

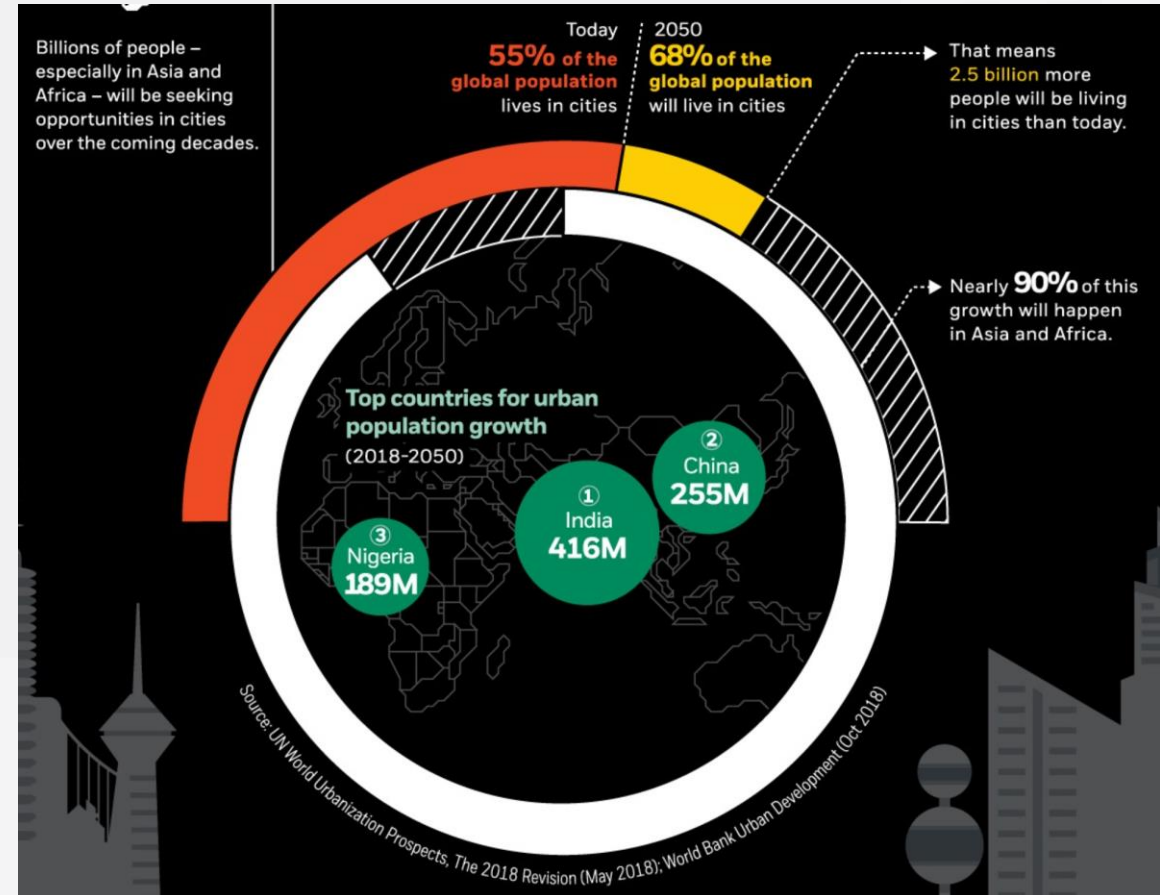
