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October 25-26, 2021

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October 25, 2021 (Morning)

Time	geoLOGIC systems Stage	All Other Rooms
7:30-8:00 AM	*Breakfast available in Exhibitor Area*	Closed
8:00-8:10 AM	**Introduction & Welcome** Megan Potter (Houston Leadership Team)	Closed
8:10-9:00 AM	**PPDM Update** Trudy Curtis (PPDM Association)	Closed
9:00-9:45AM	**Keynote Presentation** Greg Leveille	Closed
9:45-10:15 AM	**The Paths to the Cleanest and Most Economic Industry in the World** Lewis Matthews (Project Geminae)	Closed
10:15-10:30 AM	**Morning Break** - Snacks in the Exhibitor Area	Closed
10:30-12:00 PM	**PPDM Association Board of Directors Panel Discussion** Al Huber, Daniel Perna, Curley Thomas, David Hood, Ali Sangster, Trudy Curtis (PPDM Association Board of Directors) Moderator: Megan Potter (Houston Leadership Team)	Closed
12:00-1:00 PM	**Lunch**	Closed

Sponsor Spotlight - geoLOGIC systems ltd. (Stage Sponsor)

geoLOGIC systems ltd. is based in Calgary, Alberta, Canada and has been providing high-quality, integrated data and analytics to the upstream oil and gas industry in Western Canada and elsewhere for almost 40 years. geoLOGIC's relentless focus on innovation, quality, and service has made it the trusted standard in the upstream Canadian industry. Customers include exploration and production companies in oil & gas and related products; pipeline and midstream companies; service companies; the financial sector government and regulatory organizations, and educational institutions. Key products include geoSCOUT, a decision-support tool providing high quality data and analytics for all disciplines within the oil and gas industry, and gDC, geoLOGIC's comprehensive upstream oil and gas database.

For more information, please visit www.geologic.com or email info@geoLOGIC.com.

geoLOGIC SYSTEMS

Houston Professional Petroleum Data Expo

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October 25, 2021 (Afternoon)

Time	geoLOGIC Stage *Data Consumers Theme*	EPAM Room *Next Generation Data Management Theme*	Confluent Room *Work Transformation Theme*	Infosys Room *Tech Trends in Data Management Theme*	Bahwan Cybertek Room
1:00-1:45 PM	**Alleviate Hydrocarbon Data Management Challenges Using Cloud Computing on Non-Operated Assets** Venkataraman Gandhi (Infosys)	**Data & Digital Transformation In Upstream** Orestes Appel (IBM)	**Geoscience Data - Connecting Dots** Boris Makarov & Fariha Alam (Apache Corporation)	**Enterprise Knowledge Graphs (EKG) in O&G: Demonstrating the Value of KGs for the Data-Driven Organization** Ramakrishna Manne, Sachin Padhye & Jacob Thawabi (Infosys)	**EPAM – Your Energy Digital Transformation Partner** Robert Best (EPAM Sponsor demonstration)
1:45-2:00 PM	Afternoon Break - Snacks in the Exhibitor Area				
2:00-2:45 PM	**PPDM Association Board of Directors - Strategy Discussion** Curley Thomas (PPDM Association Board of Directors)	**10 Things I Hated About Subsurface Data Management - Until The OSDU™ Forum** Jane McConnell (Teradata) (Remote)	**The OSDU™ Data Platform: The Promise and the Journey** Patrick Meroney & James Lamb (Katalyst Data Management)	**America's Energy Pathways: LNG, Infrastructure and Digital Transformation** Mark Stansberry (the GTD Group)	**Innovating with Confluent Event Streaming to Reduce Cost, Increase Safety, and Protect Our Environment** John Bledsoe (Confluent Sponsor Demonstration)
3:00-3:45 PM	**Stream Processing** John Bledsoe (Confluent)	**Extending the OSDU™ Data Platform with the Geospatial Consumption Zone (GCZ)** Brian Boulmay (ESRI)	**TBD**	Closed	Closed
4:00-6:00 PM	**Cocktail Reception** *Join the other attendees for some relaxing networking time in the Exhibitor area, including some snacks, beverages and games.* ***Sponsored by Snowflake***				

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October 26, 2021 (Morning)

Time	geoLOGIC Stage *Data Consumers Theme*	EPAM Room *Next Generation Data Management Theme*	Confluent Room *Tech Trends in Data Management Theme*	Infosys Room *PPDM Theme*	Bahwan Cybertek Room
7:30-8:00 AM	*Breakfast available*				
8:00-8:45 AM	**Applying WIAW Taxonomy Within Chevron** John Thibeaux, Curley Thomas & James Pipe (Chevron)	Closed			
9:00-9:45 AM	**Smart Well Monitoring and Optimization Powered by Machine Learning** Sunil Garg & Samir Jain (DataVedik)	**A Quick Primer on Graph Databases for E&P Applications** Yogi Schulz (Corvelle Consulting) (Remote)	**Murphy's Seismic Data Management Journey in the Midst of Change** Mery Clark (Murphy Oil)	**Professionalizing our Discipline, 2021 and Beyond** Patrick Meroney & Cindy Cummings (Professional Development Committee)	**How to Move Data From Source Into Analytics Effectively Using Reusable Architectural Design Patterns** - Suresh GN (Infosys Sponsor Demonstration) and Julie (BP)
9:45-10:00 AM	Morning Break - Snacks in the Exhibitor Area				
10:00-10:45 AM	**Preparing Seismic Data for the OSDU™ Data Platform** Don Robinson (Resolve GeoSciences) & Paul Thompson (Talus Technolgies)	**Graph DB and AI Based Data Analysis for Oil and Gas Use Cases** Nishanth Raj (Deloitte Consulting)	**Seismic in the Cloud - That's Easy and Cheap, Right?** Neil Constantine (Remote), Lisa Buckner & Douglas Fisby (Sword Energy)	**International Petroleum Data Standards Open House** *Meet with members of the IPDS Committees*	**It's After Midnight, Do You Know Where Your Data Is?** Clay Harter (Bahwan Cybertek Sponsor Demonstration)
11:00-11:45 AM	**Digital Transformation in Well Cost Management** Venkataraman Sankaran & Nirav Gandhi (Infosys)	**A Cloud Data Competency Framework for Oil and Gas** Jess Kozman (Katalyst Data Management)	**Digital Transformation Winners: Competitive Advantage of Secure Efficiency** Norman Thorlakson (Xage Security)	**TBD**	**Eliminate Data Silos and Enable Next Generation Analytics at Scale with the Data Cloud** Stephen Pace (Snowflake Sponsor Demonstration)
12:00-1:00 PM	**Lunch**				

Houston Professional Petroleum Data Expo

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October 26, 2021 (Afternoon)

