

Developing a Model of National Security Innovation: Systems, Enablers, and Types

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What is Defense Innovation?

Not Invention

Capabilities-Based (Thing or Process)

Provides Advantage Over Previous Iteration

The International Innovation System

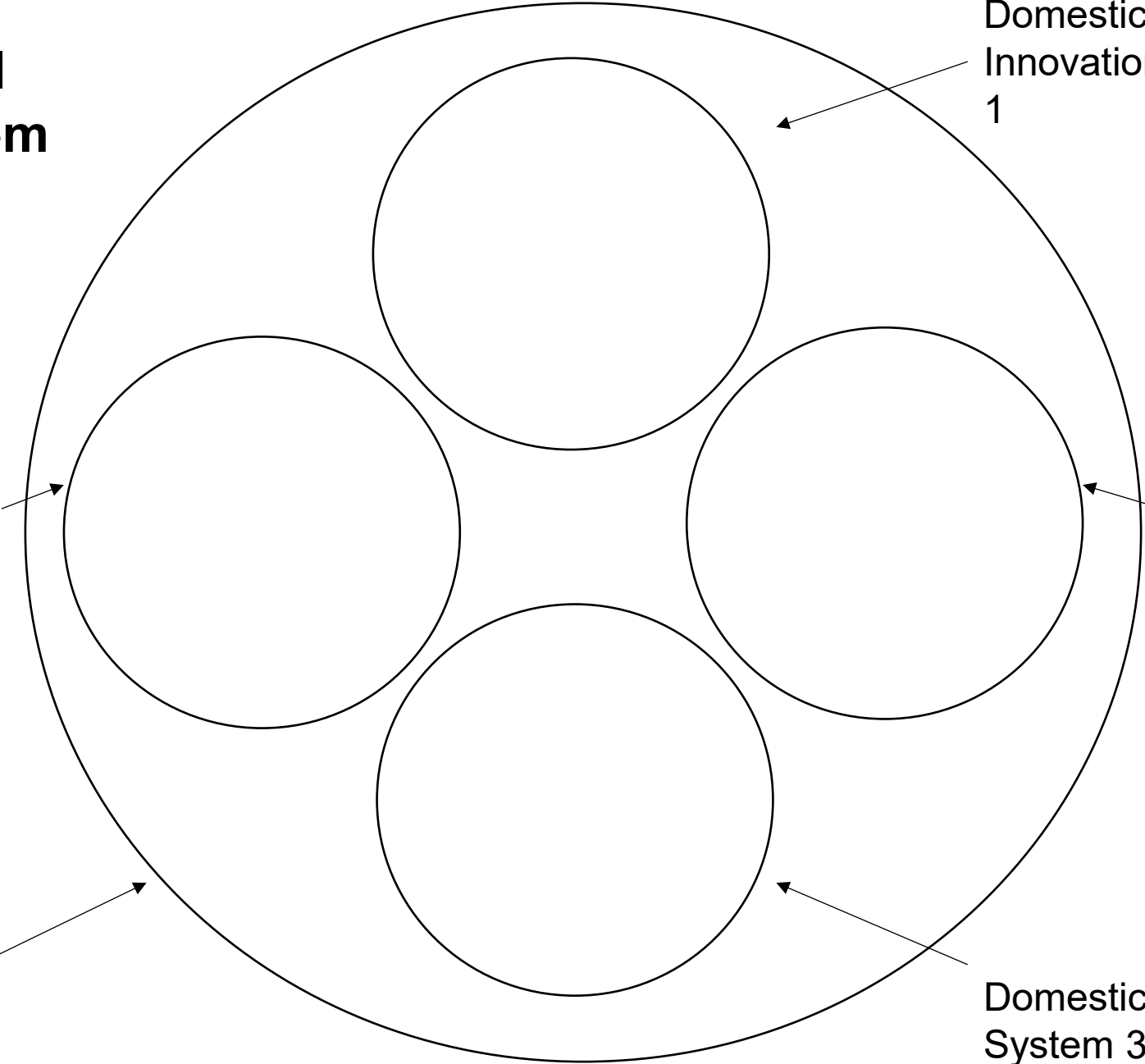
Domestic
Innovation System
4

International
System

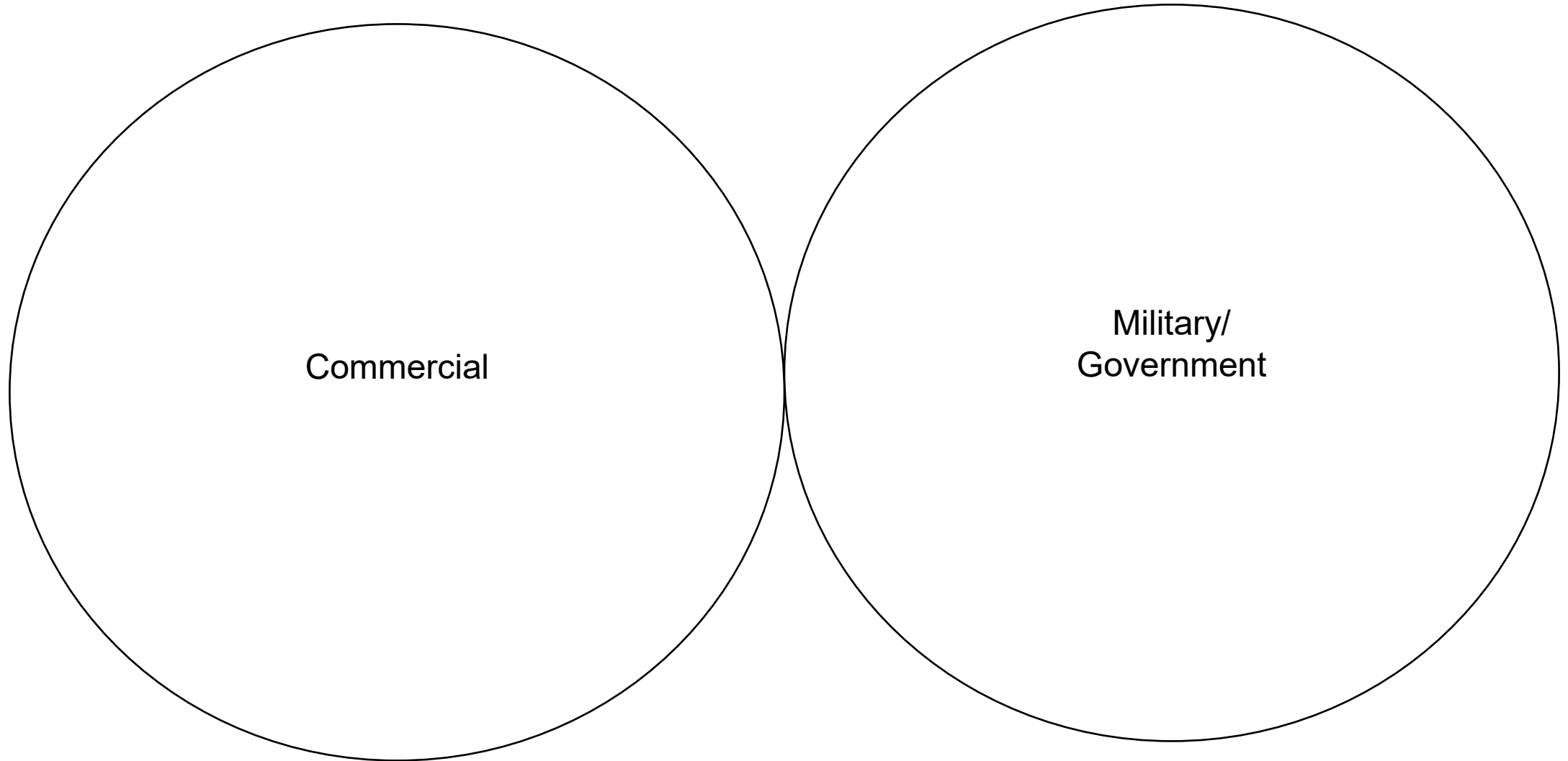
Domestic
