Unleashing Powers of Digital Transformation for Travel 4.0 and beyond
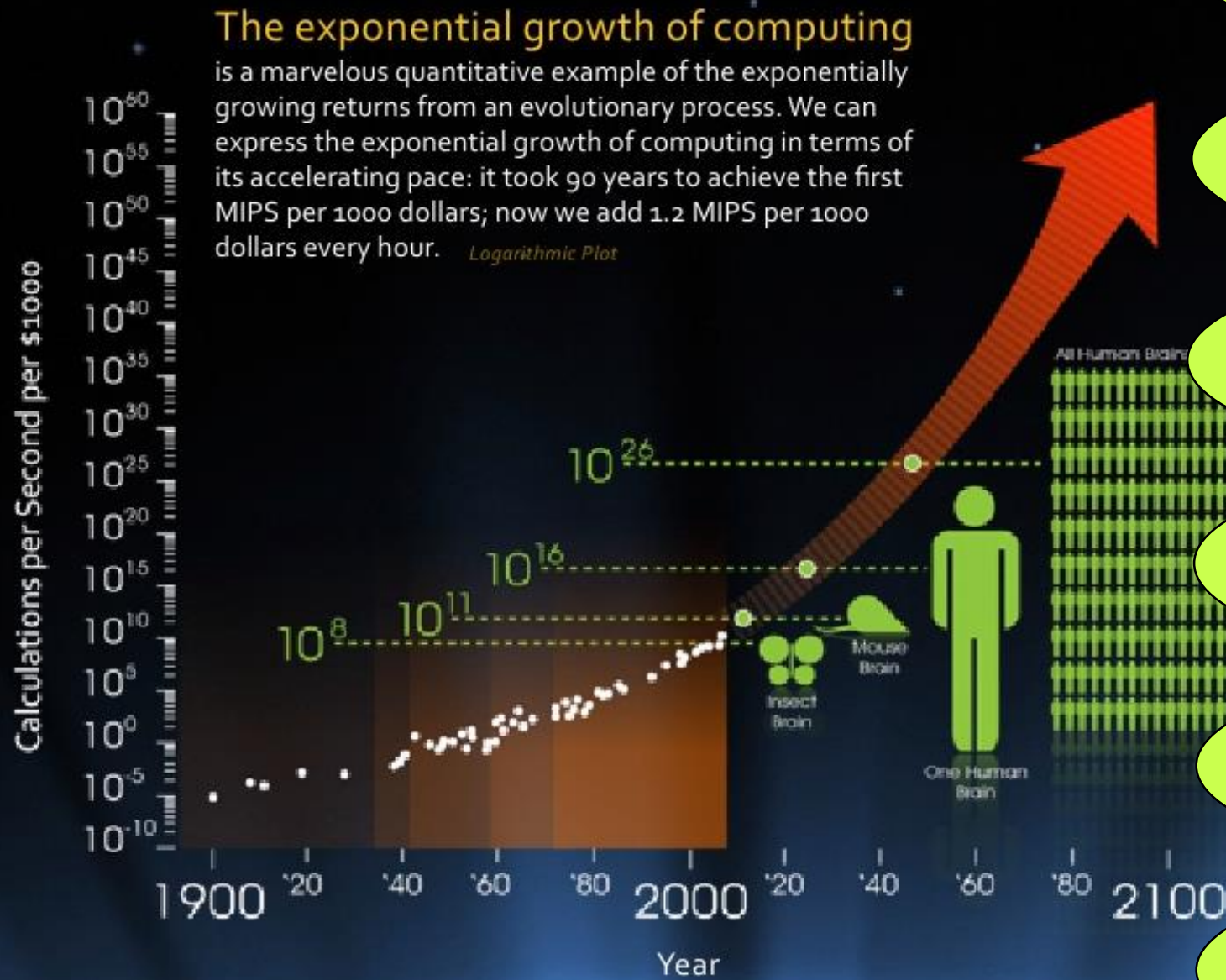
Pekka Sivonen