Time	geoLOGIC Stage *Next Generation Data Management Theme*	EPAM Room *Data Consumers Theme*	Confluent Room *Tech Trends in DM Theme*	Infosys Room *PPDM Theme*
1:00-1:45 PM	**Serverless Data Management for PPDM Using Opensource Software** Vidar Andresen (Petrodataonline)	**Putting the PEOPLE first in People, Process and Technology** Shawn New & Sue Carr (Katalyst Data Management)	**Data Trust & Curation Starts at the Source** Philippe Flichy (Endeavor)	**Trends in Data Management and Governance** Trudy Curtis (PPDM Association)
2:00-2:45 PM	**Greenhouse Gas Emissions and Quantification Challenges** Ali Sangster, Andrea Anderson, Morgen McGuire (IHS Markit), Ashley Videtto (EPAM), Kathryn Adams, & Nohyun Myung (Omnisci)	**This Old Data - Let's Talk about Being Smart Using Data You Don't Know** Ellen West Nodwell (Integrashare Dimensions)	Closed	**The Value of the CPDA During the Energy Transition** Renee Porter, Shawn New & Ankur Agarwal (Certification Committee)
2:45-3:00 PM	Afternoon Break - Snacks in the Exhibitor Area			
3:00-3:45 PM	**Data Intelligence Based Business Intelligence** Duncan McDonald (Quorum)	Closed		
4:00-4:30 PM	**Closing Remarks** Trudy Curtis (PPDM Association)	*Remember to stay for our draw and submit your event survey by 3:00 pm to be entered to win an Apple Watch, sponsored by WellDrive. You must be in the room to win!*		

Sponsor Spotlight - Quorum Software (Wifi Sponsor)

Quorum Software connects people and information across the energy value chain. Twenty years ago, they built the first software for gas plant accountants. Pipeline operators came next, followed by land administrators, pumpers, and planners. Since 1999, Quorum has helped thousands of energy workers with business workflows that optimize profitability and growth. With leading applications like EnergyIQ for well master data management, Quorum Software enables E&P companies to operate more efficiently by providing valuable insights from integrated data. From leveraging vendor data for decisions to automating and managing data flows across a well's lifecycle, EnergyIQ is helping companies tackle their toughest data challenges. For more information, visit quorumsoftware.com.

quorum software

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Note you must be in the room during the closing remarks to win!

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Biographies & Abstracts

PPDM Update, Trudy Curtis (PPDM Association)

Biography: Trudy Curtis is the Chief Executive Officer of the Professional Petroleum Data Management (PPDM) Association, the global Not-For-Profit society focused on data management best practices and standards and data management as a professional discipline. Based in Calgary, Canada, Curtis has nearly four decades of years of experience in the industry and is known around the world for her outspoken advocacy of data as a strategic asset, and its management as a core business function. In 1996, she joined the PPDM Association as architect, CIO and ultimately CEO of PPDM Association. Curtis is leading the way to the emergence of data management as a global discipline, the creation and industry adoption of data management standards and best practices, the development of professional development and certification programs for data managers, and the professionalism of data management in the petroleum industry.

Keynote Presentation, Greg Leveille

It goes without saying that 2020 was an extraordinary year with a pandemic, lockdown, economic struggles, and civil unrest. Factors that enabled some companies to thrive included -having data secured and available in the Cloud, having the ability to change and adapt on the fly, and having a culture and infrastructure that allows for flexibility. In this presentation, I plan to explore how the trials of 2020 will affect the way we work and make decisions in our industry.

Biography: Greg Leveille was the Chief Technology Officer for ConocoPhillips before he retired earlier this year. In this role, he leads efforts to develop technologies to lower ConocoPhillips' cost of supply, reduce greenhouse gas emissions, and grow resources and production.

Leveille is the chairman of the Executive Advisory Board for the Unconventional Resources Technology Conference, serves the chairman of the Society of Petroleum Engineers' U.S. Advisory Council, and is a member of the University of Houston's Energy Advisory Board, HPE Data Science Institute Advisory Board and Dean's Advisory Board for the College of Natural Sciences and Mathematics.

The Paths to the Cleanest and Most Economic Industry in the World, Lewis Matthews (Project Geminae)

The current climate story says that fossil energy is a bridge to the future and will ultimately be phased out. This narrative is based entirely on the premise that fossil energy isn't able to compete in future emissions. The story neglects the probability of significant advances occurring in oil and gas technology making this view somewhat Malthusian. When you look at the leading edge of oil and gas today, it is clear that the industry has the potential to be the cleanest and most economic on Earth. In the future world of low carbon energy, the economics still matter. This talk is about one of many possible profitable paths to a negative emission future dominated by the oil and gas industry.

PPDM Association Board of Directors Panel Discussion

More information coming

Data & Digital Transformation In Upstream, Orestes Appel (IBM)
We have witnessed several upstream industry transformations involving the data, processes and activities performed in reservoir characterization. These previous transformations covered the digitalization of data and the software tools introduced to perform reservoir characterization. As the geoscience tools & technology proliferated, the complexities in building a single, trusted end-to-end workflow increased. The industry made strides, however, has been largely unsuccessfully in fully unlocking data and interpretation models. Now, our industry is experiencing a third major transformation. In order to push the industry forward and harness today's innovative technology, the focus is shifting to the importance of trusted data and open workflows enabling. A massively scalable data fabric for seamless interoperability is necessary
with the following characteristics:
• Common data models and APIs
• Interoperability and un-locking data
• Open source architecture and tools
The industry answer to this challenge is the developing of an Open Energy Data Platform which is directed by "The Open Group OSDU™ Forum and spearheaded by its industry leaders to ensure the delivery of business value. IBM's contribution to this effort is "IBM Open Energy Data Universe™" that efficiently provides an enhanced user's experience that is completely cloud-vendor agnostic.

10 Things I Hated About Subsurface Data Management - Until OSDU™, Jane McConnell (Teradata) (Remote)
Back in 2015 I wrote a blog post called 10 Things I Hate About Subsurface Data Management. It was a bit of a rant - all the things that had always frustrated me about subsurface data management. But it seemed to strike a chord with a lot of people. Last year, for the launch of the OSDU™ Marketing site, I resurrected that old blog as the basis for a discussion on how the OSDU™ Data Platform is different from the way we have done data management on subsurface data in the past, and how the architectural approaches taken in developing the OSDU™ data platform will finally allow us to address some of those things that made me (and others) so frustrated. In this presentation I will briefly summarise the "10 things I hated" from the original post, and then explain why the architectural design of the OSDU™ Data Platform will allow us to break away from the old siloed, librarian approach to data management - and to move towards a data-centric future - supporting old workflows while enabling new ones, be they analytics-based or cross-domain. The mentioned blog posts are linked below: https://osduforum.org/10-things-i-hated-about-subsurface-data-management/ https://osduforum.org/reasons-to-be-cheerful-part-3/
Biography: Jane fell into Oil & Gas with its specific data management needs back in 2000, and has been consulting, developing product, and implementing solutions in this area since - including doing time at both Landmark and Schlumberger. Since 2012 she has been working for Teradata, specialising in data architecture for Oil and Gas companies. Jane currently sits on the OSDU Management Committee, and is heavily involved in the OSDU data architecture.

