IntegratedEA '08
Enterprise Architecture Conference

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see www.integrated-ea.com

Petroleum Industry Benchmark

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Profile

- We are active in more than 130 countries
- Worldwide we have 108,000 employees
- We produce around 3.5 million barrels of oil equivalent per day
- Our fuel retail network of more than 45,000 service stations is the world's largest
- Capital Expenditure $23b (2006)
- R&D Expenditure $ 885 million (2006)
- We are listed on the stock exchanges of Amsterdam, London and New York
- In 2006 our Income was $26b on Revenue of $319b

Source: Annual Report 2006

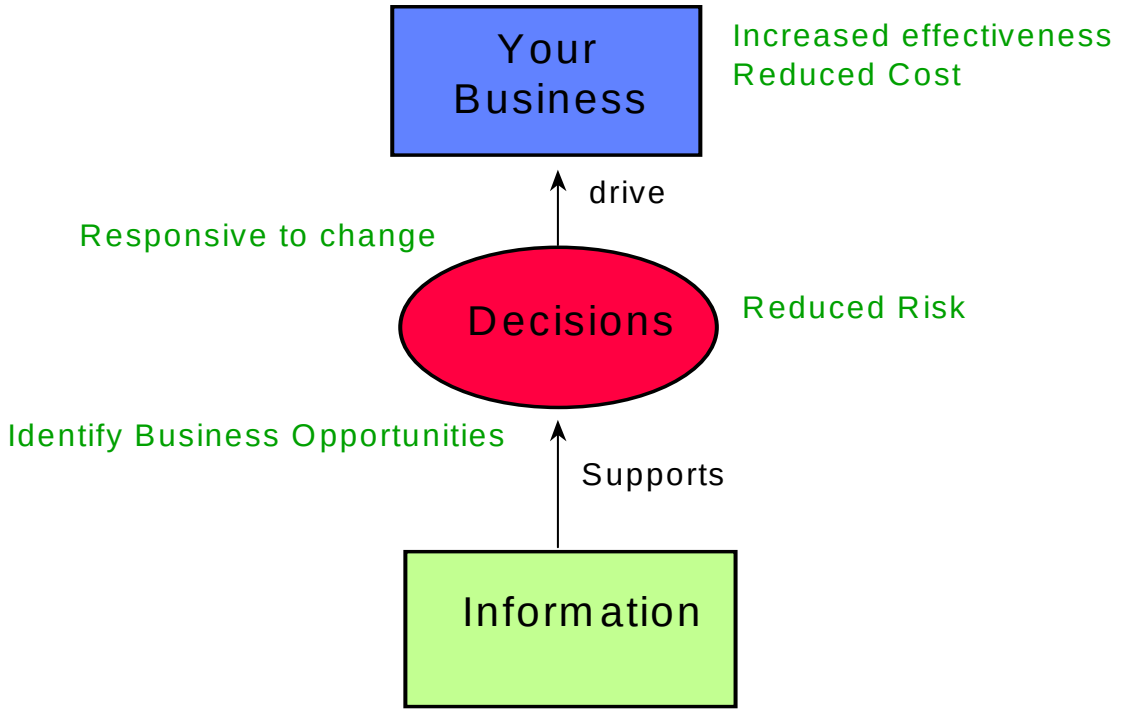
The Context

- Downstream One an initiative to globalize Shell's Downstream business around a single set of processes and systems
- Downstream One Objectives
  - Promote more accurate & responsive customer interactions
  - Remove errors & rework
  - Reduce costs by eliminating 'noise' in business processes
  - Provide proven & simpler ways of doing things

The aim is to reduce the number of operational systems to less than a tenth of those that existed at the start of the globalisation process

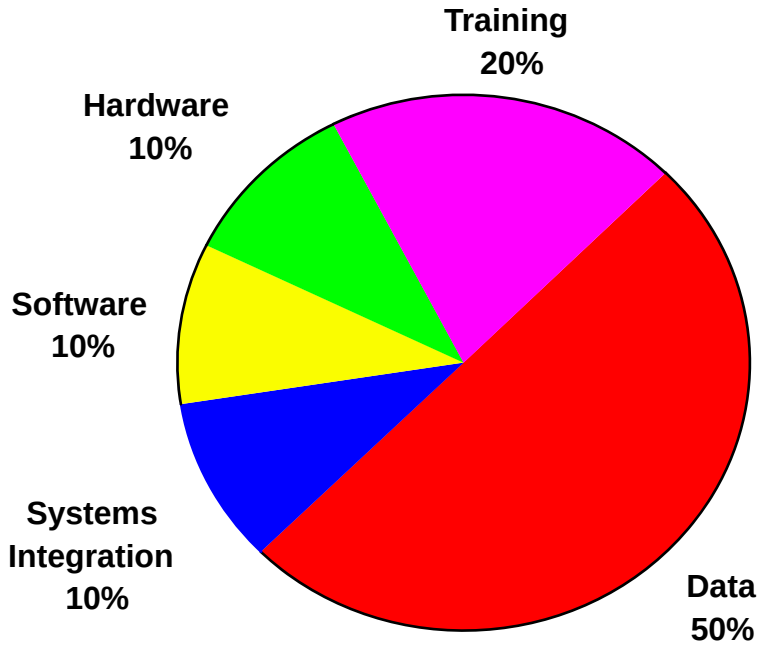
- Consistent Reference Data a critical element of business integration

Why bother with Information?



