PUBLICATION AND DISTRIBUTION OF XML BASED ON-LINE TRAININGS

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Operations 2000

Schlumberger

Summary

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2. Documentation - The equation today

3. Documentation and OLT processes

4. The solution

6. Demo

5. People concerned

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8. Conception of the XML DTDs

9. OLT Example: Lecture DTD

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11. Publication process

1. Overview of Schlumberger

- Schlumberger is a worldwide leader in technical services with 50.000+ employees in more than 100 countries. It comprises three business segments: Oilfield Services, Resource Management Services and Test & Transactions.

- Oilfield Services is the leading supplier of services and technology to the international petroleum industry. It provides virtually every type of service to the upstream exploration and production industry.

- Three Product Groups represent the key processes that dominate oil company requirements throughout the life cycle of the reservoir.

  – Reservoir Evaluation.
  – Reservoir Development.
  – Reservoir Management

2. Documentation - The equation today

Technology Centers

Documents

Current tools do not enable:

K Reuse between doc & OLT

K Profiling to end users

K Generation of multiple output formats

K Automatic publishing

No standard output:

K No uniform document set

K Formats (**web, paper, CD-ROM**)

K Format depends on Tech Center

Distribution:

K Inconsistent CD distribution process (Securit

K No clear end-user distribution list

K Difficult to find the information
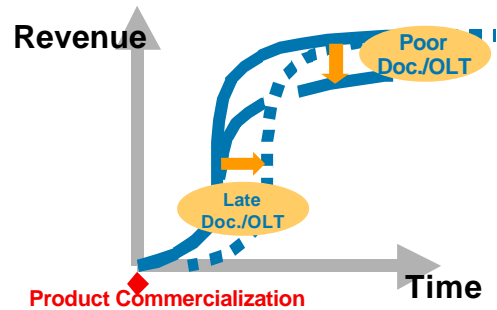
Update:

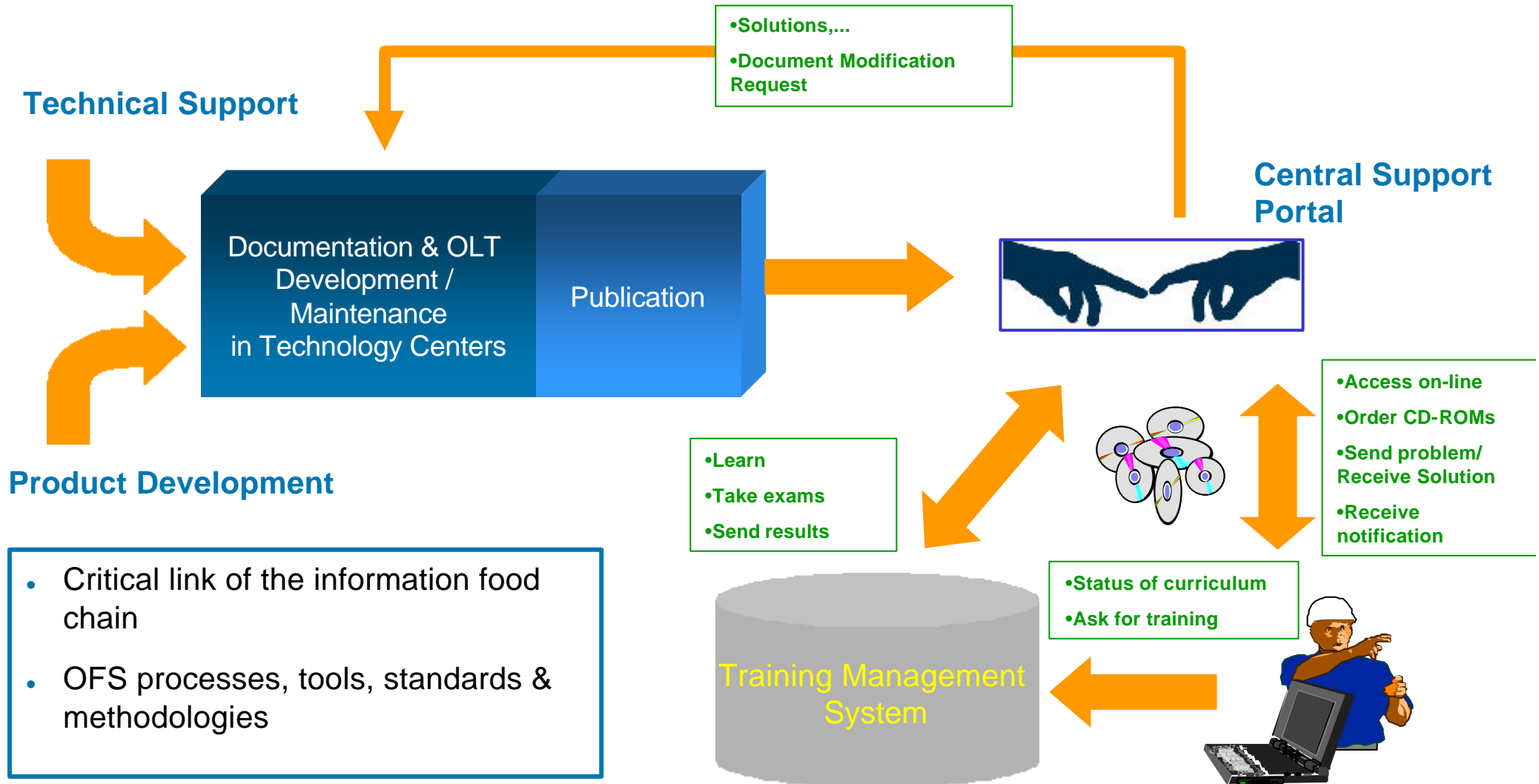K No identified channel

K Months to years between revisions

Revenue

Poor Doc./OLT

Late Doc./OLT

Product Commercialization

Time

$ Rev impact

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- **Support Engineers' time**
- **TC Engineers' time**
- **Service Quality Impact**

$ Cost impact

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3. Documentation and OLT processes

Solutions,...

Document Modification Request

Technical Support

Central Support Portal

Documentation & OLT Development / Maintenance in Technology Centers

Publication

Product Development

- Access on-line
- Order CD-ROMs
- Send problem/ Receive Solution
- Receive notification

- Learn
- Take exams
- Send results

- Critical link of the information food chain

- OFS processes, tools, standards & methodologies

- Status of curriculum
- Ask for training

Training Management System

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4   28 March 2000

4. The solution

- **IT**: Define and implement a system to produce Documentation and On-Line Training

  (i)   Set guidelines and standards,

  (ii) Recommend tools,

  (iii) Deploy a full EDMS application composed of

     an Authoring system
     an EDMS
     an Assembly system

  (iv) Implement an IETM for the field users' Bookshelf

  (v) Define the workflows to "close the loop" between users and producers, through the Request Tracking System

- Train Technology Center People on IT Tools

- Support process & Tools

- Doc/OLT Group to develop, maintain & ensure compliance to standard

5. People concerned

- Users of the documentation-OLT:

  – Field engineers, many well connected to Intranet, some in remote location poorly connected: 14.000

  – Technicians in maintenance shops

  – In-Touch engineers (technical help desk)

- Creators of Documentation:

  – Located in 10 Tech centers worldwide

  – Technical communicators: 100, expertise in writing tech manuals; publishers of manuals

  – Knowledgeable engineers: 900, expertise in the tool/system/software they design or use; little experience in writing

- Creators of On-line training:

  – Located in 3 tech centers

  – Designers of content: 3

  – Subcontractors

6. Demo of XMetaL

Tree view

List of attributes for the element

List of element in the context

7. What is Modular Documentation?

PM= Publishing module
DM= Data module

PM
- DM1
- DM2
- DM3
- Glossary...
...