Innovation System
1

Domestic
Innovation System
2

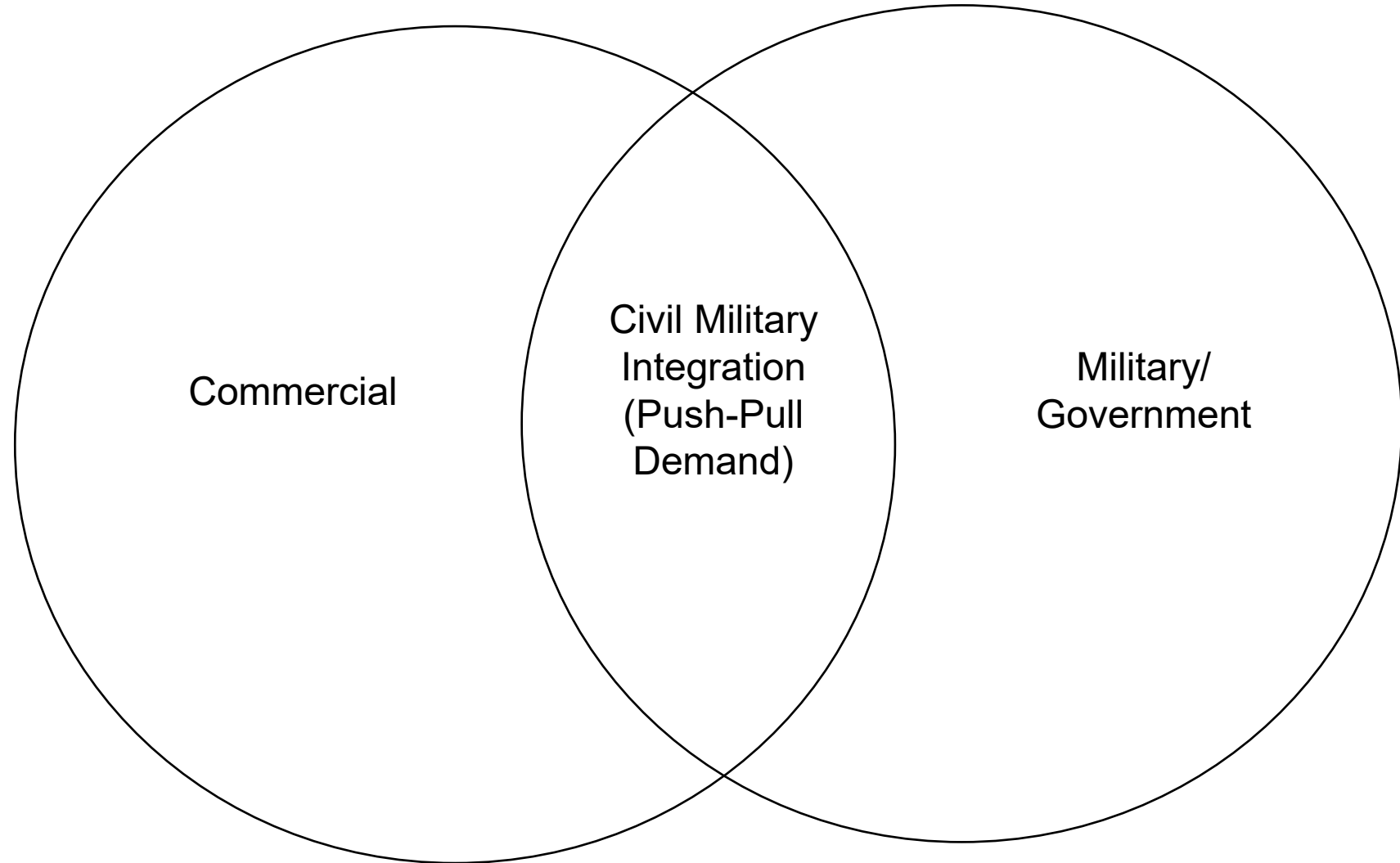
Domestic Innovation
System 3



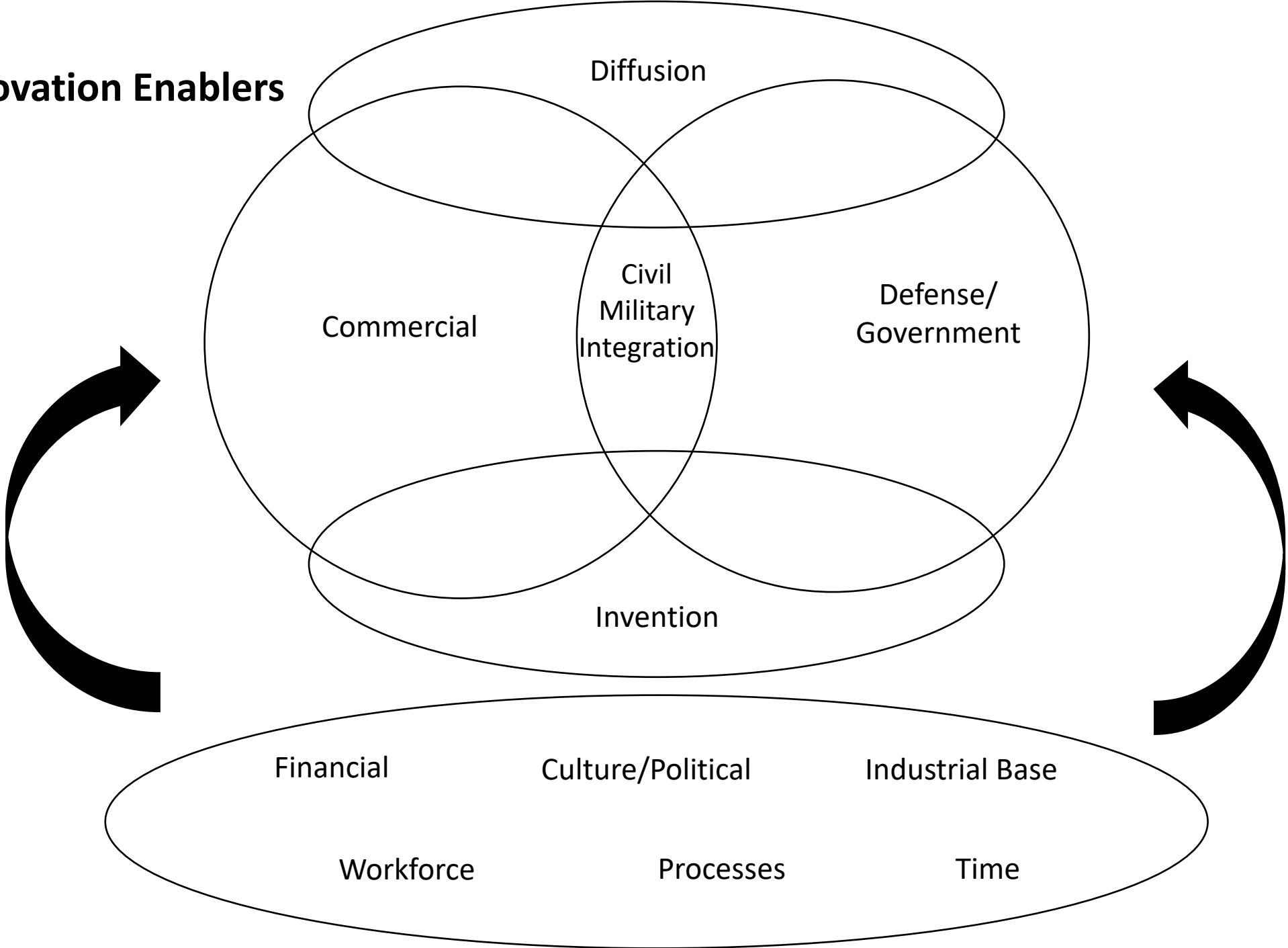
