

The importance of value creation

Regulators and governments want Mobile Network Operators (MNOs) to invest in 5G, but based on KPMG professionals' meetings with many MNO board members, they are concerned about making a profitable return on the hefty investments required to build out these new networks. Many are confident consumers will pay more for 5G, but not enough to cover capital expenditures incurred deploying these complex networks. MNOs need clarity on where to deploy 5G technology to generate the best returns and their focus must now shift from consumer to the enterprise divisions.

The opportunity exists for MNOs to create profitable new revenue streams from their enterprise customers. Enterprises are unlikely to pay more for higher speeds, but would be inclined to invest to realize the significant value 5G creates by solving existing challenges and enabling new business models.

The 5G enablers of value

Often the telecom industry has connected drivers of value with a customer proposition. In the new 5G world, capacity, reliability, latency, bandwidth, and efficiency will be transformational in what the MNO can enable for the enterprise customer.

The 4G approach would be to take the drivers of value to the enterprise customer and ask the customer to apply the drivers to the business to find a way to justify additional investment. A 5G approach requires the MNOs to think differently, understand their enterprise customers' real problems, and help the customers transform their businesses by using 5G to solve these problems.

Questions they should be asking include:

- In which industry verticals can this value be created?
- How much value can be unlocked in these respective industries?
- What is the time horizon for the value to emerge?
- What collaborative steps can enterprises and mobile operators take today to maximize their position in these value pools?

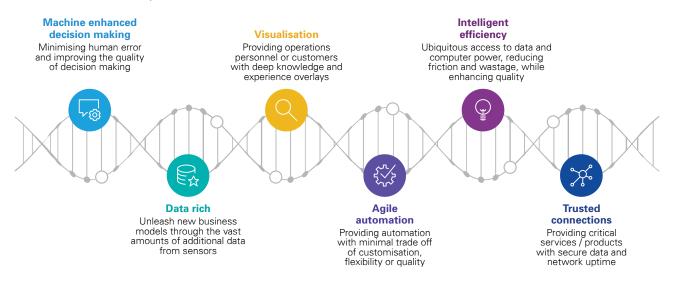
To further understand the value to be unlocked, we looked across many industries and timeframes.



The DNA of 5G enterprise value

Improvements in the enterprise are driven by innovative new capabilities that solve a complex problem or unlock an opportunity for the business to create a competitive advantage. For this reason, when KPMG professionals set about understanding the impact of 5G among industry verticals, it was necessary to articulate the actual business benefits of 5G—which creates an opportunity for telcos to lift the value proposition to new heights and make 5G a business imperative for enterprise customers.

The DNA of 5G enterprise value is the creation of actual business propositions enabled by 5G:



Timeframe to realizing value

In addition, KPMG professionals assessed the nature of the industries to understand when value may emerge. We assessed across three time horizons:



Private or Campus style use cases

These use cases are typified by industries where an organization is centrally located or physically constrained and lends itself well to a private 5G network in a limited geography. These kinds of network deployments will be the first point of call for many operators. Examples would be manufacturing environments.



City use cases

When 5G networks become publicly accessible and rolled out within or across cities, an array of industries will be positioned to unlock value. Service-related industries needing broader coverage, like healthcare, mobility, and professional services, will fall under this time horizon. The live entertainment industry and use cases involving customers' experiences will also be implemented during this timeframe.



5+ years and beyond

Beyond the five-year time horizon, we can expect the majority of global telcos to have begun broad 5G deployments. While it's hard to predict the impact this far into the future, it is imperative for the MNOs to remain focused on the business challenges faced by their enterprise customers while adapting their business models to take advantage of edge computing advancements and the ultra-fast connectivity that will be realized with 5G.

The value to be unlocked

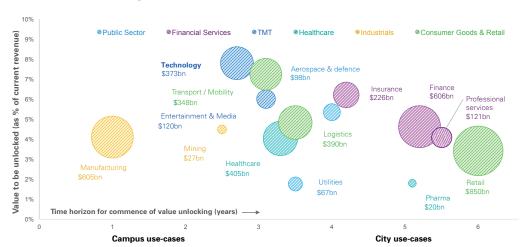
An estimated US\$4.3 trillion in value is waiting to be unlocked across the major industry verticals. By using the DNA of enterprise value, KPMG professionals were able to analyze the business challenges solved by the deployment of 5G and the value created as a result. As previously outlined, the timeline for deployments is critical for the telecom industry to understand and communicate with their

enterprise customers.

5G will be transformational in its impact, but that impact will not all happen tomorrow. MNOs should focus considerable efforts on the verticals where they can create value in the short-term, and thereby create the returns their boards need to see in order to further invest in 5G. This is not to say a longer-term focus is not important, but without some immediate financial returns the investments may not be

forthcoming in the first place.

KPMG's DNA of 5G enterprise value



\$4.3 trillion in value to be unlocked through identified use cases

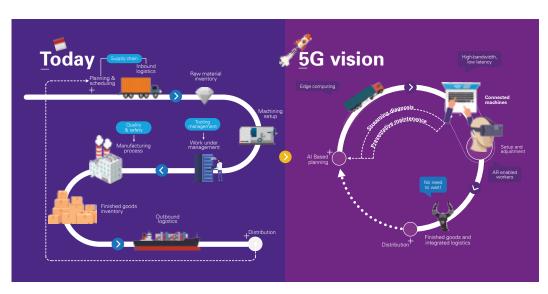
A study in 5G

Unleashing 5G's unprecedented benefits to business models is a challenge that many companies are facing or will soon experience. We took an in-depth look at select industries and how they can unlock the vast benefits of 5G. Here we will delve into one of those industries—manufacturing.

Manufacturing

In manufacturing, current 4G thinking typically creates a linear process: materials are ordered, machines are preset and managed by people, and they are maintained by lifetime, not wearand-tear. The result? A high potential for costly breakdowns and waste as well as a process that cannot easily respond to changes in demand.

Deploying 5G into this kind of environment can support a business transformation enabling



dynamic, self-regulating, and self-adjusting processes that translate into agility, speed, and higher productivity. Importantly, these benefits will be passed onto the end customer in the form of customization, quality, and speed of delivery. The linear process becomes circular and significant value is created.

Next steps for companies

Leaders need to stay ahead of the competition if they are going to capitalize on the benefits of 5G. But how does your company become an Outpacer in 5G?



Think

Think beyond the use cases already identified and the 4G infrastructure of today. Understand the DNA of 5G enterprise value to solve business issues.



Design

Enterprise divisions need to be insight-led, much like modern consulting businesses, and more "agile" in their product management, just like technology companies. Be realistic with enterprise customers on roll-out timing—these will vary and so will their ability to realize value.



Do

No one player can do this alone. Unlocking value drivers will require collaboration and co-creation. Identify the key players you need to work with to evolve your business and help maximize the value of 5G.

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