

TAMPERE.
FINLAND

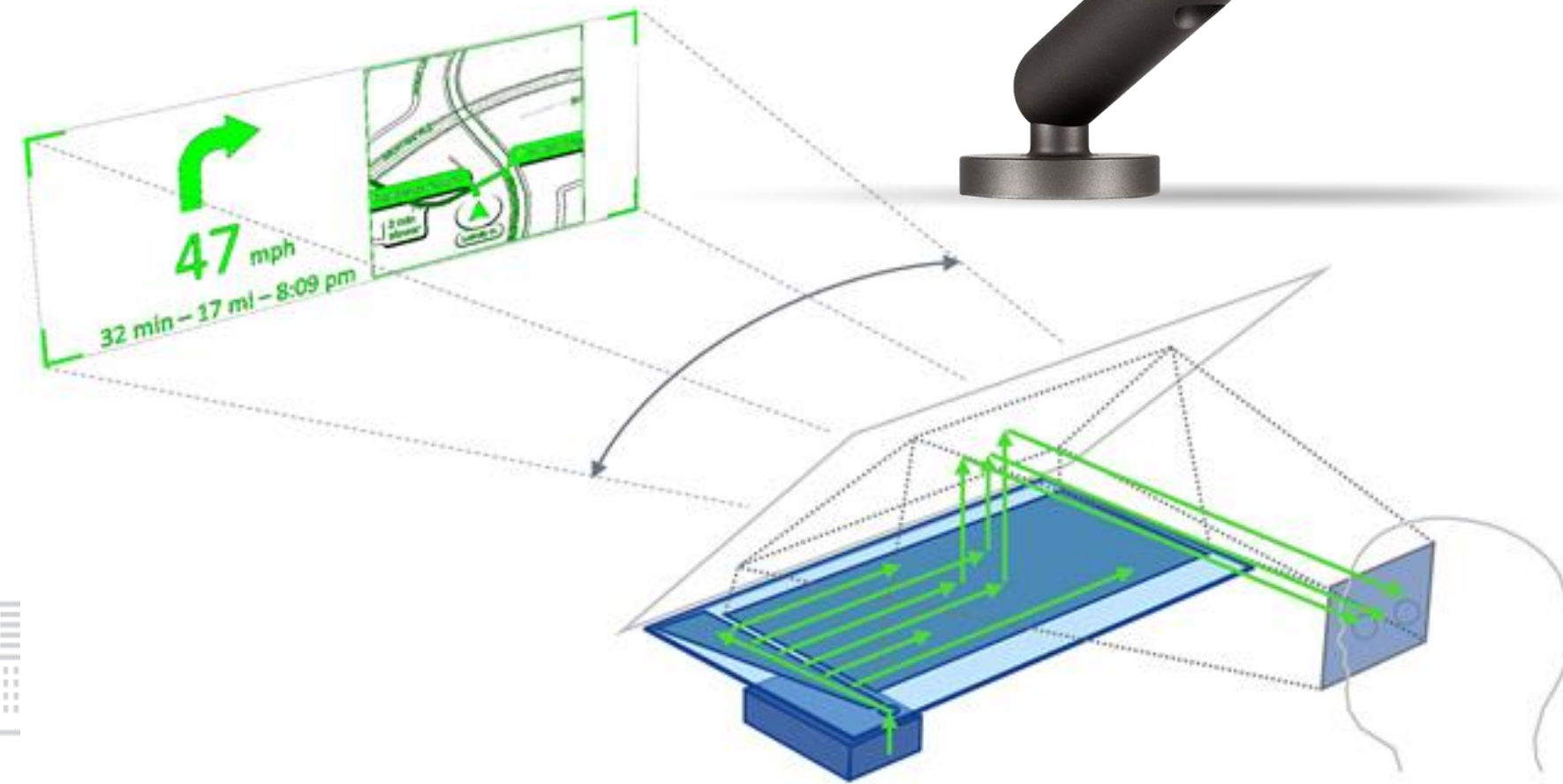


IMAGING TAMPERE

06/05/2024
Oliver Hussey, Business Tampere

Innovations in Imaging

- 2012 41-megapixel camera phone (Nokia 808)
- 2015 Nokia OZO 360° virtual reality camera
- Military grade FM-lidar for night vision applications
- Next gen. cameras from Microsoft, Huawei, Xiaomi, Microsoft ..
- AR/VR R&D at Nokia Bell Labs
- Augmented reality heads up display for car



Tampere Imaging Ecosystem

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One of the top imaging hubs in the world