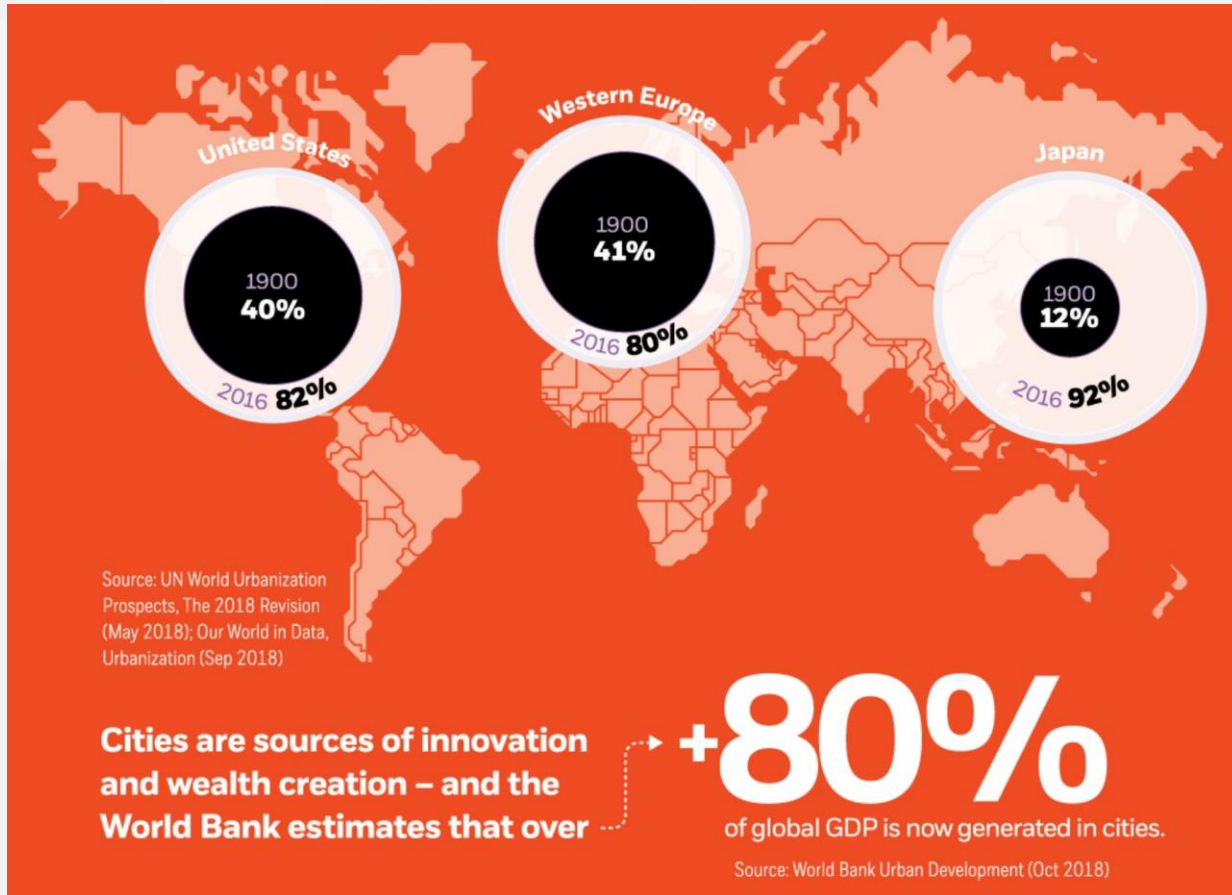
ALSO[▼]