Extending the OSDU™ Platform with the Geospatial Consumption Zone (GCZ), Brian Boulmay (ESRI)
Join us for a session to learn more about the OSDU™ Platform and the Geospatial Consumption Zone (GCZ) industry project. We will share a brief history on OSDU™ and how it has evolved, then describe the Geospatial Consumption Zone it's purpose, architecture and value. We will also share insights from the user stories driving the GCZ development effort.
Biography: Brian Boulmay has over 22 years in the geographic information science & technology field focused mostly in the energy sector. He has spent most of his career developing strategy incorporating digital technology, geospatial analytics, and overcoming data management challenges.

Alleviate Hydrocarbon Data Management Challenges Using Cloud Computing on Non-Operated Assets, Sethupathi Arumugam, Vimal Amaldas & Sanjay Gupta (Infosys)

Globally, 23 percent of equity production is delivered through non-operated ventures (NOV), with the figure rising above 50 percent in some regions. Upstream oil and gas companies are skilled at maximizing the value of their operated assets with leading-edge information technology solutions. When it comes to their NOV assets, many companies face challenges with data automation and management, therefore the NOV datasets are being processed through time consuming traditional approaches. NOV assets are as vital as operational assets however they are seldom regarded with the same value due to several reasons. Major problems faced with NOV datasets are it uses a variety of file formats that has frequent changes in file templates, structured / unstructured files formats, good to poor quality scanned reports, non-version reports, etc. NOV datasets are typical examples of Big Data concept, the real value comes from the ability to use that stored information to uncover new insights with big data analytics, and then present those ideas to promote better business decisions. This paper discusses a pilot study conducted using publicly available datasets in the area of production, storage, cargo, sales and finance to improve Hydrocarbon value realization. The solution covers logical cloud-based architecture for managing NOVs datasets, which would include data ingestion, data management, data orchestration, classification, storage, data science and reporting. With the availability of pay-per use ETL/ELT tools and serverless cost effective compute handling structured and unstructured file formats, interpreting NOV data has become easier. This paper also discusses advanced NLP algorithms that are available as APIs for accelerating data extraction from PDF documents. Financial and pricing data from NOV requires additional protection with respect to data security in-flight and at rest. This paper details out advanced threat detection along with data classification, masking and encryption to protect sensitive data and raise alerts whenever there is a breach in data security. Often there are errors in NOV datasets, which require regular auditing to maintain regulatory compliance or to gain insight into discrepancies and anomalies that could indicate business concerns for which automated alerts are set up in cloud that are triggered and send to NOV Operator for data corrections. Overall, this paper highlights effective management of NOV datasets using cloud for reporting and analytical purposes, which will enable Oil & Gas companies to seamlessly view and gain insights on NOV assets as like operated assets.

Biography: Author: Sethupathi, a Geologist , works with Infosys as a Principal Consultant, having 20 years of experience on deploying IT solutions in Oil & Gas Industry. Co-Author: Vimal Amaldas, a Cloud Architect, works with Infosys, having 12 years of experience on deploying IT solutions in Oil & Gas Industry.

Board of Directors - Strategy Discussion
More information to come.

Stream Processing - John Bledsoe (Confluent)

Energy companies have to adapt to new consumption patterns and levels of demand in a challenging environment, with more focus on efficiency and flexibility than ever before. The role of data in motion to manage and operate oil and gas companies in an event driven model is growing as companies seek to increase innovation and modernize. Traditional methods of managing and governing data at rest are being disrupted as oil and gas companies leverage streaming data to enable them to produce more product at a lower cost of supply, increase the safety of their operations, and be a good steward of the environment. The convergence of IT and OT to solve previously unsolvable problems helps organizations mitigate risk, increase revenues, and further insulate against commodity price volatility. Stream processing at the edge differs from edge computing as organizations leverage complete edge to cloud solutions to enable real-time decision making at the site while stream processing business relevant data to the cloud. This talk will focus on how stream processing will save your company money on hardware, software, service provider, and people costs.

Enterprise Knowledge Graphs (EKG) in O&G: Demonstrating the Value of KGs for the Data-Driven Organization, Ramakrishna Manne, Sachin Padhye & Jacob Thawabi (Infosys)

The Oil & Gas sector is now generating data at a greater volume than ever before. A typical offshore platform generates 1-2 TB of data every day. Data is expanding not only in quantity but also in variety given the increasing number of in-field equipment sensors. Data is commonly stored across disparate databases, servers, content management systems, wikis, data dictionaries, glossaries, and even emails. The complexity of this data ecosystem presents challenges to finding and consuming appropriate and accurate data using traditional methods. This in turn makes it hard to generate insights essential to transforming business and operations. Traditional methods of using relational databases have worked well so far for Oil & Gas companies. However, they are falling short of driving key insights given the rapid expansion of volume and variety of internal and external data. A technique known as "Knowledge Graphs" offers a new way to gather better insights faster and more economically compared to traditional methods. Knowledge Graphs use the concept of "Ontology" which is a semantic generalized data model that defines types of things (classes) along with their properties (attributes) and links properties to other classes. When plotted, it represents the building blocks or model of a graph database with the classes and properties acting as nodes and the relationships acting as links.

Knowledge Graphs provide the ability to gain faster insights to improve productivity, minimize risks, and increase uptime. This in turn has the potential to increase NPV and reduce OPEX. Geosoft (acquired by Seequent in 2019), a geophysical and geological software and services company, reported in their survey "Exploration Information Management report" about 20% - 40% potential improvement in productivity of those who respond to requests for data. Survey results showed that 74% of responders spend more than 10% of their time managing data with 34% spending between 10%-20%, 40% spending more than 20% and 20% spending more than 30% of their time on managing data.

Superior Performance: Knowledge Graphs outperform relational databases in developing insights (not known previously) faster and more economically especially as the complexity of queries increases. They can find links across various domains, functions, and regions. These links help drive insights effectively by reducing the need to reproduce or rebuild data. These links allow Knowledge Graphs to propagate and further increase their ability to discover insights.

Increased Flexibility: Knowledge Graphs are not limited by time and size as relational databases do. They can be integrated throughout the timeline of a project as opposed to relational databases which can only integrate specific and predefined data sources. They enable the reuse of data immediately and effectively. This eliminates the cost of movement, transformation, and/or recreation of more data to make it useful. With Knowledge Graphs, there is no need to create "Shadow IT" systems.

While Knowledge Graphs offer several benefits, they take diligent planning and development of the right capabilities to achieve success. The right platform with relevant tolls is necessary to develop Knowledge Graphs. Three pillars that are vital to deliver successfully are: (1) Enabling automated quality growth, (2) High accuracy, and (3) Proper governance and change management.

