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The Munich Study

Institution: Personnel and Organizational Research at the [University in Munich](#)

Directors: [Chair Professor Dr. Rainer Marr](#) and P. Seisl

Date: December 1995 to June 1996

Subjects: Professionals with no prior experience with Time/system products.
70% directorial capacity
60% budgetary capacity

Sample public and private sector businesses chosen

- Central Hospital on the Left Bank of the Weser, Bremen
- City Construction and Management, Ingolstadt
- Regional Savings Bank of Miesbach
- Nürnberg Life Insurance, Stuttgart Branch Office
- Leon Wire Works, Kitzingen
- Source Travel Agency, various locations

Purpose: Where does Time/System increase efficiency? To what degree? Where might weak points be? What could we improve in the future?
The study focused on the use of the A5 Management System.
Subjects also received Introductory Time/system concept Training.

Format: Subjects were questioned prior to the study.
After 3 months, they were questioned again on the effectiveness of the Time/system concept.
Comparison to competing products was not possible due to the nature of the study.

As this is an empirical study, you will come across terms such as “efficiency index” and “stress index.” These are figures based upon the questionnaire where appropriate aspects of their work life were determined to be “good” “better” “always” “never” and the like. These are subjective terms, but the results are still measurable.

Aspects of the pre-study determinations:

■ **Goals** ■ **Planning** ■ **Realization** ■ **Control**

The study indicates that subjects clearly indicated improved planning, goal setting, acknowledgement of the importance of these tools, less stress, more efficiency and better estimation of time and resources needed.

(Important to note, is that the subjects also expressed a value in using the system *in conjunction with computers.*)

While improved awareness of mid- and long- range activities was experienced, via use of the overviews, the amount of paperwork necessary to have with the subjects decreased. A clear expression of improved “synergy” was indicated. Witnessed a definite asset in team or company wide usage.

We wanted to know precisely!

- Time is becoming ever more significant in competition. People are even talking about time leadership as a central strategy towards gaining competitive advantages.
- Therefore we must, more than ever, learn to optimize an effective and efficient use of our time in order to stand up to the ever increasing personal demands made upon us.
- Time/System offers a valuable support in this regard with its A5 Management System and its seminar package.
- In order to constantly realize maximal usefulness for the client and do justice to what is demanded of us and our concept, we are continually checking our quality.



- Thus, for instance, the normal working day of a manager is on the average divided into 200 to 300 activities. Conferences, phone calls and discussions, etc... Many activities are not planned for, but arise in a spontaneous and unpredictable way. Often this happens outside one's office. One can often lose one's larger perspective this way.
- In addition, there are the demands made from the direct environment of the business itself. Daily consultation with coworkers and colleagues from the team or the division also require time.
- With this in mind, we have arranged for an empirical examination regarding our A5 Management System, including the introductory seminar at the Institute for Personnel and Organizational Research at the German Army University in Munich, with Professor Dr. R. Marr and P. Seisl as project directors. This was undertaken in order to answer the following questions: where does Time/System increase efficiency? And to what degree? Where might weak points be? What could we improve in the future?
- Without wanting to anticipate the results of the study, we have been encouraged by the results to follow out our work further. In the course of the next pages, we will inform you about the results of the questionnaire, allowing you to form your own idea of them.



THE STUDY

■ To be assured of the long-term success of a concept, it must be tested again and again for acceptability and effect. Through the empirical investigation of the Institute for Personnel and Organization Research at the Army University of Munich, we obtained well-founded and empirically based feedback from the market for the further optimization of our concept. And this is for your benefit!

The Sample Test

In order actually to obtain effective results, over 300,000 current Time/System users were excluded. The investigation is concentrated thus on a circle of people who did not work with Time/System before the study.

