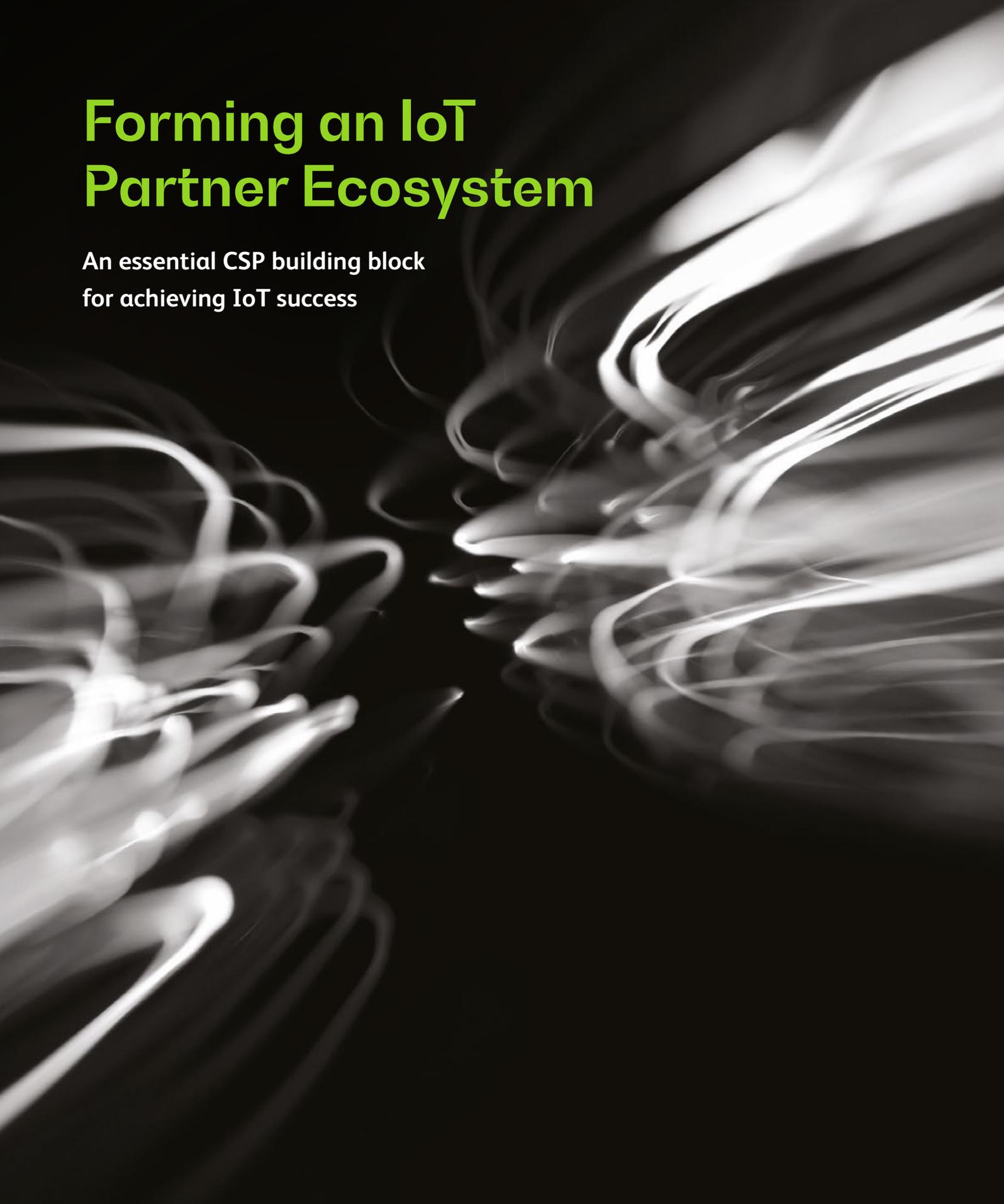


BearingPoint // Beyond
Digital platforms, growth through the ecosystem

Forming an IoT Partner Ecosystem

An essential CSP building block
for achieving IoT success





Introduction

The Internet of Things (IoT) is the concept of sensors, devices, networks and software all working together to unlock new positive and sustainable outcomes for businesses, based on the data collected and analysed from devices.

