Vídeo Industrial para visão EXPANdida em operações à Distância

VIEXPAND

E2.2

MARKET VISION FOR IMPROVEMENTS IN FUTURE ARCHITECTURES (EN) VISÃO DE MERCADO PARA MELHORIAS EM ARQUITETURAS FUTURAS (PT)

Contractual Date of Delivery: 28/Feb/2023
Actual Date of Delivery: 31/May/2023
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Workpackage (EN)/Atividade (PT): 2
Security: PU
Version: 1.0
Total number of pages: 5

SUMMARY (EN):

This Deliverable outlines the Consortium's view on the future markets that have been showing interest on VIEXPAND's outcomes, namely due to the inclusion of AI functionality. TWEVO has been gathering potential client's interest on further AI uses, namely concerning Edge-AI. Leveraging on its AI capabilities, the commercial outcome from the VIEXPAND is highly scalable, both technically and commercially.

SUMÁRIO (PT):

Este Entregável descreve a visão do Consórcio sobre os mercados futuros que têm vindo a mostrar interesse nos resultados do VIEXPAND, nomeadamente devido à inclusão da funcionalidade de IA. A TWEVO tem vindo a reunir o interesse de potenciais clientes em outras utilizações de AI, nomeadamente no que diz respeito a Edge-AI. Tirando partido das suas capacidades de AI, o resultado comercial do VIEXPAND é altamente escalável, tanto do ponto de vista técnico como comercial.

Keyword list: Market, vision, future

Cofinanciado por:







The VIEXPAND project is funded under Research and Technological Development Incentive Scheme - CO-PROMOTION | Centro2020 | P2020 | European Regional Development Funds.

Table of Contents

List of Acronyms	3
1. Introduction	
2. Future Architectures	
3. Future Markets	
4 Conclusions	

List of Acronyms

5D Dull, Dirty, Dangerous, Difficult and Dear

Al Artificial Intelligence

ISM Individual Section Machine

MD Machinery Directive ROI Region Of Interest

1. Introduction

This project public Deliverable summarises the Consortium's member's views and experience on the future development of VIEXPAND's architecture and commercial outcomes, in respect to technology and market. Our views and experience result, in part, from the VIEXPAND project development. Together with our knowledge, parallel engineering and market development, we hereby structure what we believe are the future prospects, for beyond VIEXPAND.

2. Future Architectures

Future architectures need to be understood not only in the point of view of R&D and technical improvements, but also on the market fit. Most important for an academic research group will be the R&D perspective, whereas for an SME the market is what drives effort and realisation of return on investment.

The inclusion of an Artificial Intelligence (AI) video tool for the dynamic and automated definition of Regions Of Interest (ROIs), compared to the initial consideration of a mouse/keyboard, has been crucial in showing the value, strength and adaptability of VIEXPAND's commercial outcome. At the later stages of the project, the Consortium has directly been acquiring feedback from potential clients and industrial networks, confirming large market fit and demand for Edge-AI boosted tools. With the inclusion of AI for the dynamic and automated definition of ROIs, in the form of a commercial product named 'VIEXPAND AI', the Consortium has been able to create a core technology base that makes VIEXPAND highly scalable towards other AI-boosted functionalities.

3. Future Markets

The VIEXPAND project has been highly based on the glass container industry, with the crucial inclusion of Vidrala, S.A. as a project partner. The main scenarios targeted, on such vertical, have been the Individual Section Machines (ISMs) in the hot area, the production lines and storage/logistics areas in the cold area, to monitor the product along several conveyor belts and also man-machine interactions.

With the inclusion of AI functionalities, as described above, and after the participation and feedback from several industrial events, TWEVO has gathered attention from other markets. Food & Beverages and Intralogistics have shown direct interest in the VIEXPAND AI outcome. Initial contacts with a major intralogistics Portuguese distribution enterprise group have been carried out, showcasing the interest of the solution.

Farther and possibly with a longer-term market reach, we believe that further needs to be done in the safety applications market, related to the Machinery Directive (MD), as described in Deliverable E6.2, for the glass industry and other verticals.

On the whole, for the different markets and scenarios where Dull, Dirty, Dangerous, Difficult and Dear (5D) jobs are so common, the system is showing its ability to aid workers execute their jobs, ameliorating their work conditions in such environments. This has been, from the start, one of the main objectives of the VIEXPAND project, by means of expanding worker's vision.

4. Conclusions

This Deliverable outlines the Consortium's view on the future markets that have been showing interest on VIEXPAND's outcomes, namely due to the inclusion of AI functionality. Other than only being used for the dynamic and automated definition of ROIs, as initially planned in the project's Technical Annex, TWEVO has been gathering potential client's interest on further AI uses, namely concerning Edge-AI.

Leveraging on its AI capabilities, the commercial outcome from the VIEXPAND is highly scalable, both technically and commercially.