



RESEARCH FORECAST REPORT

IoT VALUE CHAIN REVENUE: **WORLDWIDE TRENDS AND FORECASTS 2016–2025**

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About this report

This report analyses revenue from the IoT value chain including:

- revenue from mobile IoT (cellular 2G, 3G, 4G and 5G) and low-power, wide-area (LPWA) solutions
- revenue for the hardware, connectivity and applications value chain components, which can be further subdivided into value chain elements
- an analysis of key industry sectors.

The report also provides recommendations for network operators.

It is based on Analysys Mason's research with key industry stakeholders.

WHO SHOULD READ THIS REPORT

- Senior executives of M2M business units.
- Senior executives responsible for R&D and network innovation.
- Market analysts responsible for M2M market sizing.

GEOGRAPHICAL COVERAGE	KEY METRICS
<ul style="list-style-type: none"> ▪ Central and Eastern Europe ▪ Developed Asia-Pacific ▪ Emerging Asia-Pacific ▪ Latin America ▪ Middle East and North Africa ▪ North America ▪ Sub-Saharan Africa ▪ Western Europe ▪ Full country level coverage of the forecasts is included in the DataHub. 	<ul style="list-style-type: none"> ▪ Revenue for mobile IoT and LPWA solutions divided into the following sectors. <ul style="list-style-type: none"> ▪ Agriculture ▪ Automotive (including connected car and fleet management) ▪ Finance ▪ Health ▪ Industry ▪ Tracking ▪ Retail ▪ Smart buildings ▪ Smart cities ▪ Utilities ▪ Other ▪ Revenue for the following value chain elements. <ul style="list-style-type: none"> ▪ Application ▪ Application enablement platform ▪ Connectivity service ▪ Device ▪ Hardware installation ▪ Module ▪ Systems integration

Contents

5. Worldwide trends

- 6. Worldwide: Total revenue from the value chain for mobile IoT and LPWA connections will be close to USD201 billion by 2025
- 7. Worldwide: The applications component will contribute the largest share of revenue, reaching 61% by 2025
- 8. Worldwide: Total revenue from mobile IoT solutions will be much higher than that from LPWA solutions by 2025
- 9. Worldwide: Most of the revenue in the IoT value chain is generated by the applications component – this will comprise 72% of the total by 2025
- 10. Worldwide: The hardware component generates the largest share of LPWA solution value chain revenue, comprising 49% of the total in 2025
- 11. Worldwide: Mobile IoT networks generate 4 times more connectivity revenue than LPWA, highlighting the difference in value generation
- 12. Worldwide: IoT solutions will have the most impact in developed regions and this is reflected in revenue distribution worldwide
- 13. Worldwide: Emerging Asia–Pacific will generate most mobile IoT revenue in 2025, but North America will generate most LPWA network revenue

14. Sector trends

- 15. LPWA solutions are characterised by several core revenue-generating sectors, but revenue from mobile IoT is skewed towards automotive
- 16. Mobile IoT sector: Embedded connected car revenue will comprise 42% of total mobile IoT revenue in 2025

- 17. Mobile IoT sector: Fleet management generates significant value for those bold enough to move up the value chain
- 18. Mobile IoT sector: Smart buildings will generate significant revenue from security monitoring service applications
- 19. Mobile IoT sector: Health is a small but lucrative market, which is served by specialists in remote monitoring
- 20. LPWA sector: Total revenue for the utilities sector will be driven by hardware
- 21. LPWA sector: Revenue from smart building solutions will reach USD17 billion by 2025, but the role of network operators remains uncertain
- 22. LPWA sector: Revenue from tracking solutions will grow to USD13.4 billion by 2025, driven by both consumer and business solutions
- 23. Sector analysis: Retail, agriculture and smart cities generate less revenue than other sectors, but open up other opportunities

24. Forecast methodology and assumptions

- 25. Main assumptions used to calculate ARPC

27. Definitions

34. About the authors and Analysys Mason

- 35. About the authors
- 36. Analysys Mason's consulting and research are uniquely positioned
- 37. Research from Analysys Mason
- 38. Consulting from Analysys Mason

