



Technological Aspects of the Capability Development of the Logistics Support

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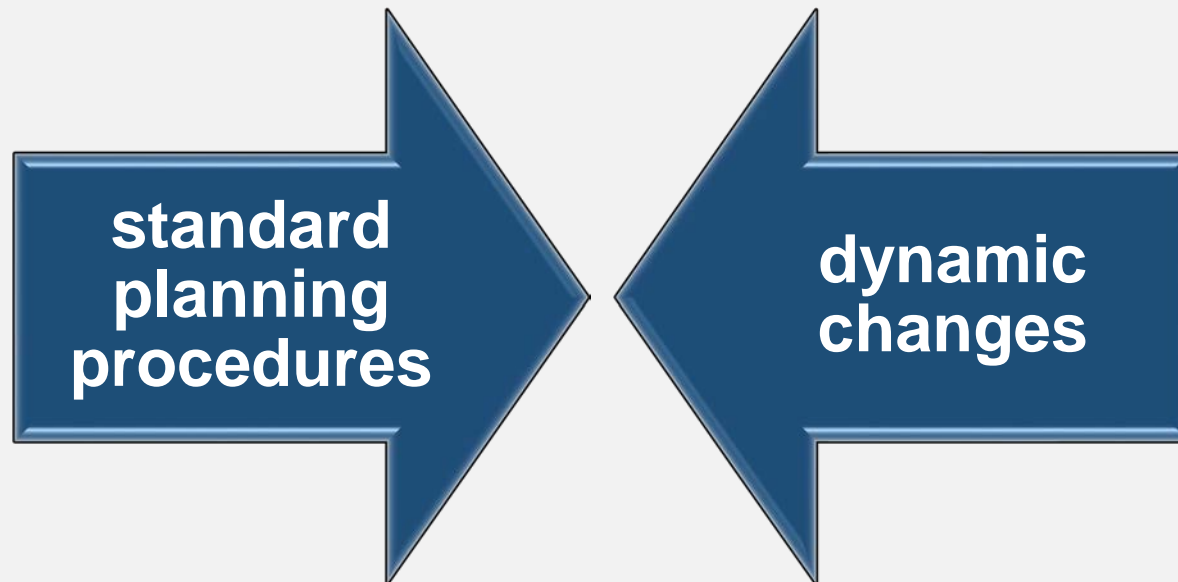
Agenda:

1. Logistics Sustainability and Importance of Technological Changes
2. Research Goal, Methods and Research Limitations
3. Preview of Emerging Technologies
4. Results and Discussion