MACHINE AND DEVICE R&D



COMPONENT R&D



HEALTH



MANUFACTURING APPLICATIONS



SW DEVELOPMENT & TESTING



BUSINESS
TAMPERE

Tampere Imaging Ecosystem

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Nokia and Microsoft Mobile heritage

Community of companies + researchers developing imaging technologies, and those utilising across a wide range of applications

15 new foreign R&D sites in last 6 years, home-grown start-ups

Growing talent pool

Top imaging hub in the world



<https://www.youtube.com/watch?v=ekJjgQCBpHs>

BUSINESS
TAMPERE
Region

Activities

Networking events, international audience in Tampere e.g. VCX conference, 2019

Facilitate multi-party PoC and Ecosystem development projects

International partner matchmaking

Stimulate research collaboration between businesses and university

Facilitate Business to education discussions

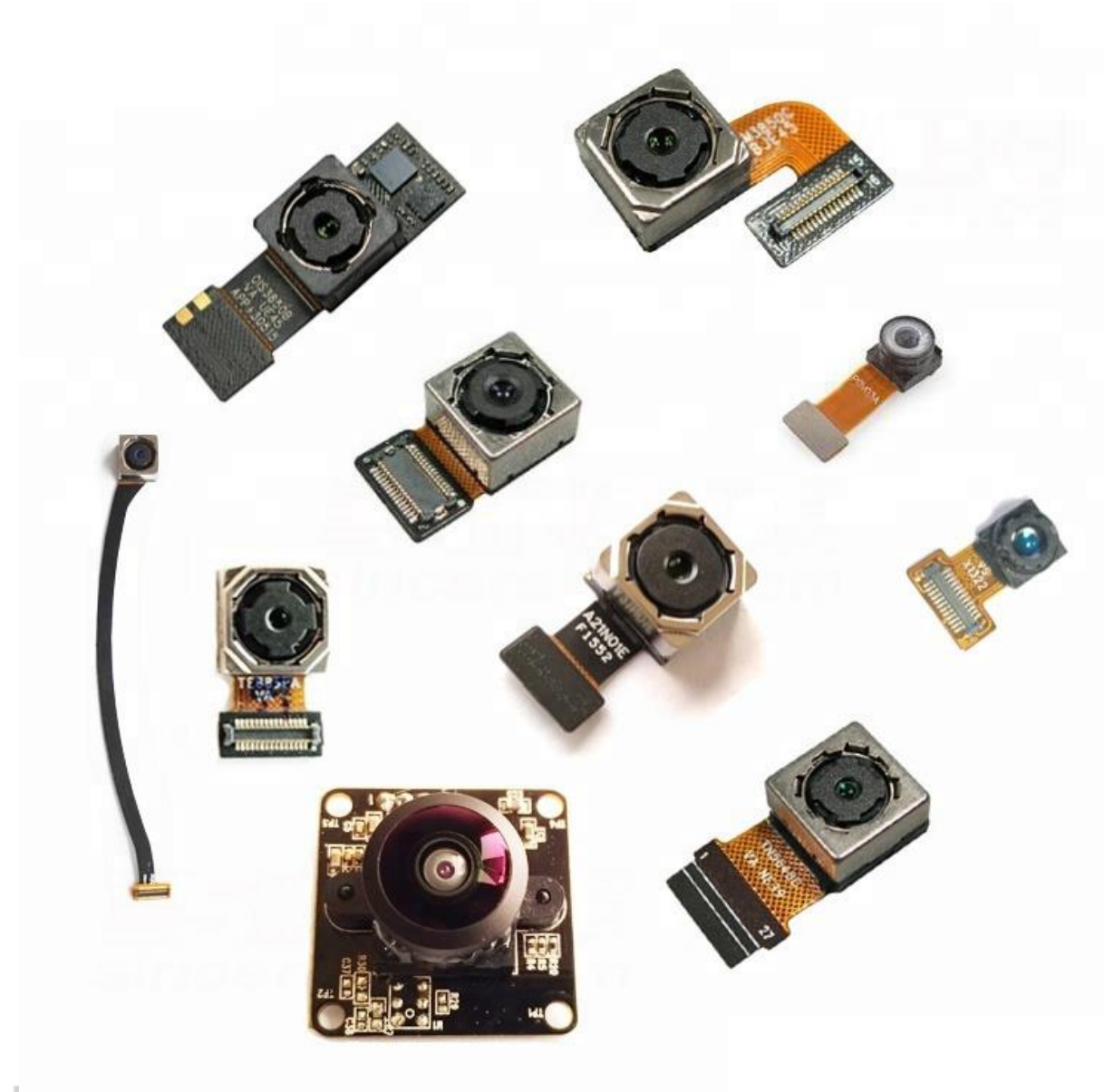


Camera Module entity

Prototype / Demo module production

Services for Ecosystem members

This project is under development



Your #1 Partner

TAMPERE.
FINLAND

...when relocating to Tampere Region!

