Energizing the enterprise journey to 5G and IoT
Exploring enterprise technology, media and telecommunications (TMT) needs

Energizing the enterprise journey to 5G and the internet of things (IoT) is the first of a series of findings from EY research into enterprise attitudes to TMT services and service providers. These insights are drawn from a survey of 200 enterprises, either based in the UK or with a significant UK presence, conducted in November 2018. These enterprises deploy a range of business models, from those principally serving other businesses (B2B), to those primarily serving consumers (B2C), and a third group who rely on a fairly even mix of business- and consumer-driven revenues (B2BC).

Respondent breakdown by business model

![Respondent Breakdown Chart]

This research helps pinpoint the diverse attitudes enterprises have toward a range of emerging technologies – and the ways in which TMT providers can support their corporate customers on their transformation journeys.

A new era of digital infrastructure is appearing

A new wave of connectivity is set to redefine the enterprise. The advent of the IoT coupled with high-speed, low-latency 5G technology can deliver unprecedented change, redefining organizational agility while creating more dynamic employee and customer relationships. Many organizations are already taking advantage of IoT, with 5G set to play a complementary role in helping to build the connected society. Taken together, both technologies signal a new era of digital infrastructure that paves the way for revenue uplift and business efficiencies across a number of traditional industries.

[ey.com/uk/tmt/5G-IoT-journey]

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Starting the journey toward intelligent connectivity

Positive 5G and IoT spending intentions but resistance remains

The research shows that over a quarter of UK enterprises are already investing in IoT capabilities. In two years’ time IoT will feature as a spending domain for more than half the enterprises in the sample.

5G spend is at an earlier stage, hardly surprising given that it is not yet commercially available. However the future is also positive, with one in 10 businesses already apportioning IT budgets toward 5G, and a further 50% of enterprises preparing to upgrade to 5G connectivity in the next two years.

Enterprise 5G and IoT spending intentions

Which of the following emerging technologies is your organization investing in?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Currently investing</th>
<th>Plan to invest in next two years</th>
<th>Monitoring technology; no plans to invest</th>
<th>Technology not relevant to my organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>5G</td>
<td>9%</td>
<td>50%</td>
<td>36%</td>
<td>5%</td>
</tr>
<tr>
<td>IoT</td>
<td>27%</td>
<td>33%</td>
<td>30%</td>
<td>10%</td>
</tr>
</tbody>
</table>

The demand profile for both 5G and IoT is encouraging, and suggests over half of enterprises have investment in both technologies in their sights. Even so, TMT providers should bear in mind that three in 10 organizations are only monitoring these technologies, and a further minority do not actually believe these technologies are relevant to them. Converting these enterprises into 5G and IoT investors should be a focus for TMT providers if they are to maximize their addressable market in the medium-term.
B2BC enterprises: investment laggards

The survey findings also highlight that certain classes of enterprise may lag the overall adoption curve. Companies with business-to-business-and-consumer (B2BC) business models that rely on a fairly even mix of business- and consumer-driven revenues, for example, show reduced propensity to apportion budgets to both 5G and IoT in years to come.

This may reflect more complex business models that are more likely to necessitate a “wait and see” approach. Even so, it is important that TMT providers recognize the reduced appetite for investment in 5G and IoT among this group – and take action accordingly.

- 52% of B2BC enterprises are currently investing or planning to invest in 5G, compared with 59% of all enterprise respondents.
- 49% of B2BC enterprises are currently investing or planning to invest in IoT, compared with 60% of all enterprise respondents.
Pain points on the road to adoption

Strategic, operational and compliance concerns in focus

Despite this positive spending forecast, the outlook for these emerging technologies comes with health warnings attached. From fundamental uncertainties regarding technology maturity and benefits, through to operational anxieties regarding security, integration and deployment, enterprises have a number of concerns. Put simply, there is a very real risk that these new forms of connectivity fall short of their potential to transform the enterprise.

Enterprise concerns regarding 5G and IoT

Which are the most critical concerns informing your organization’s view of 5G and IoT? (Please select three.)

- Increasing vulnerability to cyber threats
- Perceived technology immaturity
- Limited relevance to overall technology and business strategy
- Lack of clarity on relationship to other emerging technologies
- Complexity of integration with existing technologies
- Poor understanding of technology benefits and use cases
- Insufficient engagement with vendors
- Increasing reliance on technology partners and vendors
- Low confidence in RoI
- Uncertainty on organizational deployment scenarios

% respondents

- Increasing vulnerability to cyber threats: 40% 37%
- Perceived technology immaturity: 34% 28%
- Limited relevance to overall technology and business strategy: 32% 24%
- Lack of clarity on relationship to other emerging technologies: 36% 32%
- Complexity of integration with existing technologies: 31% 30%
- Poor understanding of technology benefits and use cases: 40% 30%
- Insufficient engagement with vendors: 24% 26%
- Increasing reliance on technology partners and vendors: 25% 24%
- Low confidence in RoI: 27% 25%
- Uncertainty on organizational deployment scenarios: 27% 24%

5G IoT
Enterprises are still struggling with IoT use cases and benefits

Despite the positive investment profile associated with IoT — and its status as a key driver of the “fourth industrial revolution” — a surprising number of enterprises are still not sold on its fundamentals. Forty percent of enterprises cite poor understanding of IoT technology benefits and use cases as a concern, the joint-top answer. IoT’s game changing potential may be lost if these basic concerns are not addressed.