Executive Director, Digital Transformation of Finnish Industries

DIGITAL TRANSFORMATION

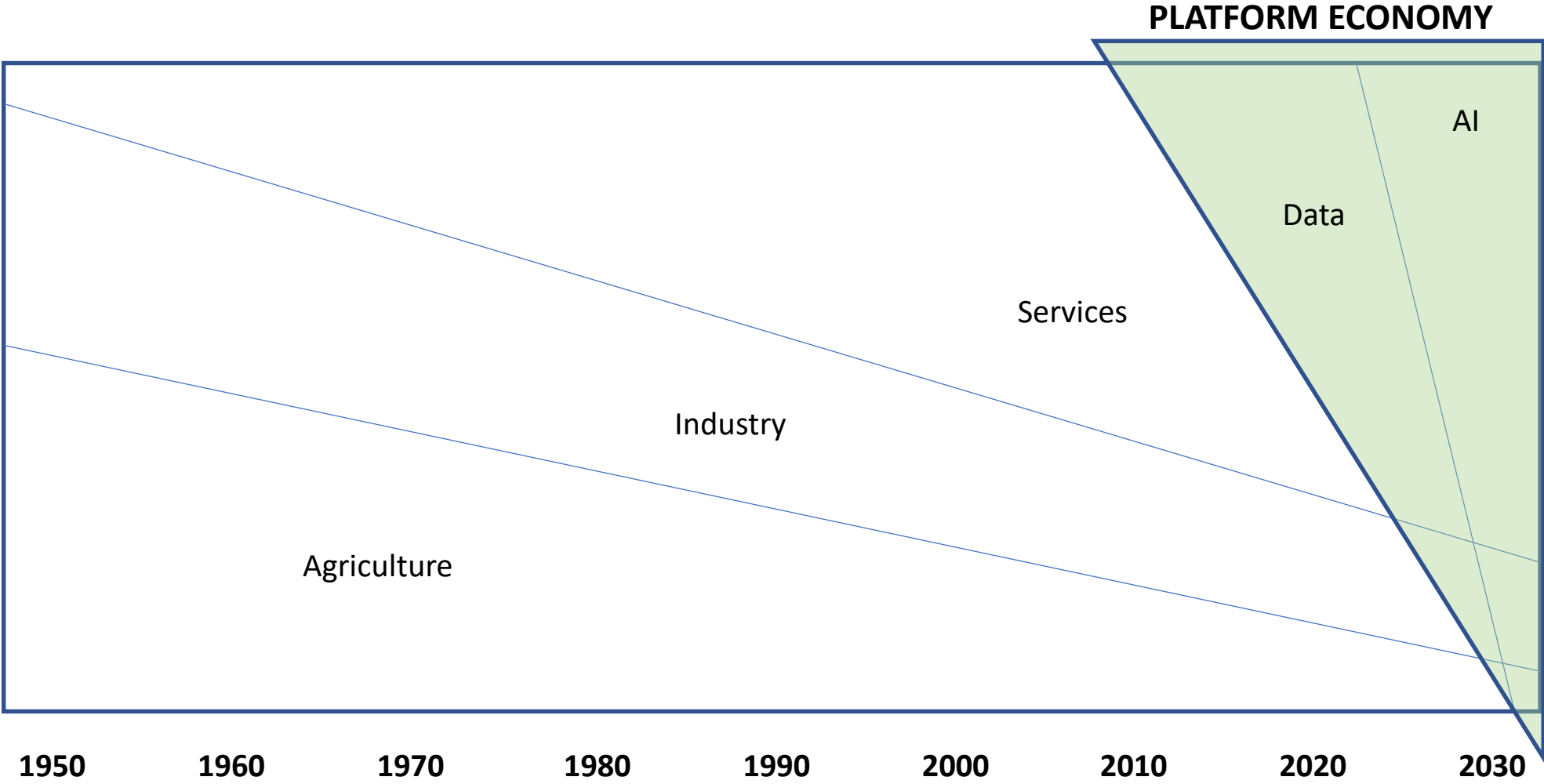**WORLD ECONOMY
80 TRILLION USD**

**EUROPE 4% OF
TOP 50 PLATFORMS**

"We estimate that digitalization could deliver around $100 trillion USD in value to business and society over the next decade."