List of figures

Figure 1: Total value chain revenue by value chain element, worldwide, 2016–2025

Figure 2: Percentage of total value chain revenue contributed by each component, worldwide, 2025

Figure 3: Total value chain revenue by technology, worldwide, 2016–2025

Figure 4: Percentage of total value chain revenue contributed by each component for mobile IoT network connections, 2025

Figure 5: Percentage of total value chain revenue contributed by each component for LPWA network connections, 2025

Figure 6: Total connections, connectivity revenue, connectivity share of total revenue and ARPC for mobile IoT networks, worldwide, 2025

Figure 7: Total connections, connectivity revenue, connectivity share of total revenue and ARPC for LPWA networks, worldwide, 2025

Figure 8: Total IoT revenue by region in US dollars, 2025

Figure 9: Revenue from mobile IoT and LPWA solutions by region, 2025

Figure 10: Total value chain revenue by sector for mobile IoT solutions, 2025

Figure 11: Total value chain revenue by sector for LPWA solutions, 2025

Figure 12: Revenue from mobile IoT aftermarket and embedded connected car solutions by value chain element, 2016 and 2025

Figure 13: Revenue from mobile IoT fleet management solutions by value chain element, 2016 and 2025

Figure 14: Revenue from mobile IoT smart building solutions by value chain element, 2016 and 2025

Figure 15: Revenue from mobile IoT health solutions by value chain element, 2016 and 2025

Figure 16: Revenue from LPWA utilities solutions by value chain element, 2016 and 2025

Figure 17: Revenue from LPWA smart building solutions by value chain element, 2016 and 2025

Figure 18: Revenue from LPWA tracking solutions by value chain element, 2016 and 2025

Figure 19: Main assumptions used to calculate ARPC

Figure 20: Definitions of mobile IoT connectivity sectors and applications

Figure 21: Definitions of LPWA connectivity sectors and applications

Worldwide: Total revenue from the value chain for mobile IoT and LPWA connections will be close to USD201 billion by 2025



Total revenue from the value chain (comprising hardware, connectivity and applications) will grow at a CAGR of 18% between 2016 and 2025, almost reaching USD201 billion.

Our projections of total revenue from the value chain are based on Analysys Mason's mobile IoT¹ and LPWA² connections forecasts, in which we predict that:

- mobile IoT connections will grow from 317 million in 2016 to 1.3 billion in 2025
- LPWA connections will grow from 64 million in 2016 to 3.4 billion in 2025.