Businesses believe 5G is immature and unconnected to broader strategy

While 5G investment is set to catch up with IoT spend over the next two years, doubts surround its readiness and relevance. Thirty-four percent fear that 5G is too immature, while 32% believe it lacks relevance to overall technology and business strategy. This is instructive, since TMT providers are positioning 5G as much more than just a better mobile connection. The findings suggest that 5G has yet to punch its weight as a driver of strategic change for the enterprise.

Cybersecurity and other operational concerns undermine enterprise confidence in both 5G and IoT

Both 5G and IoT will give rise to a new horizon of connectivity endpoints. While this can help catalyze new value propositions and closer customer relationships, it may also open the door to new cyber threats. Tellingly, this ranks highest as a concern for both technologies. Enterprises also struggle to see how both technologies integrate with legacy systems, or function in tandem with other emerging technologies. And concerns regarding data security and integration with legacy systems are not limited to 5G and IoT, they feature as two of the top three inhibitors of technology migration at large.
B2B pain points in focus: technology immaturity and integration

Delving into the responses provided by different types of enterprise, we can see that B2B companies outscore their wider peer group in key respects. They are more likely to worry about 5G’s integration with existing technologies, and also over-index on fears that IoT technology is immature. For these enterprises, harnessing the new with the old is clearly a source of heightened anxiety.

- 40% of B2B enterprises cite complexity of integration with existing technologies as a leading 5G concern, compared with 30% of all enterprise respondents.
- 37% of B2B enterprises cite technology immaturity as a leading IoT concern, compared with 28% of all enterprise respondents.
The demand on TMT providers: better vision, better vertical expertise, better outcomes

Enterprises want partners, not just suppliers

Looking beyond the strategic and operational anxieties posed by 5G and IoT, enterprise concerns with these technologies also encompass a number of direct challenges to TMT providers themselves. Issues of engagement with and reliance on suppliers already feature as anxieties informing migration to 5G and IoT, for example.

Yet the survey highlights even more fundamental issues that TMT providers must address if enterprises are to maximize the benefits of new digital infrastructure. Two-thirds of enterprises feel that suppliers need to articulate a more coherent vision of both 5G and IoT in order for them to build a robust investment case. At the same time, 31% of enterprises view best-in-class industry expertise as a factor informing their vendor strategy over the next two years.

On the whole, enterprises are seeking a new kind of relationship dynamic, with 70% agreeing that they will prioritize companies that can deliver business outcomes as partners ahead of pure cost or technology benefits.
Four key actions for TMT companies

Both 5G and IoT represent much more than an upgrade to the “plain vanilla” connectivity solutions of the past. They represent a huge opportunity for TMT providers to monetize new demands and build stronger customer relationships. Yet if they are to maximize their central role in the “fourth industrial revolution,” they must engage with their enterprise customers in new, meaningful and sustainable ways:

1. Demystify 5G and IoT use cases and benefits

These emerging technologies are much more than the latest information and communications technologies (ICT) for enterprises, enabling faster connectivity delivered to more endpoints – they are fundamentally transformational and disruptive. Explaining the true business potential of these technologies will pave the way for more confident technology migration and will help TMT providers build more valuable customer relationships.

2. Sensitize your offering to specific customer needs

Not all enterprises think alike. B2BC enterprises with more complex business models show reduced spending propensity, while B2B enterprises are more likely to perceive IoT solutions as immature. Added to this, many enterprises are looking for vertical-specific expertise from the vendors. Providers that can develop more granular 5G and IoT propositions sensitized to sector needs, will be best placed to win the hearts and minds of their corporate customers in the future.
Immerse yourself in the enterprise transformation agenda

Organizations investing in 5G and IoT are looking for better business outcomes, not just an improved technology stack. This requires TMT providers to move beyond the supplier mindset of old. Engaging in a consultative dialogue that positions 5G and IoT within the broader context of enterprise transformation will help TMT providers achieve greater credibility as true business partners.

Ensure enterprises convert business potential into operational strength

Strategic visions aside, many organizations are hyper-sensitive to operational challenges accompanying the move to 5G and IoT, from their ability to withstand cyber threats, to their relationships with a range of legacy and emerging technologies. Add to this deployment time frames and supply chain readiness, and it is clear that TMT providers should be ready with robust solutions that provide greater levels of reassurance and trust.
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