



The digital transformation of energy & industrials

Bank of America 2021 Digital Energy Conference

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EVP of Regions, Alliances & Enterprise Sales

September 30, 2021

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Good morning. Thank you to Chase Mulvehill and the Bank of America team for inviting me to speak today, and for all of you who are joining this session remotely.

This presentation (and oral statements made regarding the subjects of this release) may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, (each a "forward-looking statement"). The words "anticipate," "believe," "ensure," "expect," "if," "intend," "estimate," "project," "foresee," "forecasts," "predict," "outlook," "aim," "will," "could," "should," "potential," "would," "may," "probable," "likely," and similar expressions, and the negative thereof, are intended to identify forward-looking statements. There are many risks and uncertainties that could cause actual results to differ materially from our forward-looking statements. These forward-looking statements are also affected by the risk factors described in the Company's annual report on Form 10-K for the period ended December 31, 2020 and quarterly reports on Form 10-Q for the periods ended March 31, 2021 and June 30, 2021 and those set forth from time to time in other filings with the Securities and Exchange Commission ("SEC"). The documents are available through the Company's website at: www.investors.bakerhughes.com or through the SEC's Electronic Data Gathering and Analysis Retrieval ("EDGAR") system at: www.sec.gov. We undertake no obligation to publicly update or revise any forward-looking statement.

Before I begin, please note the disclosure around forward-looking statements that I may make today. As always, you can refer to our latest SEC filings for further details.

Today, I am going to provide an update on our digital and Industrial Asset Management strategies at Baker Hughes and how we are leveraging our digital capabilities to deliver unique solutions to the energy and industrial sectors.

Digitally transforming the energy and industrial sectors



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Last year at this digital forum, I spoke about three dynamics that were accelerating the digital transformation in the energy sector: COVID-19, the supply-demand imbalance in global oil markets, and the energy transition. All of these factors converged in 2020 to help drive an even greater industry focus on digital capabilities and improving operating efficiency at an asset and enterprise level.

Today, the impacts of COVID-19 have partially subsided, and the oil markets are now back into balance, but the focus on climate change and the energy transition has accelerated further. The call for a net zero world has intensified as people push governments, financial institutions, and corporations for more aggressive actions to combat climate change. Most notably, we have seen traditional oil and gas companies shift their strategic focus and capital allocation, while companies across multiple industries are making net zero pledges a part of their broader objectives.

We believe that this accelerating focus on carbon emission reductions creates significant opportunities for energy technology companies like Baker Hughes. While most of the attention around energy transition tends to focus on new clean energy technologies like hydrogen or carbon capture, improvements in operating efficiencies are expected to be one of the primary drivers behind reducing the world's carbon emissions.

In fact, energy efficiency represents more than 40% of the emissions abatement needed by 2040, according to the IEA's Sustainable Development Scenario. Digital technologies are transforming the energy landscape and creating a new generation of solutions. The IEA estimates that even by using readily available technology, the world could gain more than 12% of efficiency based on 2018 global electricity consumption. By 2040 that improvement potential could nearly double, representing about one-quarter of global electricity consumption.

In order to drive improvements of this magnitude, digital technology must serve as foundational in this effort. More specifically, energy and industrial businesses will require remote operations and automation technologies that reduce travel and minimize human error. Other important objectives will be to increase asset availability and optimize maintenance through condition monitoring and asset performance management, as well as solutions that can enhance process and production capabilities and lower emissions. Leaders in the space will provide not just software but expert teams that act on data-driven insights, and enterprise-scale Artificial Intelligence will be critical to enhance and accelerate domain-driven physics and engineering-based solutions.

In this presentation, I will walk you through our strategic initiatives and capabilities in these areas, and how Baker Hughes can provide energy that is cleaner, safer, and more efficient.

Differentiated digital offerings for customer outcomes



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Baker Hughes is uniquely positioned as an energy technology company to drive decarbonization and digital acceleration across multiple industries. Our core portfolio offerings provide customers with a range of solutions and technologies to drive outcomes, improve efficiency and decarbonize existing operations. We are also expanding into new areas like carbon capture, hydrogen, energy storage and emission detection and management.

