Information Centre of Excellence

Harnessing information for competitive advantage

November 2011



Agenda

Background and definition **Building blocks** Putting it together 305 304 302 13 Information Centre of Excellence November 2011 Slide 2

Background and definition

- The importance of information
- The evolution of Information Management
- Information Centre of Excellence

The velocity of business is increasing

'According to Gartner vice president and research fellow Roy Schulte, the elapsed time of individual processes at e-businesses around the globe is already beginning to accelerate. Responses to call-center inquiries, for example, have gone from eight hours as of a few years ago down to 10 seconds today; refreshing a data warehouse has accelerated from one month to one hour; and the time it takes to build a custom-made PC has gone from six weeks to 24 hours, to name a few examples. Schulte predicts this acceleration has just begun and that process times will speed up even more, triggering a huge impact on the inner workings of companies large and small. For the strategic CIO, he says, the movement to real time will mean "increasing the velocity of business processes, and to get this kind of speed the CIO is going to have to rethink how he or she designs computer systems."

Increased speed of business implies the need for increased speed of decision making. It also means that businesses might need to be thinking of analysing events that have not yet happened.

The importance of information

Information is a competitive asset and advantage

In multiple global surveys conducted across industries, one of the differentiators between those who were most negatively impacted by the rapidly changing economic climate and those who were not, was access to accurate, timely, organisation-wide information. Information is a competitive advantage and should be treated for:

- Increased multi-year Net Present Value (NPV);
- Maximised Return On Investment (ROI); and
- Reduced time to market and resulting payback period.



Differentiating between data and information

We all have systems that generate data. But how much sense can we make of it? Plain numbers from a transaction system do not lead to <u>active insight</u>. For insight we need information.

Data #Information

Desirable characteristics of information

For making the right decision, I should

- Trust the information
- Have confidence in the results

ACCURACY

Information is useless unless I

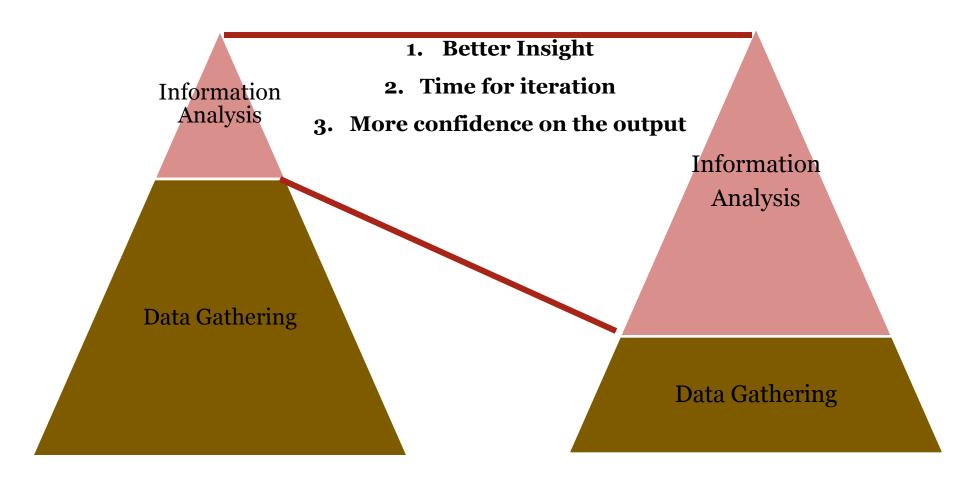
- Receive it on time
- Receive it in the desired frequency

