Energy Industry Transformation Fueled by the Power of Data

The Frost & Sullivan and Red Hat webinar shines a light on market disruptions and the rapidly evolving energy industry. **Click here** to view the webinar, "Succeeding in a World Where the Future of Energy Disrupts Everything."

The energy industry is undergoing major transformative changes as oil and gas companies, the private sector, and consumers join utilities in owning and operating renewable power assets. Sensor-fed data, analytics, and the resulting insights will be key to managing and monetizing this transition.

Critical market conditions affect all aspects of the energy industry ecosystem.

- Oil and gas companies are rebranding as "energy companies," expanding business to include renewable power assets

- Utility grids are evolving from centralized models to a decentralized matrix of power generation and storage

- Challenges facing all energy industry players include a retiring workforce, skillset gaps, the IT/OT divide, cyber threats, mounting environmental regulations, and the inability to modernize technology and culture quickly enough

- Advanced data analytics can help improve operational efficiency and create new ways of doing business, but can also subject companies to cybersecurity vulnerabilities and competitive threats
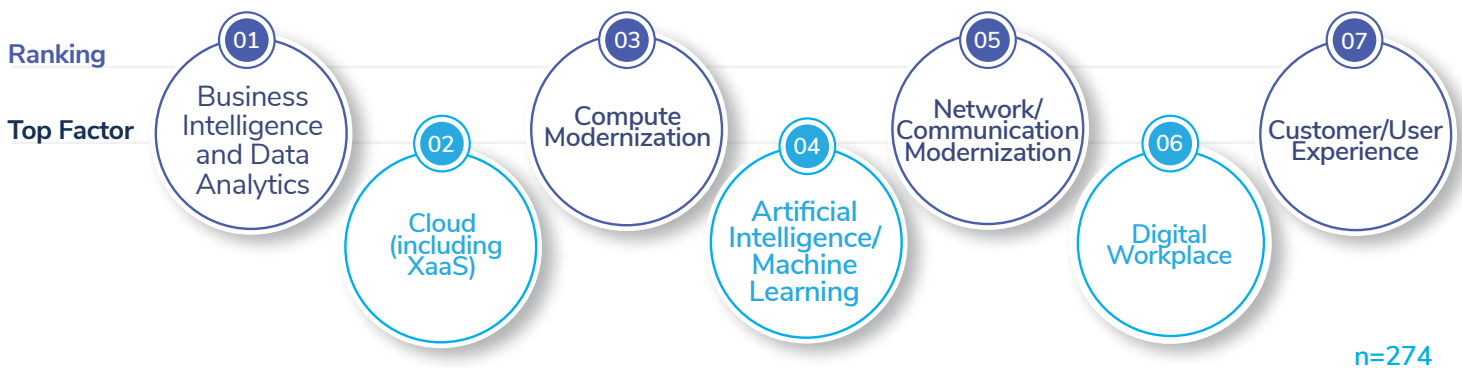
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> **Utilities are having to create new roles, new departments, develop new services, expand to the value chain partners, expand the number of companies they're working with, and also grow their data and storage, which can come with costs and risks as well. And they need to deal with legacy and unstructured data.**
>
> -Roberta Gamble, Partner and VP, Frost & Sullivan

Energy companies believe analytics-fed business intelligence and cloud services will have the most impact on their businesses.

Which technology areas do you expect to be a game changer for your enterprise?

Ranking

Top Factor

- 01 Business Intelligence and Data Analytics
- 02 Cloud (including XaaS)
- 03 Compute Modernization
- 04 Artificial Intelligence/ Machine Learning
- 05 Network/ Communication Modernization
- 06 Digital Workplace
- 07 Customer/User Experience

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Communications and connectivity are the leading areas for anticipated budget spending, followed by process automation and customer relationships.

What are the technology areas where your enterprise will be spending the largest proportion of budget?

Top Factor

Ranking

- 01 Communications /Connectivity
- 02 Process Automation
- 03 Customer Relationship Management
- 04 Core Systems
- 05 Infrastructure /Data Center
- 06 Internet of things
- 07 Cybersecurity

n=272

Partnering with the right solution providers enables energy companies to successfully address digital transformation challenges without losing focus of their core business capabilities.

The right partners bring vital benefits, such as:

- Open, cloud-based options that foster collaboration across value chain partners

- Fundamental, embedded security that protects business and customer data and streamlines regulatory reporting

- Future-proof solutions that evolve with the business and industry

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> **The technology investments that energy companies make should not only be open, but they should be future-proof. Transformation is not a one-time thing, it is continuous. Today, as you're modernizing, you should be cognizant of how you can continue that on a sustained basis so that it is more amenable to the changing markets, the changing consumer demands.**
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> -E.G. Nadhan, Chief Architect and Strategist, Red Hat