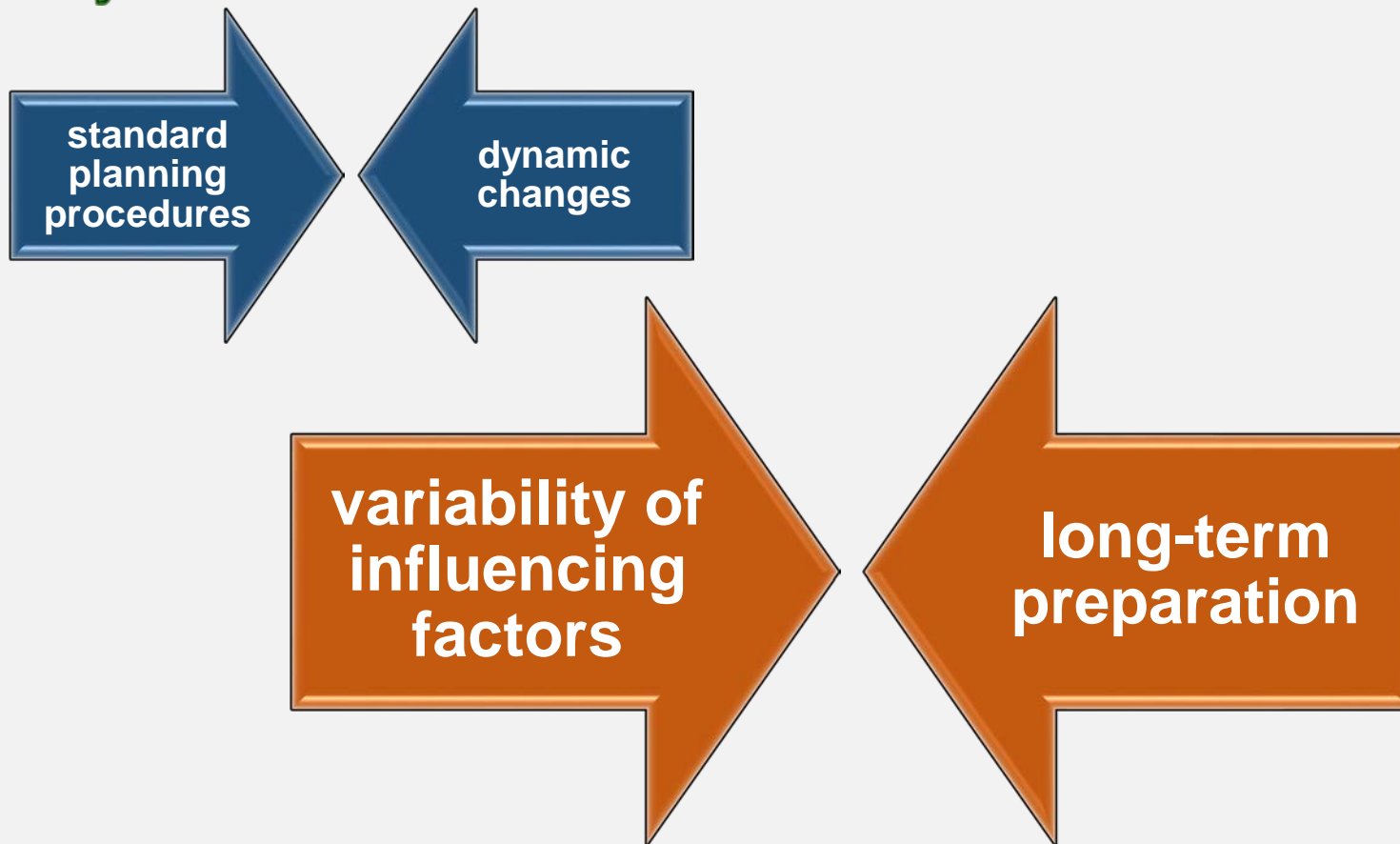


Key Questions for Consideration:



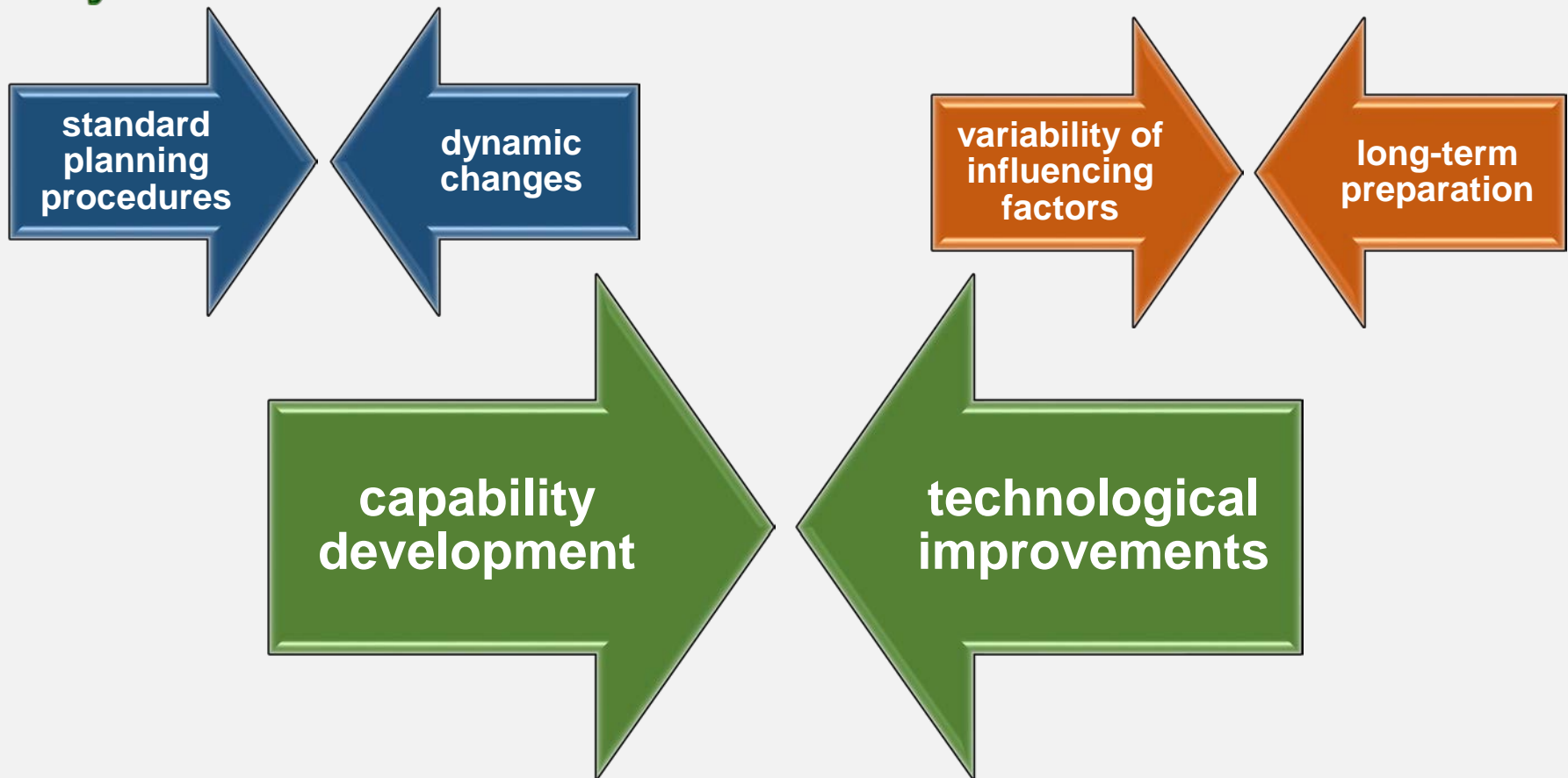


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