Total spending on IoT endpoints and services is already believed to exceed \$1 trillion worldwide with forecasts on IoT spending indicating that this will reach over \$3 trillion globally in 2025¹, by which time \$1.7 trillion (57%) of total IoT spending will be for software applications and services such as Systems Integration, Hosting and Data Monetization that help bring all elements together to achieve improved efficiencies and revenue for enterprises.

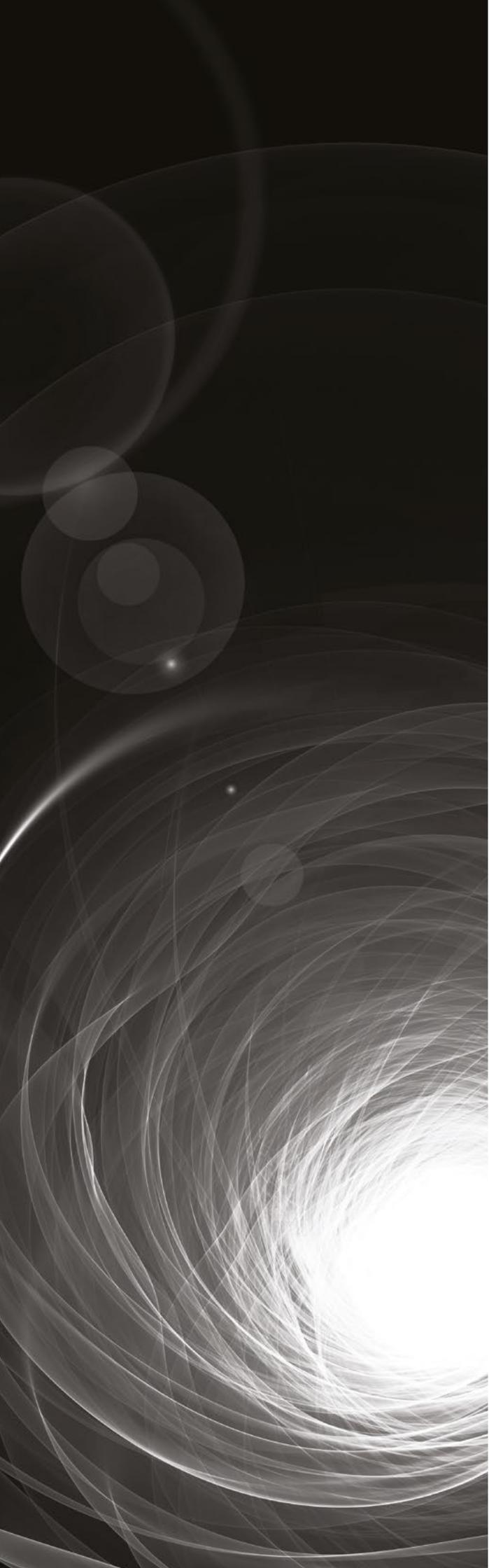
Enterprises have had an initial focus on IoT solutions that deliver cost savings and improved profitability such as improving systems and processes, remote monitoring and real-time diagnostics. Recent developments around higher speed mobile networks, and improved mobile coverage and connectivity to devices with LPWA technologies (NB-IoT, CAT-M, Lo-RAN etc) – to be further enhanced with the

imminent launch of 5G – combined with the use of real time data and analytics to understand device status, are providing enterprises with real opportunity to innovate and develop new IoT revenue generating services.

Enterprises are waking up to the wider opportunities that IoT can bring to their organizations. This is supported by a recent enterprise IoT survey² with 98% of respondents reporting that most companies within their industry include enterprise IoT initiatives in their strategic roadmaps, including those related to improving service operations, increasing visibility into operations, enabling new business models and creating new product and service offerings.

