

Organisation data architecture with standards connections

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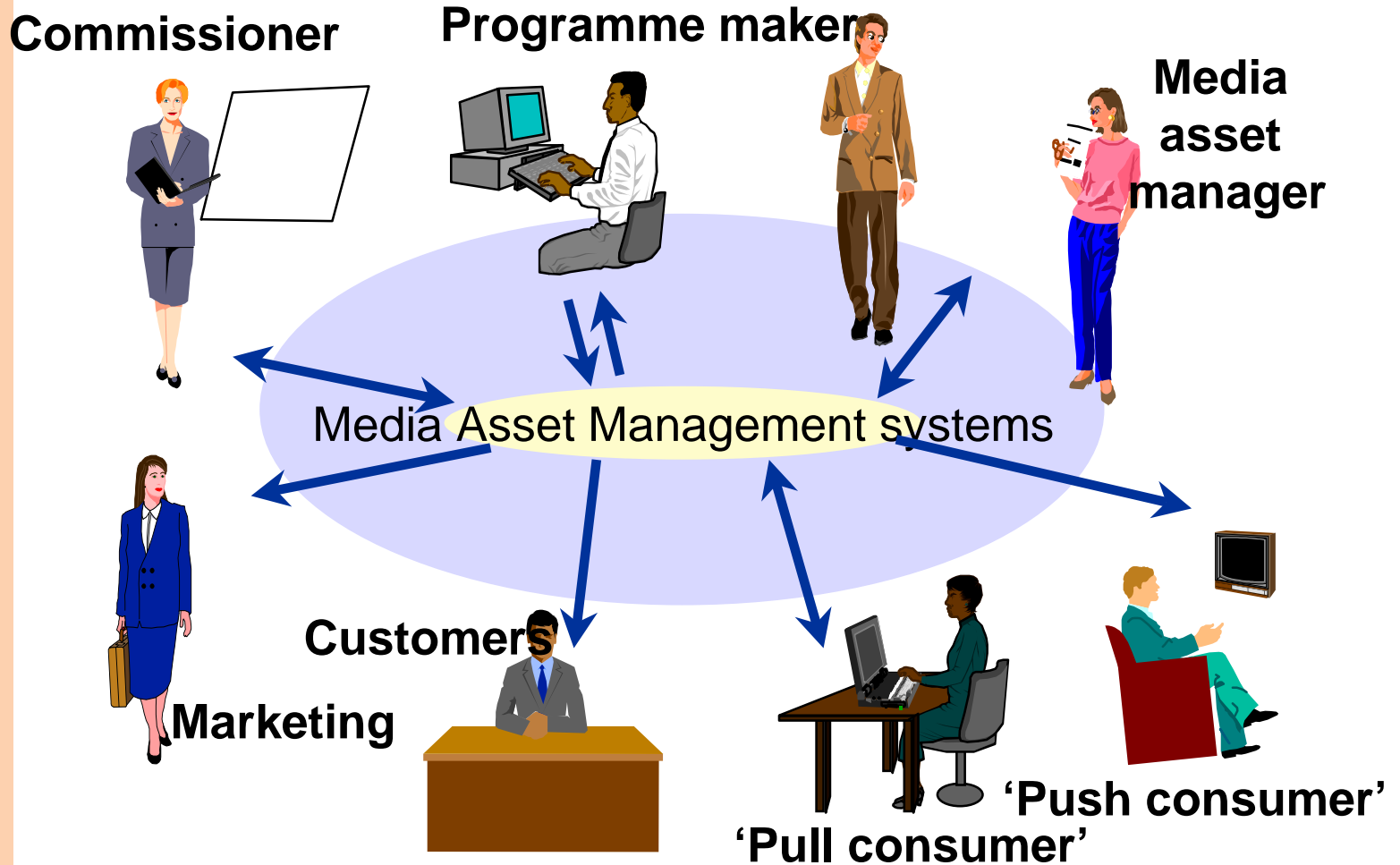
(formerly BBC Technology)

Providing a Data Integration Service

- Enable a Media Asset Management option by establishing a managed metadata service
- Introduce an approach that is not bound to a single technology
- Ensure a common semantic analysis is applied to involved projects
- Support inter-project connection through common semantic based data architecture
- Maintain cross-reference to involved standards
- Practical involvement in physical implementation

