





### IoT within Telenor group

#### **Business Units**

- Regional use cases
- >3 million IoT SIMs
- Smart digital solutions



#### Group

- Wholesale
- Research

#### Connexion

- Enterprises with large or international fleets
- >10 million IoT SIMs
- Managed Connectivity and IoT Cloud services



### Telenor Connexion customers and sales offices



























# Global connectivity with a single interface

Connecting devices in 180+ countries

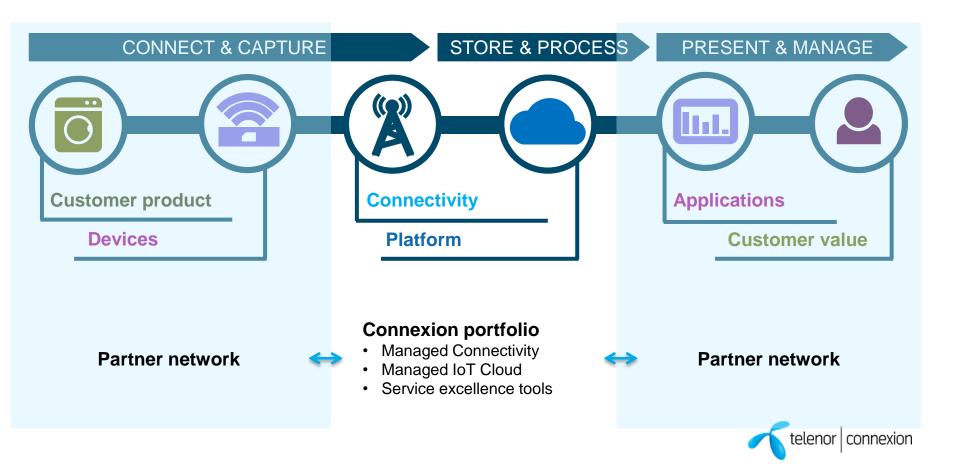
Individual customers with devices in 140+ countries

Mainly multioperator





### Telenor Connexion portfolio

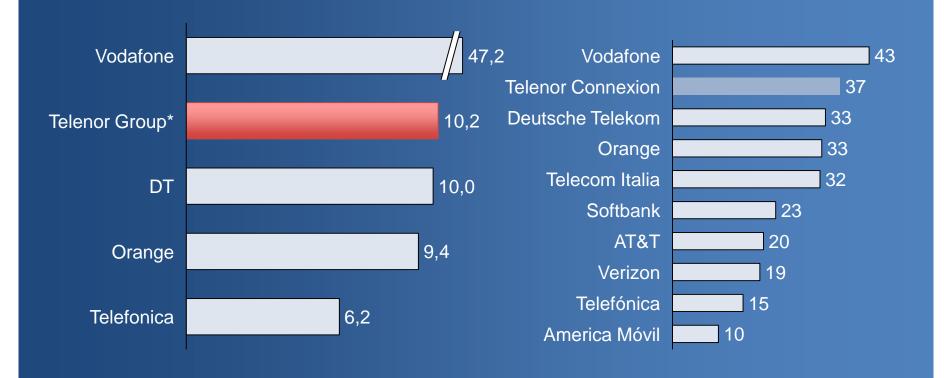


### IoT subscribers Europe 2017

Million cellular M2M subscriptions (2017Q2)

#### SIM growth 2016H1 - 2017H1

Percent; Top 10 international operator groups\*\*

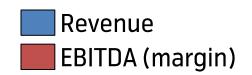


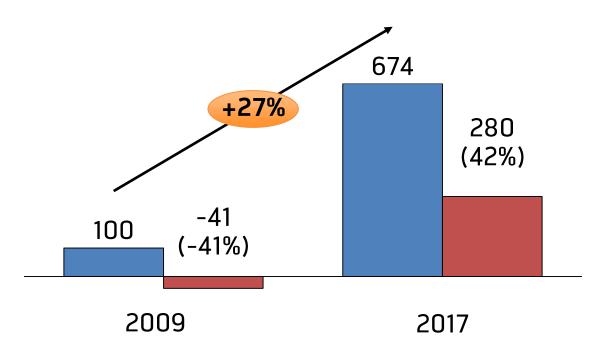
<sup>\*</sup> Incl. Telenor BUs and Telenor Connexion Source: Berg Insight 2018



<sup>\*\*</sup> In terms of number of IoT connections, excluding Chinese Operators