A Use Case: Knowledge Graphs can take the "Control of Work" or "Permit-To-Work" processes to the next level. This is because of the early identification of hidden risks coupled with insights discovery that can potentially prevent or at least mitigate these risks based on data from past incident reports, lessons learned, completed permits, after-action reviews, MOCs, and regulatory requirements. Currently, sans the use of Knowledge Graphs, relevant data is usually stored in a dozen different systems, which might or might not be linked through traditional static methods. Ascertaining hidden risks associated with a specific type of equipment, tool, manufacturer, location, elevation, operating condition, time, personnel, etc. is very challenging given the current data silos, unless another independent system is created from scratch. Knowledge Graphs will cover all these systems and databases defined above. Moreover, all linked data will be available directly within the Permit-To-Work system itself, as the operator completes the permit form online. Consequently, all new insights can be fed early during the scheduling/planning phase of the Work-Order. The new hazard/risk assessment augmented with fresh insights can in turn reduce millions of dollars in incident costs.

Biography: Ramakrishna Manne North America Partner - Oil and Gas Practice, Infosys Consulting. Ramakrishna joined Infosys Consulting in 2004 and currently heads up the North American energy practice, managing some of our key accounts such as BP and BHP Billiton. Ramakrishna has 26 years of management consulting experience in oil and gas, oilfield services, refineries, and chemical industries, helping clients with their digital and advanced analytics transformations. He is based out of Houston and can be reached at ramakrishna_manne@infosys.com

Sachin Padhye, Associate Partner, Oil and Gas Practice, Infosys Consulting. Sachin works with large oil and gas companies in the upstream, midstream, and downstream areas to frame their digital strategy across customer and employee experiences. He helps his clients quantify value beginning with industry opportunities and ending with decisions built with big data, analytical tools, and visualizations and narratives. His current focus is digital data monetization, where he helps companies put a monetary value to the data that is used to execute their digital strategy. Sachin has an MBA from the University of Michigan. He is based out of Houston and can be reached at sachin.padhye@infosys.com

Jacob Thawabi, Senior Consultant - Oil and Gas Practice, Infosys Consulting. More than 10 years of business and information management experience in large-scale IT for Energy multinationals, created his unique perspective about connections among business, information, data and technology. He is skilled at all facets of data within product development value chain and life-cycle in both upstream and downstream. He holds a Master's of Science in Mechanical Engineering and an MBA, Mays Business School, both from Texas A&M University. He is based out of Houston and can be reached at Jacob.thawabi@infosys.com

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America's Energy Pathways: LNG, Infrastructure and Digital Transformation, Mark Stansberry (the GTD Group)
Mark will address the use of content and analytics in aiming for efficiency, effectiveness, and flexibility. Therefore, ultimate results should be achieved by communicating the findings directly to the C-Suite and the Board of Directors.
He will present examples of lessons learned from analytics in the areas of LNG, infrastructure, and the digital transformation, comparing the past, present and the future.
Biography: Mark is a corporate leader with extensive experience in the energy industry. He is currently a strategic energy and corporate advisor to boards and c-suites. He has served as Chairman/CEO of The GTD Group, and CEO/President of The Oklahoma Royalty Company. An award-winning film producer, columnist, radio talk show host and writer, Mark is the author of five energy-related books. Mark is a frequent speaker in the oil & gas space--focusing on business development, strategic planning, new technologies, digital transformation and operational excellence within the entire energy sector.

Geoscience Data - Connecting Dots, Boris Makarov & Fariha Alam (Apache Corporation)
Collaboration is a key success factor in Exploration & Development workflows such as prospecting, well planning & drilling. Geoscience teams collaborate inside and outside of teams sharing ideas, work status, results, knowledge, solutions, data sets. Geoscience Data integration is a foundation and a big part of collaboration in a hybrid G&G applications environment - data exchanged, shared, and distributed across multiple repositories in non-automated and automated fashion. Apache Corporation team will be sharing their experience on the geoscience well data integration in multi-vendor and repositories environment.
Biography: Boris Makarov is an IT Expl & Dev Applications Supervisor at Apache Corporation. Prior to joining Apache in 2017, Boris worked for more than 20 years in various Information Management positions at Schlumberger and BHP. Boris has a Master's in Theoretical Physics from Gomel State University, Belarus. Fariha Alam has been with Apache Corporation for 7 years. She supports Geoscience teams as a Well Data Lead. Fariha has a B.S. in Human Geography, with minors in Geospatial Sciences and Sociology

Applying WIAW Taxonomy Within Chevron, John Thibeaux, Curley Thomas & James Pipe (Chevron)
The PPDM WIAW (what is a well) provides an industry standard taxonomy for various well components that that can help those involved in upstream operations speak a common language. Chevron has taken this taxonomy and modeled it into a relational database format to help with data integration projects within various business operations. This model has helped align cross-functional efforts in geology, drilling, completions, and production operations. This presentation will discuss some of the challenges, successes, and opportunities for greater application of the WIAW taxonomy within upstream.
Biography: John Thibeaux ("Tebo") is a Senior Data Analyst within the Reservoir management function in Chevron with 7 years experience. James Pipe is a Senior Data Architect within Chevron with decades experience in information architecture and data integration. Curley Thomas is currently the manager of Enterprise Data Performance. Tebo, James, and Curley have worked to apply the "What is A Well taxonomy" within several different business unit operations throughout Chevron for the past decade

A Quick Primer on Graph Databases for E&P Applications, Yogi Schulz (Corvelle Consulting) (Remote)
Graph databases have moved from a topic of academic study into the mainstream of information technology in the last few years. Now E&P data analysts are confronted with the need to better understand: 1. What business problems do graph databases address well? 2. What advantages do graph databases offer over widely implemented relational databases? 3. What issues emerge as graph databases are introduced into an existing application portfolio? Yogi Schulz will describe the following topics related to graph databases: 1. DBMS developments 2. Data volume explosion 3. E&P graph database applications 4. Advantages of graph databases 5. Disadvantages of graph databases
Biography: Yogi Schulz founded Corvelle Consulting. The firm specializes in project management and information technology related management consulting in the upstream oil & gas industry. Mr. Schulz has 40 years of information systems experience. He holds a B. Comm. from The University of Calgary. Yogi has presented at many oil & gas conferences. Yogi writes a monthly blog at ITWorldCanada.com. Yogi served as a member of the Board of Directors of the PPDM Association.

Preparing seismic data for the OSDU™ Data Platform, Don Robinson & Paul Thompson
There are many steps involved with properly preparing seismic data for ingestion into the OSDU™ Data Platform. In this presentation, we will review three critical areas and explain why and what is required to support each area correctly.

First, we will explore data entitlements and obligations. These requirements are wide-ranging and may include multiple layers of regulatory reporting in addition to a litany of company-specific rules. In addition, the use of data sourced from multi-client vendors, partner companies, and affiliated companies may have limitations or codicils and associated payments, as well as restrictions on redistribution. As this section will demonstrate, failure to adhere to these obligations and requirements can be extremely costly for noncompliant companies.

Second, we will examine the validation of SEG-Y data. Is the CRS known and is it correct? Has the geometry been audited? Is the Bin Grid accurately defined? Is the SEG-Y file workstation ready? Complicating these processes is the fact that many SEG-Y files do not follow the format standards set by the SEG Technical Standards Committee. Incorrectly formatted SEG-Y data or invalid headers can cause serious issues for users in the future, including inconsistent support from products that are otherwise SEG-Y compatible. This section will demonstrate why it is best to resolve issues with SEG-Y data as soon as possible.

