

In banking the processes in many instances dictate the IT requirements for the banks' efficient operations. How can you prepare your IT to reflect the needs of operations? How to look at your processes as driver of IT requirements and define them?

On Strategic Level

Business Process Hierarchy

A Business Process Architecture consists of a large collection of Business Processes, usually clustered per banking product into a hierarchy. Clustering the Business Processes into a hierarchy is an important way to ensure completeness of the Business Process Architecture.

A Business Process would be triggered by an external event (e.g. a client comes into a branch with a request for a domestic transfer) and would lead to a well defined business goal (e.g. the requested transfer has been executed and positions have been updated). A Business Process will be segregated into separate steps, Elementary Business Processes or EBPs.

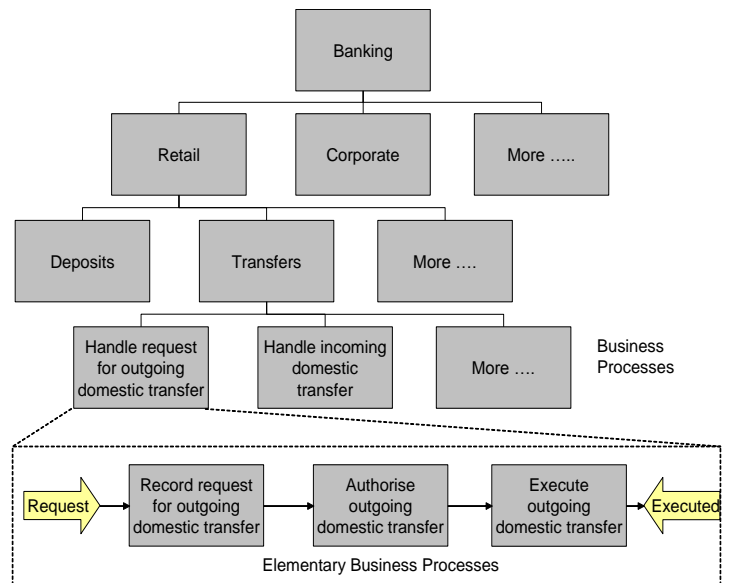


Figure 1. A Business Process hierarchy

Mapping Systems to Business Processes

Software Application Architecture on a high level consists of the collection of application systems that together support the Business Process Architecture. It usually consists of a core banking system, together with a collection of front-end and back-end functionality that takes care of capturing the various inputs and producing the required reporting, etc. Mapped over the above mentioned process flows, this could be visualised as in figure 2.

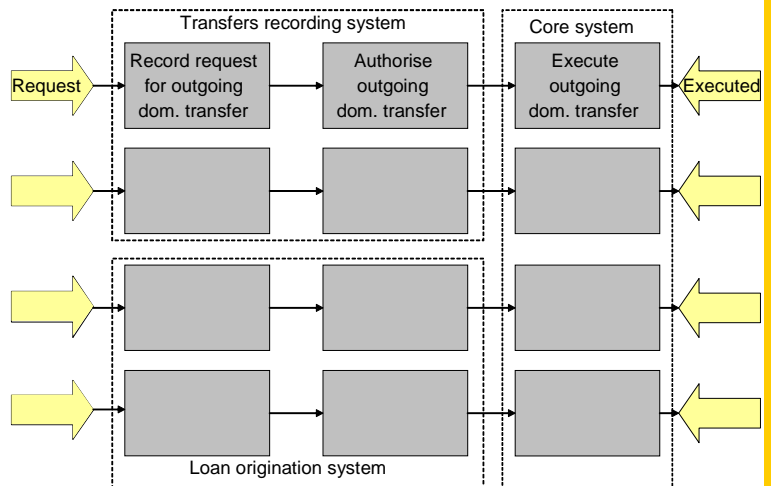


Figure 2. High level mapping of Systems onto Business Processes

Analysing EBP's

By analysis per group of related Elementary Business Processes or EBP's to what extent the needs of those EBP's are covered by the applicable part of the Application Architecture (e.g. end-users' satisfaction level) and weighing this with the importance of the EBP's (e.g. frequency/costs of execution), a "heat-map" of the coverage of the Business Process Architecture by the Application Architecture can be created.

Such a map gives a clear overview on management level of the missing or inadequate functionality of the Application Architecture (colours indicate due for replacement urgently, medium term or long term) and it will provide a good basis for defining projects to acquire software to fill these gaps.