Tero Blomqvist
23.04.2019

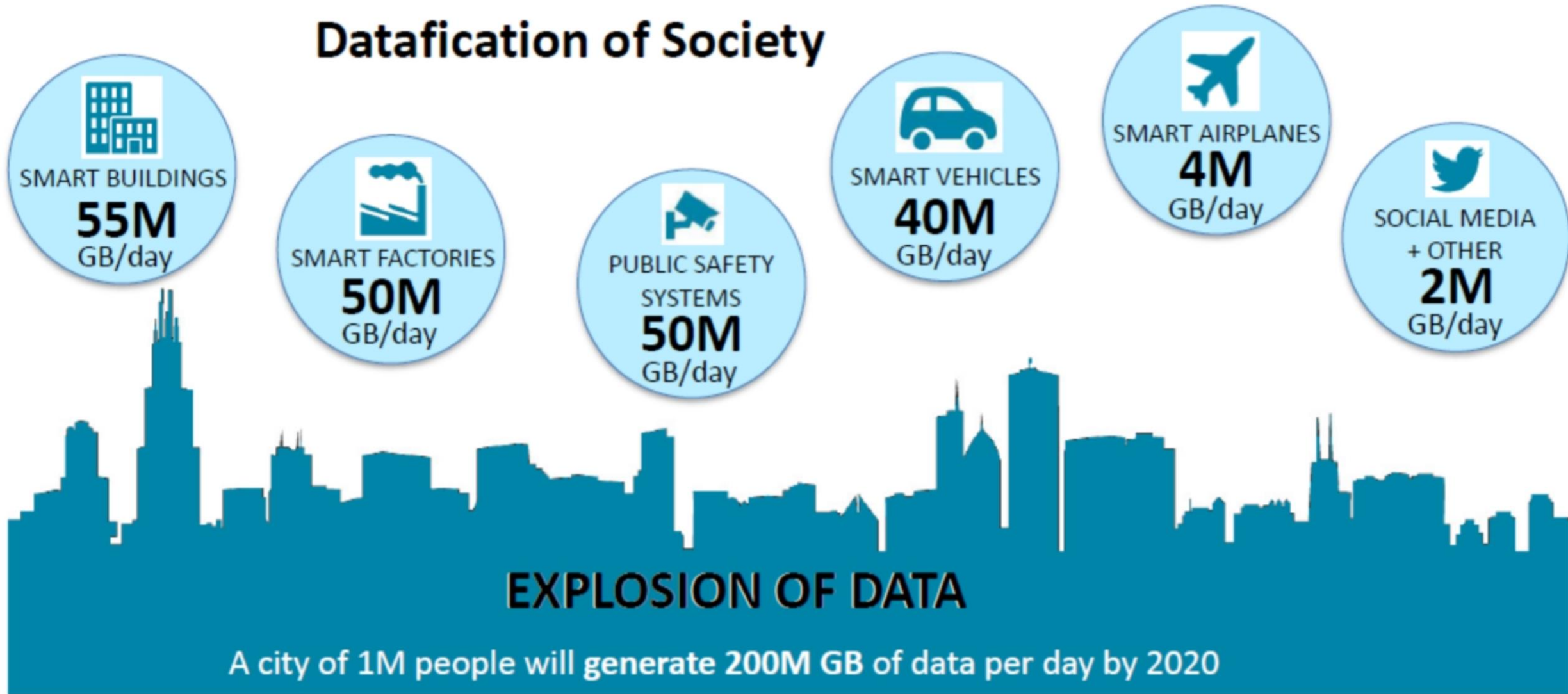


grow.
Smart.
Together.

Rapid Urbanisation – 41 megacities @ 2030



Datafication of Society



How to create business models based on public and private data sources collected to shared data pool?

- **Description:** How to create business models based on public and private data sources collected to shared data pool. How this data can be utilized and used as a base for city services and environment.
- **Problem roots:** Tampere has not established rules for data usage. We have no tools to define the value of each data element. We haven't got data architecture.
- **Main obstacles:** Data sources are in separate silos in city environment. The maturity of the data varies. There is no guidebook or law to tell how to utilize data pools that combine private and public data.
- **Case examples:** How to drive local value with the Data Utility?
 - Fan engagement by Tampere Deck and Arena
 - Destination Tampere: E2E Experience based on data
 - Cityfier to analyze and forecast the value increase of city districts under development
 - Smart Tram ecosystem, data utilization model and blueprint
 - Streetlight network commercial possibilities

EXPERIENCES

in Finland's No.1
arena

13-15,000

spectators

33,000 sqm



Insight:
Future fan experiences
are more connected
than ever

*Instant connectivity and intelligently
tailored services are the new normal
for fan experiences.*

