2020 Houston Professional Petroleum Data Expo
Speakers Abstracts
April 1, 2020

8:00-8:45am

How Do We Make The Oil & Gas Industry Sexy Again? (Keynote Presentation)
Melinda East (Equinor)
Short Biography: What will Digital Transformation do for the oil & gas industry - working faster and smarter, with less resources and less cost, all the while minimizing risk. These are the expectations of Digital Transformation. This is also what the industry is leaning on to make it attractive to the younger generation. This is what's exciting people today. Unfortunately we must first recognize that the digital concepts such as advanced analytics, data science and cloud technologies mean nothing without data to drive them. Digital Transformation starts with the industry transforming how they create, publish, consume, and make decisions with their data. Reality today is we promise the opportunity to embrace these things but first you have to spend 80% of your time doing the 'house work' and once that's in order you can do the things that excite you. Is this not counterproductive to what we expect Digital Transformation to be?
Let's talk about what it takes for companies to turn up the heat on Data Transformation so we can truly get to the Digital Transformation, which is the exciting stuff, without burdening it with the weight of the data chaos that is the industry today. This is when we'll truly embrace Digital Transformation and make this industry sexy again.
Short Biography: Melinda East is the Head of DP International Data Office for Equinor. Her career in data began over 20 years ago, and has always been rooted in the energy industry. The last 7 years of her career have been in leadership roles shaping Information Management strategies and solutions. Stewart Nelson has partnered with numerous operators as a part of Infosys and previously as a co-Founder of Noah Consulting to design and deploy solutions which help our industry optimize business performance.
~~~~~~

9:00-9:45am

Impact of Automation, Drones & Aerial Data Across Oil & Gas Value Chain
Johnathon Casillas (Airobotics)
Description of Presentation: Drones are becoming an integral tool on site, replacing manual inspections in the most hazardous areas and collecting critical information, while drastically reducing the time and manpower required. Physical inspections of assets such as the top of tanks tend to be conducted manually, and maintenance decisions which rely on visual inspections, are, as a result, oftentimes made subjectively. Several other factors including weather, lighting and time of day can influence the outcome

of data, oftentimes making it irrelevant or distort the reality. With added automation capabilities, the operational advantages brought on by drones are further augmented with consistent and reliable data capture, download, processing and collaboration. Airobotics' Director of Flight Operations, Johnathon Casillas, will discuss the era of Digital Data Delivery, and share benefits that automated drone operations entail. This presentation will focus on the efficiency of automated aerial data capture, data management and analytics. Furthermore, during his talk, Johnathon will share an overview of the digital revolution and the reality of automation in oil & gas and other industrial facilities. Supported with real-life case studies, he will identify where the data value truly lies for industrial operations, how to extract value and transform it into business-critical insights to justify investments for digitalization. With Airobotics' ability to deliver visual data, physical risk to employees can be minimized without the need for them to climb up the tanks. Activities do not have to be halted as personnel are not physically required to inspect and take measurements of critical assets. The frequency of measurements and inspections can be significantly increased whilst human risks are minimized to the absolute lowest possible rate. During the presentation, he will also discuss the implementation of new technology and how change-management principles must be applied to create behavioral-shifts. Standard decision-making processes will need to be streamlined as the value of digitalization is derived from the ability to react rapidly to near real-time data at each operation. Decision-making will transition from the basis of subjective opinions to leveraging objective data and measurements. About Airobotics: Airobotics, a global leader in fully automated industrial drones. Airobotics has developed a pilotless drone solution, the first of its kind in the global market. Airobotics provides an end-to-end, fully automatic solution for collecting aerial data and gaining invaluable insights. The industrial grade platform is available on-site and on-demand, enabling industrial facilities to access premium aerial data in a faster, safer, more efficient way. Airobotics is the world's first and only regulatory compliant commercial UAV solution that can be operated remotely in BVLOS mode..

Short Biography: Johnathon is the Director of Flight Operations at Airobotics and formerly the Chief UAS Pilot for Dow Chemical Company. His passion is all things aviation as he holds Private Pilots Licenses in Rotorcraft and Fixed-wing Aircraft. He has been in the UAS Industry since 2015 when he was charged with Dow's initial Drone implementation, and operated in flight operations and testing with Amazon.

