The Importance of Information Governance in the E&P Sector

Reap the benefits

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Abstract

Information Governance (IG) has long been held out as a way to improve information and data quality and completeness. Whilst a number of E&P companies have embraced this, many have not and are subsequently experiencing issues around data quality, risk and wasted time and budget. This note looks at the components of IG, how it is set up and how to make it sustainable in an organisation. Although implementing good IG does require a considerable and sustained investment there is clear payback in terms of improved business performance, regulatory compliance and reduction of operating risks.

Introduction

Many E&P companies struggle to complete successful Information management (IM) projects because the overall Governance piece is either missing or not correctly setup. This means that the return on investment is usually low and the 'success' of the project(s) is often limited, which in turn can put future investment at risk. Implementing a Governance framework before any projects are initiated will ensure a longer term sustainable base for Information Management in your company.

It should also be noted that 'Good Information Governance' leads to 'Good Information Outcomes' which in turn leads to 'Good Business Outcomes'. This means that IG is linked to business strategy and objectives. It integrates and institutionalizes optimal ways of planning and organizing, acquiring, delivering, supporting, and monitoring Information Management. IM governance is integral to the success of enterprise governance by ensuring efficient and effective, measurable improvements in related enterprise Information processes. It enables companies effectively to use their information to gain business value, maximise opportunities and gain competitive advantage.

Why Bother with Information Governance?

E&P companies face many common IM issues that are drivers for improved Information Governance. These include:

- Not being able to find information and data, some of which is safety-critical
- Information quality is often unknown and/or poor
- Users generally have a poor understanding of IM practices and why they are important to the company

- Data and information can be inadvertently purchased more than once
- Entitlement to information is often unknown so the company does not understand what it can and cannot distribute and use
- Ownership of information is generally unclear and accountability is not taken seriously
- Data and information is not treated as a company asset that can represent $billions of investment and resultant competitive advantage
- Poor information management can, and often does, cause regulatory or compliance issues

These issues need to be dealt with through individual projects that address specific issues, but the element that brings them all together is a trusted IG framework. There are lots of definitions for IG, but most involve the deployment of a framework that encompasses standards, information risk management, ownership, tools, controls, and quality with proactive support from senior level management.

Information Governance Components

The main components of IG have been listed below, they need to be defined, supported and promoted by all parts of the business.

- **Sponsorship** – support can come in a number of different forms, but it's suggested that two main areas are focused on. The first is to establish an IG group that acts as a decision making body for all IM projects, services and initiatives. This group should be comprised of senior executives, representatives from different business functions and a senior IM representative. The group should focus on assigning ownership, looking at data and information quality, related risks and the general promotion of IM in the business to a point where the IM culture of the company changes over time. The second group is the E&P user community. Cultural change within this group is essential, as their support (or otherwise) is instrumental to the success or failure of any project or initiative.

- **Principles & Standards** – a company should have standards that provide a consistent approach to IM. The standards should include details on how to manage information, access and security, relevant SLA's and more detailed guidance on how to implement the standards.

- **People & Organisation** – every E&P company should have basic roles that define who owns and is responsible

for and accountable for data and information. Roles should include the IG Group (high level view and control), Data Coordinators (proactive data management), Data Owners (senior users in the business who control and publish data and information). The organization needs to have an Information-centric view (along with its people, information is the lifeblood of the company), which in turn means an Information centric business.

- **Controls** – controls are required in order to align to the standards and ensure that the overall culture for IM is changing. Such controls would include data quality scorecards/dashboards to monitor data quality over time, and policing of standard and ownership via performance objectives and subsequent rewards or penalties.

- **Technology** – the tools hold much of the governance piece in place by providing scorecards on data quality (showing progress or otherwise), data dictionaries (so that the company has consistency of definitions) and a consistent platform to ensure stability.

- **Processes** – a set of key processes are essential to define, agree and promote with the business so that a constant approach to data quality management, change management and others is followed.

Sponsorship, Guiding Principles & Charter

Standards
- Information Management Standard
- Data Management Guidelines
- Data Ownership Standard
- Data Management SLA's
- Data Access and Security
- Data Change Management
- Others.....

People & Organisation
- Information Governance Group
- Information Custodians & Owners
- IT Group, IM Group
- Sponsors, Others...

Technology
- Data Quality Scorecards
- Data Dictionaries and Ownership
- Information Definitions and Models
- Others...

Processes
- Standards Management
- Change Management
- DQM Compliance
- Knowledge Management
- Others..

Controls, Services, Training & Communication

The framework provides a consistent template to design, understand and deployed IG into your business. Creating these components will gradually add capability to your governance organisation and will provide the bedrock for any future data- and information-related initiatives.

Setting-Up Information Governance

The flow diagram below shows the main steps required to get the framework established and working. The two main items to success are:

i. To maintain high levels of communication with the stakeholders and the business to gain their trust and understanding.

ii. Keep things as simple as possible, start small and simple and build when appropriate.
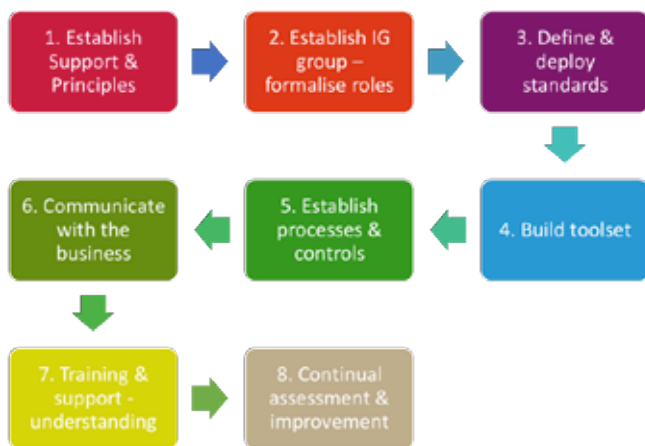
1. Engage senior stakeholders and obtain support and sponsorship, without these, the initiative goes no further.