Digital technology accelerates our ability to deliver these technologies, building on our core domain expertise with the software and services we have built, incubated, and partnered to deliver to customers.

Two broad areas that we believe have the most digital potential for Baker Hughes are oilfield digital and remote operations, and Industrial Asset Management.

This year, our oilfield services business expanded its digital capabilities, allowing for an increased focus on remote operations, data management, and advanced analytics capabilities. Our oilfield digital and remote operations portfolio supports integrated or individual experiences across every stage of the well lifecycle, driving better outcomes for customers and better margins and productivity across our OFS business.

We also continue to grow our Industrial Asset Management offerings to serve customers across energy and industrials and generate new value streams. This growing part of our portfolio encompasses a range of digital services and products around asset performance, asset inspection, and emissions management. As the world strives towards a net zero target in the coming decades, enterprise level Industrial Asset Management capabilities will be a key driver by enabling better operating efficiency, lower energy consumption, and reduced emissions across multiple industries.

Across Baker Hughes, the BakerHughesC3.ai alliance accelerates our digital portfolio. With BHC3, we are able to augment our existing portfolio to deliver holistic, AI-enabled solutions, providing the domain-specific, predictive and scalable digital solutions that customers today are demanding.

Evolving Enterprise AI

February 2021

Open AI Energy Initiative (OAI)



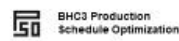
February 2021

PETRONAS adopts BHC3 technology



March 2021

BHC3 Production Schedule Optimization released



June 2021

KBC adopts BHC3 technology



September 2021

MEG Energy deploys BHC3 technology



Customer use cases



Global chemical company

Democratization of data science across engineering and operational teams



US chemical manufacturing company

AI and machine learning to optimize steam use and maximize clean power generation



Shell

Extension of BHC3 AI Suite use to address reliability, asset integrity, and process optimization with enterprise AI applications.



Bentley Nevada and BHC3

Driving collaboration on BHC3 accelerating predictive intelligence to System 1 condition monitoring



It has now been just over two years since we announced our investment in C3.ai and launched the BHC3 alliance. We have seen continued progress in the partnership over the past year, growing an ecosystem with our partners, innovating with new products, delivering for customers, and leveraging the technology across Baker Hughes.

In the first quarter, we launched the Open AI Energy Initiative. The OAI answers the challenge many customers face with AI; quickly building AI models for specific assets that can then interoperate with other software deployments. Together with C3 AI, Microsoft and Shell, we launched the OAI to offer a framework for interoperable, domain-specific solutions. We have already worked with a customer to implement OAI modules, which is recognition that the industry is becoming more open to new kinds of collaboration. We believe this kind of ecosystem approach will grow and that the OAI will see continued interest from new contributing members.

Also, during the first quarter, we were pleased to release our latest BHC3 application, BHC3 Production Schedule Optimization. BHC3 PSO uses AI to generate accurate demand forecasts and schedules to help minimize costs and improve the supply chain performance for highly engineered products and services.

BHC3 PSO has already demonstrated success with trial customers. For example, a large hydrocarbon processing company that configured BHC3 PSO for a petrochemical plant was able to optimize production schedules and reduce manufacturing costs. After a 16-week trial, the company proved they could achieve a 20% improvement in demand forecasting accuracy by generating optimal production schedules without manual adjustment and adopting machine learning models.

We have also seen continued adoption of AI for our customers.

This month we announced that MEG Energy has deployed BHC3 Production Optimization to improve operational efficiency, productivity, and to better visualize risk across more than 300 thermal production wells.

The MEG deployment extends pre-existing, domain specific capabilities from Baker Hughes, monitors moment-to-moment operations, allows seamless integration between engineers and field staff, and creates actionable predictive insights to enhance the daily operational workflow for MEG Energy's production engineers and operators. This is a great example of the joint value that we can deliver through the BHC3 alliance.

The BHC3 alliance continues work with Shell, a lighthouse C3 AI customer that has extended its use of the BHC3 AI Suite across its operations to target use cases largely focused on the reliability and availability of critical assets and systems.

We have also entered into a number of additional commercial agreements with several large customers and are focused on delivering BHC3 technology to support their digital transformation agendas. Importantly, we are seeing commercial success outside of the traditional oil and gas markets, with commercial agreements in the chemicals and midstream markets.

