

IoT Connectivity and Battery Life Just Got a Whole Lot Smarter



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What Route Are You Taking Up The Value Chain?

If you're a global manufacturer who has realized it must go 'beyond the product', you're not alone. The Big Data explosion and the reliance on connectivity has opened doors for organizations to start thinking outside of the box when it comes to revenue streams.

Industry 4.0 is no longer just a buzzword, it's a real catch-all term for how enterprises are using data and AI to see tremendous growth in a wide variety of industries. If successful, global manufacturers will be able to embed their products inside services that provide greater value to the end customers, and truly disrupt the competitive landscape.

According to Deloitte, the success of the transition will depend on a company's ability to anticipate risks, scale their service capabilities and overcome a traditional OEM mind-set.¹

The Internet of Things is the power behind any new service model that today's global manufacturers are looking to leverage. Connectivity is the way to layer the services on top of the hardware, unlocking the potential of data, artificial intelligence and advanced analytics.

Sounds positive, right? However, attaining connectivity for IoT devices needs to start with a strategic business plan. Global manufacturers need to think about their specific IoT needs before they jump into new service models, or just as Deloitte warns, they will fail to thrive.

A Call to Action for Global Manufacturers

Let's dive deep into what these goals mean, and what's standing in the way of global manufacturers upping their game from simply selling hardware products to a service-enabled connectivity-driven solution.



The race for longer battery life – and the challenges it brings



Long battery life is often considered the most important parameter of a good IoT device. With the entrance of IoT devices to areas such as smart agriculture, smart metering, logistics and tracking, connected devices are required to operate for years using the same battery; and while batteries are cheap, replacing them often costs more than the cost of the entire device.

It is no surprise that battery life is one of the key buying decisions among enterprise customers.

The recent evolution of cellular technologies such as NB-IoT and CAT-M addresses this very aspect – improved, more efficient transmission of data to save battery life, thereby increasing the devices' life span. These technologies are based on a common behavior logic – the device spends most of the time sleeping and wakes up periodically to transmit and receive data.

However, one very important aspect that is often neglected but has significant impact on a device's battery life is latency. The equation is rather simple: the higher the latency – the more time the device has to wait for a response before returning to "sleep" mode again. Studies show that reducing the latency by a few tens of milliseconds can extend a device's life span months if not years!

Today, most IoT connectivity platforms in the market fall short in providing a real solution to this problem due to their standard nature. This is especially true for roaming SIMs, but there are many cases in which local carrier networks have also proved inadequate.

This issue is complicated further by the necessity to keep other challenges in mind, specifically:

Roaming restrictions

IoT devices simply can't be restrained by rules like returning 'home' after 3 months. IoT is a global business so roaming SIMs can't cut it.

Privacy and compliance

Value-added services means collecting customer data. Compliance and privacy for specific locations need to be considered early and continuously throughout.

Security

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The balance of ensuring strong security without adding measures that will impact battery life is a delicate one. Security for IoT needs to be multi-layered.

Resiliency

IoT devices are essential for manufacturing, healthcare, agriculture and more. If a network goes down, mission-critical IoT needs an immediate fix.

Cost-effectiveness

Costs need to be managed in granular detail, from infrastructure, to people and support. Integrating with multiple vendors is a complex drain on resources and time.

Global manufacturers and their IoT devices deserve something built-forpurpose, uniquely designed for latency reduction and increased battery life, and at the same time addressing security and compliance, permanent roaming issues, and offering a simple, cost-effective method for managing all devices.

To make this simple, floLIVE has created a competitively priced, straightforward solution for global connectivity. It effortlessly checks all the boxes in a single platform and specifically addresses the requirements of low latency and battery life, as the **only** platform built for IoT challenges on a global scale.

A Checklist for Global Manufacturers to Meet IoT Goals With Ease

floLIVE has created an innovative, future-focused approach to global connectivity, allowing global manufacturers to deploy services with their products embedded seamlessly within.



Built for Reduced Latency & High Performance

The first issue to focus on is latency, a problem that the floLIVE platform was created to address from day one. We use three disparate approaches, each uniquely placed to lower latency and therefore extend battery life.



Altogether, these three methods offer the lowest possible latency alongside premium performance and speed.

Choose to engage with floLIVE to whatever degree works for your business strategy, from utilizing our platform alone to benefit from our localized global coverage, to co-hosting your application servers next to our packet gateways, or engaging deeper still, and benefitting from our unique data exchange approach.



But That's Not All! The floLIVE Solution Checks All the Boxes For IoT Connectivity

Alongside our innovative latency-reducing technology, floLIVE has been built with the challenges of IoT manufacturers in mind, from end to end. That's why we can promise:

Ensuring devices are always on

floSIM provides true always on connectivity. When radio coverage is lost, floSIM offers autonomous switching, swapping to a different IMSI or network and ensuring service continuity at all times. floLIVE's SIM is embedded into the device at the source factory. After being shipped to destination, the device automatically reports its location back to the cloud platform, and a local IMSI is downloaded. This local coverage means no roaming restrictions, and therefore no compliance headaches

Overcoming privacy & roaming restrictions

floLIVE has a vast IMSI library that provides local coverage in over 50 locations around the world, eliminating the challenges associated with roaming. Local connections access the internet via a local packet gateway, achieving compliance with complex regulations by never moving the data from its country of origin. With the SIM locally on the device, compliance and visibility for all kinds of customer information are under the enterprise's control.

Unified management & control, beyond connectivity

A cloud-native BSS system is responsible for orchestrating and controlling the entire platform. From customer management of multiple tiers, hierarchies, identity allocation and more, to a complete suite for Remote SIM Provisioning with real-time monitoring, troubleshooting and operator switching, manage your entire IoT operation from a single portal. This includes a powerful and intuitive multi-tier billing system.



Multi layered, holistic security

We provide the tightest security measures against fraud, impersonation and identity theft, without requiring resource-heavy agents on the devices. Our holistic security suite spans three elements of the IoT chain:

- SIM this includes IMEI locking, IMSI-IMEI coupling and security rules like geo-fencing.
- Core Network our core network is well protected against external attacks, data mining efforts and both known and unknown attack patterns.
- Cloud we analyze all network information, identify abnormal or inconsistent device usage, and then apply AI and analytics to ensure full safety and security of each device.

Ready to Move at Today's Pace of Change?

Today's global manufacturers know that IoT is a springboard for new service models that enhance products for Industry 4.0. To make this happen, they need to build on a foundation of technology that lives and breathes IoT, and isn't patched together with multiple disparate integrations or local carriers whose true expertise is mobile.

If you're looking for an IoT Connectivity Partner who can provide truly customized solutions and take the entire challenge off your hands, here's what floLIVE offer:



floLIVE is a secure, cloud-native connectivity solution backed by strategic investors 83North, Dell Technologies Capital, Saban Ventures and Qualcomm Ventures LLC. It supports chipset and device manufacturers looking for seamless global coverage

Our platform comprises distributed core networks that provide local connectivity while being centrally managed and controlled over the cloud. This unique approach enables manufacturers to benefit from high performance, secure and regulatory-compliant local connectivity with the flexibility and elasticity of a cloud-native platform.

floLIVE's solutions are offered as-a-service in a pay-as-you-grow business model.



Let's connect

Get in touch to discuss how we can meet your IoT requirements. We're sure to surprise you.

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