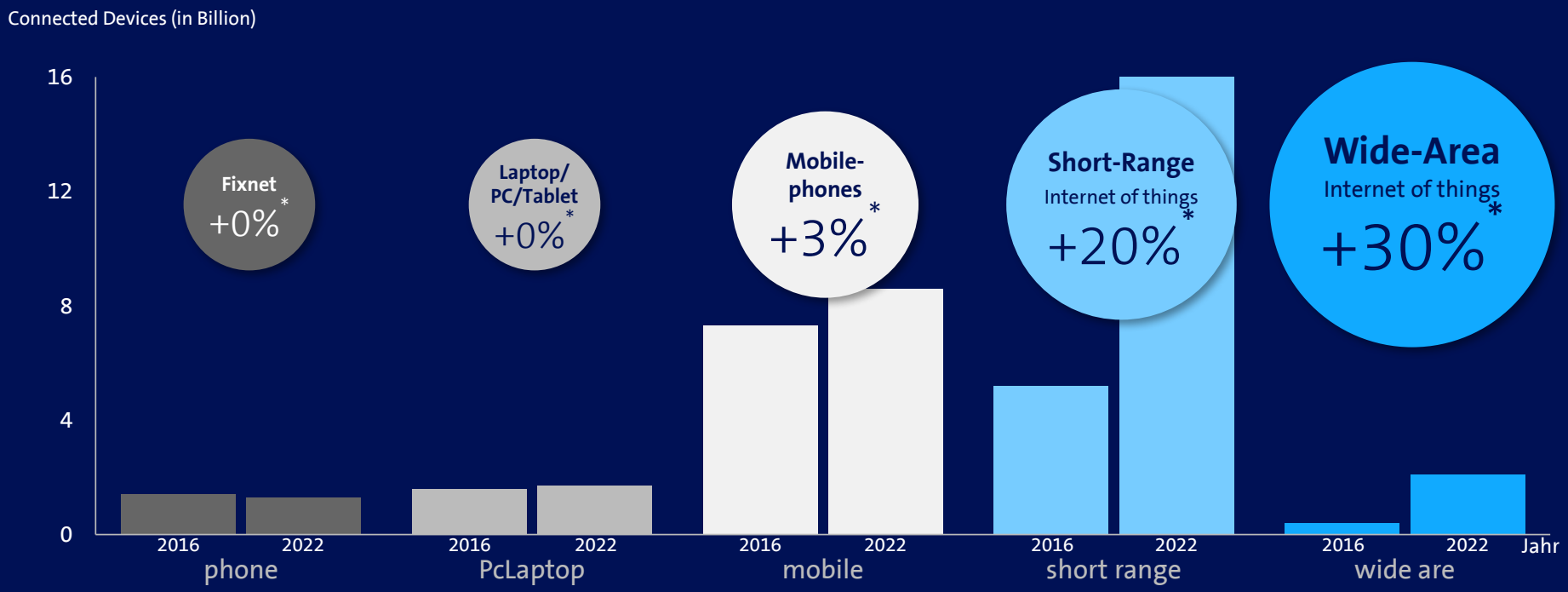
IPv6 and its role for IoT

Swisscom Enterprise Customers

Future growth is driven by IoT



Source: Ericsson Studie, weltweit | *CAGR

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Enjoy wine to the full
with the Internet of Things
