

**Organization Name:** The Manufacturing Technology Centre

**Contact Name:** David Varela

**Contact Email Address:** [david.varela@the-mtc.org](mailto:david.varela@the-mtc.org)

**What type of research project?**

Business Process Innovation Issues, New Standards Development

**Topic of proposed research project:**

Integrating 'Design for Augmented Reality' methodologies as part of the product design process

**Goal of research project (200 words):**

One of the key challenges for the integration of AR in the enterprise is understanding the skills required for the current and future workforce. As AR becomes a fundamental part of the work flow in current and future enterprises, it is critical that a new set of processes oriented to product designers and manufacturing engineers is put in place to enable AR experiences delivered during the product life-cycle in a more efficient manner. The aim of this research is to define these processes and highlight what technologies would be required for an implementation with minimum up-skill requirements in the current enterprise workforce.

**What are the specific objectives for the research?:**

1. To develop a distribute a questionnaire around industrial users from the AREA members to understand what 'Design for X' processes they are currently using and how they were implemented. The results will be summarised and presented to the AREA members if required (desensitisation of data may be required). This would be completed within 1 month from kick-off. The suggested format for distribution of results is MS Power Point presentation.
2. To design a process and/or framework to integrate a layer of AR content as early as possible in the product life cycle. At this stage key skills and tools required will become apparent. This objective would be completed within 3 months from kick-off. The suggested deliverable format for distribution is MS Visio, supported by MS Power Point presentation.
3. Detail definition of key skills and tools required for the implementation of the process designed in 'Objective Two'. This objective would be completed within 4 months from project kick-off. The suggested deliverable format is MS Power Point presentation.
4. Compilation of feedback from previous objectives and preparation of a 'Final Deliverable' report. This objective would be completed within 6 months from project kick-off. The suggested format deliverable is MS Word.

**Who do you think has expertise to conduct this research?:**

The Manufacturing Technology Centre