New R&D sites Business Tampere supported:



BUSINESS
TAMPERE



R&D CENTER IS BASED IN TAMPERE

- Surface hardware development, focusing on designing camera, imaging, electronics and wireless tech.





HUAWEI

R&D CENTER IS BASED IN TAMPERE

www.huawei.com



- Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices. It provides integrated solutions across four key domains – telecom networks, IT, smart devices, and cloud services.
- The Tampere R&D Center is focusing on the multimedia aspects; imaging and audio teams are the largest ones here.

Employees

194,000

Joint Innovation Centers

36

R&D Institutes & Centers/Offices

14

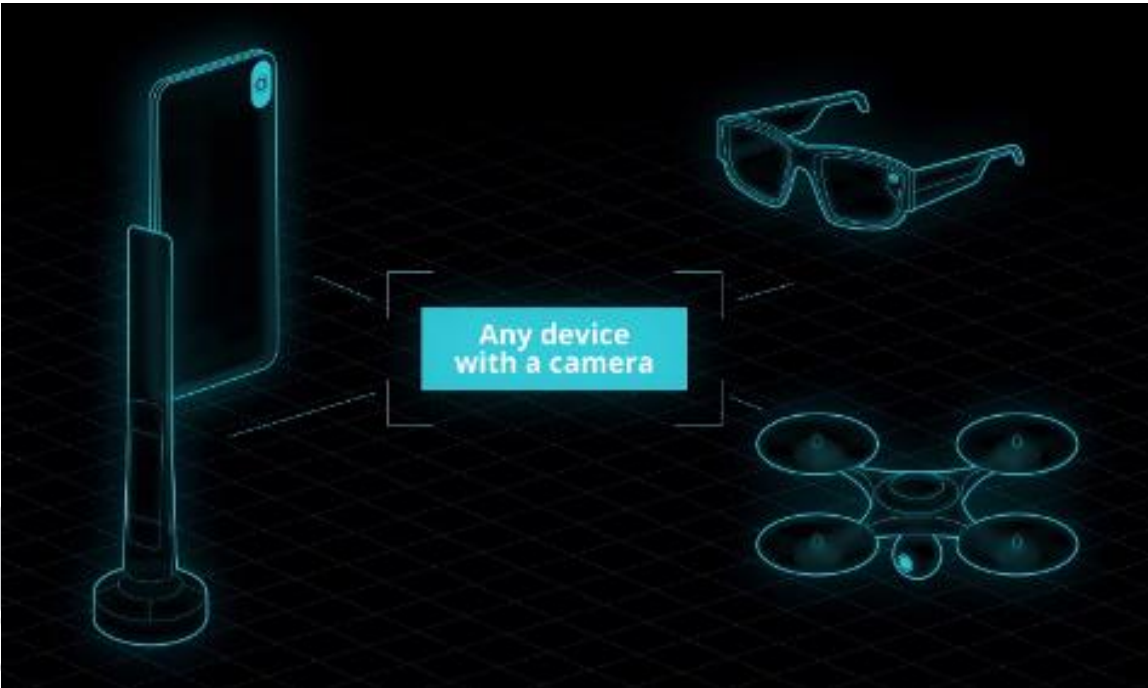
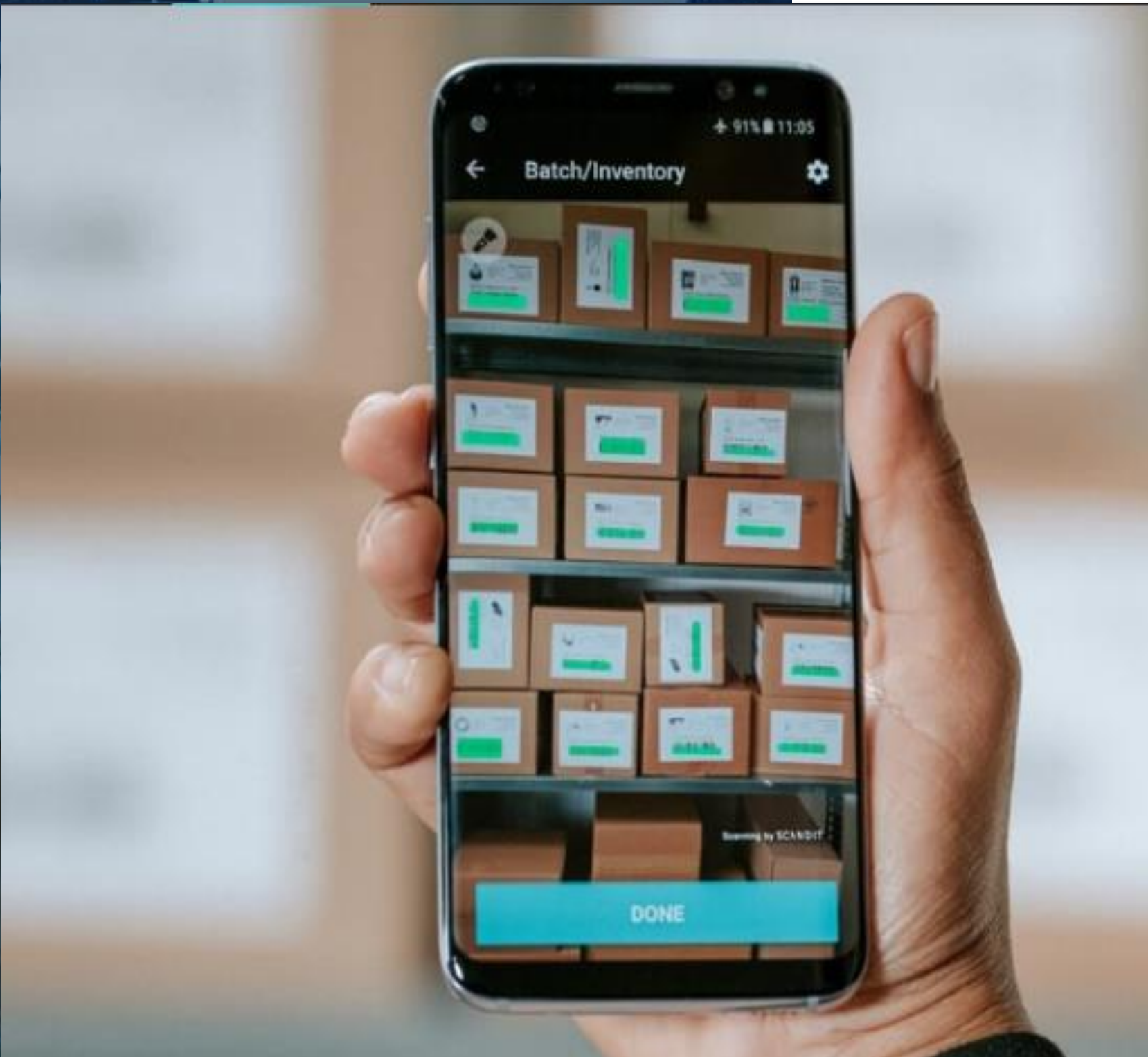