Thanks to real-time transmission of information regarding soil and climate conditions, winemakers can prepare analyses and forecasts, and implement measures in good time to guarantee the optimum quality vines.
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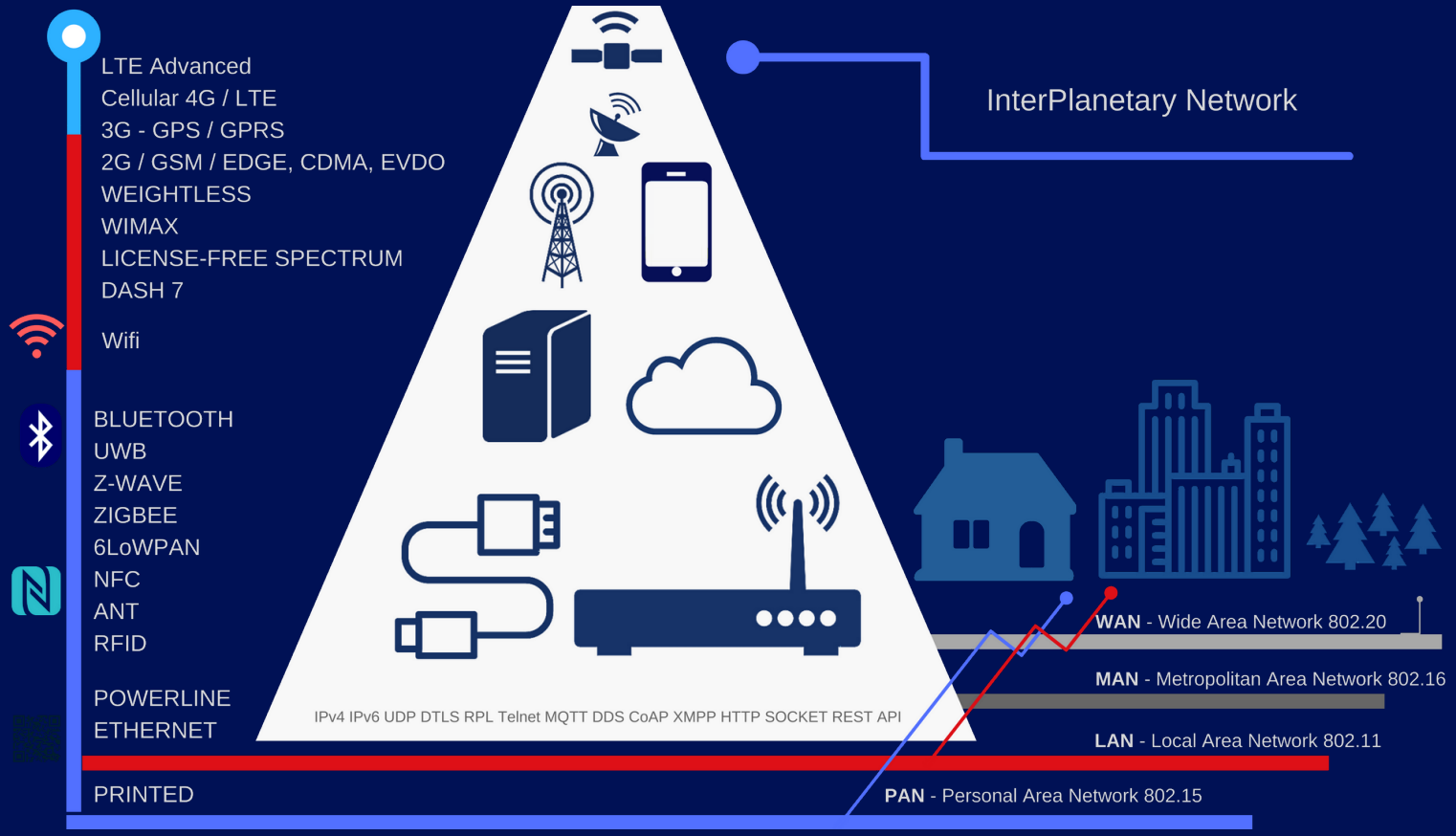
Connectivity Landscape for IoT



