

# **Augmented Reality for Technical Instructions – Challenges and Opportunities**

**Alina Fraczyk**

Centre for Technical Communication  
School of Applied Linguistics  
ZHAW Zurich University of Applied Sciences  
8401 Winterthur, Switzerland  
[Alina.Fraczyk@zhaw.ch](mailto:Alina.Fraczyk@zhaw.ch)

## **Abstract**

Augmented Reality is a promising technology for providing technical product information and might therefore be part of the digitalization strategy of industrial companies on their way to *Industry 4.0*.

Especially in manufacturing, training and service the *Augmented Reality* technology can help to augment the reality of a user (e.g. maintenance personnel with a specific task related to a machine) with linguistic, numerical and visual *Intelligent information* and lead to a context-sensitive, modern way of user instruction.

There are results from experimental approaches that apply Augmented Reality for Technical Documentation that point to a high potential of Augmented Reality regarding time savings and safety improvements.

For an industrial company though the implementation of Augmented Reality for Technical Documentation might be a challenge and many questions still remain. How can you best profit from using Augmented Reality for industrial use cases? Can and should existing content be taken over from editorial systems or do the special features of Augmented Reality require a specific new concept of presenting information and could mean a shift towards more visual communication patterns? What could the future authoring process look like?

This contribution discusses these questions and presents preliminary approaches to tackle the challenges for industry companies.

## **Keywords**

Augmented reality, Technical documentation, Industry 4.0, Digital product information, Intelligent information

## **Biography**

**Alina Fraczyk** is Research Associate at the ZHAW Zurich University of Applied Sciences at the Centre for Technical Communication in Winterthur, Switzerland. After graduating in Technical Communication (Electrical Engineering and Information Technology, Communication Science) at RWTH Aachen University of Technology, she spent several years in the Industry (e.g. Power Business) and held managerial positions in Technical documentation Tools & Processes and Quality Management. She is also a Digital Services Entrepreneur (Business Analytics) and Publisher of a Business Excellence online magazine. Her research interest include technical communication, augmented reality, user experience, digitalization, management systems and innovation.

<https://www.linkedin.com/in/alina-fraczyk-12687a7b/>