

ENERGY AND COMMODITIES

# DIGITALIZING THE COMMERCIAL PIPELINE OPERATIONS MANAGEMENT



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**The growing demand for natural gas will require nearly 60,000 miles of additional natural gas pipelines in North America through 2030, according to the Energy Information Agency (EIA).<sup>1</sup> However, Accenture reports that pipeline operators, faced with aging assets and a projected loss of 50 percent of existing workforce through natural attrition, will need to leverage emerging technologies to deliver major performance improvements.<sup>2</sup>**

The natural gas market is undergoing rapid change. While this change will offer substantial opportunity for the industry, the complexity of this evolving market will require market participants to seek innovative ways to manage their commercial pipeline operations more efficiently. To do so, operators will require real-time, accurate data and operational analysis tools to manage pipeline capacity, storage transactions, constraints, and shipper and marketer nominations and requests.

With pipeline operators looking to automate manual, spreadsheet-based processes, many are turning to software offerings. Using manual spreadsheets and processes to manage the commercial pipeline operations can be time consuming and risky. Software solutions – whether installed or web-based, software-as-a-service (SaaS) solutions – are offering the pipeline operators an easy way to streamline shipper nomination entry, pipeline scheduling, contract maintenance, allocations, imbalance management and invoicing processes to enhance operational efficiencies.

In this white paper, we review 10 steps to digitalizing the commercial pipeline operations management by moving away from spreadsheets to a modern, web-based solution.

- 1) Establish a single data repository** – Today's modern solutions provide a wealth of capabilities that have been developed after more than a decade of in-production usage at multiple interstate and intrastate pipelines. The mature systems provide comprehensive functionality that enables straight-through processing from contract initiation, tariff maintenance, shipper nominations, scheduling, allocations and invoicing. These capabilities, features and functions – on a single platform – eliminate the need to manage multiple versions of spreadsheets and database backups, thus eliminating data inconsistencies and reconciliations, errors and possible data loss.
- 2) Save time** – By managing the entirety of the business processes involved in moving shippers' gas, from receipt to delivery, today's modern, cloud-based solutions can automate and streamline what were once largely manual processes, including accounting, invoicing and reporting.
- 3) Facilitate quicker insights** – Utilizing the latest web technologies, real-time operational data from SCADA or third-party measurement systems can be quickly integrated into the daily scheduling process, facilitating rapid decision-making and eliminating the need to make best estimates based on old, and often outdated, data and information.
- 4) Maintain historic data** – Leveraging the almost infinite storage and data processing capabilities of the cloud, pipeline personnel can access and quickly recall historical data and information, ensuring NAESB compliance, and the ability to provide rapid responses to inquiries from shippers, pipeline management and regulators.
- 5) Keep the IT costs low** – Leveraging the scalability and convenience of the cloud, pipeline operators can eliminate much of, if not all of, their expenses to maintain IT servers, and reduce much of their reliance on specialized IT staff. Further, with a pay-as-you-go licensing model, the traditional, large up-front license fees associated with on-premises software installations are eliminated.
- 6) Provide web access to your shipper clients** – With a functionally rich, web-based shipper interface, shippers can access their critical information, submit nominations and make updates in real time. These capabilities will reduce shippers' reliance on their pipeline representatives and eliminate much of daily phone calls and questions that can overburden pipeline personnel and slow business processes.
- 7) Keep up with new functionality, market changes and regulatory requirements** – A true cloud-based solution allows for the highest level of vendor support. With simultaneous vendor and client access (under the control and permission of the client), vendor support teams can provide more timely responses to client issues and support questions. Additionally, in cloud environment, upgrades can be accomplished seamlessly with automatic upgrades as new capabilities are released.
- 8) Scale to meet business requirements** – No two pipeline operators are alike – each has different assets, operating constraints, growth opportunities and strategies; and as such, the functional requirements of each will differ and those needs will change over time. SaaS deployment enables the system to change and grow with customer requirements – functionality upgrades can be seamlessly added, user counts can be easily changed to meet staffing requirements, and processing capacity can be scaled automatically to ensure the system is operating at peak performance during periods of highest processing usage and user demand.

<sup>1</sup> <http://www.eia.gov/naturalgas/pipelines/EIA-NaturalGasPipelineProjects.xls>

<sup>2</sup> Accenture, Digital Innovation for Pipelines: [https://www.accenture.com/t20150523T022424Z\\_w\\_w\\_/nl-en/\\_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub\\_1/Accenture-Digital-Innovation-Pipelines-Leveraging-Emerging-Technologies-Maximize-Value.pdf](https://www.accenture.com/t20150523T022424Z_w_w_/nl-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_1/Accenture-Digital-Innovation-Pipelines-Leveraging-Emerging-Technologies-Maximize-Value.pdf)fla=en