SCANDIT

BASED IN TAMPERE

www.scandit.com

- Scandit specializes in Computer Vision for the Modern Enterprise.
- Scandit enables enterprises and consumers to change the way they interact with everyday objects and augment the physical world with real-time data captured by scanning barcodes and recognizing text, objects, and other visual identifiers using smartphones, tablets, wearables, drones, and robots.





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R&D CENTER IS BASED IN TAMPERE

www.axon.com

- Axon in Tampere has expertise ranges from deep insides of the camera hardware to the image processing, AR/VR and product development, which all goes together to perfect the quality of evidence captured by Axon products around the world.
- Axon products include smart weapons, cameras and software powers modern law enforcement



AXON BODY 3

Breakthrough camera with advanced imaging and wide, real-time situational awareness.



AXON BODY 2

Equip officers with a camera built for the rigors of a full shift, optimized usability in HD.



AXON FLEX 2

The truth from your vantage point.



AXON FLEET 2

Choose the cloud-connected camera with easy installation and continuous upgrades.



AXON AIR

Improve officer safety, provide tactical support, and reconstruct scenes.



AXON SIGNAL SIDEARM

Capture vital footage without filling a fridge



GRUNDIUM

BASED IN TAMPERE

www.grundium.com

- Grundium develops smart and portable digital microscope scanner, which makes pathology available for everyone.
- Portable Whole Slide Imaging Microscope Grundium ocus removes the need for physical slide transfers between the clinic and the lab and enables live telepathology consultations between surgeons and pathologists.



FULL METAL DESIGN

OVERVIEW IMAGE

Automated trimming of areas to be scanned, adjustable by the user.

HIGH PERFORMANCE IMAGING

18M captured pixels per field.
Super-sharp images also outside lab.

AUTOMATED X Y STAGE

Full (1" x 3") slide scanning

MEASURES

18cm x 18cm x 19cm, 3.5kg

CONNECTIVITY

Wireless with WLAN, or wired with gigabit Ethernet.
Remote use enabled.