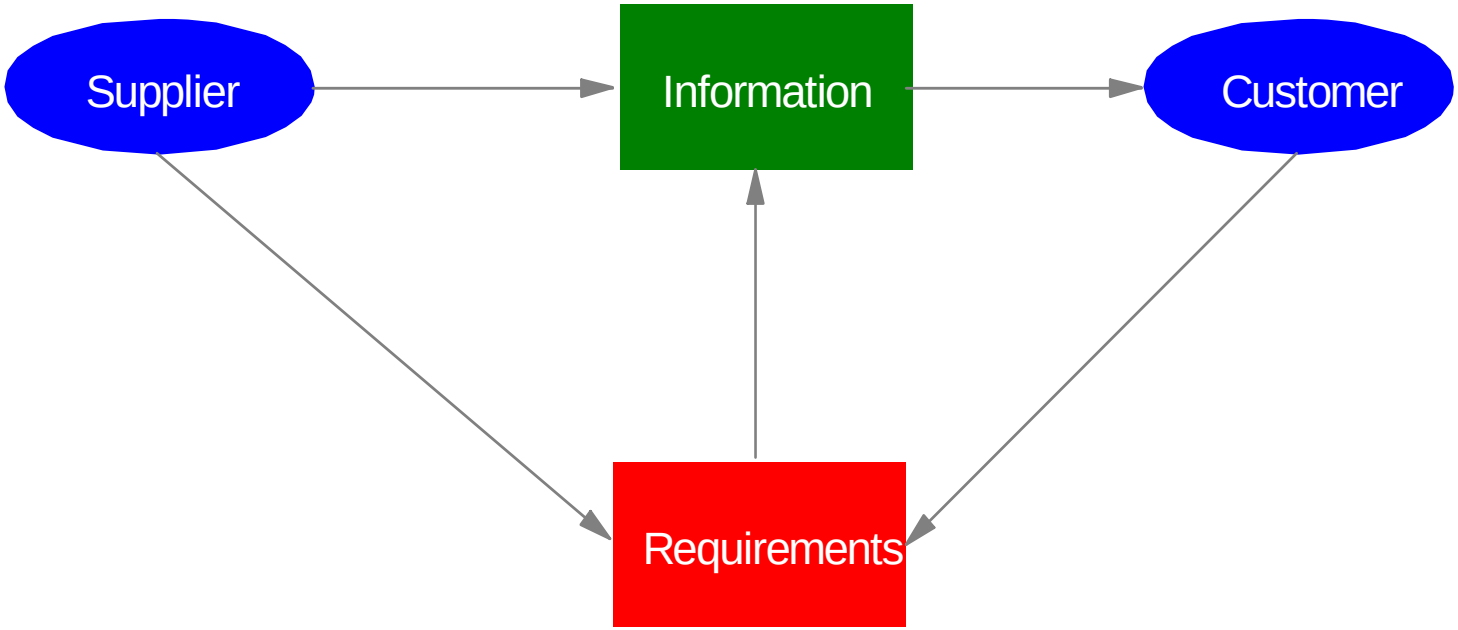
What does an Information System cost?

