



## Subjects of the study

### Working time flexibility

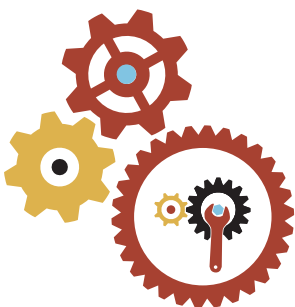
The *Future of Working Time* study examines the central components of working time flexibility in current business practice. It reveals a mismatch between supply and demand on flexible working time concepts and their actual usage.

### Flexibility of working time and working time management

Working time management as well as employee logistics as a whole, challenge all those responsible to continually adapt costs and quality of products or services to optimally balance them. Since there is no consistent school of thought in this area, but a lot of practical knowledge to be considered, the contents of the study serve to assess the current state of planning practice in the industry.

### Staff scheduling in 2020 – the next act

Working time management topics are complex, not only in their content but also in the daily need to ensure an optimal balance between legal conformity, employee interests, costs, quality and other factors. For this, a modern staff scheduling is essential for keeping up with the rapidly changing demands. This part of the study serves to identify the relevant issues and demands in relation to the support of a software-based staff scheduling.



# How are companies positioning themselves for the future of working time?

## Which factors influence working time management and staff scheduling today and in the year 2020?

Today, competitive companies are under an ever increasing pressure of short-term highs and lows, in which its products and services are demanded. Flexibility in the provisioning of services is therefore a key factor and the predictive, demand-driven control of the resource staff is becoming increasingly important under such conditions. However, many companies are not yet deploying their staff efficiently and are thus wasting considerable potential. Practical examples show that consideration of critical success factors not only significantly reduces costs, but also enables market requirements to be better addressed.

The initiators of the *Future of Working Time* study take a more detailed look at the long-term subject of *flexibility and working time* and the issue of the flexibility actually required by companies and the conditions that must be met in order to also use legally available flexibility for a competitive advantage. At the other end of the spectrum, subjects such as working time model design, ergonomic shift models and demand-driven staff scheduling can be found.

In addition, the properties of software solutions and the requirements placed on them in order to support the planning process are discussed. The complexity of the topic and the large number of people involved in the business process *planning*, demand a precise, transparent and continuously targeted approach, which can only be guaranteed by the use of powerful software.

What conclusions have companies drawn from the latest developments? This is the key question which the WORKING TIME ALLIANCE (WTA) – a combination of innovative consultants, specialized in working time issues and staff scheduling – addresses in this *Future of Working Time* study. The study focuses on current topics and is, following 2012 and 2014, already in the 3rd edition.

*Future of Working Time – Management of Working Time and Staff Scheduling* – deals with the essential success factors that companies have to overcome in practice. Where is the issue of working time organization today? What level of maturity do software solutions for the flexible organization of working time have? What is the importance of demand-driven staff scheduling, now and in the future? What developments do companies and their staff management expect up to the year 2020?



Jürgen Wintzen



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# Working time flexibility

## Mismatch between demand, requirement and implementation

### 1 Importance of the influencing factors

Workload predictability	100%	
Workload volatility	~85%	
Predictability of employee absences	~65%	
Data base	~55%	
Calculation of staffing requirements	~45%	
Support / software	~35%	
Laws, collective agreements, etc.	~25%	
Social participation	~15%	

In an environment in which working time demands are always constant, the predictability of demand for working time duration and time is always 100%. In such an environment, you only have to ensure that the working time supply (capacity) is always available in the same manner. Even in this scenario flexibility is still required, namely just as much as is made necessary by non-plannable, non-average loss of working time (e.g. due to short-term absences). Unscheduled employees need to be flexible and compensate for the capacity shortfall. An excess of planned employees needs to be descheduled to compensate for excess capacity.

The relationship between working time supply and demand, i.e. between the duration and position of the working time that is available as capacity and the working time that is required to complete the tasks, requires an additional determinable flexibility for volatile demands. An environment with highly fluctuating working time demands requires greater flexibility potential; both upwards and downwards, corresponding to the fluctuation amplitude.

The statements of the companies surveyed can be categorized into three groups.

In the first group, the most important aspects are the predictability and planning of working time demands and the coverage by the available working time, whereby the general planning of working time demands holds the most prominent rank.

In the second group, we find the topics of data base, predictability of the resulting staff requirements and software support.

The topics of employee participation and legal framework conditions receive a lower-ranking classification.

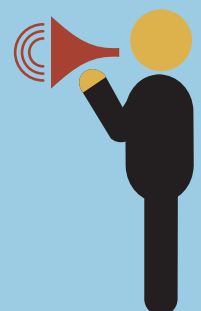
*The need for flexibility of working time is seen in the volatility of supply and demand ...*