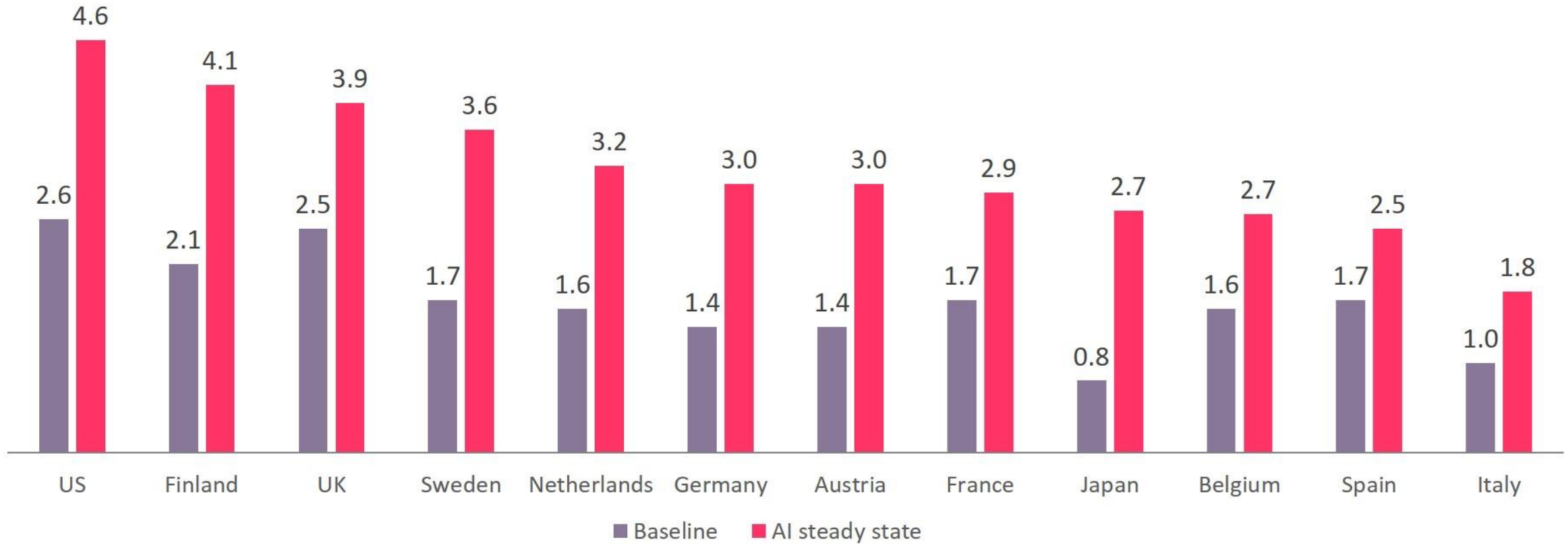**WORLD ECONOMIC FORUM**
DIGITAL TRANSFORMATION INITIATIVE MAY 2018

The changing structure of the Finnish national economy

PLATFORM ECONOMY

AI

Data

Services

Industry

Agriculture

1950   1960   1970   1980   1990   2000   2010   2020   2030

FINLAND WITH AND WITHOUT ARTIFICIAL INTELLIGENCE

US: Baseline 2.6, AI steady state 4.6
Finland: Baseline 2.1, AI steady state 4.1
UK: Baseline 2.5, AI steady state 3.9
Sweden: Baseline 1.7, AI steady state 3.6
Netherlands: Baseline 1.6, AI steady state 3.2
Germany: Baseline 1.4, AI steady state 3.0
Austria: Baseline 1.4, AI steady state 3.0
France: Baseline 1.7, AI steady state 2.9
Japan: Baseline 0.8, AI steady state 2.7
Belgium: Baseline 1.6, AI steady state 2.7
Spain: Baseline 1.7, AI steady state 2.5
Italy: Baseline 1.0, AI steady state 1.8

■ Baseline ■ AI steady state

Source: Accenture and Frontier Economics

BUSINESS FINLAND *Annual growth rates by 2035 of gross value added (a close approximation of GDP), comparing baseline growth by 2035 to an artificial intelligence scenario where AI has been absorbed into the economy*

Big D: Digital Transformation

"Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It's also a cultural change that requires

The Enterprise's Project: What is Digital Transformation

FROM DIGITALISATION TO DIGITAL TRANSFORMATION

The platform landscape consists of *White Sharks, Swordfish*, and *Piranhas*
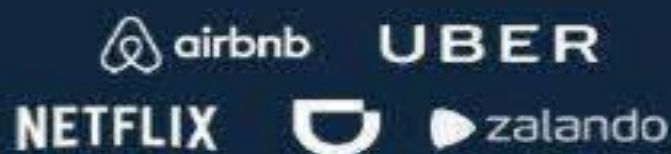
Platform economics in nutshell

Digital
White Sharks

f Google 🍎

amazon Alibaba Group

- At the top of the food chain -

› (Very few) digital economy **leaders**
› Wide, **diverse** product portfolio
› Gigantic **assets**

Digital
Swordfish

airbnb UBER

NETFLIX 🅳 zalando

- Big, fast, rarely get eaten -

› (Few) big **industry shaping** players
› Deep, **vertical specific** products
› Already **near peak** growth

