



Business Process Management

1. Introduction

Business Process Management (BPM) is widely applied across organizations, however an overview of what it is and what it can do for a Telecom service provider is often missing. We are considering BPM – according to the definition we use – if we pay structural attention to the following aspects of business processes:

- analysis and (re)design
- modeling
- implementation
- monitoring and management
- automation

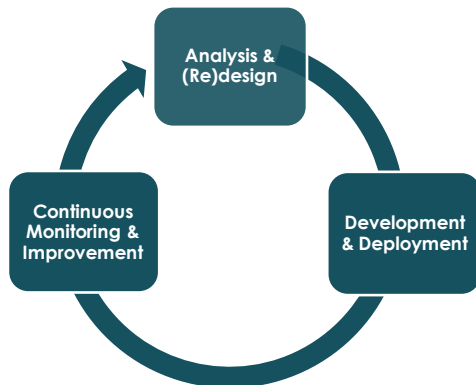


Figure 1: Business Process Management (BPM)

This BPM White Paper further explains the subjects above. At the same time, we detail the role and added value of **VDVL**.

2. Analysis and design or redesign

The lifecycle of almost every business process begins with analysis and design or redesign. For the introduction of new services and products, and in the reorganization or modification of existing activities, a business process must be designed or redesigned which is optimized for the following general requirements:

- legal framework
- scalability
- reusability
- flexibility

These requirements are supplemented with product-specific requirements in the field of:

- usability
- efficiency
- throughput time
- quality

The (product) management must establish in a multi-disciplinary context the most important assumptions and Key Performance Indicators with which the process to be designed must comply.

Widely-used KPIs include:

- cost per unit product
- throughput time in days
- % clean orders/ requests
- % first-time-right (FTR)

Depending on the nature of the product/ service, and particularly the product differentiation, the phase in the product lifecycle, the expected volumes, the expected distribution of the trigger (“arrival of requests/orders”), the desired lead over the competition etc., important choices must be made in:

- role of customer, suppliers and partners in the value chain and in the process
- required competencies of employees and the roles of the various types of functionary
- automation type (supporting or implementing)
- level of automation

Product differentiation

High	Manual Workflow	Systems Involved
	Systems Involved	Flow-Through Zero-touch
Low	Business Volumes	
	Low	High

Figure 2: Example of type of automation depending on product and volumes

For complex business processes, process simulations may help to optimize the process target variables (throughput time, efficiency etc.) and to determine what dimensioning of resources is necessary.



3. Modeling

During the analysis and design of business processes, it is already beneficial to model the processes. Modeling is thus more than just documentation, and may be made good use of in the making of the correct design choices.

The following types of modeling are used in process design and redesign:

- ❑ process decomposition models according to different levels of detail and reuse of process components
- ❑ swim-lanes which indicate which department/functionary carries out which activities, what the (external) triggers are and which systems and documents form the inputs and outputs
- ❑ sequences diagrams which lay down what messages are sent in what order from one application to another
- ❑ state/transition diagrams which indicate what states orders, requests etc. can go through

3. Implementation

In the implementation of business processes, the following aspects must obtain sufficient attention and in the correct mutual relationship (for general points for project management and implementation see also relevant **VDVL** white papers):

- ❑ Estimation of expected number of process modifications after initial implementation. This estimate is the resultant of speed of development, organization's ability to learn and implementability of new process designs
- ❑ Estimation of adaptive power of organization
- ❑ Understanding of the design or redesign by the operationally-involved employees. Insofar as the employees concerned are not involved in the design, good communication on this during the project is important. Dry run-through sessions during the project help to use the operational knowledge and create understanding and thus support
- ❑ Training of the line employees involved in the process designed and the applications developed
- ❑ Planning of the development and implementation in such a way that the necessary resources can be made available in good time and a suitable moment for the switchover can be determined and realized
- ❑ For a redesign, account must be taken of the working stock, also work in hand

- ❑ Sufficient precautions for contingency planning, which means that backup scenarios are ready, if things don't go as planned during introduction
- ❑ Minimization of impact of introduction on surroundings. Besides the business context in terms of customers, suppliers and partners, this also means the system context to avoid a whole chain of systems having to switch over at once
- ❑ Good aftercare. The operational switchover is not the end of the journey, but only the beginning. In the period immediately after implementation, extra support and monitoring must be organized
- ❑ Handover to line organization. The line and staff employees must if required be additionally trained to be able to replace the project employees. For Business Process Management is a continuous process of analysis, design, implementation and measurement.