Lastly, another important element of our digital strategy is how we implement these AI applications together with the strong digital portfolio across Baker Hughes. The market wants to see that we are delivering interoperability of BHC3 applications with other Baker Hughes software to simplify adoption and improve the outcomes that can be delivered by connecting disparate data. We are currently working on this with our Bently Nevada business, building out standard data adapters between our System 1 condition monitoring software and the BHC3 Reliability application. By augmenting our existing capabilities with AI, we are striving to improve the anomaly detection capabilities we can offer customers.


Oilfield digital offering

ABOUT OUR PORTFOLIO

- 1** global team across 12 countries
- ~15k** OFS field engineers supported
- 19** 24/7 remote operations global customer support centers
- ~30% / ~70%** External / internal user mix
- 90+** Customer service NPS score

DIGITALLY ENHANCED OILFIELD SERVICE DELIVERY				
SOLUTIONS	Well Planning Integrated well planning experience built around the user	Well Construction Data science paired with best-in-class drilling & completions services	Well Production Maximized output and efficiency on production asset operations	
	Remote Operations Infrastructure, processes, training, & automation solutions to run and monitor equipment from offsite	Data Management Systematic, automated process for data aggregation, standardization, & maintenance of unified repository	Advanced Analytics Physical and operational models layering AI, ML, & domain expertise, for better, faster, more informed decisions	Edge & Compute Hardware, software, & connectivity to collect, analyze, & act on data locally for greater speed, security, & reliability
CAPABILITIES				

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Turning to our oilfield digital portfolio, we have a global offering with a focus on remote operations, data management, advanced analytics, and edge operations. Technical software in this space is complex and drives critical business performance indicators like safety, productivity, and improved service quality. To execute with speed and quality in this space, we have formed a single, global organization that focuses on digital oilfield outcomes. This team has supported Baker Hughes with technical software for decades and is more recently servicing operators.

The oilfield digital portfolio supports integrated or individual experiences across every stage of the well lifecycle, by bringing together multi-disciplinary teams of domain, data science, and software engineering experts. We are also developing technologies to play across new energy frontiers, including geothermal and CCUS.

We offer multiple engagement models to deliver the value of digital for varied customer situations, ranging from supporting our traditional oilfield services, to enabling integrated well services and offering remote monitoring and surveillance, data management and analytics-as-a-service, to name a few.

Through our oilfield digital offerings, we have been able to drive outcomes for customers across a wide range of engagements. For example, by using AI-enabled predictive analytics, our team was able to reduce the time for drilling hazard analysis from 2-3 weeks to a matter of minutes, enabling the customer to unlock better insights and dedicate more time on higher-value planning activities.

We are also able to drive enhanced safety for our customers and our own operations. For example, in a project in the North Sea we were able to reduce the number of people in the “red zone” by 50% through remote operations, with personnel moved to onshore remote service centers to streamline operations.

As we look to drive further digital adoption for our OFS customers, we continue to view the complementary nature of BHC3 technology as a differentiator in the industry and an accelerator of our oilfield digital portfolio. We continue to push our teams to develop technologies and offerings further, that help to break down data silos in the upstream with a focus on data streaming and data quality.

Scaling remote operations with Saudi Aramco

Largest deployment of remote operations in Baker Hughes' history

Objectives	Deployment
Consistent access to real-time data across fields, wells, service providers	Concurrent data aggregation from 200+ sites
Increased automation for improved safety and performance	Integrated data streaming of oilfield data
	WellLink software applied across the field for real-time drilling insights

100+ team ~95% localized

- Accelerating deployments with Enterprise AI
- Analyzing historical oilfield data at-scale
- Trends analysis and anomaly detection using machine learning
- Predictive intelligence to improve performance across the upstream

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As I discussed at last year's conference, Baker Hughes is a leading provider of remote operations in the oilfield, which is a foundation of our digital strategy in OFS. We believe that the increased deployment of remote operations capabilities in our OFS business can represent an ecosystem that helps reduce HSE risks, enhances performance quality, improves efficiency, and delivers greater results for our customers. We have seen continued success in our ability to scale and deploy our remote operation offerings across a growing number of customers and operations around the world. In 2019, a little more than 50% of our drilling operations were conducted remotely, and today it is nearly 90%; more than 50 customers across 12 countries adopted remote drilling operations for first time in 2020.

