

IoT device management platform suppliers should do more to communicate their differentiators

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The need for enterprises to manage a growing number of diverse IoT devices has led to the emergence of various platforms over the years. This, in turn, has made it increasingly difficult for suppliers to differentiate their offerings and for customers to identify the key strengths of each supplier.

Device management platform (DMP) suppliers should focus on developing distinctive features and strengthening their presence in select verticals that demonstrate their expertise in order to stand out in this crowded market and to improve their appeal to customers. If suppliers fail to do this, they risk rendering their capabilities and platforms too generic to attract interest and gain market share.

IoT device management platform suppliers are finding it increasingly difficult to differentiate their offerings

Device management is one of the most important functional layers of an IoT management solution: it supports the complete lifecycle of devices including onboarding, execution of tasks, monitoring, troubleshooting, software updates and disconnections.

Businesses are increasingly deploying DMPs to automate the lifecycles of their connected assets and to improve the resilience and security of their IoT device estates. However, the growing number of DMPs, the increasing sophistication of their features and their overlap with connectivity management platforms (CMPs) and application enablement platforms (AEPs) complicate the selection process for customers.

There were 87 key IoT platforms in the market at the end of 2019 according to Analysys Mason's [IoT platform tracker](#) (up from 53 in May 2017), 63 of which supported device management. Vendors sell DMPs directly to enterprises, as well as to telecoms operators that then resell them as managed services. Some examples of recent IoT contracts and deployments that involved a DMP are listed in Figure 1.

Figure 1: Examples of IoT DMP contracts in 2019

Country	Customer ¹	DMP provider	DMP name	Announcement date
Brazil	TIM Brasil	Nokia	IMPACT and Nokia WING	December 2019
Japan	Japanese government	Nokia	Nokia WING	December 2019
France	Schneider Electric SE	Ayla Networks	Ayla IoT platform	October 2019
Germany	Hager Group	Bosch	Bosch IoT Gateway Software	July 2019
Germany	Deutsche Telekom	Software AG	Cumulocity	July 2019
USA	AT&T	AVSystem	Coio IoT platform	June 2019

¹ We define a customer as an enterprise that has acquired the platform or an operator that is reselling the solution as a service.

Country	Customer ¹	DMP provider	DMP name	Announcement date
Australia	Telstra	Ericsson	IoT Accelerator Platform	February 2019
China	China Unicom	Arm	Pelion IoT platform	February 2019

Source: Analysys Mason, 2020

DMP suppliers should prioritise the development of features and expertise that highlight their technical strengths

Enterprises are using DMPs to address the technical challenges that they encounter when deploying IoT solutions. We interviewed several operators and vendors that provide DMPs as part of our research. Three key technical capabilities that can be used as a basis for differentiation stood out during these interviews.

- **Security.** The security of IoT infrastructure is extremely important because of the growing role of IoT in mission-critical processes, the increasing sophistication of cyber attacks and the potential financial losses due to liabilities, regulatory fines and loss of business. Suppliers can distinguish their platforms by implementing strong end-to-end security measures to detect and prevent breaches. For example, Arm embeds security into all components of its Pelion IoT platform.
- **Flexibility.** The platform should be able to accommodate changing enterprise requirements and ensure compatibility with a growing number of devices. Suppliers can differentiate on the number of certified devices in their catalogue and the number of standard or proprietary protocols that their platform supports. For example, Litmus Edge Manager supports an extensive number of industrial devices and systems, and offers ready integration with cloud and business applications.
- **Specialisation.** Suppliers, especially new entrants, should concentrate their efforts on developing distinctive features and addressing the technical requirements of specific verticals or user groups that have an above-average level of interest in their solutions. For example, start-up company Device Authority specialises in IoT device security for the healthcare and industrial sectors, while Balena provides an open-source platform that enables greater customisation of the software modules than proprietary solutions.

DMP suppliers should build close partnerships and proactively communicate their success stories to gain experience and trust

Enterprises will also take commercial factors (such as track records and experience) into account when selecting a DMP provider. There are at least two aspects that suppliers can improve in order to generate sales leads, bolster their reputations and inspire more confidence in their capabilities.

- **Collaboration** with other hardware, software and professional services providers can help to complement suppliers' capabilities, expand their list of references and create co-sale opportunities. For example, Telefónica relies on Software AG and PTC to provide advanced device management functionalities and carry out the integration work for large IoT projects. Smaller suppliers can also increase their visibility and improve their track record by contributing to their partners' IoT projects. For example, South African platform supplier IoT.nxt (now part-owned by Vodacom) has established partnerships with technology solution providers, telecoms operators and system integrators in order to execute IoT projects worldwide.

- **Publicising success stories** helps to bolster suppliers' reputations and educate prospective customers about the benefits of using their solutions. Suppliers should publish case studies and organise regular webinars to promote their products (IBM, PTC and SAP are examples of companies that do this well). They should also provide clear statements about the benefits of their IoT platforms instead of using generic marketing messages that simply list the technical features. For example, C3 IoT uses its website to explain how its solutions have been deployed in different industries, supported by case studies and customers' testimonials.

As the device management market becomes more crowded and DMP features become less distinguishable, it is critical for suppliers to increase their efforts on showcasing their innovation and expertise to carve out a niche. They should also grow their partner ecosystem and promote their credentials to improve their standing in the market and win larger contracts. These considerations, as well as others including contractual and pricing flexibility and bundling of devices and services, are discussed in Analysys Mason's [Success factors for IoT device management platform suppliers](#).