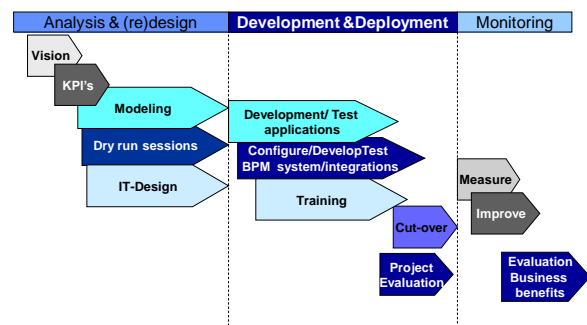


Figure 3: Example of process implementation project phasing



4. Monitoring and management

In the analysis and design or redesign of the process, important objectives are agreed upon and laid down in KPIs. It is of great importance that these KPIs are immediately measured and structurally reported on during implementation.

Issues which play a role here are:

- Comparison of current (realized) performance with performance standard
- Frequency of reporting
- Presentation of reports
- Distribution of reports

Besides the reporting itself, the organization of the managing process itself is of great importance.

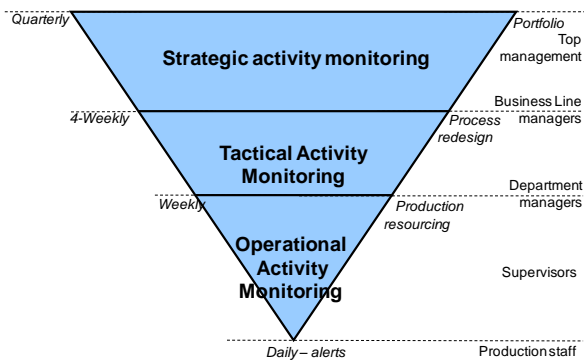


Figure 4: Management process structure

5. Automation

Automated support or implementation is possible in the following areas:

- simulation tools for process analysis and design;
- modeling tools for process modeling;
- workflow engines with regard to process implementation;
- (process) reporting tools with regard to process monitoring.

There are certain packages that possess all functionalities, but in practice, the market leaders are different for each functionality area, and with relatively little effort, integration of the points above can be achieved.

Closely-related IT areas of attention are:

- Document management
- B2B interfaces/web portals
- Enterprise Application Integration

6. VDVL and BPM

VDVL has built up much experience with BPM, with Telecom Providers and ISPs, and also in various other sectors.

We are BPM experts who feel at home realizing robust processes with product management, operational line management and IT professionals.

In projects for KPN Telecom, Wanadoo, T-Mobile and CAIW, we have designed, automated and implemented processes using our specific expertise in the Telecom field, and we have been finally responsible for all these activities. For the actual realization of IT systems, our clients must select other suppliers. With its business partners, VDVL can however fill the role of system integrator.

We have worked for our clients with the following IT products:

- Arena and ProModel for process simulations
- Rational Rose, ARIS and naturally Visio for process modeling
- TIBCO BPM (formerly Staffware) , FileNet, IBM Websphere, Bea WebLogic and TIBCO In Concert as workflow engines
- Business Objects and Crystal reports for process reports

A number of lessons we have learned in practice are:

- Ensure clean orders/requests and invest in on-line order/request validations with back-office applications
- Ensure that even with an (extremely) high degree of automation, manual intervention is still possible
- With far-reaching automation, look carefully at the rainy day process scenarios.

For details about our projects and references we refer you to our website www.vdvl.nl, where you can find all the necessary information under References.

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