Preface to Part 2 - From requirements via architectural design to software release

- Business Object Model (BOM) – enterprise model
- Domain Object Model (DOM) – conceptual model of a domain of interest
  - business use case model
  - business class model
- Business context diagram – to depict the scope of an enterprise core business
- Artifact – any documented information produced by a system developer and used in a development lifecycle
  - Glossary of terms and definitions – an important artifact

Topics

- Advertising Expenditure Measurement (AEM) – the business
- Business context diagram
- Business use case model
- Business glossary
- Business class model

Advertising Expenditure Measurement (AEM) - the business

- Market research company
  - Obtains, processes and sells information about advertisements in various media
  - Capturing ads:
    - automatic data capture
    - manual data capture
    - matching of advertisements
  - The advertising content:
    - external verification
    - internal verification
    - electronic log files
- Two areas of reporting to the AEM customers:
  - campaign monitoring
  - expenditure reporting

Business context diagram

- A simplified business use case model to depict the overall “system behavior”, to present the core business activity, and to express the scope (boundaries) of the system under development.
- The idea of business context diagram borrows from Data Flow Diagrams (DFDs) – a non-UML modeling technique.

Business use cases and business actors

- Business use case is a high-level usage case (case of business use) within the system under consideration
- Actor is a role played by a person, system, device, etc. when using or otherwise communicating with the services of a use case
- Business actor can be:
  - a role, which is internal to the system
  - a primary actor (it interacts directly with the system)
  - an external entity (i.e. outside the scope of the system)
  - a secondary actor (a role that communicates with the system via an intermediary – normally a primary actor)
- Relationships:
  - association – between business use cases
  - communicate – between an actor and a use case
generalization – between business use cases and/or between business actors
Business use case model

Business glossary

Term | Definition and Explanations
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ad | A unique piece of creative that may be broadcast, screened, published or otherwise exposed any number of times. Each ad exposure by a media outlet is known in the AEM system as an ad instance.

ad instance | A particular occurrence of an ad, i.e. each incidence of an ad broadcast, screening or publication.

product | A merchandise or service that may be advertised. Products may be categorized (i.e. a product can belong to a category of products). Categories are classifications of products as envisaged by AEM. The AEM system supports a hierarchical grouping of categories with an unlimited number of levels in the hierarchy. Products may only be categorized at the lowest level of the category hierarchy.

Business class model

Alternative business class model
### Summary

- **Business Object Model (BOM)** is an object-oriented model that describes the core business of an enterprise.
- A model artifact contains **classifiers** — model elements that describe behavioral and structural features of an enterprise or system.
- **Business context diagram** consists of one business use case representing the enterprise and input/output data flows from/to external entities.
- **Business use case** model defines business use cases, business actors, and relationships between them.
- **Business glossary** is a list of business terms and definitions.
- The existence of glossary facilitates development of the **Business Class Model**, which defines business entities and relationships between them.