AUTOMATED FOCUS

Automatic in scanning, adjustable by user in live mode.

AUTOMATIC STITCHING

High-performance embedded processor.

THE ONLY PORTABLE WSI

Can be powered by a battery pack.
Water-tight carry-on luggage case available.





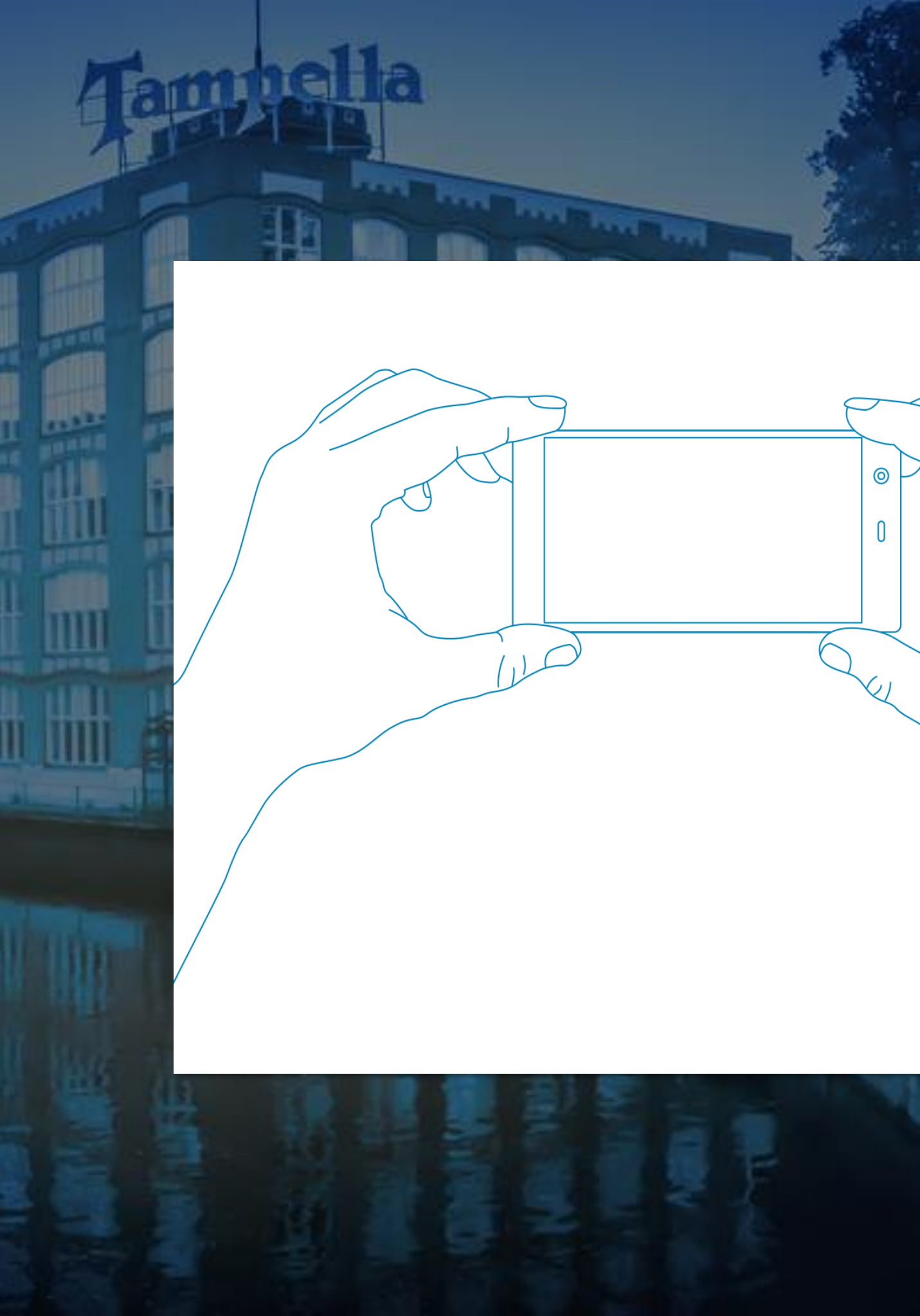
NOISELESS IMAGING

BASED IN TAMPERE

www.noiselessimaging.com

- Noiseless Imaging Oy (Ltd), a Tampere University of Technology spin-off company, providing the world's best solutions in image and video denoising.
- The company specializes in noise-removal and restoration/enhancement technologies (algorithms, software, consultancy services).
- Noiseless Imaging is proposing a completely original technique of image and video modeling which provides the best filtering/imaging quality available, in terms of noise suppression and of preservation and enhancement of details.