Digital
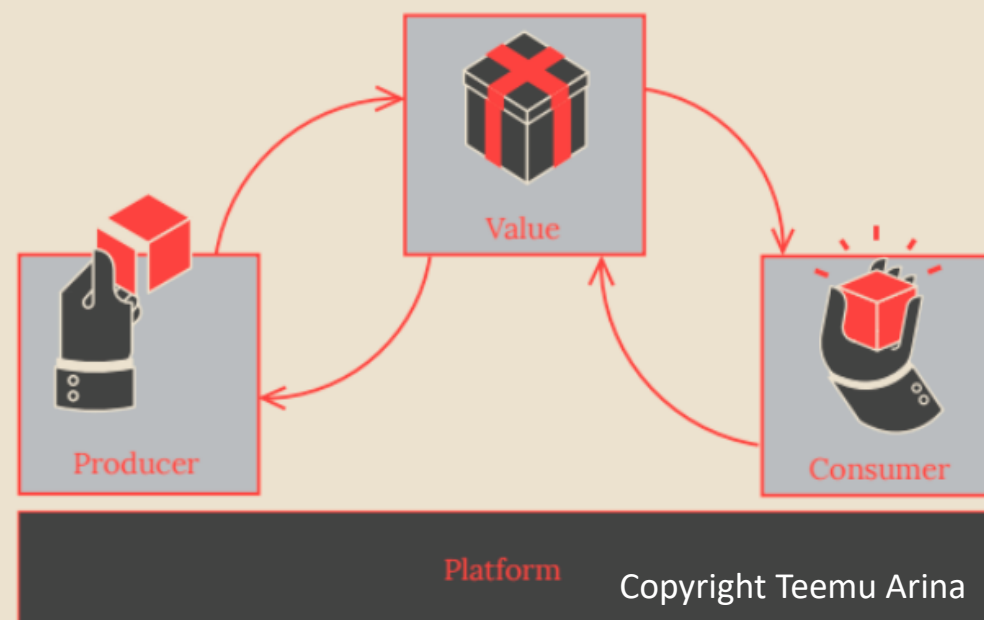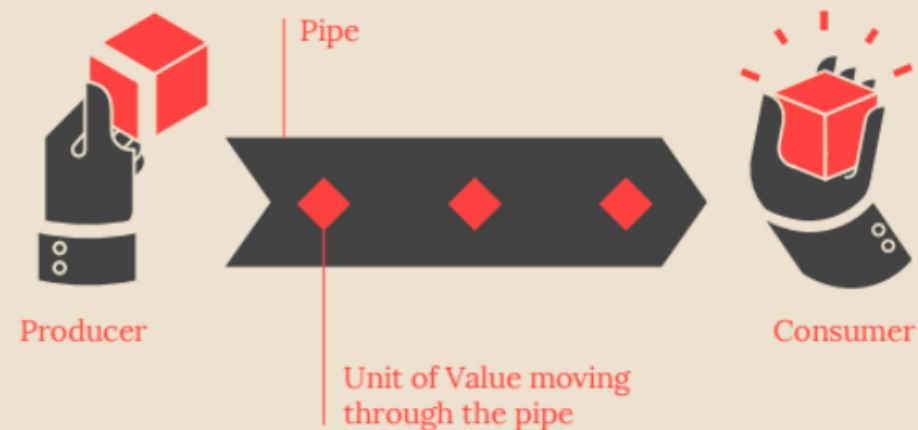## Piranhas

SHAZAM Bla Bla Car

WARBY PARKER

SoFi houzz slack

- Small but aggressive for prey -

› (Many) **product specific** players
› Huge, product centric **competition**
› **Peak growth** not yet reached