I require information that is

- Suitable to my purpose
- Helpful to derive the right conclusion

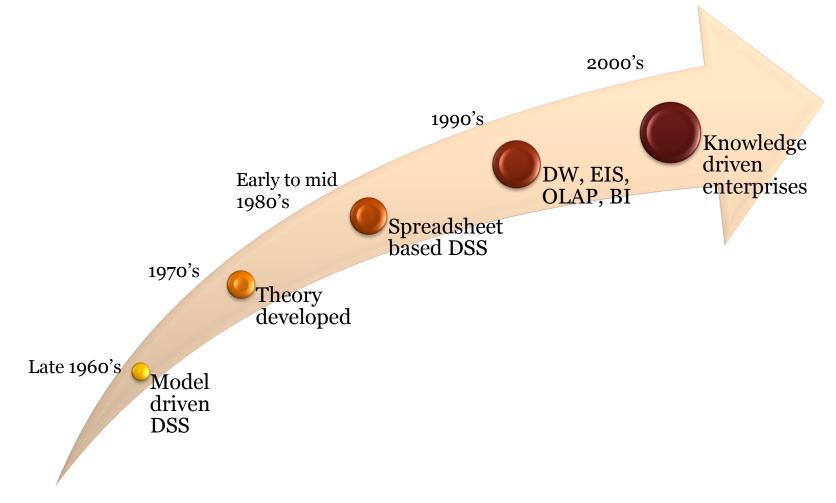


Information Analysis

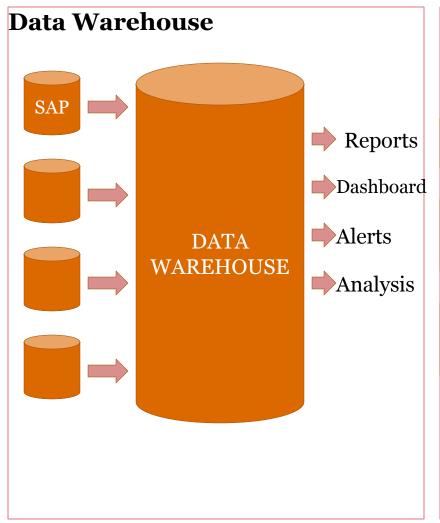


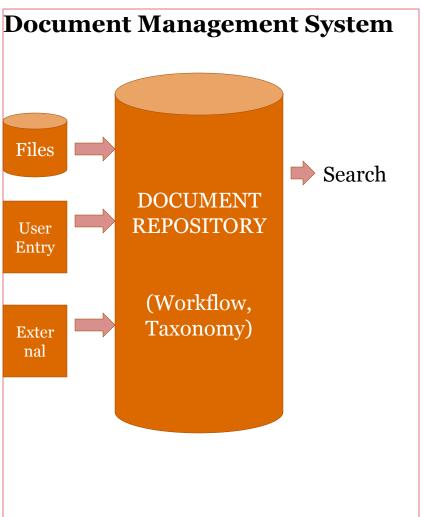
Information Management- Evolution

Delivering information to the enterprise



Quick Definitions





Getting the information – some challenges

A Data Warehouse is just a start

Whilst most of us have systems and processes that churn out data at a high frequency, we have noticed the following challenges:

- We often require to collate information from multiple sources
- Most of the effort is manual involving significant use of productive time and effort
- Information requests to the IT team take a long time to process
- Repeat the process the next time the need arises
- Many times we analyse the cause of the issue instead of predicting it

And at the end of the day we are still not sure if the information and insight we have gained is correct in the first place.

iCOE – How it works

Authorisation to access the information requested

Is it there as a report or a screen in one of transactional systems (SAP ERP, Oracle ERP, etc)?

Is there a data warehouse which has the data?

Is the data there in emails or other documents of the organisation?

Is the data there with one of the vendors, customers, even the internet?

Does the information need to be massaged or synthesized

Is there a training issue with the user to find the information?

Was the information available, and was just provided to the user?

iCoE

Did we go external, created a quick report, integrated information from various sources? Timely accurate information provided back to the user

Information Dictionary - Metadata

Is there a training that needs to be given to the a user set

Is the information request repeating to create a new report?