# Telenor Connexion financials Million SEK, CAGR



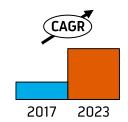


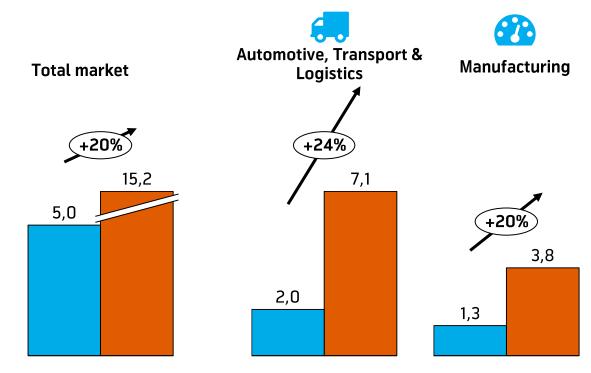




### Cellular IoT growth across manufacturing industries

Network revenues; 2017-2023, BEUR globally







## Digitalization of the customer experience









**Connected product** 

Product-as-aservice Ecosystem experience

~2018

Autonomous experience

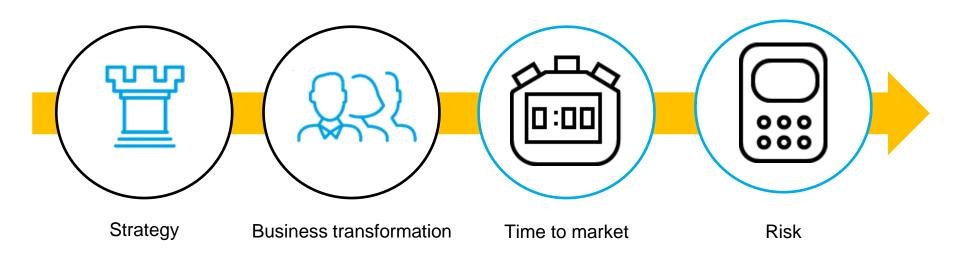
2020+

~2008

~2015



### Requirements on a succesful IoT solution





#### IoT infrastructure evolution

#### **Pioneers**

End to end customized

~2000

#### **Adopters**

Standardized IoT platforms and solution eco-system

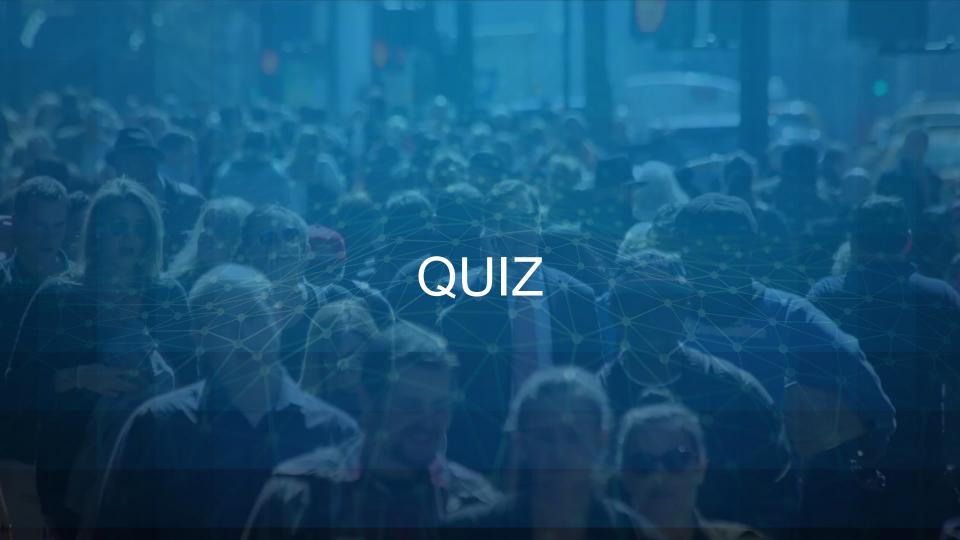
~2015

#### **Natives**

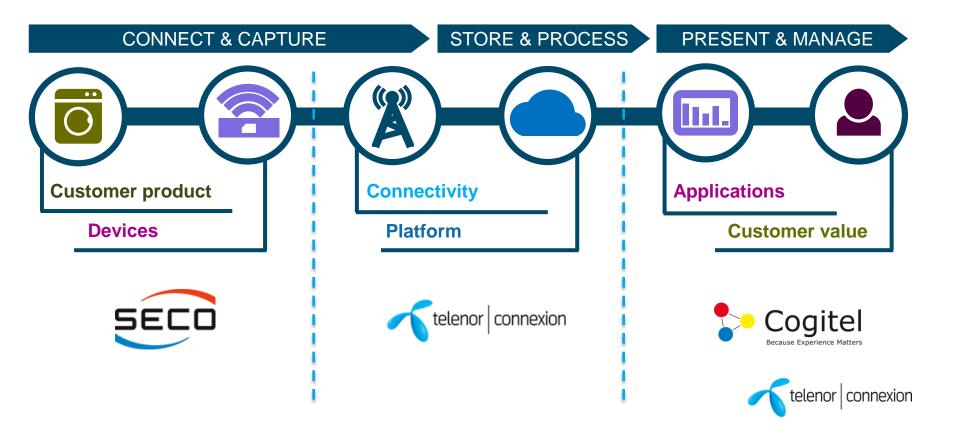
All components designed for IoT

~2020





