



Project LOCUS

LOCalization and analytics on-demand embedded in the 5G ecosystem,
for Ubiquitous vertical applications

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<https://www.locus-project.eu/>



GROUP OF COMPANIES



Operators Motivation



- Gain strategic and a competitive advantage over their competitors.
- Identify and exploit new revenue opportunities
- Increase market share
- Boost customer experience
- Need to differentiate is paramount.
- Clear definition and communication of their added value.





Current and Future Services

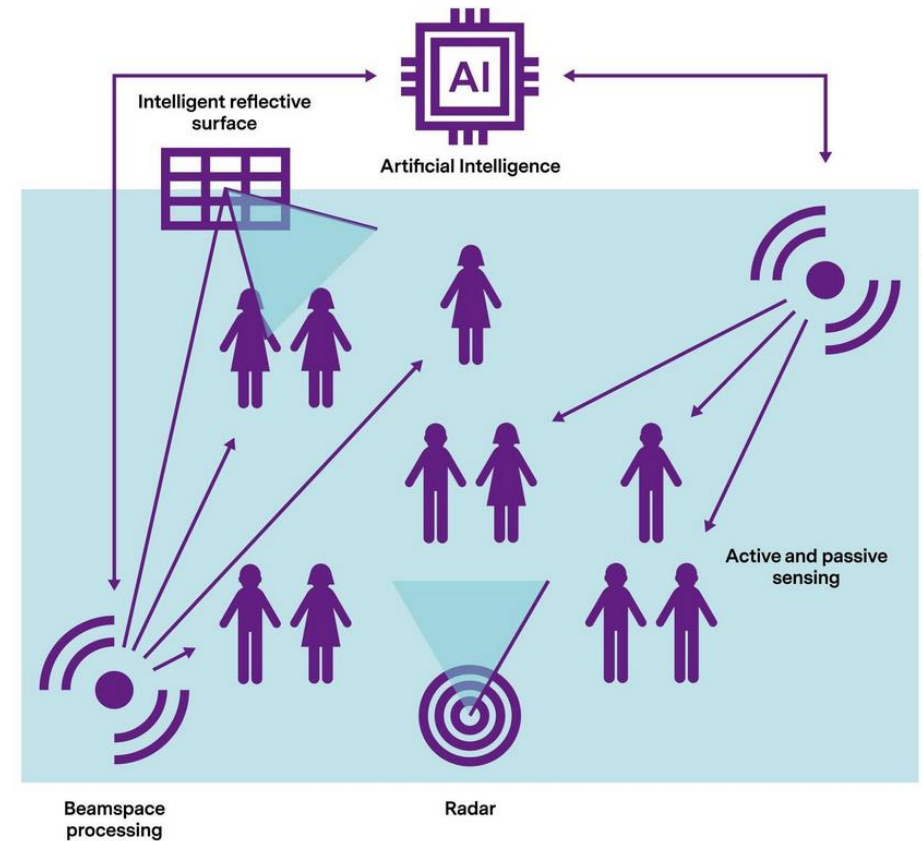


Current Services

- ❖ Navigation
- ❖ Proximity Marketing
- ❖ Mobile Phone Tracking

Future Services

- ❖ V2X applications
- ❖ Extended Reality (XR),
- ❖ Industrial IoT applications
- ❖ Ultra-precision manufacturing
- ❖ Mapping & Navigation
- ❖ Contextual Marketing
 - Personalized marketing according place and time



