IFS 2024 Predictions:

Top trends driving the digital transformation in Energy, Utilities & Resources sector

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Industry Challenges

- Climate change
- Meeting ESG/ sustainability goals
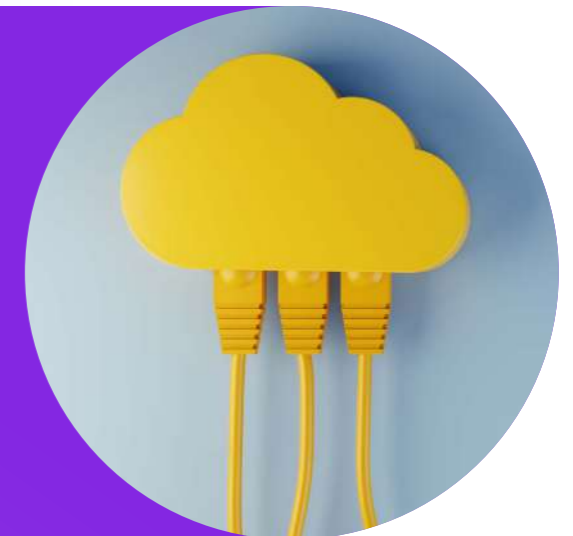- Legislations and regulations

- Aging infrastructure
- Supply chain

- Skills shortage
- Employee retention

- Increasing demands
- Rising customer expectations

What's Driving the Future State?

1 Climate change and the energy transition accelerating the number of assets needing to be deployed and maintained

2 New business and operating models demanding increased customer experience

3 Resource shortages, competition over technical skills

2024: Accelerate Digitalization.

The Energy, Utilities and Resources (EU&R) sector continues to prioritize digital transformation to drive meaningful operational efficiencies while meeting the growing rise in energy demand and tackling climate change.

In 2024, we will see how the industry accelerates their digitalization with integrated systems and leveraging disruptive technologies such as AI and automation.

In this eBook, we'll explore the drivers behind the biggest energy and utilities industry predictions, the role of technology in responding to these predictions that would help companies navigate the turbulent market dynamics.

Prediction #1: In 2024, demand for integrated systems with embedded AI and automation will increase by 50%

Digital transformation continues to be a central point of focus for the industry. In a [recent PWC report](#), "digital transformation" ranked second only to hiring and retaining talent as a top growth driver for the industry. This becomes even more relevant with the rapid adoption of AI, IoT, and other intelligent technologies.

In 2024, the Energy, Utilities & Resources sector will continue its evolution towards a composable, integrated environment, one that is capable of supporting the innovation and rapid change underway within the industry.

The Role of Technology

According to research by the Capgemini Research Institute, almost all – 95% – of utilities and energy companies surveyed globally have had conversations about generative Artificial Intelligence (AI) in the last 12 months.

Of those, apparently thirty-three percent have already begun to pilot generative AI for different use cases. Yet while almost 40% of utility and energy companies have established a dedicated team and budget for generative AI, 41% state they are taking a "watch and wait" approach.

IFS Blog: AI could Fuel the Utility of the Future

IFS Blog: Holistic optimization in Oil and Gas

How AI could be leveraged within EU&R?

Improving and creating a better customer experience with AI

Extending operating lifetimes: working smarter with Asset Lifecycle Management

Optimizing and planning resources – AI helps us understand what we will need

Master data catalogues and governance: rightsizing critical inventory

AI in offshore drilling and exploration: optimizing drilling campaigns

ESG targets: minimizing the carbon footprint

Prediction #2: Water management will become a business imperative in 2024, with sensor and smart meter deployments increasing by 100%

Clean, potable water isn't a privilege. It's a life necessity. With only 0.5% of water on the planet useable and climate change dangerously affecting the supply, managing this resource is one of the industry's most important responsibilities.

In 2024, the industry will be under increasing pressure to manage the water supply proactively, with smart meter deployment increasing substantially to improve leak detection. This will result in an increase in revenues utilities can invest in new infrastructure and technology.