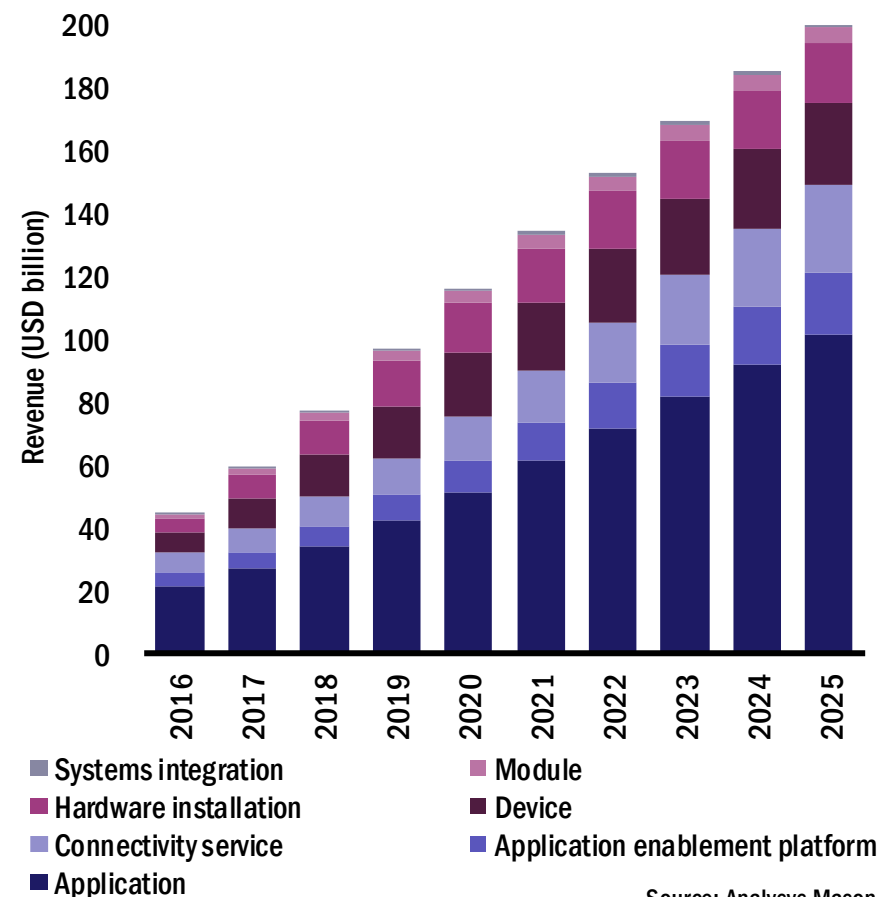
Average connectivity revenue per connection is small, despite significant growth in connections. Mobile operators and other players in the value chain are seeking additional incremental value by offering other components of the value chain, including hardware, devices and applications.

Participation in parts of the value chain beyond connectivity carries more risk, but also generates higher revenue and, typically, higher margins. This report quantifies the total revenue from the value chain for IoT applications using mobile and LPWA connections.

¹ Mobile IoT includes 2G, 3G, 4G and 5G networks.

² For further details, see latest results from Analysys Mason's [Datahub](#) for mobile IoT and LPWA connections.

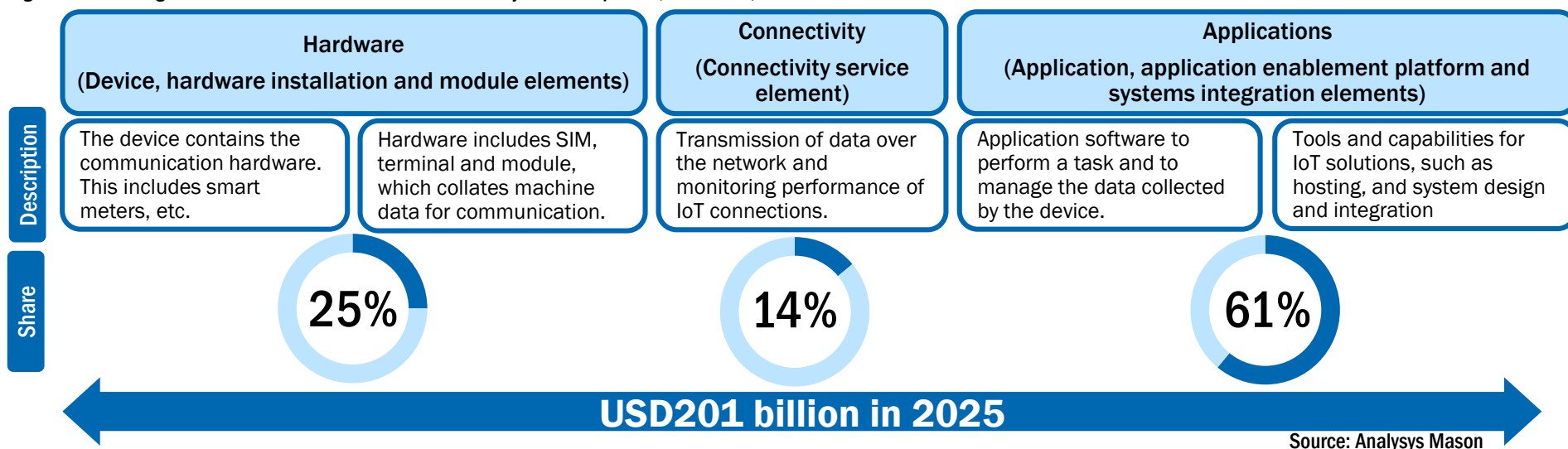
Figure 1: Total value chain revenue by value chain element, worldwide, 2016–2025