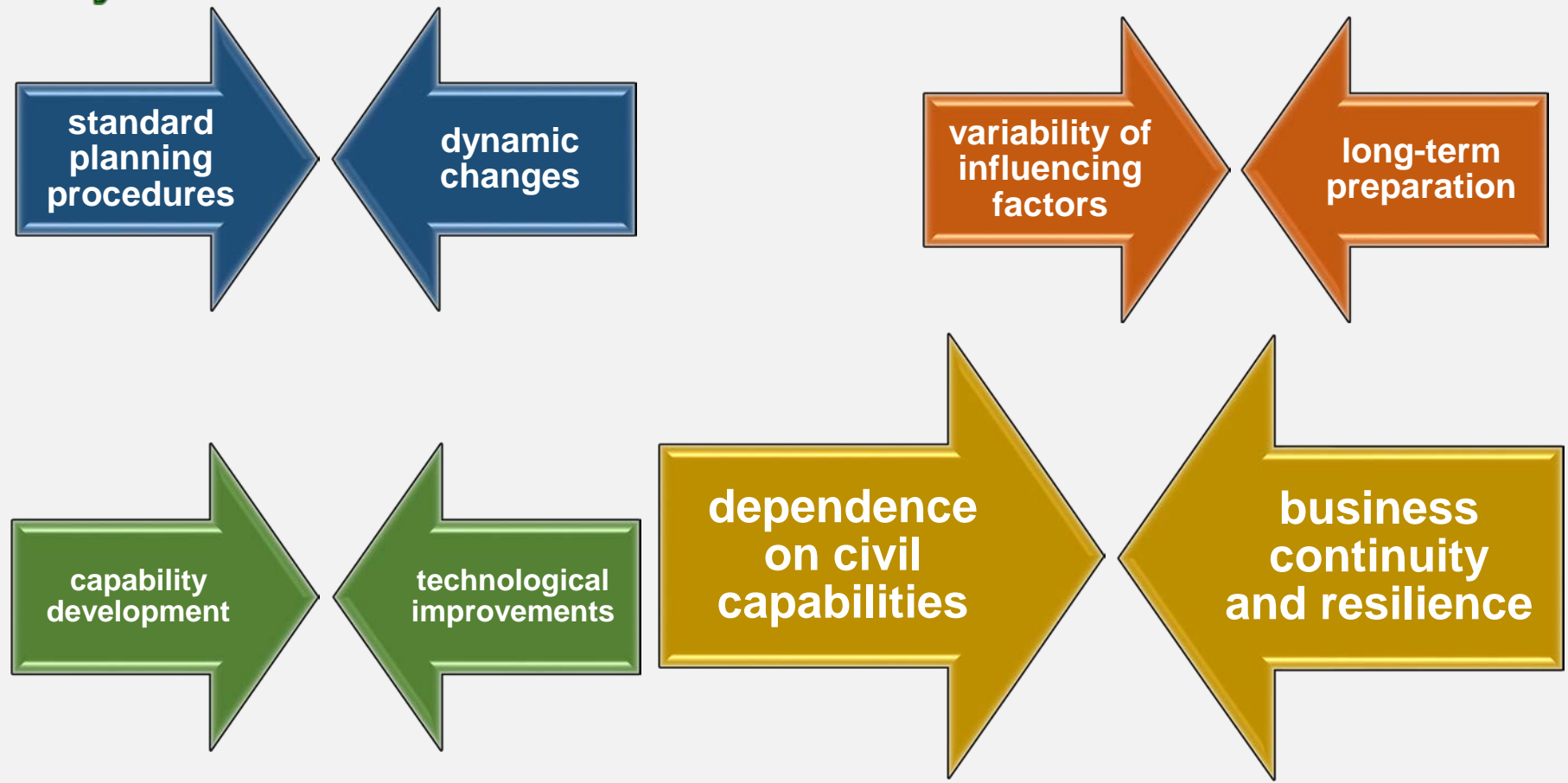