~~~~~~

What Can AI Teach Us About Well Spacing?
Luther Birdzell (OAG Analytics)

Description of Presentation: Large-scale development projects in U.S. unconventional basins have put a spotlight on the importance of understanding how well spacing affects production and the ability to forecast accurately. Operators are using insights from machine learning models to complement subject matter experts' interpretations in understanding the balance between well spacing, localized rock properties, and completion design to improve drilling unit economics.

Short Biography: Luther has been transforming data from a cost to an asset for over 20 years. In 2013 he founded OAG Analytics to build a cloud AI platform that helps the oil & gas industry improve critical decisions. Dmitriy has over 20 years of experience of architecting and delivering enterprise solutions,

and has been with Amazon Web Services for more than 2 years. Before Amazon he spent more than 10 years in Oil and Gas industry working as architect for SLB and HAL.

~~~~~~

The Role of PPDM in the Digital Transformation
Steve Cooper (Quorum Software)

Description of Presentation: There is a lot of discussion in the industry about the digital transformation that is underway. Much of this discussion focuses on technology and the incredible advances that are being made in terms of data capture, query, and visualization, as well as the application of analytics and machine learning leading to workflow optimization.

It is important, however, not to forget the lessons of the past and to make sure that future solutions recognize and leverage the tremendous contributions and ongoing relevance of organizations such as PPDM. As companies look to streamline operations through workflow automation and advanced analytics, data integration and quality form the foundation for success. This requires strong, industry accepted standards around data definitions, governance, validation, and exchange implemented using leading edge technology. To quote Jim Crompton, 'Big Data will not overcome Bad Data'.

This presentation will discuss how the PPDM organization has delivered, and continues to deliver, value that is critical to organizations undergoing their own digital transformation. We will demonstrate how it is possible to apply the standards definitions within the PPDM data model and initiatives such as 'What is a Well?' to derive common Data Objects within an industry leading open source search engine provided by Elastic. The combination enables us to deliver lightening query and visualization performance while retaining the underlying relationships critical to delivering the data that the business needs to make critical decisions as part of the ongoing digital transformation.

Short Biography: Steve Cooper is the Vice President of EnergyIQ by Quorum Software, a recognized leader in the oil & gas data management arena. As part of EnergyIQ, he developed a sophisticated Well Master Data Management platform that supports critical decision-making at many oil and gas companies today. He started EnergyIQ in early 2008 after 14 years at Petroleum Information (later IHS) with 5 years spent as the CIO. He is a past Chief Communications Officer and Board Member with the PPDM Association.

~~~~~~

Art of the Data Possible
Matt Becker (Sullexis Systems LLC)

Description of Presentation: Data management technologies are a dime a dozen and are improving at an ever-increasing rate. How does one determine how to transform data technologies such as cloud storage, data streaming, no-SQL technology, ML and AI into an effective (and cost-saving) data management solution for upstream companies? This article will provide an objective set of examples of a variety of open-source and various vendor solutions to help educate the upstream industry on ways to incorporate various data transformation solutions to provide data insights rapidly, repeatably, and efficiently. Learn the "art of the possible" to leverage effective data transformation processes and

technologies along with seamlessly integrated public, private, structured and unstructured data sources. With modern data transformation best practices, see how companies can rapidly provide a data platform to better manage Data analysis, Data Replication, Data Management, BI Tool Connectivity, Support, Scalability, Data Stream and Cluster Monitoring, and Disaster Recovery/Failover.

