



Barriers to the effective management of Information Assets

Due to the observed gap between the acknowledgement of information as a vital business asset and its effective management, Experience Matters, the Universities of South Australia, Western Cape (South Africa), South Carolina (USA) and Texas Woman's (USA) and Mike Orzen and Associates have established and are conducting a research project into the Barriers to Information Management. Working with Clevel executives and above of large private and public sector organisations on three continents, our purpose is to identify the Barriers to the effective deployment and management of Information Assets and to develop a practical solution to the problem. Given that most organisations competently manage their other business assets, in many ways our research into their inability to effectively manage Information Assets is addressing the unconquered frontier in business management.

This project is unique in that it is being conducted:

- with academic rigor to stand up to the most assiduous scrutiny;
- to a breadth and depth not previously attempted as evidenced by our review of global literature;
- across multiple industries on multiple continents;
- on a topic that is relevant and important to every organisation;
- to enable the delivery of tangible benefits and value to organisations and their management.

The Barriers identified have been observed from working with and studying organisations:

- of all sizes from a handful of employees to the world's largest multinationals with hundreds of thousands of staff;
- representing the industries of mining, energy, oil & gas, engineering, defence, banking & finance, insurance, utilities, manufacturing, retail, legal, transport and logistics and all levels of government;
- in Australia, Asia, North America and South Africa.

These Barriers complement Attributes of Success. Together they provide a check-list of issues that each and every organisation may face in managing their Information Assets. Whilst we recognise the significant difficulties in doing so, by acknowledging and preferably addressing each of these Barriers and Attributes, organisations improve their chances of Information Management success with the resultant tangible and lasting benefit to their organisations.

The following barriers to the effective management of Information Assets have been identified through interviews with senior management of a wide range of organisations on three continents.

BARRIER	
Awareness	Whilst there is plenty of formal education in Information Technology, there is little in Information Management. A recent interviewee raised the point that at no stage did his MBA address any aspect of IM. Further, Experience Matters' literature review has uncovered little evidence of diligent, multi-national research into the barriers to effective Information Management.
	There is a lack of on the job training . Shareholders and investors do not have the capability to ask the Board hard questions about Information Management which, in turn, does not do the same to their CEO and executives. C-level executives are not held accountable for inefficiencies and risks in Information Management and, moreover, don't have the time or inclination to learn about it.
Governance	Responsibility. Unlike the other principal assets and business inputs of Financial, Human and Physical Assets, in no observed organisation is responsibility allocated for the effective management of Information Assets. The roles of owner, sponsor, steward, custodian and manager of Information Assets are seldom defined or enforced. Whilst many organisations have the title of CIO, in practicality the role is of IT Manager with responsibility for managing the IT infrastructure. The Information Assets remain largely unmanaged. Accountability. Unlike the other principal assets and business inputs of Financial, Human and Physical Assets, in no observed organisation is accountability allocated
	for the effective management of Information Assets. Most organisations acknowledge that if their Financial Assets were managed with same lack of rigor and diligence with which Information Assets are managed, the organisation would fail financially and cease to exist.
	Measurement at corporate and individual levels. In no observed organisation is the management of Information Assets measured, rewarded or punished at either corporate or individual levels.

Justification

The **cost** of managing Information Assets is unknown. Most Chief Financial Officers will readily describe the cost of managing Information Assets as the cost of hardware + software + upgrades + maintenance + support + telecommunications + IT staff salaries. However, this is the cost of managing the infrastructure, the physical assets, the things. It is not the cost of managing the data, information and knowledge, the intangible assets, the stuff. Every time someone reads a report they are managing data; every time someone sends an email they are managing documents, every time someone searches the intranet or web they are managing content and every time someone has a conversation they are managing knowledge. The time and cost invested by the organisation to deploy Financial Assets is the time taken by the CFO, Finance Department and those with delegated authority when managing money. The time and cost invested by the organisation to manage Human Assets is the time taken by the Director of HR, the HR department and those with line management responsibility when managing people. The time and cost invested to manage Physical Assets is the time taken by the Site Manager, Property Manager, Office Manager and IT Manager when managing physical plant and equipment. The time and cost invested to manage Information Assets is the rest. The cost of managing Information is by far the largest of all the Assets. Yet that cost is unknown.

The **value** of an organisation's Information Assets is:

unknown. Can we value them absolutely; can we value them relatively? What is the value of two emails? What if both contained attachments, one with a \$30 million contract and the other with a map to the Social Club barbeque?

contextual, temporally, managerially / hierarchically and professionally. Information that is of importance to a storeman or reservoir engineer may not be of such importance to a senior manager or Board member. Information that is of value on one day may be valueless the next.

captured at time of sale only. Organisations can only attribute the value to information what someone is prepared to pay for it – as a transaction for an item of Intellectual Property or as collection of policies, procedures and methodologies and know-how at time of sale of the business.