Paper
Web
CD-ROM

DM1
(Principles)

DM2
(Operation)

DM3
(Maintenance)

Glossary

Graphic1

Graphic2

Animation1

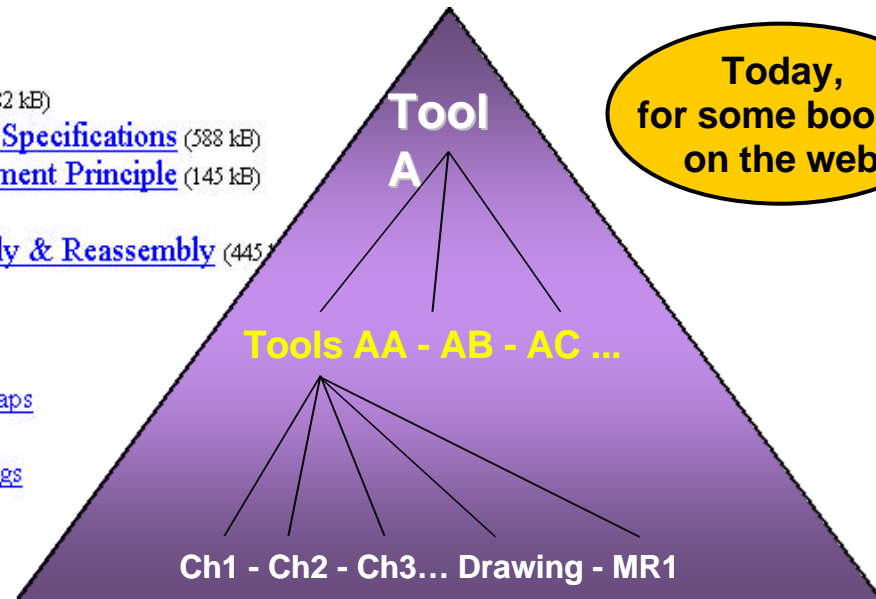Animation2
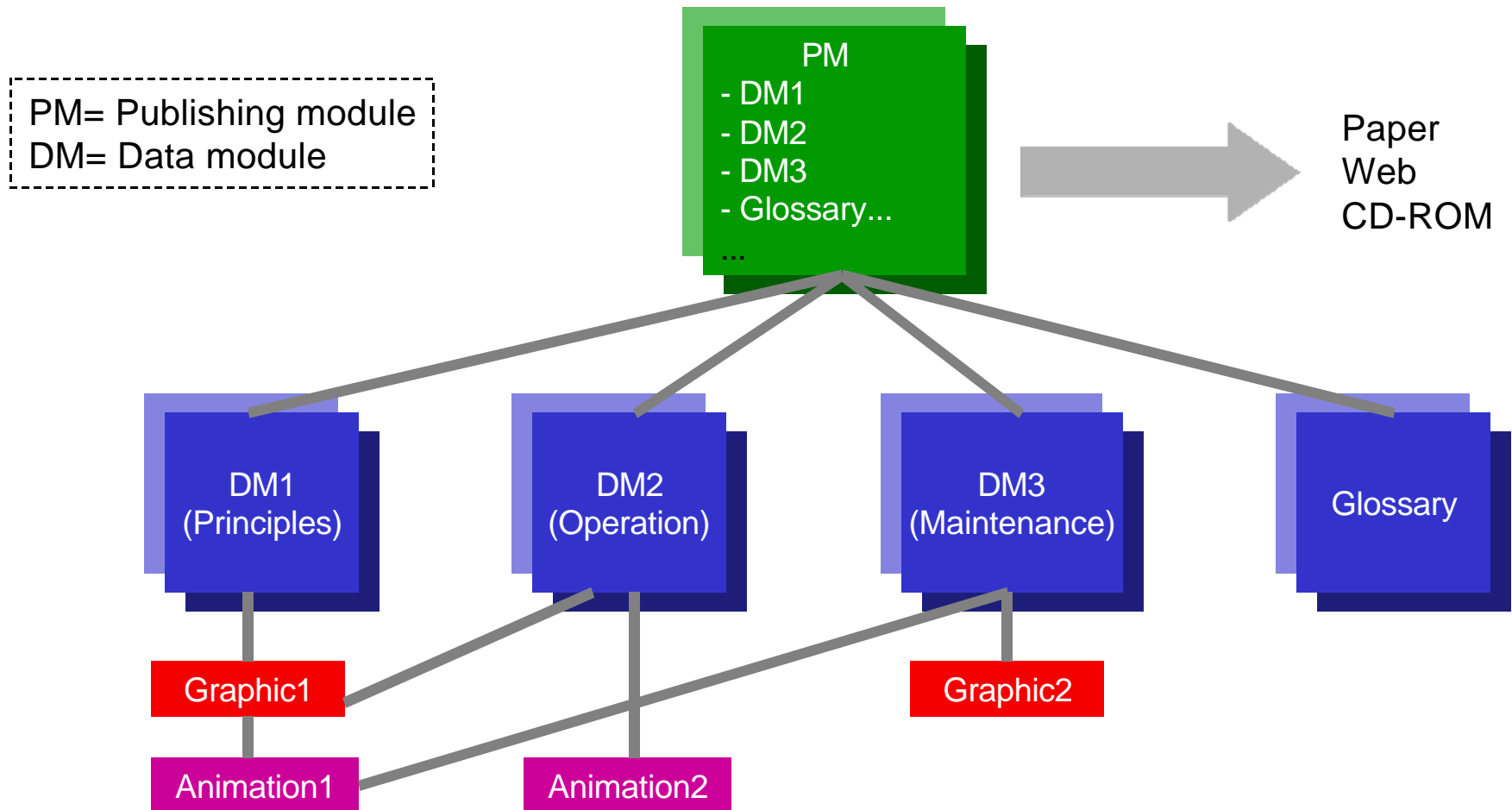
Doc-OLT today, somehow modular

