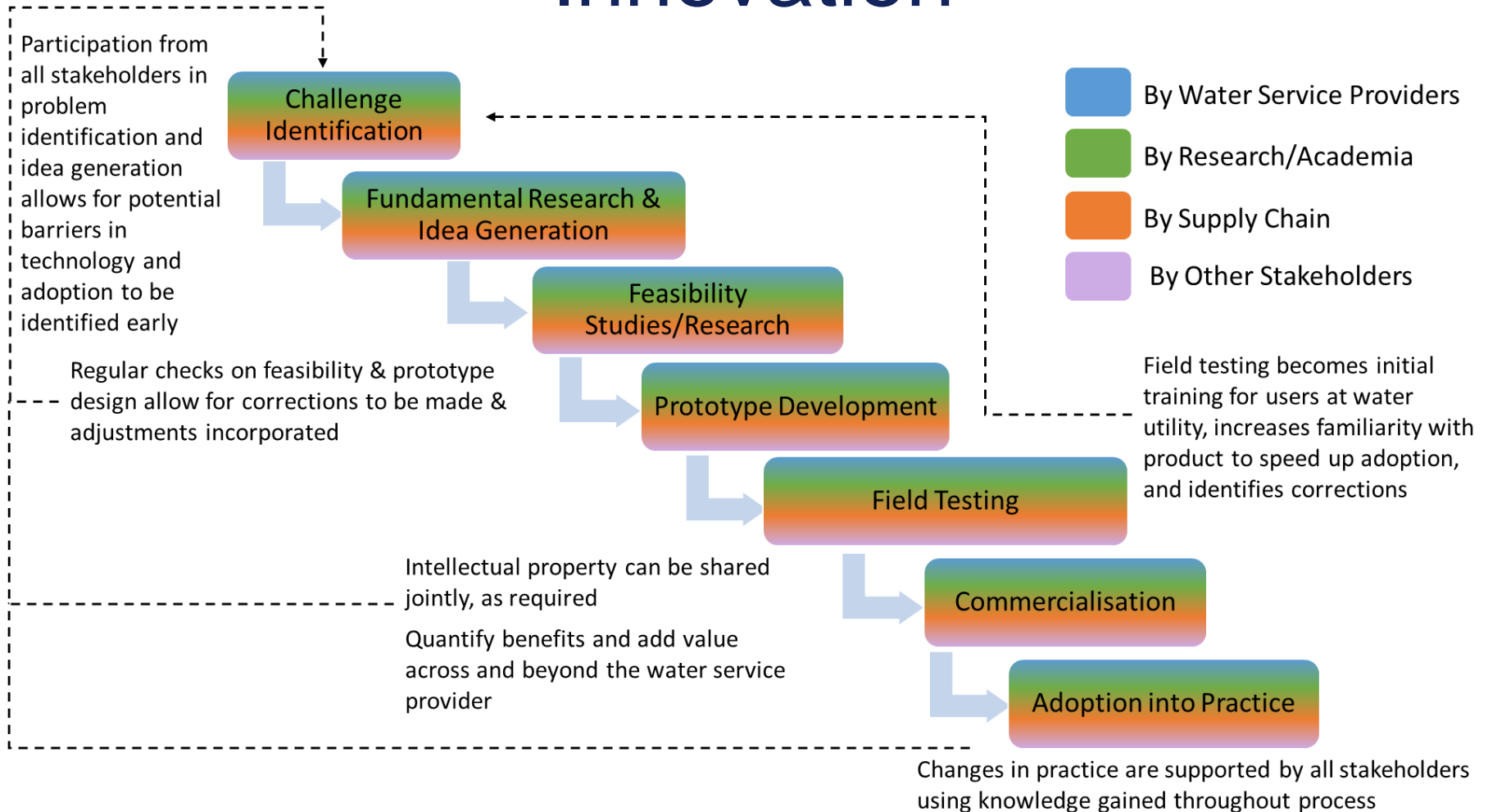


Innovation Maturity

“Being innovative is not a one-time event or a series of discrete activities. Being innovative requires a cultural change so that employees and other stakeholders feel empowered to make decisions and take risks, but potentially more rewarding, options”.

- Framework developed to set the baseline innovation capability & capacity of each water company
- Tailored action plans are then developed to help drive change and improve innovation maturity
- The framework:
 - Highlights discrepancies between all levels of staff
 - Understanding and vision
- Contribute to developing and implementing new ways of working, including changing the culture and the ways they work with each other, their supply chain, and wider stakeholders;

Collaborative Approach to Innovation



Ways to Make Sector-Wide Collaboration for Innovation Happen

- Physical space for interactions
 - Incubation, hot desks
 - Meeting space
 - Labs/testing facilities
- Central repository of challenges, roadmaps, and other sector knowledge
- Facilitation of joint projects
- Training programmes
- Independent services for validation, etc.



Global Water Hubs and Partnerships



Central
Coordination
Point for the
UK

Test Facilities

Existing
Industry
Associations

Research
Institutions

Regional
Hubs

Centres of
Expertise in
Particular
Topics

Investors /
Funding

Innovation
Centres from
other Sectors

Questions?

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