## Legend

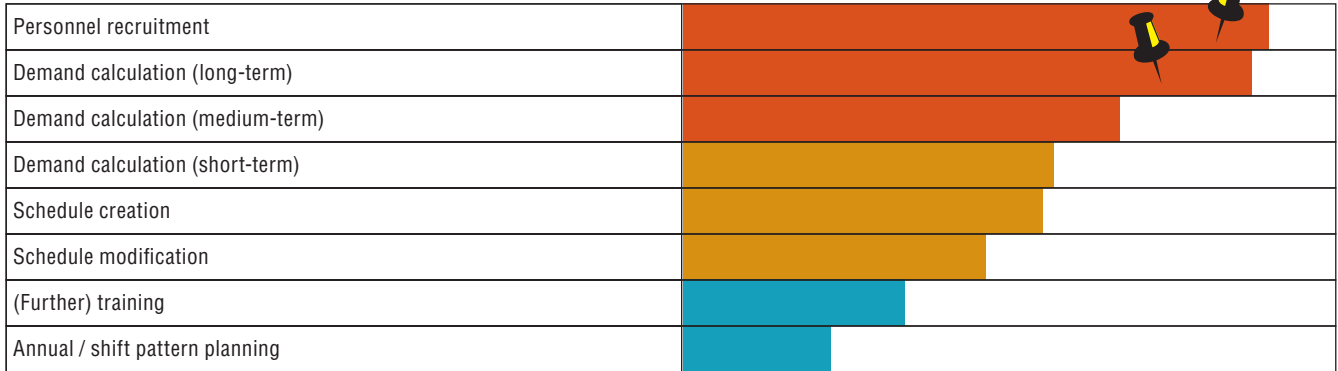


The pin marks conspicuous statements / results.

On the post-it notes, prominent statements or results [indicated by the pin] are commented.



## 2 Importance of the planning phases



The basic question is, in which stage of the planning process what level of flexibility is required in order to successfully respond to fluctuations in demand.

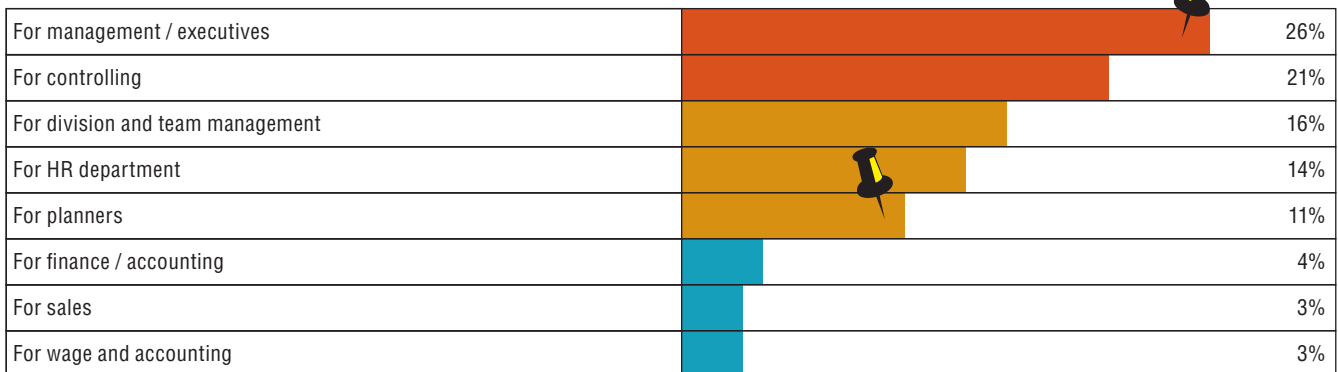
In most cases this will be quickly answered: "In the context of long-term planning". At least, this is how the evaluation of the participants in this study was understood, who judge staff recruitment as the most important phase of the planning. The long-term and medium-term demand calculations were also identified as the central planning stages for ensuring flexibility.

The topics of demand calculation, schedule creation and schedule modification are in the middle.

Since the annual or shift pattern planning also count towards the long-term strategic topics, their last place position appears to be inconsistent; the importantly classified staff demand is ultimately part of the shift pattern plan or annual plan.

... but it is believed that it has to be met in long term planning processes ...

## 3 The importance of human resource key indicators



Human resource KPIs are centrally important as an instrument of effective staff management.

Since the participating companies locate the long-term and medium-term staff scheduling primarily in the recruitment process and thus in the area of responsibility of the management of the company, it is not surprising that the relevance of the indicators required for this purpose are mainly associated with the management or the executives. A quarter of the companies surveyed see the collection of human resource KPIs as a primary task for the management. Another 21% state the relevance of human resource KPIs for controlling. Thus, almost half of those who assess the use