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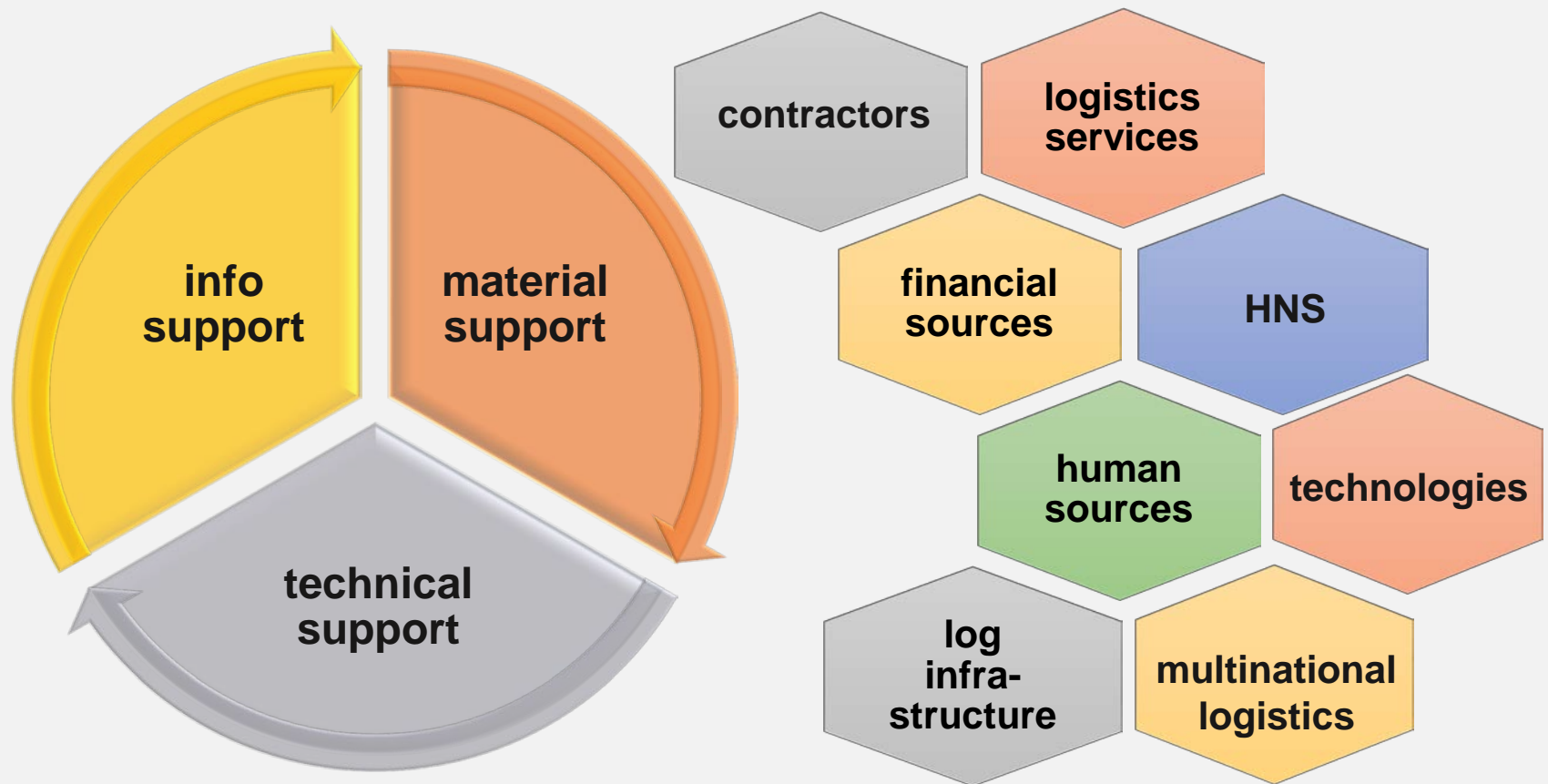


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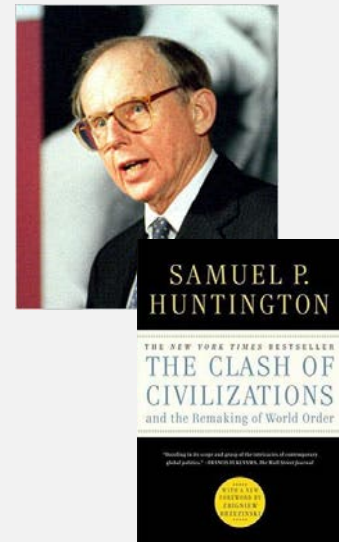
Complexity of Log Environment:





1. LogSustainability and Importance of TechChanges

- implications of changes in the security environment
- S. Huntington – military power dimensions:
 - quantitative dimension
 - technological dimension
 - organizational dimension
 - social dimension
- security trends vs. flexibility of response
- logistics as a key prerequisite for success
- technological and skills developments





