





Business Development Manager at EON Reality

**LUIGI CLIVATI** 

# **FRANCESCO SALIZZONI**

Project Manager at EON Reality





### **AVR Platform in Industry 4.0**

October 25<sup>th</sup> 2019 – IDC EON Reality Italia

Luigi Clivati, Business Developer Manager, EON Reality Italia Francesco Salizzoni, Project Manager, EON Reality Italia

### THE BIG PROBLEM

......

\*\*\*\*\*\*\*\*

### TECHNOLOGY DISRUPTION KILLS JOBS BUT IT ALSO CREATES THEM

Traditional learning methods cannot cope with pace of change
The rapid technology disruption kills millions of jobs every day.
Paradoxically, technology disruption creates also most of the new jobs.
The disruption of killing existing jobs and creating new ones is accelerating.
Traditional knowledge transfer in the education and work sector cannot cope with this rapid pace of change.

### THE GROWING GAP OF SKILLED SMART WORKERS

Lack of skills needed for full-time employment



There are 3 billion workers in the world of which increasingly too many will not have the skills needed to land full-time employment

Of the 3.5 million new smart manufacturing jobs that will be available in the US, 2 million of which will go unfilled





- A McKinsey Global Institute report estimates that automation will displace between 400m and 800m people worldwide by 2030, but the report also suggests that automation can create enough new jobs if the workers are retrained
- McKinsey says that **countries should invest heavily in retraining workers** that need to change careers.
- **375 million workers who lose their original jobs** may need to **switch careers and retrain by 2030.**
- The shift could be on a scale **not seen since the transition of the labor force out of agriculture** in the early 1900s in the United States and Europe
- Governments, Academic institutions and enterprises need to **invest in a new innovative knowledge transfer solutions**

# BY2030, HALF

OF ALL WORKERS IN JAPAN AND 33 PERCENT OF THE U.S. WORKFORCE WILL REQUIRE RETRAINING

A McKinsey Global Institute report

**McKinsey Global Institute report** 

### HOW DO WE FILL THIS GROWING GAP?





#### THE NEGATIVE SCENARIO: AI EMPOWERED MACHINES

#### Finding Meaning in a World without Work

Most jobs that exist today will disappear within decades.

As artificial intelligence empowered machines outperform humans in more and more tasks, it will replace humans in more and more jobs. Consequently, by 2050 a new class of people might emerge – the displaced & useless class.

People who are not just unemployed, but unemployable

However, this is not a humane solution: a job is more than salary: it's purpose, it's meaning, it's identity and it is dignity.



#### THE POSITIVE SCENARIO: AVR EMPOWERED HUMANS

### Empower 3.8 billion people to grow beyond their current human constraints

EON Human 2.0 Vision is to **blend man & machine in a** symbiotic partnership;,

**Democratize access to fast knowledge transfer** for everybody on the planet,

**Ask the big questions** and Create new exciting Job opportunities

### INCREASING THE SPEED OF COMMUNICATION BETWEEN MAN & MACHINE

#### "Speed Of Thumb" Too Slow, Neural Lace Too Far Away

Today the **bandwidth is far too slow**, we communicate at the **"speed of thumb" with mobile devices**. While futuristic technologies such as **neural lace** supported by **Elon Musk** could achieve instant connection with machines, they **will take too long time to develop** to prevent the negative scenario.

#### Humanity Needs A Solution Today!

We believe that **EON H2.0** can provide this solution and **significantly increasing the speed of communication** between man-machine by using **Augmented Virtual Reality (AVR)** fueled by **Artificial Intelligence (AI)** and **Internet of things (IoT)** 





### 2.5B WORKERS NEED FAST-KNOWLEDGE

2.5 billion workers are not supported by ICT todayContextual knowledge on the spotEON is Uniquely positioned to capture this market

#### INDUSTRY CUSTOMERS





### LEARN, TRAIN, PERFORM





**NR** 



### WORK PERFORMANCE SOLUTION

IMPLEMENTING CREATOR AVR

-----

# ONE UPLOAD, MULTIPLE USES

0 🖷 ----



**Product catalog** Use the app as an interactive sales tool to browse your products. Real-scale product demo Use the app to roll out visualization and animations of bulky and/or costly equipment.