The Role of Technology

To deliver a reliable supply and exceptional customer service, water and wastewater organizations require the capabilities to plan new network and infrastructure investments, ensure the supply resilience through optimum performance of existing above and below ground assets and optimize the field workforce.
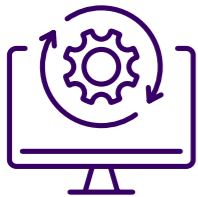
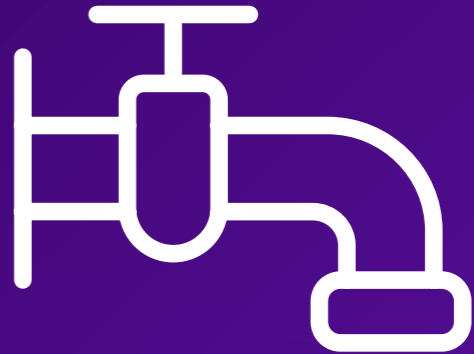3 ways can help achieve a digital water and wastewater ecosystem:

Unify customer communication and experience across all channels

Ensure reliability and effective asset planning with proactive inspection and asset maintenance

Automate workforce management with digital scheduling and dispatching for optimized, safe, and efficient operations

2 trillion Gallons of treated drinking water lost each year in the US

Ways to achieve a digital water and wastewater ecosystem

Prediction #3: In 2024, carbon capture and storage (CCS) practices will increase by 30%

According to the Paris Agreement, global warming must not exceed 1.5°C above pre-industrial levels. However, the planet is already 1.1°C warmer and emissions continue to rise. To keep global warming to 1.5°C, emissions must reduce by 45% by 2030, reaching net zero by 2050.

Unfortunately, experts are already predicting our current efforts will not be enough. A recent International Energy Agency (IEA) report advises that the path to net zero is narrowing, requiring greater ambition and implementation, with stronger international cooperation to turn things around.

In 2024, we will see new practices implemented in an effort to get us back on track–specifically, on carbon capture and storage (CCS).

The Role of Technology

According to the <u>Environmental and Energy Study Institute</u>, increasing the storage and recycling of CO2 are critical imperatives to stabilize the climate for continued human development.

Within the industry, some power plants have already implemented carbon capture and storage (CCS) strategies. For example, an ethanol plant in the US is recycling CO2 to produce algae, processing it into livestock feed, biofuels, and food and nutritional supplements. The program has succeeded, and the utility plans to install the technology at all nine ethanol refineries.

The success of these progressive CCS programs relies on a unified cloud platform, capable project management, and technology that precisely tracks ESG objectives in real time to meet carbon reduction goals.

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With a new company structure in place, together with a need to accelerate the delivery of new carbon capture and storage initiatives, we needed a solution that could drive our push for digitalization and generate operational efficiencies. The flexibility and versatility that IFS Cloud offered us in supporting ERP, EAM, and FSM on a single platform, as well as accelerating the delivery of digital capabilities, made it ideally suited to our needs."

Jonny Lotten, Head of IT and Digitalization, Hafslund Oslo Celsio

Learn more

Navigating what lies ahead

The Energy, Utilities and Resources sectors have an interesting journey ahead of them. With critical developments at play, like global warming and the effects of a shrinking water supply they must actively incorporate AI and automation into their organizations.

By leveraging these technologies, organizations in the EU&R sector will be well-equipped to strategically utilize operational intelligence across all areas of their operations. This will enable them to not only maintain optimal levels of productivity but also demonstrate a strong commitment to excellence and success across the enterprise. While at the same time driving forward sustainable practices.

Discover how IFS is helping companies like yours achieve their digital transformation goals.

Watch this video to learn how you can enable smart asset management and optimize a connected workforce with an industry-focused solution, in order to keep ahead of the curve and achieve business success.

Watch Video

Start Your Digital Transformation Journey **with IFS**

Learn more

About IFS

IFS develops and delivers cloud enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations. Within our single platform, our industry specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers – at the Moment of Service™. The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector.

Our global team of over 6,000 employees every day live our values of agility, trustworthiness and collaboration in how we support thousands of customers. Learn more about how our enterprise software solutions can help your business today.

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