Third, we will delve into how relationships between datasets are established. In this section, topics to be discussed will include lineage, derivative products, merging of datasets, and subsetting of datasets.

In reviewing these areas, this presentation will provide valuable insight into how companies can ensure their corporate Seismic Master Repositories are ready for OSDU.

Graph DB and AI Based Data Analysis for Oil and Gas Use Cases, Nishanth Raj (Deloitte Consulting)
Optimizing oil movements is a critical driver for maximizing profits for O&G companies. Pattern analysis and profitability optimization enables insights that leverage the relationships between product movements and uncover hidden relationships to that maximize the potential opportunities to increase revenue. The approach uses a combination of network graph technology and AI enabled data stewards. The business users are able to obtain access to trusted high quality data enriched via cognitive enablement from a variety of sources linked together using network graphs to streamline transportation patterns, improve profitability analysis, optimize routing patterns using 3rd party weather data etc. The data entities in the various source system containers could be modeled very easily using graph capabilities, and the analysts were able to navigate across the data sets optimally without the need to write complex queries or joins. The approach exposes data and associated relationships that were not previously visible, while using machine learning based data profiling, data quality rules configuration & analysis, and anomaly detection.
Biography: Nishanth Raj is a Senior Manager with over 19 years of professional consulting & program management experience providing strategic, fiscal and operational leadership in Data Management, Architecture & Analytics in the Oil & Gas Sector. He leverages the power of data, analytics and cognitive capabilities to help transform companies into insight driven organizations.

A Cloud Data Competency Framework for Oil and Gas, Jess Kozman (Katalyst Data Management)
Several Australia based innovation partners and agencies are engaged in developing a "Three-Capital" seed model for data competency, assessing the behavior capabilities necessary in defined roles to enable data competency across human, social and organizational frameworks. The work is driven by a recognition that regardless of growth trajectories, "the ability to use and interpret data will only become more important for oil and gas occupations"1. This has led to initial discussions between operators such as Woodside, mining resource companies, the National Energy Resources Australia industry growth center, Perth's CORE Innovation hub, and local universities. Identified challenges include petro-technical employees who find themselves removed from understanding the processes that create and potentially degrade the quality of the digital information stream that informs decisions2, and the fact that "working with data can longer be the domain of a few data experts". Working with the Three Capital model can leverage on the success of creating a safety culture, without needing the kind of high-visibility failure that led to the creation of a safety-focused Three Capital model after the 2010 Deepwater Horizon explosion, which ultimately was a data consumption workflow failure3. Similarly, that response involved collaboration between industry, regulators, and academia4. The goal is to deliver a framework that can be used to identify the organisational and cultural changes needed to support systematic employee training and development for cloud data fitness-to-operate. Some of the case studies from the mining sector emphasize challenges and results in consumption workflows. As data managers, we believe that value embedded from decades of optimum accepted practices applied to on-premises legacy systems of record is more easily transferred to cloud platforms in the ingestion stage, and the value of visualization and analysis will be commoditized with off the shelf commercial tools. Anecdotal evidence from our technology providers and joint venture partners suggest the largest differential value in cloud data management is to be found in iterative data enrichment workflows in the cloud. This workshop will allow participants to contribute to prioritizing behavioural characteristics from 8 different dimensions of the model that they believe are most important in their organization to success in cloud data management. The material will be adapted from the existing set of sample assessment questions from the Behavioural Assessment Tool prototype. Overall there are 23 behaviors and the workshop participant's feedback will be used to guide a process for identifying functional and discipline roles in data management critical to data competency. Participants will be provided with the observational characteristics list as a pre-read and will be able to pre-select their forced ranking choices. The competency dimensions are: Human Capital: • Personal Attributes • Data Attitude • Skills & Expertise Social Capital: • Data Culture • Communication Organizational Capital: • Data Systems • Process and Routines • Human Resource Management & Development During the workshop we will discuss and debate those choices, with participants having the opportunity to change their ranking during and after the discussion. The progress of converging to a consensus will be used in mapping data competency for specific projects across the model dimensions to assess and select favorable behaviors. The workshop team will then engage the broader consortium to refine the model to produce a working Fitness Framework & Behavioural Assessment Tool. These prioritizations will then become input to the process of validating outcomes and assimilate insights into the seed model. Results will be collated and shared with the participants in an anonymized, aggregated form under Chatham House rules.
Biography: Jess Kozman has taken a new position as Senior Principal Consultant for Asia Pacific at Katalyst Data Management in Perth, where he is responsible for identifying, planning, executing and managing digital data consulting engagements, and delivering solutions for the energy and resources sector. He brings over four decades of experience to the role, having most recently worked as a petrotechnical advisor for Woodside Petroleum Ltd. in Perth and working continuously with international data standards organizations and global government agencies. Previous roles have taken him to over 35 different countries, deployed him with over 200 different clients, and allowed him to work with geotechnical data from every major terrestrial tectonic plate and several interplanetary bodies. Jess holds a degree in Geology and Geophysics and several professional registrations and certifications.

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Smart Well Monitoring and Optimization powered by Machine Learning, Sunil Garg & Samir Jain (DataVedik)
A typical Drilling Rig is equipped with hundreds of sensors which transmit data in real time (or near real time) which is then monitored by Drilling Engineers, Geologists and others in Real time Operation Centers to ensure a smooth operation. The drilling crews also report every day on the various aspects of the operation and a typical day/shift at a Rig starts with the analysis of the previous day's reports (traditionally called Morning Reports). Extracting and interpreting information from morning reports and correlating it with the high frequency sensors data is complex and time consuming which makes it difficult to apply the learnings to control/improve the ongoing operation. This presentation and case study will focus on a Smart monitoring and optimization workflow enabled by an intelligent fusion of drilling sensors data with the daily operations reports and the BHA data and powered using a seamless integration of Drilling Domain knowledge with Machine Learning. It uses both historical and real-time data which the drilling engineers can use to visualize, analyze, predict and optimize the various KPIs and operational parameters and further investigate potential areas of improvements to minimize ILT and NPT.
Biography: Sunil Garg is the founder and CEO of dataVediK, a Houston based startup building a Hyper-Converged Data and Analytics Platform for Oil & Gas industry. Prior to this, he spent 20+ years establishing and growing Data Management, Big Data and Analytics business for SLB. Sunil has deep understanding of Oil and Gas data & ML and uses the combination to build end user centric solutions. He is an active participant in several industry organizations like SPE, AAPG, PPDM, SPDM, OSDU, Rice Alliance & TiE.