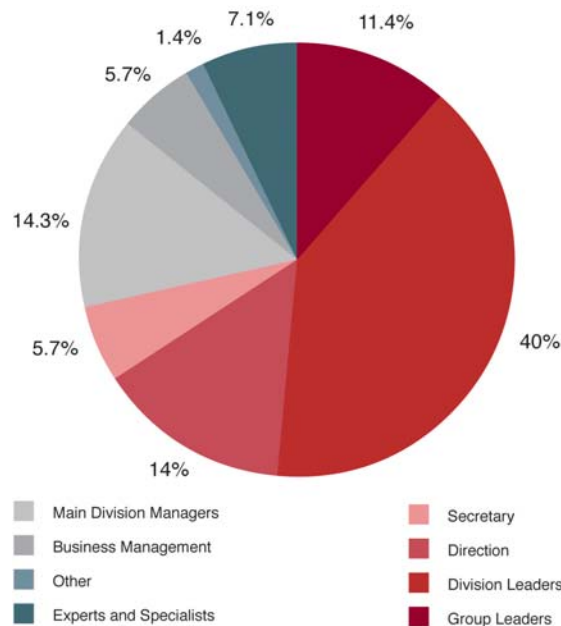
■ Coworkers of businesses from the public and the private sector were chosen. The names of the companies show that we have covered a broad spectrum of the field.

- Central Hospital Left Bank of the Weser, Bremen
- City Construction and Management, Ingolstadt
- Regional Savings Bank of Miesbach
- Nürnberg Life Insurance, Stuttgart Branch Office
- Leon Wire Works, Kitzingen
- Source Travel Agency, various locations

■ To guarantee valid results for the study, the areas investigated were chosen so that different hierarchical positions were represented. From the secretary's office on up to official experts, group leadership and division or headquarters management to business management levels.

■ 70% of the participants were in a directorial capacity; just 60% were responsible for budgets.

Structure of the Test



The Course of the Study

■ On the basis of a typical management process – from formation of goals to planning and realization to concluding checks and several overlying factors – hypotheses were put forth about efficient support from Time/System. It was then a matter of proving them.

■ The data gathering then followed in two steps. First the participants were questioned *before* the introduction of Time/System. Then they could collect data over a time period of roughly three months. After this time period, which is relatively long for an empirical study, there followed a second question period. We could then draw conclusions on the basis of the corresponding changes of attitude and behavior about the usefulness and efficiency of our concept.

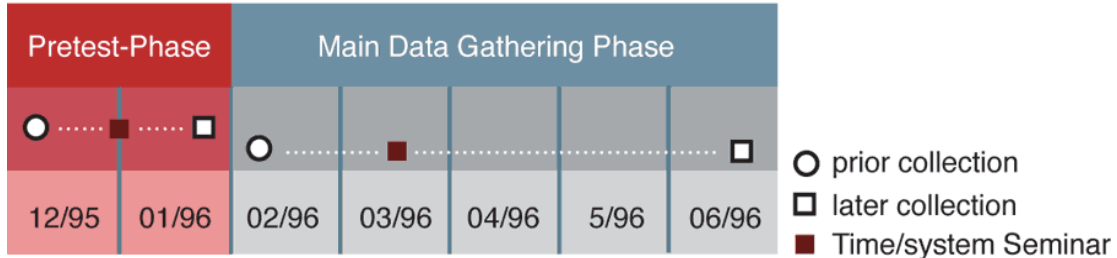
■ We then formed indices on the theses to be tested, in order to measure quantifiably the individual changes of attitude and behavior. The evaluation of data concluded the study.

■ ■ ■ Some Pointers

■ The study investigated the A5 Management System of Time/System, together with Time/System's introductory seminar on self management. All results relate to the Time/System concept.

■ The production of the documentation here presented to you was worked out in close cooperation with the Institute for Personnel and Organization of the German Army University in Munich. All statements are made on the basis of the study.

Course of Data Gathering



■ The working out of the actual Data gathering took place in two phases. The pretest phase from December 1995 to January 1996 served the purpose of testing theses and questionnaires, and also interview length and motivation of the interviewees. Following this, more than 48,000 individual data were gathered in the framework of a four month chief data-collecting phase.

■ Since only the effectiveness of the Time/System concept was tested, any comparison with competing products is not possible.