¹ Source: Machina IoT research

² Source: McKinsey Enterprise IoT Survey



The CSP IoT Market Opportunity

The forecasts, which indicate a threefold market growth potential for IoT over the coming years, represent a significant opportunity for Communications Service Providers (CSPs) to exploit.

We have observed the market entry strategy for many CSPs has been the provision of basic IoT connectivity services (SIMs) including some limited device management capability.

With IoT connectivity revenue delivering only a fraction (less than 10% and declining) of the total IoT value chain revenue, an IoT strategy based on connectivity alone will not deliver a significant profit contribution for CSPs. Therefore, they are embarking on two additional routes in order to move up the IoT value chain: Horizontal and Vertical strategy.

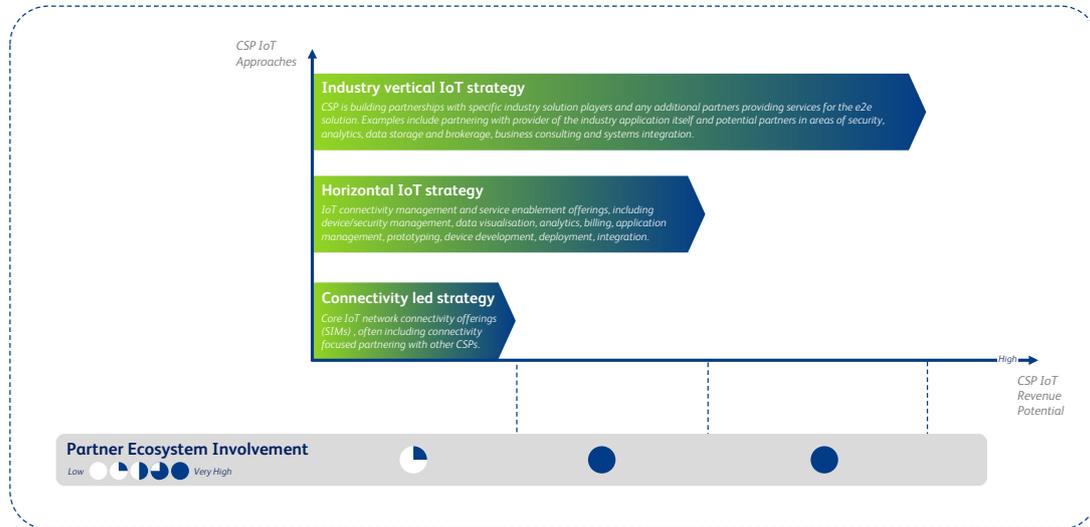
Horizontal IoT play: offer on top of connectivity, a comprehensive suite of management services; such as device and security management, application management, essential data components, data visualization and analytics or billing. They also create an installed base of IoT devices certified for their networks and monetize their IoT assets by charging fees for access to their APIs.

Vertical IoT play; on top of the horizontal offering, here the CSPs launch IoT solutions tailored to specific industry segments. It may include vertical application, security, analytics, data storage and brokerage, business consulting and systems integration expertise. This is achieved through partnerships with specific industry solution players and any additional partners providing services which further enhance the overall proposition and revenue potential in the targeted industry.

A CSP addressing multiple verticals directly will also need to assess the resources, capabilities and systems required to manage multiple industry specific complex ecosystems.

CSP IoT Go-To-Market approaches

The revenue potential for vertical solutions is higher than the horizontal play with 60-70% of the total IoT E2E revenue attributed to vertical solutions.



Building the IoT Ecosystem

To undertake either of these strategies CSPs need to combine their connectivity offerings with a range of business partners to build up an IoT ecosystem (such as hardware and software technology providers, industry vertical solution providers or channel partners).

