## → SOFTABILITY

# YOUR RELIABLE PARTNER FOR DIGITAL SOLUTIONS

From idea to design, implementation, testing and successful delivery!

# Agenda – Tools of Modern Work & Studies: AR/VR and Remote Support

- 1. Softability Corporate Presentation
- 2. Customer case: Savonia AMK Microsoft D365 Guides and Remote Assist with HoloLens 2 smart glasses
- 3. Customer case: Sandvik Mining and Rock Technology XReach Remote Support
- 4. How to Get Started with XR Technologies?
- 5. Contact Us!

#### **SOFTABILITY IN BRIEF**

Innovative, growing and profitable Finnish software consulting company.

- Established 2002, privately owned
- Located at Vantaa
- International customers
- Revenues in 2020: 5,4 MEUR
- 60+ highly skilled experts
- Microsoft Mixed Reality Partner
- Great Place to Work certified 2017-2021
- Customer Satisfaction Rate 2020: 4,5 / 5



#### **OUR MISSION**

 Developing a better world with the help of technology and care.

### **OUR VISION**

 To be the most warm-hearted and wanted work-community for the development of meaningful software.

#### **OUR BUSINESS UNITS**



#### **X-Reality**

 Our business unit XR Studio develops XReach Remote Support product as well as Augmented, Mixed and Virtual Reality applications for companies regardless of domain.



## Software development

- Application Development:
   We design and implement
   applications for web, mobile,
   cloud and Windows desktop. We
   are a Microsoft Gold Partner.
- Embedded Development:
   From small micro controllers
   (RTOS) to embedded Linux and
   Windows devices with C/C++ and
   Python programming languages.



## **Quality Assurance**

 Testing: We offer our customers versatile testing services from manual testing to test automation and Continuous Integration / Delivery.

### **OUR CUSTOMERS**















































### **XR STUDIO BUSINESS UNIT**

#### **Summary**

- Started in 2016.
- Team of +10 highly skilled person.
- Our product: XReach remote support solution.
- We design and develop X-Reality solutions to our customers combined with cloud and AI services.



### Smart glasses based work Instructions (e.g. assembly or maintenance)

- Finnish industrial manufacturer: Quality Assurance app with SAP ERP integration, Hololens 2, Production project.
- Savonia AMK: Microsoft D365 Guides and Remote Assist app in Teaching and Work, Hololens 2, HUS Diagnostics lab as a user organization, Pilot project.

#### Training

- Finnish device manufacturer: VR training for device installation at site, Oculus Quest 2 VR headset, PoC project.
- Perho Culinary, Tourism and Business College: MR learning environment with Web based Content Management, Hololens 2, Pilot project.
- KEUDA Group: MS D365 Guides app in Teaching, Hololens 2, Pilot project.
- Large Finnish Education organization: English language pronunciation, Web app connected to Azure Speech Services, PoC project.

#### Real-time video based Remote support (XReach product)

- Sandvik Mining and Rock Technology: iOS/Android mobile, RealWear HMT-1 smart glasses and PC Web client, global production project.
- Multiple pilot projects for remote maintenance, audit, installation, training and work safety.

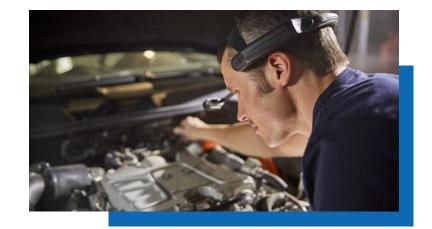
#### Sales and marketing

- American medical device manufacturer: Realtime 3D graphics Online experience, Pilot project.
- HeadPower, Tehomet/Valmont and FCG: Mobile AR and VR/MR headsets, PoC projects.
- Finnish health & wellness company: Mobile AR and VR headset, PoC project.
- Swedish industrial device manufacturer: Mobile AR, PoC project.

### WHAT IS XREACH REMOTE SUPPORT?

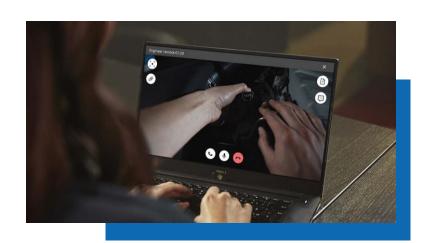
#### **XReach provides expert help for troubleshooting**

- Sharing of video, audio and documents between a technician on the field and an expert.
- Support through online video call where the expert can see all what the field technician sees.
- Making annotations and guidance to the video call.
- Storing interactive data for knowledge sharing, reporting and analysis.