Domain of Effectiveness of Time/System

Phases of Management Process



The Management Process

■ Content and goal of the study was the testing of individual hypotheses about Time/System. These hypotheses were set up with regard to the individual phases of the management process and the factors that overlie it.

- Every phase of the management process is overlain with definite factors:
 - Relevant information must always be available
 - Priorities must be constantly set
 - Stressful situations must be avoided

■ The graphic chart above gives an intuitive picture of the principal sequence of the individual phases and the link to overlying factors: on the basis of goal-setting of an activity or of a project, there follows the planning of individual phases. Finally the specific measures of the project are to be carried out and checked.

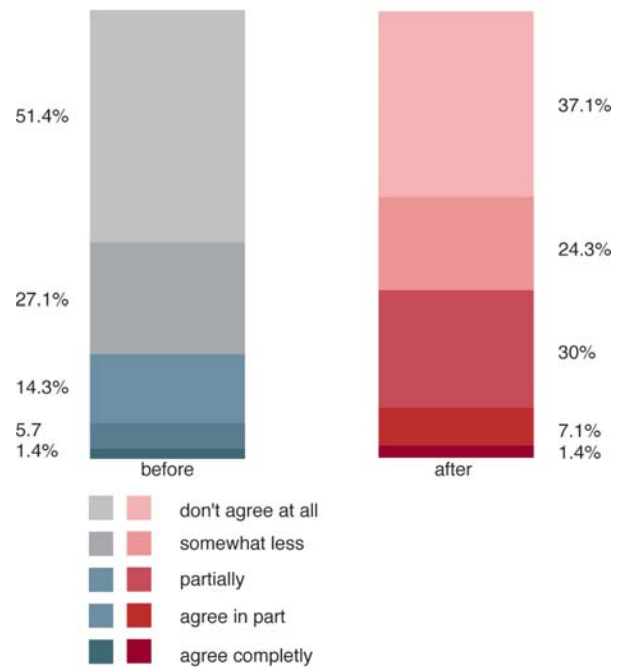
Group Effect

■ Time/System fulfilled a management information function. Important information and data were offered and made available in overview and at all times, so that colleagues needed to be asked less frequently about them

■ Time/System reduced unnecessary meetings. Colleagues and coworkers were less disturbed and distracted from their actual tasks, thereby saving time and cost

Need for Meeting or Voting with Colleagues (chart)

In order to carry out a job, one must discuss it with one's colleagues at work



In the Beginning was the Goal

Phases of Management Process



■ Although more goals were set down in writing, the amount of time used to set goals fell on average from 31.3 minutes a day to 21 minutes a day. At the same time, the overview of goals increased, since the respondents documented more than three quarters of their goals in the A5 Management System. On the other hand, the amount of tiresome paperwork (Post-Its, notepaper, memo pads, etc.) fell on average from 44.1% to 8.0% (relative decrease of 61.9%). This latter form of goal setting guarantees neither a broad overview of goals nor goal-checking, and thereby endangers the reaching of goals.

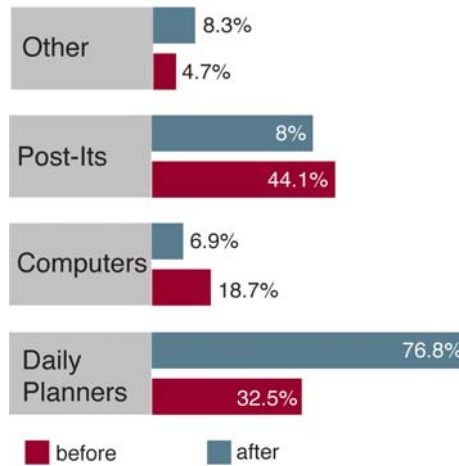
The Significance of Goals

■ The study confirmed that after the introduction of the A5 Management System and participation in Time/System’s seminars on self management, the importance of goals was rated substantially higher. In the same way a heightened awareness of goals was registered.

Setting Goals

■ All participants in the questionnaire were convinced by the introduction of Time/System that it is meaningful to set their goals in writing. Although before the introduction of Time/System, only 77.3% of those asked reported that they set their goals down in writing, 100% said they did so afterward (a difference of 22.7%).