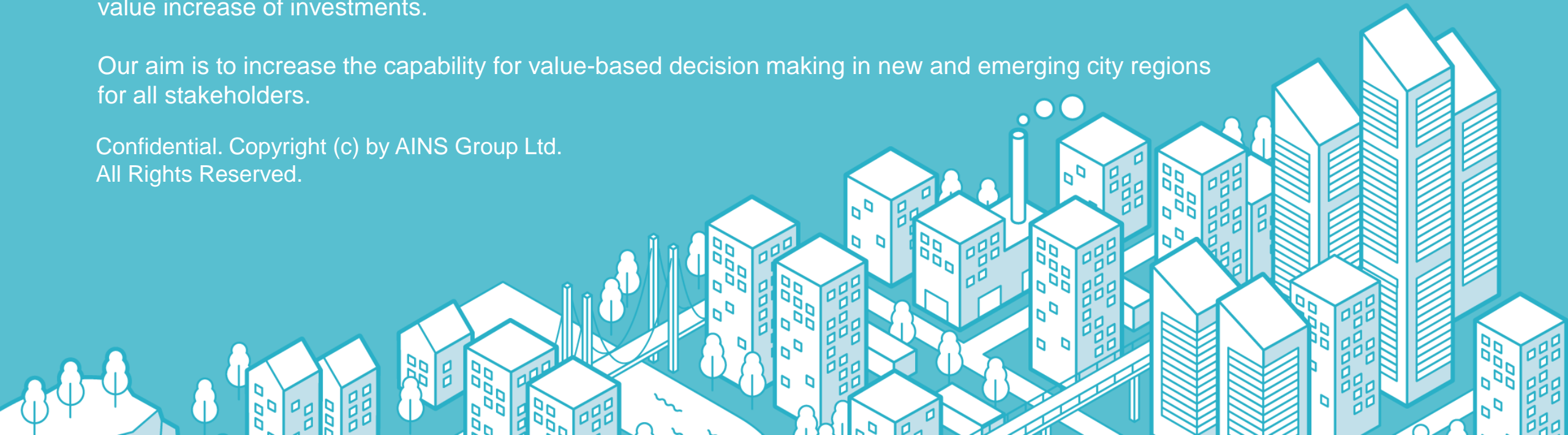


Cityfier is a digital service to analyze and forecast the value increase of city districts under development.

We use **Open Data** and **Master Plans** to analyze locations of residents and workplaces together with predicted investment timing. Based on **Urban Economy Research Data** we can assess the location value increase of investments.

Our aim is to increase the capability for value-based decision making in new and emerging city regions for all stakeholders.