Source: 6G paper on Localization and Sensing

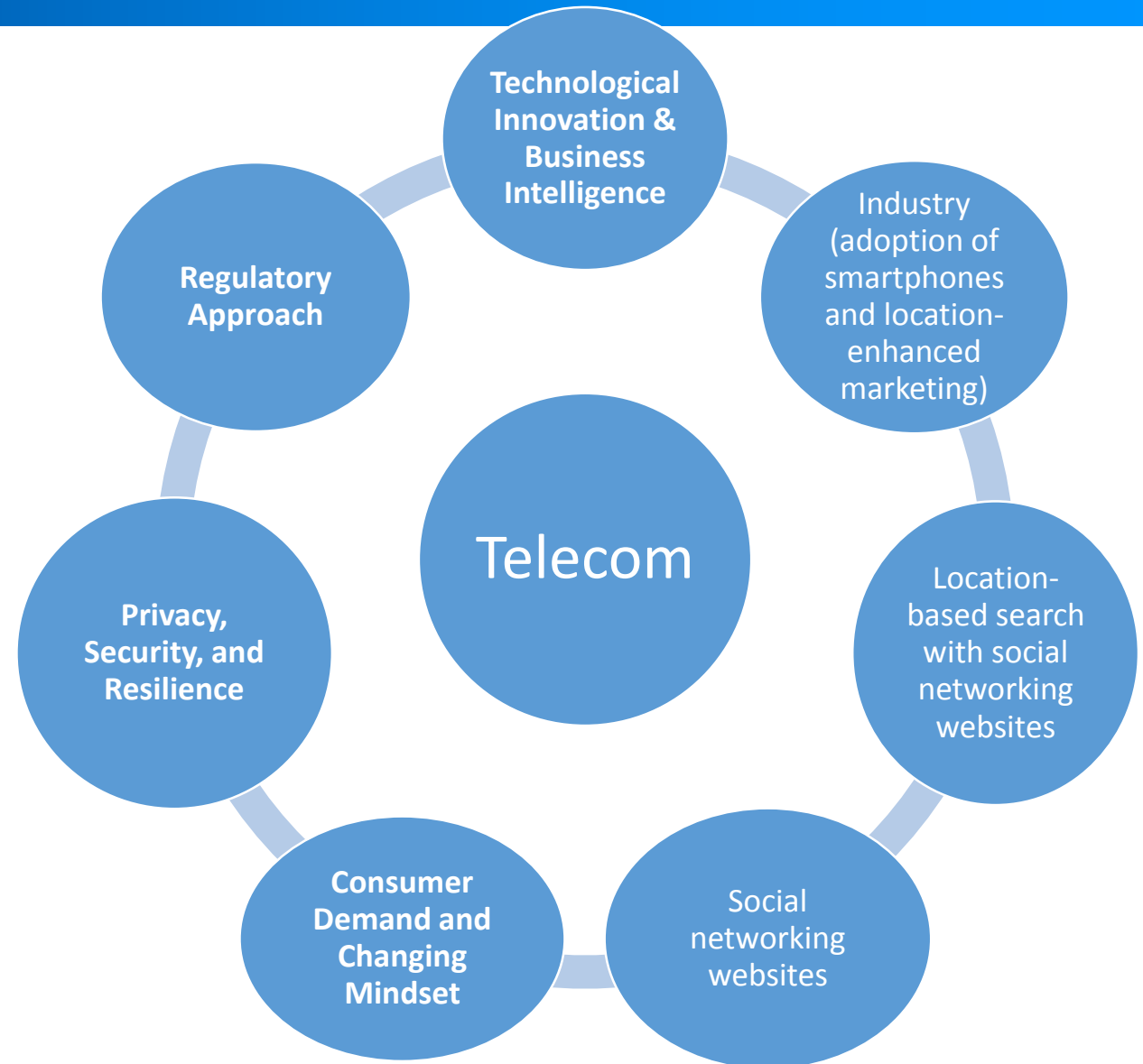




Market Drivers



**Recent world drivers
influencing the market for
LOCUS**



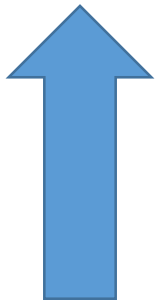


Market Forecast

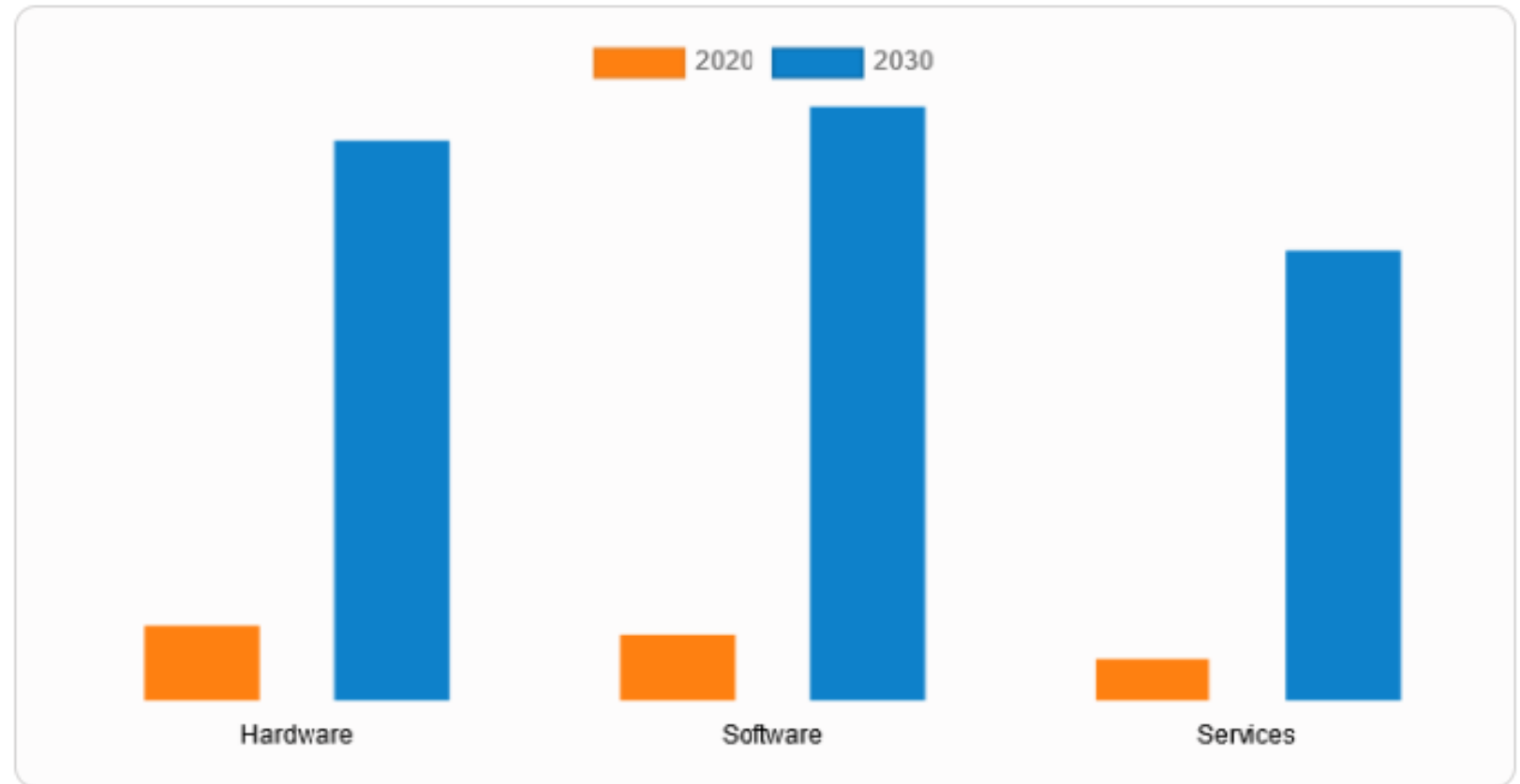


The global location based services market size accounted for \$36.35 billion in 2020, and is expected to reach \$318.64 billion in 2030.

Service Segment



Hardware Segment





LOCUS Vision & Key aspects



The **goal of the LOCUS project** is to design and develop a location management layered infrastructure not only capable of improving localization accuracy and security, but also to extend it with physical analytics, and extract value out of it, meanwhile guaranteeing the end users' right to privacy.

LOCUS will improve the functionality of 5G infrastructures to:

- Provide accurate and ubiquitous location information as a network-native service and
- Derive more complex features and behavioral patterns out of raw location and physical events, and expose them to applications via simple interfaces.