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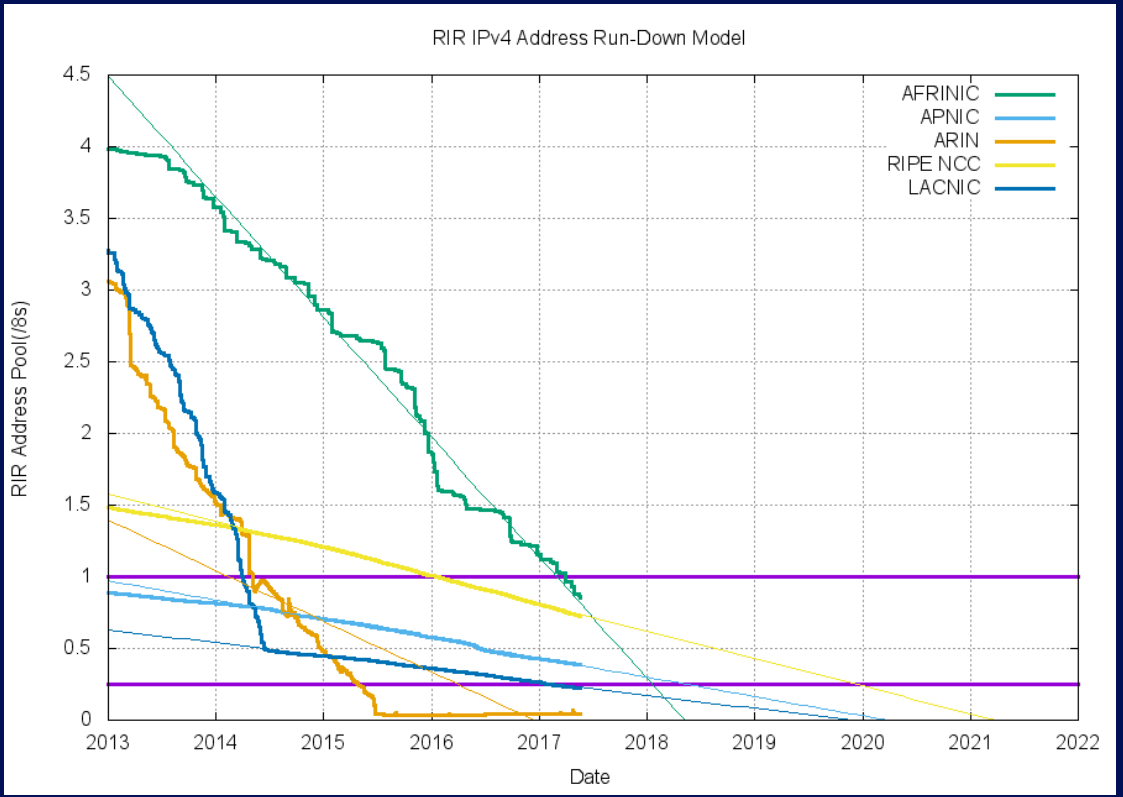
The IPv4 pool dries out – but when?