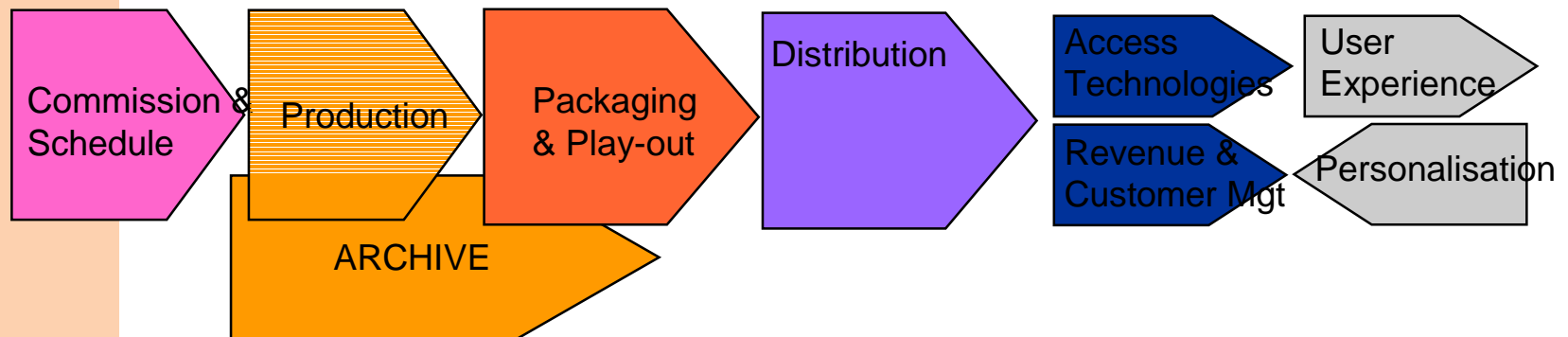
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Media Business Model



Definition of Media Asset Management (MAM)

- MAM is the management of digital media and related data, during the life-cycle of a media asset from its inception in commissioning, through production, delivery to the audience; its after-life in the archive, and its commercial exploitation.