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Information

Request

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iCOE – How is it different from the traditional thought process

The focus is on getting the information back to the user quickly for the case, and less on building a repeatable report

1 AGILE

One is not limited by the data in the various systems stored in structured form. Any organizational or external data can be the source

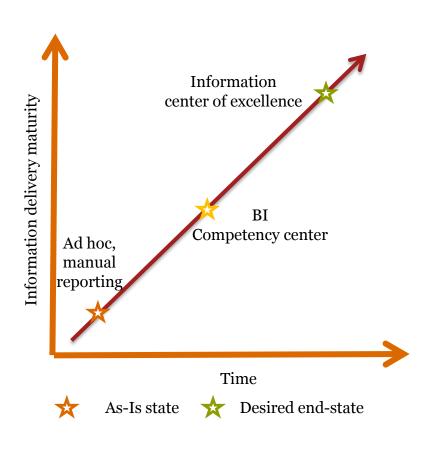
2 BOUNDARY LESS

The reports that are the required by the users will get created automatically, and the concern on usage of the DW is not there

3 INCREMENTALLY BUILD SYSTEM

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Next generation of BI transformation



Many organisations are already on the path of implementing a Business Intelligence Competency Centre of sorts. The key components are already present:

- 1. A collection of Data Marts
- 2. A presentation layer (SAP BusinessObjects, Cognos etc.)
- 3. Extraction processes that automate data loading
- 4. Ad-hoc analysis allowing users to create reports and analyse on the fly

Information Centre of Excellence

Definition, Characteristics and Drivers

Definition

- A separate entity / department reporting to the CIO /CTO of the organization
- Caters to all business needs in the following areas:
 - Subject matter expertise on data and analytics
 - Is the sole authority on data definition and usage

Characteristics

- Well defined business processes and systems
- SLA for maintaining service levels to business within time and cost constraints
- KPI and KRA for guiding its performance

Drivers

- Use of analytics as a means to stay a step ahead of the competition
- Helps the organization treat information as a competitive asset

The Information Maturity Model



Large Financial Services group in India

The virtual ICoE is able to get back to business proactively

The group has interests across banking, capital markets, life and general insurance, private equity etc. Most of the large business units in the group have set up their own business intelligence teams that are distinct from Business Users and IT and yet can interact very closely with both.

These teams take requests for development of new reports and work on special assignments given by Business users for which there is a charge back.

More importantly, these teams are able to get back to business with their suggestions which are based on their analysis of data.

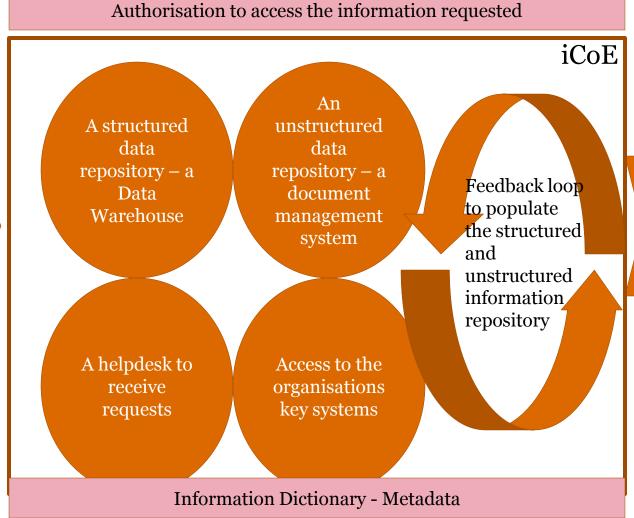
Benefits

Benefits are both tangible as well as intangible

- 1. Improved business performance:
 - a. Better top line
 - b. Reduced costs
- 2. Ability to predict future areas of concern
- 3. Improved ability to respond to changes in business environment
- 4. Ability to drive alignment to business strategy in a more streamlined fashion
- 5. Better control over information assets
- 6. Self sustaining and hence delivering better Return on IT investment