Source: https://ipv4.potaroo.net/, 22.05.17

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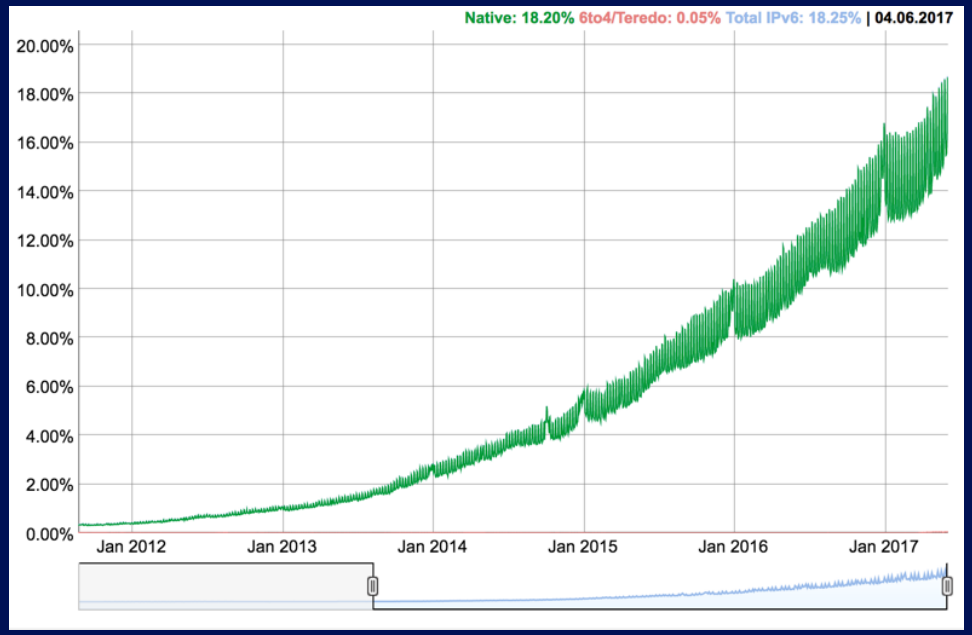
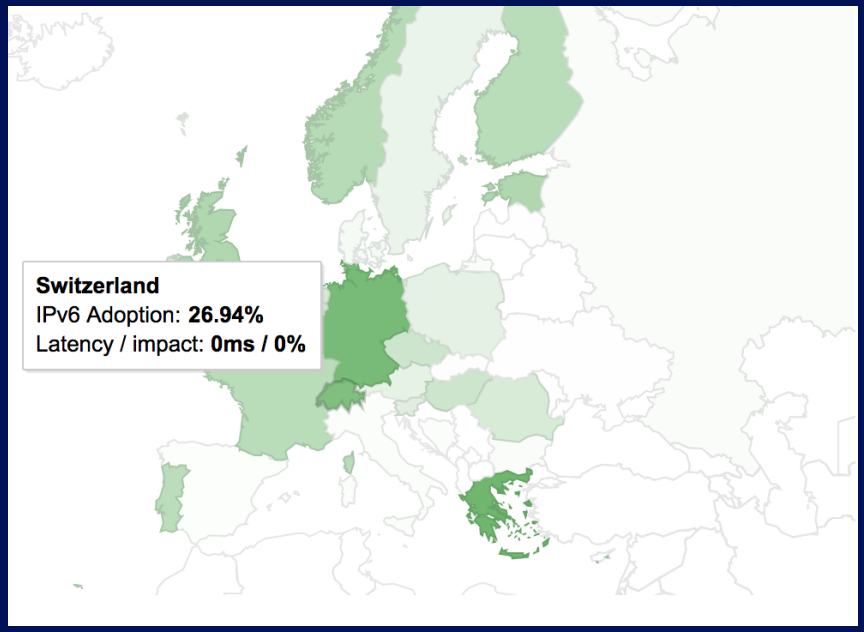
Switzerland in the EU midfield in adopting IPv6





Source: https://www.google.com/intl/en/ipv6/statistics.html, 6.6.2017

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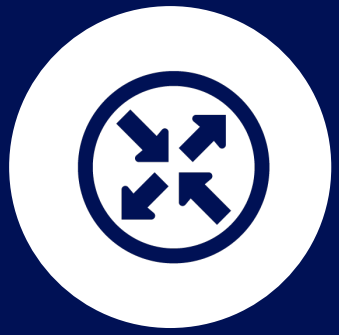
Challenges for IPv6 adoption

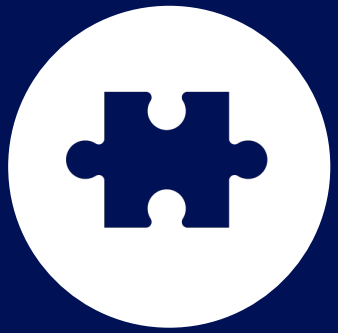
Know How

Building up and maintaining know how on IPv6



Installed based

Your installed base has to support IPv6 or be replaced



Decoupling layer

Decoupling IP and higher layer often requires complete redesign of networks

Customer readiness

Customer networks need to adopt in parallel

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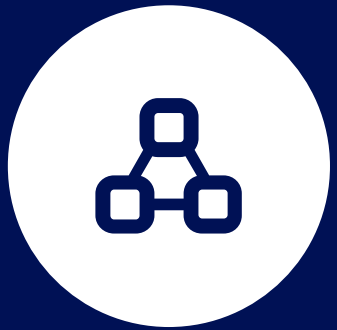
Why introducing IPv6 now?

