



ADML

A result of cooperation and leverage!

The Open Group

W3C

OMG

MCC

CMU

Background

- There are many different classes of tools ⁽¹⁾
 - that serve many different purposes
 - that serve many different constituencies
 - such as



“The reality is that no single tool exists for both modeling the enterprise and documenting the applications that implement the business solution. A combination of tools from different vendors is necessary ...”

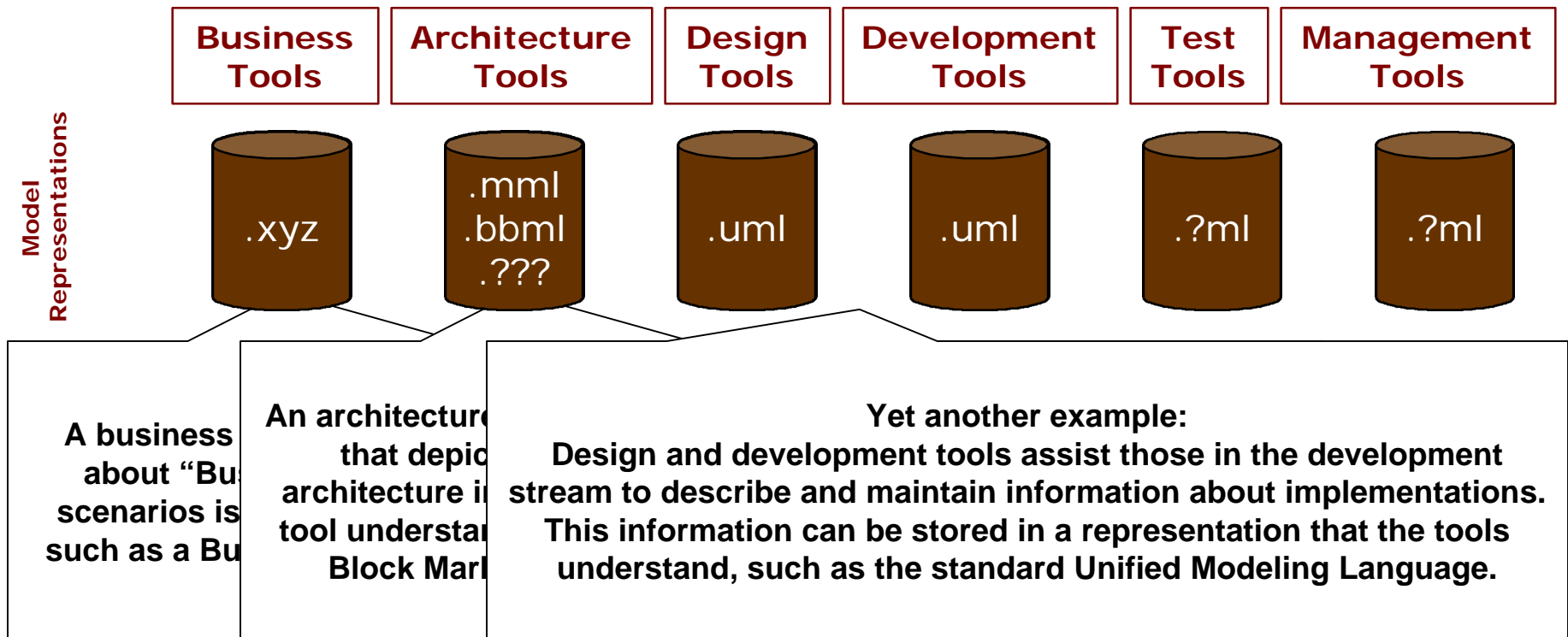
*XML Metadata Interchange (XMI)
Version 1.1*