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**Tampereen
Ratikka**

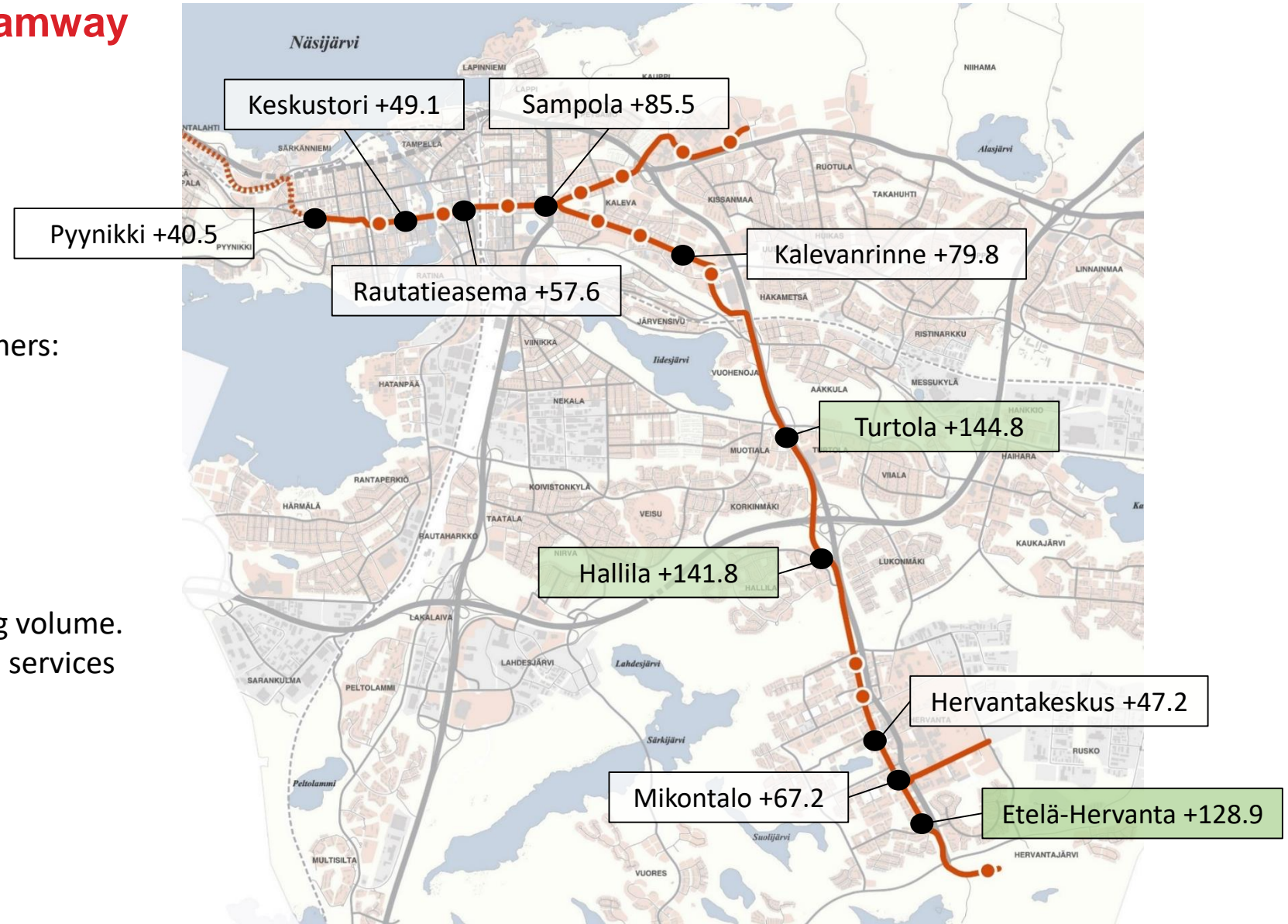
**Tampere
Tramway**

Cityfier Index/ Tramway effect

Housing location value biggest gainers:

1. Turtola
2. Hallila
3. Etelä-Hervanta

- Currently underrated
- Potential for additional housing volume.
- Excellent accessibility and local services



Tampere tramway

**23 km of real estate
opportunities
(and fiber under
the tracks)**

**Urban service hubs
along the way**

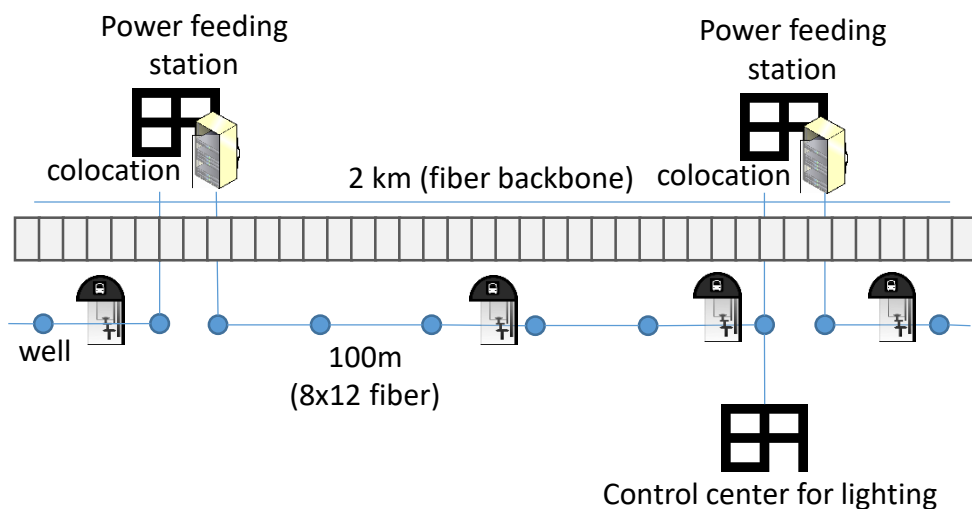
**5G ready testing area
already in use**