Example Business Issues

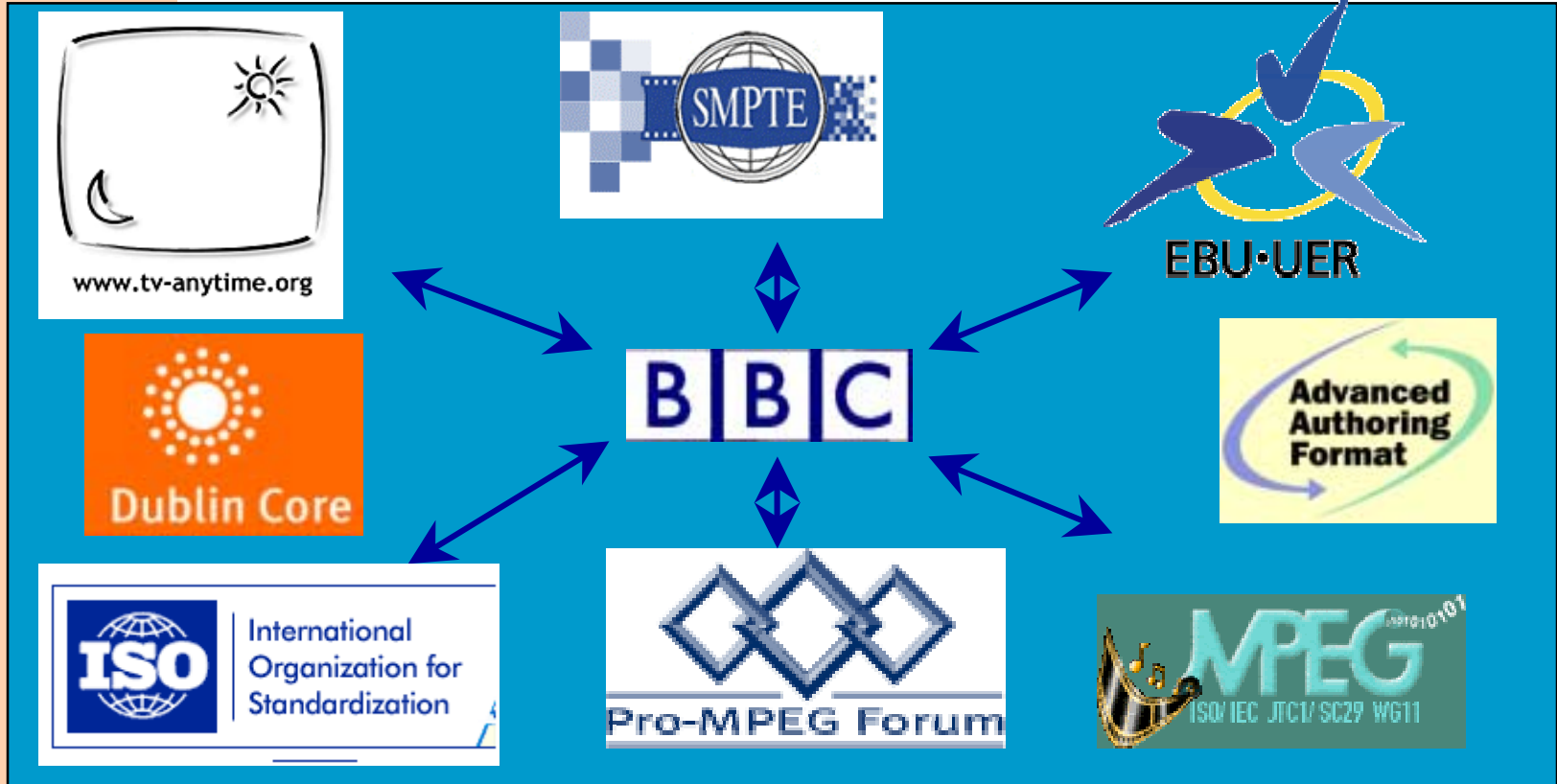
- Can these problems be solved
 - Material is a costly liability unless I can re-use it and know what rights are pertinent
 - Can I find previous material, where is it stored?
 - Do I have to re-shoot, haven't we got something I can use?
 - What technical quality does it have?
- Many issues are involved but one basic aspect is the management of “metadata”
 - Metadata is “data about data”, but here it means data about material
 - Can sort out engineering issues, but this metadata is confusing
 - Don't want to re-enter the same information x times

Wider Industry Background

- Other industries moving towards business process connectivity, why is this so difficult for the media industry?
- Technology led solutions being implemented, only partially meeting requirements
- Manufacturers used their own standards, enabling metadata interchange between their machines only, no “bedded in” international standards
- Huge expansion in channel offerings/outlet options from mobile phone to set top boxes
- Technical architectures are very confusing for integration purposes, even more difficult here

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Industry context



Data Management Introduction

- Focus entirely initially on Semantic data model – the model is known as SMEF™
- Understand what the exchange/interchange requirements are and standardise approach
- Deal with a world of package procurement and some legacy systems
- Sort out corporate reference data approach and standards
- Do not become isolated, provide immediate value to projects and organisation

Media Data Group

- Current approach and work stream began in 1997
- The range of problems not fully understood, but can we sort out our organisation's metadata?
- Cannot solve the range of issues highlighted, but focus on business understanding of its metadata requirements
- Ensure organisation is able to understand and exploit developing industry metadata and carriage/storage standards