#### **Smart request handling system for experts**

- XReach is a platform for iOS/Android/smart glasses to offer customized versions for companies with Expert access on web and mobile.
- Share Expert's computer screen to technician on the field.
- Resolve issues together with the field worker or a larger group via teleconference.
- Support partners and end-customers easily with Ad hoc access without the need to download an app or register a user account.



## **XREACH COMPETITIVE FACTORS**

Ease of use

Automatically and easily stores solution data

Ready-To-Use product solution

Hands-free work: Smart glasses & USB camera use

Customizable and Integrable platform solution

Adding interactive data to existing productivity systems

Solution knowledge base enables: Searching solutions to known problems without calling an expert, faster training for new employees & development of Your service business by analyzing the data

Superior Customer Service and Experience

Custom-made Augmented Reality (AR) features

Full Software As Service delivery with options: Softability /
Customer hosted Cloud and Onpremise solutions

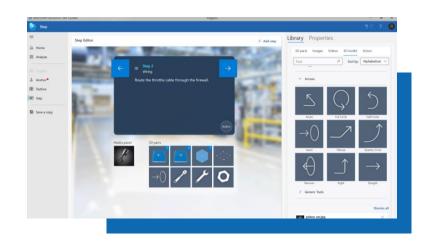


## **Customer story:**

#### **Savonia AMK**

Microsoft D365 Guides and Remote Assist with HoloLens 2 smart glasses

- Savonia University of Applied Sciences and Softability have developed virtual working instructions on Microsoft Dynamics 365 Guides app for three (3) medical devices.
- In addition Microsoft D365 Remote Assist (real-time video based solution) app was tested for maintenance on one of the devices.
- D365 Guides and Remote Assist apps run on Microsoft HoloLens 2 smart glasses:
  - Guides offers a separate Windows 10 based Content creation app for any organization to create its own work instructions.
  - Remote Assist works with MS Teams.
- Softability's consultation was produced as part of the Savonia UAS Future Technologies in Education (FutureEdu) project.



#### FUTUREEDU

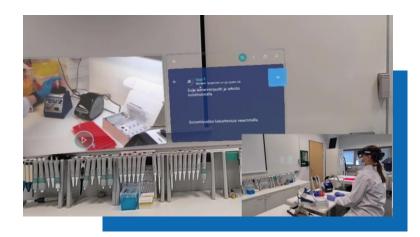








- The four (4) use cases in the project included:
  - Performing the Puumala virus IgM rapid diagnostic test
    - Device used was Reagena ReaScan+.
  - Performing morning maintenance procedure for Cobas U601 urine strip analyzer
    - Device used was Roche, Cobas U601.
  - Configuring Anesthesia work station for patient use
    - Device used was Maquet.
  - Remote maintenance of Cobas U601 urine strip analyzer.





- Guides app benefits include:
  - Makes the laboratory work faster to perform
  - Eliminates errors
  - Improves quality
  - And speeds up employee training.
- The apps were tested by Savonia UAS, and were found to be effective in training students and guiding laboratory work in real working conditions.
- "What has been particularly meaningful was seeing how these environments have enabled flexible, safe, and cost-effective operational continuity during the ongoing COVID-19 pandemic. Many of the apps enable studies at Savonia UAS without restrictions on the time or location. In addition, the environments offer many ways for working life to develop and continue in challenging social conditions." Anssi Mähönen / Lecturer at Savonia UAS and the Project Manager of the FutureEdu project.