34 statista

PIPES vs. PLATFORMS

1. **The ecosystem** is the new warehouse & supply chain

2. **The network effect** is the new economy of scale

3. **Data** is the new currency

4. **Community management** is the new customer service

5. **Curation and reputation** are the new quality control

6. **User experiences** are the new sales funnels

7. **Distribution** is the new destination

8. **Engagement** is the new loyalty program

9. **Data science** is the new process optimization

10. **Algorithms** are the new decision makers

Pipe

Producer

Consumer

Unit of Value moving
through the pipe

Value

Producer

Consumer

Platform
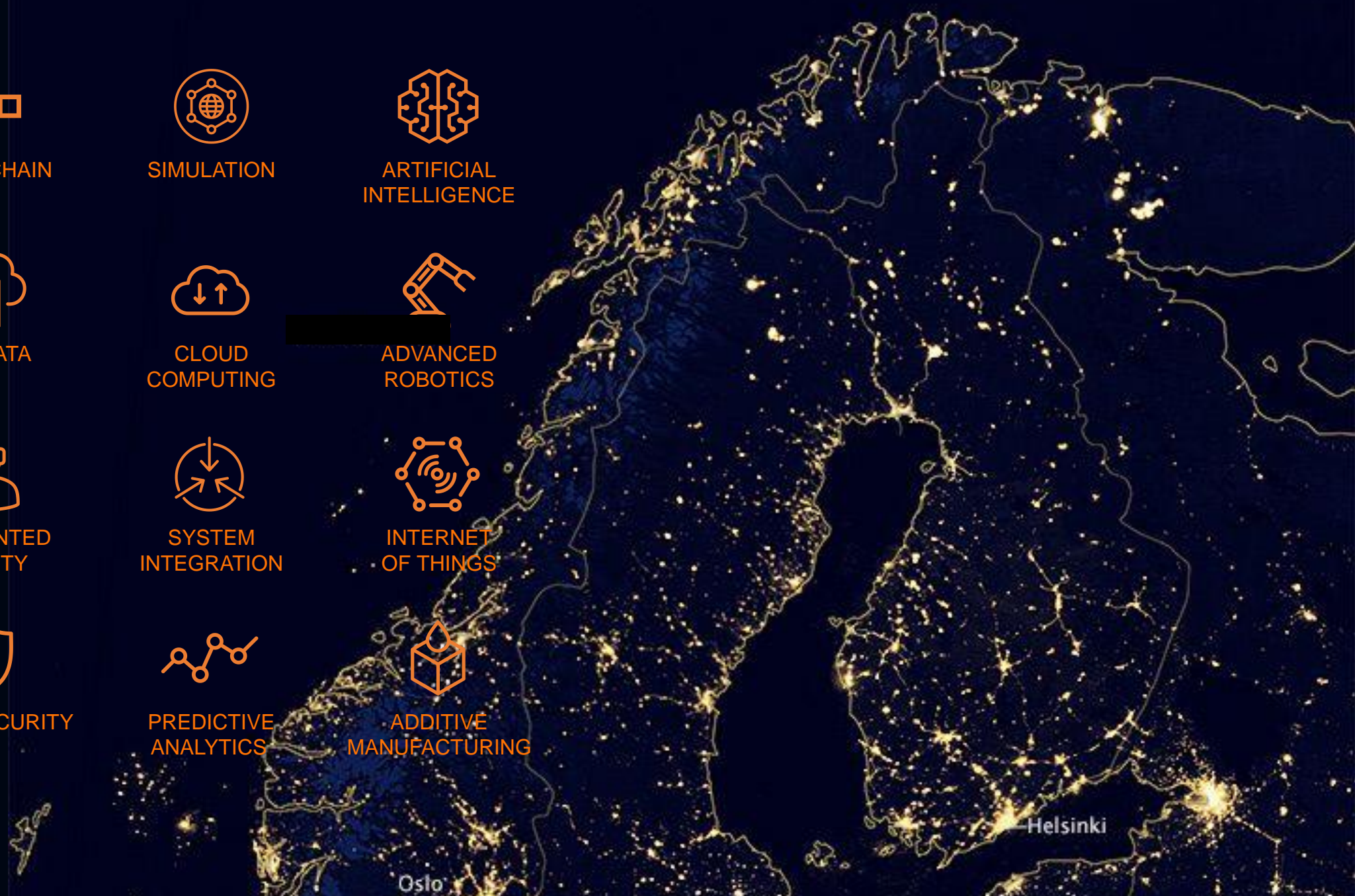
The Jobs Landscape in 2022

emerging roles, global change by 2022

133 Million

Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

declining roles, global change by 2022

75 Million

Top 10 Declining

1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Source: Future of Jobs Report 2018, World Economic Forum

Digital Transformation
Powered by Platform Economy

is More Fundametal
Than Digitalisation

FROM DIGITALISATION TO DIGITAL TRANSFORMATION

MULTIMODAL TRANSPORTATION

AI in Travel Industry

Figure 1
The Goldilocks Opportunity

Post-AI travel value proposition

Luxury

Midscale

Budget

More services, same price

Figure 2
The Netflix Effect

Richer data

Centralized traveler portal

Increased engagement

Improved service

Figure 3
Travel-as-a-Service

Budget
Travel time
Food

Lodging

Activities
for the kids

Destination

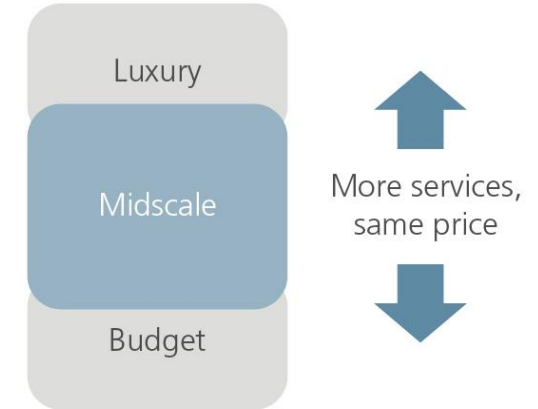**Finnair and Silo.AI improve situational awareness of air traffic with artificial intelligence**

Finnair and the artificial intelligence company Silo.AI built a machine learning artificial intelligence tool that enables the airline to predict possible disruptions to air traffic more accurately. In Finland, this unprecedented solution can for example be used to assess the impact of weather on the punctuality of flights, so that preparations for irregularities can be done in advance.