Short Biography: Matt Becker serves as the Managing Director of Sullexis' Enterprise Data Management practice. He has spent 20+ years implementing strategies that drive client performance through technology adaptation in areas ranging from big data, enterprise data management to business intelligence and analytics. Matt enjoys delivering the value gained by implementing solid information management principles, thereby reducing inefficiencies and gaining insight into overall operational performance.

~~~~~~

Well Status & Classification Update
Curley Thomas (Chevron), James Pipe & Ingrid Kristel (Well Status & Classification Group)

Description of Presentation: PPDM has engaged its global community (2018/19) to understand the where version 2 of the Well Status and Classification met their needs, required enhancements, and a better understanding of areas that needed to be covered. Through the process of surveys, interviews, and intensive work group sessions and with the support of our sponsor, Chevron, we were able to obtain the information required to make these enhancements. More importantly, through this engagement we were able to map some interactions between some facets, represent the facets in the lifecycle, provide some initial symbology work and even illustrate some of the more complex or confusing facet values for more clarity.

Short Biography: Having over 14 years of experience in Upstream data management, James has worked his way through a wide range of projects, programs, and roles to reach his current position of Information Architect and Subsurface data SME within Chevron's New Capabilities Delivery team. He has worked on a variety of solution deployments around the globe, with a focus on Reservoir Management and operations.

James joined Chevron as a full-time employee in 2018, having worked with them for several years as a consultant. He is the Chevron data liaison to the Open Subsurface Data Universe (OSDU) industry forum, where he leads the Data Definitions and Modelling team, as well as an active contributor to PPDM work groups.

Based in Houston, James is married with one daughter, two dogs, and one and a half working dishwashers.

Short Biography: Prior to joining Chevron, Curley worked for ExxonMobil, Hess and Noble Energy. He has worked in the oilfield supporting multiple petrotechnical applications both onshore and offshore. In his previous roles, Curley traveled throughout various oil-producing regions of the world, designing, developing, and implementing digital oilfield and workflow solutions in support of well planning and production optimization. Curley joined Chevron in 2017 as a Well Model and Data Standards Specialist within Chevron's IT organization. Prior to this role, he consulted with Chevron for several years in the

Gulf of Mexico business unit on standardizing wellbore schematics, working on the Drilling and Completions Applications Projects (DCAP) team with the rollout of Wellview 10 and most recently as a SME on the cross functional Well Information Project (WIP).

Curley is actively involved with the Professional Petroleum Data Manager (PPDM) organization, where he is not only the driving force behind such work as the Well Status & Classification but has also served as a contributor, panelist, and speaker and now Board Member where he is able to bring his wealth of experience and insight to PPDM's strategy. He has also given presentations at SPE, LIFE, P2 and multiple Peloton conferences. Curley also serves on the PRODML Executive Team for Energistics.

Curley is married with four children and enjoys golf, traveling, and loves college football.

Short Biography: <mark>Ingrid</mark>

~~~~~~

10:00-10:45am

New Breakthroughs in Well Planning using Machine Learning
Sunil Garg & Samir Jain (dataVediK)

Description of Presentation: This presentation and demonstration will focus on a machine learning workflow in the upstream Oil and Gas domain to do analog well selection and then feeding it to a novel ROP prediction technique by applying artificial intelligence and machine learning techniques to drilling data. The model uses both unsupervised Machine Learning as well as supervised deep learning techniques on drilling sensors data, the daily operations reports and the BHA data and provides drilling KPI dashboards as well as a predictive well plan to aid the drillers to plan better drilling operations. The self-learning model, which is a unique differentiator of dataVediK and encompasses the detection of outliers and data quality issues and their subsequent validation and suggested corrections to improve the quality of data in an automated fashion during the model training process. The demo will showcase the end-to-end process used in building this solution as well as a unique performance dashboard to validate its performance.

Short Biography: Sunil Garg is the founder and CEO of dataVediK, an early stage startup specializing in Big Data, Data Analytics, Machine Learning and end-to-end Data Ecosystems for Oil & Gas industry. Prior to this, he spent 20+ years establishing and growing Data Management, Big Data and Analytics business for Schlumberger. Sunil is a sought-after speaker at various industry conferences and also conducts Big Data, Machine Learning and Blockchain trainings for the Industry, the Government and the Academia.