Earlier this year, we were extremely pleased to announce the largest deployment of remote operations in our history with Saudi Aramco. We are deploying our remote operations digital technology across all of Aramco's drilling operations, encompassing over 200 sites, working across all well types. Baker Hughes is providing a single solution that covers data aggregation from the edge; real-time, unified data streaming and visualization; data management; software development services; rig-site digital engineers; and monitoring personnel.

The project supports Aramco's ongoing efforts to drive further digital opportunities and initiatives and to enhance operating performance and reduce emissions. Our teams have been working closely to deploy the technology 50% faster than originally planned, despite working under pandemic conditions. As part of Baker Hughes' localization strategy, the team is staffed with 95% Saudi nationals who are being cross trained on essential digital competencies in data science, data management, and IoT capabilities.

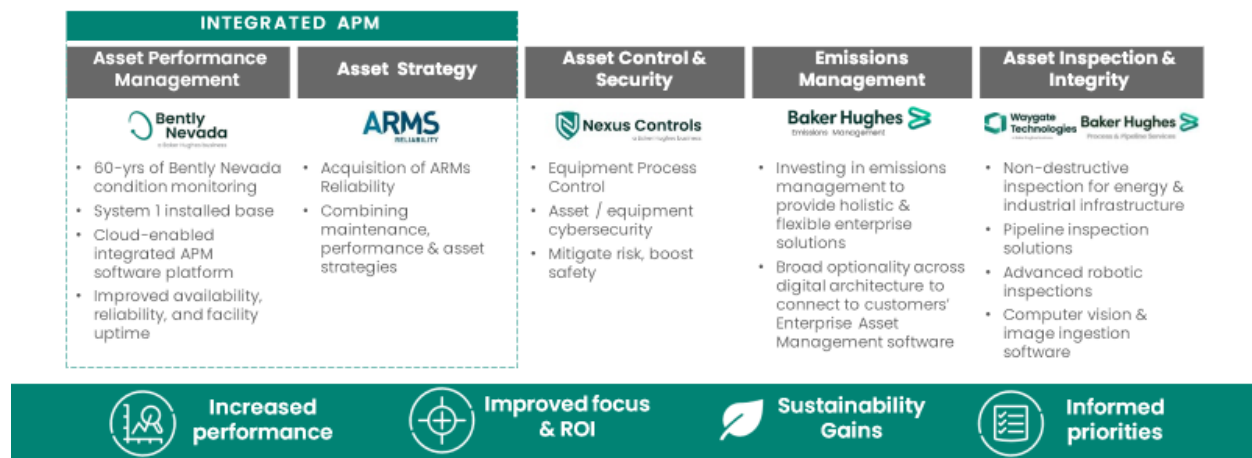
Through the project, remote monitoring personnel receive faster, higher quality, standardized, real-time data delivered through a modern user experience, enabling enhanced well monitoring and management. Field-based personnel have access to a unified view of wellsite operations from all providers on location, enabling effective and proactive mitigation of drilling hazards. Office-based personnel have easy access to current and historical well data for quick visualization and benchmarking, enabling proactive operations management with a direct line to the wellsite.

Overall, our oilfield digital team has delivered a one-stop shop solution from asset connectivity to data aggregation, visualization and insights. This is an example of how we can combine our domain and digital expertise to provide differentiated solutions to support our customers' digital transformation efforts.

Our remote ops footprint has grown in sophistication over the last two decades, learning and improving across a cumulative portfolio of over two thousand unique customers in the drilling and production space. Whether it's a smaller E&P in North America Land, or larger IOCs and NOCs – the oilfield digital team is capable of scaling up and down to execute monitoring, optimization, and protection of operations across billions of dollars of assets. We will continue to invest in our remote operations product and see it as a gateway to our efforts with automation and AI enabled analytics.