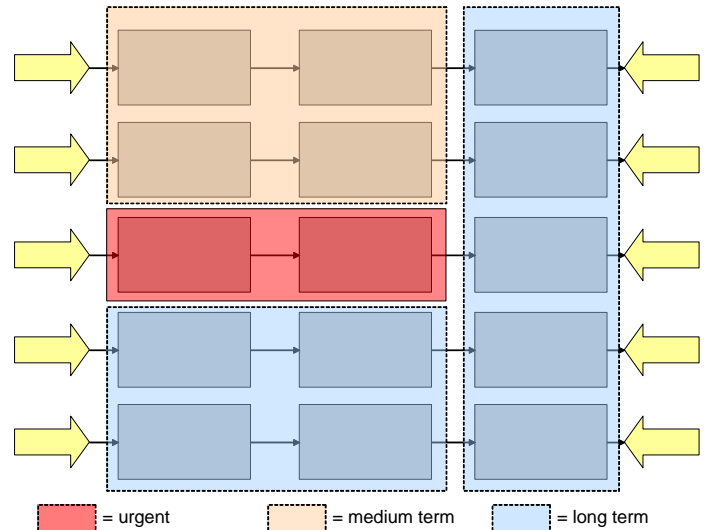


Figure 3. The "Heat Map"

On Tactical Level

On a tactical level the flows per Business Process will become of prime importance during system development. The EBP's will become the major units of development.

An EBP is a part of a Business Process with the following properties:

- carried out uninterruptedly,
- carried out within one organizational Role,
- based on
 - efficiency,
 - duty segregation,
 - more

This implies that in the detailed Application Architecture an EBP will

- preferably be supported by one menu option
- transform the database from one consistent status into another
- map to a Component in the Business control layer of a Component Based detailed Application Architecture;

see figure 4 for a sketch of such architecture.

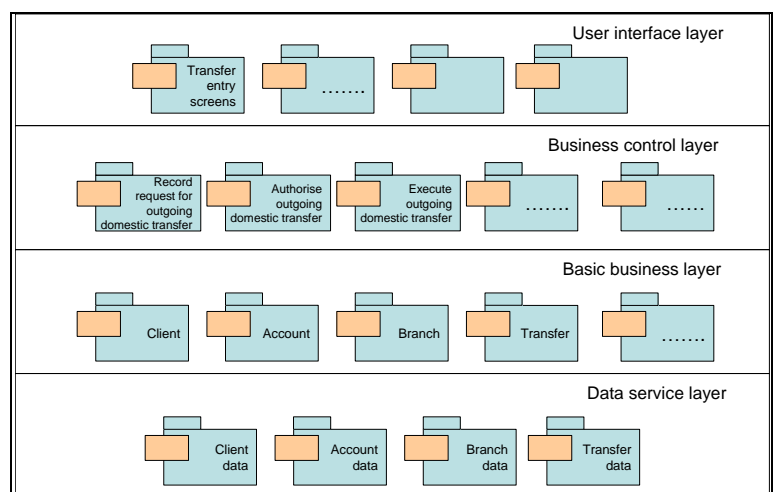


Figure 4. A 4-layer Component-Based detailed Application Architecture

In the system development cycle this leads to a very straightforward development process in which each EBP will result in one main Use Case, which subsequently will result in one Control Component. See figure 5.

For test preparation, the EBPs (+ related Use Cases and Control Component specs) will become the test bases for Unit Integration Testing. The Business Processes will become the main test bases for functional System and Acceptance Testing.

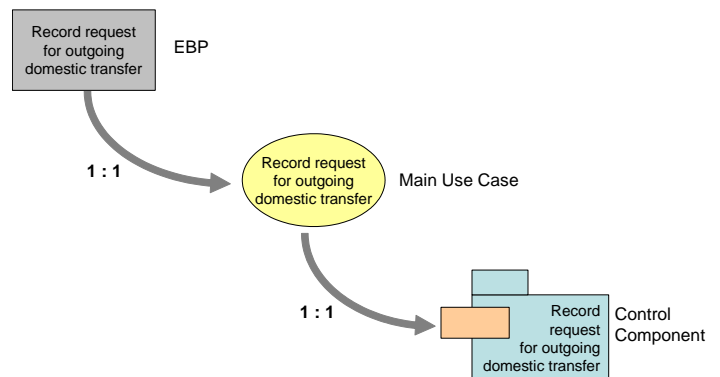


Figure 5. From EBP to Use Case to Control Component

What TCG can offer?

TCG has extensive hands-on experience in analysing, changing and implementing business processes and underlying IT and organization infrastructure. TCG employs a structured approach to conducting Business Process-based system selection, development and testing for our clients.