However, we still have little standard today:
- different tools (Word, Frame, SGML…)
- different structures (chapters organization, logic..)
- different presentations (fonts, size, positions, icons…)
- single output media (PDF, Word, HTML…)

LOTS OF REWRITING
RE-USE OF CONTENT BY DUPLICATION

📖 Manual front pages (53 kB)

Contents Table of Contents (50 kB)

- Chapter 1 - Safety & Precautions (82 kB)
- Chapter 2 - General Description & Specifications (588 kB)
- Chapter 3 - Local Probes Measurement Principle (145 kB)
- Chapter 4 - Tool Operation (112 kB)
- Chapter 5 - Mechanical Disassembly & Reassembly (445)
- Chapter 6 - Maintenance (72 kB)

- Appendices:
  - Appendix A - Modifications Recaps
  - Appendix B - Specifications
  - Appendix C - BoMs and Drawings
  - Appendix D - Circuits Diagrams

Example: Tool A

Before, Printed Books

Today, for some books, on the web

Tool A

Tools AA - AB - AC ...

**Ch1 - Ch2 - Ch3… Drawing - MR1**

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Next step Doc-OLT, truly modular

Doc-OLT Standards & Processes

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Tool A

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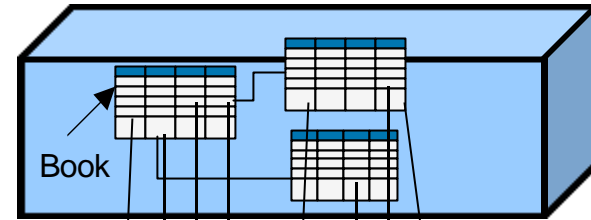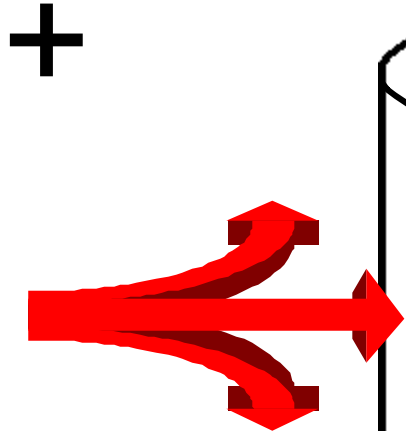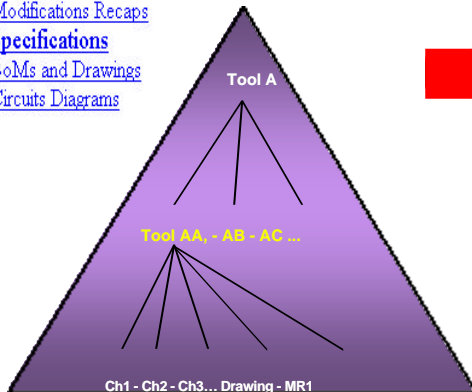
Book

**EDMS layer:
Links, Metadata
Version control**
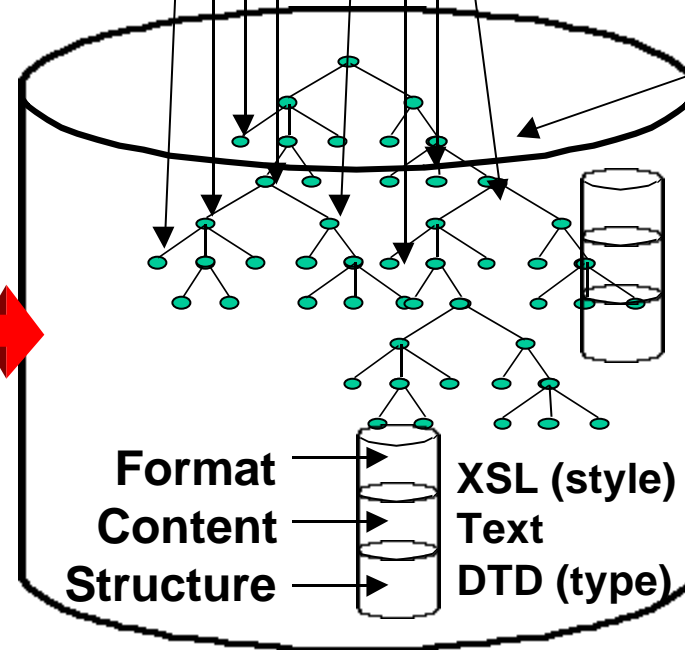
Books share sources in repository

**Publication
Module
(one per book)**

Format → XSL (style)
Content → Text
Structure → DTD (type)

**Data
Modules
(many)**

8. Conception of the XML DTDs

- Analysis and definition of the OLT types

  - Little existing content
  - Defined the best-of-class OLT

- Analysis and definition of the Doc types:

  - 30 types identified
  - Reduced to 3 major DTDs, and 5 minor
  - Structure of each type quite homogenous

- Creation of the DTDs:

  - Outsourcing of the creation of modular DTDs + authoring environments
  - Reuse of data modules common to OLT and Doc

- Role of the Tech communicators and OLT designers

  - During the analysis, specification and testing phases

9. OLT Example: Lecture DTD

- OLT: All training done on a computer, be it directly connected on the Network, for example on the Web, or be it via a CD-ROM.