Flight punctuality is one of the biggest factors that affect customer satisfaction, and weather is one of the biggest factors affecting the punctuality of air travel globally. With artificial intelligence solution, Finnair will be able to better prepare for exceptional circumstances caused by weather and plan actions to minimize the impact on customers well in advance.
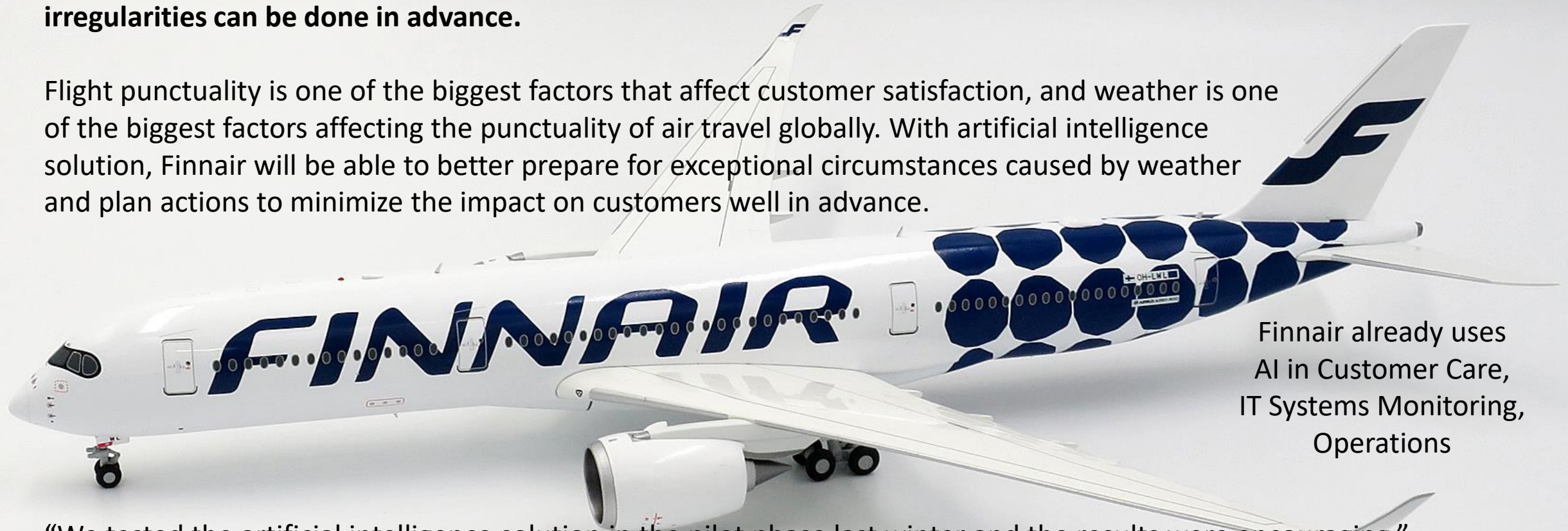
Finnair already uses AI in Customer Care, IT Systems Monitoring, Operations

"We tested the artificial intelligence solution in the pilot phase last winter and the results were encouraging," says **Juha Karstunen**, digital transformation lead at Finnair. "The goal is to implement the solution as part of a broader technical reform later this year. We are also developing other intelligent solutions to support decision-making. Exceptional weather conditions are common in air travel, and our goal is always to minimize their impact on our customers' travel plans."

MR=AR/VR/XR

Value Proposition of Augmented Reality

Intuitive
Users get an interactive interface on their devices and get contextual information based on real world view, providing a "What You See Is What You Get" UI that is user-friendly

