

Connected Devices

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Possibilities and Security

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Industrial Design & Integration Services

Founded
1983

People
2500

Revenue
\$200M

Nasdaq
Mid-cap
(Nordic)



Connectivity technologies



NB-IoT



LPWA



vs.



sigfox

LPWA



vs.



Private network example



Helsinki Water
Meter Reading



Photo courtesy of



HSY

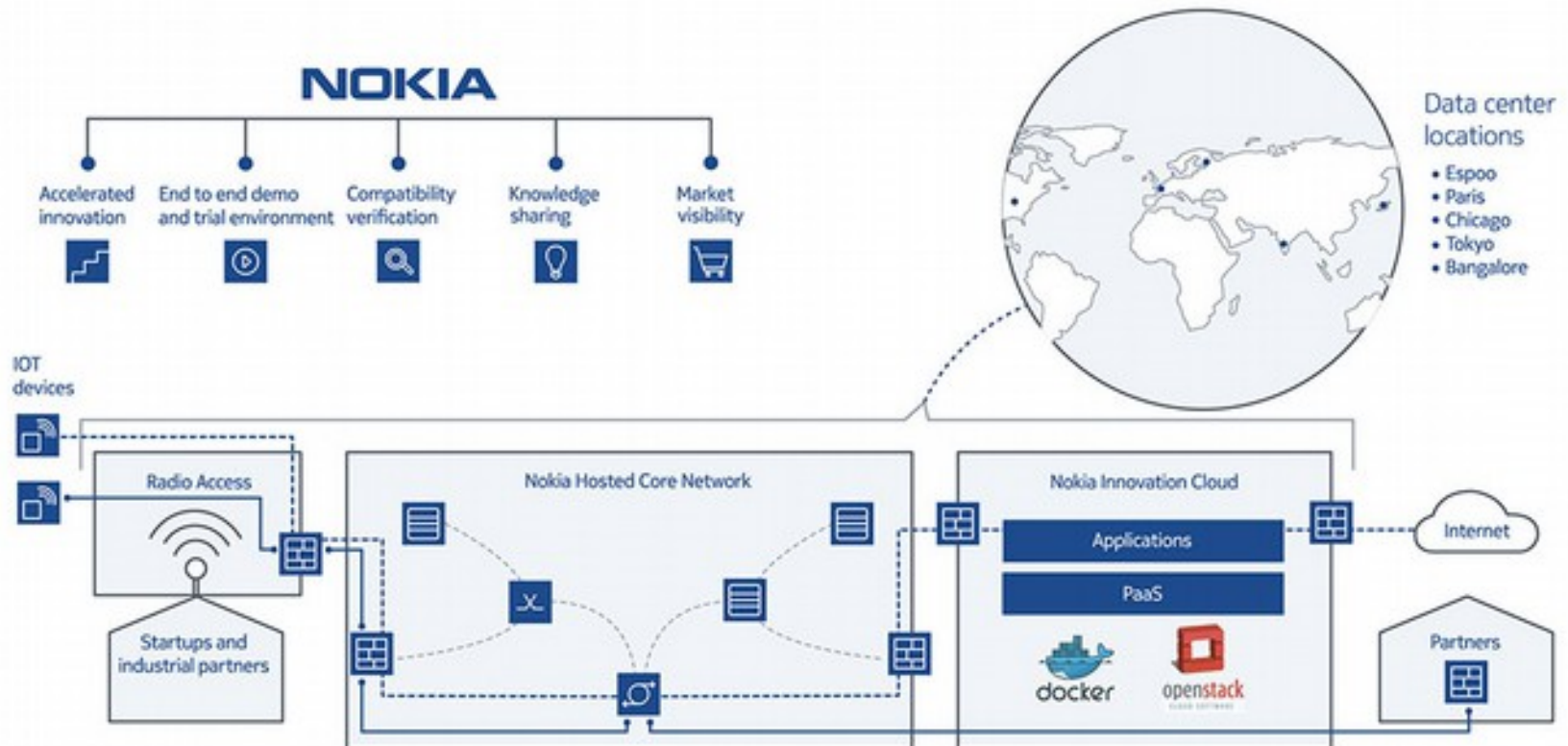
NB-IOT



NB-IOT



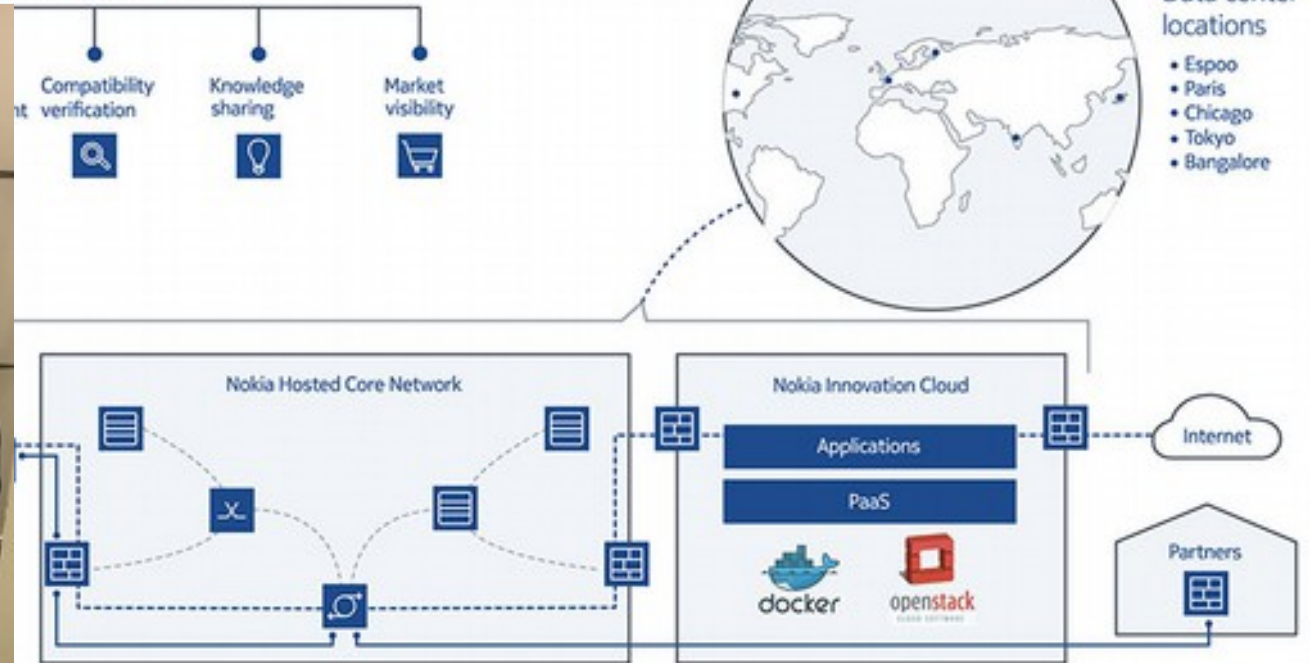
Nokia Innovation Platform



