

Case Study

Visual Asset Management (VAM) in Decommissioning

Client: Major Oil & Gas Company

Location: Southern North Sea

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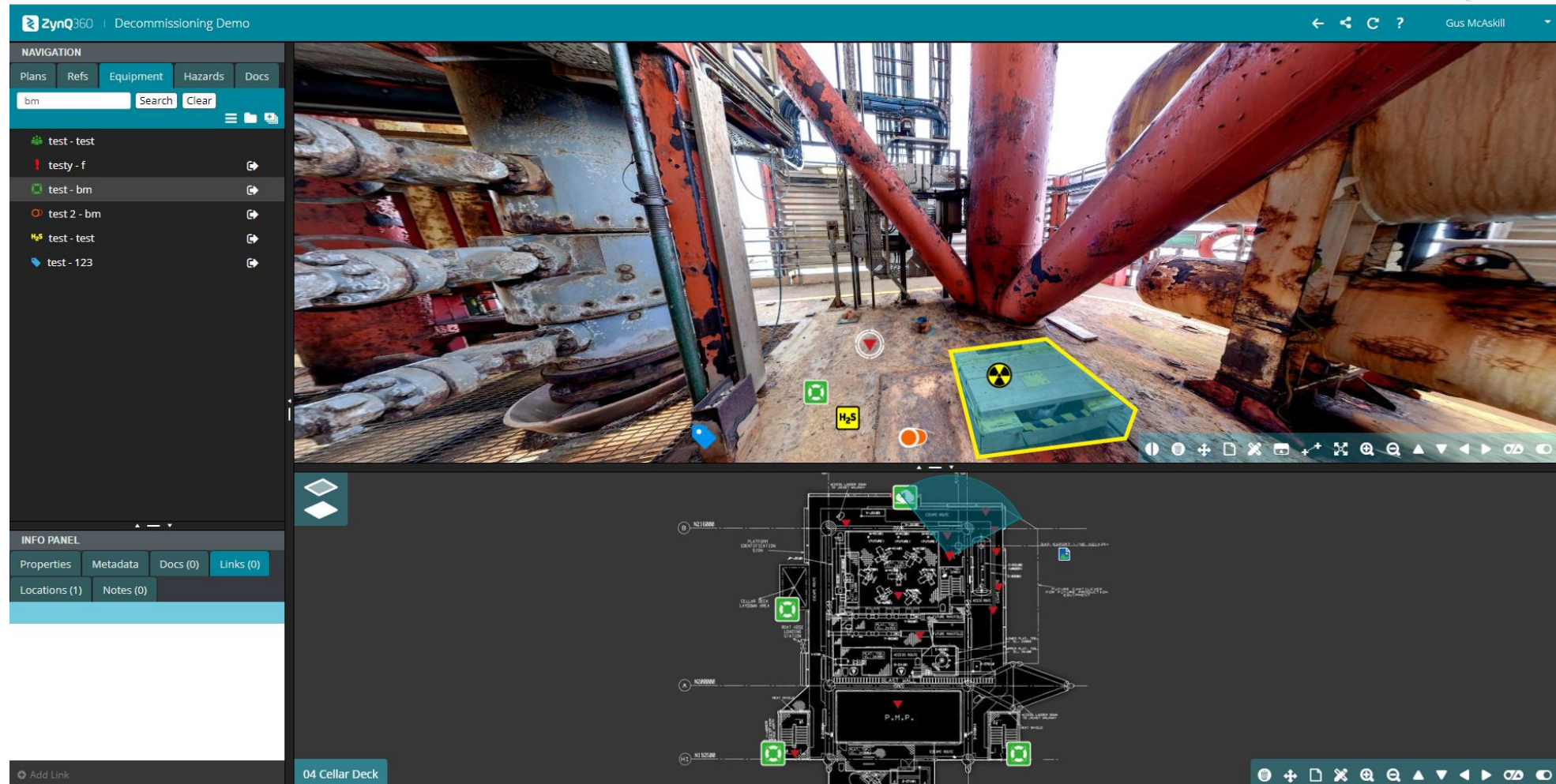
Who are we?

- We at ZynQ 360 specialise in creating a safer working environment, basically creating a digital twin of any Asset or Facility.
- We do this by using innovative visualisation technologies to build bespoke Visual Asset Management (VAM) solutions.
- We support our clients globally, in the effective, safe management of their assets. By using our visualisation platform, it gives our clients increased visibility into complex operations, insight and access to data they can rely on, and a place where they can operate, maintain and modify any asset in a safer environment.
- Through collaboration, our visualisation process allows all stakeholders to make informed operational decisions that impact positively on the business.

