

**NOKIA**

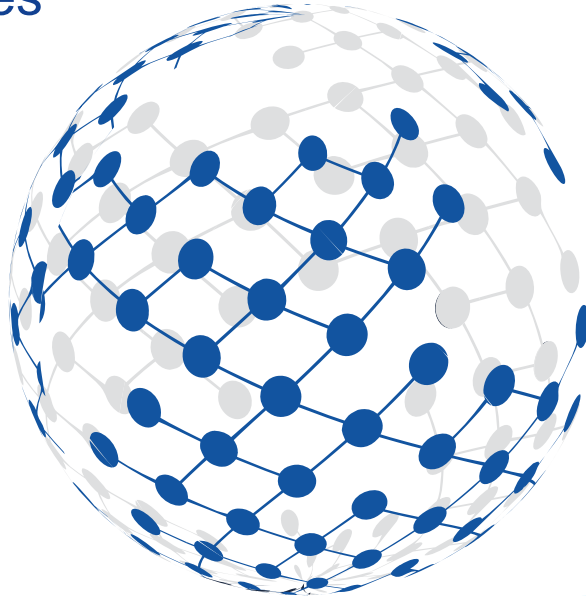
# Internet of Things

IoT brought to life

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While the past has been about connecting places & people, the future is about connecting things – improving personal life, optimizing business processes



Programmable things  
Connected things

— Fixed internet with 1 bn places connected by 2005

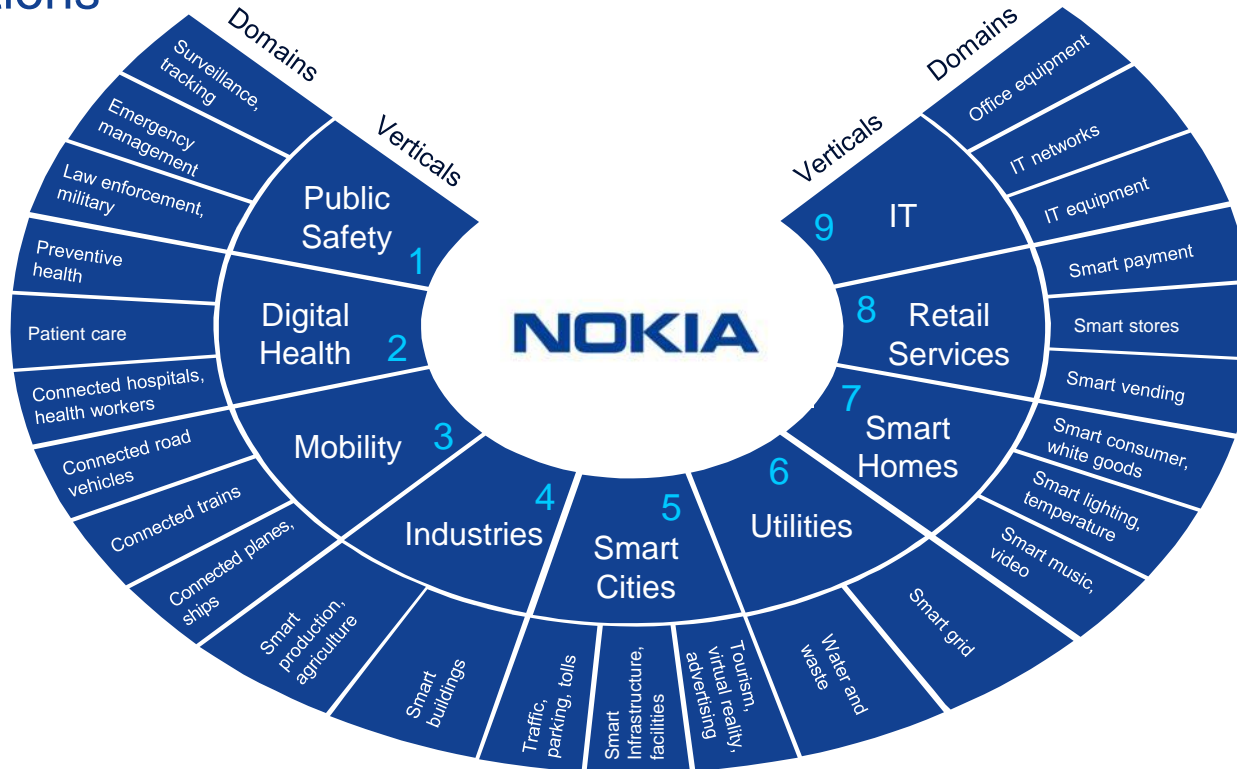
— Mobile internet with 5 bn people connected by 2020

— Programmable World with 50 bn things connected by 2025

# An opportunity to improve people's standard of living



The Internet of Things has a transformational impact on all industries, re-shaping business models, value chains, and entire industry configurations



## Use case: connected bus shelter



# The explosion of possibilities and use cases is creating a huge market opportunity in the entire Internet of Things ecosystem

■ >€100B or >50% 2015-25 CAGR
 ■ >€10B or >30% 2015-25 CAGR

2025 market projection in €	Mobility	Industries	Utilities	Digital Health	Smart Homes	Retail & Services	Public Safety	Smart City	IT	
Applications, Analytics and End-User Services	203B	110B	31B	23B	19B	18B	18B	6B	6B	434B (90%)
Application Enablement Platform	11B	3B	5B	2B	2B	0.6B	0.3B	3B	0.3B	28B (6%)
Connectivity Management Platform	2B	0.4B	0.8B	0.3B	0.2B	0.1B	0.04B	0.04B	0.002B	4B (1%)
Cellular Connectivity	6B	0.04B	0.02B	0.08B	0.01B	0.7B	0.7B	0.4B	0.01B	8B (2%)
IoT modules	2B	2B	1B	0.6B	2B	3B	0.1B	0.3B	0.4B	9B (2%)
Source: Machina Research and Nokia Strategy	224B (46%)	117B (24%)	39B (8%)	26B (5%)	24B (5%)	19B (4%)	19B (4%)	10B (2%)	7B (1%)	484B

# IoT: Key policy domains

**Connectivity & spectrum**

**Standardization**

**Net Neutrality**

**Data protection / ownership / location**

**Security**

**Digital Skills**

**Conclusion** : to fully capitalize the IoT opportunity, 5 main challenges have to be addressed

Robust  
connectivity

1

Standards

2

Inter  
operability  
and open  
interfaces

3

Privacy and  
security

4

Domain knowledge:  
Deep, vertical-specific insights

5



One more thing...

The best things  
in life aren't things

**NOKIA**