

SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Tools and Technology in Support of Integrated Applications (1)

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THE FUTURE OF INTERNET OF THINGS AND THEIR APPLICABILITY TO SPACE

Abstract

A detailed study to explore the future of Industrial Internet of Things and their applicability to the Energy and Space industries based on the criteria of Unmanned and Remote operations is highly desirable. This is a synergistic technology with mutual benefits to both the energy and the aerospace fields. The nature of this technology and its applicability can encounter various challenges that will need to be assessed. These challenges include engineering, applications, business cases, and policy, among others.

These devices will primarily be internet-connected sensors and may be used to provide environmental metrics about extraction sites. By fully optimizing the IoT solutions available, an oil and gas company

will be able to leverage analytics to improve business and enhance process safety by deploying automated monitoring systems across major facility components.

The IoT environment could present numerous advantages for various space applications as well, including creating lighter vehicles due to fewer cables, and a greater payload capacity. It will also allow measuring important parameters, which may be difficult to instrument and deploy with conventional wiring systems.