wood. IBM.

Wood-IBM Technical collaboration overview



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Our vision

To live at the intersection of technology and engineering.

By combining Wood's **engineering innovation** with IBM's advanced market leading technologies in fields such as **cognitive computing**, **blockchain**, **mobile** and **analytics**, these digital offerings will unlock new value for our customers.



Our mission

Wood and IBM have signed a **multi-year strategic collaboration** to deliver new
engineering innovation and services solutions
across multiple industries.



Wood digital footprint

Domain know-how



- ✓ Serving the energy and industrial sectors for over 20 years
- ✓ Over 2000 associated engineers, scientists and discipline experts
- ✓ More than 250 customers in over 40 countries

Technology excellence



- ✓ Co-located engineering and software development teams
- ✓ More than 100 staff software architects and developers
- ✓ Robust best practices
- ✓ Over 20 established commercial software products
- ✓ ISO certified

Innovation



Software innovation:

- Custom software development
- Systems integration
- Web / cloud-hosting
- ✓ Agile development for speed, quality and cost control
- ✓ Innovation award winners

Data analytics centre of excellence

- Asset performance
- Predictive analytics





IBM empowers Wood to become the global leader in digitally-enabled engineering and technical services.

Wood empowers IBM to dramatically deepen the reach of solutions across energy & industrial markets.

A category of one

Together, the Wood-IBM combination delivers:

- Outstanding differentiation and pull-through opportunities.
- Combined capabilities, breadth, depth and ability to deliver extraordinary value:
 - Across the asset life cycle from design to decommissioning
 - Across the business from the front line to the back office
 - Across a broad spectrum of industries and market sectors
- Unparalleled insight to enhance business decision-making and the execution of services.
- The opportunity to do things in combination that we couldn't do before.



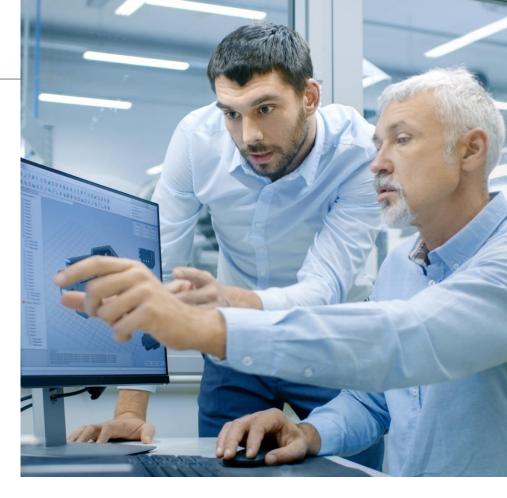
BP – extending field life in the North Sea

The aim of the Quad 204 project was to redevelop the Schiehallion and Loyal fields that lie 150km West of Shetland, with a view to extending the field life for 20 years post first oil. Wood provided engineering and project management for the concept design phase, through FEED and detailed design and supported engineering for manufacture, fabrication, test, installation, pre-commissioning and commissioning. We determined the integrity of existing systems and reconfigured existing structures to allow for future expansion without the need for additional structures.

BP – Gulf of Mexico

Wood provided procurement, cost control, schedule control, HSE action tracking, quality assurance/control, flow assurance, hydraulic modelling and human factors engineering to the Mardi Gras Transportation System which serves the development of five deepwater fields in the Green Canyon and Mississippi Canyon area.

A key achievement was the successful management of interfaces amount several onshore and offshore project contractors, regulatory agencies and stakeholders. This was important for the use of proprietary mapping systems and collaboration with regulatory agencies to select onshore pipeline routes with minimal to 'zero' impacts to Louisiana's environmentally sensitive wetlands.





Woodside – cognitive knowledge management

Australia's largest independent oil and gas company are using IBM Watson technology to extract decades of experience from an ocean of data. Woodside harnesses the power of cognitive computing to extract meaningful insights from 30 years of dense and complex engineering data. IBM® Watson® technology puts decades of knowledge at the fingertips of employees across the company, helping answer tough questions faster to enable fact-driven decision making on complex projects.

Digital reinvention in petroleum

Digital technologies are altering petroleum companies' operations, including exploration, transportation, refining and retail. These technologies are also creating unprecedented levels of industry dislocation, with new entrants fundamentally changing the economics of the business. To thrive, petroleum companies need to conceive and offer compelling new customer and end-consumer experiences, advance operational efficiencies, launch new digital offerings and build innovation ecosystems. We call this process Digital ReinventionTM.







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