Survey by Daratech, Inc

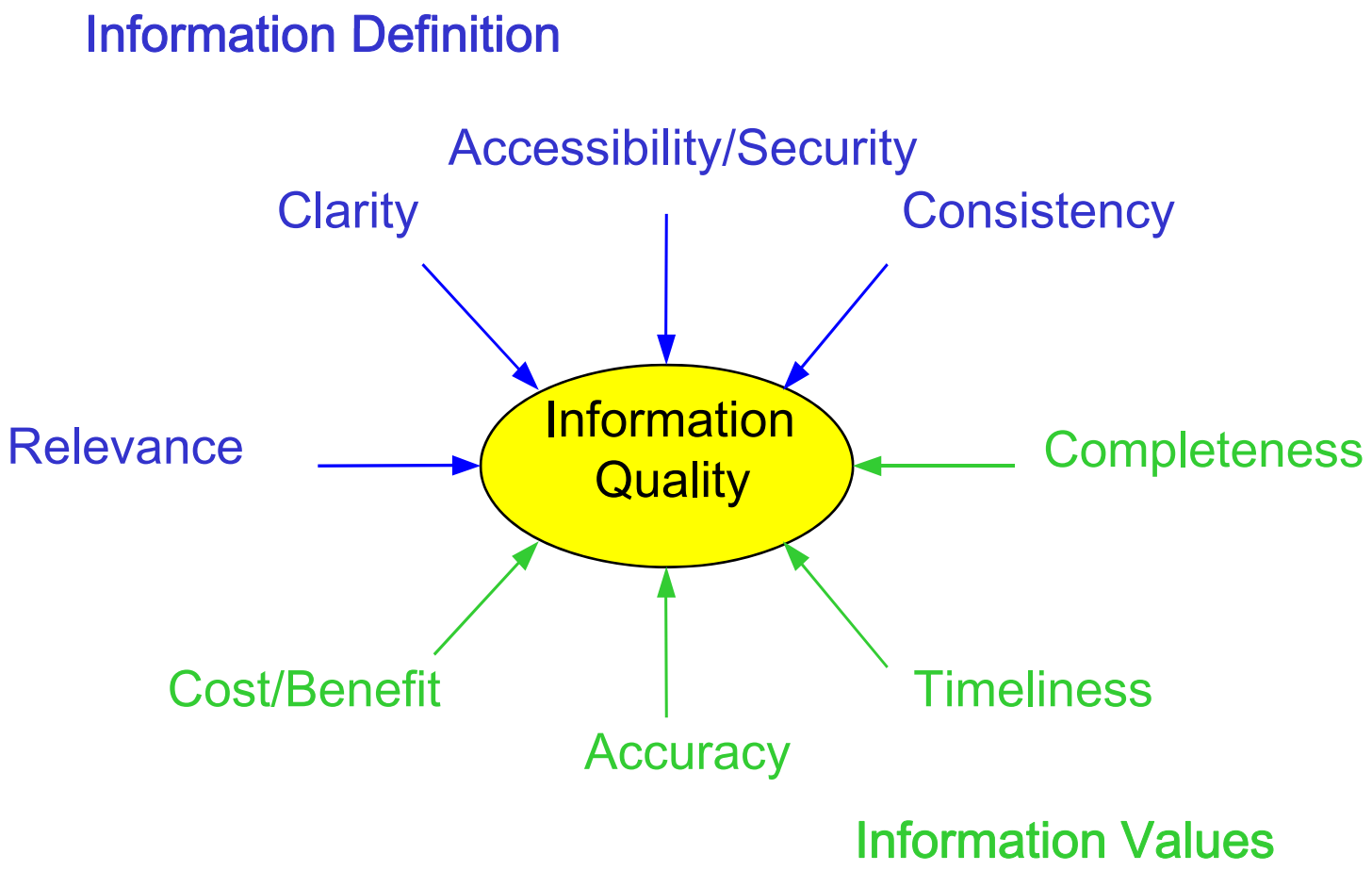


Hardware: The cost of additional infrastructure required for the project.
Software: The cost of licenses for the software used, or the cost of software developed.
Systems Integration: Cost of interfaces between applications in a system.
Data: The business cost of creating the data to configure and use a system.
Training: Cost of training and the 'cost' of getting accustomed to a new system.

