

Digital Transformation: Planning, Executing and Generating Results

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1st Petroleum
**PETROLEUM DATA
MANAGEMENT**
Conference
2021



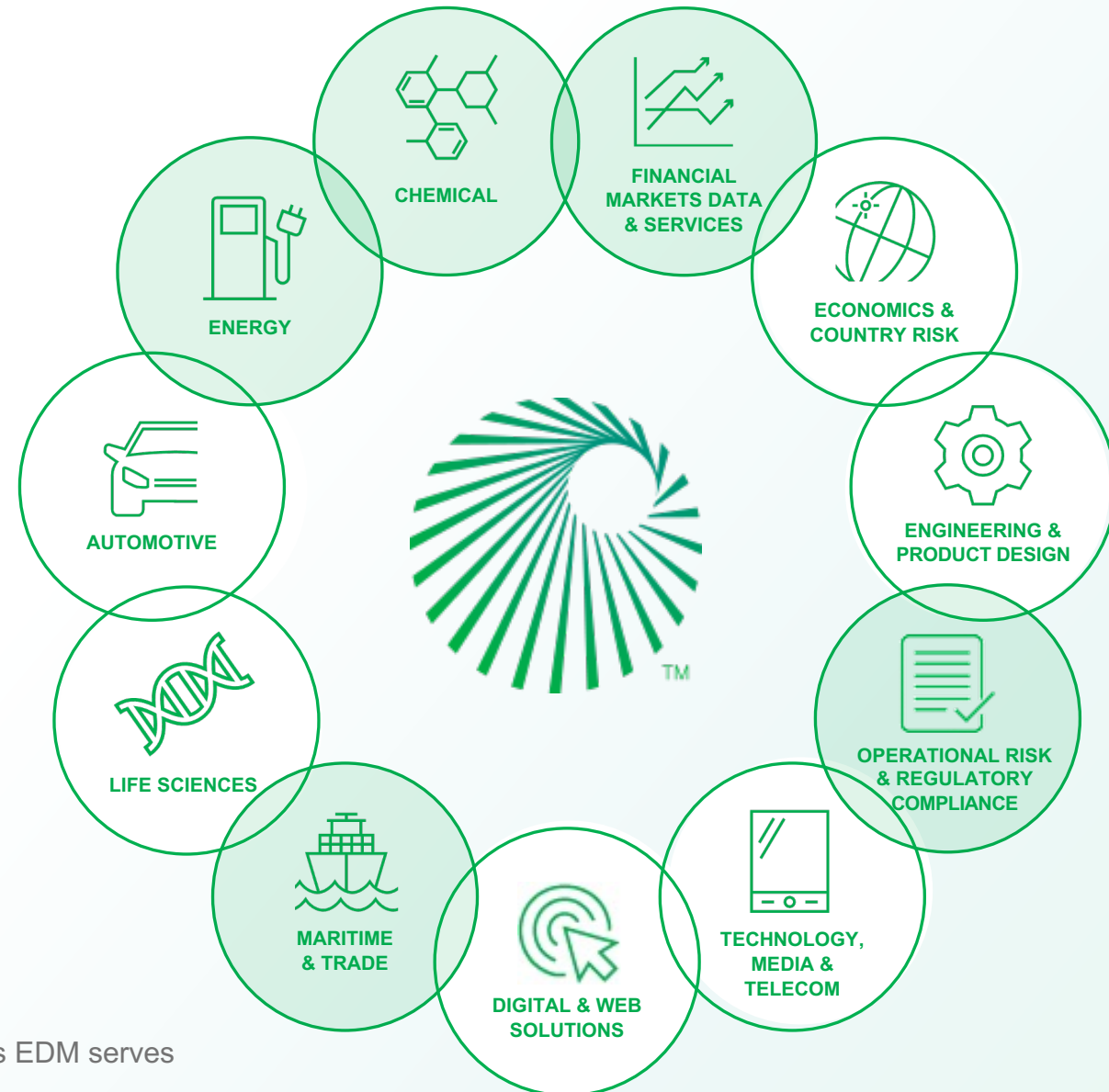
Who is IHS Markit

IHS Markit

Addressing strategic challenges with interconnected capabilities

We deliver on the promise of The New Intelligence

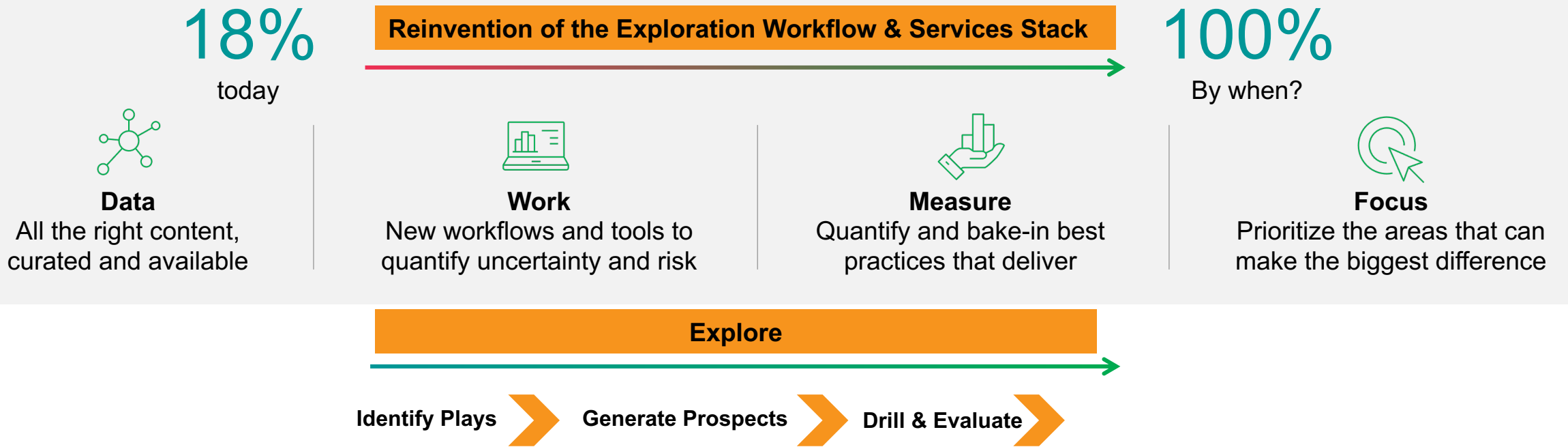
IHS Markit provides leaders from multiple industries with the perspective and insights they need to make the best choices and stay ahead of their competition.



 Industries EDM serves

Exploration example - 100% discovery chance factor, no exploratory wells

Digitalization must change how results are achieved. The architecture must enable innovation.



- Sounds simple, but it's a complex set of workflows
- Many initiatives focus on individual workflows (e.g. basin screening, well planning)
- What information can help identify and manage risk? AI assistance that "remembers"
- Metrics link to overall goal (e.g. managing biggest risk)
- Maintaining shared risk responsibility across the EXPLORE workflow domain

Data-intensive workflows – challenges of digitalization

Goal: Fastest time to the best possible decision in the most economical way

Function/Activity									
	Cataloging	Acquisition	Normalization	Validation	Blending and Accumulation	System Interoperability	Dissemination	Audit and Reporting	Governance
