

# ❤️ #DoingSomethingGreat

## eSIM



### THIS MONTH'S NEWS AND UPDATES:

**Building successful  
brands by  
delivering great  
integrated  
customer  
experiences**

When I was in the US in October last year, I bought the latest iPhone 14, soon after it was released. The US version supports eSIM only and I thought that was a great move from Apple that makes a lot of sense.

The embedded Subscriber Identity Module (eSIM) has evolved rapidly in the last five years. The GSMA states that 5G adds momentum to the use of cellular connectivity for the Internet of Things (IoT), which is pushing eSIM adoption as well.

[Kaleido Intelligence](#), a leading connectivity market intelligence, and consulting firm, expects eSIM connections to exceed 4.5 billion in 2027, driven by a booming consumer market.

5G and eSIM are thus being rolled-out globally, and -when combined- lead to very innovative services that were not possible until now. eSIM is defined as an embedded universal integrated circuit card (eUICC) by GSMA.

Compared to legacy plastic, removable SIM cards, the eUICC can be soldered directly into the device which provides greater flexibility since devices can immediately connect, no matter where they are deployed or where they may travel during their use. It can also be downloaded remotely as a software-only version with an easy-to-use customer journey scanning a QR Code.

The evolution of the eSIM/eUICC makes it possible to survive in intense environments that experience extreme temperatures, humidity, or vibrations.

# Evolution of SIM



**Mini SIM**  
25 x 15mm



**Micro SIM**  
15 x 12mm



**Nano SIM**  
12.3 x 8.8mm



**eSIM**  
6 x 5mm

Therefore, eSIM is ideally suited to applications such as smart metering for remote-operated management, robotics, and asset monitoring, surveillance cameras in smart cities and factories, connected ambulances, medical monitoring devices, and more.

One of the great benefits eSIM brings to consumers, telcos, and enterprises, is flexibility. The Internet of Things (IoT) describes the network of physical objects with software that allows them to communicate with other 'things.'

This concept can be found in many modern smart homes. Thermostats, fridges, lights, and speakers often contain sensors that allow them to detect changes and respond to voice commands.

The most significant potential of eSIMs is to revolutionize this industry entirely.

The IoT has several challenges to overcome in the future, with scalability and security posing two of the biggest threats. Fortunately, eSIMs look set to overcome both challenges.

As a key component of connectivity services, eSIM makes the selection, contracting, and onboarding of new customers easier.

Consumers do not need to look for providers or go to the shop to buy SIM cards. Legacy SIM services such as roaming, local breakout or SIM applets with multi-International Mobile Subscriber Identity (IMSI) are available via eSIM.

As a key innovation, eSIM can trigger a localization service with the flexibility to choose a new local service provider to remotely provision and activate a new subscription to the device when needed, over the air.

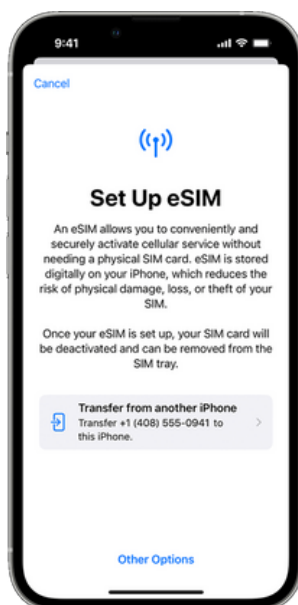


This flexibility truly enables global device manufacturers to rely on a single eSIM to be able to connect all their devices all over the world. eSIM technology simplifies device manufacturing and logistics by allowing a single stock-keeping unit. The eSIM technology enables guaranteed seamless global connectivity services provided by CSPs across the entire device life cycle.

Enterprise eSIM management platforms can help provide visibility and remote provisioning across millions of devices.

eSIM technology offers a simplified user experience for end users as well as time-saving operational expenses for the CSP handling eSIM devices over the product's lifecycle.

The potential for eSIMs to completely revolutionize wireless tech is an exciting prospect. Let's look at some core ways eSIMs could offer new opportunities to businesses and consumers.



## 1. Mobile phones

The eSIM has several valuable benefits for mobile phone users. One of the eSIM's biggest draws is how easy they are to set up and use. Rather than waiting for a new SIM to arrive in the post, consumers can sign up for a new carrier, receive a QR code and set up their eSIM in minutes.

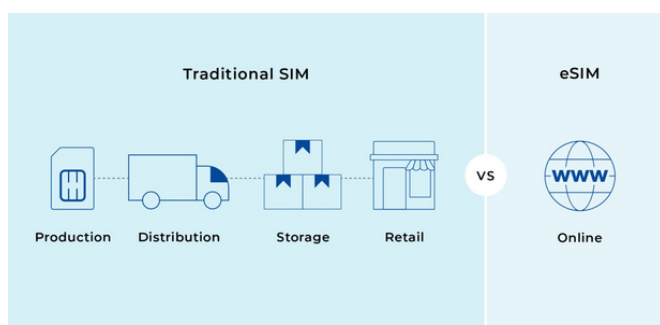
The eSIM also gives the consumer more freedom to choose the network of their choice. All phones with eSIMs are unlocked, meaning users can switch carriers as often as possible. This should drive competitiveness and lead to a more customer-centered mobile phone industry.



## 2. Production

The eSIM has the potential to completely revolutionize the production industry by offering new ways for manufacturers to complete **large-scale IoT projects**.

eSIMs are smaller, more secure, easily updated, and less susceptible to human error. This allows companies to expand their operations without fear of losing control of their daily procedures. As time progresses, eSIMs should give production companies the confidence to tackle more extensive operations and increase their economies of scale.



## 3. Shipping

With an eSIM, a business shipping globally can monitor and track a package in **live time as it moves across the globe**. Under normal circumstances, workers must replace a physical SIM in each new destination unless a business wants to incur roaming charges. With the eSIM, this is a non-issue, as the eSIM can be quickly updated to reflect a package's new location.

This means lower costs to connect with local carriers, more package security, and cheaper international shipping costs.



## 4. Vehicles

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Consumers also benefit from eSIM technology in vehicles. Optimized 5G support and a more secure connection allow drivers to make uninterrupted calls and receive live traffic updates.

Furthermore, if a customer takes their car to a different country or sells their vehicle to someone else, companies can instantly reprogram the eSIM to account for these changes.



## 5. Security systems

With the home security industry growing alarmingly excuse the pun ;- ) businesses frequently incorporate eSIMs into alarms, sensors, and control systems. Using the IoT, eSIMs can securely link sensors to a centralized independent connection that can't be tampered with.

This connection can then seamlessly connect to a monitoring service, allowing the service to update the security system and remotely provision each sensor in the house.

## Looking beyond eSIM technology

This technology is not only making it easier for users to manage their mobile connectivity, but it is also opening new possibilities for IoT devices and connected devices previously limited by traditional SIM cards.



eSIM technology is expected to become even more widely adopted as 5G networks roll out globally, providing users with faster and more reliable connectivity.

**#DoingSomethingGreat** is creating seamless experiences for customers by providing integrated solutions that capitalise on technology and differentiate the customer value proposition. customer experience.

