

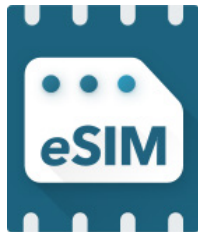
eSIM

PARTNERSHIP FUELS GROWTH IN CONNECTED IoT SOLUTIONS

AN ANALYST REPORT BY TRUPHONE AND IoT NOW.

TRUPHONE





eSIM is increasingly the catalyst for new IoT use cases, removing many of the barriers to adoption associated with the traditional SIM card.

A wide ecosystem is required to address these new connected IoT opportunities and partnerships between leading component makers, distributors and connectivity specialists are needed.

Truphone's unique position as the only provider that operates its own GSMA-compliant eSIM, remote SIM provisioning platform and global mobile network makes it the 'connectivity partner of choice'.

Here, Digi-Key's **Robbie Paul** and ST Microelectronics' **Denis Dubois**, explain how their partnership with Truphone is stimulating eSIM uptake and delivering substantial benefits to customers.



Analysts are predicting an exponential growth in eSIM and connected IoT solutions adoption over the next few years as solutions providers look to evolve their customer offering for competitive advantage and open up new ongoing service revenues.

Juniper Research has reported that adoption of eSIMs will grow 350% over the next five years to exceed one billion eSIMs globally by 2024.

350%

growth of eSIM adoption over the next five years

The firm also projects that the total number of IoT connections will reach 83 billion by 2024, rising from 35 billion connections in 2020.

83 BILLION

IoT connections by 2024

This is borne out by **ABI Research** projections which estimate 0.9 billion eSIM enabled devices will be shipped annually by 2023.

0.9 BILLION PER YEAR

eSIM enabled devices will be shipped by 2023

Counterpoint Research estimates shipments of eSIM-based devices will reach almost two billion units by 2025, up from 364 million in 2018.

2 BILLION

eSIM-based devices shipped by 2025

However, to hit these encouraging numbers, different types of organisations will need to collaborate to foster market growth. IoT involves significant complexities at multiple levels and requires different skillsets and inputs from many specialists. Truphone has continuously collaborated with partners throughout its history, whether via its nine national MVNOs or through its work with Apple bringing eSIM to the mainstream cellphone market. It looks to collaborate effectively for the long-term and has been bringing exciting new products to market as a technology partner to Apple since 2016, for example. It is as much about driving the growth of eSIM as it is ensuring the technology is being used to its full benefit, says Steve Alder, chief business development officer at Truphone. "It's never been more important

that the benefits of eSIM are exploited across the supply chain and that it is put to use in the spirit of its invention: to make the business of connecting devices much simpler for the customer."

To that end, Truphone, ST Microelectronics and Digi-Key Electronics have come together to help businesses supercharge their IoT and break down the barriers to large-scale international IoT adoption. As industry leaders in their respective fields, the partnership delivers a comprehensive, flexible, end-to-end solution for businesses of all sizes. Together, the companies bring a wealth of IoT capability and experience to businesses looking to deploy at scale and speed, taking advantage of eSIM and the latest IoT devices and applications.



DEMAND IN DISTRIBUTION

eSIM, because of its versatility, global applicability and flexibility means a distributor like Digi-Key can offer SIM provisioning for the first time. For Robbie Paul, the director of business development at Digi-Key Electronics, which distributes more than 9.2 million electronics components globally, connectivity has been in increasing demand from customers which, in addition to buying components, welcome the opportunity to enable connectivity as part of their purchasing.

“Traditional SIM cards have an efficiency management impact on all phases of deployment including production, enabling, distribution and ongoing maintenance,” he explains.

“They add management complexity and make deployments more of a challenge, which is added to when you consider most mobile network operators are regional or national so having global products is challenging.”

Paul adds that the issues are amplified when logistics and partners are brought into the equation. This means individual products can need hundreds of different stock keeping unit (SKU) numbers causing substantial headaches for distributors. These have been so significant that Digi-Key has stayed out of the SIM provisioning market until now.

“eSIM aims to change all the complexities of needing to configure devices for specific operators and the supply chain complexities that causes,” adds Paul. “Digi-key customers can now purchase electronic components directly from our website with eSIM technology already embedded. eSIM is remotely programmable and fundamentally switches ownership from the network operator to the customer. It is controlled by the user”.

“eSIM aims to change all the complexities of needing to configure devices for specific operators and the supply chain.”



Robbie Paul
Digi-Key Electronics

That control is an important aspect of eSIM's appeal but few organisations will be able to take advantage of it on their own, they will need a platform through which to manage their eSIMs and take advantage of the connectivity expertise and relationships of an eSIM provider like Truphone that has the experience and ability to handle

the sheer scale of the connected devices market. “Even with the benefits of eSIM, partnerships like this are the best paths to success,” confirms Paul. “Truphone offers global eSIM connectivity ‘out of the box’ with a single SKU. With their self-service SIM activation portal, together we enable our customers to manage their connectivity directly and change network operators over-the-air if they choose to. In this partnership we can provide an end-to-end solution in cellular connectivity that will accelerate global IoT products and worldwide deployments.”



ENABLE NEW USE CASES

It's not just distributors that have found SIM provision excessively complex, component vendors have also encountered traditional SIM complexities and found that these have limited their opportunities to market products that need robust, global connectivity. eSIM changes this and enables previously unviable use cases to be exploited.

"eSIM gives us the opportunity to create and define use cases and take account of the different requirements that different environments place on connectivity," says Denis Dubois, product marketing manager at ST Microelectronics, who emphasises the need for component providers, distributors and connectivity experts to collaborate to provide end-to-end solutions to the challenges of IoT connectivity.

An ecosystem is therefore a necessity for addressing the vast variety of use cases that need eSIM's flexibility and control.

These can broadly be segmented into three key areas: Internet of Things, Industrial and Automotive.

In IoT devices such as drones and hotspot devices have relatively basic requirements while in the industrial sector, applications such as metering and tracking applications require greater security but also can be moving items that traverse regional and national borders. The need to optimise

connectivity for these is of greater importance, especially as the applications demand high levels of security and resilience.

A final and most complex sector is the automotive market, which is increasingly mandated to accommodate connectivity in vehicles for applications such as emergency calling, or eCall.

These demand always available connectivity and vehicles routinely cross borders or move to areas in which the original mobile network operator's coverage drops. In these cases, eSIM enables the flexibility to ensure coverage.

"eSIM gives us the opportunity to create and define use cases and take account of the different requirements that different environments place on connectivity"



Denis Dubois
ST Microelectronics

"It may seem difficult to understand the eSIM ecosystem at first but, in reality, it's simple," he says. "The ST4SIM solutions from ST Microelectronics with connectivity provided by Truphone can be selected from the Digi-Key website and marketplace complete with all necessary GSMA certifications and interoperability."

"With ST4SIM solutions combined with Truphone's complete global eSIM ecosystem and management platform, customers can activate and remotely manage the solution so devices can be 'always connected', everywhere."



PARTNERSHIPS BREAK DOWN THE BARRIERS

"It is as much about driving the growth of eSIM as it is ensuring the technology is being used to its full benefit."



Steve Alder
Truphone

By collaborating in partnerships across the ecosystem, the barriers to large-scale international IoT adoption can be broken down making it simpler for customer organisations to harness the power of eSIM.

Truphone, Digi-Key and ST Microelectronics are focused on delivering a comprehensive, flexible, end-to-end solution for businesses of all sizes by demystifying and streamlining the process of provisioning connectivity.

To read more about Truphone's ecosystem of partners, visit truphone.com/things/partner-with-us.

 truphone.com/things