2. Research Goal, Methods and Research Limitations

- goal:
 - to identify the impacts of significant emerging technologies on military logistics capabilities
- method:
 - primarily: content analysis (Web of Science/WoS, Scopus)
 - secondarily: analysis/synthesis
- limitations:
 - focus on main categories
 - time frame 2015-2021
 - unclassified information





3. Preview of Emerging Technologies

„The way how people ensure their livelihoods is very similar to way, how they are fighting.“

Alvin Toffler, *Third Wave* (1980)





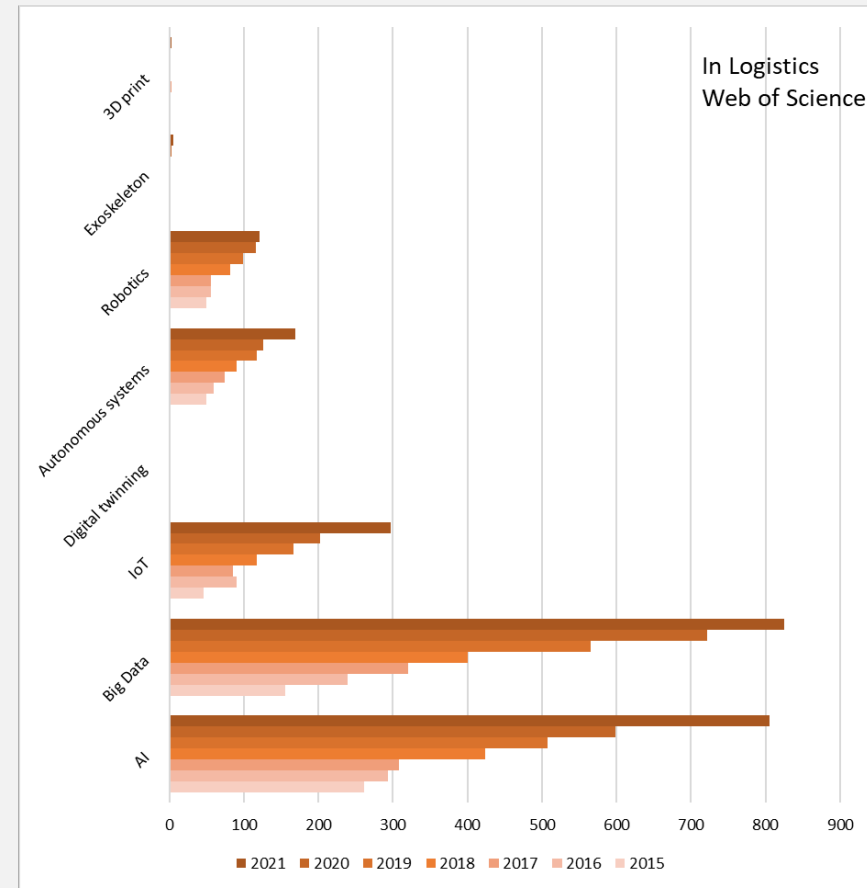
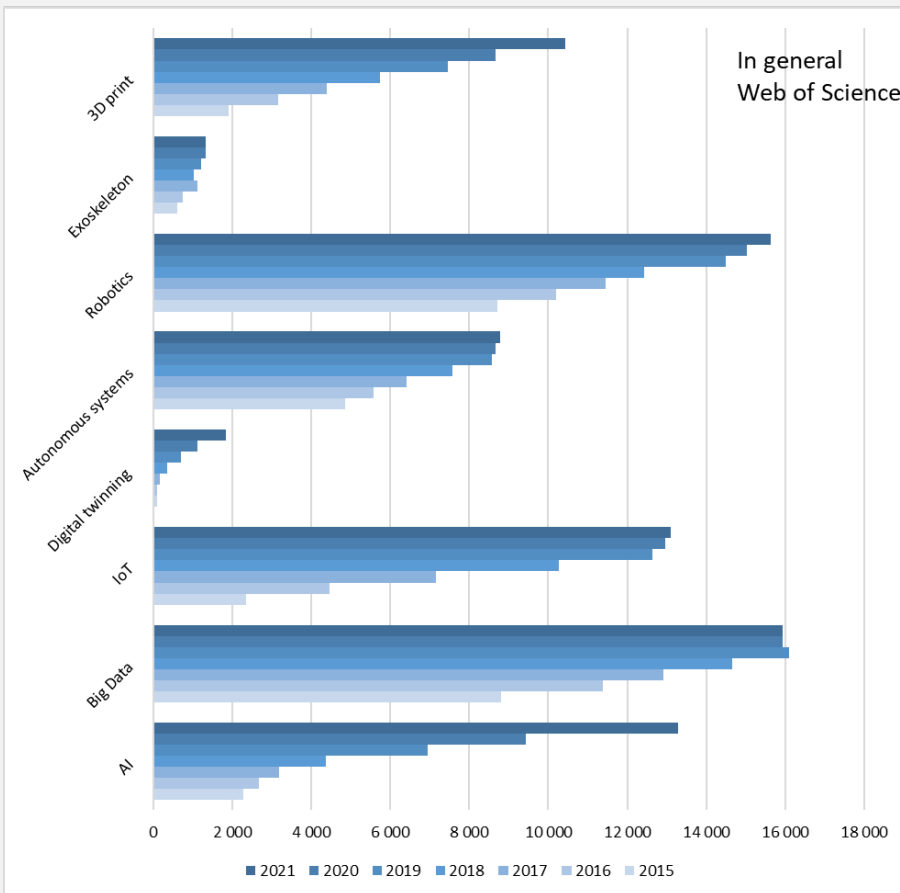
3. Preview of Emerging Technologies