Putting the PEOPLE first in People, Process and Technology, Shawn New & Sue Carr (Katalyst Data Management)
Why do technology projects fail, or do not deliver the promise of value that they originally propose? What can we do differently? After 30 plus years, the amount of time our G&G's spend looking for data is still very high, up to 75% of their time. As "grey hairs," we have seen multiple data management efforts fall short of their promise and failed attempts abound. Why is that?
New technology is everywhere and given the upcoming crew change, interactivity, IOT, the Cloud, and compute power, it is more important than ever that we get this right.
Shawn & Sue will provide examples where "people and process" were forgotten for the sake of "technology" and share the accompanying results. They will share ideas on a different approach to projects, putting the people first.
Biography: Sue is a Senior Data Management professional and front line people leader in the technology domain, with 25 plus years of energy experience. Recognized as a digital innovator, she continuously improves processes by challenging the status quo, creating tangible value aligning people and process with technology. A big picture thinker, her career has been spent supporting the adoption of Digital Transformation, Data Management and Data Governance in large organizations. Sue's skills and knowledge include a combination of Data Management expertise, strong IT Leadership, an in depth understanding of the energy business with a unique ability to identify and play to skillsets across the team.
- *People leader for technical teams (IT and Data management) and project activity in major energy companies.*
- *Financial accountability yearly for $20 MM USD (G&A, Capital, special corporate integration).*
- *Well-informed about the global energy business activity and stakeholders across the upstream organization. Understands the handoffs, the technical nuances, the business challenges between technical and corporate functions.*
- *Collaborate with business and provide guidance; Data Governance implementations, corporate integrations of people and process, organizational design for job roles, application selections, system implementations and upgrades.*
- *Skilled workshop facilitator, communicate to all levels in the organization.*

Shawn New is Principal Consultant for Katalyst Data Management, responsible for implementation and growth of their U.S. consulting practice. He has 24 years' experience as a Data Management Professional for Marathon, Shell, Chevron, Maersk, BHP, and BP, in roles of increasing complexity from individual contributor to building and leading experienced teams and developing corporate data strategy. His work history includes projects to streamline data operations, improve data quality, build and integrate subsurface data systems of record, and design geoscience technical computing environments. Shawn achieved his CPDA certification in June of 2018, and is a former member of the PPDM Certification Committee. He has been an Advisory Board Member for the Petroleum Network Education Conference (PNEC) since 2017 and served as 2019 Conference Chair. Shawn serves as current Chair of the SEG Technical Standards Committee. He believes in the application of sound but practical data governance, standards and processes coupled with the right technologies to meet the needs of data consumers. In his spare time, Shawn enjoys composing, performing and recording music, attending concerts and record hunting, traveling with his wife Jennifer, and spending as much time as possible with their 2 adult children Christian and Alaina.

Digital Transformation in Well Cost Management Venkataraman Sankaran & Nirav Gandhi (Infosys)
As oil prices have been hovering around $ 40 range, managing well cost is becoming a major area of focus for E&P operators. We are now in the 5th year of the downturn of lower prices and outlook doesn't seem to show any upswing in the near future. This has led to diminishing shareholder value and operating margins. Operators today are taking multiple measures to mitigate the price challenge to improve operational efficiencies across functional areas. A recent report published by EIA shows that drilling costs represent about 40 % of the total well cost. It is imperative that the focus on well-cost management will positively improve operating margins. Some of the challenges in well-cost management are re-use of offset well data in estimation, correlating events from other wells with the estimates and actuals of the new well, insights that help to negotiate with large vendors, tracking & reporting performance indicators. Leveraging digital technologies is one of many steps that operators are adopting towards addressing these challenges. An integrated well cost management on a digital platform will eliminate organizational silos, unlock the power of data, and will shift the paradigm from experience-based estimation to data-based estimation. The use of digital technologies such as artificial intelligence(AI), robotic process automation(RPA), machine learning(ML), cloud, analytics and such will help decision-makers to harvest value from the organization's knowledge base and deliver improved bottom line.
Biography: Venkataraman Sankaran - Principal, Energy Consulting Venky has over 23 years of Global Experience in the Oil & Gas Up, Mid & Downstream sectors, Oil Field Services and SaaS implementations delivering practical and powerful solutions enabling businesses to work smarter. Nirav Gandhi - Sr. Principal Digital Strategy / Energy Consulting. Nirav has 20+ years of experience in helping clients across the energy and utility sector running complex, enterprise-wide digital transformation programs.

Murphy's Seismic Data Management Journey in the Midst of Change, Mery Clark (Murphy Oil)
At the end of 2019, Murphy Oil Corporation made the decision to begin the journey of implementing a new global Seismic Data Management solution. This presentation will follow the change process, including everything 2020 could throw at us. This typical journey that most Petroleum companies undertake became more interesting during this historic year. From quarantine to office closures, new staff to no budget, you will learn how Murphy still managed to make big progress towards their Seismic Data Management goals and where they are now in 2021.
Biography: Mery Clark I have been in the oil and gas industry since 1996. After graduating from Miami University (OH) with a degree in geology, I accepted a position processing seismic data at Western Geophysical in Houston. I'm currently the Subsurface Data Advisor for Murphy Oil, and have had different roles throughout the years relating to managing subsurface data. I currently enjoy living in Houston with my husband and three kids.

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Seismic in the Cloud - That's Easy and Cheap, Right? Neil Constantine (Remote) & Douglas Fisby (Sword Energy)
Moving field, processed and working seismic data sets from physical media and on-premise disk to cloud based storage is an appealing model and has gained significant attention over the last five years. Much of this interest stems from changes in our own personal use of cloud-based storage and services, but how successful are these models when applied at the industrial scale on multi-petabyte seismic libraries? This paper will use recent experience and worked examples to identify and help you assess what factors you need to consider when looking at moving your organisation's data to the cloud. Firstly, what are the pre-requisites that you should already have in-place prior to defining and implementing a successful cloud strategy? Regardless of technology, there are some Data Management 101's that you should address ahead of cloud as they either deliver greater benefit for your data users and data owners, or they are required for your cloud storage model to function as intended. Then, the ability to realise cost-savings is often cited as a reason for moving to cloud. Whilst on-going storage at archive levels in public cloud is well under one cent per gigabyte per month, what are the other costs involved that maybe aren't so obvious? You will need to transcribe all the tapes in your store and there are data residency, ingress and egress costs. We consider these with worked examples to help understand what the real time to return on investment is so that you can define exactly what budget you will be asking your project sponsor for at the outset. Once your data is in the cloud, what benefits can you expect to realise beyond any potential storage cost reduction? Whilst it is early days in this space, the paper explores options for improved data sharing across joint venture partners and regulators to save costs and looks at the opportunity to accelerate existing workflows using cloud-based transmission of data from the field to the processing contractor. We will all be aware of certain technologies that are built upon the cloud storage model and the improvement opportunities that these offer. Whilst maintaining a technology and vendor-neutral standpoint, what are the new and emerging concepts that we should have in mind as we look to update our existing approach to seismic data management with a cloud-first strategy? Every operator working with seismic data will have a different view based on their particular facts and aspirations for seismic data storage and use. No single answer is right for every operator in every scenario, but this paper presents the common themes to understand and assess when working out what your organisation's approach to seismic in the cloud should be.
Biography: Neil Constantine is the Business Unit Director for Sword Venture Asia-Pacific responsible for delivery, growth and financial performance in the region. He maintains hands on involvement as a data management consultant and is a Chartered Data Management Professional. He is motivated by the opportunity for data and technology to enhance the delivery of business objectives whilst bringing step-change improvements to all who work with these tools.
Lisa Buckner is a Data Manager – Geophysics for Sword Venture in Houston responsible for seismic data management, seismic data loading to interpretation applications, transferring seismic data to external parties and ingestion of seismic data to the cloud. She is a Certified Petroleum Data Analyst (CPDA), holds both BS and MS degrees in Geophysics and has a background in seismic data processing.