iCOE – What's inside



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Information

Request

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Timely

accurate

information

provided

back to the

user

iCOE – What's inside

Authorisation to access the information requested

iCoE

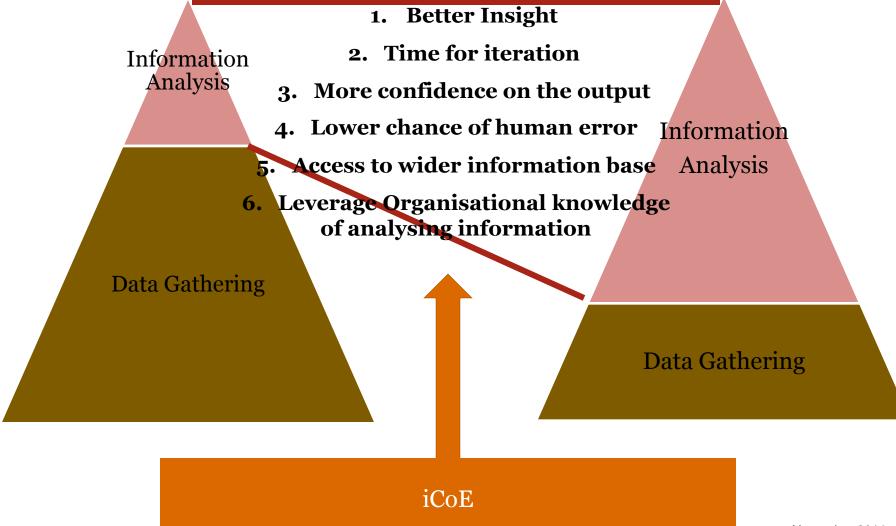
Information Request

harness the Intellectual Property of the Enterprise

Timely accurate information provided back to the user

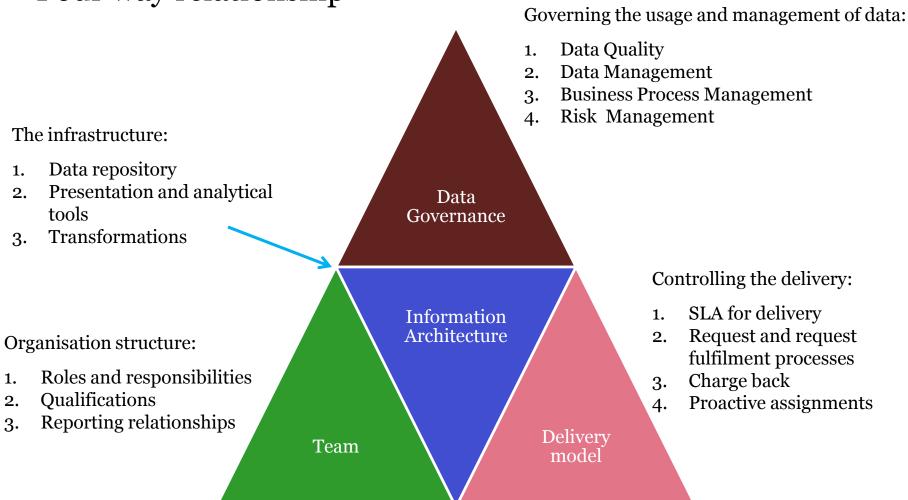
Information Dictionary - Metadata

Information Analysis



Building blocks

Four way relationship

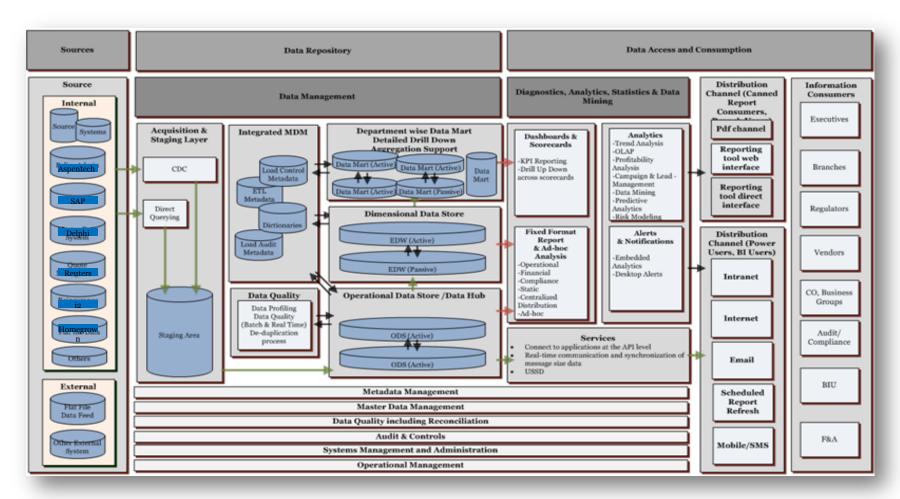


Information architecture

The Information Architecture consists of the following building blocks:

- 1. Automated mechanism to extract, transform and then load data into the data repository.
- 2. A data repository or multiple data repositories each providing data for various business functions.
- 3. Presentation and analytics tools to provide business users with adequate and relevant insights into business performance and issues.