Upload 3D model Design and upload your equipment model. Prepare digital manuals Product details display, embedded video and audio, animations, multiple language support. Train workers 24/7 remote onboarding, maintenance and SOP via touch and AR mode. Remote collaboration Real-time group session within the lesson. Analyze results Review scoring and usage statistics.

## CONSISTENT 24/7 TRAINING

6

×

VR

\*

Filler Valve

B

Operating Process

From onboarding to process familiarisation, Creator AVR makes it easy to bring immersive learning materials whenever and wherever they are needed.

 $\bigcirc$ 

# COLLABORATE WITHOUT BORDERS

Creator AVR can drastically cut down on the travel costs and times associated with training by enabling seamless collaboration regardless of geography.



# BRING YOUR PRODUCTS TO LIFE

As the next generation of product catalogs, Creator AVR allows you to tailor your product details, specifications, and functions for various audiences, presenting your value proposition more clearly and powerfully.

Creator AVR is designed to drive greater customer interaction with a hassle-free user experience in a single, intuitive tool.



### VIRTUAL SHOW & TELL

Easily portable and packed with unlimited capacity, Creator AVR perfectly displays bulky and/or costly equipment for easy visualisation and understanding.

O

From trade shows to board meetings, products can be showcased in realistic 3D at the touch of a button. Products' functionalities can be easily demonstrated using Creator AVR's explosion and animation features while the AR mode brings them to life with full-sized models.

Excavator Model K100 🌈

C400 Eng





#### **BUS & TRAIN MAINTENANCE TRAINING**

- Tablet Training application AR Training application •
- ٠



# SBS ransit

### SBS Transit Smart Workers use AVR

29

#### HOST® A Sonepar Company

#### AR FOR MOTOR MAINTENANCE

- Display live information about each specific motor on AR Glasses.
- iOT sensors collect information about the motors.
- Also display troubleshooting information and possible fixes for each issue.



TEMP

RATION

CURREN'

SPEED

• Check motor specification and VFD setting (under size, insulation class)

• Check motor running hour (AR can display the motor running hour)

• Check Ventilation Hole Blocked or External Fan Stopped.

 $\bigtriangledown$ 

0



CHECK ERROR



Reduce training time required without compromising on effectiveness and efficiency.

Reduced requirement for face to face instruction by specialists and supervisors. Utilise time of high value employees more efficiently.

Scalability of training content.

Access anytime, anywhere. Overcome issues caused by conflicting schedules and trainer/trainee locations.

Increased productivity, every employee will have an animated digital manual in their pocket.

Results and evidence from various clients that using AVR will lead to increased learning retention (e.g. increase of 70% memory encoding and double the visual attention), leading to deeper learning and hence, better learning outcomes.

Reduces the need for re-training and allows to use the time on evaluation.

AR/VR/3D model-based training created to ensure achievement of learning outcomes specified by the trainers / organisation.

Allows trainees to learn at their own pace, ensuring effectiveness. Focus on individualised training and reduced reliance on group training.

VR training allows exact replication of actual environment leading to effective familiarisation of environment and processes.

Increased learner engagement.

Time Saving

WIIFM (What's In It For Me?)

Efficacy

Horizontally scalable across different departments with minimal effort. Use the same model and application for training, sales, roadshows, and even as a remote communication tool.

Multi-faceted distribution platform allows ease of geographical scaling.

Invest in one time modelling and use in a variety of applications. E.g. The same model can be viewed in VT Light to accomplish a different learning experience and outcome.

Adaptable platform solution. Add features and evolve the platform to suit your needs. Work with our team to achieve outcomes that may not be currently possible. E.g. Use the mobile application as a more effective interface for parts ordering.

Higher degree of accuracy and quality in procedures performed through augmented guided process.

Maintain consistent operational standards.

Monitoring of compliance to standard operating procedures.

Increased worker safety due to training in virtual environments. Conduct training for impossible to replicate and dangerous scenarios at zero risk to the trainee.

Use our assessment tool to test and certify employees for specific equipment / tasks.

Track employees' understanding of key concepts. Identify outstanding performers.

Safety & Compliance

Easy

### THANK YOU