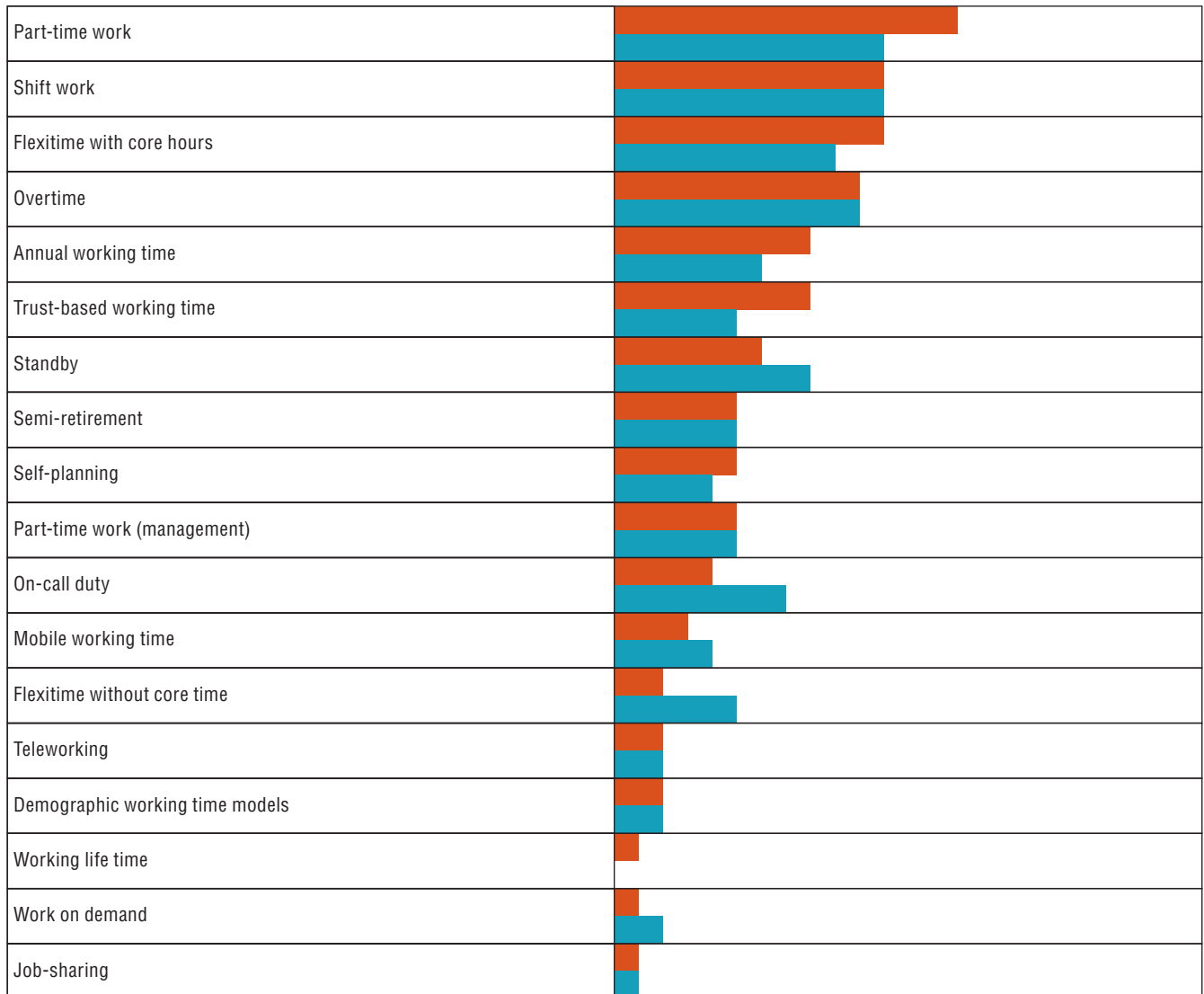
of human resource KPIs in turn connect it with a long-term benefit.

The planners' work is in the middle of this, where only 11% of the participants view their relation to key figures as important or capable of being influenced by them.

This assessment is more than surprising, because the planner requires human resource KPIs in order to ensure the necessary transparency for an optimal schedule. Without sound KPIs, a target-oriented planning is not possible.

... and it is assumed that the responsibility for the control of working time flexibility is with the management and not with the planners.

#### 4 Use of working time forms




Red = 2016, blue = 2014

In contrast to this, it is suspected that the greatest potential for increasing flexibility is in short-term measures, followed by the available quantities of flexible working time. The study participants suspect that the greatest benefit of many common forms of work is in their short-term improvement or reaction potential, which should be reflected in a demand-driven staff deployment. Long-term forms

of work such as working life time will be ranked lower, in particular part-time work plays a prominent role in the general comparison of working time forms. Particularly in comparison to the 2014 study, part-time work has significantly increased and is once again at the top position.

## 5 The importance of flexibility components

Announcement period		42%
Amount of working time		38%
Balancing period		20%

In order to make the most of the many flexibility potentials offered by the various forms of work, rules still have to be observed, as defined by industrial agreements, collective agreements or legislation.

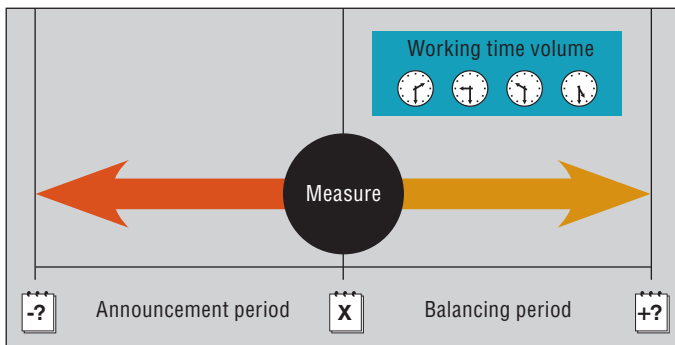
Among the three rules inherent in the system, the study participants rank announcement period in first place, with 42%. The length of the announcement period tells us how flexibly a short-term working time requirement can be registered or canceled.

Over a third of the participants rate the volume of working time almost as high. The volume of working time can, for

example, be controlled by a reduction in the number of assignments, shift cancellations or allocation of additional shifts during the period in question.

The balancing period, in which aggregate hours that are above or below the contractual working hours are balanced, is only seen as a priority for 20% of the participants.

Unlike intrinsic criteria, which control the use of flexibility potentials, external system-modifying conditions affect the actual degree of use of flexibility potentials. In particular, legal regulations or instruments affected by legal provisions, such as a working time account, play an important role here.