- 4. The information architecture also encompasses technology and tools to implement policies around Data Governance.

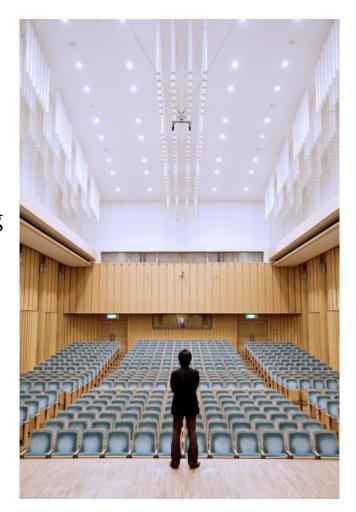
*Information Architecture*Sample



Data Governance

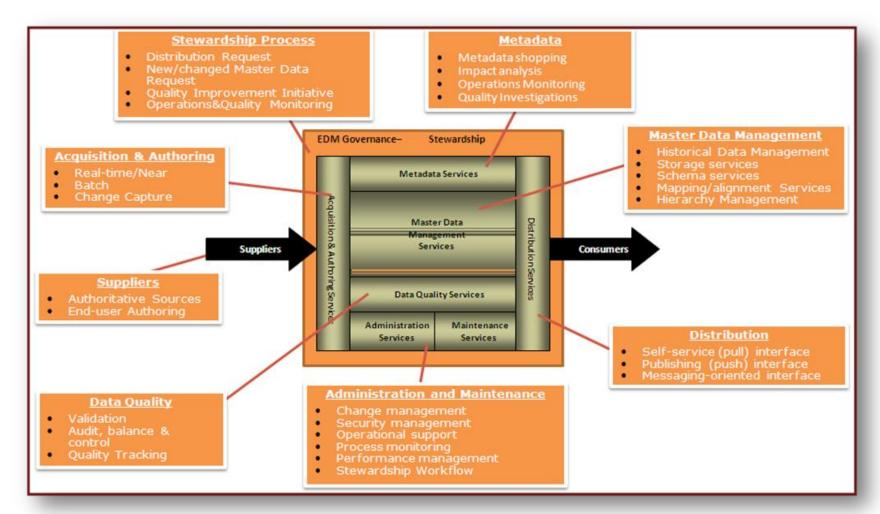
Data Governance structures and procedures are put in place in order to manage the following:

- Data Quality: So that the information being provided is complete, acceptably accurate, timely and relevant.
- 2. Data Management: So that information being updated within the Information Architecture does not affect Data Quality
- 3. Risk: So that information being served from the ICoE is protected from unauthorized use
- 4. Changes to Business Processes: So that the linkage between the business process and the data captured is maintained



Data Governance

Illustrative framework



Data Governance within a iCoE

Change request procedures

Authorization BI Strategy

Data Quality Standards

Service Level Agreements

Change request processes for CIL environment:

- User rights
- Reports
- **Definitions**
- **Processes**

Supported by automated workflow tooling

Management Information Authorization strategy and guidelines Company-wide role based

authorization matrix (who can access what type of information based on their role)

Data Quality Standards (e.g. Completeness, timeliness, accuracy)

BI integrated control framework:

- Systems controls
- Access controls
- Processes controls

Business requirements for SLA between business and IT for services including for example:

- Response times
- Helpdesk services

MI GOVERNANCE **ORGANIZATION**

CENTRAL

LOCAL

3

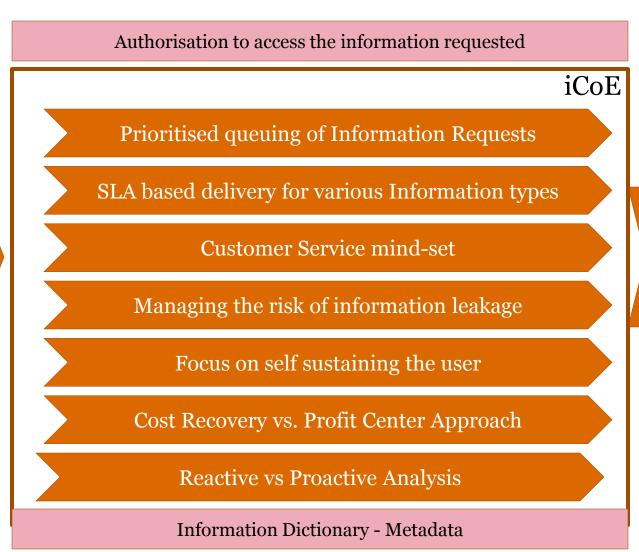
The Central team will be responsible for: Maintenance of CIL definitions, reports, processes Authorizations matrix

Change request coordination and prioritization Central support

The Local team will be responsible for:

First line user support Day-to-day communications to end-users Handling requests from users