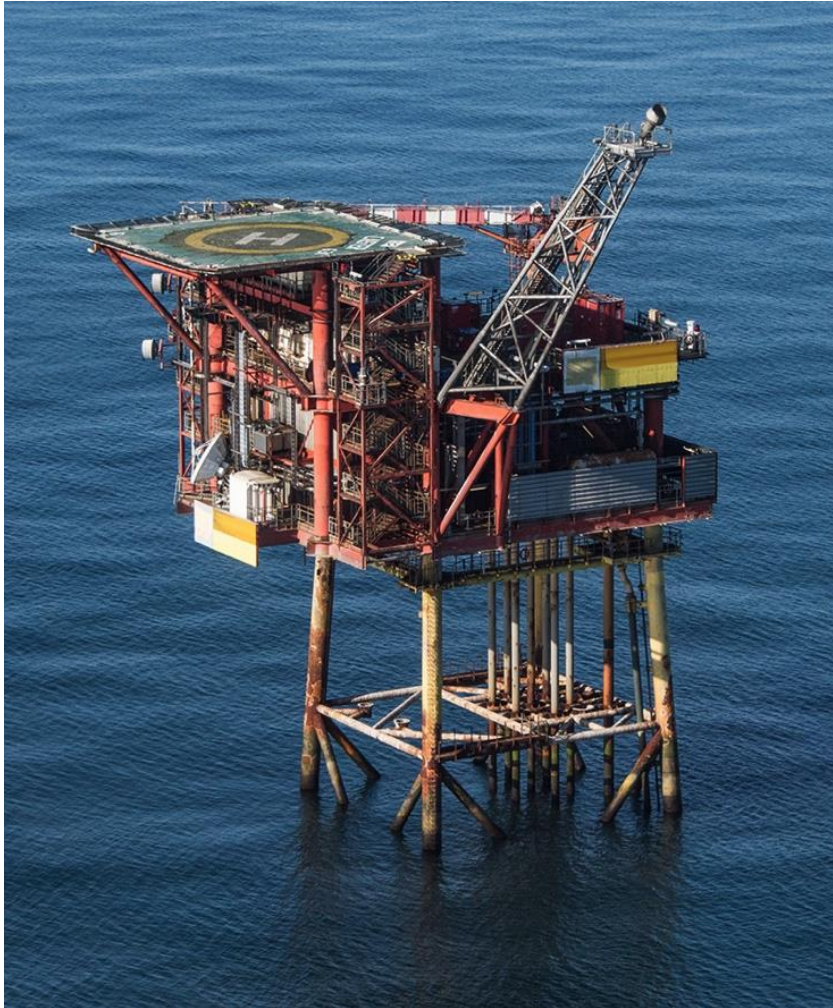
Digital Transformation



Case Study Video



Applications and Benefits in Decommissioning



Safety

- Addition of escape routes
- Emergency response & planning
- Duty of care compliance
- Reporting incidents
- Less trips to the asset

Planning Tool

- Identify and tag kit for removal
- Identify required isolations
- Identify and tag Hazardous Waste areas
- Identify and tag tanks and vessels where Breaking Containment is required
- Identify Hazardous Materials (e.g. Lead Based Paint on Structural Columns)
- Identify and measure laydown areas (e.g. measure an area to see if a service providers shipping container will fit)
- Logistical planning – what needs to be done first and who needs to be on location to facilitate the work

Hazardous Work Area

- Clear visualisation of designated hazardous areas located on the platform can be highlighted on layered plans (e.g. NORM areas, Lead Based Paint structures or Asbestos)
- Areas of interest include: Naturally Occurring Radioactive Material (NORM) present in vessels and pipes, lead based paint used to paint steelwork, areas where grating and railings have been condemned or removed.
- Identify any areas where rope access will be required in advance, along with other restricted areas such as confined space

Equipment Tagging

- Tagging of relevant equipment
- Attaching associated documents, along with next inspection dates etc.
- Equipment can be identified and tagged to indicate status, i.e. removal, recycle or remain
- Geo-referencing o Creating 'geo-referenced' equipment & asset registers
- Auto-tag existing 'geo-referenced' datasets

Document Management

- Documents can be uploaded to ZynQ360, creating a place to store the
- Draft Decommissioning Programme associated P&IDs, Risk Assessments etc.
- Vital or High-Risk items can have associated documents and procedures uploaded and tagged within the 360 sphericals
- ZynQ360 can integrate with existing document management software to create a comprehensive picture without disrupting existing systems
- Integration with existing data systems

Stakeholder Collaboration

- Web based software
- Multiple users with different profiles and levels of interaction
- Multiple stakeholders need to be consulted in each project at various stages
- Visualisation creates a clear message and understanding of the asset
- ZynQ360 can be used as a focal point, a sole source of truth, as it shows the asset in its current state, reducing the reliance on P&IDs, outdated 3D models or laser scans
- Communication between Onshore and Offshore teams is more effective
- Operators can engage the supply chain and service providers earlier in the project



Project Summary

DATE:	24th March 2017
TEAM:	<i>ZynQ 360 Photographer along with Decom Engineer and Maintenance team</i>
DURATION OF TRIP:	2 x Shuttle Mobilisation days
OVERVIEW:	246 detailed 360° Photogrammetry Images and Aerial Photography capture of specific areas and equipment.
ACCESS TO DATA:	2 days after capture completion, data was delivered online in ZynQ 360 cloud software solution
FINAL DELIVERY:	31st March 2017 – 8 days from capture to delivery
18 Users were assigned to the ZynQ 360 Project including a 3rd Party Vendor	



Project Benefits

A SIGNIFICANT REDUCTION IN OFFSHORE TRIPS

- Avoids multiple mobilisations for logistics and manpower

WITH AN ESTIMATED OFFSHORE SAVING OF OVER: **£20k** per trip

- Based on a 2-day trip, Helicopter costs and Support Ops to Man a satellite for a standalone survey

REDUCTION IN PLANNING TIME:

- Accelerated project completion
- More complete work packs
- Increased Efficiency
- Enhanced Collaboration



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