Professionalizing our Discipline, 2021 and Beyond, Professional Development Committee
The Professional Development Committee has had a busy year producing many new professional development templates for individuals, managers, and human resource professionals. This session will provide a snapshot of some of the tools produced and what's coming in 2021 and provide an opportunity to weigh in on outputs of the Job Families group. You will review a selection of roles from the six (6) Petrotechnical Job Descriptions (E.g., Data Analyst, Data Manager, Chief Data Manager, Petrotechnical Business Analyst, Data Steward and Petrotechnical Data Scientist). The workshop aspect of the session will delve into one (1) to two (2) Job Descriptions developed.
This presentation and workshop will provide an opportunity for regional delegates to review and to add to this body of work. Establishing these critical foundational benchmarks are the first step in solidifying our professional discipline. Although PPDM leads this critical initiative, it's important to remember, PPDM is made up of Members, Volunteers, and Professionals, who are passionate about their professional discipline and want to see themselves represented on a career map in the nation's Standard Classification of Occupations (SCO), or within a National Occupation Code (NOC).
The workshop aspect will engage delegates in providing specific feedback to verify selected content of the job descriptions and identify any obvious gaps. We will engage the use of Mentimeter to capture some critical content feedback with ample time for questions and answers.

Digital Transformation Winners: Competitive Advantage of Secure Efficiency, Norman Thorlakson (Xage Security)

Digitizing operational technology in oil & gas improves accuracy, speed and safety. But legacy systems, which weren't designed to be connected, have now become easy to target and compromise. Following high-profile attacks over the last year, pipeline owners and operators are working to uplevel their cybersecurity. Further, the federal government is refreshing standards and requirements for agencies and the private sector – the Transportation Security Administration (TSA) recently issued two Security Directives with requirements for oil and gas distributors to enhance cybersecurity.

Traditional cybersecurity approaches can't handle the scope or complexity of interconnected operations. For organizations to reap the benefits of digital transformation, they must prioritize comprehensive cybersecurity, covering new and legacy, edge and cloud, so IIoT benefits aren't diminished by the vulnerabilities of legacy systems. This presentation will walk the audience through the risks and rise of cyberattacks, the challenges faced by the industry, and modern solutions that protect systems and increase operational efficiency:

1) Potential consequences of cyberattacks are massive: they can "shut down operations," cause damaging explosions or harm the environment (oil spills, fires, etc.) Attacks include:

– Internal threats: Phishing, malware-infected laptops/phones onsite inside the firewall, and disgruntled employees
– State directed attacks
– Blackmail/ransomware
– Industrial espionage, such as hacks on petabytes of data stored by individual oil & gas companies

2) IIoT devices and data present new challenges for the oil & gas industry, particularly due to:

– Quantity: The sheer number of connected devices.
– Diversity: The variety of devices, from legacy to technologically advanced.
– Distribution: Assets spread over large geographic areas requiring remote maintenance + access, especially during contingency operations.
– Detection: Less than 1 in 5 companies believe they can detect (and contain) a hack. – Multiparty access: e.g. across a supply chain.

3) To address said challenges, a holistic cybersecurity approach should look like:

– Qualities

Comprehensive: Consistent across devices, control systems, people, applications, and data––with policies defined and automatically enforced on-site.
Universal: Able to layer and pair with legacy and modern equipment.
Decentralized: Matched to the distributed devices.

– Resolutions to Previous Concerns – Recent federal directives have encouraged owners and operators to embrace zero trust architecture. Zero trust creates a lock on each asset with its own unique key.

With a zero trust strategy, oil and gas pipeline administrators give each user, device and application its own unique identity with specific access protocols. Zero trust allows IT to control access for all digital interactions, including user-to-machine, machine-to-machine and machine-to-cloud, as well as provide secure, immediate, remote access to industrial assets, including PLCs, RTUs, sensors and more.

By implementing a zero trust strategy and protecting both legacy systems and prepping for future innovation, operators can reap the benefits of digital transformation. They'll experience easy remote access, efficient data sharing and convenient collaboration with partners, all resulting from a tactic previously considered purely defensive and costly.

– Best Practices

Companies need to work with leadership and establish a dedicated cybersecurity expert to oversee the intersection of IT and OT cybersecurity.
Companies must implement audits that examine internal practices and identify areas of improvement.
Governments also need to continue to develop cybersecurity regulation that pushes the industry forward. As demonstrated in US utilities, the entire industry benefits when companies must meet cybersecurity standards.
Companies must design SOPs that ensure cross-functional and end-to-end security, avoiding vulnerabilities "at the seams."
Companies require comprehensive identity and access control systems to block rogue systems and prevent unauthorized digital interactions.

From the presentation, the audience will walk away with 1) a better understanding of new means to securely digitize device data that drive operational improvements 2) how a decentralized enforcement approach meets the demands of digitized oil & gas operations 3) how to proactively safeguard assets from cyber risks.

Biography: Norman Thorlakson is SVP of Sales & Business Development at Xage, where he leads customer expansion across industries such as manufacturing, oil & gas, transportation, and utilities. He has 25+ years of leadership experience at companies like Schneider-Electric where he led HMI & SCADA Software, Mercator, where he led sales for N. American manufacturing, Honeywell, Wonderware, & Invensys. Norman holds a BA from California Lutheran University & an MBA from California State University, Northridge.

International Petroleum Data Standards Presentation
More information to come.

Data Trust & Curation Starts at the Source, Philippe Flichy (Endeavor)
In the context of ever expanding data volume and its influence on our decision systems one can wonder how much one can rely on this ever-increasing feed of data or information we have no or little control over. In this context it seems fair to ask, "How do we build trust?" We will demonstrate how indeed we can trust the data once it has been properly (and transparently) validated. At which point we will establish that trusted data becomes an asset for the users and therefore the company which owns it. Such assets deserve to be curated like museums do with their master pieces. Only then can you let the data bloom with the advent of all forms of analytical and correlation tools. The author will highlight how to adapt this logic to remote data gathering and the challenges it has traditionally represented.
Biography: Philippe Flichy is a digital transformation strategist and advisor with deep knowledge of the energy industry. He held senior positions at Schlumberger, Baker Hughes and Weatherford. He joined the O&G industry from the 2002 Salt Lake Olympics delivering all the games results. He initiated the Digital Transformation Study Group at the Society of Petroleum Engineers. Philippe graduated from Boston University in Management Information System. You can follow his blogs at philippeflichy.com

Data Intelligence Based Business Intelligence, Duncan McDonald (Quorum)
Even before the challenges associated with the Covid-19 pandemic, oil and gas operators were making significant investments in advanced Business Intelligence solutions as a key part of the digital transformation. It is evident that this technological investment will only accelerate as these operators pursue competitive advantage faced with a reduced workforce. Companies have also recognized that Business Intelligence solutions require access to quality data to deliver meaningful enterprise value. However, many of these same companies struggle to gather, integrate, validate, and maintain enterprise data to support business needs. This presentation will discuss these challenges and how some companies are establishing organizational Data Intelligence in large part by adopting standards for data definition, integration, and exchange. These standards have been developed over many years by organizations including PPDM and are getting much more attention today through the support for the OSDU.