Industrial Asset Management

Technology and Engineering Expertise Accelerated by Expansive, Intelligent Digital Solutions



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In addition to capitalizing on our remote operations and oilfield digital capabilities, another major area of focus is Industrial Asset Management. IAM is a combination of Baker Hughes' expertise in engineering, premium industrial sensors, and advanced analytics and software platforms – supported by the best AI-capability in the sector today.

Importantly, Baker Hughes is starting from a position of strength, through an industrial legacy in managing the most critical and complex pieces of equipment that are core to our customers' operations.

We define Industrial Asset Management into five complementary segments:

- i. **Asset Performance Management:** APM solutions aim to improve the reliability and availability of physical assets and are already deployed in some of the world's most demanding industrial sectors, delivering up to a 30% reduction in maintenance cost and up to a 45% reduction in downtime. With over 60 years of Bently Nevada condition monitoring experience and a System 1 installed base of over 10,000 units across 90 countries, Baker Hughes already has a strong cloud-enabled software platform for integrated Asset Performance Management. Adding AI-driven machine health as a service to industrial APM will dramatically increase its predictive capabilities and can also help lower energy consumption and emissions in the industrial space, which currently consumes over 35% of the world's energy. The APM market is expected to grow at a compound annual growth rate of 10% to 2026, according to the APM Market Global Forecast.
- ii. **Asset Strategy:** Asset Strategy entails optimizing asset maintenance plans, predicting performance, and eliminating defects. Our recent acquisition of ARMS Reliability, coupled with our expertise in TPS Services, provides a broad offering that can combine maintenance, performance, and asset reliability strategies that are all crucial to running the most complex energy and industrial systems.

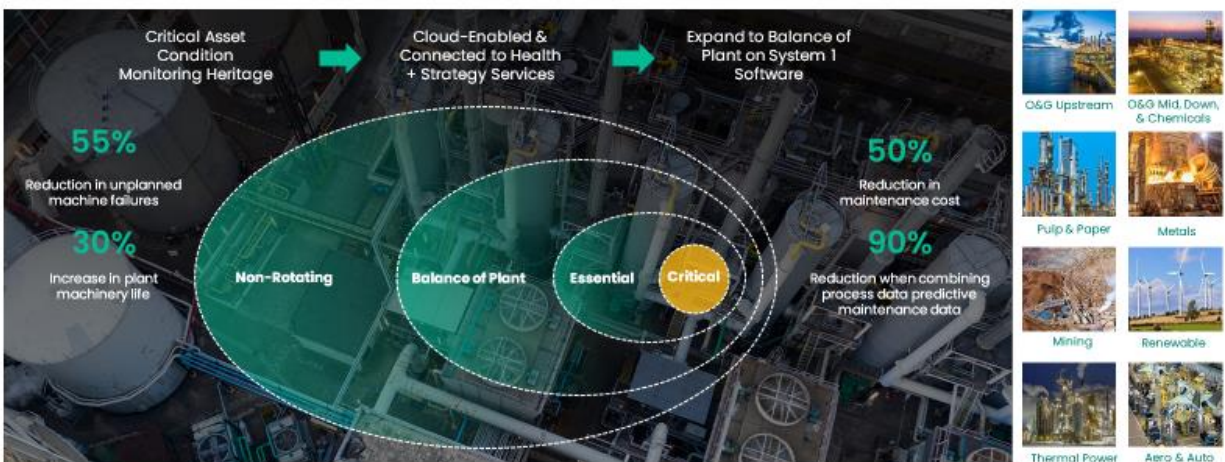
- iii. **Asset Control & Security:** this includes equipment process controls and cyber security to help mitigate risk and improve safety. Our Nexus Controls business brings together the ability to independently offer control solutions for customers' assets, while also enabling cybersecurity capabilities that are increasingly required as they continue to transform their own digital operations.
- iv. **Emissions Management:** we are investing in our emissions management portfolio, bringing enterprise solutions that have material impacts on our customers' ability to reduce, certify, and monetize their own emissions footprint. Importantly, we are working to ensure that our solutions can connect effectively with our customers' enterprise asset management software. Our broad digital architecture provides the optionality required as our customers look to connect their workflow databases into a holistic asset management system.
- v. **Asset Inspection & Integrity:** these include core capabilities in non-destructive testing inspection, utilizing best-in-class industrial X-ray, ultrasound, video borescopes, EMAT tools, pipeline solutions, and advanced robotic inspections.