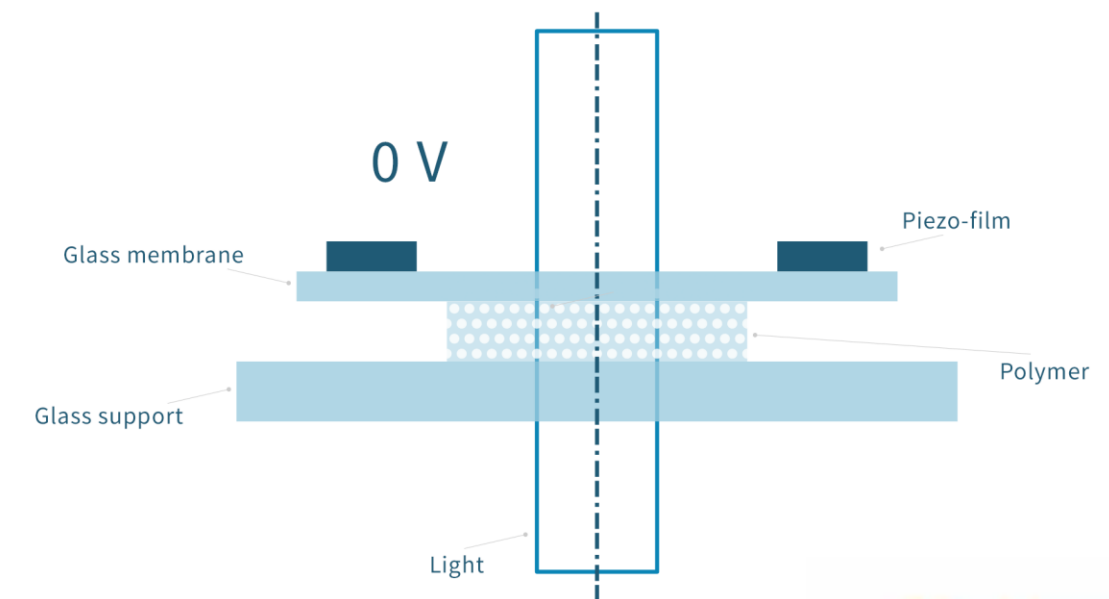
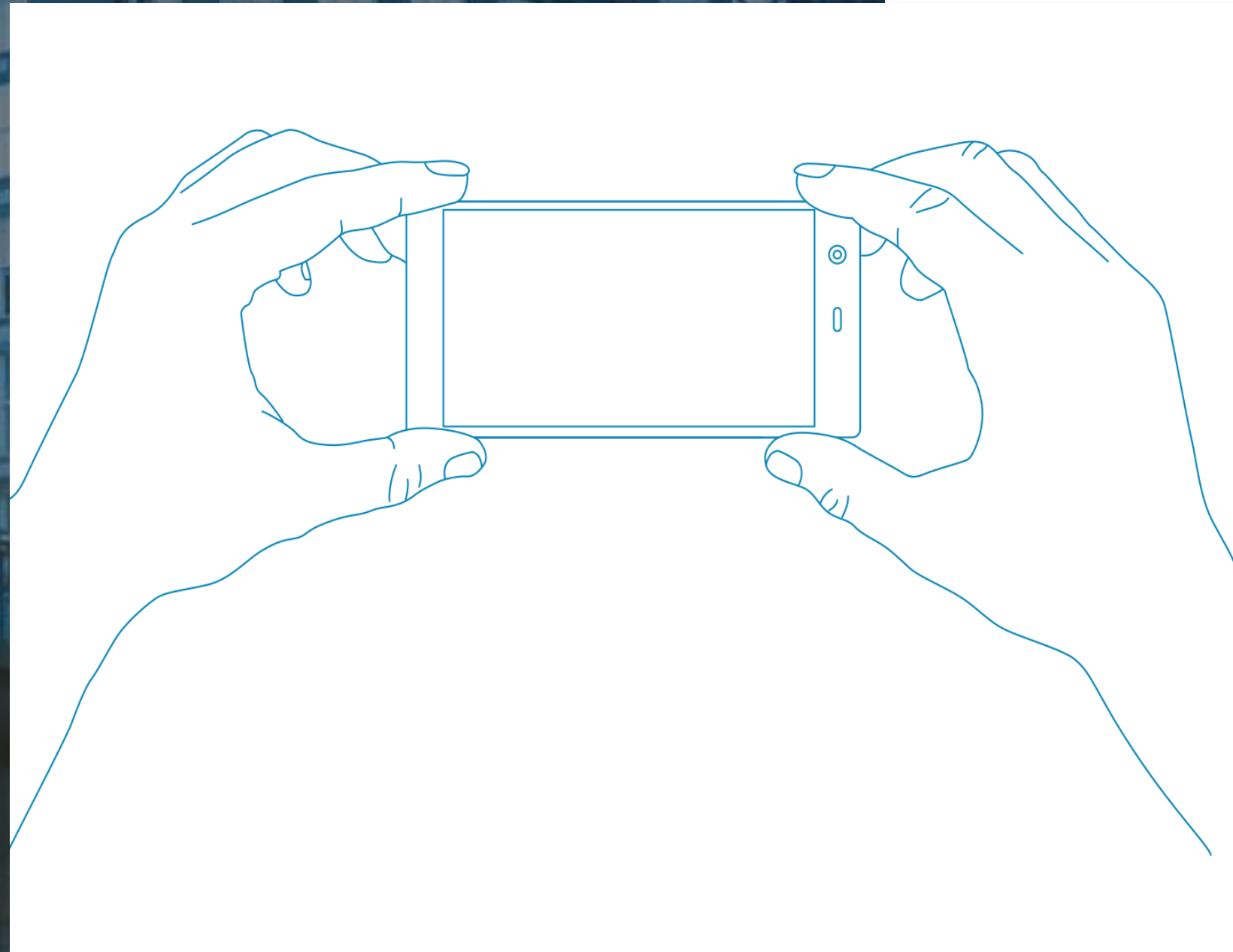




