



Business Process Engineering



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- “Business process” engineering defines architectures that will enable a business to use information effectively
 - It involves the specification of the appropriate computing architecture and the development of the software architecture for the organization's computing resources
 - Three different architectures must be analyzed and designed within the context of business objectives and goals
1. The data architecture provides a framework for the information needs of a business (e.g., ERD)
 - *The individual building blocks of the architecture are the data objects that are used by the business.*
 - *A data object contains a set of attributes that define some aspect, quality, characteristic, or descriptor of the data*



- For example, an information engineer might define the object **customer**.
- Once a set of data objects is defined, their relationships are identified.
- As an example, consider the objects: **customer, and product A**.
- **The two objects can be connected by the relationship purchases; that is, a customer purchases product A or product A is purchased by a customer.**

2. The application architecture encompasses those elements of a system that transform objects within the data architecture for some business purpose

- we consider the application architecture to be the system of **programs (software)** that performs this transformation.
- However, in a broader context, the application architecture **might incorporate the role of people**