Serverless Data Management for PPDM Using Opensource Software, Vidar Andresen (Petrodataonline)
Forbes magazine announced recently that serverless is the next frontier. A serverless architecture refers to one in which functions ("micro services") that perform a single service are handed over to a function cloud to run in real time. They execute only when needed, after which time the computing instance shuts down. Gartner, Inc. predicts that 75% of organizations will be running some sort of a serverless architecture in production by 2022. At the same time, adoption of OpenSource software at the enterprise level has flourished, as more businesses discover the considerable advantages OpenSource solutions hold over their proprietary counterparts, and as the enterprise mentality around open source continues to shift. This presentation will explore why this is important, what this means for upstream data management and how you can implement this on top of PPDM. The end goal is to reduce your cost and improve your efficiency.
Biography: Vidar Andresen is a software developer and has over 30 years of experience from the industry developing and implementing data management systems. This includes software such as Charisma, Exsci, PetroBank, InnerLogix and Studio in companies such as Exsci, InnerLogix, Schlumberger, Landmark and PGS using seismic, well and lease data. Most recently has been working at PetroDataOnline with focus on serverless technology in Microsoft Azure developing data management software for oil & gas in addition to financial software

Greenhouse Gas Emissions and Quantification Challenges, Ali Sangster (IHS Markit)
Governments, industry, investors, and other stakeholders are increasingly interested in understanding the implications of energy transition on the competitiveness of upstream oil and gas operations. Greenhouse gas (GHG) emissions intensity, or emissions per unit of output, has become a key metric of interest. In response, oil and gas companies have increased disclosure, academia has produced more research, and various consultancies and non-governmental organizations generate their own estimates. However, there are challenges with consistency which limit the comparability and ultimately use of these data. This presentation will discuss the implications of ESG pressure for greater disclosure of GHG emission intensity metrics in the oil and gas sector. It will discuss how the oil and gas industry is responding, the sources where estimates can diverge, and some key factors to consider when looking at GHG intensity estimates of oil and gas.

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OSDU™ Data Platform: The Promise and the Journey - Patrick Meroney and James Lamb (Katalyst Data Management)
The Open Group OSDU™ Forum was established in order to deliver a technology agnostic platform to the energy industry. Much like the disruption promised by the emergence of commercial cloud solutions in the oil and gas industry, OSDU™ Data Platform offers the promise of a platform that transforms the way that companies use technology and design workflows, allowing users to 'plug and play' technology and build workflows that are comprised of best in class products and technology. As the platform has evolved, producers and service providers alike have taken a keen interest in watching this evolution to see if OSDU™ Data Platform can deliver on its promise. Drawing on Katalyst's extensive involvement with the OSDU™ Forum and the development work we have done, this talk will review the current state of OSDU™Data Platform, concentrating on the opportunities, and potential pitfalls, that the platform offers.
Patrick Meroney has worked in and around Information Management in Exploration and Production for over 30 years and has written and presented on various topics over the years including GIS, Information Architecture and Delivery, Data Governance and Organizational Readiness. Pat has held various positions in the E&P business and within IT and IM organizations at ConocoPhillips, and Repsol and is currently the Vice President Operations and Professional Services at Katalyst Data Management.

This Old Data - Let's Talk about Being Smart Using Data You Don't Know, Ellen West Nodwell (Integrashare Dimensions)
In boom-bust cycles, investors and shareholders see opportunities in the ups and downs. Assets change hands, and that includes data attached to those assets. Like any other cyclical business, those in the energy business - regardless of type - see opportunities when the busts happen - and those who must handle the data assets inevitably face some interesting challenges and opportunities. The value of data coming in with the assets can be maximized and expensive problems can be avoided if a careful process is used in on-boarding your new data. "Hi, I'm your new data" - that experience can be like getting a puppy from the shelter. It's up to you to check a few things and get to know it better. Does it need a bath? Has it had it's shots? Or does it actually belong to someone else and you need to return it or get the ownership straightened out? Where does it need to live - in a container or can it just roam freely, adapting to anywhere it exists? Can you keep it from having puppies of its own? Will it behave properly? What do you do to feed and care for it? Will it get sick, if you don't practice prevention? This can be quite an exploration and an interesting challenge! First things first - the overall understanding of the best methods to use when you are onboarding data or packing it up for a new owner. It sounds like a boring old hat, but not ticking the boxes can spell trouble. The general idea is that your new data should be useable for your business teams. It should be validated, cleaned, and ready to go for all the cool analytics and integration that people like to do with data in order to make great decisions or do their ongoing work - whatever. This facilitated workshop will enable participants to explore the best methods to use, to pick up some tips and tricks, and be aware of warning signs of trouble that can be avoided. Attending this workshop will enable attendees to walk away with some new understanding and tools in their back pockets for facing the next time that they have an "adoption" of new data assets that come in or decisions are made to pack the data up for a new owner.
Biography: Ellen West Nodwell, GISP, is an early pioneer of the petroleum data management profession. She has served on the PPDM Board of Directors, as it's Vice-Chair, as well as having served as the Chair of the Houston Leadership Team and on several workgroups. She has decades of experience working across the petroleum value chain, in upstream and midstream data governance and management, and in geospatial technology and data delivery. She and her husband run a woman-owned small business, IntegraShare Dimensions, Inc. based in The Woodlands, Texas. Her current focus is governance for geospatial (positioning) and overall data integrity as well as data integration and analytics. She chairs the APSG Education Foundation, a non-profit supporting education-to-careers for geomatics. Ellen is married to her business partner, Gus Nodwell who she met in 2002 when working at Anadarko Petroleum as a GIS advisor on a project in Anadarko's UK office; he later proposed to her while fly fishing in the Guadalupe River, in Texas. She is a Texas native, and a permanent resident of New Zealand. She is an outdoor fitness "nut" which includes fly-fishing, swimming, and running. She completed 10 half-marathons before retiring from distance running in 2014, after her 10th.

Trends in Data Management and Governance, Trudy Curtis (PPDM Association)
Biography above.

The Value of the CPDA During the Energy Transition(Petroleum Data Management Certification Committee)
More information to come