



Aalto University  
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Engineering

# S-38.3046 Value Network Design for Internet

Case: Sharper Shape

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# Case description

- Sharper Shape: services provided on drone platforms, current focus on inspection and management of utilities' infrastructure, data collection and analysis, and required software development.
- The future market depends on the regulations in different countries and technological development of sensors and drones.
- Company's aim is to license their platform to other companies which would then provide additional services

# Scope definition and Stakeholders

- Scope:
  - US market centric
  - timeframe 5-10 years
- Stakeholders:
  - Sharper Shape
  - Utility companies and other asset owners
  - 3rd party application and service providers
  - Drone and measurement equipment manufactures
  - Mobile operators

# Key Trends

- Drones provide a significant cost reduction to inspection activities (from helicopters to drones around 70% less) -> drone use will increase even with current prices
- Drone and measurement device technology will improve and reduce in price (e.g. solid state lidar costs over 99% less) -> more use cases become affordable
- Regulations will evolve toward more permissible and homogenous forms (in the US, beyond line of sight operations allowed in the next year or so, in Finland already the case)

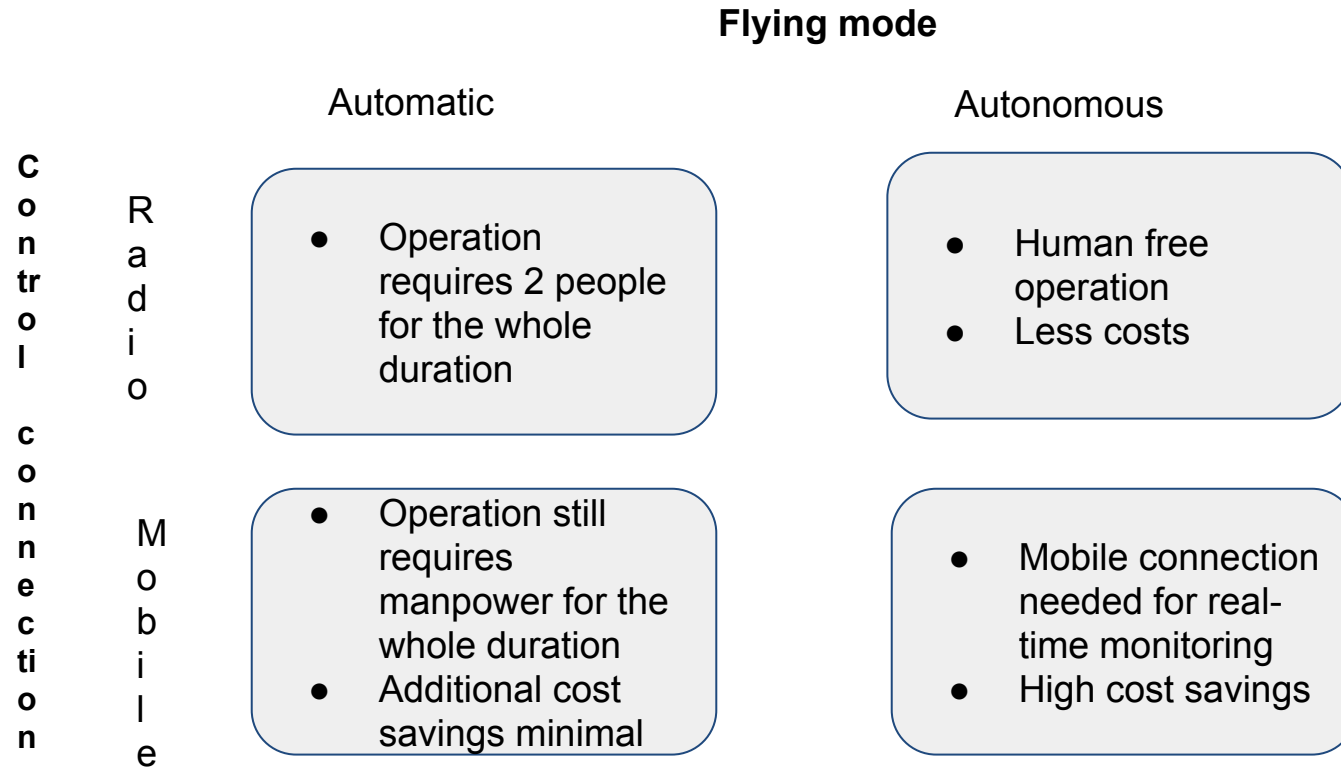
# Key market uncertainties

- Is it better to retain full control of the value chain or develop a value network with 3rd party service providers?
- Drone control and data link implementation: will mobile networks be available ubiquitously
- Cost reduction rate: many services only become affordable if costs reduce by order of magnitude
- Automated or autonomous: technology will probably allow it before regulators
- Is Sharper Shape's position in the market secure or will there be lot of competition?

# Scenario 1

		Licensing of platform	
		Yes	No
C o m p e t i t i o n	l o w	<ul style="list-style-type: none"><li>• Lower risk and rapid growth</li><li>• Higher revenues (ROI)</li><li>• Agile operations</li></ul>	<ul style="list-style-type: none"><li>• Less applications</li><li>• Higher share of smaller market</li><li>• Less agile</li></ul>
	h i g h	<ul style="list-style-type: none"><li>• Faster market development</li><li>• Should allow larger share of market</li></ul>	<ul style="list-style-type: none"><li>• Unique technological advantage and high level of provided services required</li></ul>

# Scenario 2



# Any questions?