Some CSPs have followed an acquisition strategy for bringing in IoT capability to their operations, as illustrated by acquisitions by Verizon (Fleetmatics, Telogis and Movildata), Telefonica (MiNodes) and Vodafone (Cobra).

Whilst acquisitions serve specific strategic purposes for CSPs, a quicker, more flexible and less risky approach to building the IoT solution is through securing partnership agreements with business partners and forming an ecosystem.

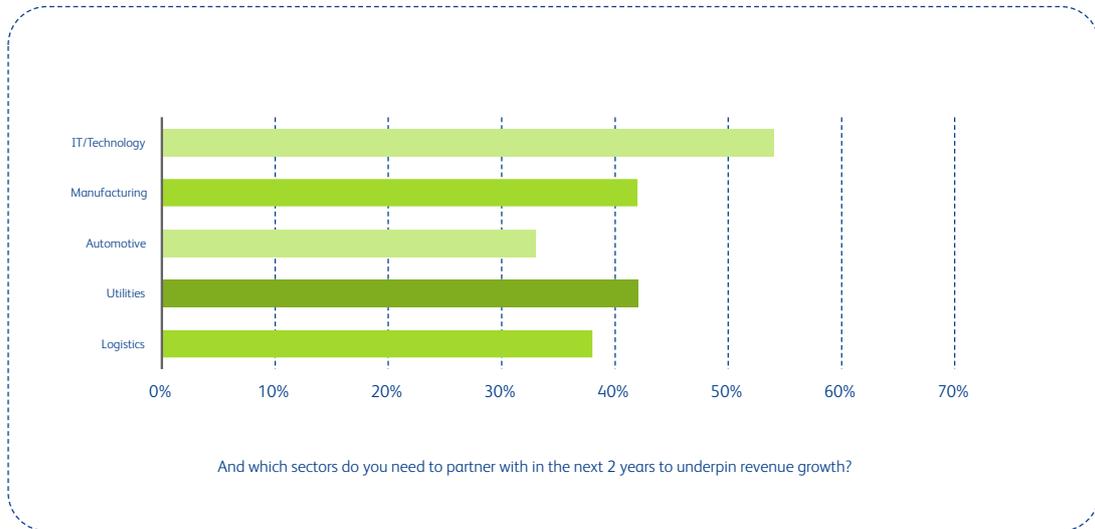
In a recent survey³ we conducted, we found out that while CSPs have high hopes for the business benefits they can gain from partner ecosystems, over two thirds of them partner mostly with other CSPs. In addressing the IoT opportunity they will need to think about increased levels of partnering outside their own sector and focus more on technology and IoT players and specialist solution providers from specific industry verticals.

The required partnerships in the target IoT ecosystem need to be identified, and given the breadth of cross industry IoT opportunity, CSPs should focus and target partners best suited to their profile and business ambitious.

When asked in the survey which sectors CSPs expect to be partnering with in the next two years, automotive partnerships are expected to treble to 33% (from 12% today), manufacturing will rise to 42% (from 17% today) and 54% plan to be partnering with IT/Technology companies.