Information Quality



8 Key Properties of Quality Information

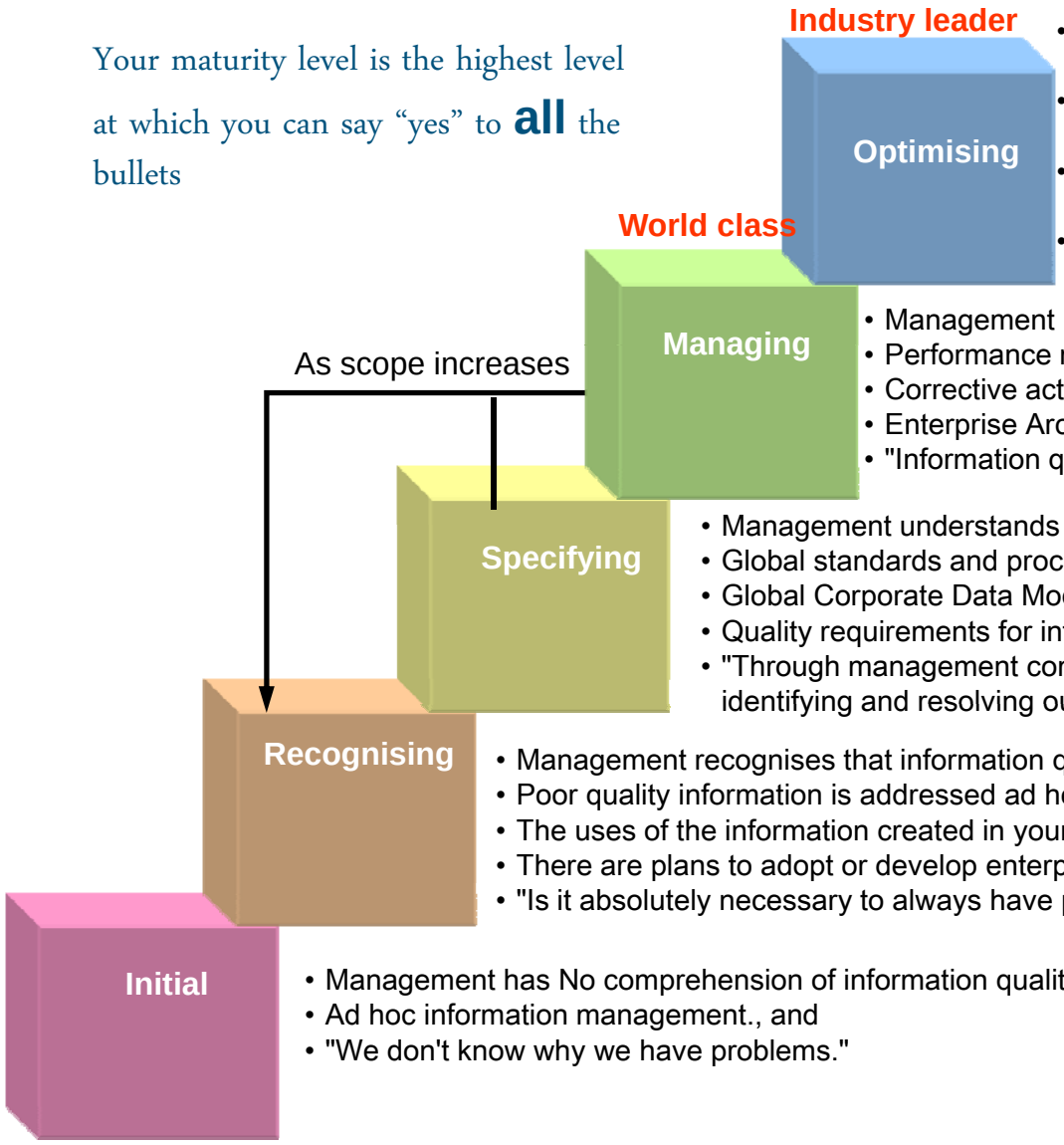


Information Management Maturity

- Information Management is about assuring the quality of information – that it is fit for purpose
- Information Management Maturity is a way of identifying the quality of information management in an enterprise.
- You cannot leap from having poor information management to having great information management in one go.
- There are a number of stages you need to go through, and you have to consolidate at each stage before moving on.
- Each stage delivers incremental business benefits.
- You can work out what stage you are at and see what you need to do to move to the next level.
- A part of improving information management maturity is about putting the infrastructure described by the IM Landscape in place, and using it.
- The other part is in changing practices and attitudes to information in the enterprise so the infrastructure is used to when it is in place.

Global Information Management Maturity

Your maturity level is the highest level at which you can say "yes" to **all** the bullets



- Management consider information management an essential part of the enterprise, and
- There is a change management process in place and in use around the Enterprise Architecture, and
- Root causes of Information quality problems are addressed routinely - usually before they are a problem
- "We know why we do not have problems with information quality."

- Management understands their role in information management, and
- Performance measures collected regularly, and
- Corrective actions in place for critical data, and
- Enterprise Architecture in place and in use, and
- "Information quality problem prevention is a routine part of our operation."

- Management understands the importance of Information Quality, and
- Global standards and processes for information implemented, and
- Global Corporate Data Models in place and in use, and
- Quality requirements for information explicitly defined (e.g. SLA) and
- "Through management commitment and information quality improvement we are identifying and resolving our problems."