*Much depends on the rules for the use of flexibility potentials.*



# Working time flexibility and the Working Time Act

## Expectations, estimates and interactions

### 6 Regulations for working time account

Upper and lower limits	Red	Blue	Grey
More than 26 weeks compensation	Red	Blue	Grey
Traffic light system	Red	Blue	Grey
Zero crossing	Red	Blue	Grey
Expiry of negative balance	Red	Blue	Grey
Rigid adherence to limits	Red	Blue	Grey
Use only by employers	Red	Blue	Grey
Capping positive balance	Red	Blue	Grey

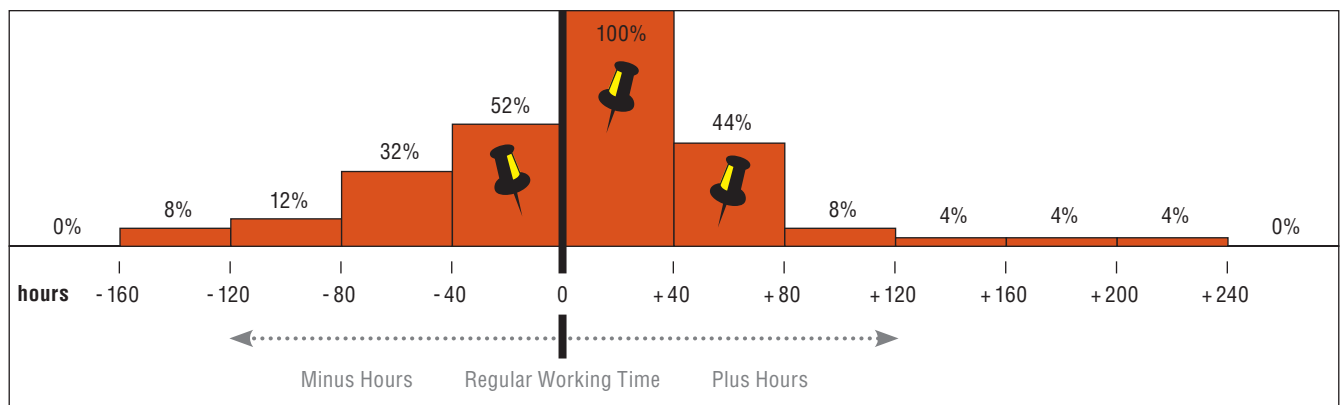
Red = yes, blue = no, grey = no information

The active use of working time accounts offers the greatest flexibility potential for the alignment of working time availability and working time demand. Peaks and troughs in working time demand can be offset against each other and, in special circumstances, short-term reactions are possible. The flexibility potential of a working time account will, however, be (sometimes severely) limited by numerous conditions, so that the actual benefit of creating flexibility is no longer, or only partially, possible. A traffic light system, especially with a narrowly defined corridor, hardly allows a significant deviation from the agreed, or due, working time. Also a so-called zero transition (at a fixed date or during a rolling period) allows compensation mechanisms for

achieving the agreed weekly working time, which have not been legally regulated, to quickly lose their impact – and, from the point of view of the employee, is not a management tool that could improve planning.

Regardless of the Working Time Act, the flexibility of a large number of respondents (30%) is affected by unproductive schemes such as the “zero transition” and “traffic light control”...

### 7 Use of the scope of a working time account



All participants in the study use a working time account. All of them have a minimum limit between 0 and 40 plus hours. 52% has the lower limit of minus 40 hours, 32% up to minus 80 hours. There is clearly a stronger scope and larger volume usage of working time accounts in the negative range. On average, according to the figures, half of the

participating companies have an available flexibility of only three weekly working hours within a period of one year.

... the limitation of the accounts to under three weekly working hours (52% of respondents) affects the working time usage considerably, too ...



# Workforce Management (WFM)

## 8 Staff scheduling in 2020 – the next act

Staff scheduling and working time flexibility are not only essential for the economic success of the company, but are also relevant location factors from an aggregated economic perspective. Precisely where international competition and market requirements are particularly high, all potentials must be used. Companies face the urgent questions, how a further possible automation or the consequences of demographic change can be met. Staff scheduling is a company-specific process, which has to be matched to the individual needs of a company. There is no single solution that fits all companies. Additionally, demand-driven, flexible working time models are the basic prerequisite for flexible staff deployment in many organizations. Staff scheduling can make a significant contribution to fulfilling the needs of employers and employees. Properly used, staff scheduling is also a tool for employee loyalty. Keywords here are: “Load-dependent working times”, “Schedule reliability” and “Ergonomics of demand-driven working time models”. In particular,

companies under the pressure of costs and competition have to face these challenges.

So, what is the view of the future? As the last WTA study from 2014 ascertained, the flexible response to fluctuations in demand, the improvement of operational planning flexibility and the forward-looking control of staff scheduling are essential factors in today’s approach to planning. To what extent will staff scheduling change by the year 2020 – will the topics mentioned gain in importance?

### Future Challenges

Increasing cost pressure for companies	14%
Employee motivation, employee satisfaction	14%
Increasing flexibility needs	14%
Employees must be deployed with economical precision	13%
Identification with the company	13%
Dealing with aging workforces	11%
Unlimited flexibility in the organization of working time	6%
Mobility, mobile staff deployment	5%
Self-monitoring by groups and employees	5%
Employees with more than one employment relationship	5%

With a view to 2020, a large part of the companies surveyed expect further increasing cost pressure (14%), followed by the not negligible employee motivation and thus by the employee satisfaction (14%) in their own company. On a par with the desired employee satisfaction follows the assessment that companies will have to deal with a growing demand in flexibility (14%) with respect to the staff to be deployed. Deploying staff economically and precisely (13%), as well as identifying with the company (13%) follow, but the difference is small. For the first time, demographic changes are visible in the survey. The companies surveyed order dealing with aging workforces in staff scheduling (11%) similarly to the already mentioned points as of great importance in the coming years. Firstly, it is clear from the responses of the participating companies that firms expect continued pressure on costs and expect to have to deal with a most flexible, demand-driven staff scheduling. This is basically nothing new. The results of the survey

confirm the trend of the last few years – these issues will become more prominent. It is also a clear tendency towards the necessity of the employee satisfaction and identification with the company. In many areas, there is currently – in our opinion – a substantial need for improvement. With a focus on 2020, operational needs and interests of the employees must be taken more strongly into account within staff scheduling.

