



**BUSINESS
FINLAND**

SUSTAINABLE MANUFACTURING: FACTORIES FOR THE FUTURE

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BUSINESS FINLAND



RAPID URBANIZATION



**DEMOGRAPHIC AND
SOCIAL CHANGE**



DISRUPTIVE TECHNOLOGIES



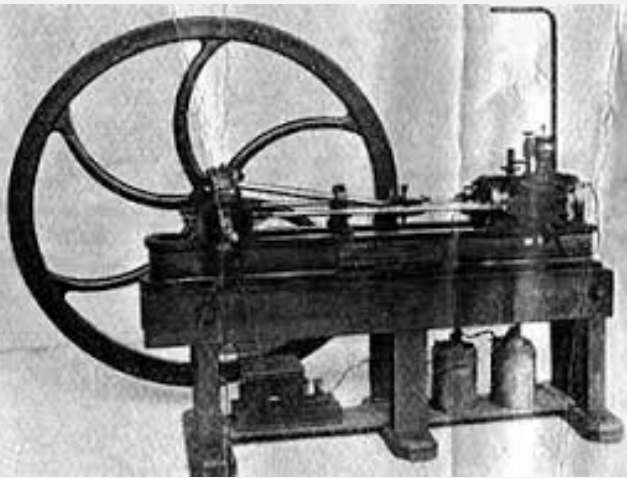
**CHANGES IN GLOBAL
ECONOMIC POWER RELATIONS**



**CLIMATE CHANGE
AND SCARCITY OF
RESOURCES**

Lähde: PriceWaterhouseCoopers, 2019

THE WORLD OF MANUFACTURING IS CHANGING FASTER AND FASTER...