LOCUS Innovative Concepts



- ❖ Localization analytics exposed as virtualized services on top of hybrid edge/core virtualization platform integrated with 5G network infrastructures
- ❖ People (individual and group) mobility analytics as virtualized network functions
- ❖ 5G localization enhancement by pencil beamforming





LOCUS Demonstration Scenarios

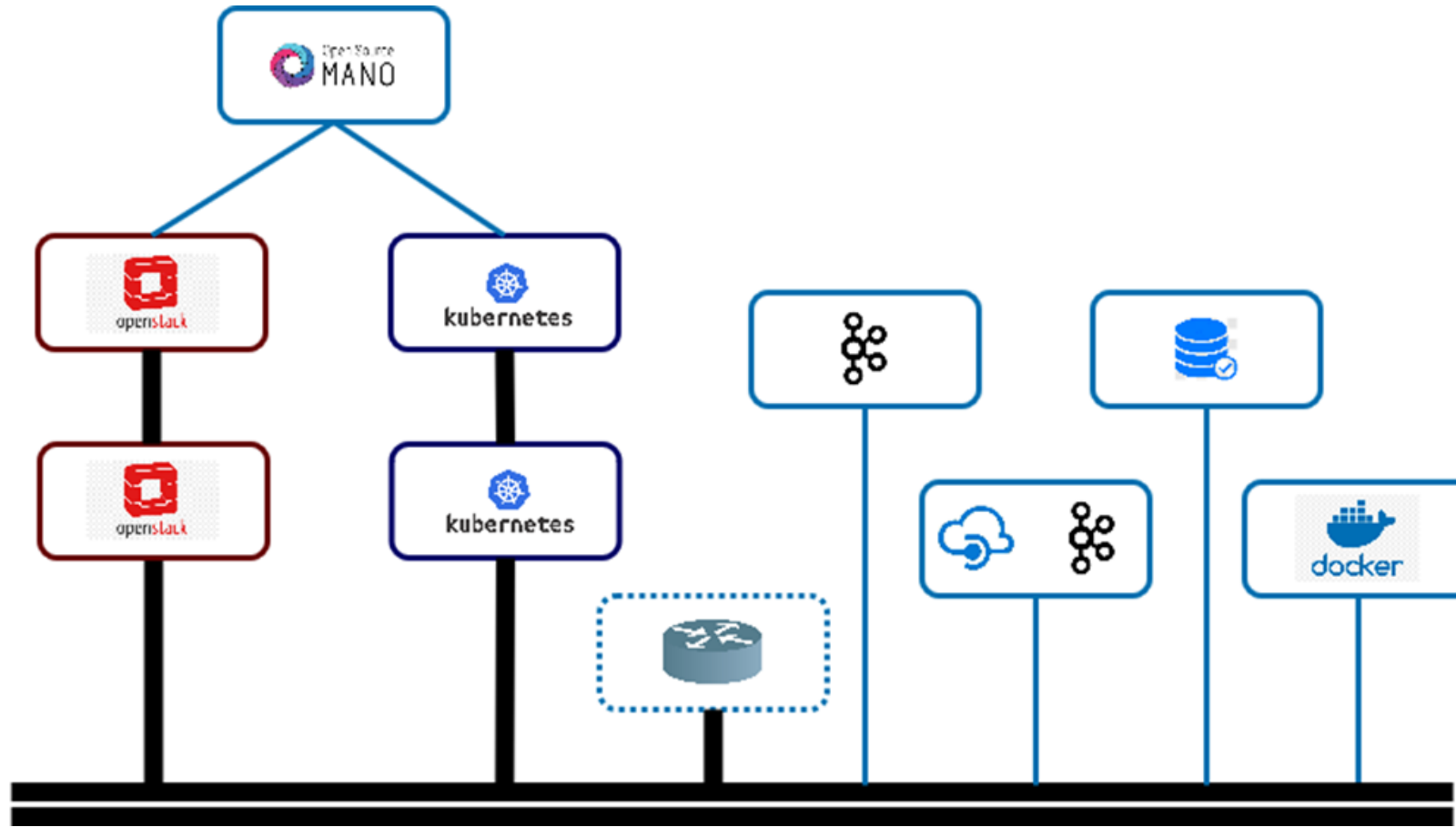


- ❖ Network Management based on Location Information
 - ❖ Localization will rely on the integration of non-3GPP technologies
 - ❖ 5G features will be emulated.
- ❖ Network-assisted Self-driving Objects
 - ❖ Industry 4.0 scenario.
 - ❖ Performance evaluation
- ❖ People Mobility & Flow Monitoring
 - ❖ Retail in indoor areas
 - ❖ Crowd-mobility in urban areas





OTE hosting Environment





Thank you for your attention!!

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