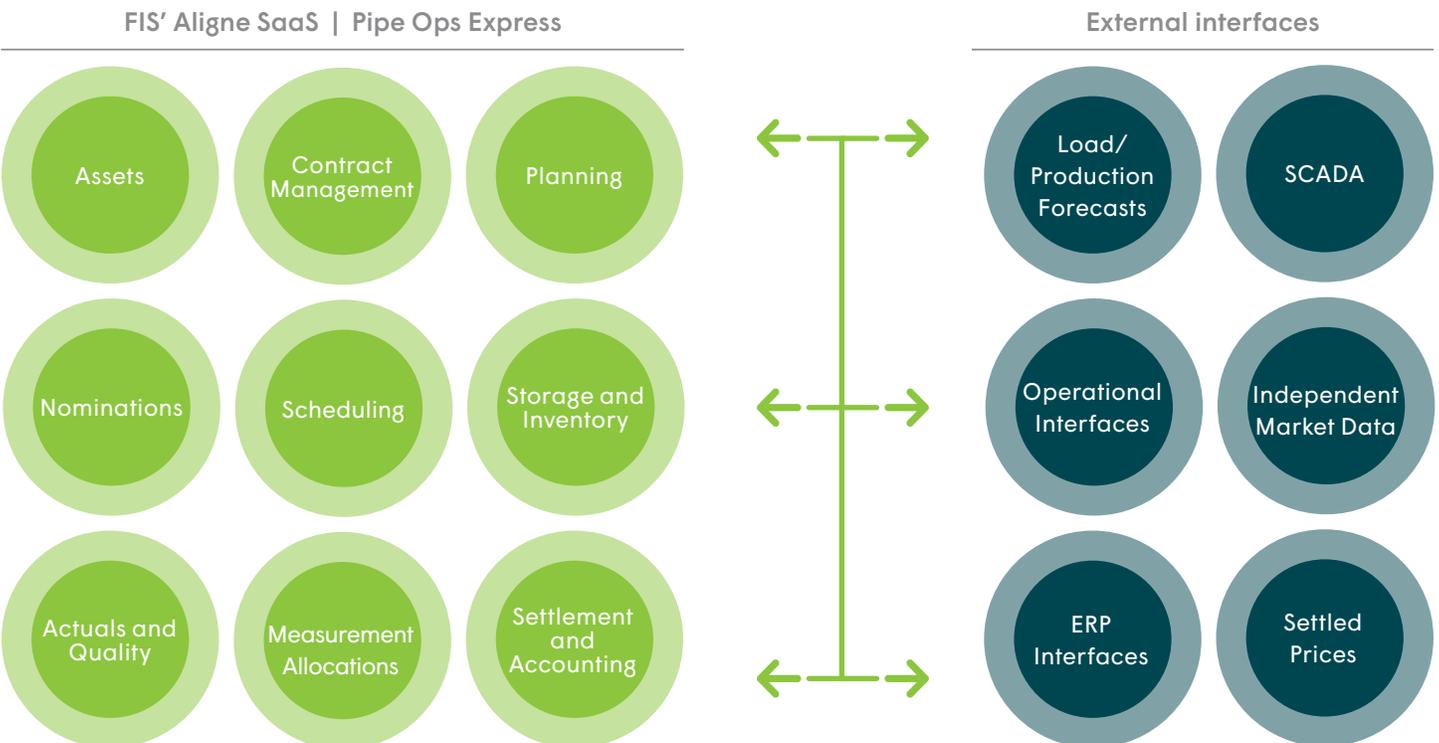
- 9) **Ensure cybersecurity of systems and data** – Given the high-profile data breaches that have plagued dozens of companies over the last year and have caused severe damage to those companies’ reputations, IT leaders are becoming more aware of the security vulnerabilities inherent in their own data centers. Given this awareness, cloud-deployed solutions are increasingly being recognized as the most secure solution for safe guarding critical business data. With the highest levels of data security, reliability and access, today’s state-of-the-art cloud facilities are simply the safest choice and outperform virtually all end-user-operated data centers.
- 10) **Enable fast and simple implementation** – The latest generation of SaaS pipeline systems utilize proven and standardized business models that can address a wide variety of processes without customizations, extensions or add-ons. Additionally, utilizing web-services and standardized APIs, external data from SCADA, prices and corporate accounting solutions can be quickly integrated with the system, reducing implementation time and costs. Typically, such solutions can be implemented and in production in 60 to 90 days.

### Summary

Every pipeline operator is different. Whether they are operating the FERC-regulated U.S. interstate, regional or CRE-regulated Mexican natural gas pipelines, each maintains a unique strategic vision as to how their business should operate in order to achieve the greatest return for their shareholders. The combination of these characteristics mandates that each maintains its own unique software and technology requirements as well – including budget constraints, functional needs, and support and deployment for its critical systems. Our [installed and SaaS Aligned solutions](#) for commercial pipeline operations management can address those requirements and provide a range of options that can help lower system costs and gain rapid access to critical business insights. And, just as importantly, our deep experience and broad capabilities ensure we can provide our customers with market-leading solutions within the technology delivery frameworks and commercial terms that best fit their needs – all supported by the market-leading capabilities in providing full managed services support to our customers.

### Solution overview

A single platform delivered as a SaaS solution via internet.



### FIS Solutions for Energy & Commodities

FIS solutions for energy and commodities help utilities and retailers, pipeline and storage operators, marketers and traders, as well as integrated energy companies, compete efficiently in global markets, by streamlining and integrating the trading, risk management and operations of physical commodities and their associated financial instruments. Through real-time data, connectivity and analysis, FIS solutions help you achieve transparency and regulatory compliance, optimize end-to-end transaction and operational lifecycles, and meet time-to-market needs with flexible deployment options. As your technology partner, we can help take advantage of the latest innovation and explore new opportunities. For more information, email us at [getinfo@fisglobal.com](mailto:getinfo@fisglobal.com)

### About FIS

FIS is a global leader in financial services technology, with a focus on retail and institutional banking, payments, asset and wealth management, risk and compliance, consulting and outsourcing solutions. Through the depth and breadth of our solutions portfolio, global capabilities and domain expertise, FIS serves more than 20,000 clients in over 130 countries. Headquartered in Jacksonville, Florida, FIS employs more than 53,000 people worldwide and holds leadership positions in payment processing, financial software and banking solutions. Providing software, services and outsourcing of the technology that empowers the financial world, FIS is a Fortune 500 company and is a member of Standard & Poor's 500® Index. For more information about FIS, visit [www.fisglobal.com](http://www.fisglobal.com)



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