INDUSTRY 1.0 18TH CENTURY

- STEAM POWER
- MECHANICAL PRODUCTION



INDUSTRY 2.0 19TH CENTURY

- ELECTRIFICATION
- MASS PRODUCTION
- THE ASSEMBLY LINE



INDUSTRY 3.0 MID 20TH CENTURY

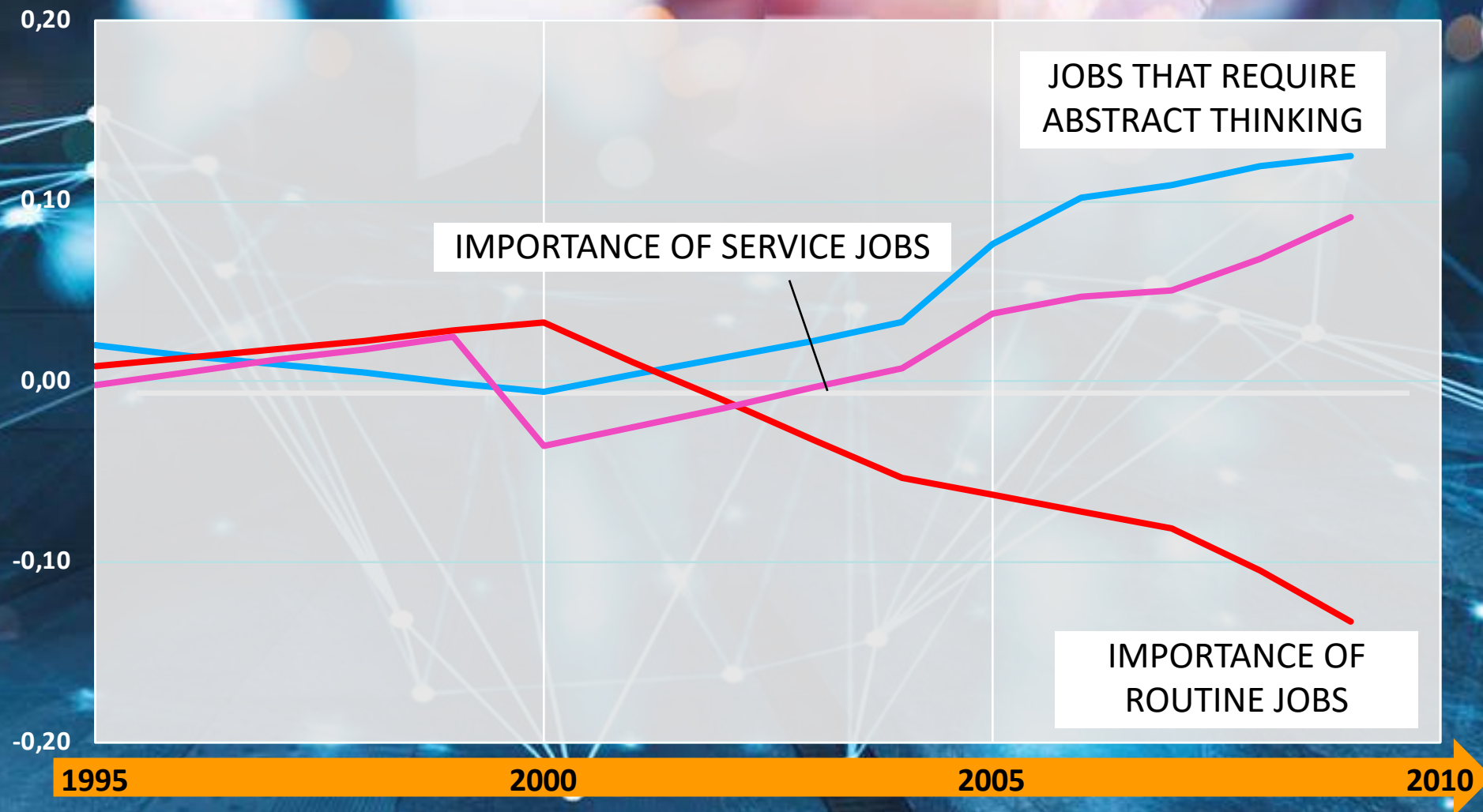
- ICTS
- ELECTRONICS
- AUTOMATED & NETWORKED PRODUCTION



INDUSTRY 4.0 TODAY →

- ADVANCED ROBOTICS
- 3D PRINTING
- INTERNET OF THINGS
- AI
- BIG DATA
- SMART MANUFACTURING

DIGITALIZATION CHANGES JOB REQUIREMENTS





**SUSTAINABLE
DEVELOPMENT**

GOALS



1 NO
POVERTY



2 ZERO
HUNGER



3 GOOD HEALTH
AND WELL-BEING



4 QUALITY
EDUCATION



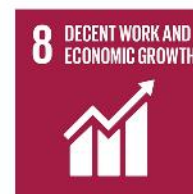
5 GENDER
EQUALITY



6 CLEAN WATER
AND SANITATION



7 AFFORDABLE AND
CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



14 LIFE
BELOW WATER



15 LIFE
ON LAND



16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



17 PARTNERSHIPS
FOR THE GOALS



**SUSTAINABLE
DEVELOPMENT
GOALS**

SAVING THE WORLD IS GOOD BUSINESS

BF programs open new business opportunities and speed up solutions to the challenges of sustainable development.

SDGs indicate promising markets.

8 DECENT WORK AND ECONOMIC GROWTH



13 CLIMATE ACTION



SMART HEALTH AND WELLBEING

Smart Life

Personalized Health

"Healthy and full of life at the age of 100"



SMART AND CLEAN ENERGY

Smart Energy

Batteries from Finland

"Clean energy without waste"



SMART INDUSTRY

SUSTAINABLE MANUFACTURING

"A renaissance for industry jobs"



SMART AND SUSTAINABLE COMMUNITIES

Smart Mobility

"From forest to the sea"

"Smooth and safe transportation"



CIRCULAR ECONOMY AND RESPONSIBLE CONSUMPTION

Bio and Circular

Food from Finland

Experience Commerce

"Zero carbon emissions"

