



# Regulatory Experimentation Workshop

Community of Federal Regulators  
26 November 2018

# Workshop agenda

- **Goals and objectives** 5 minutes
- **Activities:**
  - **Identifying target areas and experiment types** 20 minutes
  - **Defining success** 20 minutes
- **Top takeaways** 10 minutes



# Goals and objectives

Given what you heard from this morning's session, what one or two things would you find practical to explore further?

- Daily work
- Agility



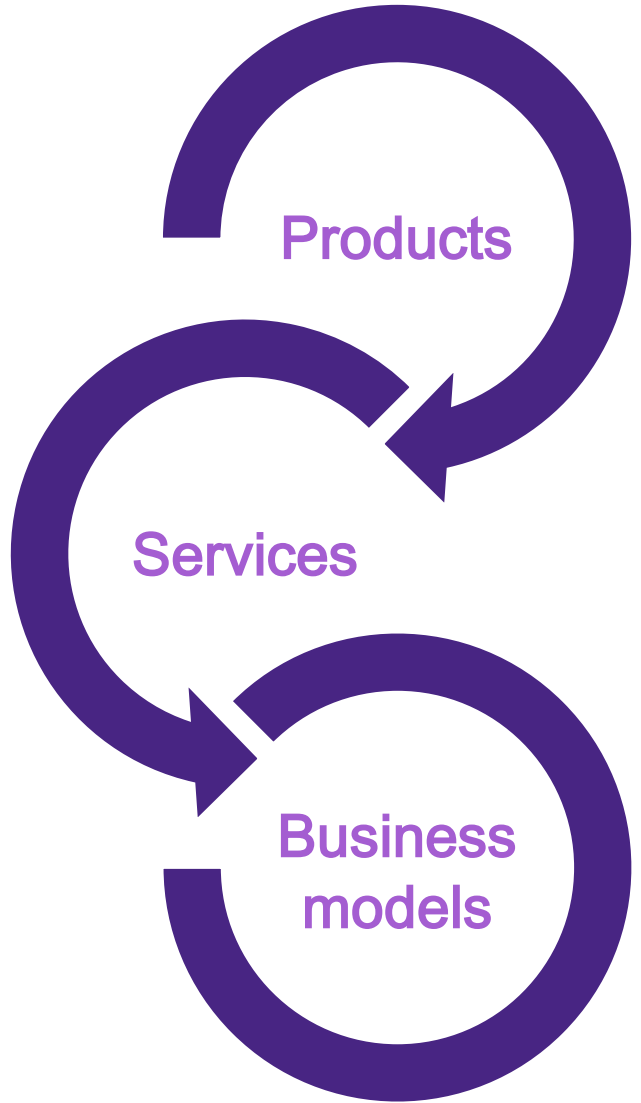
# Activity 1

- Take 20 minutes to draw connections between target areas and experiment types.
- What conclusions can you draw?



# Target areas

Emerging technologies



Known & unknown risks



# Emerging technologies

## HEALTH & LIFE SCIENCES

Biotech

Brain scanning

CRISPR/Gene editing

Genomics

mHealth

Precision medicine

Regenerative medicine

## TRANSPORTATION

Autonomous vehicles

Smart traffic management

Predictive maintenance

## GENERAL

Artificial intelligence

Augmented reality/Virtual reality

Big data

Blockchain

Brain-machine interfaces

Cybersecurity

Drones

Nanotechnology

Robotics

3D printing

## ENVIRONMENTAL

Synthetic biology

Geo-engineering

Smart dusts

## SPACE

Astrochemistry

Astromining

Commercial space flight

Small satellites/Cube sats

Satellite networks



# Experiment selection: Some factors

- Evidentiary/scientific rigor (Low to high)
- Risk of harm (Low to high)
- Expected impact/outcomes (Tactical vs. strategic)
- Other agency/jurisdiction impact (Yes/No)
- Gating criteria (Merit/Competitive implications)
- Time horizon (Months to years)



# Activity 2

- Take 20 minutes to define success factors that might be most important in general, or in your area of work specifically.





# Key success factors: Examples

- Frameworks and models
- Skills and capabilities
- Capacity and ability to scale
- Stakeholder satisfaction
- Cross-agency/jurisdiction collaboration



# Top takeaways

1.

2.

3.

4.

5.