Challenges	<ul style="list-style-type: none"> Multiple versions Lack of visibility of availability of info Lacking in metadata 	<ul style="list-style-type: none"> Manual processes Inconsistency of delivery mechanisms Difficult to support and manage change 	<ul style="list-style-type: none"> Multiple data models Inconsistency of UOMs, coordinate systems Domain specificity 	<ul style="list-style-type: none"> Often after the fact Meta data capture Controlled overrides 	<ul style="list-style-type: none"> Functional protectionism Difficult to manage multiple business requirements 	<ul style="list-style-type: none"> Point solutions not designed to talk to one another Plethora of technologies Functional ownership 	<ul style="list-style-type: none"> Multi data dependent applications and users Manual processes Destination specific requirements 	<ul style="list-style-type: none"> Historical lookbacks Accountability Time to report 	<ul style="list-style-type: none"> Functional focused Difficult to truly implement
Impacts	<ul style="list-style-type: none"> Data assets underutilized Data acquired multiple times Historical data may be used as current 	<ul style="list-style-type: none"> Human resource intensive IT intensive Prone to error 	<ul style="list-style-type: none"> Hardens silos Requires specialist knowledge 	<ul style="list-style-type: none"> User subjective Lack of trust Error tracing very difficult 	<ul style="list-style-type: none"> No single view Data remains within functions 	<ul style="list-style-type: none"> Central functions occur in application/function Repetition of tasks Little governance 	<ul style="list-style-type: none"> Human resource intensive IT intensive Prone to error Timeliness 	<ul style="list-style-type: none"> Error tracking is impossible KPI generation difficult 	<ul style="list-style-type: none"> Inconsistent approaches Variable quality levels

IHS Markit: how do we help?