BASED IN TAMPERE

www.polight.com

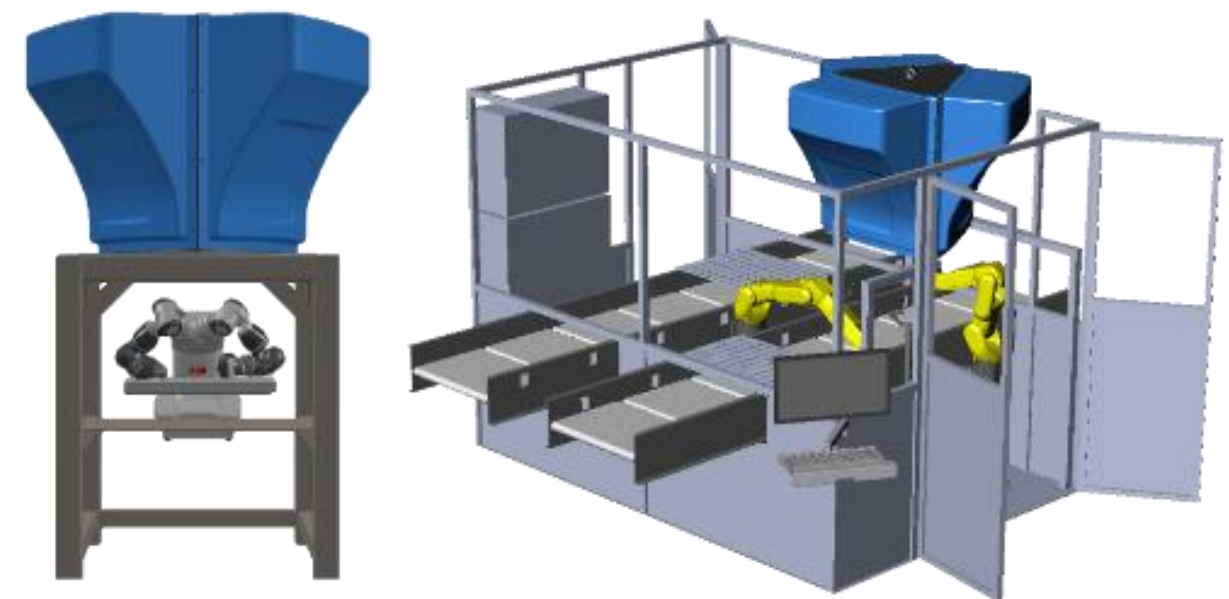
- poLight introduce a unique photographic lens to the market for mobile devices.
- Replicating the lens of the human eye, poLight®'s TLens® enables new user experiences, and eases implementation of autofocus functions for various applications.



BASED IN TAMPERE

<http://helvee.com/>

- Helmee Imaging is a Finnish high-tech company providing revolutionary CSD[®] systems for visual quality inspection for glossy, mirror like parts.
- The roots of Helmee are in VTT Technical Research Centre of Finland Ltd, and various automation companies in Finland.
- Helmee CSD[®] (Covered Stereo Deflectometry) is a online sorting and quality inspection unit that gives you full control over your quality.