## Example of developing a connected product today



# Time to develop a connected product today?

A. < 3 month

B. < 3 years

C. > 3 years



# Cost to develop a connected product today?

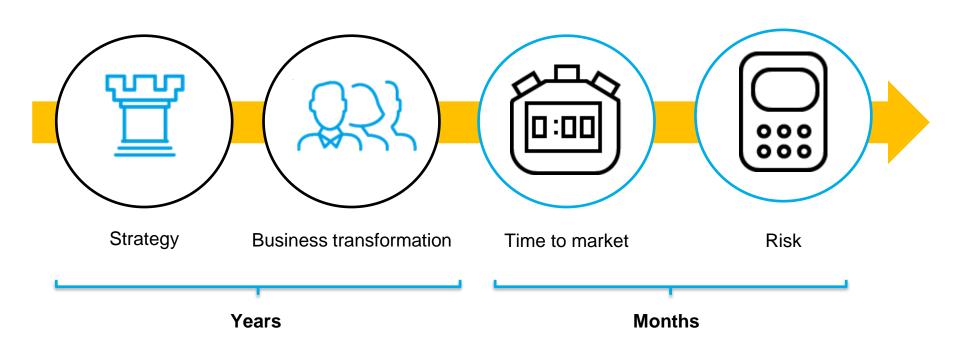
A. < 1 million SEK

B. < 10 million SEK

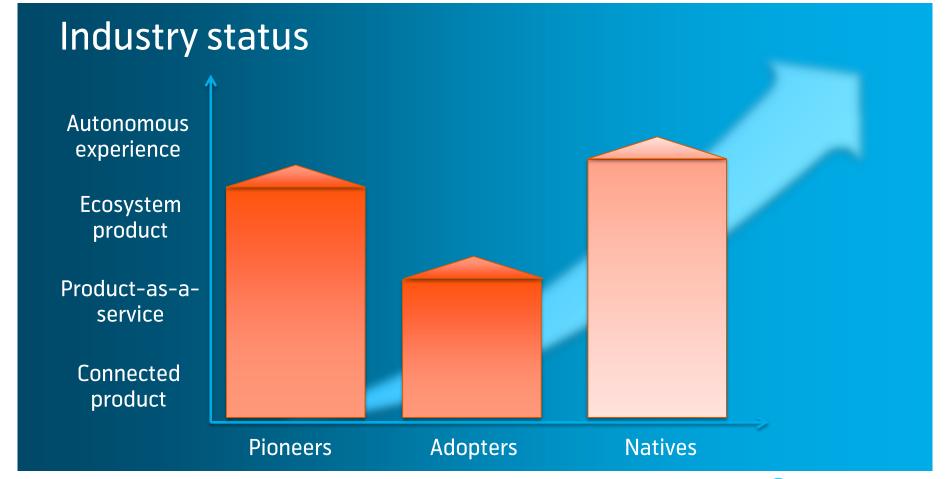
C. > 10 million SEK



### Requirements on a successful IoT solution



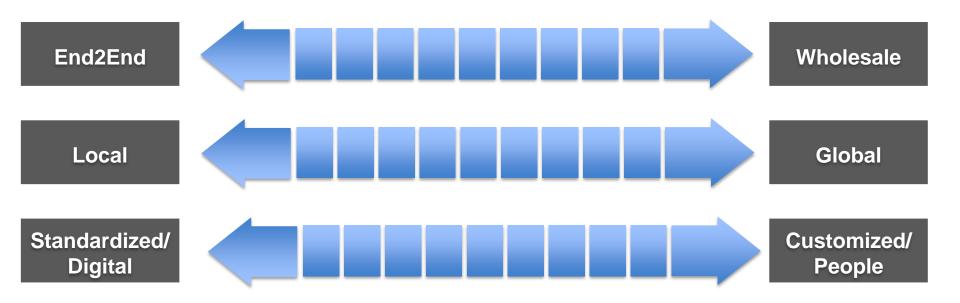






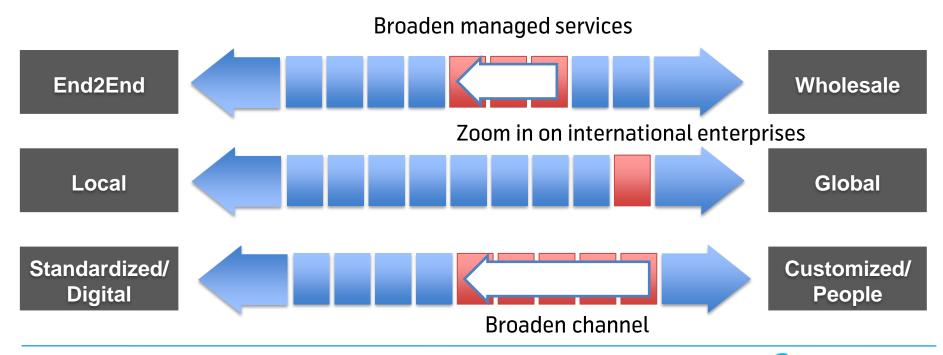


### The successful IoT service provider has to make choices





### Telenor Connexion – looking ahead





# To sum up

Continued 2 digit growth across managed IoT services markets

Growth rate is driven by speed of digitalization across industries

Telenor Connexion is well positioned to capture growth from large scale and international IoT deployments



