



Images above show point clouds generated from original R2S photographic captures

Sustaining positive disruption . . .

Not ones to back away from a challenge, SeaEnergy continue to innovate, pursuing R&D without boundaries

ASSET INTEGRITY



BY BOB DONNELLY

During this critical time in the oil & gas industry, disruptive technologies present real alternatives to the way we approach challenges – not least in the area of asset integrity.

Ironically, disruptive technology can, in fact, reduce operational disruption, something we've gone on to prove with our own R2S visual asset management (VAM) system.

Over the past 18 months, the mantras of innovate, collaborate, reduce costs and increase efficiencies have been repeated continuously. For the team at SeaEnergy, this has meant

an increased focus on our core deliverable, R2S.

According to Harvard Business School Professor Clayton Christensen (the academic who coined this terminology in his 1997 publication *The Innovator's Dilemma*) "disruption is a process, not a moment in time". This certainly reflects our experience in bringing R2S to market.

Our own journey illustrates just how important the support of industry champions can be. Early in our engagement with the oil & gas sector, we found a champion in one individual whose role within a major global supermajor was to seek out disruptive technology and prove its concept. He became the first of a cluster of ambassadors we've since established championing R2S both internally and externally.

Champions of disruptive technologies are hugely important and will play an even more critical role during these more difficult times. We know how difficult introducing alternative services to market in more affluent

times was; when hampered by tight budgetary constraints and job insecurity, these challenges are yet further exacerbated.

Not ones to back away from a challenge – we're innovators after all – we've continued to work very closely with our technical team, clients and user groups, pursuing R&D without boundaries and embarking upon the development of "sustaining technology". (Professor Christensen defines this as "incremental improvements to an already established technology.")

This approach to innovation and R&D has also generated conversations and opportunities for greater collaboration with our peers. There is a general understanding of the need to move away from information and data silos and we are continuing to explore these projects.

To date, this has had particular focus on combining data and service of-

ferings, with the objective of providing the wider industry with further opportunities for cost efficiencies

Bringing all of this together, our sustaining technology initiative has concentrated on the development of our existing spherical photographic capture and photogrammetry techniques.

This has enabled us to generate point clouds – providing an understanding of space as an accurate 3D representation, allowing precise dimensions, area and volume measurement and angular data. This means we can offer increased accuracy in R2S measurement capability. Effectively, this is using existing R2S photographic captures of assets to generate [overview] point clouds. This will benefit clients, for example, who are contemplating conducting a laser survey ahead of retrofitting a piece of equipment.

The point cloud could be generated through the spatial information and data from our original R2S capture – saving on survey time and critical bed space. Although not comprising comparable data density to a full laser scan (or bespoke R2S point cloud survey), this overview point cloud would nonetheless provide invaluable survey and overview information.

These developments, which are currently being prototyped, are not detrimental to the existing capabilities of R2S and will not undermine the value of existing investment.

The opposite is true – users will be able to obtain more value from their R2S captures. The software maintains its look and feel while high resolution imaging will remain central. We have simply been improving and enhancing our core deliverable.

Amid all the negativity currently surrounding the oil & gas industry, it is difficult, but important to continue to think long term. If we maintain R&D processes, enhance skillsets, push boundaries and positively disrupt the norm, then we can look forward to a successful and sustainable future.

Bob Donnelly is director of business development at SeaEnergy

“A disruptive technology is one that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry”

Oil & gas industry project management mentoring initiative

SKILLSET



“This ECITB Programme is one of the best initiatives I have been part of during my time in the Oil and Gas Industry.”

Rob Knox – senior project controls engineer, Amec Foster Wheeler

The Offshore Project Management Steering Group (OPMSG), facilitated by the ECITB is a group of senior industry practitioners, who have come together to enhance Project Management capability in the offshore oil & gas industry, and to impart wisdom and experience to those developing their skillset in the Project Management discipline.

In 2014-15 the OPMSG and ECITB launched a pilot programme to mentor 14 young professionals from the Aberdeen area already working in the industry, to develop further their behaviours and competence in project delivery.

Mentors from Shell, Maersk, Apache, WGPNS, AMEC, Aker Solutions, Petrofac and Global Energy

Group joined forces to address the critical skills shortage of project managers working in the oil & gas industry.

Following the success of the pilot, the OPMSG is now officially launching the Oil & Gas Project Management Mentoring Programme. This will be available to individuals working within the oil & gas industry, who wish to further their careers in the project management and control specialisms.

“The mentoring programme initiative evolved from direct feedback from the local community and we are delighted to offer these aspiring project managers one-to-one development from experts in the field and also an experience which will

undoubtedly be a very enjoyable & rewarding one in the careers” (Tony Maplesden, former Chair OPMSG)

The programme is a six-month guided relationship with ECITB Recognised Industry Mentors, who are experienced project management practitioners working within the oil & gas industry, sharing their knowledge, skills and experience to assist the mentee's progress in their career.

Both parties (the mentor and mentee) will mutually agree areas of development and work towards set objectives and plans specific to the individual.

The scope of mentoring will include project management tools, behaviours and leadership development set in an oil & gas context.

Successful applicants will:

- Undertake a self-assessment against the ECITB Project Management Framework.
- Agree with their ECITB Recognised Industry Mentor areas of competence for development.
- Set objectives and action planning.
- Have regular communication and reviews with their mentor.
- Undertake a post-programme self-assessment (against the ECITB PM Framework) and review progress against set objectives.

To find out more about how to be part of this exciting initiative, please visit <http://projectmanagement.ecitb.org.uk/mentoring-programme/> or contact Carol Sinclair on PM-Mentoring@ecitb.org.uk