Tram line and tram stops

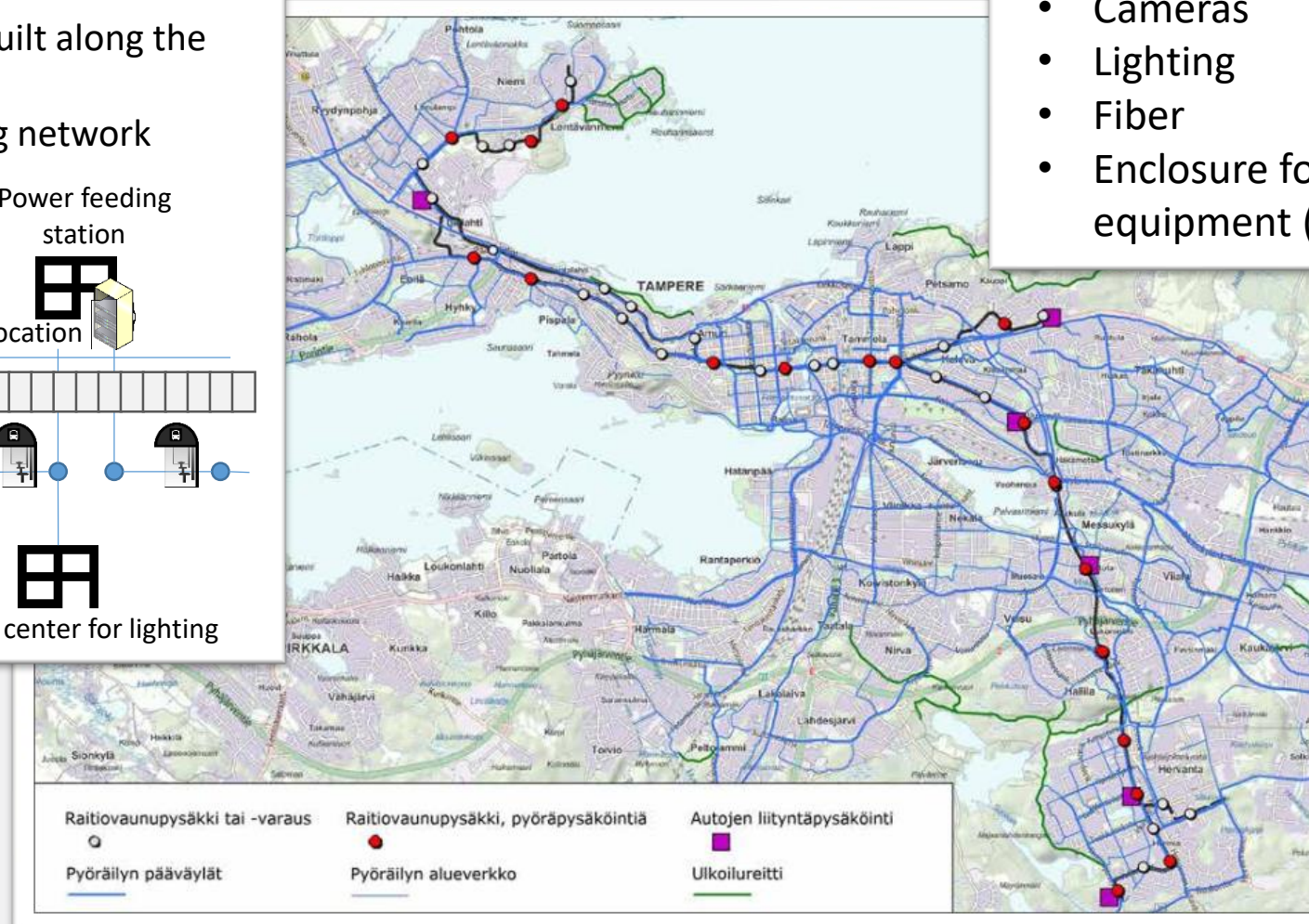
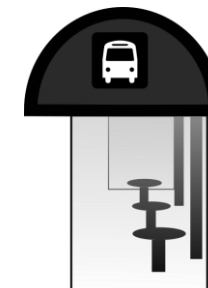
Tram line and power feeding stations

- New fiber backbone network is built along the tram line
- Frees up some capacity in existing network



Tram Stops

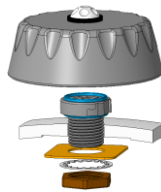
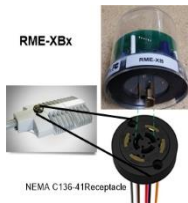
- Info displays
- Ads
- WiFi
- Cameras
- Lighting
- Fiber
- Enclosure for 3rd party equipment (colocation)



Streetlight network

Streetlight poles

- 37.000 lightpoles, 41.000 lamps in the city.
- Gradual upgrade ongoing
- Futureproof design to expand with standard connectors
 - NEMA and Zhaga



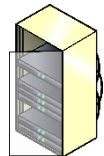
Electricity + wireless connection to control cabinet. Fiber available in selected number of locations (in city center/along the tram line).