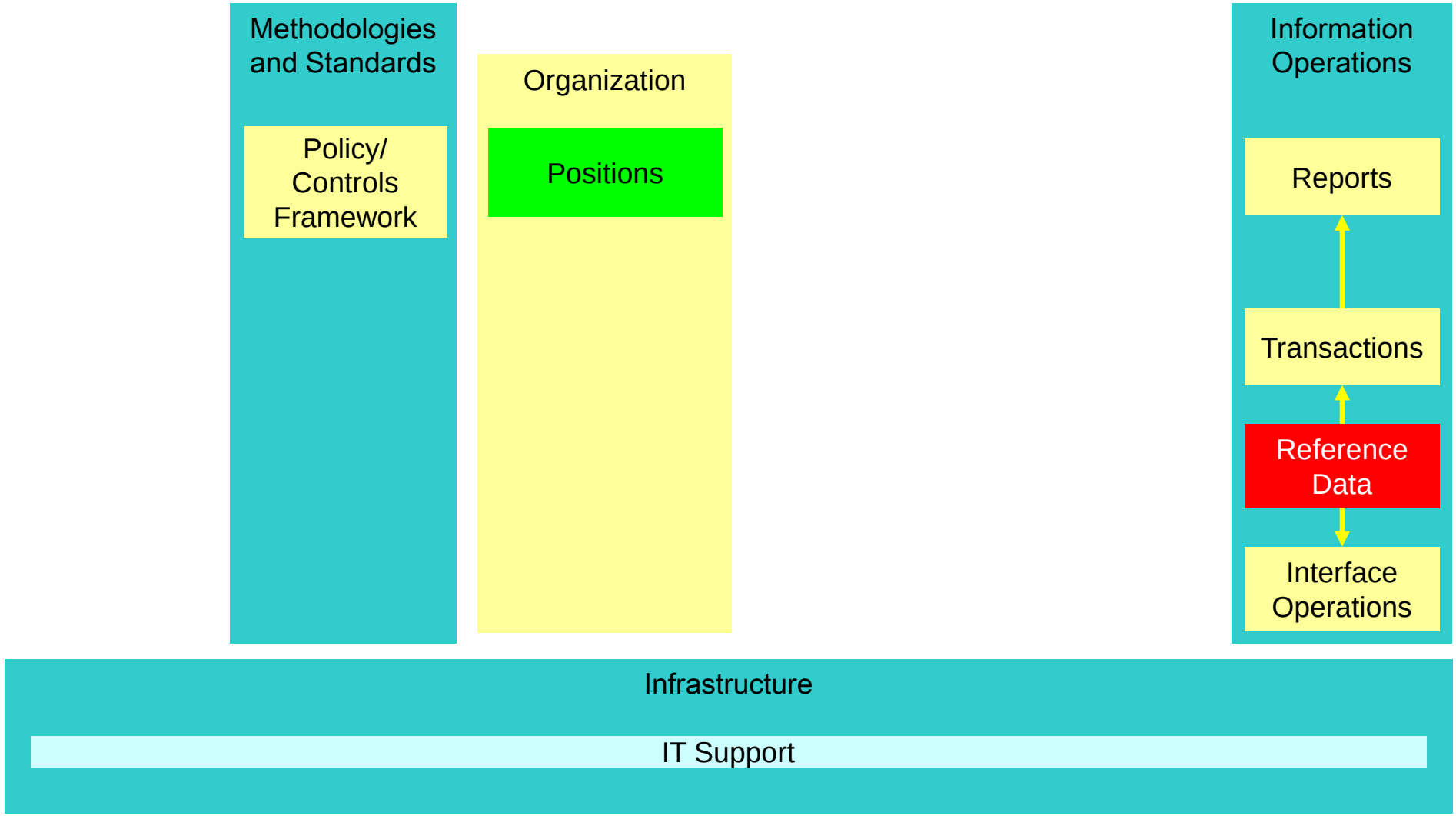
- Management recognises that information quality management may be of value, and
- Poor quality information is addressed ad hoc, and
- The uses of the information created in your organisation are documented, and
- There are plans to adopt or develop enterprise wide information standards.
- "Is it absolutely necessary to always have problems with information quality?"

- Management has No comprehension of information quality, and
- Ad hoc information management., and
- "We don't know why we have problems."

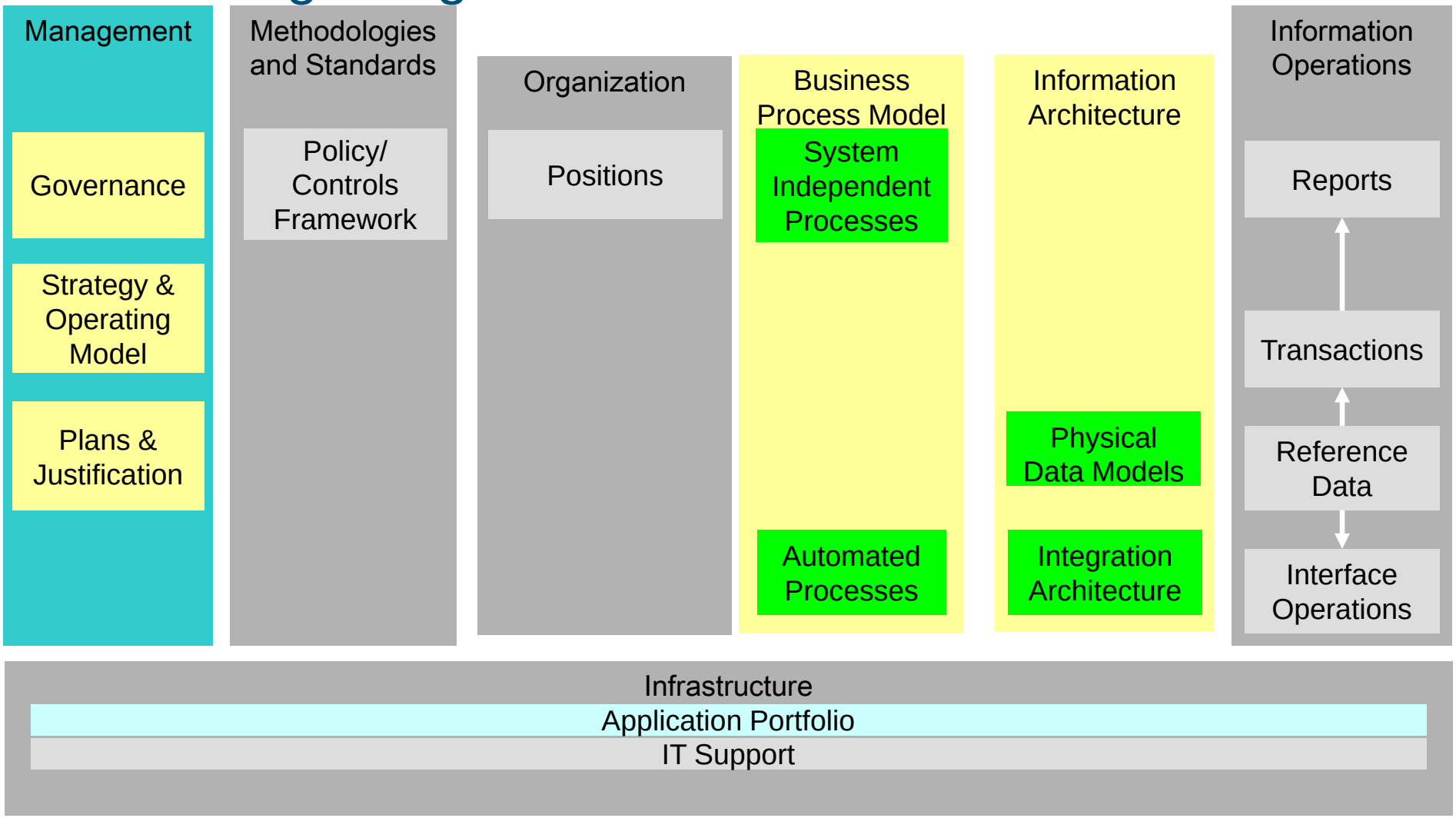
Typical Timeframe?

