Case Study

AUGMENTED REALITY FOR INDUSTRY 4.0

Keywords: *Augmented Reality, Industry 4.0, Common Augmented Reality Platform*

Background to Case Study

Augmented Reality is a technology that has gone beyond the sphere of gaming and overspread significantly into many industrial applications. Augmented Reality (AR) is a technology that overlaps digital content and information with the physical world. The information can be of different types, such as sounds, videos, graphics, and 3D models. The AR technology can be described through the four characteristics: overlapping of real world and digital world, registration in 3D, real-time interaction and portability.
AR helps SMEs build applications that transform the way employees design products, use machines and equipment, make and deliver products in a smart world of digital production.
It can be said that AR is a component of Industry 4.0 that could be interacting with IoT systems, fundamentally changing the way people operate in the production flow.
In this sense, many companies are reconsidering the way they design, produce, operate equipment and deliver their products.

This case study presents the Bosch's Common Augmented Reality Platform used to develop AR applications in new forms of human-process-product-equipment interaction using technology AR.

Introduction to the Case Study and it's growth within Industry 4.0.

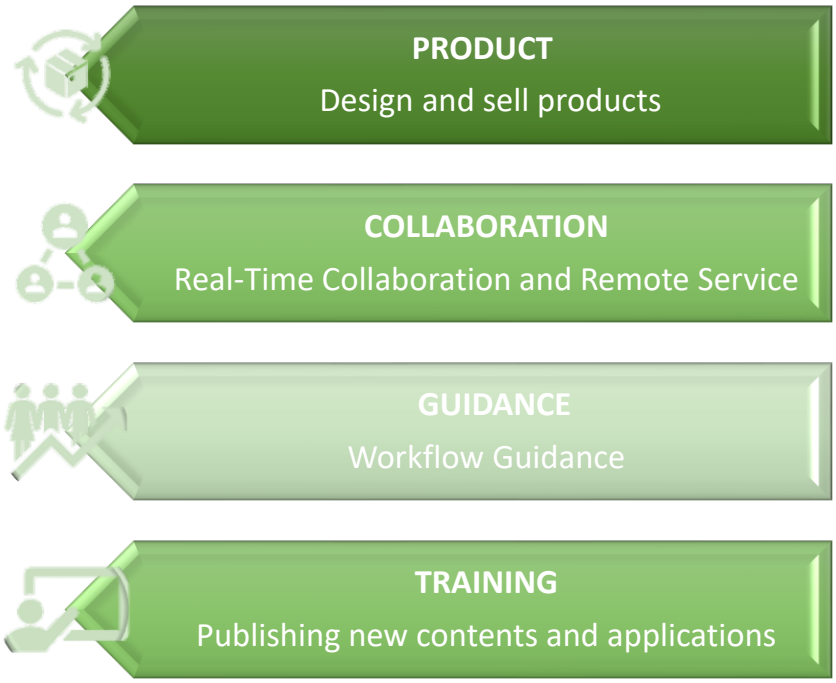
By including AR in the manufacturing companies, the efficiency and productivity of the work will increase and the costs and time allocated to specific activities will be reduced.
In the industry, AR technology can be used successfully in the following activities: product design, work instructions, training specific to each job, industrial marketing, logistics network management, etc.

Project No. 2019-1-PL01-KA202-064936

Case Study

The Case Study and Industry 4.0 Elements: A Pictorial Overview

Augmented reality is a technology that helps companies in any industrial field from process optimization to increase users involvement. The possibilities of using this technology in the industry are limitless.



Project No. 2019-1-PL01-KA202-064936

Case Study

AUGMENTED REALITY FOR INDUSTRY 4.0

The Element Explored within Industry 4.0 Application. BOSCH Invented for life https://www.bosch.ro/  Source: Video: How to use and benefit from augmented reality car services https://www.youtube.com/watch?time_continue=3&v=gefW8EC-ZCc&feature=emb_logo	**Bosch Automotive Service Solutions** *Bosch offers augmented reality solutions to support companies in various phases of the value chain: from production to service and repairs to training. Bosch developed the CAP platform (Common Augmented Reality Platform) to integrate the production of visual and digital content directly into the authoring process.* *CAP allows importing data directly into existing editing systems to create the Augmented Reality content.* *With Bosch's Common Augmented Reality Platform (CAP), companies can deploy AR solutions on their own and spread them widely.* *Bosch use the Augmented Reality technology for its technical service trainings thus literally increasing the transparency of the training contents for the participants.* *By using AR, repair processes accelerate and the quality of work increases. AR applications can provide support by displaying additional information from engineers.* *In Romania, Bosch Automotive Service Solutions offers Augmented Reality applications for car services. The Augmented Reality application shows the information right at the place where it is needed to support technicians.*
Application Target Audience	*The results of the case-study are intended for use by SMEs, entrepreneurs, managers*
Resources Used:	*References* https://www.bosch.ro/ https://www.boschautomotiveservicesolutions.com/
Further Reading:	Video: How to use and benefit from augmented reality car services https://www.youtube.com/watch?time_continue=3&v=gefW8EC-ZCc&feature=emb_logo https://www.bosch-presse.de/pressportal/de/en/augmented-reality-applications-allow-new-working-methods-for-modern-and-connected-workshops-112512.html https://www.bosch-presse.de/pressportal/de/en/full-view-and-comprehension-for-technical-service-trainings-bosch-trains-automotive-mechatronics-with-innovative-augmented-reality-technology-166656.html

Project No. 2019-1-PL01-KA202-064936