PSIpep powered by Qualicision Staff Planning and Scheduling

Software for short-term operational staff scheduling and strategic budget and capacity planning

PSIpep makes staff planning easy. The software's interactive visual planning assistant enables the planner to do detailed shift planning based on staff availability and demand. Depending on the inputs, the level of detail may be chosen down to the minute. Short-time rescheduling is facilitated as the system offers proposals for suitable alternatives. Detailed shift models and the use of qualification profiles are supported. Both full time employees and part-time workers with their different types of contracts may be modeled.
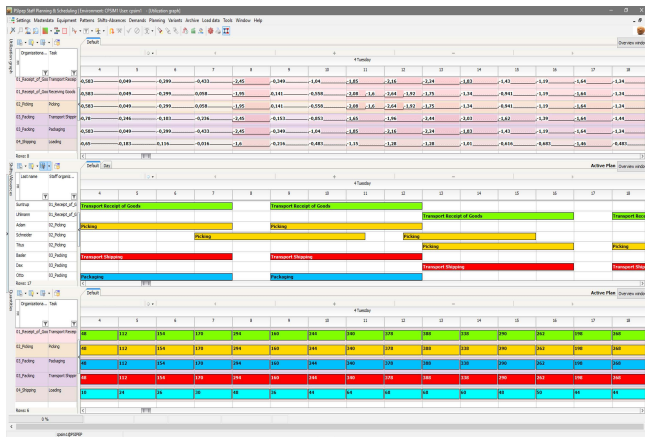
PSIpep also provides capacity planning on a monthly or yearly scale. Holidays and times of absence are considered. With its demand-oriented staff planning approach, PSIpep enables you to standardize your planning processes. Schedules may be generated automatically by Qualicision. Furthermore, simulations regarding different shift models may be done in the system. Clearly arranged work schedules give transparency at a glance. Detailed reporting on costs, required staff and productivities are available for management.

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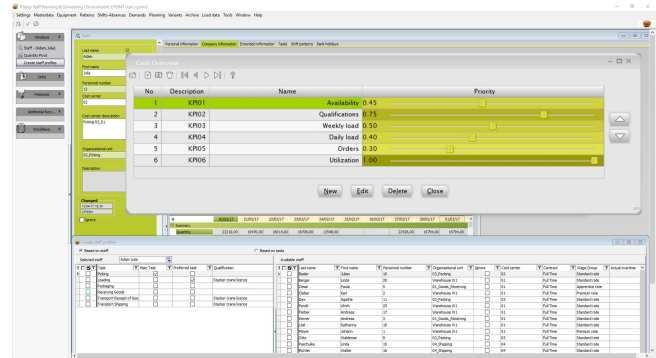
Operational and strategic workforce planning

Operational workforce planning with PSIpep is based on previously determined personnel demands for each period and work area. Demand is broken down to individual employees and shifts. The shift or team leader may find all the relevant information in an interactive planning table. Coordinating the required workforce capacities with the available pool of employees creates planning transparency and allows potential bottlenecks or idle times to be identified early. Appropriate action can be taken at the right time. In particular, forward-looking personnel planning as part of management and controlling focuses on long-term budget and

capacity planning with a planning horizon based on quarterly or fiscal year requirements. Reconciling the personnel available in the future with the expected demand curve allows managers to identify how many temporary workers will be needed in each case. Recurring shortages of specific skills can lead to the introduction of recruitment or training measures at an early stage. Furthermore, long-term capacity planning in PSIpep includes demand-orientated shift and holiday planning, and provides evaluations regarding the development of flexitime accounts for the permanent workforce and the expected wage costs.

Automated planning with Qualicision

A whole range of planning factors must be taken into account, both in operational and long-term workforce planning. In addition to varying demand, these include the respective availability of employees in accordance with attendance and absence patterns, skills profiles, contractual agreements and

other conditions. Various criteria determine the quality of a plan. For example, in addition to quantitative factors such as costs, distances covered or the efficient use of equipment, also qualitative aspects such as the balanced distribution of tasks and individual scheduling preferences play an important role. Other planning objectives may be to minimise deviations from the long-term plan in the event of short-term rescheduling. This is where Qualicision comes into the picture. Qualicision is an optimisation engine that allows automatic scheduling whilst taking into account multiple planning criteria. A goal function may be assigned to each of these in order to describe which characteristics are to be evaluated and how. For example, exceeding the daily target time by 10% could still be deemed acceptable, while overshooting the weekly working time by the same amount is unacceptable. Users may control the relative priorities of criteria by themselves using a slider. The planning result is visualised in a radar chart. This gives an impression as to how well each of the criteria can be achieved. Customised extensions to the scheduling logic may be realized. The planner always has the option of interactively modifying the plan.