OPTOFIDELITY
BASED IN TAMPERE

www.optofidelity.com

Optofidelity provides Automotive Infotainment Testing solutions & tools for human interaction inside the vehicle.

1. Infotainment system functionality and connectivity testing

Typical test cases

- Hard booting
- Audio & media connectivity

2. Infotainment display quality, performance and uniformity

Tampella

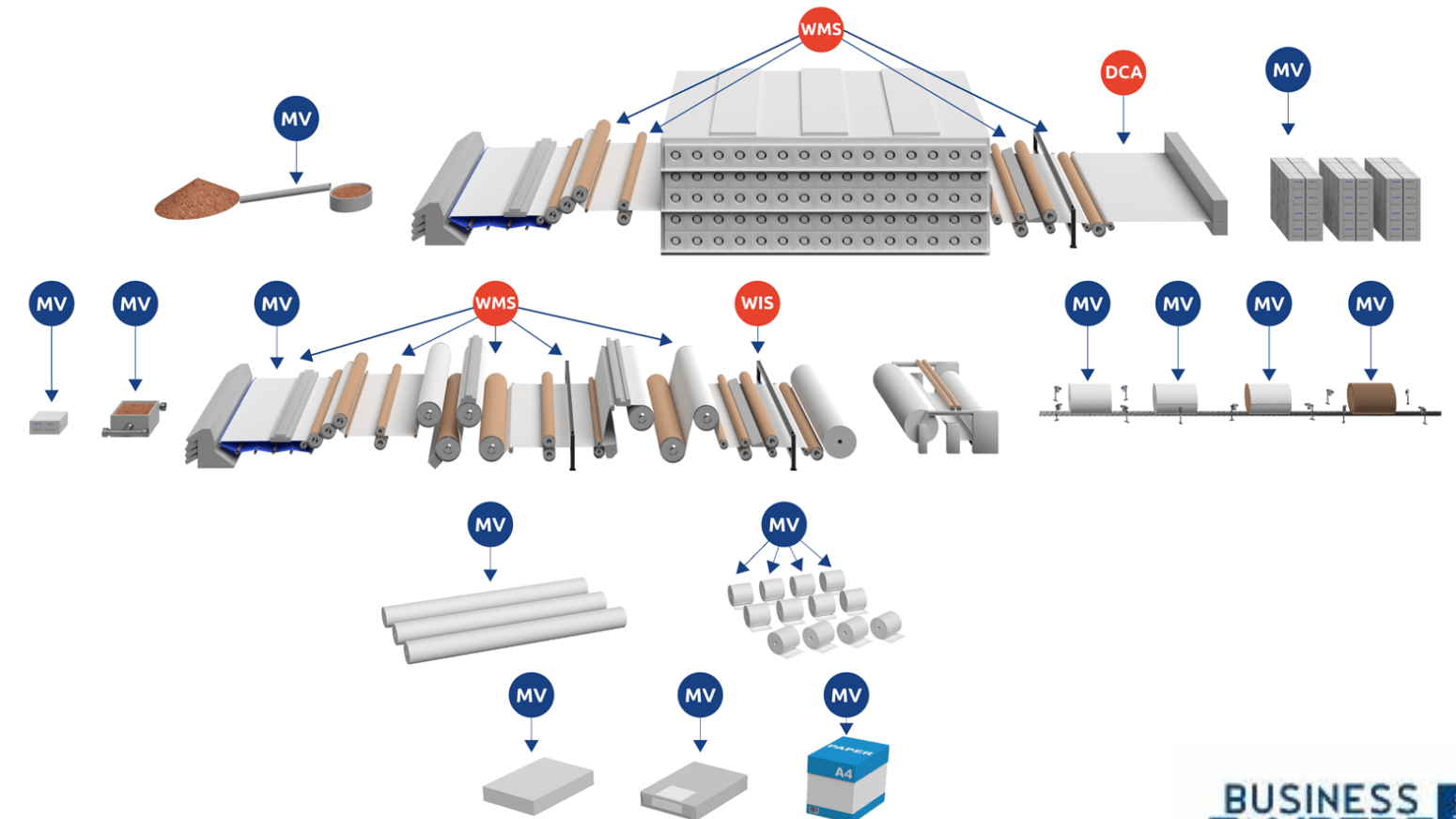
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www.procemex.com

Procemex develops, designs and delivers the fastest and the most accurate smart camera-based solutions for paper manufacturers and printers worldwide.



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Image: Machine Vision Applications

IMAGING TAMPERE

LinkedIn Group: Imaging Tampere

#ImagingTampere
@BusinessTampere

<https://business tampere.com/imaging/>



Kiitos



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