



What is DEMO?

DEMO (Design and Engineering Methodology for Organisations) is the principal methodology in the new discipline of Enterprise Engineering (EE)¹. In EE, an organisation is considered a designed (social) system, even if it seems to have grown 'organically'. Changing an organisation thus means deliberately re-designing and re-engineering it, including the supporting ICT applications.

The *philosophy* of DEMO is that people are the 'pearls' of every organisation. The basic stance is that people are good by nature, that they are able and willing to bear responsibility for their acts, provided they have got the right authority. This is the ambience in which people want to collaborate, and to excel in bringing about the services through which the common mission of the enterprise is accomplished. ICT applications are meant to support people, not to take over their responsibility.

The main *PSI theory* of DEMO (Performance in Social Interaction) is that collaboration takes place in social interaction and that it evolves in universal patterns, called transactions. Consequently, business processes become simple trees of transactions, instead of mind-bending railroad yards. Analysing business processes with DEMO yields the so-called *essential model* of an organisation, which is a model of its construction and its operation, that completely abstracts from implementation, like ICT, and from realisation, thus from informational aspects (remembering, sharing and deriving facts) and documental aspects (storing, retrieving and copying documents or data).

The essential model consists of four integrated aspect models: the Construction Model (actor roles and transaction kinds), the Action Model (business rules and work instructions), the Process Model (business events and processes), and the Fact Model (business objects and facts). The essential model is comprehensive, coherent, consistent and very concise. The reduction of complexity that the essential model achieves, compared to current models, is over 95%. Consequently, the essential model of an organisation offers the insight and overview that you want and need.

What does DEMO offer you?

- Your employees become the pearls of your organisation again
- Transparent authorisations and responsibilities
- Univocal and clear process and data ownership
- Comprehensive, coherent, consistent and yet concise models
- Broad overview and deep insight in the operations of your organisation
- Keeping control over the most complicated organisational changes

Examples of DEMO in practice

- Uniform ICT applications based on the essential model (SGC 1995)
- Determining 'untraceable' causes of business problems (PTT Telecom 1997)
- Reference model for organising civil engineering projects (VISI 1999)
- Stable basis for reorganisation (Police district Rotterdam/Rijnmond 2001)
- Unique overview of and insight in allying organisations (Air France/KLM 2010)
- Collective involvement of management and shop floor (KMar 2011)

¹ See "The Discipline of Enterprise Engineering" on www.ee-institute.org

DEMO-3 Master

course description



ENTERPRISE ENGINEERING
institute

For whom is the course intended?

The DEMO Master course is intended for practitioners in the field of organisation and ICT (like enterprise architects / consultants, business architects / analysts / consultants, information managers, business process managers, and quality managers) who want to be educated more profoundly in their field of practice, and who particularly look for a solid methodological foundation of their profession.

Learning objectives

The DEMO Master course builds on the DEMO Bachelor course. The course contents is both a broadening and a deepening of the contents of the DEMO Bachelor course. Next to the Construction Model and the Process Model, which you learned to make in the DEMO Bachelor course, you will learn to produce the corresponding Action Model and Fact Model. In addition, you will get the insight that these four models are truly and intrinsically integrated, that they are four different views on the same thing, namely the ontological model of the organisation. From now on, you will understand deeply that business process models, object or data models, and business rules should be developed hand-in-hand, and that DEMO offers the right help to achieve it. This constitutes the notion of Enterprise Ontology.

In addition to the four EE theories (PSI, OMEGA, TAO, ALPHA) that you know from the DEMO bachelor course, you will learn four other ones: FI, MU, DELTA, and BETA. The FI and MU theories serve in particular to understand the Fact Model, as well as conceptual modelling in general, whereas the DELTA theory serves to deepen the understanding of the AM. At the same time, it provides deeper insight in the PSI theory. The BETA theory offers the introduction in Enterprise Design, which is, next to Enterprise Ontology, also based on Enterprise Architecture and Enterprise Governance & Management.

Other course information

A DEMO Master course covers three contact days and three days of self-study. Therefore, the contact days are normally spread over several weeks. Therefore, having a DEMO Bachelor diploma is a prerequisite for going in for the DEMO Master exam. Next to (paper or digital) handouts, the course material comprises this book:

- Jan L.G. Dietz: Enterprise Ontology (2nd edition, to appear in 2017)

The Enterprise Engineering Institute regularly (3 to 4 times per year) organises written exam sessions. They can also be taken at distance. If you pass the exam, you receive the DEMO Master diploma and you can apply for being recorded in the register of Certified DEMO Masters.