

Classification of Business Processes

In this section, the main dimensions along which business processes can be classified are investigated.

Organizational versus Operational

Intraorganizational Processes versus Process Choreographies

Degree of Automation

Degree of Repetition

Degree of Structuring

Video

Organizational versus Operational

- Different levels can be identified in BPM, ranging from high-level business strategies to implemented business processes.
- These levels are depicted in Figure
- At the **highest level**, the strategy of the company is specified, which describes its long-term concepts to develop a sustainable competitive advantage in the market.
- An example of a business strategy is cost leadership for products in a certain domain.

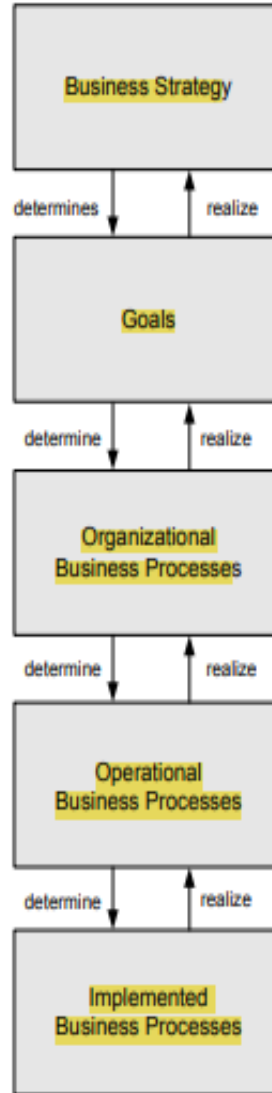


Fig. 1.6. Levels of business processes: from business strategy to implemented business processes

Organizational versus Operational

- At the **second level**, the business strategy is broken down to operational goals. These goals can be organized, so that each goal can be divided into a set of sub-goals. Reducing the cost for supplied materials is a sample goal that contributes to the realization of the business strategy mentioned.
- At the **third level**, organizational business processes can be found. Organizational business processes are high-level processes that are typically specified in textual form by their inputs, their outputs, their expected results, and their dependencies on other organizational business processes.

Organizational versus Operational

- In **operational business processes**, the activities and their relationships are specified, but implementation aspects of the business process are disregarded. Operational business processes are specified by business process models.
- Operational business processes are the basis for developing implemented business processes.
- **Implemented business processes** contain information on the execution of the process activities and the technical and organizational environment in which they will be executed.

Intraorganizational Processes versus Process Choreographies

- Each business process is performed by a single organization. If there is no interaction with business processes performed by other parties, then the business process is called **intra-organizational**.
- Most business processes, however, interact with business processes in other organizations, forming process choreographies.
- The primary focus of **intra-organizational business processes** is the streamlining of the internal processes by eliminating activities that do not provide value.

Intraorganizational Processes versus Process Choreographies

- The personnel of the enterprise is represented in organizational models used to allocate activities to persons who are skilled and competent to perform these activities.
- Traditional workflow management systems can be used to support intra-organizational business processes.

Degree of Automation

- Business processes can diverge in the level of automation.
- There are business processes that are fully automated, meaning that no human is involved in the enactment of such a business process.
- An **example** is ordering an airline ticket using Web interfaces. While the process is fully automated on the side of the airline, the customer is involved with manual activities, such as providing address information via Web browser interfaces.

Degree of Repetition

- Business processes can be classified according to their degree of repetition.
- Examples of highly repetitive business processes include business processes without human involvement, such as online airline ticketing.
- However, business processes in which humans are involved can occur frequently, for example, insurance claim processing.
- If the degree of repetition is high, then investments in modelling and supporting the automatic enactment of these processes pay off, because many process instances can benefit from these investments.

Video

- [What is business process?](#)
- <https://youtu.be/Tp3ysZpi TE>
- Business processes with a low degree of repetition are often not fully automated and have a collaborative character, so that the effort in providing automated solutions is not required, which lowers the cost.

Degree of Structuring

- If the business process model prescribes the activities and their execution constraints in a complete fashion, then the process is structured.
- The different options for decisions that will be made during the enactment of the process have been defined at design time.
- Leymann and Roller have organized business processes according to dimensions structure and repetition. They coined the term production workflow.
- Production workflows are well structured and highly repetitive. Traditional workflow management system functionality is well suited to supporting production workflows.

Reference

- Please read article 1.3 from book