iCOE – Delivery Model

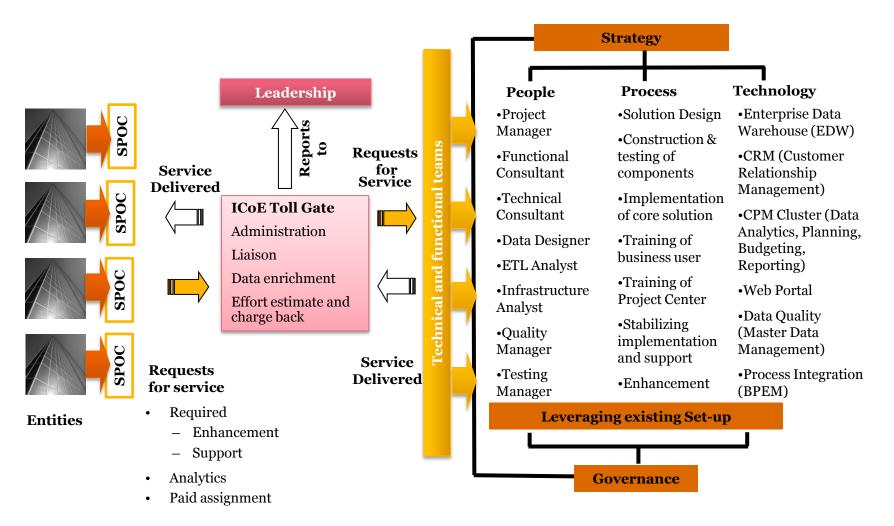


Timely accurate information provided back to the user

Information

Request

Delivery model – Illustrative

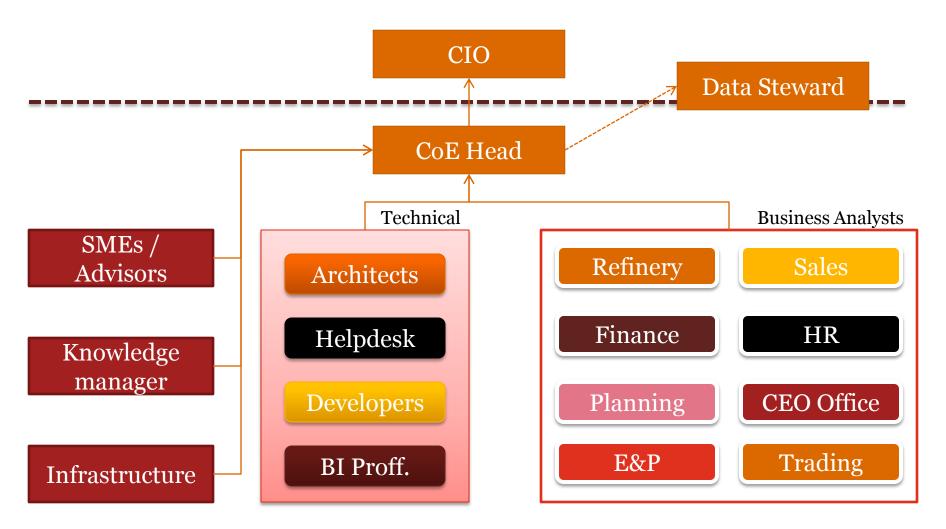


Team

The team that is responsible for the ICoE has the following characteristics:

- 1. Is proficient with the tools and technologies of the Information Architecture
- 2. Is proficient with the business processes and can appreciate the challenges being faced by the business
- 3. Has a clear and well defined span of control between both technology and functional teams
- 4. Is capable of utilising its expertise in getting back to business pro-actively with its own analysis of business issues
- 5. Is focused on working in a Profit Centre approach

Team components





There is no shortcut to the implementation of the ICoE. The journey is long and to reach managed state would take about 2-3 years if starting from scratch.

Considerations

Commissioning an ICoE requires thought

While any time is a good time to start, the following need to be addressed before embarking on the ICoE journey:

- All relevant business users and departments have been sensitised to the coming of an ICoE
- The IT strategy reflects the coming change from a technology and process perspective
- There is a clear articulation of the information architecture of the organisation and clarity for the next 3-5 years
- The process of evaluation of products and vendors for plugging the gaps in the architecture has been completed or is on track for completion

Starting from scratch?

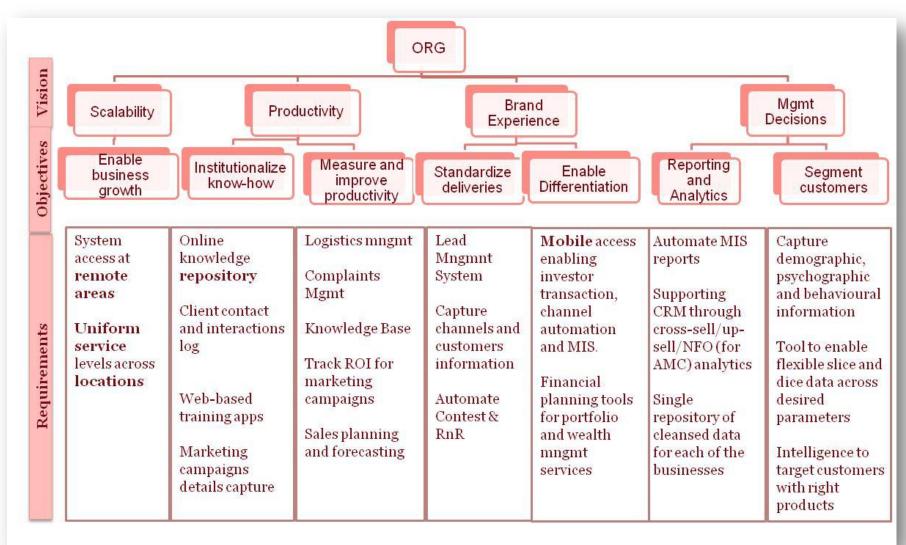
Business case IMPLEMENTATION AFTER CREATING A FOUNDATION **DESIGN** ASSESSMENT **BUSINESS USER DEFINE TECH DEFINE TOOL SET** CREATE ROADMAP **DEFINE VISION** ARCHITECTURE **INPUTS** STUDY EXISTING **DEFINE ARCHITECTURE PROCESSES DEFINE BI ORGANIZATION** Clear unambiguous Get to know the Blue sky vision of Generate and Define high level