Convenient
There is no need to get extra hardware for existing devices. If your device runs the latest operating system, has enough space, and comes with a camera, you are good to go
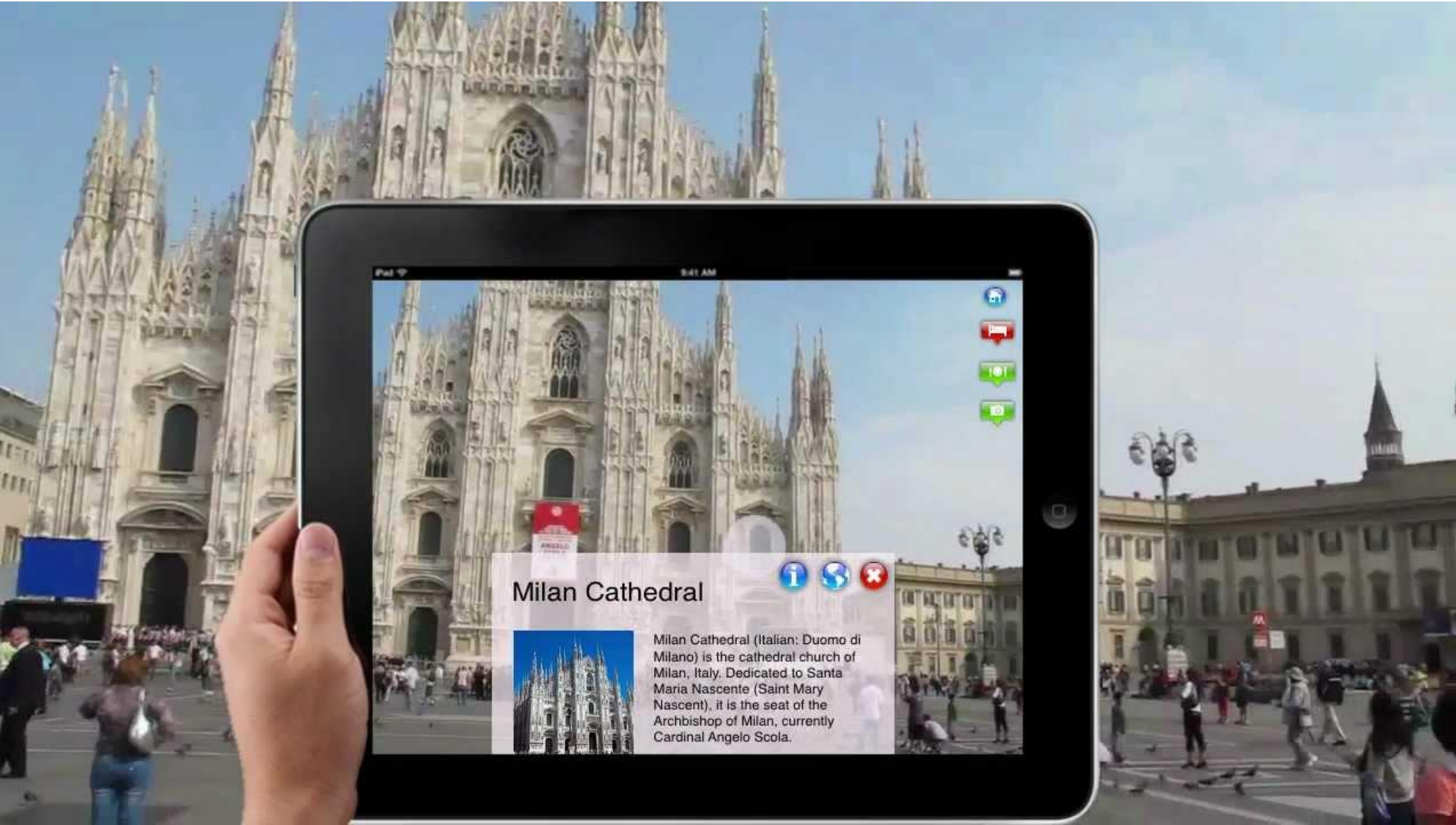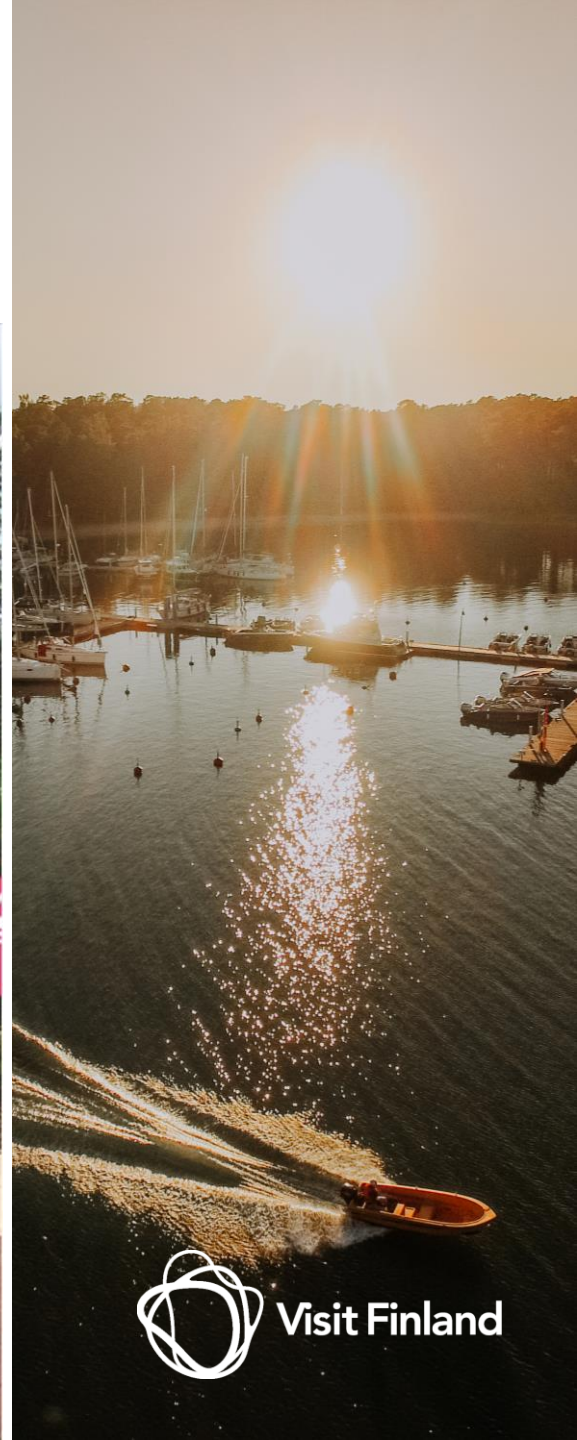
Entertainment
Augmented Reality is a new and exciting technology that excites most users. Its game-like and futuristic look add entertainment value to applications which utilizes this technology

AR

AR

AR

Mixing Actual/Augmented/Virtual Reality

Google Maps, where are they going ?

February: Google Maps displays buildings and subway stops in NYC, Washington, D.C., London, and other cities.

Google traffic info officially launches, displaying real-time traffic-flow conditions for 30 major U.S. cities.

May: Google Street View launches in five U.S. cities.

Google Maps allows users to search by neighborhood.

September: Google Maps adds 54 countries in Latin America and Asia.

November: Google Maps adds Terrain feature, showing basic topographic elements.

February: Google Maps officially launches in the U.S., providing road maps and driving directions.

April: Google Maps launches in the UK.

July: Google Maps launches in Japan.

Where 2 Technologies, which became a building block for Google Maps, was founded in Australia.

2003

2004

September: Google acquires ZipDash, a company providing real-time traffic analysis.

October: Google acquires Where 2 Technologies, converting it into a web application.