³ Source: BearingPoint industry research on attitudes towards partner ecosystems

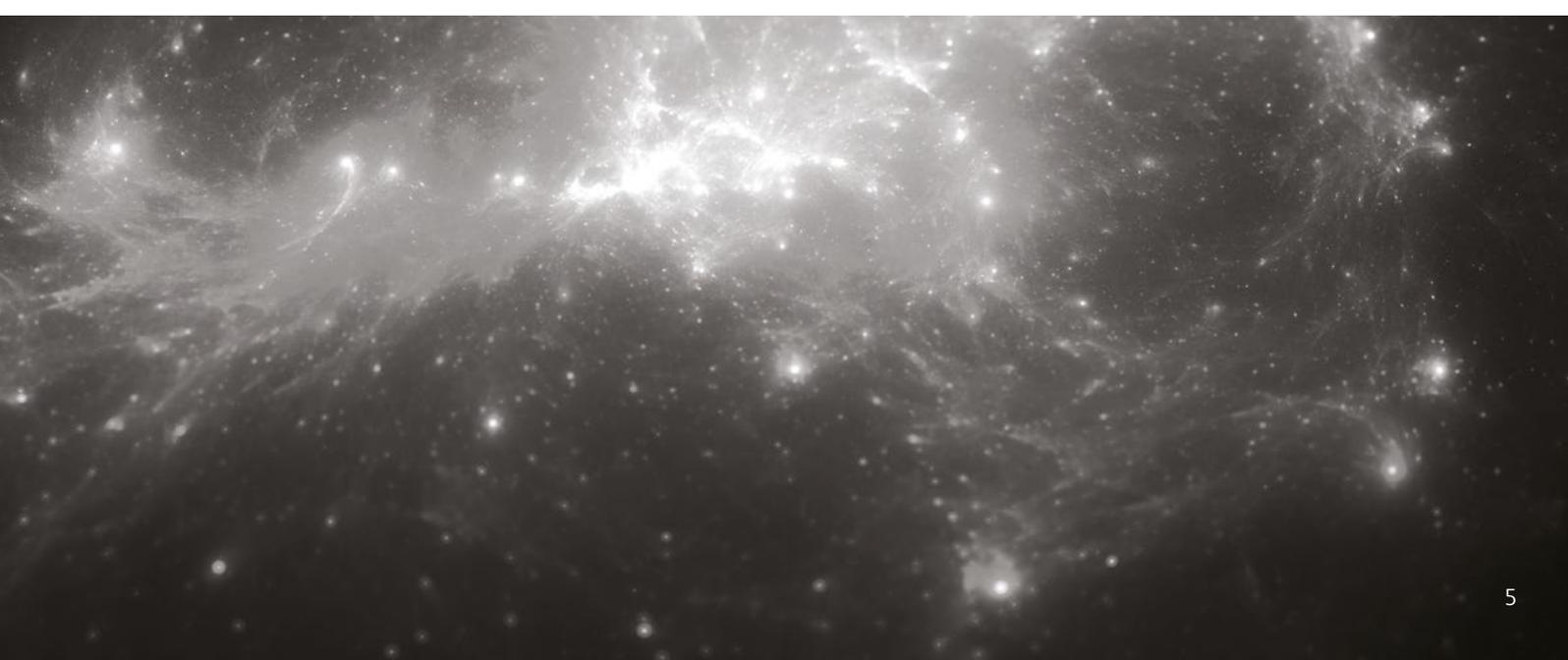
CSP Partnership plans over next 2 years



Prepare your operations

To be ready to exploit these new IoT market opportunities, CSP's must adopt a digital platform solution to more efficiently manage the complex partner relationships and simplify the monetization of multi-partner, multi-service and multi-country scenarios. The CSPs that succeed will be those that can efficiently orchestrate each of their many IoT partners ecosystems to succeed in service delivery.

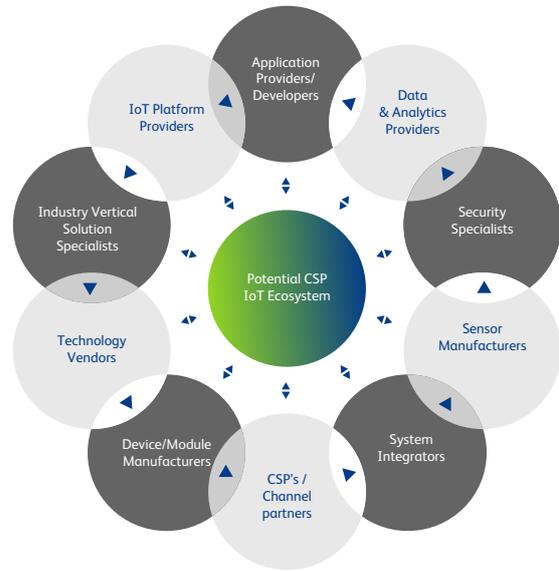
Whether CSPs decide to become a horizontal IoT provider for third parties or launch their own vertical IoT solutions, a critical enabler for their IoT businesses will be the facility to flexibly monetize their offerings whilst ensuring that all partners and entities adding value in the ecosystem are appropriately rewarded.



