

MNOs and MVNOs: from competition to collaboration to expand the IoT connectivity opportunity

September 2019

Michele Mackenzie

Strong competition in the IoT connectivity market is nothing new – enterprises have long had a choice between operators and MVNOs for connectivity contracts. However, operators’ attitudes to these competitors appear to be changing. While MVNOs have traditionally occupied the role of competitor (or occasionally, served as an additional route to market), operators are increasingly turning to them as technology and platform partners to deliver their IoT connectivity offering. Although these companies pose a potential threat to mobile operators’ IoT businesses, some MVNOs are open to opportunities to collaborate with mobile operators. Some MVNOs may also present operators with investment opportunities (either via acquisition or a stake in the MVNO’s business). This article highlights some of the findings from our third and most-recent report *IoT MVNOs: case studies and analysis (volume III)* and also discusses the shift towards collaboration.

The MVNO market is dynamic; established companies along with new entrants are building IoT connectivity propositions

In the course of our research, we identified three categories of MVNO, as shown in figure 1. Each category of player has its own strengths and weaknesses and could potentially pose a threat to established operators’ IoT businesses. For example, the SoftBank Group has provided Arm with the freedom and financial means to rapidly expand its IoT offering to include connectivity and connectivity management. Telit is also building on its strengths in hardware and its existing customer base to expand into new areas of the value chain. Traditional MVNOs are not standing still; Wireless Logic, for example, is also growing through acquisition and entering new geographies following its acquisition by Montagu Private Equity in 2018.

Figure 1: Different approaches to delivering global IoT connectivity

	Traditional MVNO	Entrants from across the value chain	Disruptor MVNOs
MVNOs ¹	Aeris, Arkessa, Com4 , Cubic Telecom, Globetouch, Kore Wireless, Transatel , Truphone, Wireless Logic .	Arm , BICS, MOVE, Nokia, ² Sierra Wireless, Telit , Twilio.	1NCE, Emnify , Monogoto, Soracom , Telna .
Description	These MVNOs take a traditional approach and focus on simplifying the connectivity proposition for customers. They tend to be MVNOs that have been active in the market from an early stage. Some of these MVNOs were used by operators to serve markets	Established players in other parts of the value chain that have now entered the IoT connectivity market.	New MVNOs (Telna is an exception) that operate on a fully virtualised, ³ cloud-native core network.

	Traditional MVNO	Entrants from across the value chain	Disruptor MVNOs
	that they did not address directly.		
Comments	Some traditional IoT MVNOs are expanding their capabilities (for example, Com4) but still focus on connectivity. This group is experiencing greater competition, which is why they are investing in new capabilities to differentiate.	These players are shifting away from their dependence on existing revenue streams and are moving along the value chain to provide connectivity and services. They aim to sell new services to their established customer bases, as well as acquire new customers, in order to diversify their revenue mix.	These players are technically innovative and appeal to developers that are familiar with cloud-based services in particular. They may not have the same financial standing and brand awareness as their competitors but they are potential acquisition targets (as demonstrated by KDDI's acquisition of Soracom) or partners (EMnify).

¹ Companies in bold feature in our latest IoT MVNO report.

² Nokia provides MNOs and MVNOs with the infrastructure on which to build a global IoT connectivity proposition.

³ Some MVNOs included in previous reports also have a virtualised platform (for example, MOVE, Nokia and Twilio).

Source: Analysys Mason, 2019

MVNOs are trying to create more-sustainable differentiators, either in terms of technology or bundles of capabilities.

Our article *MWC 2019: a growing portfolio of network technologies could result in new operator business models* discusses the shift that we observed at MWC 2019 towards partnerships and collaboration between mobile operators and MVNOs. Our recent research supports this observation. Certain MVNOs, typically those that are newer entrants, have built a cloud-native approach to providing core network functionality. For example, EMnify, Soracom and Telna have all built virtualised core networks on AWS, with connectivity management and other functionality on top. A virtualised platform could potentially facilitate significant cost efficiencies and a scalable solution as the IoT market grows. Moreover, some MVNOs are enhancing their connectivity offering with software services and now boast differentiated technical propositions or capabilities with which operators could struggle to compete. This has resulted in some operators exploring partnerships or even acquisition opportunities with MVNOs. We highlight some examples below.

- KDDI acquired Soracom in 2017. Soracom provided KDDI with the B2B IoT business platform to complement its B2C offering, as well as a differentiated platform.
- Deutsche Telekom will be using INCE's platform to support its connectivity offering for some applications (typically lower ARPC applications).
- NTT acquired a majority stake in Transatel in 2019 to fulfil its ambitions to become a global provider of IoT solutions.

We are also aware of several other partnerships that are not in the public domain. One of the consequences of this shift towards collaboration is that some MVNOs now compete with vendors such as Nokia WING for operator attention.

If managed well, investment from operators will provide the financial resources and stability to enable MVNOs to further develop their platforms and expand their geographical presence. For example, Soracom remains a separate business unit with its own P+L but benefits from KDDI's financial might. Soracom now manages its own IoT fund to invest in IoT start-ups and is an investor in Unabiz, a Sigfox network operator. A relationship such as this with an MVNO means that the operator can leverage the MVNO's innovative technology approaches to serve demand for global IoT connectivity, a service which is complex, costly to build internally and represents a different technological approach to operators' traditional systems. In the legacy smartphone business, MVNOs have provided a new route to market for operators, mainly supported by operators' technology assets. In the IoT market, many MVNOs have built their own platforms to support global IoT connectivity and benefit from recent technological innovation. This differentiated approach will become more important as the high-volume, low ARPC LPWA market develops and will likely pave the way for further collaboration and partnership between MNOs and MVNOs.