Google buys Keyhole, a small satellite-image firm based in Silicon Valley.

2005

2006

January: Google Maps is offering road maps for the U.S., including Puerto Rico, as well as Canada, the UK, Ireland, and Japan.

July: Google Maps starts to include local business listings, including hotels and restaurants.

December: Google Maps allows users to add multiple destinations in driving directions.

2007

April: Street View launches in Hungary and Lesotho, bringing the number of countries offering Street View up to 50.

August: Google Maps becomes the world's most popular app for smartphones, with more than 54 percent of smartphone owners worldwide using it at least once.

March: Google Maps begins adding comparison shopping, or metasearch, for hotels.

2010

2013

March: Google discontinues Map Maker, as it is too hard to moderate user updates.

2017

February: Using augmented reality, Google Maps unveils a feature that enables people using walking directions to figure out where they are and what direction to head toward.

May: Google Maps tests a Your Match feature, calculating how likely the user will appreciate the business/restaurant recommendation.

2019

2008

July: Google Maps offers walking directions.

August: Street View launches in Japan and Australia.

September: Google releases Google Maps for Android and iOS devices.

2011

April: Google adds Map Maker to the U.S. version of Google Maps, allowing users to edit and update the product. (This is discontinued six years later).

Google offers a premium licensed service for companies using Google Maps.

2015

September: Google announces it will be mapping air quality, equipping its Street View cars with air quality sensors.

2016

June: Google introduces satellite imagery, sourced from Landsat 8, globally.

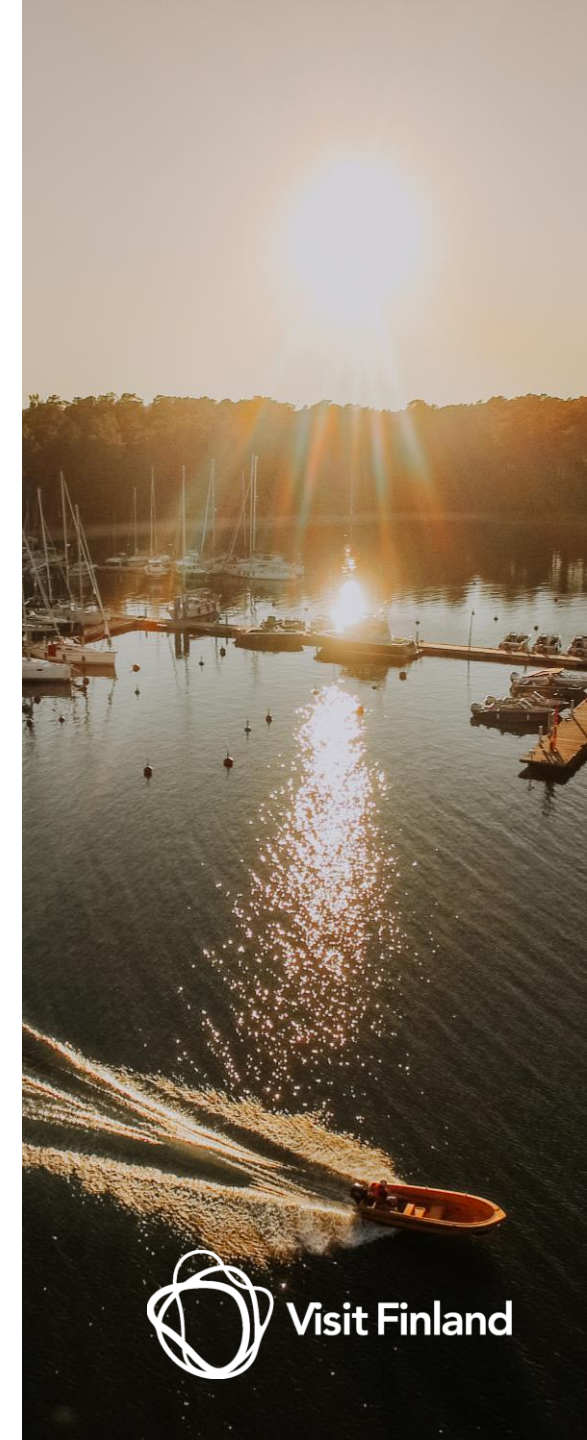**September:** Google acquires Urban Engines, a mapping analytics startup.

2018

May: Google Maps updates the Explore tab, now showing users a personalized list of local bars, restaurants, activities, and events. Google Maps rolls out Your Match feature, calculating how likely you may be to enjoy a venue and why.

October: Google Maps introduces star ratings for bars and restaurants.

Google Maps adds Commute tab with real-time access to traffic and transit information. The Android app features notifications about delays.

December: Google Maps adds the For You tab on iOS and Android, allowing users to "follow" neighborhoods and places they like, and receive recommendations.

Google allows users to see nearby bikes and Lime scooters, starting in several U.S. cities.

Sources: Wikipedia, Recode, Blumenthals, Google Maps blog

Visit Finland

WINTER IS COMING