Some material taken from Improving Data Warehouse and Business Information Quality : Methods for Reducing Costs and Increasing Profits by Larry P English

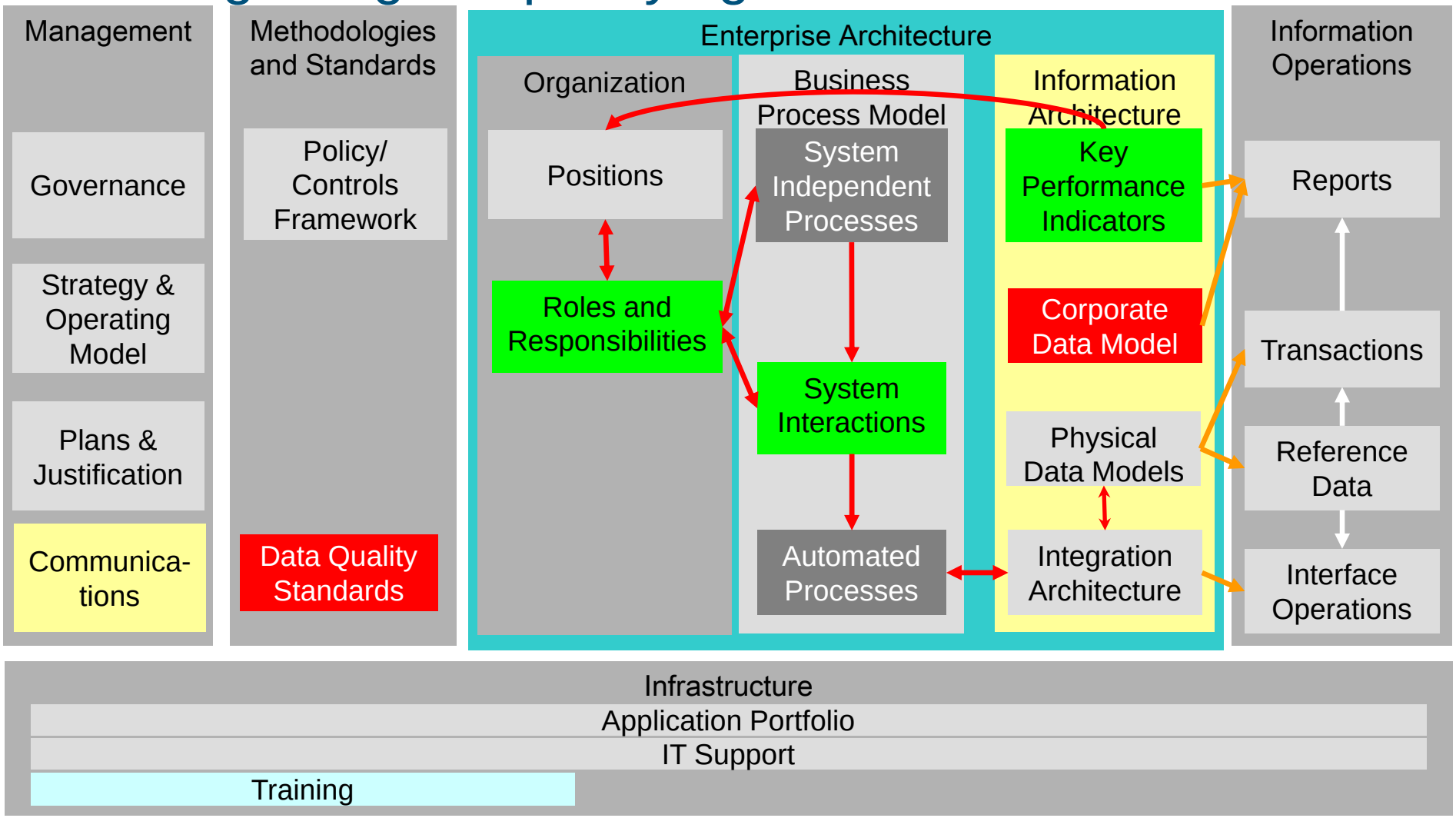
The Information Management Landscape: Initial