- quantum technologies
- key emerging technologies for military logistics
 - artificial intelligence (AI)
 - Big Data
 - Internet of Things (IoT)
 - digital twinning
 - robotics
 - exoskeleton
 - 3D printing



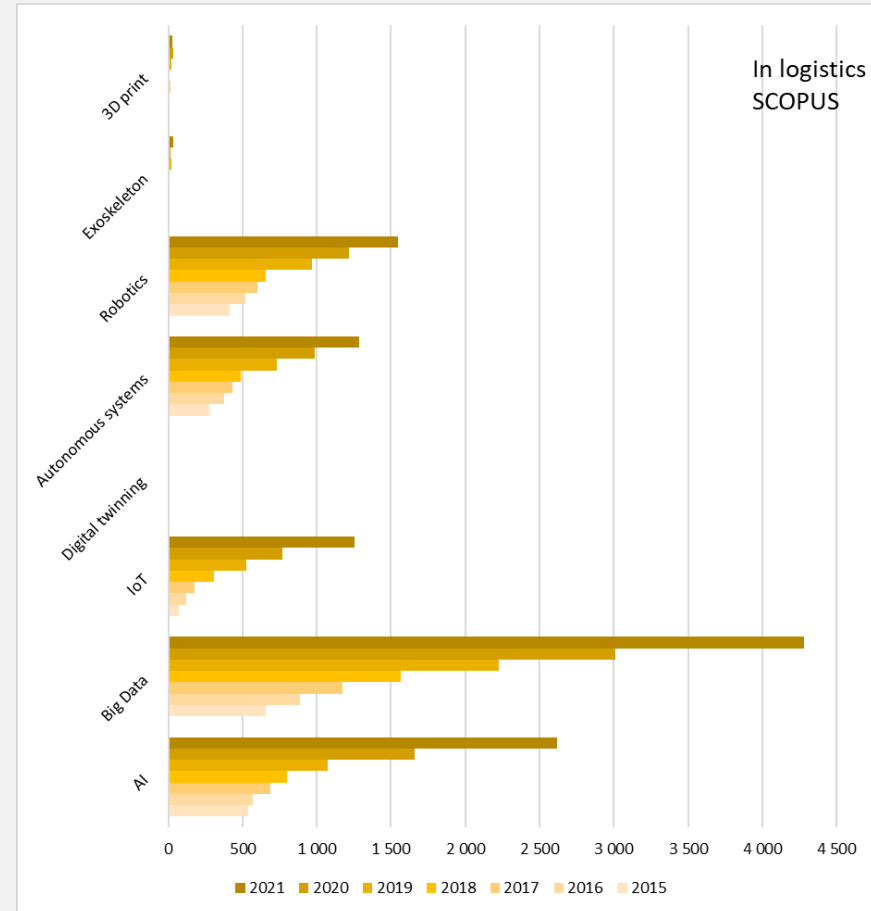
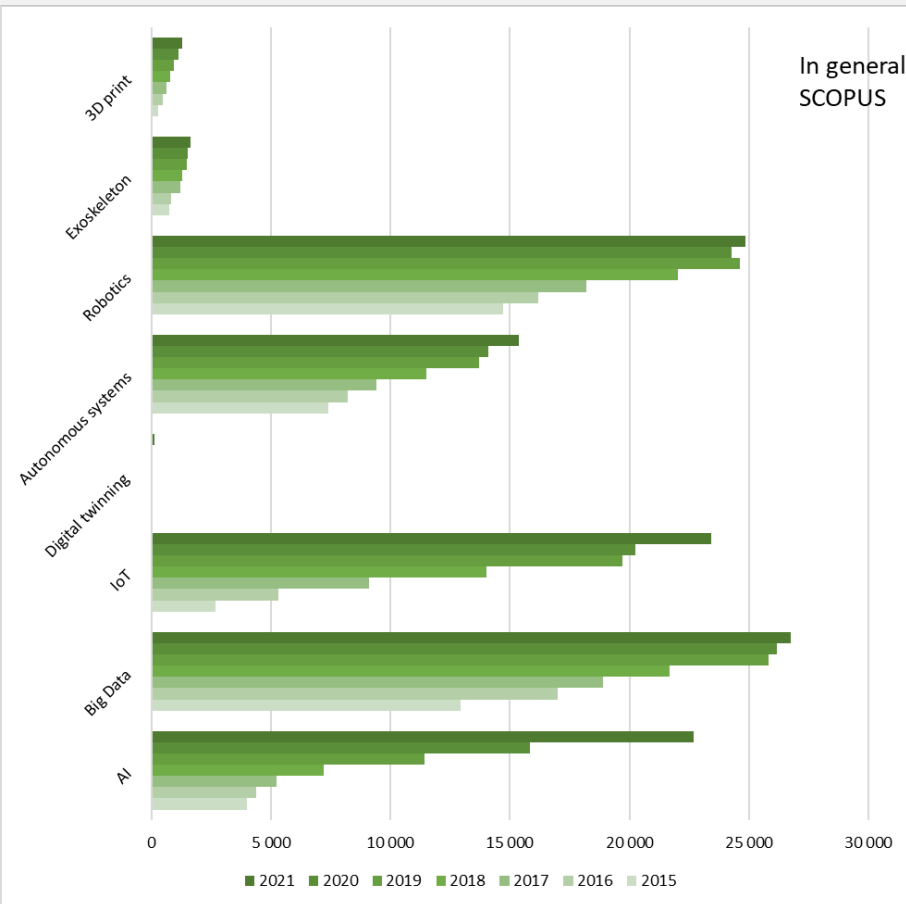


3. Preview of Emerging Technologies





3. Preview of Emerging Technologies





4. Results and Discussion

- databases WoS and Scopus
- in general:
 - digital twining
 - AI and IoT
 - 3D printing
- logistics applications:
 - Big Data, AI and IoT – strong applications
 - autonomous systems and robotics – application increase
 - 3D printing, digital twining and exoskeleton – not yet, why?





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