Manual Work Support Throughout System Lifecycle by Exploiting Virtual and Augmented Reality

Fact Sheet

Project Information

ManuVAR
Grant agreement ID: 211548

Funded under
FP7-NMP

Project website

Status
Closed project

Overall budget
€ 9 649 244,99

EU contribution
€ 7 397 613

Start date
1 May 2009

End date
30 April 2012

Coordinated by
TEKNOLOGIAN
TUTKIMUSKESKUS VTT
Finland

This project is featured in...

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NO. 9, FEBRUARY 2012
Objective

Manual work is a crucial and expensive component of manufacturing. Globalization causes companies to reduce manual work costs by offshoring and global outsourcing. This poses problems such as increased lead times, lower quality products and services, and weaker management. Because of the pressure of globalization and the decline of the working age population in Europe, the situation will get worse in sectors with a large proportion of high value manual work that cannot be automated or outsourced. The ManuVAR project aims to provide a timely and systematic solution to this problem. The objective of ManuVAR is to develop an innovative technology platform and a framework to support high value manual work throughout the product lifecycle. ManuVAR will cover ergonomics, safety, work assistance, and training. It includes various people from designers to factory workers, operators, maintenance personnel, and end-users. The aims of ManuVAR are to: (1) increase productivity and quality, reducing the cost of high value manual work at every stage of the lifecycle; (2) facilitate adaptation to product customization and changes; (3) support efficient knowledge and skill management; (4) improve EU industry competitiveness via knowledge-based business models. This will be achieved by employing virtual reality technology to facilitate communication between people and systems. It will also enable the two-way flow of knowledge and its accumulation and reuse throughout the entire lifecycle and across subsequent system generations. The consortium comprises 18 partners representing industry, research and academia. In ManuVAR, there are five synergistic application clusters in different industrial areas: terrestrial satellite assembly, assembly line design, remote maintenance of trains, maintenance of nuclear reactors, large machine assembly process design. ManuVAR will demonstrate that high value, high knowledge manual work is an opportunity to improve the competitiveness of EU industries.

Field of science

/social sciences/sociology/globalization
/social sciences/economics and business/business and management/business model
/social sciences/economics and business
/social sciences/sociology/governance/public services
Programme(s)

Topic(s)

Call for proposal

FP7-NMP-2007-LARGE-1

Funding Scheme

CP-IP - Large-scale integrating project

Coordinator

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- **Activity type**: Research Organisations
- **EU contribution**: € 1 436 203,50

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- **EU contribution**: € 479 520

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