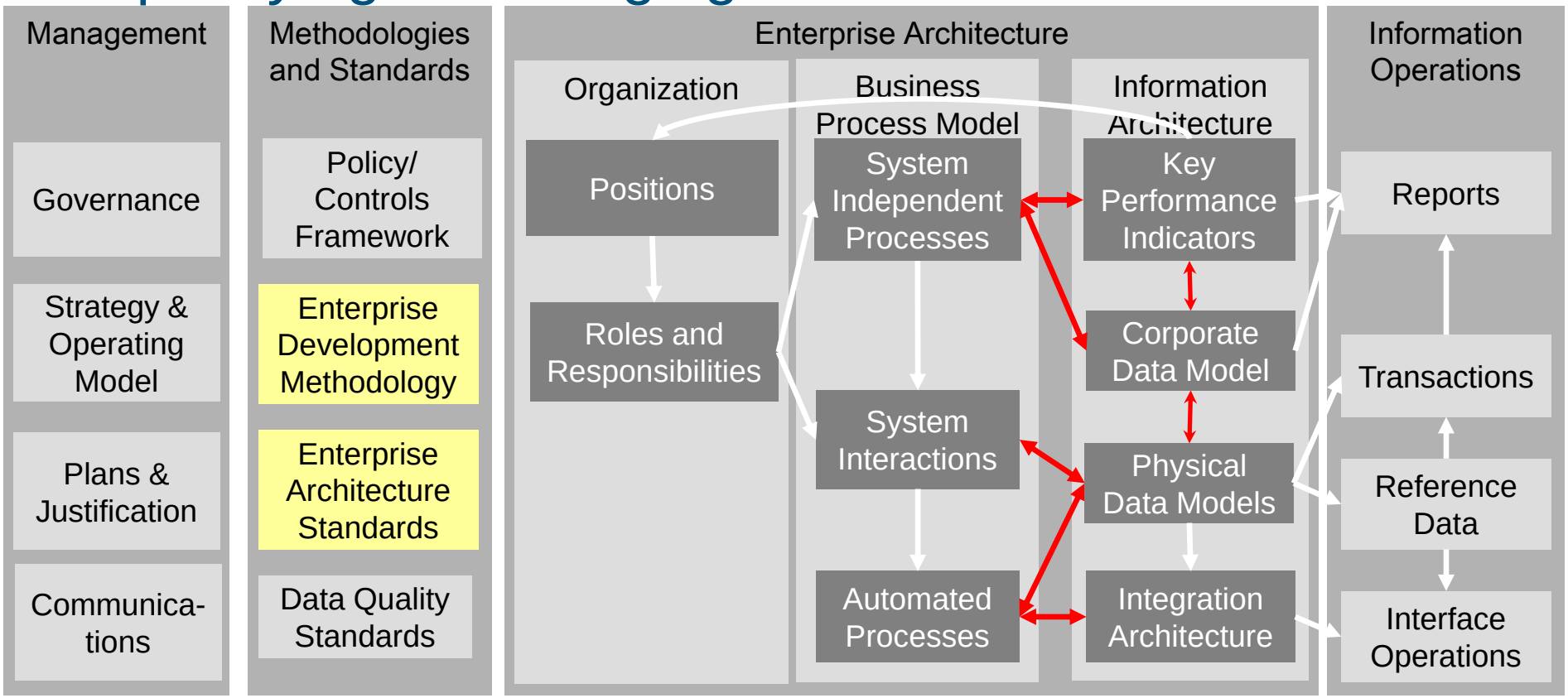
The Information Management Landscape: Initial to Recognising



