One of the many lessons that emerged from the Apollo missions was the concept of operational readiness based on the need to ensure that everything functions correctly the first time and every time.

The concept of operations readiness was adapted by the oil and gas industry and used to manage, monitor and measure the progress of projects towards a state of ‘readiness to operate’.

As the name suggests, operations readiness and assurance (OR&A) includes an assurance component that gives an ongoing, real time indication to stakeholders of the likelihood that a project will achieve that ‘readiness to operate’ status by the time it is due to be handed over.

David Powell, who was a key member of the team at Shell who initially adapted the OR&A concept for the oil and gas industry, and has literally written the book on the subject, cut his teeth in the days when project management relied upon paper-based information. Later, whilst working at Shell, he developed the outline of a basic computerised system to deploy operations readiness. After leaving Shell in 2008, he founded OR&A Ltd which has been used on projects for clients in the USA, Ghana, Norway, Vietnam and beyond.

The OR&A process looks at a project from the opposite end to traditional project management techniques. David explains: “How can you know that a project will be ready three years in advance? The answer is that if you know what you have got to do and how and when to do it and it is all recorded, monitored and managed, then you can demonstrate you are on track.”

After leaving Shell, David commissioned a software development company to build a program that would facilitate the deployment of OR&A on a project. A list of key activities soon grew into a database, a website and a book to which a dashboard was added and then developed into a fully integrated, modular and highly complex suite of tools. The current system, the OR&A Solution, is hosted on a secure private managed cloud server, accessible via a secure log-in. When a major infrastructure project may require anything from 70,000 to more than half a million maintainable components, all of which come with manufacturer instructions and have to be installed, maintained and potentially replaced at some point, then it’s clear to see why records are vital.

An opportunity to modify the software for a refinery project in Kuwait prompted David to seek the help of DigitalCity. OR&A was able to source funding to review the current software and develop a proposal to modify parts of it so it would be bespoke to the potential client’s needs.

Although the particular project is currently on hold, David says the investigations into the software that the project prompted had additional benefits. “At the very least, it was an exercise that allowed us to re-visit the system design and to identify other improvements we could make, that I have since invested in. Technology is constantly evolving and receiving the funding from DigitalCity to carry out this particular exercise has been a catalyst for us to develop further.”

Scott Watson, of DigitalCity, adds: “The expert consultancy support we offered OR&A Ltd was a great fit for David and his team. At the time his business was undergoing a new product innovation and required access to knowledge and skills that we could provide. I believe that the software review that took place has helped the business with the evolution of the technology, leading to further commercial opportunities.”

For further information, please call: 01642 738 694 or Email: info@thedigitalcity.com