(1) This list of classes of tools is not intended to be exhaustive

A Need for Native Representation

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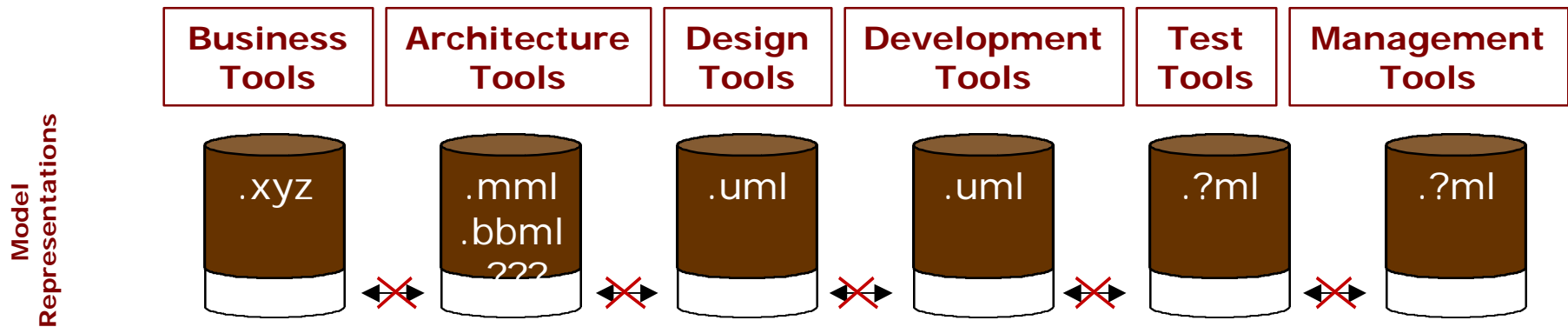
- These tools use, create, and maintain information
 - some of the information is represented in an open format
 - some of the information is stored in an internal closed format
 - regardless we refer to this as a “model representation”



Also a Need for Interoperation

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- Typically tools in these classes don't share information
 - not all information needs to be shared
 - however to improve the connection of "need" to "implementation" could share some information

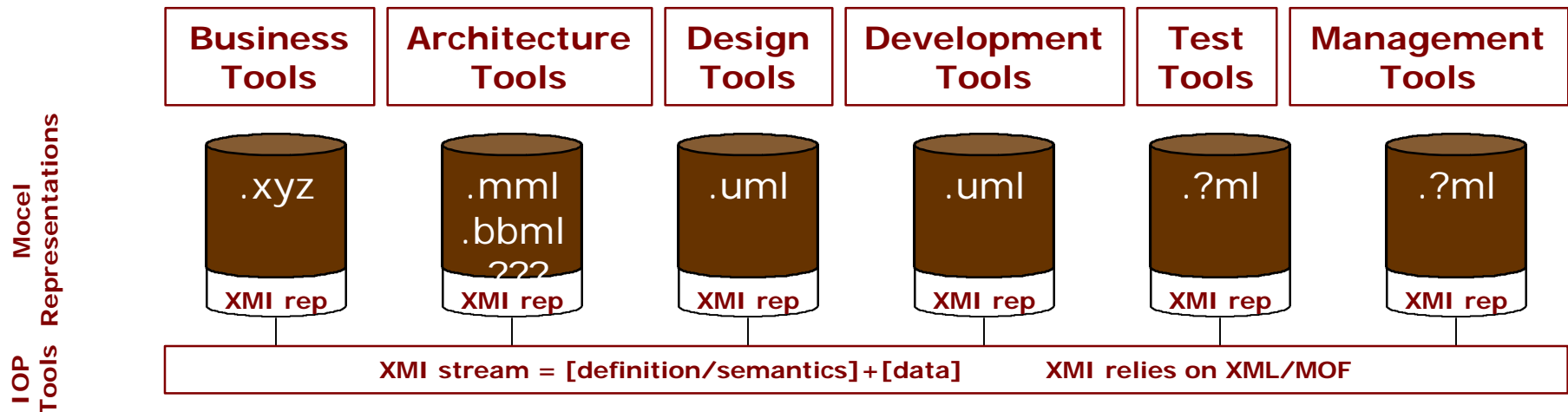


"A combination of tools from different vendors is necessary but difficult to achieve because the tools often cannot easily interchange the information they use with each other. This leads to translation or manual re-entry of information, both of which are sources of loss and error."