- A lecture: Declarative knowledge - facts, concepts, principles, theories

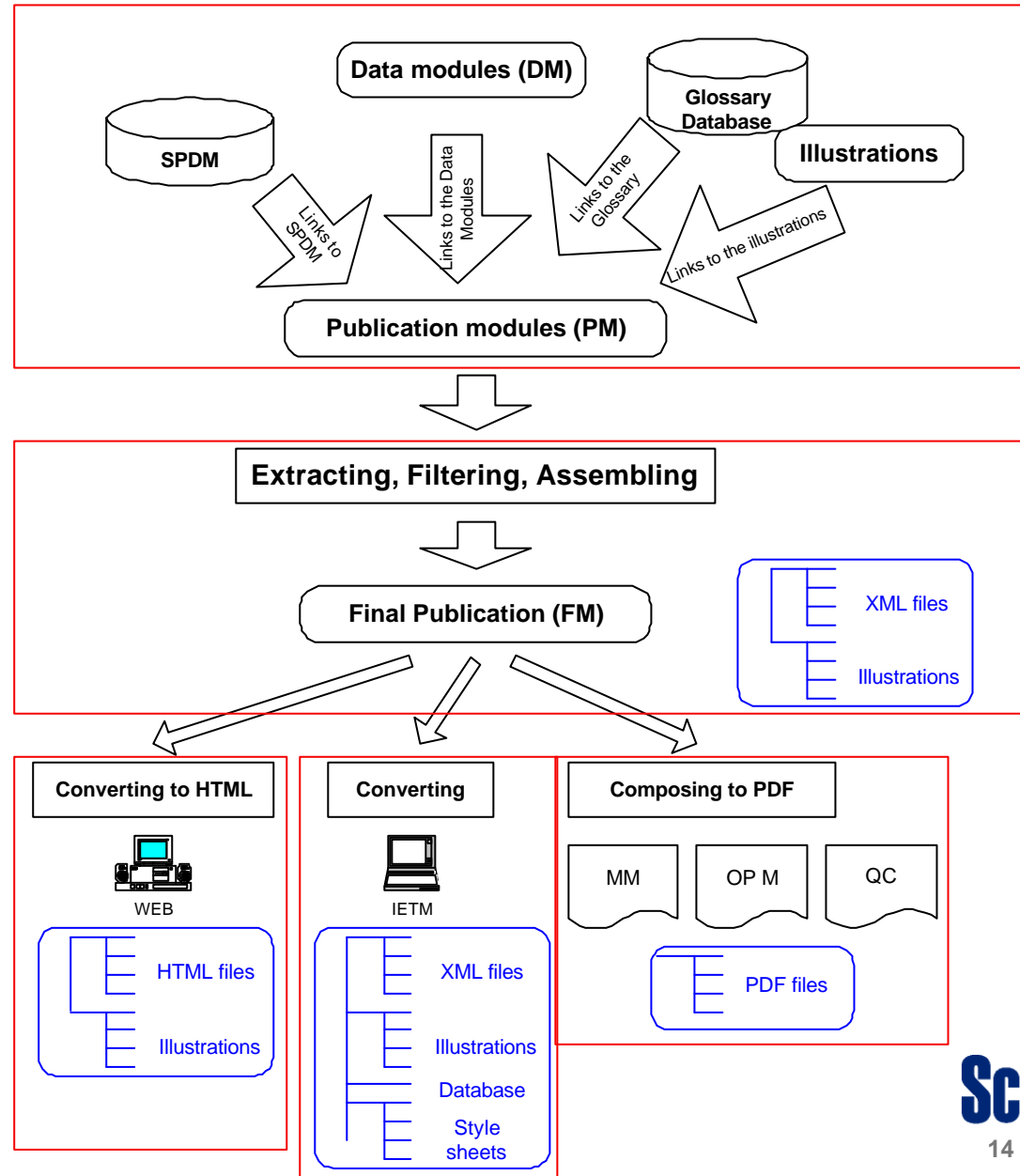- OLT: Different From Documentation... And Yet Similar
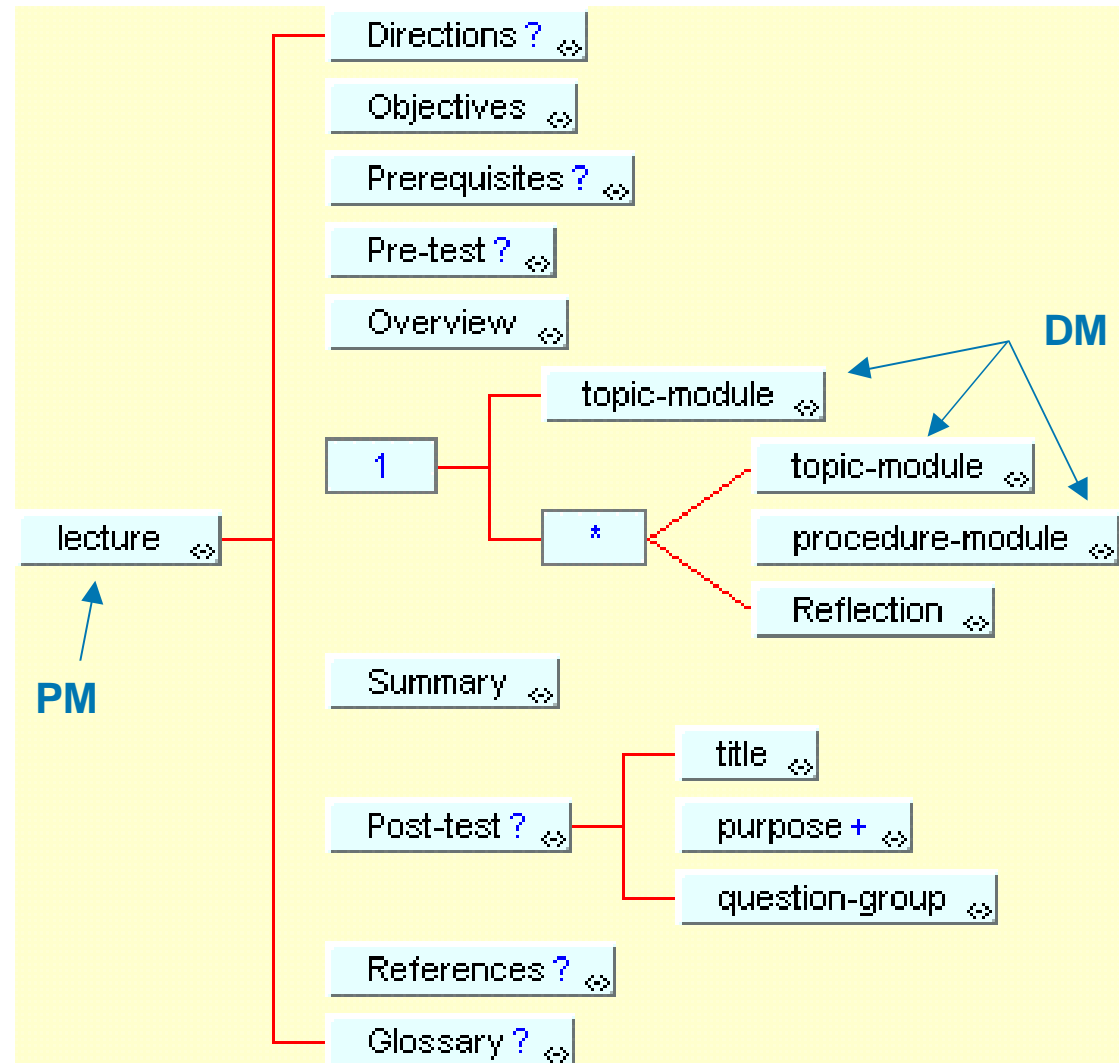
10. EDMS system

- Authoring tools: XMetaL 1.2, Adept 8.2

- EDMS: Sigmalink

- Publishing tool:

  - HTML in batch: **HTML-P and Balise** => multi-files output
  - PDF: **Adept publisher** => multi-files output

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11. Publication process

- Process

Questions?

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