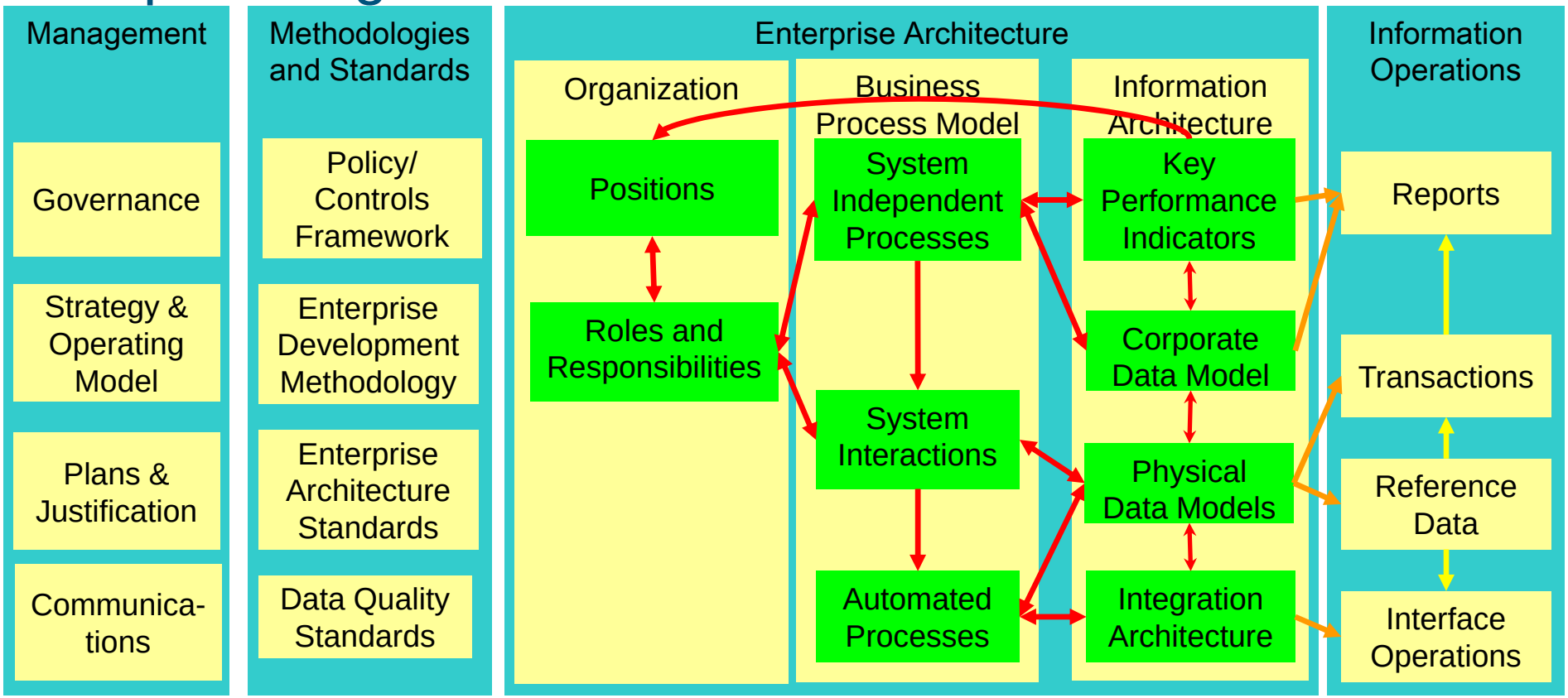
Information Management Landscape: Recognising to Specifying



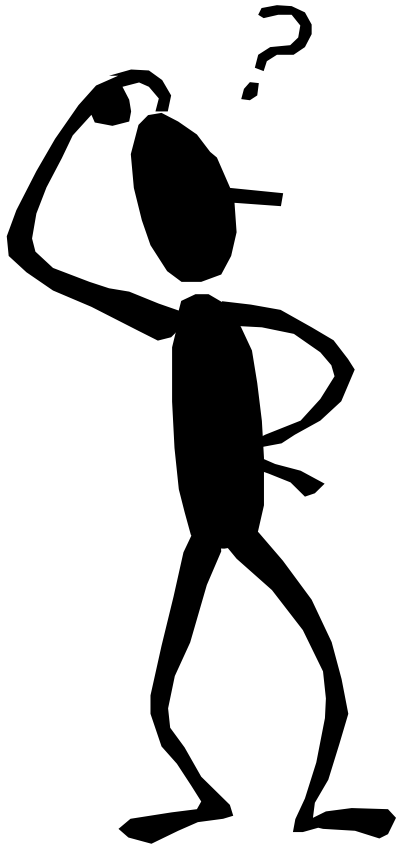
The Information Management Landscape: Specifying to Managing



The Information Management Landscape: Optimising



Summary and Conclusions

- Information and the management of its quality is critical to decision taking
- Information Management Maturity is a powerful tool to assess where you are, and what you need to do next in building your information management landscape
- Enterprise Architecture is a key part of the information management landscape required to improve information quality

Questions?