Short Biography: Samir provides domain expertise to dataVediK in developing Machine Learning based solutions. He has over two decades of experience in the field of Upstream Oil and Gas E&P Information Management and has worked with the leading E&P software consulting organizations – Schlumberger, Fugro and Noah Consulting. Samir's expertise spans Business Process Improvement, Data Governance, Data Quality & MDM.

~~~~~~

The RPA Journey to Cloud for Scale

Deepak Adappa (Infosys Consulting), Sachin Padhye (Infosys Consulting), John Breeden (Infosys Consulting)

Description of Presentation: Most organizations today are adopting Robotic Process Automation (RPA). The RPA market is estimated at $16.2 billion by 2023. Many organizations, including large bodies such as the United Nations se huge benefits in adopting RPA. However unbridged opportunities in RPA adoption are preventing maximizing returns on RPA. These opportunities include selecting the right RPA product, long lead times for procuring the product and putting in place the infrastructure, obtaining management and work-force buy-in and resistance to RPA due to fear of job losses. Among technical opportunities, the long lead time for infrastructure and the cost to operate and maintain that infrastructure is the tops the list of opportunities. Cloud computing offers a way to address this opportunity. As the Journey to Cloud begins to become widely adopted in organizations, RPA efforts can harness cloud capabilities to quick adoption and scaling. The cloud landscape offers several alternative cloud providers such as Amazon Web Services, Microsoft Azure Cloud, Google Cloud, and a host of the other providers. These providers have already created the infrastructure and built in security protocols, scalable data storage capacity, and built in solution for availability and backup and recovery, While the Cloud offers a way to scale RPA, there are certain considerations that organization must pay attention to for a successful RPA Journey to The Cloud. This includes having a steady pipeline of automation opportunities, careful selection of the appropriate vendor, cloud connectivity, data security adherence and strong governance for developing/testing/going live, developing a first-class automation production process, and managing change. In addition to leveraging the Cloud to scale RPA quickly, organizations should consider adopting agile methodology instead of waterfall. People should be trained in adopting and using agile. Finally, organizations should consider managing change with RPA adoption – this includes redefining jobs and developing new skills. In conclusion, a Journey to The Cloud, offers organizations an effective way to scale up quickly and reap the maximum benefits of automation.

Short Biography: Deepak Adappa is a Principal Consultant with Infosys Consulting group. He has about 20 years of IT experience, mostly in Oil & Gas. For the last 4 years he has been involved in enabling customers in their cloud journey. He is also implementing RPA in cloud. He is a certified in TOGAF, Microsoft Azure, AWS cloud (Associate and Professional) and Certified Scrum master.

Short Biography: Sachin works on Digital Strategy issues in Oil & Gas. He has experience in Downstream, Midstream and Upstream Oil & Gas in the US, India and South East Asia. He works with several large Oil & Gas Clients to frame their digital strategy encompassing customer and employee experiences, operations and new business models. Sachin helps quantify value across the Digital Value Chain beginning with industry opportunities, ending with decisions and built with Big Data, Analytical Tools, Insights, Visualization and Narratives. One of Sachin's current focus areas is to monetize the value of Data in order to determine the size and scope of the digital footprint required to harness and maintain the data. Sachin has an MBA from the University of Michigan, Ann Arbor.

Short Biography: John is a Senior Consultant with Infosys Consulting with experience in Upstream Oil & Gas, Oilfield Services, and Supply Chain across US, UK, Middle East, and Asia. John's project experience includes project management of a new RPA development initiative for a multi-national operator implemented in cloud. Recently, he helped curate a digital transformation strategy for a global oilfield services company. John holds an MBA from the Jones Graduate School of Business at Rice University.

~~~~~~

OSDU, A Business Transformation Movement
Ron Clymer (EPAM)

Description of Presentation: The OSDU forum has a unique opportunity to introduce not only a functional open API standard and a reference implementation, but it also has a unique opportunity to revolutionize the way our collective community comes together bring the subsurface domain to a revolution in a way we interoperate amongst not only teams, but teams of companies.

With such a goal in mind, there needs to be a shared vision of prosperity and opportunity for Application Developers, Data Vendors, Service Providers & Operators. As an ecosystem that benefits a select few, will only certainly fail in an economy that requires all of us.

Our vision is to empower Petro technical teams to expand and challenge their full potential. As a forum we work to challenge the boundaries of what is possible as we believe our vision of pushing the limits of innovation can best flourish when the industry comes together to create an open ecosystem of member companies that inherits its vision through lenses of shared economical prosperity from the mutual respect & comradery driven & nurtured by the spirit of the OSDU forum.

Ron Clymer, part of the OMC, OSDU Management Committee, shares a perspective on why OSDU is uniquely positioned to change an industry, and how it plans to accomplish that vision.

