

Use of PLANTA Project in Research & Development

The time to market is increasingly becoming a critical factor for companies. You can only make significant improvements if you are able to efficiently link up master data management with the complete product development process. An integrated approach enables you to considerably optimize development and product costs and reduce the time to market. Talk to us about the complete product innovation process, from ideas management and product launch right through to ongoing improvements and the controlling of measures.

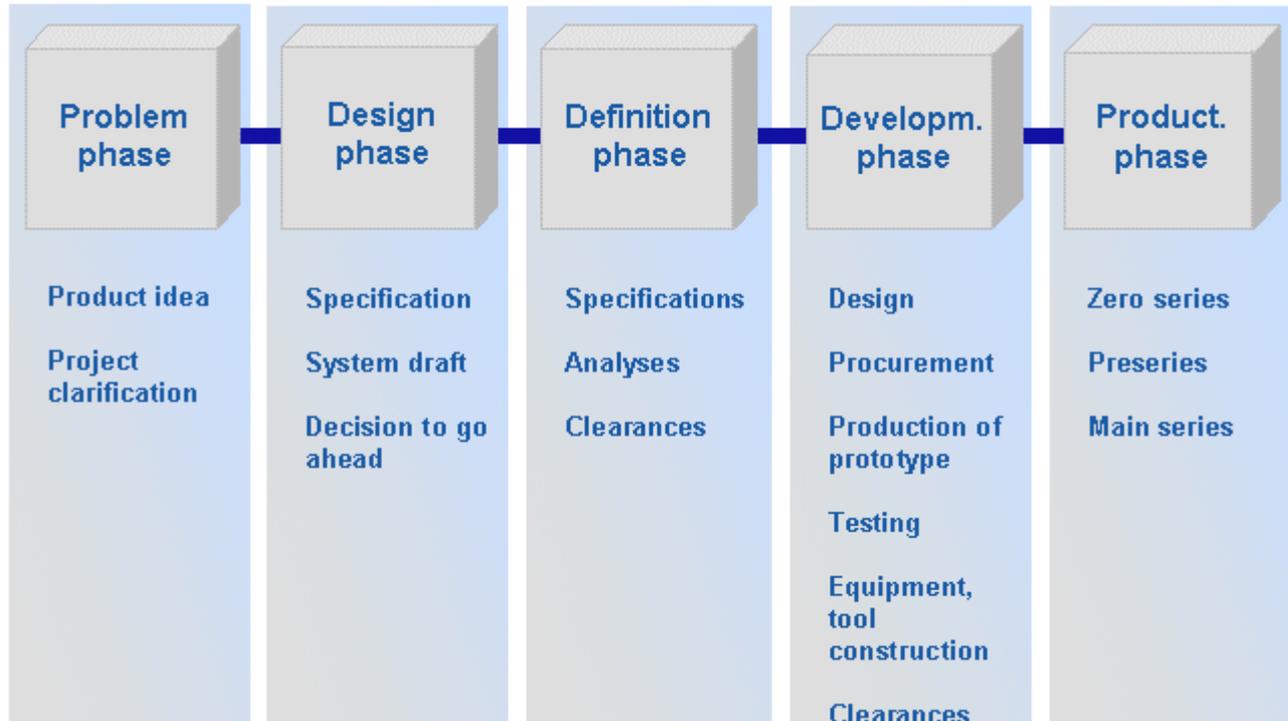
Product development

The development of a new product is a classic project task. Product development takes place between research and market research. Research provides new options, market research new customer requirements. The purpose of product development is to define production- and market-ready products in such a way that the company can maximize yield.

Time, costs, customers, and competitors are all factors that play a decisive role. To maximize yield within the product life cycle, you must first be able to present the customers for the new product. The risk of this "pioneer strategy" is that a company may launch the product too soon and have excessively high production costs. In contrast, the "follower strategy" makes use of the experiences of the pioneer product to create similar products as cost-effectively as possible, often with minor improvements.

Whether an innovative product reaches its market launch in good time depends not only on it being the right product idea, but also on continuous monitoring of the main factors affecting the development of the product.

For product development projects, project management with PLANTA Project therefore means controlling the sequence of activities in all phases of a development project, from the product idea through to the run-up of series production.



Project characteristics

Development or series production run-up projects can be characterized as follows:

- They are directed towards the strategic objectives of the business, and the operational objectives which stem from them
- Reductions in product life cycles necessitate shorter development times
- There is a limit to the available R&D resources
- They may call for investments in new production facilities and equipment, and new organizational arrangements

Practical challenges

In the start-up phase, the weak spots in practical project management include ineffective presentation of the development projects to the areas involved. In the development phase, this can lead to commitments to incorrect production dates with too little information on the capacity situation in other areas.

In project execution, technical, time-related, and financial problems may occur, which arise from insufficient documentation of agreements between those involved in the project.

In addition, poor planning of scheduled dates and capacity usage make it more difficult for development departments to stick to due-dates, or to give timely and full notice of timing changes to those involved in the later stages.

Experience indicates that a critical factor in the run-up phase to series production is the communication of details of changes in the scope of requirements, or technical changes, which because of

time pressures are only handled informally. Detailed specifications are frequently only agreed between users and engineers in the test phase.

Further weak points are the pressures on completion dates and the reallocation of priorities in the development department, arising from the late finalization of a detailed design, or from the continued emergence of requests for changes.

PLANTA Project features for product development projects

Reference projects

The various phases of a development project can be represented in PLANTA Project, standardized and then re-used as reference projects for new development projects.

Development planning

The plans for development projects can be drawn up on a cross-area basis, and the detailed planning and reporting for individual areas such as development, sample manufacture and the construction of production equipment and facilities done locally. Decentralized plans are then based on milestones and key dates in the outline plan.

Simultaneous product development

The activities in a development project build successively on one another. It is also frequently possible to make an early start on some activities, and work on them in parallel. PLANTA Project supports development projects with parallel or simultaneous development ('simultaneous engineering'). This enables predictions critical for an overall assessment of the project to be made earlier.

Project progress

There is a serious risk of losing the overview of costs after a development project has been authorized. Inadequate transparency in the planning, events during the course of the project which could only be anticipated with difficulty, and changes in conditions outside the organization, may endanger the financial success. PLANTA Project creates the transparency needed to identify these developments at an early stage and implement corrective measures in good time.

Cost tracking

On the one hand, PLANTA Project offers an option to estimate development orders, i.e. to cost individual tasks within the plan framework. Cost rates are applied to the quantities determined from the resource requirement calculations, giving individual costs. The total sum of all the budgets for sub-projects gives the total project budget. In doing this, the costs can be distributed in time in the same way that the tasks are, so that they are available as plan figures for comparison. The distribution over time can be linear or in accordance with user-definable profiles.

On the other hand, the actual costs for work which has been done can be determined from the feedback reports. The juxtaposition of the plan and actual costs indicates the progress of product development, which is shown in absolute or relative figures.