The Domestic Innovation System



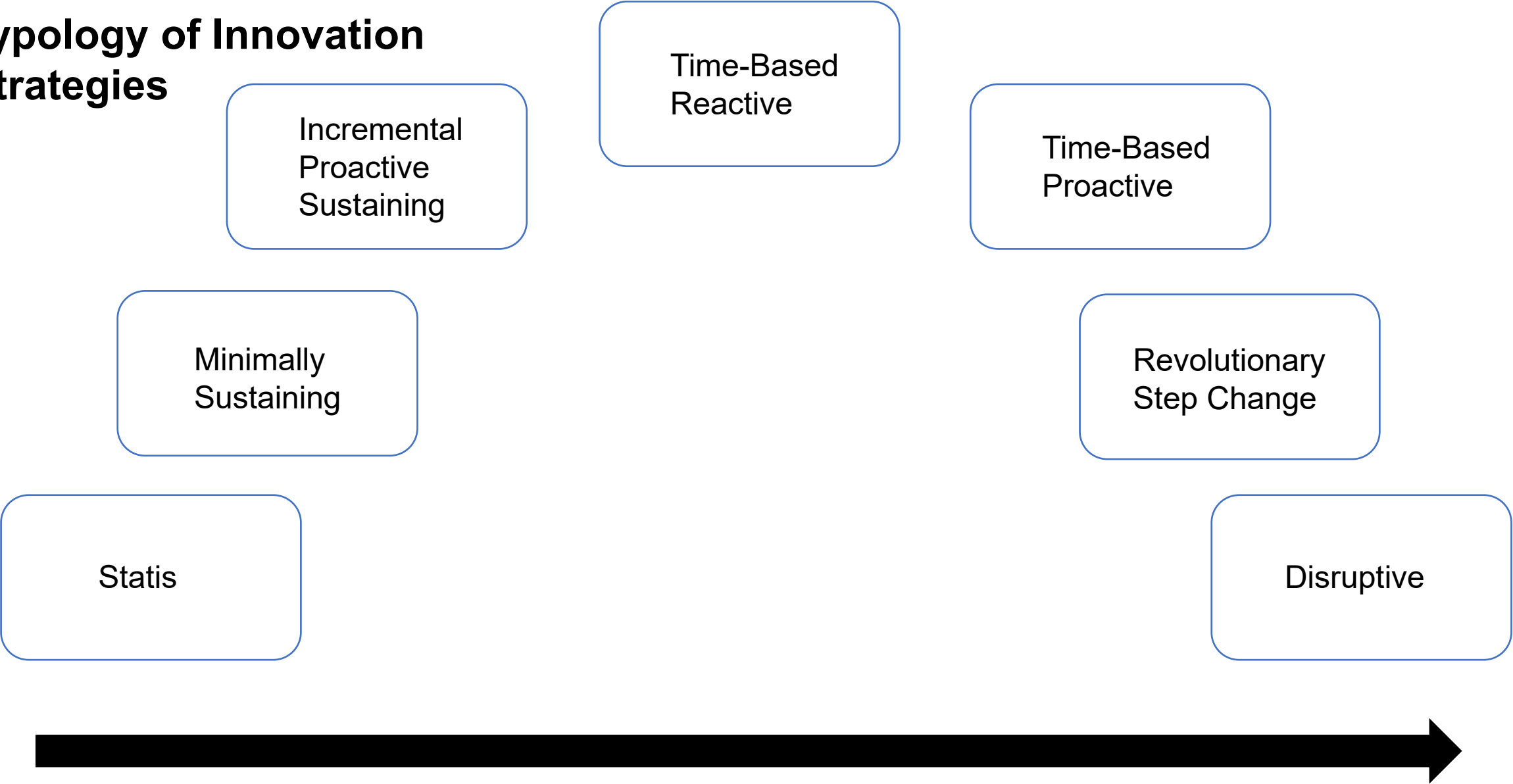
The Civil-Military Integration Innovation System