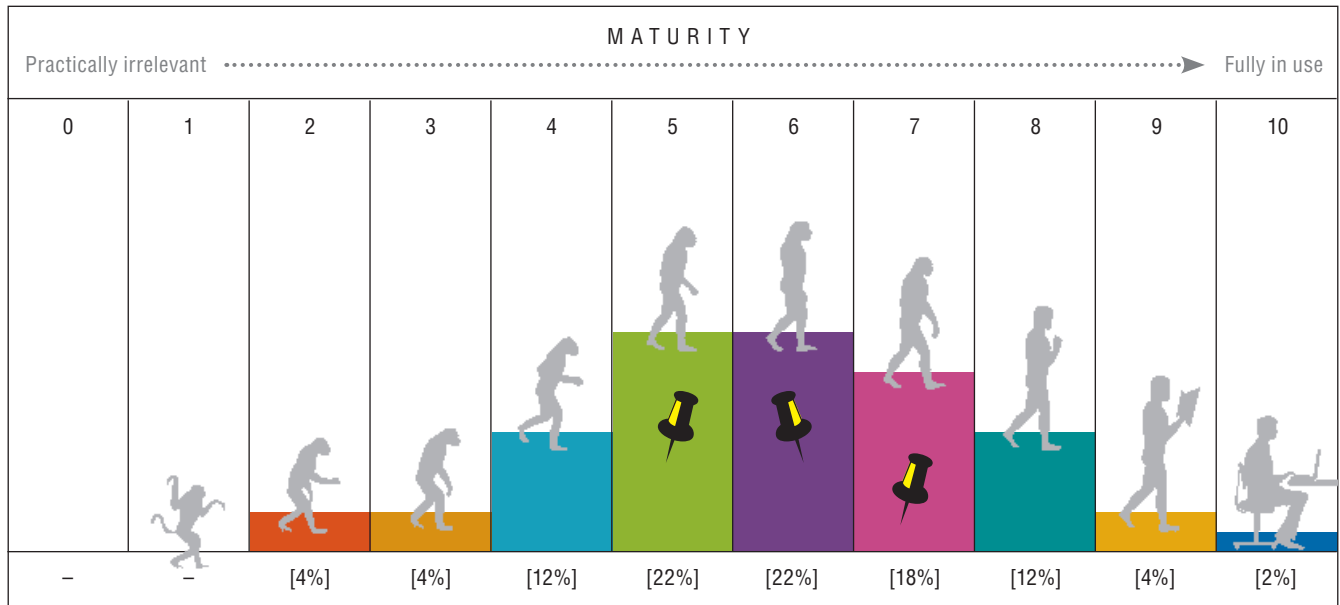
Cost pressure, employee satisfaction and growing requirements for flexibility are the three central issues that will dominate the whole staff scheduling process in the future.

## 9 Has staff scheduling arrived in the companies?

In the opinion of many experts today, the importance of a demand-driven staff scheduling has reached the executive levels. Professional solutions for staff scheduling are certainly in use. The question is how well these solutions and also the methodological issue of working time are received

in business practice. On a scale of 1 to 10 experts see companies have reached an average value of "5". How do companies evaluate themselves and their current maturity in their own environment?

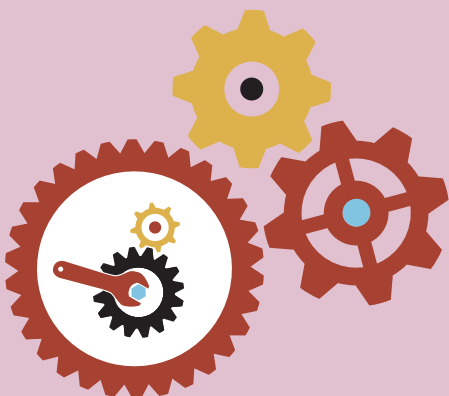
### The maturity of WFM software in the company



Approximately 58% of companies surveyed see the maturity of staff scheduling at a value of "6" or higher. A further 22% gave a value of "5" but 20% gave a ranking below the value "5". This makes it clear that there are significant needs for optimization and improvement in the implementation of a demand-driven deployment planning. Staff scheduling is recognized as a strategic instrument, but it seems that among the

surveyed firms, the expected benefits are currently only partially reached. It appears that there are still a lot of work to do to ensure that staff scheduling arrives in business practice with lasting effect.

The vast majority of participants (62%) attest that the deployed WFM solutions are average, compared with an optimal planning process support.



## 10 Satisfaction with the implemented staff scheduling solutions

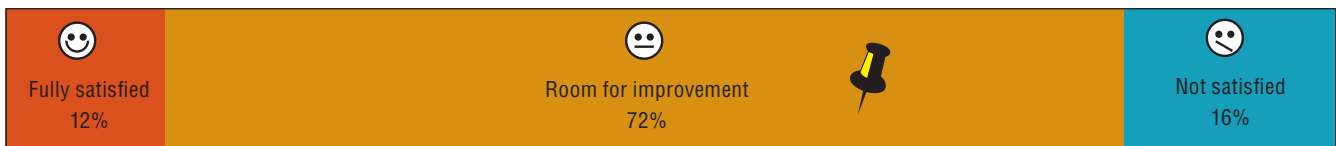
With staff scheduling implementation, software support is very often the central focus. In order to establish an efficient use of staff scheduling in a sustainable manner in business, there needs to be more than just implementing the current processes in supporting software.