DIGITAL TRANSFORMATION

AI Business
Connected Intelligent Industries

Digital Trust
New Space Economy

GAME CHANGERS

New Value Creation
Developing Markets

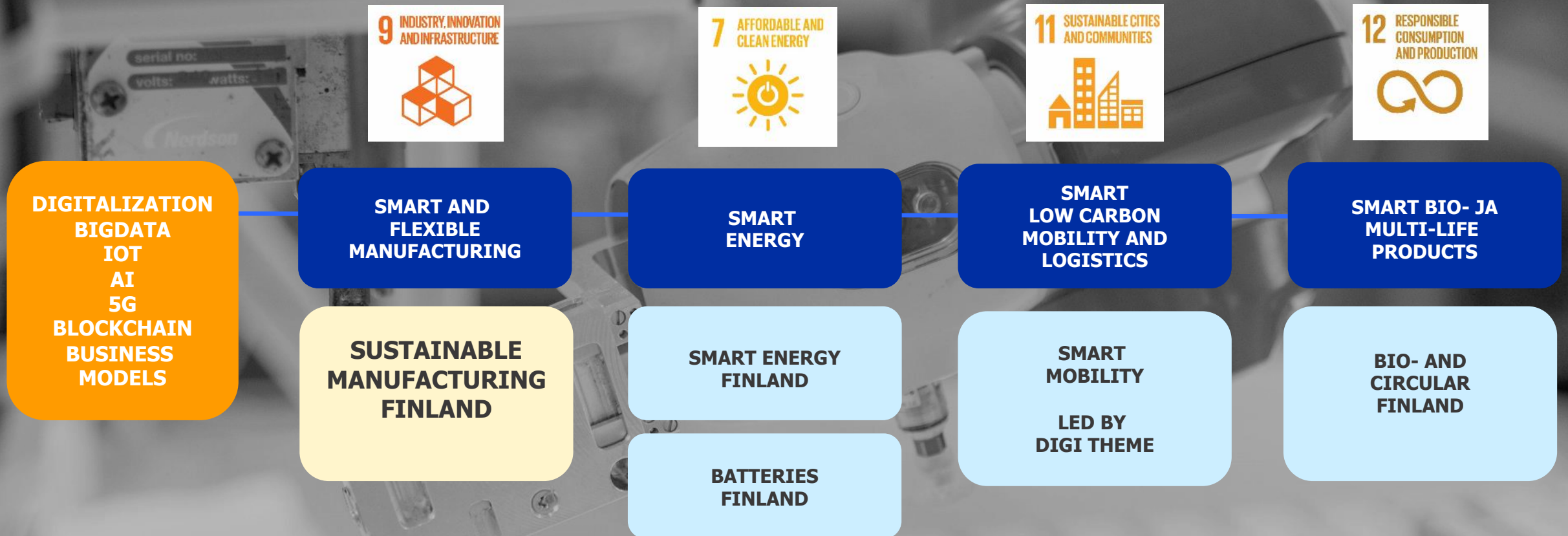
"Finland becomes number one travel destination in the Nordics"

ATTRACTIVE COUNTRY BRAND

Talent Boost
Travel

WE MAKE STRATEGIC CHOICES

Programs and Focus Areas in the Bio, Circular and Cleantech Sector



BUSINESS
FINLAND

SUSTAINABLE MANUFACTURING FINLAND



OBJECTIVE:

FINLAND IS A GLOBAL SUPERPOWER OF SMART, SUSTAINABLE MANUFACTURING

INCREASED COMPETITIVENESS, MORE HIGH VALUE EXPORTS, LARGER CARBON HANDPRINT

NEW ERA OF INDUSTRIAL COLLABORATION

6-10 new disruptive manufacturing industry ecosystems

6-10 international level pilots and demonstrations

50 ecosystem/test bed related SME projects per year

SMARTEST MANUFACTURING SECTOR

Enabling manufacturing sector transformation through digitalization

Networked Pilot projects (5 per year)

Activate SMEs to participate in EU projects

MOST WANTED CLEANTECH OFFERING

Challenge SMEs to internationalize their business and go global

Create competitive joint offerings for global cleantech market

Challenge large enterprises to create offerings to global markets with SMEs

GLOBAL HUB OF MANUFACTURING EXCELLENCE

Attract investments by international companies, facilitate culture of domestic industrial investment

Attract skilled labour, experts, researchers and students to Finland

Develop practices for technology and knowledge transfer from key international hubs.

The background of the entire slide is a photograph of a modern industrial manufacturing environment. It features several orange robotic arms (likely KUKA) working on a production line. The scene is brightly lit, showing various mechanical components, pipes, and structural elements of the factory floor.

BUSINESS FINLAND SERVICES FOR COMPANIES

FUNDING

We provide innovation funding for smart and sustainable solutions in manufacturing.

NETWORKS

We help you find the right contacts and business networks in smart manufacturing.

DEVELOP AND RENEW

Our expert team helps you create the perfect pitch, business model or marketing strategy.

IDENTIFY OPPORTUNITIES

We help you identify and test international market opportunities for smart manufacturing solutions.

GO GLOBAL & SCALE UP

The experts in our global network help you conquer new markets. We provide advise, contacts and market research.

BUSINESS FINLAND VISION

FINLAND DEFINING THE FUTURE

Together we make Finland
an attractive and competitive environment for innovation
– a place where world class success stories are created