Upstream Technology and Innovation

Valuable insights into technology trends and developments taking place across the exploration and production and broader energy value chain, including how best to source, manage and advance technological innovations.

IHS Markit's Upstream Technology and Innovation advisory service:

- Arms senior technology and business executives with the robust insight they need to make the right technology investment and deployment decisions
- Helps technology practitioners with independent, integrated and comprehensive analysis of technology advances and their practical application
- Provides a collaborative setting for discussing upstream technology developments and opportunities with peers, partners and IHS Markit experts



Prism



Data Lake Platform

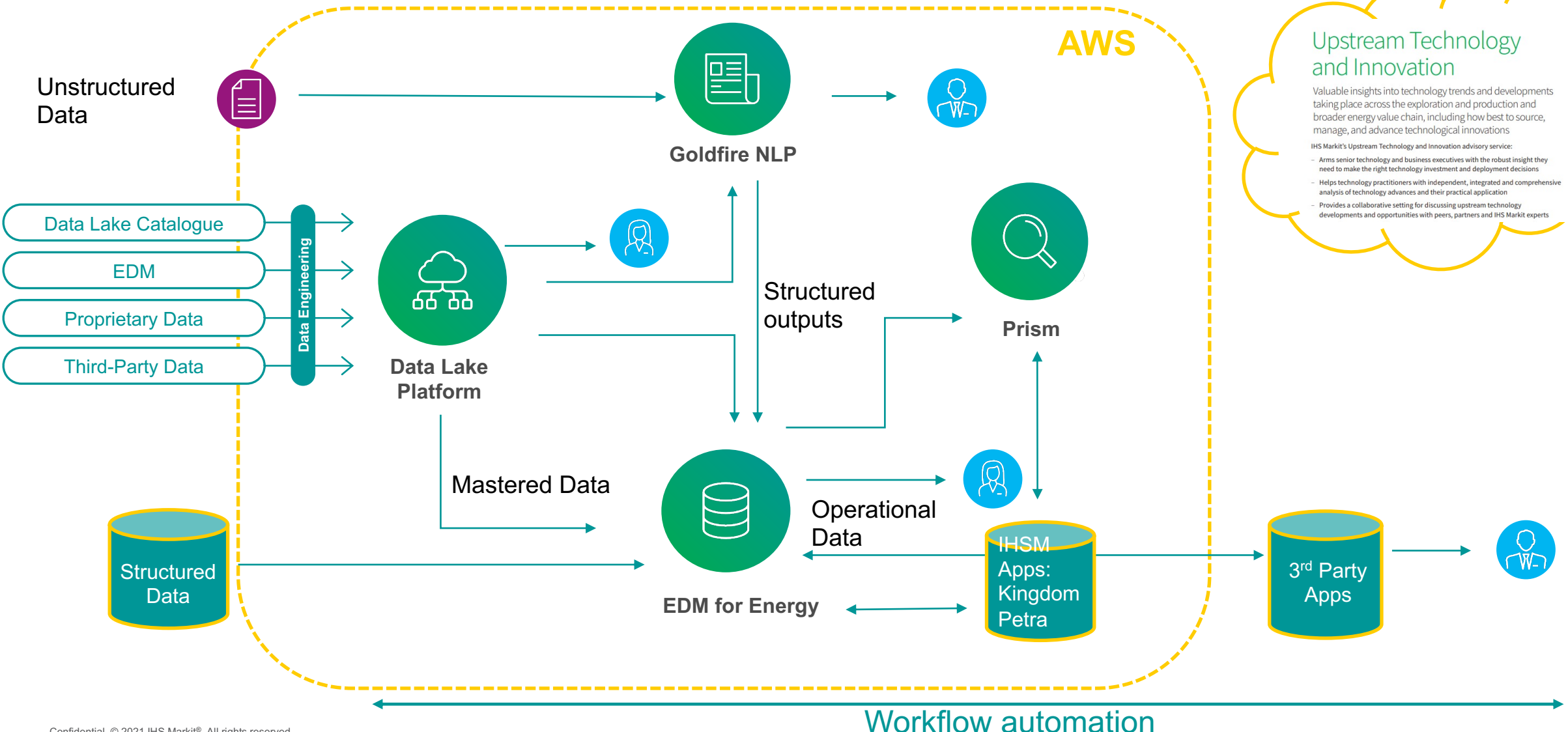


**Enterprise Data Management
(EDM) for Energy**



Goldfire NLP