Short Biography: Ron Clymer has 9 years of upstream oil and gas domain experience, specializing in enterprise subsurface data management, business life cycle, solution development and enterprise capability enablement. He currently serves as a Senior Manager of Business Consulting for EPAM Systems as well as serves on the OSDU Leadership Committee representing service organizations, ISVs and Data Vendors.

Ron has previously served as the Subsurface Data Management, Process and Governance Lead at Devon Energy Corporation, where he established the subsurface data management practice, developed a proprietary full life cycle enterprise subsurface master data system, and lead a culture of innovation, integration and collaboration between the engineering, geoscience and reservoir communities. As a member of PPDM and SPWLA, Ron has presented and authored multiple white papers on executing and evolving subsurface capabilities for the enterprise in global upstream forums such as PPDM, PNEC, SPWLA Data & Analytics, and the Landmark Innovation Forum (LIFE). Ron holds a Bachelors of Fine Arts from the University of Oklahoma.

~~~~~~

Digital Transformation in Well Cost Management
Venkataraman Sankaran & Nirav Ghandi (Infosys Consulting)
Description of Presentation: As oil prices have been hovering around $ 60 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.
Short Biography: Venkataraman Sankaran - Principal, Energy Consulting Venky has over 22 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.
~~~~~~

International PPDM
PPDM Volunteers
Description of Presentation: Join some of PPDM's International Volunteers for a discussion about what it's like being a part of the PPDM Association, why they volunteer, and why you may wan to volunteer too.
Short Biography:
~~~~~~

11:00-11:45am

Data & Analytics Enablement in the "Age of With"
Nishanth Raj (Deloitte Consulting LLP)
Description of Presentation: Operational and Strategic evolution of business models have created unprecedented pressure on Data management & analytics needs, compelling organizations to re-organize their data and drive to a 'Future State' of Information Architecture & Analytics. Achieving

exceptional outcomes starts with Data, since everything that we do is built on having a solid data foundation. We are now in the "Age of With", where companies are harnessing the power of "with" to identify unique advantages through data, analytics and the future of artificial intelligence (AI). The results are insights that become automated, engagements that become insightful, and relevant information that can get into the right hands at the right moment. This presentation talks about opportunities and challenges associated to driving data capability modernization by exploiting disruptive technologies to exponentially shift the pace of change and value delivered from information assets, along with real life O&G industry use cases.

Short Biography: Nishanth is a dynamic, result-oriented leader with a strong and consistent track record of delivering extraordinary results in growth, revenue, and operational performance. His main area of expertise is in Enterprise Information Management & Supply Chain Management in the Oil & Gas sector along with additional expertise in the areas of business process optimization, systems integration, business intelligence and change management.

~~~~~~

Presentation TBD

~~~~~~

Presentation TBD

~~~~~~

"Open Standards"; How Many Cooks in the Kitchen?
Jess Kozman (Woodside Energy Ltd.)+ Panelists TBD
Description of Presentation: "Open Standards" such as the Open Subsurface Data Universe platform have been gaining momentum and membership as oil and gas operators look to leverage open source standards in deploying data and analytics platforms, in many cases as part of digital transformation projects. Enterprise level data solutions must include not only consideration of standards, but associated governance policies, procedures, and processes. This panel discussion will address best practices and lessons learned from deploying standards for cloud native data management ecosystems. Participants will be asked to discuss: - Progress on the inclusion of open-source code from organizations supplying data management, geospatial analysis, and seismic storage and compression. - How traditional standards organizations such as PPDM and Energistics are moving toward making semantic definitions, reference data, business rules, and training proof points re-usable in a cloud environment. - Experiences in deploying API's for ingestion, enrichment, and consumption of data from multiple sources including Joint Venture Partners (JVP's), government regulatory agencies, digital data subscriptions, joint academic/industry consortiums, and third-party application vendors. - How operators are working to leverage open standards to create an environment for deploying a combination of internally developed and vendor-supplied applications. The audience will participate via interactive tools in the gathering, prioritization, and communication of top voted user stories for open source development with the most business value to operators.