XML Metadata Interchange (XMI)
Version 1.1

Enter XMI

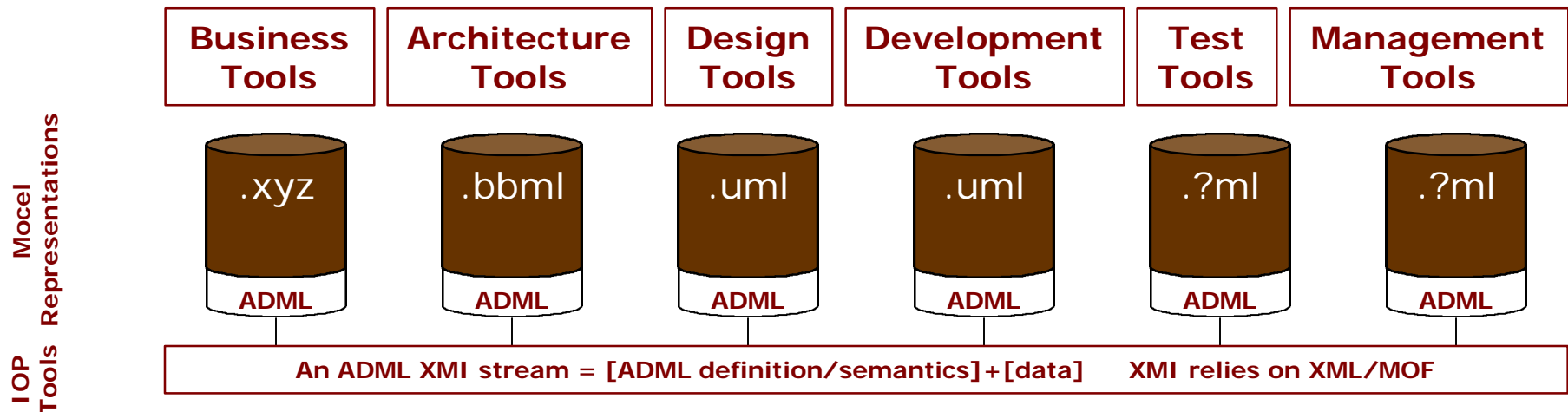
- ❑ XMI provides capabilities to interoperate
- ❑ XMI itself leverages XML and MOF



“XMI eases the problem of tool interoperability by providing a flexible and easily parsed information interchange format. In principle, a tool needs only to be able save and load the data it uses in XMI format in order to inter-operate with other XMI capable tools. There is no need to implement a separate export and import utility for every combination of tools that exchange data.”

Enter ADML

- ❑ Architects are involved throughout the process
- ❑ One needs a model and language to describe what is to be shared
 - ACME from CMU represents the model of what can be shared
 - ADML represents information that can be shared across the toolset and is founded on ACME
 - ADML does not cover all shared information, there is probably more



“The makeup of an XMI stream is important too. It contains both the definitions of the information being transferred as well as the information itself. Including the semantics of the information in the stream enables a tool reading the stream to better interpret the information content. A second advantage of including the definitions in the stream is that the scope of information that can be transferred is not fixed; it can be extended with new definitions as more tools are integrated to exchange information.”

Summary

- A standard language for architecture has resulted from cooperation and leverage!
 - TOG - provided a forum to standardize ADML
 - W3C - developed the specifications for XML and XSL
 - OMG - developed the specifications for XMI and MOF
 - MCC - developed the specification for ADML reliant on XML
 - CMU - developed the ACME model
- The benefactors of ADML include
 - users of the tools
 - and vendors of the tools

**Business
Tools**

**Architecture
Tools**

**Design
Tools**

**Development
Tools**

**Test
Tools**

**Management
Tools**