One undoubtedly needs a solution in which the topics of demands orientation, flexible working time models,

specific company requirements and staff wishes are made manageable.

“Features and Functions” often determine the characteristics of the software implementation. The consistent orientation towards the needs of the company often becomes of secondary importance. Solutions for staff scheduling are often improperly used, potential not fully tapped.

### Satisfaction with the performance of staff scheduling software in the respondents' company



The percentage of companies that are fully satisfied with their systems is only 12%, far below the expectations of the experts. Compared to the study in 2014, this value has worsened significantly (fully satisfied: 36%, room for improvement: 38%; not satisfied: 15%). For companies that already work with staff scheduling software solutions, this result is very worrying.

A large part of the companies surveyed (72%) classifies the systems used as having room for improvement. Additionally, a further 16% are dissatisfied with the status quo. This result indicates that companies use a software-based staff scheduling that is not ideally suited to them, although the degree of functional maturity of market standard solutions today leaves almost nothing to be desired.

In addition to the impression that there is a significant need for improvement in the deployed solutions, these clear results lead us to suppose that the companies focused on the software procurement in order to bring the topic of staff scheduling “on board”. In our experience, we often see that project launches are not brought to a successful conclusion,

remain incomplete or, in the worst case, must be canceled. Perhaps this is an indication that the issue of staff scheduling is still not extensively implemented within the companies. The results of the study confirm that this is a fundamental problem that involves all sectors represented in the study. Beyond the IT there are numerous success factors that must be strictly observed in order to sustainably implement suitable planning, with a view to the “realistically feasible”.

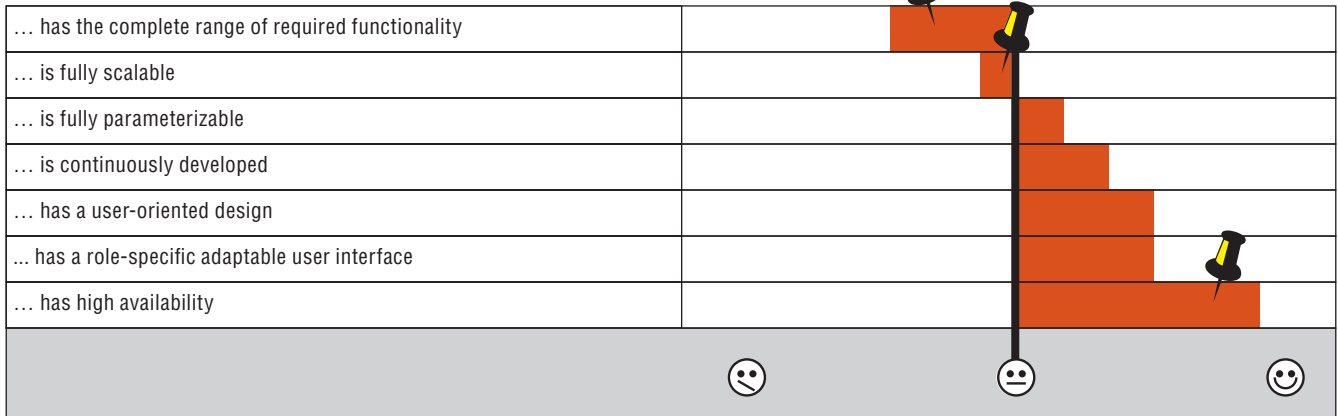
*72% of the surveyed firms are of the opinion that the deployed WFM solution could be improved. Only 12% are satisfied with their solution.*



## 11 Usability of the staff scheduling solutions in use

**R**eliability, functionality and user-friendly operation are crucial for the acceptance and successful use of staff scheduling. What importance do the following features achieve in the software for the companies surveyed?

### The staff scheduling software in use



**C**omparable with previous results, the trend continues here as well. There are considerable imperfections in the systems being used for staff scheduling. More than half of the companies see optimization requirements in the necessary functionality, adaptability (parameterization) and scalability of the software products needed in business practice. Topics such as user-oriented design or the expectation that the suppliers develop their systems further appear to be in need of improvement.

Whether the existing functionality is unused, or improperly used, remains unclear at this point. The software packages do not meet the requirements of a role-specific adaptable user interface and generally have high availability. In principle, the survey results at this point are rather sobering and indicate measurable





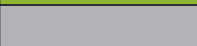








technical mistakes in the deployment process. As the study also documented in detail, the results of the planning do not meet their objectives. The expectations on the implementation of a software-based solution apparently could not be met.

*The biggest drawback is the lack of functionality and scalability of the software used. The stability of the deployed WFM tools has improved significantly.*

## 12 Challenges in 2020

In your opinion, which factors do you think today and until 2020 are the greatest challenges for your company and your staff management? What is the role of these factors for staff scheduling in particular?

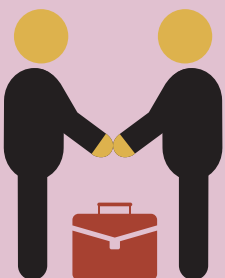
### Requirements of staff scheduling on the software

Flexible and fast response to fluctuations in demand		15%
Productivity		12%
Optimize personnel costs		11%
Demand-driven working time design		11%
Improving the flexibility of planning / scheduling		10%
Properly plan / calculate staff demand		9%
Increasing demand for specialists		6%
Involvement of employees in the staff scheduling process		6%
Changes in the availability of temporary staff / contracted labor		5%
Increasing planning uncertainty		4%
Shorter times for planning		4%
Other uncertainties (collective agreements, operating agreements)		4%
Legal uncertainties / changes		3%

When asked about the most important challenges between now and the year 2020, the companies surveyed firstly name the flexible and rapid response to fluctuations in demand, improvements in productivity and the optimization of the personnel costs, as well as the demand-driven organization of working time. These results are thus fully in the expected trend. They are simultaneously a long-term issue and a permanent focus of the company for years. Looking at studies of the last ten years, these topics have only marginally changed in their

rankings. The companies must take the constantly growing cost pressure into account, in order to maintain their competitive capacity. The flexible and measurably productive staff deployment remains an important strategic instrument for the companies.