Address self-configuration

IPv6 supports SLAAC and therefore reduces complexity and costs

Scalability

2^32 (4.3 Billion IPs) vs. 2^128 IP addresses



Solving the NAT Barrier

Replacing NAT with direct communication

Fully Internet Compliant

IPv6 provides worldwide compliance for IoT applications

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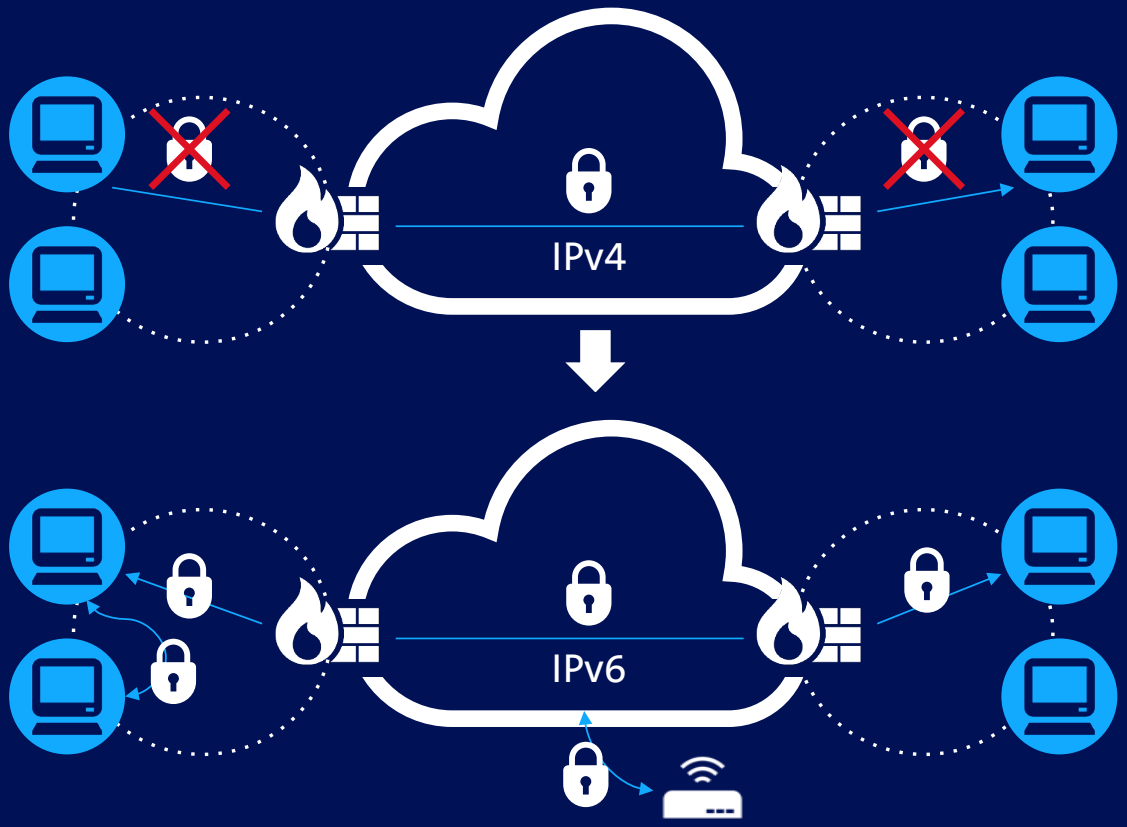
Increased level of security with IPv6



IPv4

> During development Security was not considered and had later be solved by the upper layers of the OSI model