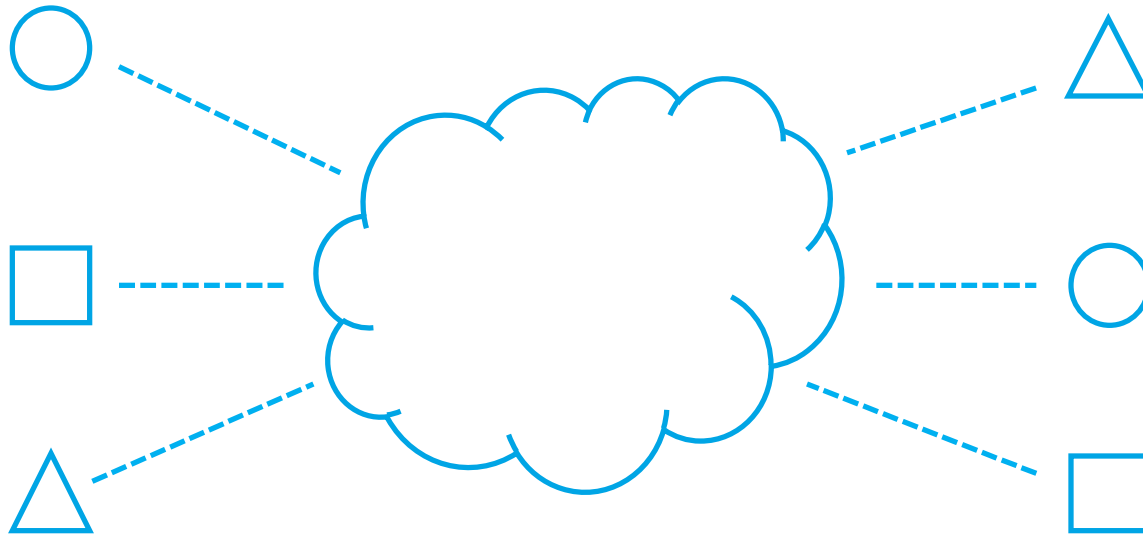
Nokia Innovation Platform



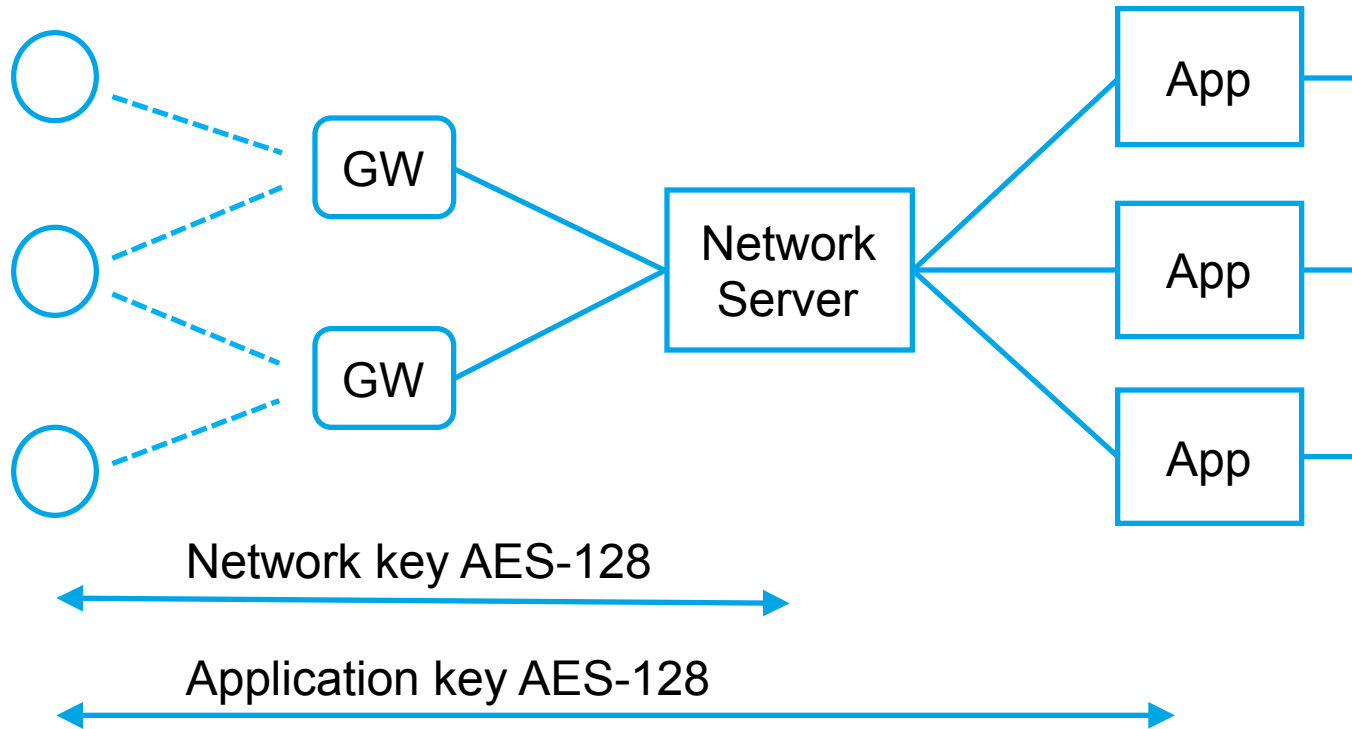
NOKIA



End-to-end IP connectivity?



LoRa security architecture



Smart vs. dummy devices

Jaakko's rule:

Make smart applications
and dummy devices.

Engineering with a difference