Short Biography: Jess Kozman in the Data and Solutions Manager for Subsurface Digital Information Management at Woodside Energy Ltd. In Perth, Western Australia. This role follows five years as a regional representative for PPDM in Asia Pacific, and independent consulting as a trusted adviser on data management and business intelligence for National Oil Companies and government regulators. Mr. Kozman has over four decades of experience working with emerging technologies for digital geotechnical data.

~~~~~~

Certified Petroleum Data Analyst Panel. An Open Discussion With a Cross Section of Stakeholders
PPDM Association Certification Committee (PPDM)
Description of Presentation:
Short Biography:

~~~~~~

1:00-1:45pm

Opinion Engineering or Science - Advances in Infonomics
Emile Coetzer (Chevron)
Description of Presentation: Most everyone in our industry instinctively understand that technical data Is valuable. In recent years there has been a need to calculate that value, not least to justify the expense in developing, maintaining and governing data quality. As in any new field, a variety of approaches have emerged.   This field of study has become known as "Infonomics." The presentation will start with contrasting anecdote and research and exploring the implications of either approach. New perspectives on the subject will be presented, and the implications for PPDM explored.
Short Biography: Emile-Otto Coetzer M.Eng, P.Eng is part of Chevron's reliability engineering community. His 35+ years career in Asset Management has seen him on 4 continents in both Operations and Major Capital Project environments. His experience includes a number of oil majors, and time in the mining and nuclear sectors. He was involved with the development of ISO 55000 and serves on the Board of Directors of PPDM and the Information Standards Subcommittee of the IOGP. He is passionate about ethical, real and sustainable improvement in our industry's performance, and views engineering data quality as a key enabler. As a result, he is a scholar of what is now being called Infonomics. He holds degrees in Mechanical and Industrial Engineering , a management qualification and an RBI certification. He resides in California with his family, a motorcycle and a fly fishing rod, in no particular order.

~~~~~~

Load Balancing for a Cloud Native Elastic Distributed Compute System
Tanmoy Palit (Bluware)
Description of Presentation: Intelligent Load Balancing for a Cloud Native Elastic Distributed Compute System with Dynamic Pluggable Workflows The Headwave Distributed Compute framework provides an

extensible platform where new workflows can be deployed and discovered. These dynamic workflows can be created using the Headwave platform data architecture. The architecture is cloud agnostic. The framework uses an intelligent load balancer for dynamic scalability and cost optimization. Here we present the key architectural characteristics of the intelligent load balancer which dynamically increases and decreases compute nodes based on user requests and availability of the provisioned compute resources.

Short Biography: Tanmoy Palit, Technical Lead at Bluware, has a computer science and engineering degree from MAKAUT, India. He has more than a decade of experience with developing software for the oil and gas industry. For the last five years he has been working on high performance computing applications for seismic interpretation. Currently he is part of the Bluware's platform team that is working on the cloud native distributed compute system with pluggable workflows.

~~~~~~

How Much Is Your Upstream Data Worth?
Sachin Padhye (Infosys Consulting) & Jim Soos (Infosys Consulting)

Description of Presentation: Every business decision that is made, by a human or Artificial Intelligence, is based on data that is available. While we typically quantify the value of the outcome from decisions, we rarely quantify the additional upside of the outcome, that may result directly from an improved data. We also do not consider all the costs associated with data. Consequently, we do not assess the value that data contributes to decision making. Within Upstream Oil & Gas, data is leveraged across several workflows such as Reservoir Management, Drilling and Completions, Facilities Engineering and Base Business and Operations. Several use cases are cited where data can help increase speed to first oil, enhance production, lower costs and nonproductive time and reduce health, safety and environmental risks. Yet, there is no standard way to assess the value of the data itself that helps increase the value of business. The value of data has many dimensions creating the complexity to assess the value at any point in time. This paper reviews the need to assess the value of data, outlines a method for valuing data and recommends ways to drive valuation efforts in an organization.

Short Biography: Sachin Padhye is a General Management consultant focused on leveraging digital to transform customer/employee experiences, operations and business models. Sachin works with several large Oil & Gas companies to define their strategy and execution plans. He has an MBA from the University of Michigan. His latest interest is assessing the value of data and digitalization.

