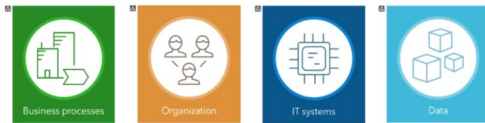# ARIS

ARIS Basic

Structure diagram

This model type containt the object of type structural element and the connection of type contains. Since a structural element can be assigned to all model types, this model has a wide range of uses. It is often used as a start model for various views of a company.

Process landscape

A process landscape is used to structure the process portfolio of a company. Processes in a process landscape can be connected in a sequence to describe an end-to-end scenario or a value chain. Processes can be arranged hierarchically to further refine certain process areas. The process portfolio is usually structured into the following three process types:

1. Management processes (e.g. strategy),

2. Core processes (i.e. value-adding processes)

3. Support processes (e.g. marketing)

This symbol represents a process that can be described, e.g. by using a "Process landscape" diagram.

## Event-driven process chain (EPC)

The event-driven process is a set of related tasks or activities performed to produce a product or service. The event-driven process consists of events triggering activities. Rules control the flow of the process. The event-driven process describes:

1. Which activities are performed in the course of a process

2. Which organizational units participate in process execution (persons, groups of persons)

3. What input and output data are used

4. What IT systems are involved

5. Which events and risks occur during process execution

An **event** describes a state that controls or influences the progression of the process. They trigger functions and are the results of functions.

The **system** is a software system that is used to support the execution of a function.

A **function** is a task or activity performed to deliver process outputs and support business objectives.

A **risk** represents the possible danger of a defined process objective not being achieved.

The symbol **role** illustrates who is performing an activity.

An **information** carrier stores knowledge/data.

Connectors are used to split and join the control flow. Split connectors have one incoming and several outgoing connections. Vice versa for join connectors.

OR considers at least one path.

AND considers all paths.

XOR (exclusive or) considers exactly one path.
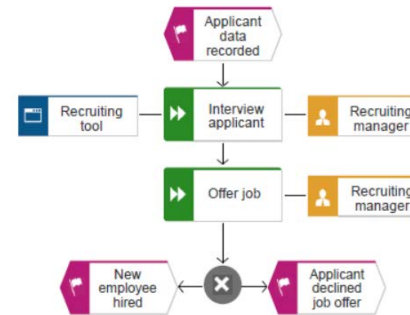
You can find a more detailed overview about the EPC **here**!

BPMN process

BPMN is a process notation used to model business and workflow processes alike. BPMN is a open standard for process modeling maintained by OMG. The BPMN collaboration diagram is used to model the interactions between participants, e.g. in a business-2-business (B2B) context. Participants are involved in the process and represented by means of pools. Interactions between these pools are represented by message flows (message exchanges).

Start events may use different symbols in BPMN. For example, "Message event" for processes starting with a message.

These symbols mark the **end** of a process.

Gateways represent decisions within the process flow. Using the corresponding symbol, they represent parallel, exclusive, or other execution modes.

Intermediate events affect the process flow. They do not start or end the process.

In BPMN, **tasks** are represented by activities. They cover the human execution of tasks ("User task" or "Manual task") as well as the technical task execution. As "Subprocesses" they represent basic processes.

Text annotations are used to add comments to model elements.

These represent organizational units. Using **pools** or embedded **lanes** tasks can be assigned to persons or groups of persons.
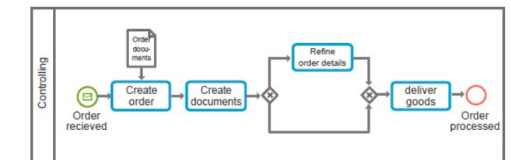

You can find a more detailed overview about the BPMN **here**!

System landscape

System landscapes describe which IT systems belong to which logical units (domains). This assignment information is relevant for budgeting or for defining administrative responsibilities.

Systems represent logical electronic data processing systems. These systems are not hardware but software systems. ERP systems and EAI platforms can be named as examples.

IT systems can be grouped into areas **(application domains)**. In doing so, the question of similarity can be defined according to different classification criteria.
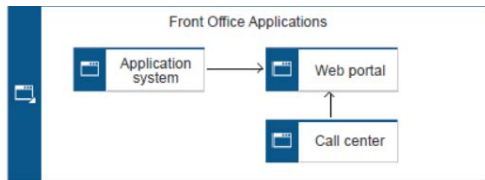
Data model

A data model represents the data view of a company, e.g. which business objects exist. The entity relationship notation is used for data modeling.

Data models are created e.g. to define database structures. The cardinalities of relationships between entities illustrate the number of interconnections.

An **entity** is an individually identifiable object of reality. In databases, it is represented as a table.

Attributes describe properties of a data object (entity), i.e. the columns of a table.

The **primary key** (here: purchase order number) is a unique identifier for an object.

The **foreign key** is a reference to the primarykey of another data object. For example, the customer ID is a reference to a data object of the "Customer" type.
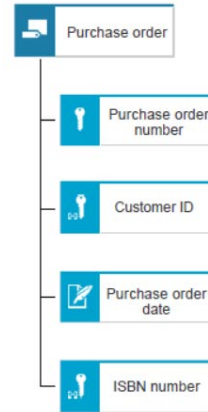
Organizational charts

Organizations and companies illustrate their structures with organizational charts. With the ARIS symbolism (organizational unit, role and person) relationships between individual units like departments or employees are demonstrated. The relationships stand for:

1. Who is responsible for whom?

2. Who is the supervisor or inferior?

3. How are the communication channels?

Organizational unit is a unit in an organizational hierarchy. It can be used to show which organizational units are superior to others.

Position is the smallest organizational unit in a company.

Persons can be assigned to an organizational unit.

Groups of persons can be combined in a **role**.

A **location** refers to a physical place and can be a factory, a building, or also an office.

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