CSP IoT Ecosystems – Illustration of potential network of partners

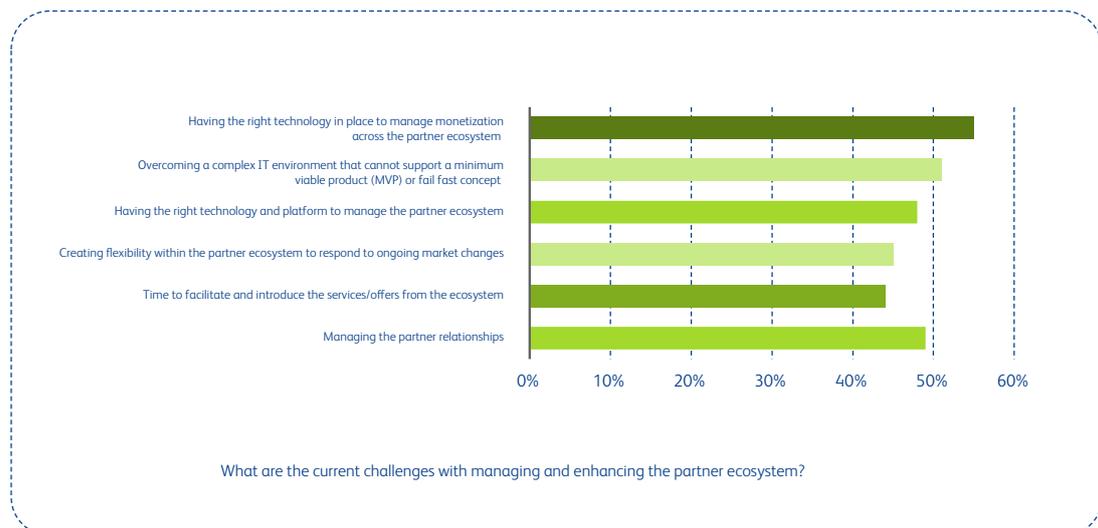
The importance of ecosystem management for CSPs to drive IoT growth is supported by research³ conducted into CSP attitudes to partner ecosystems. CSPs view ecosystems as being most important to drive business growth, innovation and new revenues but they are challenged when it comes to being fully engaged in the execution of new business models and offerings.

The research highlights (below) that the main challenges are technology-oriented, including the number one challenge relating to CSPs not having the right technology in place to manage monetization across the ecosystem.



Challenges for CSPs with managing partner ecosystems

It's evident that CSPs need to make the right technology choices in the coming years to succeed in executing on their IoT ecosystem strategies and consequently be better positioned to realize the maximum potential value from their IoT partner ecosystems.



Digital Business Platforms in action

BearingPoint//Beyond digital platform solutions are designed to support CSPs aiming to grow IoT market share. Here we reference the case of a European CSP with global operations, executing a plan for IoT market growth across the group in a way that would leverage their centralized IoT assets at group level while also optimizing market knowledge and speed to market at local level.