Short Biography: Jim Soos is an Oil & Gas Consultant with 20+ years of experience. Soos holds an MBA from the Ross School of Business at The University of Michigan. He works with large Oil & Gas Clients in Data Management, Growth and Efficiency Strategies and Organization Restructuring. Soos recently worked with some Clients to assess the value of upstream data and created a working model for users to simulate the value of data. Understanding the value will help users to prioritize Data Management efforts.

~~~~~~

Crossing the Chasm from Digital Proof of Concept to Full Scale Deployment
Phil Neri (Energistics Consortium Inc)

Description of Presentation: There is a consensus among companies on their digital transformation journey that 70% of successful proof of concept (PoC) projects do not achieve their stated goals when moving to the deployment phase. If not addressed energetically this "high fatality" situation will slow down the impetus to truly transform the industry. Organizational inhibitions and people issues are most often cited as reasons for such failures. However technical issues are less commonly mentioned. If a digital system can work on a small scale it seems trivial to scale it up. A digital PoC involves a mix of existing operational systems and some new technologies, data management tools, connections between silos, migrations to cloud or any combination thereof. A good PoC will look for a point of pain in the data / digital landscape, or an untapped potential, and demonstrate a high-value result through the innovative elements it deploys. The emphasis is seldom on engineering into the PoC the components of future scalability. For all the efforts invested in opening up and connecting legacy siloed applications and data repositories, the oil and gas digital landscape remains quite heterogenous, and will remain so for a number of years while next-generation infrastructure is being worked on. This lack of uniformity was the foundational motivation to develop data exchange standards to connect disparate systems and achieve interoperability. The reality is that the pace of adoption of standards and the uneven conformity of various implementations generates data 'friction', requiring the attention of scarce subject matter expert resources to resolve them. The PoC project can demonstrate a lot of value while it operates in a confined space where data compatibility issues have been addressed. It does not matter for the PoC whether this compatibility was achieved using pragmatic custom methods or a rigorous standards-based approach. But crossing the chasm to a full deployment across a large organization and an ecosystem of multiple vendors, partners and data sources will face insurmountable problems if standards are not in place to ensure trustworthy, efficient and comprehensive data flows. Implementing standards does not require a proof of concept and it is not a project. It is a basic necessity to achieve digital transformation. While PoCs are exploring the realm of value-driven digital initiatives, companies should be accelerating the use of data standards within their digital infrastructure to ensure that small-scale initiatives can scale up to the enterprise, while avoiding the sort of problems that prevent many PoCs from scaling up successfully.

Short Biography: Philip is Director of Marketing at Energistics. With an M.Sc. in geophysics and computer science, he started out as an interpreter at Shell, before taking on product management roles for AI-driven interpretation software at Schlumberger, Total and CGG. Moving to the US in 2002 he worked for Paradigm Geophysical in product management, global business and marketing. More recently he was VP marketing at Ikon Science. Before joining Energistics in 2017 he worked with ML and seismic start-ups.

~~~~~~

Data Governance Training (1:00pm – 2:45pm)
Kevin Brunel (Brunel Analytics)
Description of Presentation: --
Short Biography: Kevin's career in data management and data-driven software application development spans more than two decades. As a consultant, he spent several years providing business analysis,

project management, and solution delivery management services to companies in the oil and gas industry, including ConocoPhillips/Phillips 66, Williams, Great White, and others. In early 2013, Kevin entered Devon Energy as a business analyst with Noah Consulting, kicking off the Engineering Data Management program. From 2013 until this year, Kevin led Business Process Management and Subsurface Data Management teams at Devon. In 2019, Kevin returned to Data Management and Analytics consulting, and also serves on the PPDM Board of Directors.

~~~~~~

2:00-2:45pm

Presentation TBD

