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Sparkle and floLIVE collaborate to support sophisticated, global IoT connectivity

IoT organisations are becoming more advanced as they launch richer, global IoT products onto the market. When it comes to connectivity the market has moved on from simply thinking about cost per megabyte to more carefully assessing how to handle regulatory compliance, how to balance differences in mobile network performance from market to market and how to manage the more complex latency, security and failover requirements of IoT devices. Daniele Mancuso, chief marketing and product management at Sparkle, and Luigi Capobianco, the senior vice president and head of Europe and the Middle East at floLIVE, explain to George Malim, the managing editor of IoT Now, how the companies have collaborated to create compelling, compliant sophisticated, global IoT connectivity services that level the playing field across the entire planet

Daniele Mancuso
Sparkle



GM: How does your partnership with floLIVE align with Sparkle's strategy?

Daniele Mancuso: floLIVE was for us the missing piece, a reliable partner. One of the unique strengths of floLIVE has always been that it is a customer of Sparkle's outbound worldwide connectivity solution. floLIVE being interconnected with us already as a customer was one of the enabling factors and floLIVE is an excellent developer with an excellent platform. We are finding a lot of synergies, both from a technical point of view and from a commercial perspective. The success of Sparkle using the floLIVE platform is creating benefits to floLIVE itself and also enabling further benefits to Sparkle because, if we are able to increase the traffic that floLIVE can push towards our international mobile subscriber identity (IMSI), we are creating mutual benefit for both companies.

I would say that floLIVE is enabling us to realize our product pitch from when we launched our global IoT suite and we presented the idea of venturing into the IoT market to our CEO. We created a kind of double strategy. On one side, we

want to target multinational enterprises directly and address some specific verticals that are striving to enter the mobility ecosystem. We target multinational enterprises and we tend to go up the value chain to those that are producing the objects that will onboard the SIM cards, either plastic SIMs or embedded SIMs (eSIMs), it doesn't matter.

The other side of the strategy was to enable Tier-2 and Tier-3 MNOs and MVNOs to develop an international IoT market based on the fact that they were already our global connectivity customers. This is enabled by floLIVE's connectivity management platform (CMP) because the platform can independently serve either enterprises, where we go directly with the Sparkle brand, or allow us to go to market with floLIVE's white-labelled solution. We can go to a Tier-3 MNO, for example, and give them our IMSIs and a customised floLIVE platform and they can resell this to their own customers using their own brand, with their own look and feel and their own commercial rules.

I think this new collaboration is a first in terms of commercial launch of an IoT solution with data localisation. There were several workgroups in international standards trying to address the topic of critical IoT. We are basically avoiding the need for SIM cards that are travelling in the US to connect back and forth with Europe ►

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There will be three big gateways that we are going to localise: one in the US, one in Europe and one in Asia

or vice versa. This is going to be unique and the strengths of the partnership between floLIVE and Sparkle enable it.

There will be three big gateways that we are going to localise: one in the US, one in Europe and one in Asia. The unique factor is that it's not just a simple gateway localisation, it's a localisation in places where we have Sparkle local connectivity through peering with local carriers. Basically, we are going to provide a zero-latency IoT service for SIM cards that connect to those points of presence. This, I believe, is really a market first.

Of course, it's a combination of several factors. As we said before, let's not forget that our mobile platform runs over our 600,000 kilometres of fibre optic cables around the world, on top of our Seabone IP transit platform. We believe that we are going to see a lot of positive returns both in market appreciation in terms of revenues and margins, but what concerns us most is the customer experience. This is our main objective.

GM: floLIVE has built an impressive global IoT network; can you explain how this extensive data network benefits mobile operators compared to traditional connectivity management platforms (CMP)?

Luigi Capobianco: Our global IoT network has been designed and built in a way that allows us to constantly introduce new services and offerings both quickly and in a cost-effective way; this is because we developed the entire

platform in-house using modern software architecture approaches and design guidelines. We have used Sparkle's global presence, not only for connectivity needs, but also for global presence in terms of data centres and physical interconnections globally, to access this connectivity and provide it to our customers. Sparkle has been a very important part of our growth when it comes to sourcing global access to cellular data.

Now, what does that mean for the CMP? It means that our CMP, which is only one service out of the entire range of data connectivity services we offer, is not just the front end, but it's a complete, holistic solution. It comes with an online billing system and with full Remote SIM Provisioning (RSP) ▶

Luigi Capobianco
floLIVE





Our IoT offering is based on global connectivity because of our history and because we strongly believe that being able to be connected anywhere in the world is an important foundation for the IoT business for multinational customers

capabilities for both M2M and consumer use cases, multi-IMSI capabilities and more. Our distributed network around the world enables all floLIVE customers, which could be MNOs, MVNOs and IoT service providers, to access our global data network and consume the advanced services we offer.

I think the advantage of our approach is that we do not only provide mobile operators a means for operating a profitable IoT business, but we've added two very important capabilities - one is the ability to extend their global reach even to highly regulated countries such as China, Brazil, Turkey and others. In addition, we're also enabling them to generate new revenues from advanced services that are made available via our global platform. These services include MVNE, mission-critical IoT, advanced IP data management, satellite connectivity and more. One of the new and very interesting things that we're doing with Sparkle is distributing our network capabilities and global presence.

