You spoke, we listened

Now we're matching the insights you provided
at Smart IoT 2020 with our IoT strategy

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Where did we get to?

We all know the Internet of Things (IoT) has been around for a while now. Yet many organisations are only just beginning to see how it can completely transform what they do.

We all know it's an essential part of the Smart Home and wearables markets. There have been growing numbers of Smart City applications for IoT too. But it's only when you talk face-to-face with people that you can see the barriers to widespread adoption.

That's why we took part in Smart IoT 2020. We wanted to use the opportunity to meet IoT buyers, policy influencers and key suppliers. To gain an even deeper understanding of what others in the market needed from us.

We've taken the insights you shared with us and looked at what we can do to help. Using what you told us, we're breaking down barriers that might stop you making the most of IoT.

We've identified three core areas that cover the IoT challenges you told us about at the event:

Planning new infrastructure and mass connectivity

Building a compelling business case

Ensuring security from end to end

But we also want to hear from you – our partners, start-up contacts and industry experts – about anything we may have missed. We see this as an ongoing process. By keeping the conversation going, we can keep on delivering the IoT services you need the most.

Planning new infrastructure and mass connectivity

You told us:

"We have to know how to handle the huge rise in IoT devices."

- "How do we prepare the right infrastructure?"
- "How much maintenance is required for IoT devices?"

"We need reassurances about data transfer and mass connectivity."

- "How do we maintain connections to our network?"
- "How will data-heavy IoT ecosystems work in real-time and at scale?"

Here's where we can help

Nationwide IoT ecosystem
We can wrap together everything you need to create a nationwide IoT ecosystem. Here's some of the ways we can help:
- O2 Smart Connect using our LTE-M network gives you the device management platform to control a large number of devices.
- O2 Gateway will secure all your IoT data.
- O2 Motion or O2 Smart Vehicle will then help you turn your data into insights that you can use across your organisation.

LTE-M network
LTE-M is a licensed network, so it's secure. We're currently enabling our LTE-M network with plans to cover the whole country in 2021. So you'll be able to connect devices that you wouldn't have been able to before. Like those in remote rural areas or in pipes under the ground.

There's very little maintenance required here because LTE-M is a low-power network. Which means you can keep your IoT devices going for up to ten years without having to charge them.

Scale your IoT estate
You'll be able to scale to whatever size of IoT estate you need on the O2 Smart Connect platform. You'll also get expense, consumption control and security alarms that tell you how much data you're using, what it costs and if there are any issues. We can help you host the data in the cloud. And we'll work closely with you to decide on the best tool to visualise that data. That way, you can actually use it to make crucial business decisions.

Building a compelling business case

You told us:

"We need to collaborate to understand how IoT will fit with our business strategy."

- "Is IoT right for our business, our sector and our customers?"
- "How do I create the right strategy and give my business the confidence to implement it?"
- "Where does IoT help with our digital transformation and the shift from Capex to Opex?"

"We need to know more about how IoT can support what we already do."

- "How does IoT support asset optimisation, product tracking and business process monitoring?"
- "Is there much software development required?"
- "How can I use IoT to reduce costs?"

Here's where we can help

Every sector is set to be transformed by IoT
Using O2's LTE-M network organisations can rollout secure nationwide IoT ecosystems. We're working on some existing use cases:

- Scalable Smart City devices from our partners include remote street lighting and smart benches.
- Real-time fire alerts, temperature checks and automated door controls in Smart Buildings.
- We're seeing a high take-up of wearable health monitors like the ones provided by our partner Navigil.
- The Utilities sector is already using smart metering and remote sensors to manage valuable assets.

Reducing cost and increasing efficiency using IoT
We're helping industry scale up the use of machinery controls, safety monitoring of hazardous materials and tracking assets to reduce the cost of unnecessary waste. And supporting productivity initiatives through our IoT-based Workforce Management tool.

We're helping fleet managers reduce fuel costs using our Smart Vehicle solution. Out in the field, there are agricultural and environmental applications where we're making a difference. Like livestock tracking, monitoring soil conditions and collecting information on pollution, noise or weather conditions through our partners Breezometer.

Make informed business decisions
Instead of expensive customised software, O2 Motion can provide rich insights on aggregated and anonymised population movement, profiles and preferences to the platform. For example, retailers and advertisers are using customer insights to tailor promotions to match stock levels and demand. The anonymous data from our mobile network means you can understand more about your customer journeys, spend propensity and other insights so you can get closer to your customers and plan ahead.

Combining this with data generated by your IoT devices will inform your digital strategy too. Like where and how autonomous sensors can support process automation to boost productivity and make major operational cost savings.

Ensuring security from end to end

You told us:

"We need to know what IoT really means for our security posture."

- "How do we make sure our network remains secure?"
- "What do we need to do to safeguard the data generated by IoT devices?"
- "Are there any particular vulnerabilities and how do we maintain ID verification?"

"We have to be confident that IoT will not adversely affect our mission critical processes."

- "What are the mission-critical implications of introducing IoT in areas like fleet management or manufacturing operations?"
- "How do you protect individual IoT devices?"

Here's where we can help

Security at its core
We provide the confidence an organisation needs for a large-scale IoT rollout. We secure the network, the device sims and the data. Our licensed LTE-M network gives you access to years of IoT industry collaboration. It comes with the high standard security features as other licensed spectrum technologies. It's secure and provides resilient links for transferring critical information by redirecting IoT traffic in the event of a network issue.

Built to last, investing in the future
Using APN and additional security, data can be encrypted when it is sent over our network. Our sims are purpose-built for IoT environments that often involve tough working conditions, like high temperatures. They're manufactured with authentication keys built in to protect both the device and the network. They also comply with the latest UK legislation on IoT security.

We can set alerts on IoT devices and even remotely disable sims if they are tampered with or removed from objects. And we don't stop testing our IoT security. For example, we're working alongside the scientists at Millbrook to continually update connected car security. We're also investing in Artificial Intelligence and Machine Learning to sense, detect and remove emerging threats in real-time.

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Let's keep the conversation going

We never stop looking for better ways to meet our customers' needs. This means investing in the most innovative technologies capable of transforming how the UK does business.

And now we'd love to hear from you.

How are you thinking of scaling up IoT in your organisation?
Are there any challenges you've come across that that we haven't covered here?

Get in touch and we'll take the time to talk through your situation. We'll get to know what you do and what problems you're trying to solve. Wherever possible, we'll help solve your problem with our IoT solutions to fit your needs. And put a dedicated team at your disposal to make sure they're working.

Contact us now to kick off the conversation or call us on **0800 955 5590**

You can also find out more about our LTE-M network on **our blog**.

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