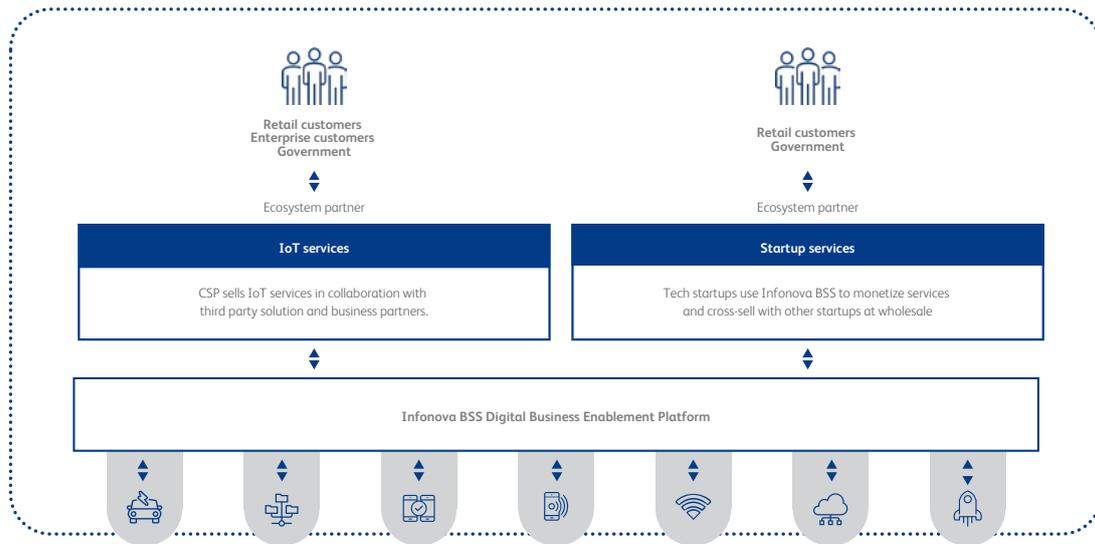
CSP IoT challenges:

- Move up the IoT value chain and grow IoT revenue by expanding to new services beyond connectivity.
- To have streamlined IoT service development operations between group level and local operating companies.
- To support the selling and monetization of IoT services through a centralized platform, enable service bundling capability and easily facilitate revenue sharing between its business and solution ecosystem partner.
- Gain a competitive edge across B2B, B2B2C and B2C domains and have the capability to scale and adapt to the future IoT landscape.

BearingPoint provides the digital platform solution which delivers positive outcomes for the CSPs IoT activities:

- Provides CSP with a centralized capability to easily expand its partner ecosystem into new markets using multi-tenancy and ecosystem management capabilities.
- Achieves a more flexible way of working internally between group level and local opcos, and externally with ecosystem partners to deliver improved IoT offerings for customers across the group.
- Improvements in IoT portfolio management through shorter time to market and supporting smarter IoT service innovations.
- The increased range of pricing options helps the CSP model any type of IoT service into offerings that maximize its IoT monetization opportunity.
- Lower operating costs due to increased automation and streamlining of service provisioning and selling.

Digital Business Platform supporting CSP IoT Business



Conclusion

We've seen that most CSPs recognize the IoT market opportunity and are taking steps to address it. A build-it-yourself strategy, including through acquisitions, might be the preferred approach for some CSPs, however a partner ecosystem model approach is a faster route to capture the IoT market opportunity. This approach is a less risky and quicker strategy and provides the CSP with the flexibility to adjust its partner ecosystem model to meet changes in market conditions.

As the volumes of IoT business and complexity of partner ecosystems increase in coming years, CSPs must be prepared to succeed in orchestrating their partner ecosystems through the adoption of digital platform solutions, enabling them to more efficiently manage the complex partner relationships and simplify the service monetization that the volume of growth in the IoT market will dictate.

Interested in finding out more? Please [contact us](#) for more information.

BearingPoint//Beyond

BearingPoint//Beyond helps organizations reinvent their business model and grow from efficiency to innovation. Our digital platform solutions give them the start-up advantage, to move rapidly from ideas to concept to revenue, with minimum risk and cost.

This brings our clients closer to their customers, enabling them to build connections between systems and partners, while becoming more agile in face of digital disruption.

BearingPoint//Beyond is part of BearingPoint, an independent management and technology consultancy with European roots and a global reach. A worldwide consulting network with more than 10,000 people, BearingPoint supports the world's leading companies and organizations in over 75 countries, engaging them to achieve measurable and sustainable success.

Contact

For more information, please contact infobeyond@bearingpoint.com