

Kinematic Scanning and Digital Twin – Reality Capture for Asset Management

If you could:

- Make **business critical decisions** with **greater certainty**
- **Increase** the **effectiveness** of your planning and design process
- Achieve **quicker installation**
- **Improve the efficiency** of live operations

Wouldn't you take that option?



Kinematic Scanning provides a rapid, repeatable, cost-effective and accurate solution for turning your facility into digital reality. Collecting as-built data that is available almost immediately provides the ability to extract and share information in real time.

- A quick and effective way of achieving a digital twin of your facility
- Rapid re-scanning enables you to keep information up-to-date and relevant
- An intuitive and intelligent platform enabling real time decisions within the digital world, regardless of stakeholder location



20%-30% cost savings in efficiency gains



Up to 10 times faster than terrestrial scanning



Reduces time and cost for late changes and planning errors

Are you installing or relocating equipment?

A **digital twin** can provide real advantages:

- Enables an understanding of the current facility and its condition in 3D or 2D
- Ability to include all stakeholders visually, remotely and interactively, working in real time
- Rapid re-scanning keeps the data right up to date

Having access through either a website portal and interactive viewing tool or on your main system, you will have flexibility to:

- Take direct measurements
- Download and extract 3D data, create models, or 2D CAD
- Geotag points of interest
- Include locational optimisation and route planning
- Ensure multi-stakeholder involvement in a virtual digital facility

Operating Nationwide or Worldwide?

Operating with a digital twin allows greater flexibility and response. Managing multi-site operations has its difficulties, but having the ability to remotely visit a site to inspect or compare it has considerable advantages in relation to both time and cost.

The ease and speed of Kinematic Scanning means that change or a re-fit can be easily captured and added to the main dataset. Regular re-surveys assure that the data is always up to date.

Efficient Management

A digital twin supports efficient and lean management. Having accurate data available to all stakeholders means quick and informed decision making enabling best practice and protocol adaption. An interactive viewing tool allows transfer of geo-spatially referenced information, and tagging equipment or locations with meta-data provides additional information on items such as specifications and Health and Safety protocols.



Benefits

Kinematic Scanning offers real advantages to warehouse, logistics, automation facility and operations managers, designers and suppliers. It can also be easily applied to bespoke robotic and automation projects

- **Accurate, consistent and timely data that is kept up to date in a cost-effective way**
- **Improves collaboration with all stakeholders**
- **Facilitates more informed decision making and market reaction**
- **Reduces re-works or late design adjustments**
- **Provides a greater understanding and information of all facilities**
- **Accommodates best practice**
- **Reduces travel through remote access to reality**
- **Multi-stakeholder access both in the office or 'on the go' on the shop floor**
- **Geo-spatially tag items for reference or instruction**
- **Reduces project timelines**
- **Increases employee productivity**
- **Offers data that supports space optimisation**
- **Effective management of geo-spatial data across multiple sites**

Want to know more?

If you would like to discuss any of the points included in this document or would like further details, then please contact me.

Peter Folwell
Author



For and on behalf of:

Plowman Craven

Plowman Craven House, 2 Lea Business Park
Lower Luton Road, Harpenden, Hertfordshire, AL5 5EQ
Tel: +44 (0)1582 765566 plowmancraven.co.uk