Agile Data Modelling Style

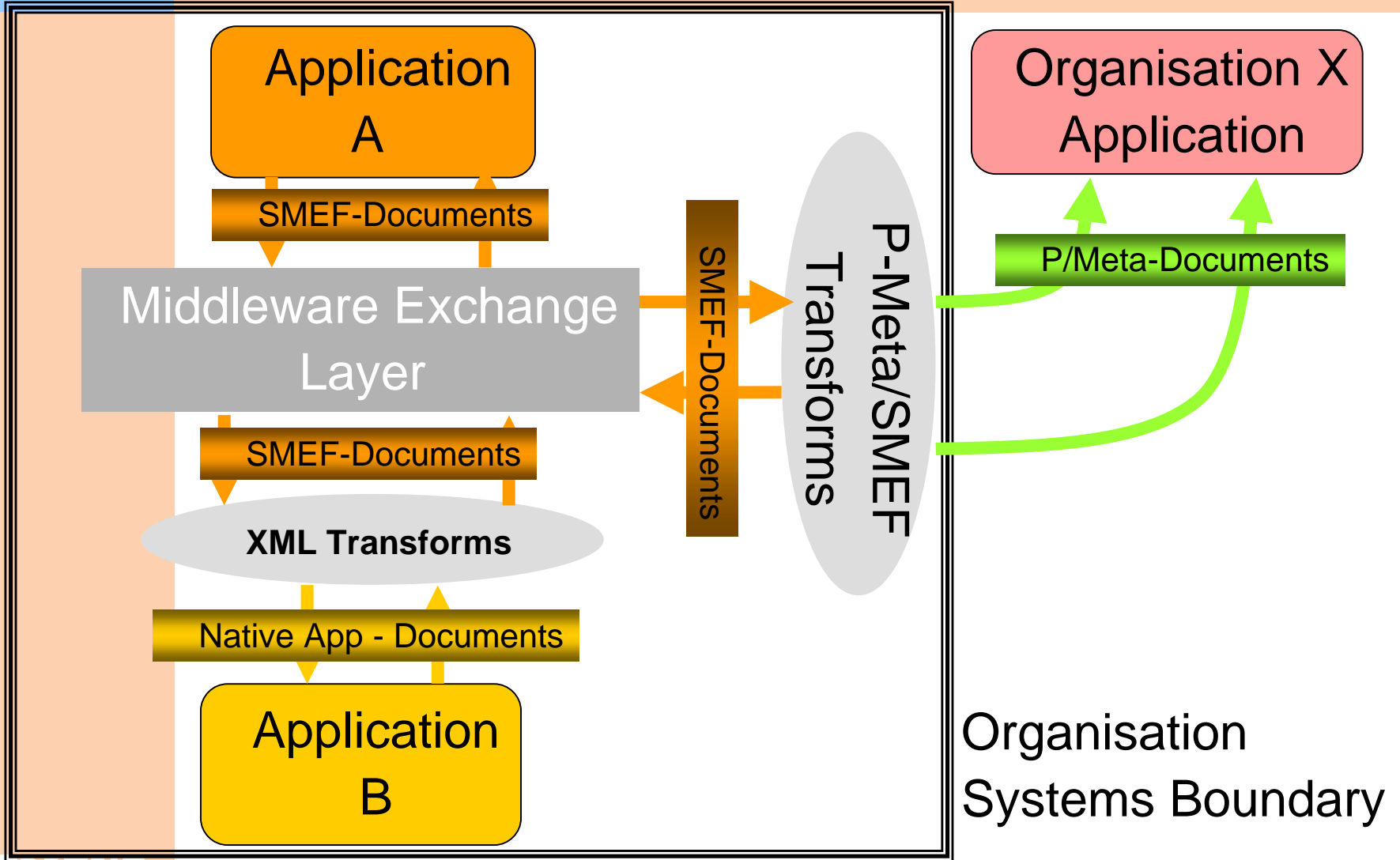
- Successive, configured model versions containing:
 - What business definitions we know
 - What business definitions we think are true
 - Posits for what might be true
 - Placeholders where we know nothing
- Very limited generic/all purpose modelling. Specific statements of what is known
- Ensure agile and able to be updated as necessary
- Formal mapped connections to other products, project models, interface definitions, XML schemas
- Audited formal change control processes

Enterprise Architecture Involvement

- Only now moving towards a known Enterprise Architecture
- Clearer position expected regarding Application and Technical Architectures
- The semantic data architecture always applies – using XML (and other specific media standards) based physical data architecture
- Recently published agreed XML-based physical project compliance layer