The ability to react quickly and flexibly to fluctuations in demand remains the central support function of WFM software. Directly taking legal framework changes into account in the planning plays a minor role.



# Conclusion

The *Future of Work Time* study consolidates a number of important opinions about the central topics of working time flexibility. In the overall presentation of related questions, new aspects also become visible. In the concrete long, medium and short-term routine of staff scheduling, the strengths and weaknesses of the common software solutions are examined, to determine whether they effectively support companies in all stages of the planning process.

## **Working time management and flexibility**

To retain the ability to plan working time with volatile demands is the main subject of flexibility needs among the study participants. Flexibility becomes an instrument for dealing with unplanned events (that change demand and capacity).

In the opinion of the study participants, the planning phases in which ensuring sufficient flexibility is a matter of urgency, are recruitment and the calculation of long-term and medium-term demands. In the middle of the scale of the answers provided are schedule creation and schedule modification. This is surprising, because the disparity between working time demand and working time capacity is most obviously apparent in the short-term period. Proof of this is the fact that among the working time forms, the highest proportion of potential flexibility is suspected in the use of part-time work.

But also, almost half of the participants counted human resource KPI-oriented planning procedures as a part of the management tasks. For the central role of the planner, who creates flexibility by aligning working hours to demands, it appears that human resource KPIs – according to the participating companies – is only 11% of central importance.

Overall it can be stated that there is a mismatch between the actual flexibility demands, the apparent degree of required flexibility and the actual use of flexibility.

## Staff scheduling in 2020 – the next act

In everyday operation, the complex topics of working time management and labor protection laws also need a comprehensive range of technical support to ensure an optimal balance between the interests of the employees, working time demands, cost and quality.

The guiding principles within the biggest challenges in the next five years are equally: cost pressure, employee satisfaction and flexibility.

Under the objective of being able to achieve greater efficiency in the use of resources and greater effectiveness in the use of flexible conditions, the industry requirements for continuously developed software solutions for staff scheduling and their extensive parameterization and scalability have been very high for years. The results of the *Future of Working Time* study highlight this need.

The largest discrepancy between customer needs and available software solutions is seen in the completeness of the functionality offered. Consequently, 72% of those surveyed consider the WFM solutions in need of improvement, 16% are openly dissatisfied. In particular, parameterization and scalability were insufficient to allow the required flexibility potentials to be implemented in a timely manner. The most positive development compared with the last survey results, is the apparently growing satisfaction with the stability and availability of the software solutions.

Those software providers who manage to deliver a comprehensive functionality for the entire staff scheduling process and at the same time support the future topic of rapid and flexible reaction to fluctuations in staff demand, will create a sustainable competitive advantage for their customers – and thus also for themselves.



# Statistics

## General study data

Data collection period:  
**Between September 2015 and January 2016**

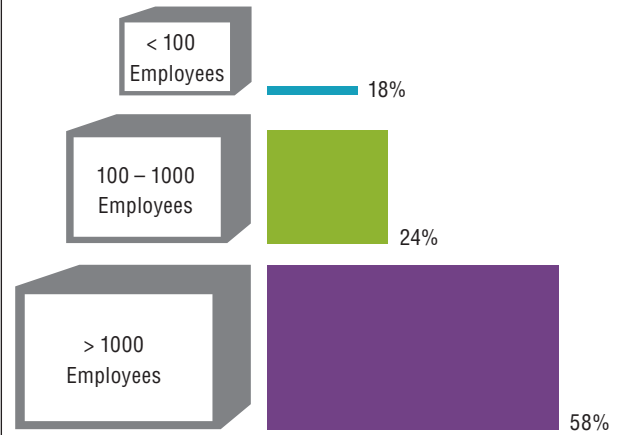
Survey type:  
**Online questionnaire**

Participants:  
**213**

Companies:  
**184**

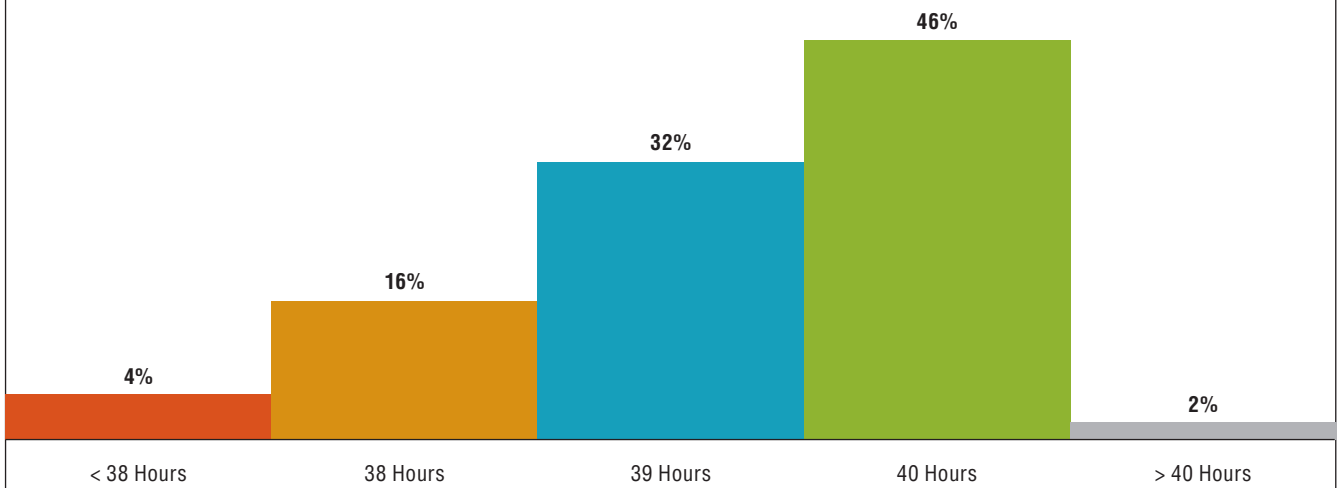
Bearing in mind the sizes of the companies, this study represents (in total) about 528 thousand employees.

