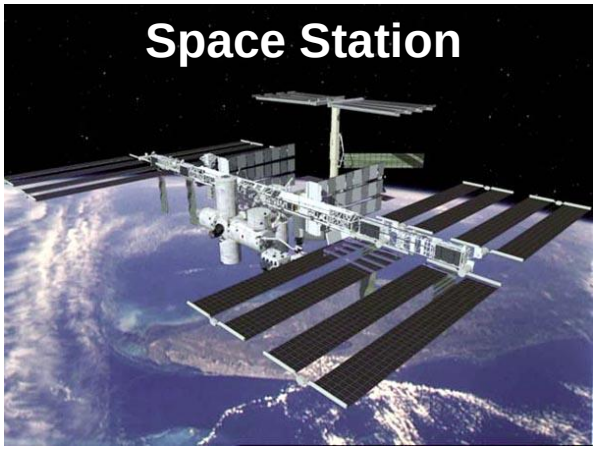
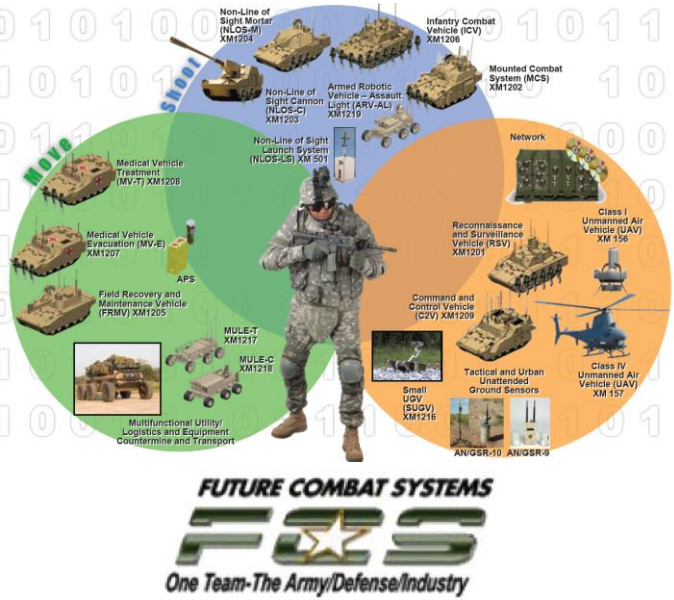


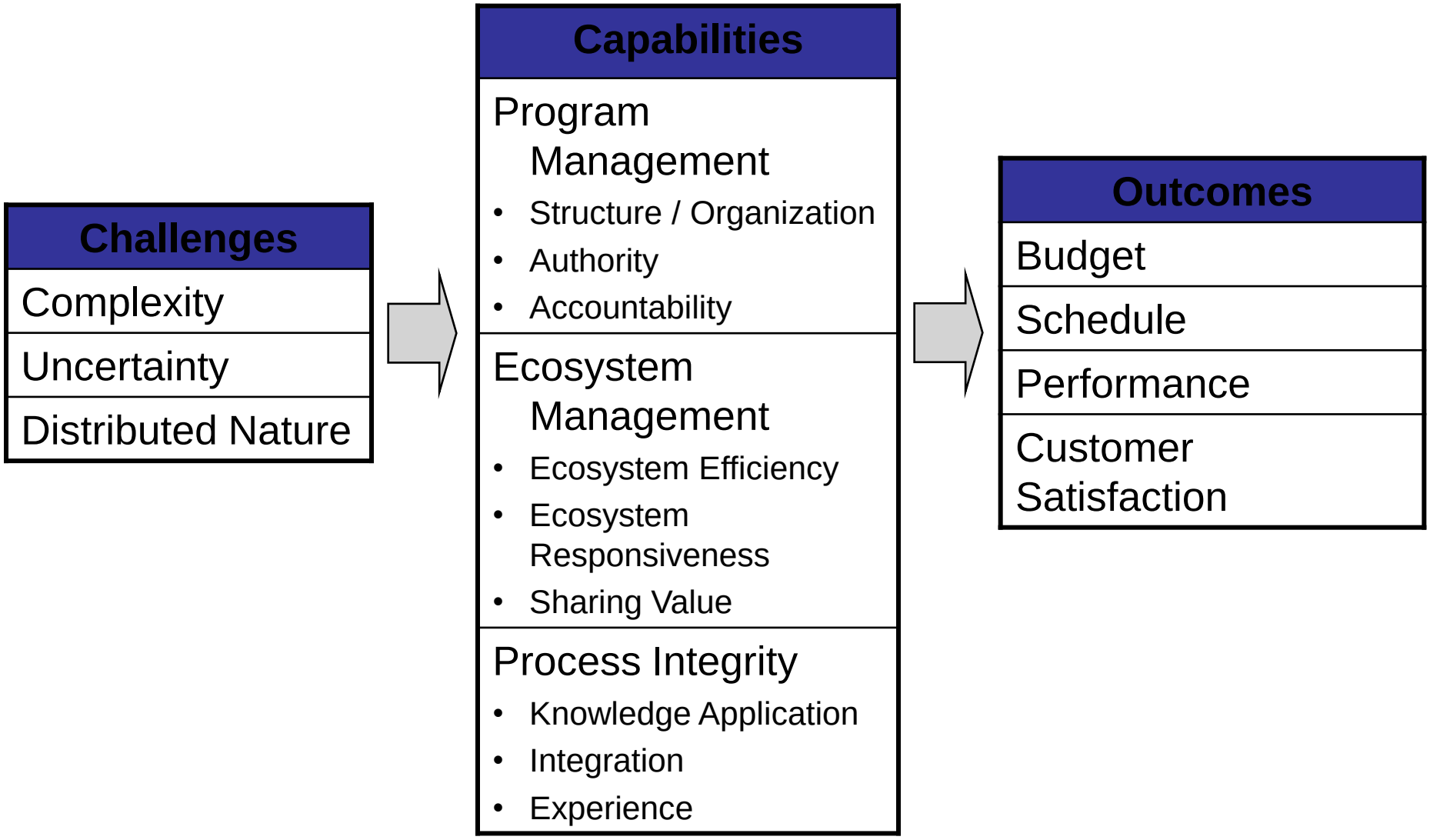
Successful Management of Large Complex Systems