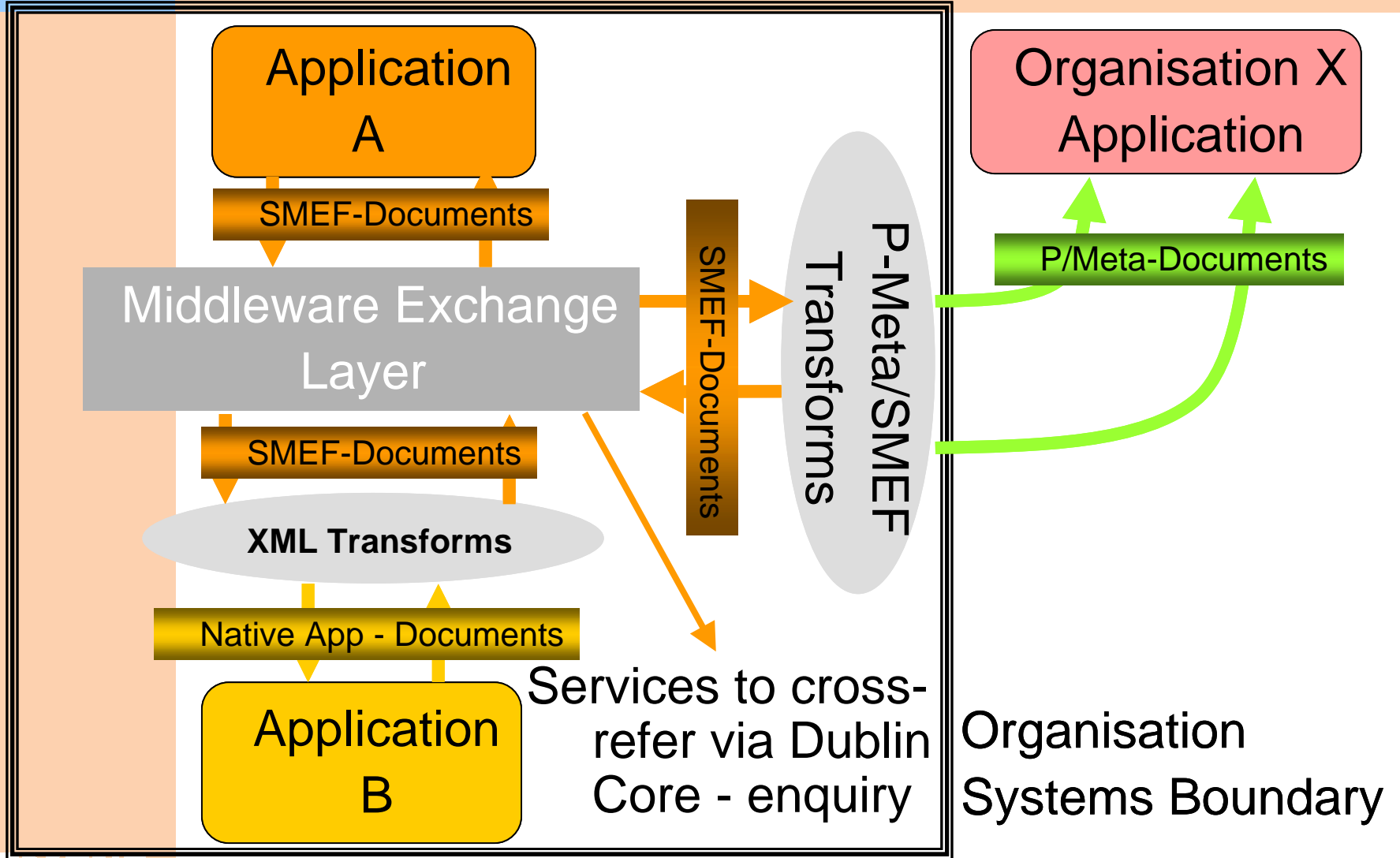
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The Exchange Architecture



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The Exchange Architecture



Data Architecture Approach

- Enables direct support for projects throughout their lifecycle – including operation
- Has remained neutral during phases of architectural approach planning (e.g. role for Zachman)
- Supports most up-to-date implementation ideas for interoperability for media standards, XML, service oriented architectures and semantic web

Connection - Semantic Web

- All managed services and interfaces based on common semantics
- The semantic model is based on shared vocabulary of agreed business concepts (business ontology)
- Translations managed from taxonomies/reference data and agreed semantics into all applications
- Connections maintained to industry standard semantics
- Will support “intelligent” interaction and searching using Dublin Core
- SMEF™ will maintain cross-references to Dublin Core

Summary

- Maintained an approach that provided a “development to operational” service for projects
- Published the background SMEF™ semantic-based model across organisation
- Maintained connections to developing international and media standards, including Dublin Core
- Involved in the next stage of Technical Architecture development
- Future application services will support connectivity and semantic enquiry

Thanks

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www.bbc.co.uk/guidelines/smef