

# Universal Data Models

## ACCELERATE YOUR DATA MODELING EFFORTS WITH INDUSTRY-SPECIFIC TEMPLATES

Developed by renowned author and modeling expert Len Silverston for ER/Studio, these time-proven templates have been continuously improved during the last 15 years and implemented by hundreds of companies that have benefitted from a complete set of data models that ensures quality, reduces development time and facilitates standardization of existing data models and definitions.

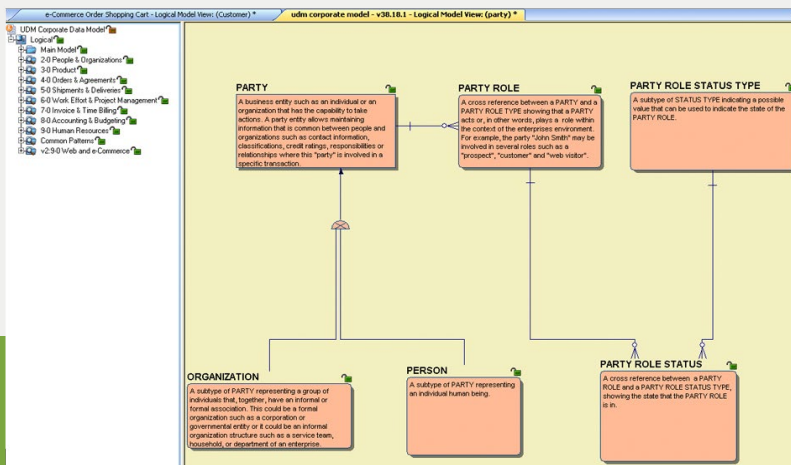
### UNIVERSAL DATA MODELS HELP DATA PROFESSIONALS REDUCE DEVELOPMENT TIME, IMPROVE CONSISTENCY & STANDARDIZATION WHILE ACHIEVING HIGH QUALITY MODELS.

The Universal Data Models (UDMs) have been developed by a team of experienced data modelers, led by Len Silverston. The templates have been refined based on hundreds of implementations and are laid out for easy navigation, including full attributes and **detailed definitions for every attribute**. They make sophisticated data models more accessible to small & medium-sized businesses that previously had to forego them due to budget or IT constraints. The models are available for nine different subject areas as a complete and **integrated corporate model, and seven industry-specific add-ons**.

The UDMs available for ER/Studio **reduce development time and ensure quality**. The templates arm users with a powerful set of data models and data warehouse designs that jump-start database development projects. They include proven models for **common business functions** such as ordering and managing products, handling shipments, invoicing, accounting and budgeting, managing human resources, contact management and project management.

New models can be laid out and categorized into subject data areas with ER/Studio's easy-to-use format, reducing data model development and maintenance time by an average of **60%**, as well as improve the quality of existing data models. Users can save even more time with the **industry-specific extensions** for Healthcare, Telecommunications, Manufacturing, Banking, Investments & Financial Services, Insurance, Professional Services and Travel.

The Universal Data Models enable users to be consistent with other organizations and improve quality assurance by referencing hundreds of **integrated, "best practice" models**. UDM customers can refer to a standard, proven source for models that are easily able to handle conflicting opinions regarding data modeling. All of the models contain a full set of **entities, relationships, attributes and detailed definitions**. The models are also a great resource for enterprise data modeling, master data management, data warehouse, data governance, data quality, big data programs, canonical/semantic models, ontologies, and any effort where data models can help.



## BENEFITS

- Achieve high-quality models
- Reduce development time
- Improve consistency & standardization

**ER/Studio** allowed us to quickly model, communicate and revise our data model & definitions. Without this tool, we may not have attempted the project.

- Rebuilding Together



Standardization of data models is often seen as a **never achieved nice-to-have**, rather than an essential ingredient of a data management and data quality program.

## REDUCE DEVELOPMENT REDUNDANCY & IMPROVE DOCUMENTATION

**Immediate benefit in productivity** has been realized since using ER/Studio, especially when leveraging domains that represent template data types. These domains can be created hierarchically so specific properties are inherited from the parent domains. These domains help to ensure that we accurately represent many similar data structures with ease as well as guarantee that we understand the data represented in every data model design we develop.

### DM Review

## INDUSTRY-SPECIFIC MODELS

Jumpstart modeling efforts within a particular industry or define a common data model. Models below include all Subject Area Corporate Models that are integrated into the industry constructs. Includes full descriptions of entities and attributes with primary keys and foreign keys (where applicable) defined for each entity.

### Repository for Banking, Investments and Financial Services

For entities such as Account, Investment Vehicle, Security, Saving Account, Objective, Risk Analysis, Performance Characteristic Type, Yield Type, Financial Position, Mortgage, Scheduled Payment Due, Financial Agreement and Account Notification

**Repository for Healthcare** For entities such as Patient, Insured Party, Insurance Provider, Hospital, Medical Office, Health Care Visit, Health Care Episode, Claim and Settlement

**Repository for Insurance** For entities such as Insurance Agency, Payor, Insurance Product, Coverage Level, Coverage Type, Actuarial Analysis, Rate, Application, Quote, Insurance Policy, Premium Schedule and Claim

**Repository for Manufacturing** For entities such as Distribution Channel, Part, Raw Material, Part Specifications, Engineering Changes, Manufacturing BOM, Manufacturing Order and Process Plan

**Repository for Professional Services** For entities such as Professional Resource Requirement, Skill Type, RFI, RFQ, RFP, Engagement, Engagement Rate, Professional Assignment, Service Entry and Work Effort

**Repository for Telecommunications** For entities such as Telecommunications Carrier, Regulatory Agency, Network Component, Network Assembly, Deployment and Service Order

**Repository for Travel** For entities such as Traveler, Travel Preferences, Travel Reservation, Ticket, Sale, Scheduled Transportation, Accommodation Class and Travel Experience

## SUBJECT AREA CORPORATE MODELS

Frameworks and reusable constructs for common corporate subject areas to jumpstart specific modeling efforts or to define a common data model. Includes full descriptions of entities and attributes with primary keys and foreign keys (where applicable) defined for each entity

**People and Organizations** For entities such as Party, Party Role, Organization, Person and Postal Address

**Product** For entities such as Product, Service, Good, Feature Type and Inventory Item

**Orders and Agreements** For entities such as Order, Agreement, Requirement, Quote & RFP

**Shipments and Deliveries** For entities such as Shipment, Receipt, Issuance, Shipping Document and Shipment Route Segment

**Work Effort and Project Management** For entities such as Work Requirement, Work Effort, Time Entry and Rate Type

**Invoice and Time Billing** For entities such as Invoice, Billing Account, Payment and Financial Account

**Accounting and Budgeting** For entities such as General Ledger Account, Accounting Transaction, Budget, Budget Scenario and Planning Transaction

**Human Resources** For entities such as Employee, Position, Responsibility Type, Skill Type, Salary and Benefit

**Web and e-Commerce** For entities such as User Preference, Web Address, Object Content Frame, Server Hit and Web Visit