Our Top Tips to Achieve Marine Data Management Success

Did you know that the most important resource of any business, after the people it employs, is its data or information? This is an often overlooked fact which means that such a vital resource is often misunderstood, misused or worse still, just ignored!

*Consider these tips to enable more successful management of your data*

**Tip 1: Know the Value of Your Marine Data and Information**

Data is the new oil, the new electricity; it is everywhere and often taken for granted! Data has known and often high costs in terms of collection, ingestion and management and has a high and often unappreciated value to the business. You collect data for a reason; for either direct use in your business and /or in the creation of your products and services. This diagram shows how data can be transformed through processes into a valuable asset for your organisation and the user.

![The Data Information Knowledge Pyramid](image)

**Tip 2: Implementing Data Governance Will Ensure Your Data is Well-Managed**

Data Governance is the exercise of authority, control and shared decision-making (including planning, monitoring and enforcement) over the management of data and information assets. It is assuming greater importance due to the focus on Big Data, Data Security, Data Privacy, Master Data Management (MDM), Reference Data Management, Regulatory Compliance, and Data Quality Management. Many organisations have some form of Data
Governance in place, via data controls, structured development life cycle (SDLC) check points, design boards and architecture. However, these data controls and governance activities tend to lie within business silos and not handled consistently across the whole business. Governing data across an organisation in a standard and consistent manner is a real challenge with several attempts usually being made before it is right. One of the reasons for the limited success is due to the organisation having a corporate culture that is resistant to change with poor change management practices, lack of sponsorship from decision makers, lack of education about the benefits of data governance, scope creep, poor strategy and execution, or budgetary challenges. Before embarking on a new programme or addressing the challenges presented by an existing situation, the key concepts relating to Data Governance (Data Ownership, Accountability, Organisation and Transparency) must be understood and agreed upon by stakeholders.

Tip 3: Understand Why Marine Data Management is Important?

Data management is an important part of the bigger picture of any business as well as to everyone in that business either directly or indirectly. It is not a separate activity that is just for technical people as it plays a key role in managing business risk, quality assurance and future business planning and opportunities. Everyone in the organisation can and should play their part in managing this valuable resource as it is used in development, execution and supervision of plans, policies, programmes and practices that control, protect, deliver and enhance the value of the business information assets.

So it is important to understand:

- What data have you got?
- Where do you get it from?
- How do you manage it?
- When is it updated?
- How is it controlled and accessed?
- Can you retrieve it if it is lost or misplaced?

![Figure 2. How not to do data management?](image)

Tip 4: Find out who is Responsible for Data in Your Organisation?

Data ownership is critical to governing data, since it deals directly with data accountability. If you ask the question “Who owns the data?” across your organisation you will receive many interesting answers, including:
- Data producers
- Data consumers
- Business units that typically manage it (e.g. product managers)
- The owner of the system where this data resides (system-of-record)
- The first system that receives the data and processes
- The owner of the corporate data warehouse

As Data is a strategic asset, three roles are typically defined; the Data Trustee, Data Steward or Data Custodian. These staff members play a critical role in governing data, in collaboration with other members within the organisation in order to ensure accountability. It is important to have nominated “owners” of the data.

**Tip 5: Implementing Metadata Will Help You Learn About Your Data**

Metadata is data about data. It provides important additional information about a (data) resource, to enable the resource to be better accessed, understood and used to good effect.

There are a range of uses for metadata including:
- Discovery (existence and overview)
- Evaluation (more technical details)

These apply to “raw” data as well as data products and services.

Metadata enables you to search, define, reuse and govern data consumed across your business.

![Figure 3: Example of metadata on a consumer item](image)

**So what can you do now?**

An ideal first step towards properly managing the data in your business is to host our half-day management briefing on Data Management. This will present the considerations necessary to deliver data management effectiveness in your organisation, and how this translates into improved operational effectiveness. Contact us for further details.