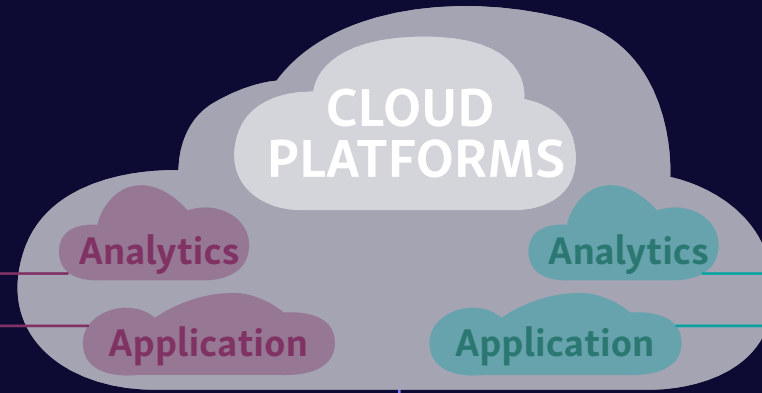


**BLUELIGHT**  
Develop insights into the factors that influence response times.

Analyse data and build predictive models  
Optimised route planning applications for emergency vehicles



Collect, analyse and visualize data to highlight efficiencies  
Distributed SCADA application

**SMART MANUFACTURING**  
Cloud based Industrial Control Applications



Collect and report traffic data

Tracking ambulances



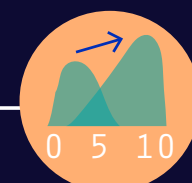
Secure communications from SCADA application to PLC'S



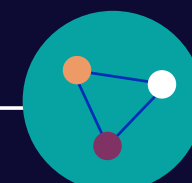
**Collect Data**



**Analyse**



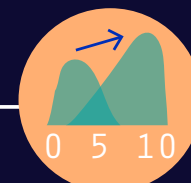
**Identify Patterns**



**Predictive Models**



**Design**



**Build**



**Validate Scaling**



**Migrate**



**SOCIETAL IMPACTS**

- Drive Improvements For Public Safety Organisations
- Improved Services for Citizens



**BUSINESS IMPACTS**

- Agile Operations
- New Business Opportunities
- Greater Efficiencies



**ECONOMIC IMPACTS**

- Digital Employment
- Increased Competitiveness
- Value Added Services

# THE INDUSTRIAL INTERNET REVOLUTION WITH SENSORS, CLOUD, ANALYTICS AND SECURITY

## INDUSTRIES INTERACTING

- ↘ Telecommunications
- ↘ Information Technology
- ↘ Health
- ↘ Manufacturing
- ↘ Emergency Services
- ↘ Smart Grid
- ↘ Energy

## IMPACTS

- ↘ Business
- ↘ Economic
- ↘ Societal

## INFINITE and The Industrial Internet Revolution

### CONTEXT

INFINITE is an example of how diverse technologies such as sensors, connectivity, cloud, analytics and security can create new business models and value chains in the Industrial Internet of Things. In order to be effective, these implementations require strong partnerships between key stakeholders from different domains and ICT sectors working on the common goal of seamless & interoperable Infrastructure.

The INFINITE testbed\* reports the potential for impact across multiple sectors:

### Emergency Ambulance services

The testbed connectivity capabilities enables the collection of location data from ambulances and other data sources such as traffic statistics and roadwork’s information. All this data is combined and analysed by the analytics capability to deliver insights into the factors that affect transit times for ambulances.

### Smart Manufacturing

INFINITE enables the connectivity, application development and cloud environment to enable the design and development of Cloud based Industrial

Controller applications that aim to deliver on key performance requirements such as scale, latency, resilience, reliability and security.

### OPPORTUNITIES AND CHALLENGES

**Employment** - Enterprises will need to attract and retain digital talent but also create a culture in which employees, on-demand workers and robots can work effectively together. Technological advances are rapidly making it possible to automate many activities that currently require human skills and knowledge. This applies to blue-collar jobs, through robotics and the Internet of Things, as well as to white-collar work through AI.

**Agile Governance** - Governments will need a new framework for governance both in the ways evolving technologies and the personal and business opportunities they create affect policy decisions, as well as the means for efficiently executing government functions to the benefit of citizens. Developing this framework requires an approach that is as novel as the technology it governs, one that is agile and responsive enough to accommodate software’s enormous impact.

*\*The Industrial Internet Consortium has approved INFINITE, a strategic partnership between Dell EMC, Vodafone Ireland, Cork Institute of Technology (CIT) and other partners, as a testbed. For more details, please visit [www.iotinfinite.org](http://www.iotinfinite.org)*