Source: Analysys Mason

Worldwide: The applications component will contribute the largest share of revenue, reaching 61% by 2025

Figure 2: Percentage of total value chain revenue contributed by each component, worldwide, 2025



The hardware component generates 25% of total revenue. Network operators may benefit from a share of this revenue, depending on the partnerships they have with device vendors and their roles in the value chain. Connectivity services, including revenue from connectivity and connectivity management, constitute 14% of total revenue. Connectivity typically has a relatively high margin, with EBIT margins often around 10%. Barriers to entry to the wide-area connectivity market are high for mobile IoT connectivity, but IoT can leverage an existing network serving many customers. However, the presence of LPWA connectivity in unlicensed spectrum has lowered its entry barriers.

The applications component will generate the vast majority of revenue: 61% of the total from the value chain in 2025. Software application development generates higher costs (as it requires specific skillsets and resources) and requires specialist sector knowledge. It is also increasingly subject to higher costs, including the requirement for built-in security. Mobile network operators are not typically equipped to provide application services, but will partner or build expertise in sectors where they are pursuing an end-to-end strategy. The share of revenue contributed by each category fluctuates very little between 2016 and 2025.

CONTENTS

WORLDWIDE TRENDS

SECTOR TRENDS

FORECAST METHODOLOGY AND ASSUMPTIONS

ABOUT THE AUTHORS AND ANALYSYS MASON

About the authors



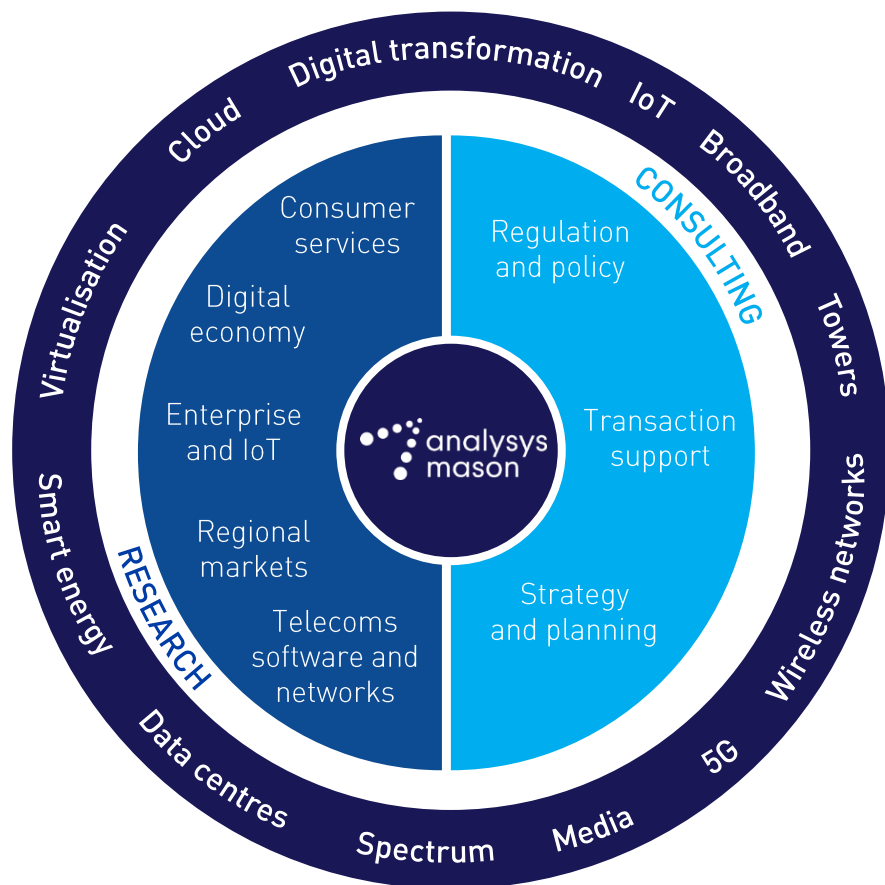
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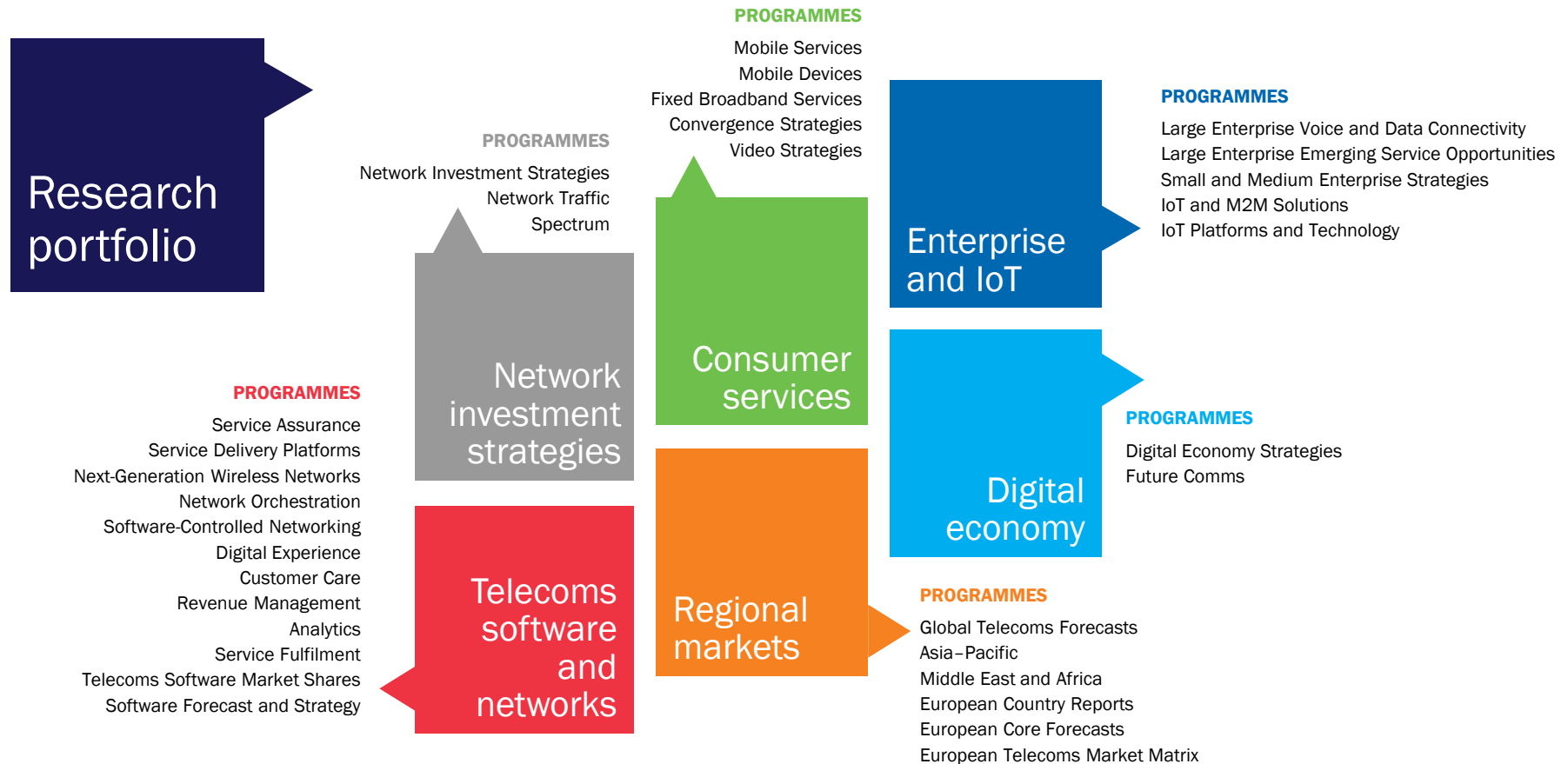
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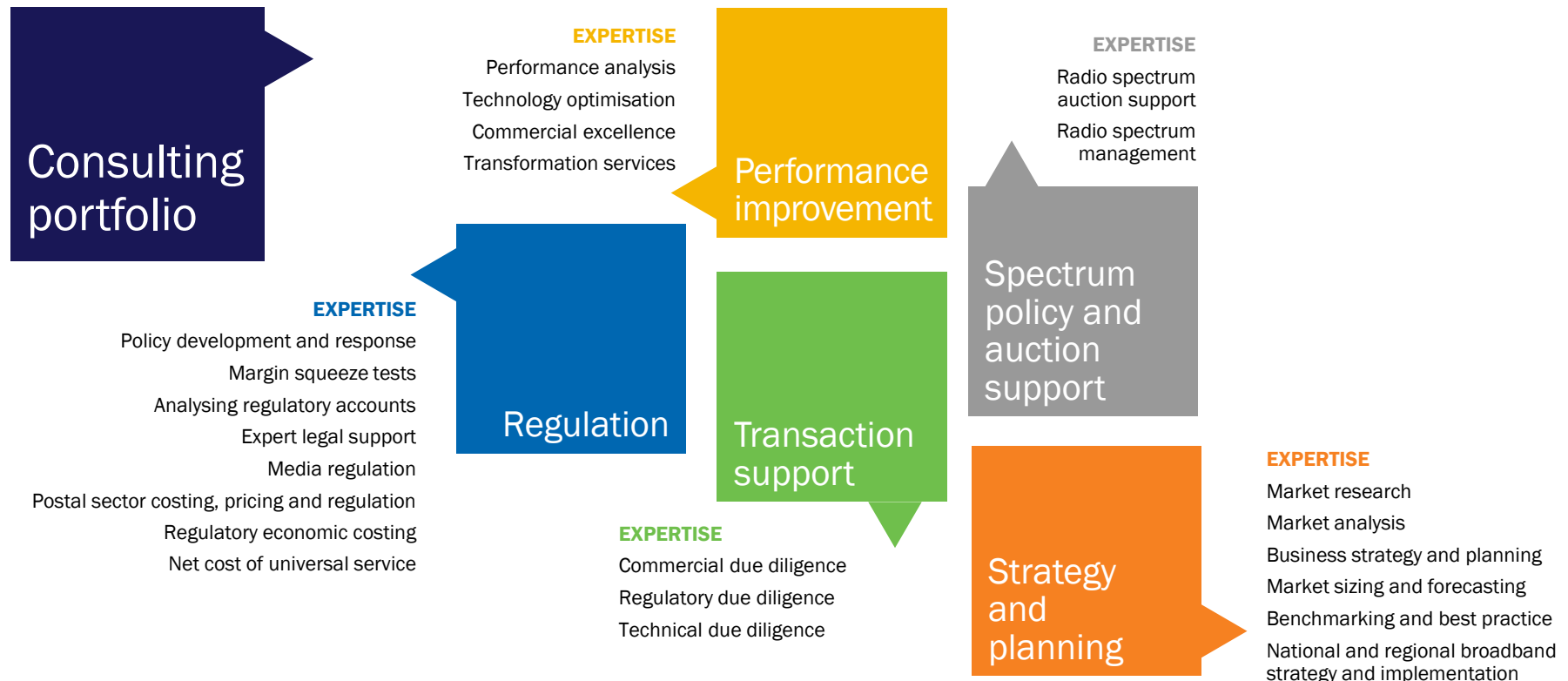
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