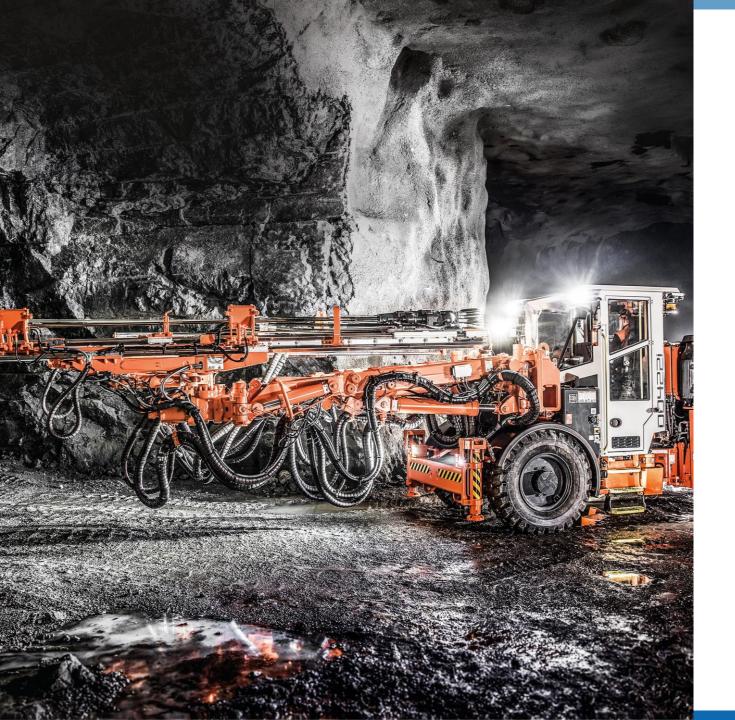




 Watch the video (in Finnish) to see how the Puumala IgM RDT works in practice with the HoloLens 2 smart glasses app:

https://youtu.be/rwILDrQBaJk





## **Customer story:**

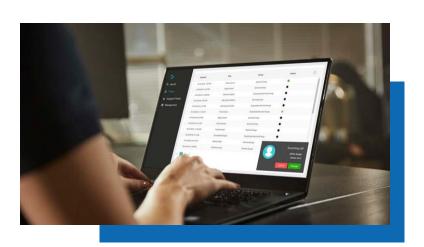
# Sandvik Mining and Rock Technology

**XReach Remote Support** 

## Sandvik: XReach Remote Support

- Question I: What was the main motivation for implementing remote support?
  - The limitation of not being able to send out our service technicians and supporting staff to the front line because of the global pandemic.
  - Decreased costs in offering support for maintenance, repair etc.
  - Ability to offer live expert support 24/7, 365 days a year, because we work globally.
  - Creation of a knowledge bank that offers immediate help without the need to necessarily connect with an expert. Additional benefits include:
    - We can identify where our caps in knowledge are and how to develop our competence in those.
    - By reporting and analysing on the data we can manage our operations more efficiently.
  - Furthermore, I think AR/MR [smart glasses] have a high potential in keeping information easily available to technicians while still guaranteeing their safety as they are aware of their surroundings.

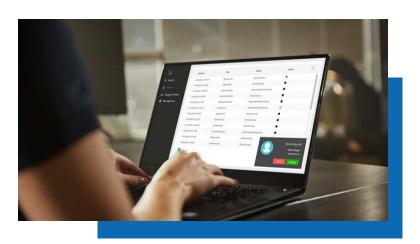




## Sandvik: XReach Remote Support

- Question II: What are the typical challenges in implementing remote support?
  - Mining industry is heavily regulated e.g. work safety is priority one and handling digital devices has to be done carefully.
  - Also security (privacy) issues can cause problems:
    - Sending video feed out of a mine site is often against some regulation.
    - Storing video requires that peoples' faces on those video recordings will be blurred for GDPR compliance.
- Question III: What is the role of remote support in reducing the life-cycle costs of maintenance operations in the mining industry?
  - First-time fix! Having an "Expert in Your Pocket" enables you to send a Technician out once and he/she gets the job done.





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## How to Get Started with XR Technologies?

## **Experience XR at our Showroom in Vantaa!**

- Smart glasses based Work Instructions with Mixed Reality (MR) based Microsoft Hololens 2 smart glasses.
  - From individual to shared experiences with Microsoft Mesh (MR): design, training and collaboration with Hololens 2 and other devices.
- Training with Virtual Reality (VR):
  - Oculus Quest 2 headset.
  - HP Reverb G2 Omnicept headset (includes measurement of cognitive stress).
- Real-time video remote support with XReach product:
  - Mobile devices, computer web browser and Realwear HMT-1 smart glasses.
- Sales and Marketing with mobile Augmented Reality (AR), MR and Real-time 3D Graphics:
  - Mobile devices, Hololens 2 smart glasses and computer web browsers.





## How to get started with XR?

- 1. Define potential Use Cases for XR in your company.
- 2. Choose the most promising Use Case.
- 3. Identify KPIs.
- 4. Phased implementation. Enhance based on KPIs:
  - 1. Proof-of-Concept
  - 2. Pilot
  - 3. Full-scale production project.





### **CONTACT US**



Juha Asunmaa

**Business Unit Executive** +358 40 523 5940 juha.asunmaa@softability.fi



Mikko Luukkonen

Solution Sales +358 50 554 3652 mikko.luukkonen@softability.fi



**Tapio Pukkala** 

**Solution Sales** +358 40 718 0514 tapio.pukkala@softability.fi