Control cabinets for lighting

every 1.5 km to control the local lighting (0.5 – 1.5 km)

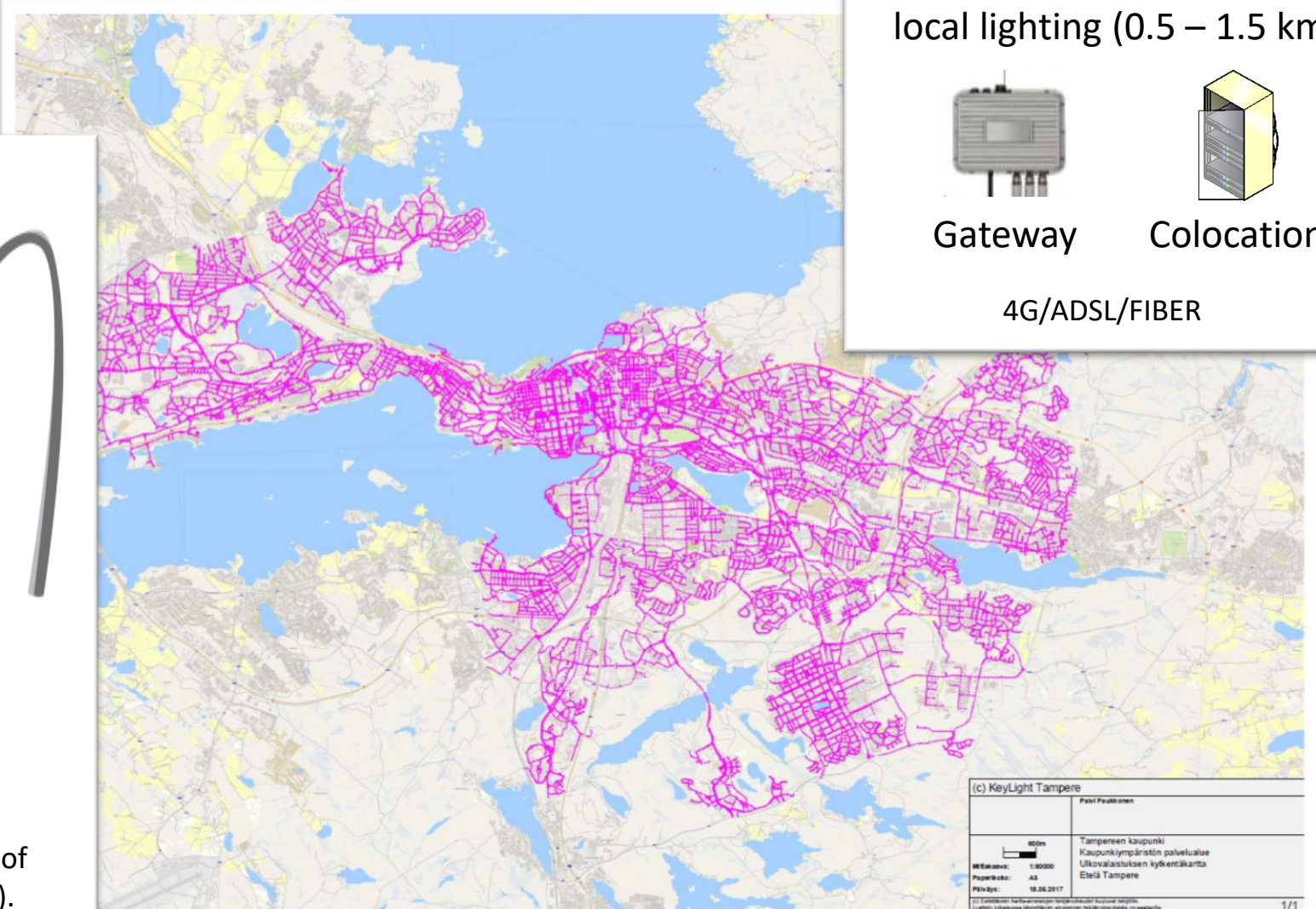


Gateway



Colocation

4G/ADSL/FIBER



ALSO Finland Oy

ALSO Holding AG

200

Employees

4000

