W.I.T.

CREATE NEW VALUE

WIT READER

DATA IMPORT & PROCESS AUTOMATION

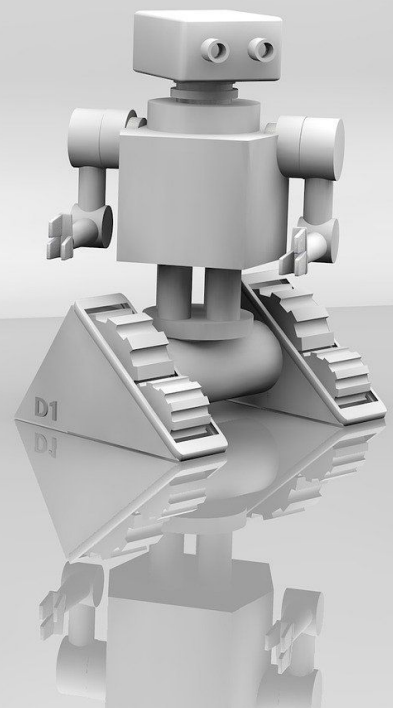QUALITY CONTROL

INDUSTRY 4.0

TIME · COST · QUALITY

WIT READER

Research and Development Project
OCR software evolution
featuring AI and Deep learning technology

The data-capture based software solution we propose aims at managing problems relating to data acquisition, processing and transmission. The system that analyses the document enables to interpret and understand what the document refers to, the field of application, to extract the salient information and also to answer some questions about the content itself.

WIT READER facilitates the process towards a paperless digital transformation. Our research made it possible to develop a software that can be considered the evolution of OCR (optical character recognition). Analysing, processing, editing, evaluating texts, documents and images can now be faster and more efficient thanks to a new model of data acquisition.

NEW VALUE CREATE

WIT READER software progressively refines the skills of discernment and interpretation in an asymptotic way and the acquisition and classification of information through continual learning (CL) and deep learning (based on artificial neural networks) algorithms by extracting the sampled information with precision and accuracy.

Furthermore, by means of syntactic parsers and semantic analysers it is possible to verify the integrity and quality of the data. In fact, in the event of omission of characters or an error in interpretation, the recognition system will make the necessary corrections based on what is statistically known in the documents acquired and on the basis of continual learning with which the system progressively and continuously refines its own interpretation criteria.

WIT READER

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WIT READER involves in a first phase the use of automated procedures guided by Artificial Intelligence and Computer Vision processes capable of sampling, analysing, correcting and validating the information coming from data sources such as a photograph, a video recording, a scan of a document or a structured data file.

When the document is acquired, which is stored as a TIFF or PDF file, possibly multi-page, the system is able to analyse it, then after recognising the type of document and having it classified, it will proceed to extract the information and then present it to the user in a PDF-A uniquely associated with the scan.

Once the model has been created, it can be used as follows:
• Presentation of the sampled and interpreted data.
• Editing and correction of acquired data.
• Manual and RPA data entry in a PDF-A