



## Case Study: Virtual Reality Support Ford Motor Company

### Project Aim

Ford Motor Company announced that they were looking to introduce the use of virtual reality (VR) into the manufacturing side of their business, on a trial basis, in order to understand the benefits of adopting this technology into their wider organisation. HSSMI therefore provided a short term project with a set of defined deliverables to enhance the experience of using VR. To understand the benefits of these tools, HSSMI worked alongside various teams within Ford to establish use cases that could be developed and delivered within the project timeframe.

### The Challenge

VR is an emerging, disruptive technology which is being used increasingly across multiple industries. With the increased focus on digital manufacturing, Ford decided to explore the possibilities of using VR as a tool within their powertrain manufacturing engineering group with the aim of reducing cost, increasing productivity and increasing quality. The challenge however, was that Ford's manufacturing department had only minimal experience of using VR, therefore in order to investigate further applications, they would need a skilled Engineer with knowledge of the current state of the technology, software and hardware requirements and VR workflows as well as advanced VR scene development capabilities.

## The Solution

One full VR system was installed onsite at Ford for the entirety of the four month duration. A Technical Lead (VR Specialist) from HSSMI's Virtual Engineering Team was then based onsite with Ford for two days per week working alongside the digital manufacturing team to assist with scoping, developing and deploying the use of various VR models. During the four month project HSSMI, with assistance from the organisation, worked with various stakeholders across the business in order to discuss, plan and generate valuable applications for a number of 'Proof of Concepts (POC)'. A number of scenes and workflows within the VR system were developed and the issue of file formats and data availability was also explored. HSSMI worked with Ford to communicate the progress of the trial across the organisation globally and were responsible for documenting the findings in a series of reports. This project also allowed HSSMI to spend time with the relevant members of the organisation to share skills, knowledge and best practice for using a VR system.

---

## Duration

Four months

---

## Project members

HSSMI and Ford Motor Company

**Tosin Famusudo**  
Technical Lead  
Tosin.Famusudo@hssmi.org

**Satwik Mehta**  
Virtual Engineering Manager  
Satwik.Mehta@hssmi.org