A car maker, for example, doesn't just connect its cars in the old-fashioned roaming model. That works well when you're connected in Germany with a European MNO, but when you move to Canada or China with the same MNO, the user experience falls short. What we're going to do with Sparkle is build something that allows cars and other connected devices to have the same experience, performance, service level and security all around the world regardless of location. This is only possible when you put together a CMP for sure, but also the capabilities and the global presence of Sparkle.

GM: What makes Sparkle stand out from the competition and what impacts have you had on the success of IoT solutions?

DM: Our IoT offering is based on global connectivity because of our history and because we strongly believe that being able to be connected anywhere in the world is an important foundation for the IoT business for multinational customers. IoT by itself for us is a means to address the connectivity needs of things that are on the move. We strive to provide connectivity to things that are moving, and Sparkle is a multinational carrier with the strongest offering.

GM: Please can you tell us more about Sparkle's IoT strategy and offering?

DM: We started to develop the strategy roughly a year ago and we have already achieved good results. First of all, we had a list of requirements that are driven by our worldwide connectivity and machine-to-machine priorities. We don't need to

negotiate an entire roaming agreement from scratch that is based on the full paradigm of human communication, but we can really focus on selective agreements that are related to the machine-to-machine market. Either we extend already existing partnerships and introduce a specific price list for machine-to-machine connectivity or we enter a new partnership dedicated to the machine-to-machine sector. This is already a good differentiator from other carriers that operate in the same space but I will say that the basic foundation of our global connectivity proposition, the technical foundation, is really a differentiator compared to the competition.

Our global connectivity has always been based on the concept of multi-operator service. Our platform is based on a multi-IMSI paradigm that allows us to offer to any customer wherever they are the best connectivity in terms of price, coverage or diversification. For IoT this is really a unique advantage. When you have an automotive manufacturer that needs to ship cars everywhere in the world, they need to guarantee that the vehicles they are producing can connect in all the countries and always find the best coverage at the best rates. There is also always the possibility to switch to another operator, either by failover, or by applying steering policies.

This multi-IMSI solution is corroborated by the over the air (OTA) capabilities to reconfigure a single SIM card or a set of SIM cards. If there are changes to the customer requirements or the commercial scenario in that specific country, we can still guarantee the customer that the coverage, the rates and the failover level agreements are respected over time. We can do everything with an OTA campaign. The technical capabilities that we just described with our commercial strength, part of it inherited from the TIM Group and part of it because we established this new roaming team, make us stand out. In addition, the coverage that we have with our 170 points of presence is spread around the world where we can do IPX peering with basically all the interconnect carriers. I would say that creates a unique solution in the market.

GM: How does floLIVE's solution enable mobile operators to manage and monetise IoT connectivity more effectively?

LC: The IoT connectivity market is quite competitive, so there are two things you can do: One is to try to bid the lowest possible price, which is not always easy and probably doesn't always bear the right fruits in the long term. The other is to move up the value chain to serve higher-value use cases with the connectivity they need in terms of latency, security and location. ►



We're not telling MNO customers to do one or the other, but we are empowering them to do both. What does that mean?

First of all, as one of the world's leading IoT CMP providers, floLIVE was the first to differentiate between high ARPU and low ARPU use cases, meaning we launched an offering that distinguishes between the volume of megabytes per month and charges a platform fee accordingly. For example, with smart meters, the platform fee is a fraction of a high ARPU service's platform fee. We did this to allow mobile operators to run a profitable IoT business and compete in this challenging market.

Second, our platform, built using the latest software design, architecture and deployment practices, ensures a lower marginal unit cost as more and more devices are onboard our global, cloud-native network. In both the short and long term, this allows mobile operators to increase their profitability and obtain a strong presence in the growing IoT space.

The importance of owning our entire software stack, from the core network through SIM management, real-time multi-tier billing engine and CMP, comes into play when we deploy since we don't have fixed third-party licence costs.

Another key benefit that floLIVE brings to mobile operators is a new, constant revenue stream generated by floLIVE's global customers who seek connectivity in the mobile operator's footprint. As I stated earlier, this is how floLIVE and Sparkle began the relationship – by offering Sparkle's coverage to our global customers. This is another pillar that empowers MNOs to not only operate a profitable IoT business but also increase their revenues inorganically.

GM: How does floLIVE ensure compliance with diverse regulatory requirements across different countries, and why is this crucial for mobile operators?

LC: The world is going in a direction in which permanent global roaming is going to become more and more complex. Accessing all countries around the world, without any temporary restriction through a single IMSI is already a challenge today, but it is going to be more of a challenge in the future. Let's say you have a track and trace application for containers – you don't really care about permanent roaming. However, there are numerous use cases that where this does matter, such as smart metering, automotive, POS, credit card readers, alarm systems, video cameras and dashcams, which are all interesting use cases.

These applications are more prone to requiring permanent roaming. If you deploy one of these use cases in Turkey, for example, the devices are likely to stay in Turkey for more than 90 days, and that is not allowed. Additionally, privacy regulations like GDPR and CCPA require that data remains within the country of operation, which conflicts with roaming. For example, a device operating in California but using a European SIM/profile violates CCPA regulations because data, which is protected as private, is routed through Europe instead of the device's actual location. To address this, we started cooperating with the 15 different IMSI providers we support today. We have a global bootstrap, via Sparkle, which has by far the largest coverage in the world and also reliability. Then, whenever a customer says they need to localise in Brazil we have two Brazilian IMSIs so that you can access Brazil on local networks owned by floLIVE, compliantly accessing different local operators. ■

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