2. Establish a group that will form the IG group and formalise other roles with the business - such as Information Owners and support roles.

3. Create standards and communicate them to the business so that they gain ownership and acceptance of the new ways of working. The standards should be created using a cross function group from different parts of the business and from outside expertise to achieve the right mix of input and experience.

4. The toolset will vary in size and composition depending on the target level for IG but essential elements include data quality scorecards/dashboards, a consistent Data Dictionary and a data model that links the business together. Specialist organisations exist that can create these for your business, usually based on industry best practice. Maintenance and support plans also need to be put in place for these using a low cost outsourced provider.

5. The processes that a company will need to create will vary and will depend on what is already available or adaptable. The key process is IG compliance - how is it assured and what are the implications of non-compliance.

6. Most of IG is about getting people to change the way they do things – particularly around the management of information. Communication with the business is essential and will take two main forms. The first is continual, appropriate and targeted communication to key stakeholders who will hopefully promote the efforts being made. The second is more targeted at end users and will involve a great deal of change management and support for the business users.

7. Unless a company has significant in-house change management expertise, the use an external agent is recommended. The change management component around IG cannot be completed quickly. The business needs time to understand and accept the required behavioural and cultural changes that support good IG. Point 6 above is the main vehicle for starting the change management, but continuous support, education and training will be required at a low level for an extended period of time. This needs to be built into support plans and budgets.

8. Any effort on Information Governance will not stop at the end of the project. It is worth noting that the processes, tools and standards may need to be changed or improved over time as situations change. One such example would include altering data quality dashboards if different data types or attributes become more important for some reason.

Making it Sustainable

As mentioned in previous sections, IG is a challenging area, mainly because there is no start and finish date - it's a continuous piece that needs to be driven into the business for the long term. The sustainability of IG in your organisation will depend upon a number of factors:

1. Sponsorship and Executive Understanding – Information Governance requires sustained executive level sponsorship, understanding and active promotion. Only by having this level of the organisation engaged and prepared to undertake a sustain drive on IG can it succeed. To encourage this, company executives need to understand that drivers for undertaking IG, the benefits and risks and they probably need to see results in the short term that will encourage self-promotion of the initiative.

2. Results – most organisations would aim to have 'quick wins' pinpointed and achieved early on so that all stakeholders can see the benefits. Be targeted with specific business targets,

such as better data quality management or basic ownership of Master Data Entities. It's important to undertake a benefits realisation exercise that tracks the IG framework deployment and relates the resultant benefits to business objectives.

3. Complexity – as mentioned above, it's important to tailor the IG framework to the size and type of company. A framework designed for a super-major will fail almost immediately in a small exploration company because the business does not have the capacity to undertake such a large venture. All aspects from ownership to processes to standards should reflect what is achievable in a specific organisation.

4. General Business Culture – if the organisation has a genuine desire to undertake Information Management in a better, more robust manner then the chances of success are higher. This can be helped by implementing a change programme that will gradually chance minds and ways of thinking. The message to push to the user community is that 'this will help – for the long term'.

Summary

Information Governance is not for the faint hearted: it requires significant time and effort and the capacity to influence key stakeholders. However, E&P companies can derive a great deal of value from such an initiative by reducing risk, lowering costs and improving performance and productivity.

Since IG compliance is essential, those that adhere to the requirements of IG need to be rewarded and those that do not need to be shown the error of their ways. Publicising good behaviour to the rest of the business is important. Effecting cultural change will make it easier to deploy and support good IG for the long term and will reduce the need for additional support.

Although the steps laid out above are common to all implementations, pace and complexity must be tailored to a specific organisation. It's better to begin with some key elements (IG 'lite') and build on success rather than start with an onerous framework that few people understand and even those that do find too difficult to implement.

Specialist E&P Information Management companies can be a great resource as they bring experience from other operators and industries and can design and implement a practical IG framework that can be deployed in a reasonable time frame. However, the underlying push and sponsorship for IG needs to come from senior company executives who are willing to promote and support the initiative from the outset

About Flare

Flare provides information management consulting, software solutions and related services to the E&P industry.

Formed in 1998 by people with a background in geoscience and petroleum engineering Flare brings extensive industry experience gained at management, operations and technical levels, both within oil companies and the E&P service sector.

The Flare team has developed consulting and services based on a practical, holistic approach to managing knowledge, information and data that focuses on real business needs. The same thinking is encapsulated within Flare's portfolio of software solutions. These include the Catalog for publishing and finding information, Tracker for organising deliverables and Cortex for classification and text analytics. These are all underpinned by Flare's comprehensive Taxonomies. We also have a range of specialised modules, including Emergency Response, Exploration Opportunity Manager and Wellfile.

Since its formation Flare has worked on a broad range of projects with E&P organizations around the world and has gained a reputation for excellence and innovation. Engagements have ranged from information management strategy development, through data and information clean-up projects to software implementations and associated change management. Flare has worked with a wide range of organizations from small independents to large multinational oil companies as well as governments, services organizations and industry groups.

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