481 M€

Revenue

9.2 Mrd €

1995

Founded

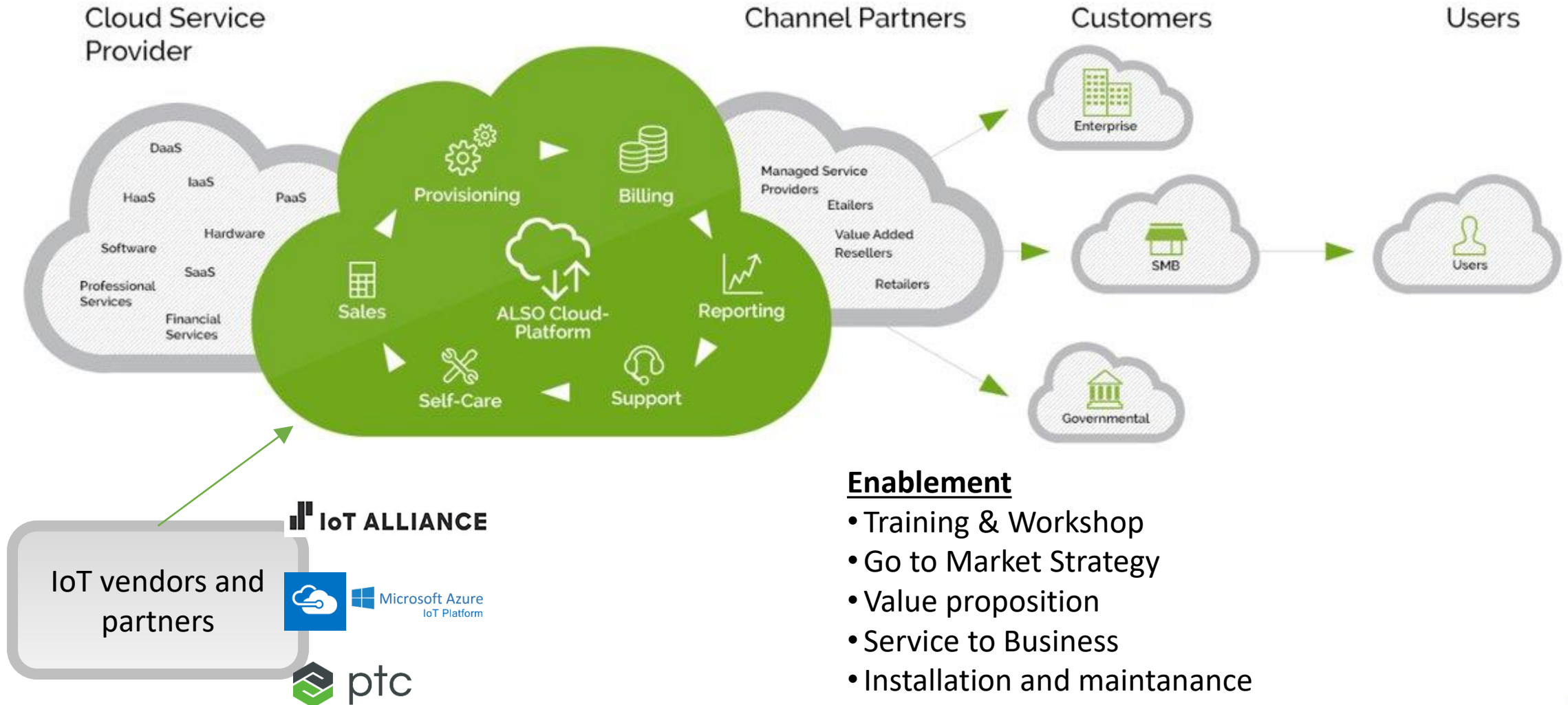
1984

**Tampere, Espoo
ja Pirkkala**

Location

18 countries

ALSO's IoT -ecosystem





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