Justification (continued)

The **benefits** of improving the management of Information Asset are:

- **unknown**. Few organisations implement diligent Benefits Realisation programmes to measure the effectiveness of their Information Management initiatives.
- **intangible**, for instance, improving morale, increasing compliance, reducing risk and enabling the ability to identify trends and make predictions for decision making.
- **intertwined** with the benefits of other contributing factors. For instance, how can a grain handling organisation isolate the benefits of an ERP implementation when financial results are also improved by a successful marketing campaign, favourable growing conditions and high grain prices?
- difficult to crystallise. Many organisations are unable to recognise benefits such as productivity improvements because crystallising them as cost savings is difficult.

Information Management is low priority because:

- **business performance is adequate**. If an organisation is performing satisfactorily, there may be no need to improve its Information Management.
- **the business is out of control**. If an organisation is facing significant challenges it will have imperatives other than improving its Information Management.
- **the need is lacking**. There is no burning platform. There is no catalyst that is forcing the Executive to address Information Management.
- **risk is inadequate**. The risk of blowing up a gas plant and having to reverse engineer its reconstruction from bits of twisted metal because as-built drawings cannot be found or the risk of killing an employee by giving them the wrong site plan that doesn't have an 11,000 volt cable on it is too low.
- the **management burden** of the day to day operations and the effort required to properly manage Information Assets is too great.
- **compliance** not required or the risk of non-compliance is insufficient to warrant investment in managing Information Assets.

Personal interest:

- **is insufficient**. Management and staff are too busy and time poor or the incentives are lacking to take interest in managing Information Assets.
- is not present because management and staff find the **topic boring**.

Leadership and management

Information Assets are **unknown**. Few organisations have an Information Assets Map / Information Chart of Accounts / Information oriented Enterprise Architecture. It is not easy to manage something that is unknown.

Whilst **resource allocation** is a lead indicator, it is often done on a cost basis. However, this is difficult if the true costs are unknown.

Information Management:

- vision of the future is nebulous. It is easy to demonstrate what a new bridge or LNG plant will look like. But demonstrating what the future Information Management state will look like is difficult. Risk averse management finds it difficult to invest in something that is not concrete.
- pain is insidious. Like the boiling frog analogy, the pain of poor information
 management slowly grows and people don't recognise it. It's only when a new
 information environment is experienced that people wonder how they ever put
 up with the previous situation.
- **is seen as the domain of IT**, not that of the business and responsibility for managing Information Assets is often abdicated to the IT Department.

IT seen as a cost centre, not a business enabler and investment in Information Management is routinely minimised.

IT has poor credibility due to domain complexity, lethargy, lack of business engagement, a history of project failure, poor data quality, inadequate decision support, siloed systems, the ability of the business to find workarounds and a technical not business focus with the result that management is reluctant to invest.

The organisation's culture

- does not value information.
- does not tolerate mistakes creating fear of embarking upon high risk Information Management projects

Tools

Organisations' language is often imprecise, making Information Management difficult. For instance the word referring to the clean-up of an exhausted mine site in Australia is "rehabilitation" whereas in North America it is "reclamation". Searching on only one word will return results for only one geographic region. In another instance, a university has four different definitions for the term "student commencement" which must make business management challenging.

Accounting standards cannot recognise the value of Information Assets and, as what cannot be measured cannot be managed, Information Assets fall into the "too hard" basket.

Software is seen as a panacea. If an organisation has an Information Management problem, the typical response is to buy a bit of software, to leap to a solution. Often, there is little attention paid to the organisation's business requirements, to the preparation required or to the options available. When building a bridge, the construction firm does not immediately start pouring concrete. When searching for oil, the explorer does not immediately start drilling holes in the ground. These organisations consult with communities, do environmental impact assessments, conduct detailed planning, obtain approvals and so on. So why don't organisations apply the same level of diligence and rigour to difficult, high risk Information Management projects.

The fundamental Information Management **tools are not understood**. These include business activity maps, classification schemes, information maps, thesauri etc. An organisation would not contemplate trying to manage its Financial Assets without a Chart of Accounts, Balance Sheet or Income Statement. Similarly it would not consider trying to manage its Human Assets without an Organisation Chart, Roles and Responsibilities or Key Performance Indicators. So why do they try to manage Information Assets without the basic tools?