IPv6

> Considered security right from the beginning by providing IPv6 as a built in feature

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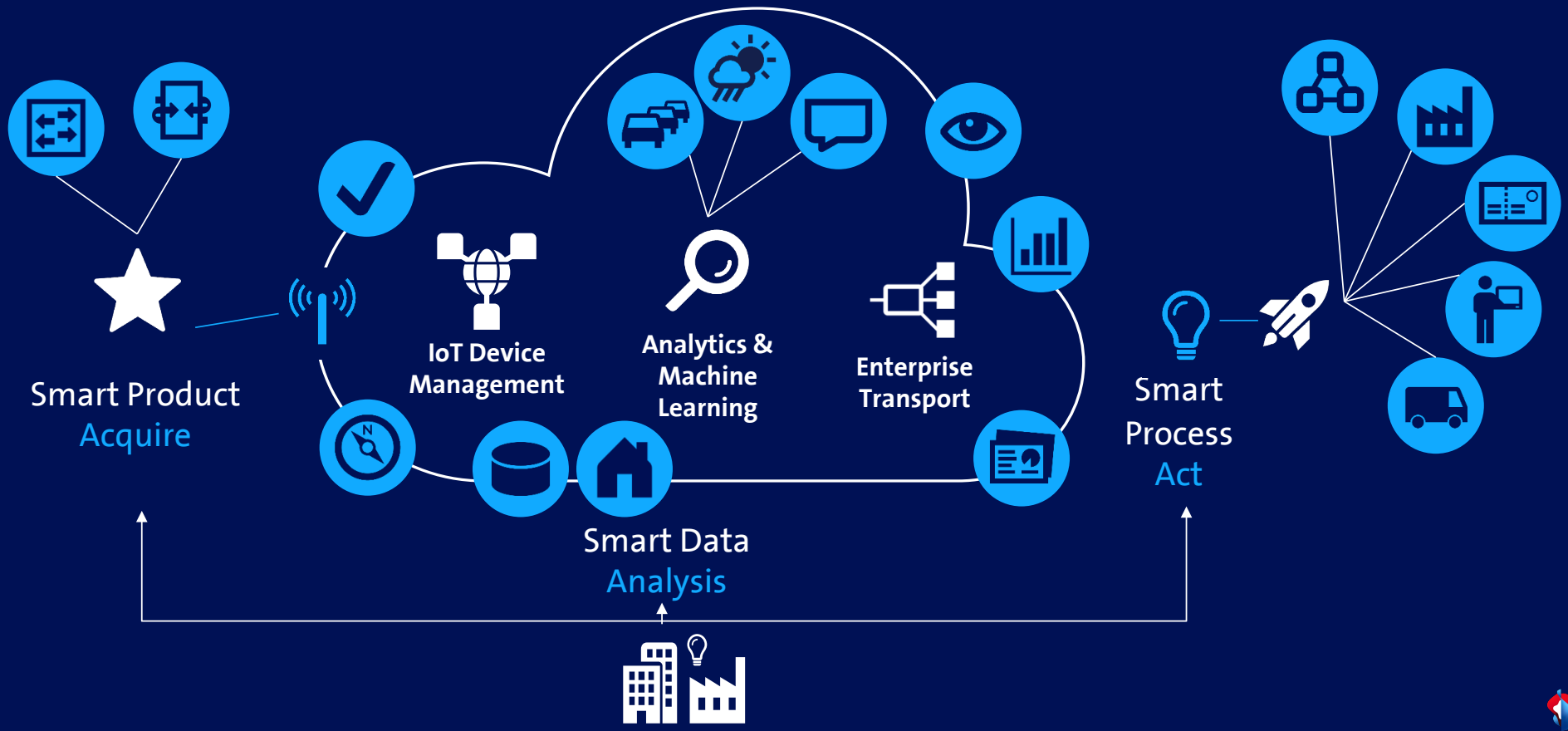
Connectivity is only the beginning



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Questions?

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