Innovation Enablers

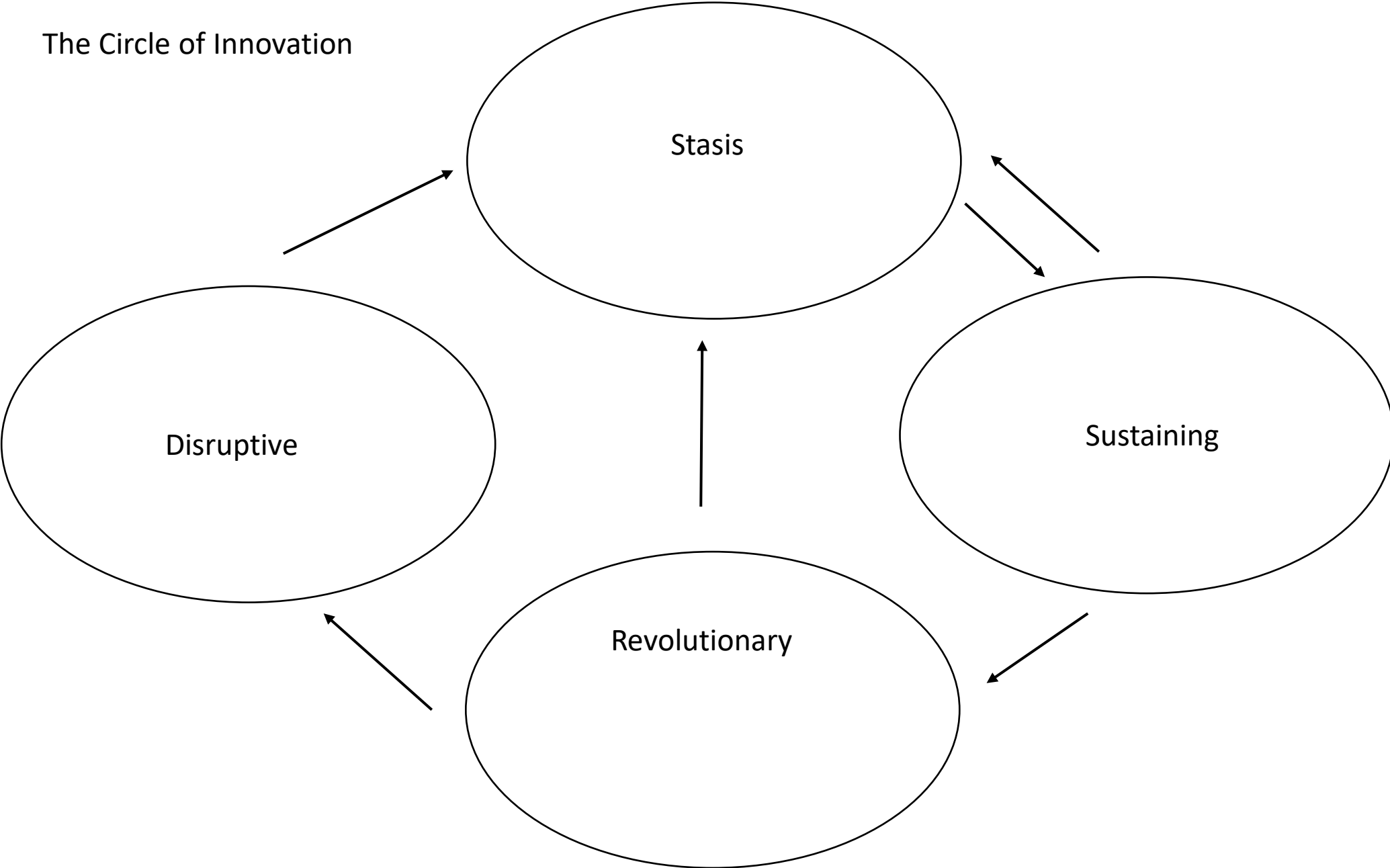


Typology of Innovation Strategies



Cultural Change

The Circle of Innovation



Time Period	US Innovation Trends and Types
World War II	<p>Defense: Emergency Time-Based Reactive, Time-Based Disruptive</p> <p>Commercial: CMI to Defense, Subsidized Retooling</p>
Early Cold War (1945-1960)	<p>Defense: Serial Time-Based Operational Prototype Disruptive</p> <p>Commercial: Innovation Stasis, Sales Expansion to Meet Pent-up Demand</p>
Late Cold War (1960-1990)	<p>Defense: Beginning of Arms Control Stasis and Minimally Sustaining Proactive Model</p> <p>Industrial Commercial: Stasis and Decline then Emergency Time Based Reactive Once Disrupted Japan Challenge (1970s Proactive Quality Process) Emergency Reactive</p> <p>Silicon Valley: CMI from Defense, Serial Time Based Disruptive (Moore's Law)</p>
Post-Cold War Pax USA (1990-2014)	<p>Defense: Stasis (Peace Dividend), Minimally Sustaining Predictive GWOT: Emergency Reactive (MRAP/RAA)</p> <p>Industrial Commercial: Minimally Sustaining -- China Outsourcing Strategy</p> <p>Silicon Valley: Serial Time Based + VC Disruptive</p>
US Hegemony Challenged (2014-2025)	<p>Defense: Stasis and Expanded Evolutionary Predictive Creation of Time Based and Disruptive Alternatives (Production OTA/MTA/Software Pathway)</p> <p>Industrial Commercial: Emergency Reactive, Supply Chain Disruption, China Risk Reduction and Decoupling (Friend-shoring, Insourcing)</p> <p>Silicon Valley: Serial Time Based + VC Disruptive</p>