~~~~~~

Empowering Data Driven Upstream on Azure
Kadri Umay (Microsoft)
Description of Presentation: In this session, we will discuss how better usage of data can drive higher productivity, what Azure provides as a platform, examples of work we're doing with standards organizations such as Open Subsurface Data Universe (OSDU), PPDM, Energistics. Oil and Gas customers are leveraging cutting edge technologies like deep learning, serverless on demand hyper-scale compute and augmented reality to fuel the next generation of subsurface data management, we. We will dive deep on cloud computing innovations from Microsoft and the architectures that make this possible. Microsoft's work with PPDM has resulted in innovations in the platform and products which has driven business solutions that was not possible before the cloud. PPDM joining OSDU enables new opportunities, we will present an OSDU primer and short demo to the audience and talk about possible areas of collaboration. Lastly, we will conclude with new innovations that could shape the future of subsurface data management.
Short Biography: Kadri Umay is a principal program manager for the Energy Industry Group at Microsoft Azure Global, focusing on domain-specific data platforms utilizing Microsoft technology and cloud platform. He also works with the Microsoft product team, mapping industry architectures to technology requirements, and helping to define the features of the new products and capabilities. Mr. Umay is an IASA-P architect and holds data science certifications. He has MSc in Process Control engineering.

~~~~~~

Geospatial Intelligence
Bill Barna (Microsoft) & TBD
Description of Presentation:
Short Biography: Bill Barna works for Microsoft as a Principal Cloud Architect and supports a dozen upstream oil and gas customers in Texas and Oklahoma. He specializes in using cloud-based AI to solve drilling and completion problems. He works closely with ESRI on geospatial solutions for oil and gas. He has an MBA from Southern Methodist University and a Master of Science in Predictive Analytics from Northwestern University.

~~~~~~

What Does Blockchain Have To Do With Me?

Andrew Bruce (Data Gumbo)

Description of Presentation: Our workshop would aim at answering the following questions and more: What is blockchain? What are hashtags? What does blockchain have to do with databases? What are the governance and legal implications of blockchain? What does blockchain have to do with me?

Short Biography: Andrew Bruce is the CEO of Data Gumbo, a Houston-based technology company that has developed the blockchain-as-a-service (BaaS) platform GumboNet™ to streamline smart contracts for oil & gas. After realizing the inefficiencies across the industrial value chain, Andrew leveraged a proprietary blockchain with an IoT data platform that enables vendors in a transaction to be certain of immutable data and measurement accuracy.

~~~~~~

3:00-3:45pm

Education Panel Discussion

Trudy Curtis (PPDM Association), Matt Becker (Sullexis), Melinda East (Equinor), Al Huber (Shell), Andrew Klein (Texas A&M)

Description of Presentation:

Short Biography: Matt Becker serves as the Managing Director of Sullexis' Enterprise Data Management practice. He has spent 20+ years implementing strategies that drive client performance through technology adaptation in areas ranging from big data, enterprise data management to business intelligence and analytics. Matt enjoys delivering the value gained by implementing solid information management principles, thereby reducing inefficiencies and gaining insight into overall operational performance.

Short Biography: Melinda East is the Head of DP International Data Office for Equinor. Her career in data began over 20 years ago, and has always been rooted in the energy industry. The last 7 years of her career have been in leadership roles shaping Information Management strategies and solutions. Stewart Nelson has partnered with numerous operators as a part of Infosys and previously as a co-Founder of Noah Consulting to design and deploy solutions which help our industry optimize business performance.

Short Biography: Al Huber

Short Biography: Dr. Andrew Klein is a Professor in the Department of Geography in the College of Geosciences at Texas A&M University and holds the EOG Teaching Professorship in Geosciences. He serves as Faculty Program Director for an online Masters of Geoscience Program focusing on GIS and Data Management in the Petroleum Industry. He is currently the Education Chair of the Petroleum User Group (PUG). Dr. Klein received his B.A. from Macalester College and his Ph.D. in Geological Sciences

from Cornell University. He has taught at Texas A&M since 1998 with teaching expertise in the areas of Geographic Information Science (GISci) and Remote Sensing.

Dr. Klein's current research interests lie in the application of GISci and Remote Sensing and to study various aspects of the Earth's cryosphere. He applies these techniques to examine the impact of humans in and around scientific research stations in Antarctica, including McMurdo and Palmer Stations. This research has taken him to "The Ice" 18 times. Closer to home, Dr. Klein and his students are using remote sensing to study seasonal snow and glaciers.

~~~~~~

4:00-4:30pm

Closing Remarks
Trudy Curtis (PPDM Association)
~~~~~~