The enterprise AI offering from BHC3 will extend across our Industrial Asset Management capability, providing the data integration, unification and analysis at-scale needed for large enterprises and integrating predictive capabilities into individual deployments.

Our current IAM offerings will continue to expand as we invest in new capabilities and extend our technology, both physical and digital, into new areas of expertise to continually transform our business to better serve our energy and industrial customers' needs.

Scaling Industrial Asset Management

Integrated APM drives differentiation with holistic asset expertise



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As we think about the potential of Industrial Asset Management, the assets that we refer to are broad in context. Today we support a wide range of projects, including LNG facilities, refineries, power plants, wind farms, automotive manufacturing, and consumer electronics. Importantly, we monitor the most critical assets at these facilities. As we look to the future, we are building and scaling our current offerings to be able to monitor and maintain other essential assets and to continue to expand our capabilities for the entire balance of plant.

We are also positioning our integrated APM offerings into new energy frontiers, where we will be able to support new geothermal assets, new CCUS projects connected to large emission assets, and new hydrogen and chemical plants with similar capabilities.

The further integration of our Industrial Asset Management solutions should only yield better outcomes for our customers and new growth opportunities for our commercial offerings.

Let me give you an example of one of our global integrated energy customers. Today, System 1 is running on all of their critical assets – upstream, midstream, and downstream. We have embedded Bentley Nevada and TPS engineers in their facilities to help mitigate challenges in real-time, utilizing our broad range of software solutions. ARMS Reliability is supporting the customer in vulnerability analysis projects on their largest assets, and we are running maintenance strategy programs on eight of their global regions. Nexus Controls systems are connected to their gas turbines and we are utilizing our cybersecurity solutions on their plants and infrastructure. And our Advanced Inspection business under Waygate Technologies is providing corrosion inspections on a variety of global assets, flare stack inspections and tank inspections across their global fleet.

Separately, we announced a strategic framework alliance agreement last week with SABIC for integrated Asset Performance Management services. This five-year alliance includes the delivery of Bently Nevada's plant-wide condition monitoring and machine asset protection services across over 1,200 assets at over 16 SABIC sites in Saudi Arabia. The partnership with SABIC will deliver localized maintenance, support, and more streamlined, assured access to Bently Nevada's full suite of hardware, software, and services, including the System 1 platform.

As these examples suggest, we have a strong position today in monitoring critical industrial assets across a range of different facilities. The next steps in our IAM strategy will be expanding our presence to non-critical assets and developing software capabilities to allow us to cover the entire balance of plant.

We will also look to offer additional commercial solutions through a software-as-a-service framework, allowing customers to enhance their operations and more effectively manage their opex budgets, as well as providing a strong recurring revenue model for Baker Hughes.

Taking digital forward

- Digital is an enabler of energy and industrial technology
- Baker Hughes driving digital transformation
- Domain-specific, differentiated digital portfolio
- Remote operations driving safer, cleaner more efficient operations in upstream
- Industrial asset management a significant opportunity for industrial energy technology
- BHC3.ai is an AI accelerator across our digital portfolio
- Continued digital growth from organic innovation, collaborations, and partnerships

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In summary, digital technologies are key enablers of energy and industrial technology, transforming the way these industries work.

Our domain-specific digital portfolio, coupled with our existing installed base, partnerships, and people are Baker Hughes' digital differentiators.

The evolution of digital is enabling remote operations, driving safer, cleaner, and more efficient operations in upstream oil & gas for our customers.

Our Industrial Asset Management offerings also provide significant opportunities for our customers to improve industrial asset health and productivity and supporting low carbon solutions.

We remain committed to delivering these capabilities today while innovating for the future. BHC3.ai complements our existing portfolio to deliver holistic, AI-enabled solutions.

We continue to expect to see digital growth across the Baker Hughes portfolio from organic innovation, collaborations, and partnerships.

Thank you for the time and thanks again to Chase and the Bank of America team for inviting me to speak today. I look forward to answering some of your questions.