IHS Markit's Digital Transformation Ecosystem



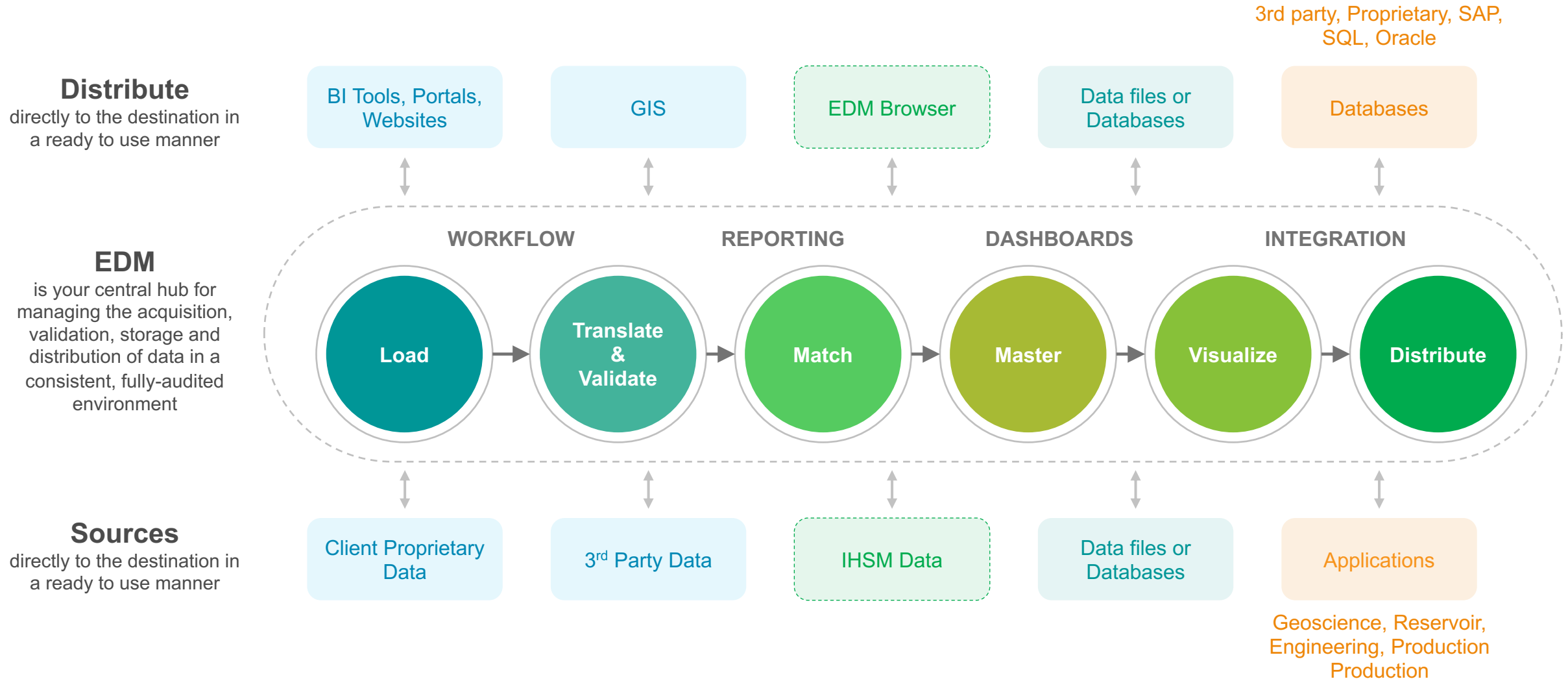
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EDM for Energy



Benefits of the ecosystem

- Increased cross-business collaboration by breaking down technical and functional silos
- Democratization of data historically entrenched in closed applications/workflows
- Time to decision point significantly reduced
- Reduced opportunity for human error
- Company-wide trust in data
- Cost savings from reduction in system support, automation of repetitive, low-complexity tasks
- A real opportunity to execute true governance at a business or corporate level
- Issues identified earlier, reducing cost impact of errors
- Ability to find opportunities faster than competitors
- Improved human resource utilization and job satisfaction

QUESTIONS?

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