- statement of the vision with regards to Information as a competitive asset.
- Shortest timeframe, most important block
- user better
- Anticipate business user information requirements and current issues
- High intensity, medium duration

- what the end state will look like
- Incorporate vision, business user needs, best practices
- Leverage existing Infra

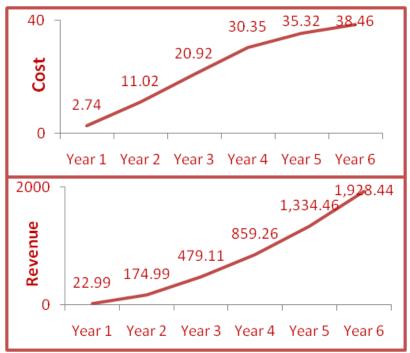
- evaluate tool and technology options
- Define data governance organization, and its processes
- project plan towards realization
- Set the stage for the implementation

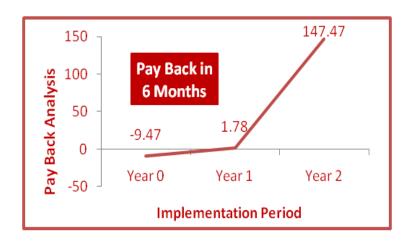
Align to business objective and strategy

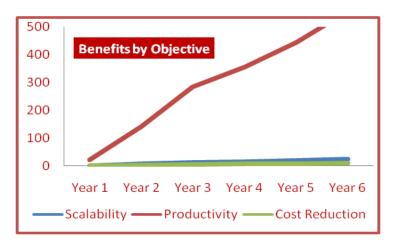


Clearly define the business case and track it

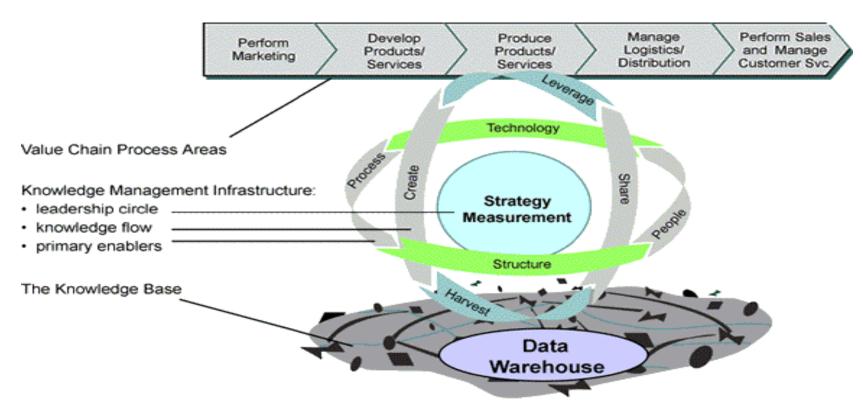
Financial Evaluation (Cost vs. Revenue)







Defining the knowledge and information cycle



Alignment of the relationship between the value chain, strategy imperatives, the knowledge cycle and is necessary to create the business meta data that would be used to form the basis of all information flow across the organisation.

How an ICoE would help?

- 1. Unified business meta data
- 2. Published and accepted business transformation logic
- 3. Automated processes for loading of information
- 4. Unified information delivery channels
- 5. Control over the information delivery channels improves consistency, reduces reduces reduces maintenance costs
- 6. Self service mechanisms allow users to reduce dependency on IT
- 7. Time freed up for CoE personnel will allow them to focus their efforts on proactively looking for emerging issues and advise business on corrective actions
- 8. CoE can take up paid assignments from business for analytics on a case to case or continuous basis

Thank you

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