Dennis Muilenburg
The Boeing Company



Keystone Strategy Study* Framework

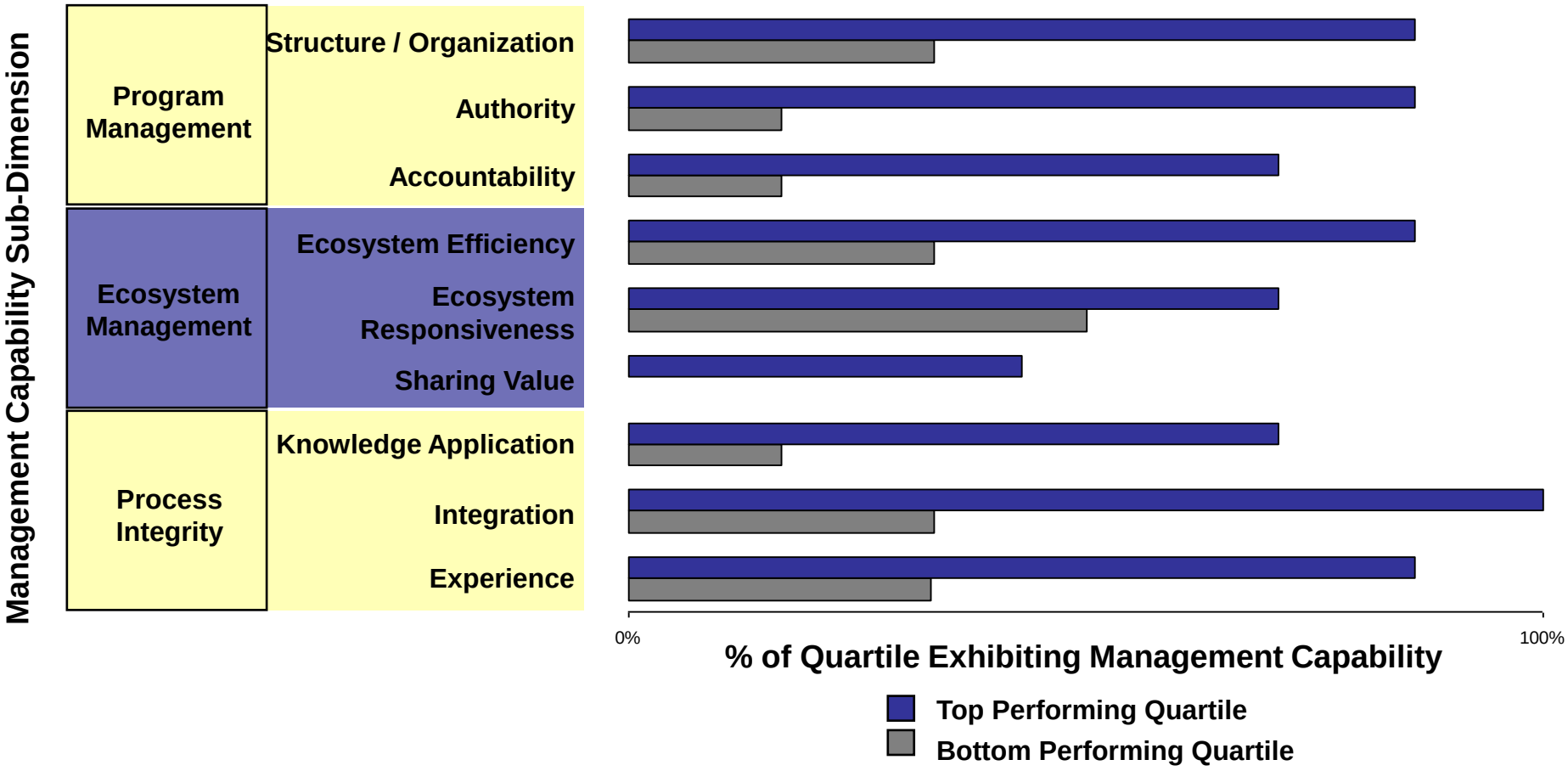
Focus on Common Attributes of Successful Programs



* "Managing Megaprojects: Lessons for Future Combat Systems" in Organizing for a Complex World (2009)
Professor Marco Iansiti – Harvard Business School

Keystone Strategy Study Results*

Validating Attributes of Successful Programs



* 30 complex program capabilities & outcomes assessed spanning military, public works, science, and commercial projects

Current Issues

Current political environment

- Lost confidence in private sector following financial crisis
- Desire to reduce outsourcing and reconstitute government capability
- Desire to reduce government risk via incremental upgrades, fixed price contracts, etc.
- Desire to effectively address a rapidly changing threat environment
- Desire to improve acquisition speed with less concurrency, more testing
- Demand for greater competition with shrinking budgets & industrial base capability

Roles of government & industry

- What is inherently governmental?
- How can government exploit available expertise and minimize conflict of interest?
- How much systems engineering & integration skills must reside in government?
- How do we best leverage capabilities of government & industry in public-private partnerships?
- What are the essential skills and attributes to effectively manage complex systems?
- How does the government develop and maintain people with these skills and attributes?
- How do we validate upfront that the right requirements, program management structure and processes have been selected?