## Company size



Company sizes (number of employees) of the participants

## Working hours per week





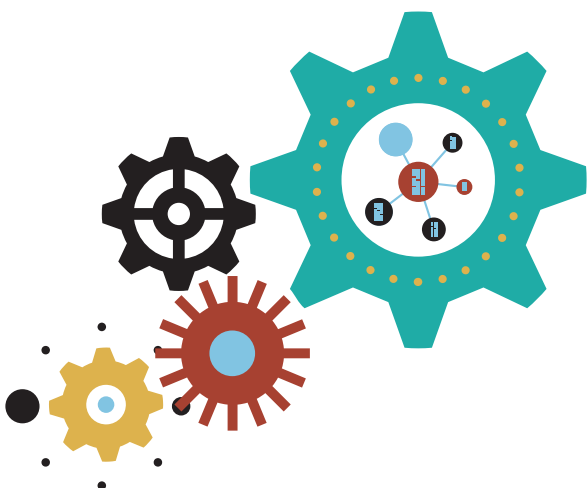
# Working Time Alliance

Projects in workforce management are complex. For the safe and integral implementation, various competencies are needed. In addition to the clarification of process and organizational questions, it relates to the selection, implementation and optimization of software systems for staff scheduling, management of working time and wage accounting. With the determination of demands and the design of efficient shifts and shift models, scientifically correct mathematical approaches are required, as well as many years of experience in dealing with the various expectations of stakeholders (management, employees, employee representatives).

To meet the current market needs, bm-orga GmbH (Beratung für Management und Organisation), the specialist for working time management and staff scheduling, ROUNT GmbH, the consulting company for employee logistics & working time consultancy and XIMES GmbH, the experts for intelligent working time solutions, have combined their competences and have been working together for years as the WORKING TIME ALLIANCE.

This strategic partnership offers our customers maximum certainty for each specialist area in workforce management, to swiftly build on the knowledge of an experienced expert. bm-orga, ROUNT and XIMES form a team network which, with its practical and scientific expertise in the productive and sustainable management of working time, is unique. In the context of competence and resource sharing, customers can quickly access the right consultant at the right time, even for large projects. Project-related increases in required consultants or unplanned losses can be reacted to in a quick and unbureaucratic manner. This significantly increases the certainty in relation to the successful and timely implementation of projects.

Thus, our customers benefit from the higher quality and faster development of consulting services and concepts. In joint competence groups, experiences and insights are exchanged, new consultants are trained together and studies as well as scientific projects are implemented.



## bm-orga GmbH

bm-orga GmbH was founded in April 2007. As a consulting company with a focus for efficient working time management and demand-driven staff scheduling, we work closely with our customers to develop tailor-made concepts and implement these successfully in their company. We spend most of the time directly with our customers, because successful project implementation requires the personal touch during the most important project phases.

Our concepts consistently use integrated solution approaches. Integrated means that we consider both the company with its organization and employees, as well as its environment and image. We are convinced that corporate development and success are closely related to staff development and work process design. Our consultancy is influenced by the focus on the efficient design of work and in particular, the sustainable organization of work of our customers.

For our customer consultations, we exclusively use experienced specialists from working time design, working time management as well as staff scheduling – either from our own company or via partners and cooperation from a highly flexible network.

What makes us stand out?

- bm-orga offers a unique combination of process expertise around the subjects of working time management, staff scheduling, process optimization, organizational consultancy and project management.
- bm-orga supports you in the implementation of the agreed measures – we will not leave you to deal with the concepts on your own.
- we know that, with all organizational changes, it is vitally important to involve the affected employees. Here we have proven social and methodological competence.



bm-orga GmbH

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## Rount GmbH

ROUNT GmbH is a consultancy company for personnel logistics and working time management. Included under the term personnel logistics are individual disciplines such as identifying demands, working time model design, shift and shift model design, staff scheduling, time recording and time management as well as working time related KPIs.

ROUNT supports companies in the development and implementation of optimal structures and processes for employee logistics in their individual environment. This includes for example:

- calculation of working time demand / forecasting / capacity planning
- calculation of staff demands
- shift models / demand coverage
- shift pattern design / working time models
- staff scheduling / working time management
- daily dispatch
- time recording and time recording evaluation
- time management and payroll
- industrial, collective and individual agreements
- type of contracts
- internal conflict resolution
- reporting / controlling / KPIs
- technical support, project management

With the support of professional tools for determining demand and shift model design, ROUNT manages to deliver a transparent and robust basis for decision making, even in very dynamic business areas with a variety of variables. The goal is always the establishment of industry and customer-specific best practices.



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## **Legal Notice**

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