Media for Goal Setting (chart)



Quote

“At the time of the first data gathering, I wrote down that I ‘clearly defined my goals, and in written form.’ If I look back at that now, I have to revise the answer I gave then, for only now do I clearly define a task and a goal for myself.”
(Statement by a respondent)

Quote

“Since the first poll, I have been especially concerned with optimizing my professional goal management as it relates to tasks. I would like to try to devote myself soon to my larger personal goals and define them more clearly.”
(Statement by a respondent)

Checking Goals

■ The index of efficiency gathered by the study was called “Setting and Checking of Tasks and Goals.” This index confirmed that the respondents not only set their goals increasingly in writing, through using Time/System, but also checked their degree of success more regularly. In addition, the pursuit of possibilities for improved reaching of goals was also furthered.

■ Participants claimed that not only did they question more often their goals, but also checked them more carefully to see if their activities contributed to the reaching of company goals.

■ Beyond this, the use of Time/System made it easier for participants in the research project to admit to not reaching a goal, look for the causes of this and conform their activities to this goal, if need be.

The subjective estimates of the respondents

■ The subjective estimates of the respondents confirmed the effects of Time/System which we have just laid out regarding goal hypotheses. When asked concretely what personal improvements were brought about by using Time/System, participants stressed several aspects:

- I define my goals more precisely
- I use my time more meaningfully
- The use of Time/System improved the Voting on goals within my work group or with my coworkers and colleagues (see also Group Effects, page 7)



Overall View of the Study

■ Time/System increased awareness of goals. That means that the function of goals became more conscious and the significance of goals was rated more highly.

■ Time/System raised the level of goal orientation, which means:

- Goals were defined more frequently, more consciously, and more clearly
- Actions and tasks were more strongly oriented to goals and tested with regard to their effectiveness

Planning better and more easily

Phases of Management Process



Quality of Planning

■ The planning of tasks and projects can be carried out according to various categories such as:

- Activities and partial tasks
- Time needed for partial tasks
- Deadlines for partial tasks
- Personal resource needs
- Responsibilities/Duties
- Financial needs

Knowing How To Plan

■ The use of Time/System as a planning instrument was so convincing that the respondents clearly altered their attitude regarding written medium- and long-range planning. The negative aspects and prejudices that have been mentioned previously gave way to a positive evaluation and fundamental attitude toward written medium- and long-range planning. Its significance was rated substantially higher through the use of the A5 Management System. Especially noteworthy was that aspects which were mentioned in the first questionnaire, such as stress, pressure, obligation and time-consuming were hardly mentioned at all in the second questionnaire.

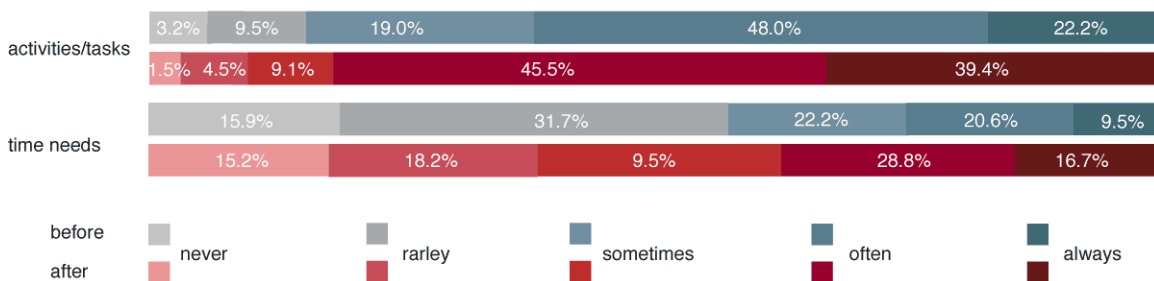
The index of efficiency formed on these categories, called "Written Project Planning," improved by 18.3%

The use of Time/System led especially to stronger planning of activities and partial tasks as also of the time needed for their execution.

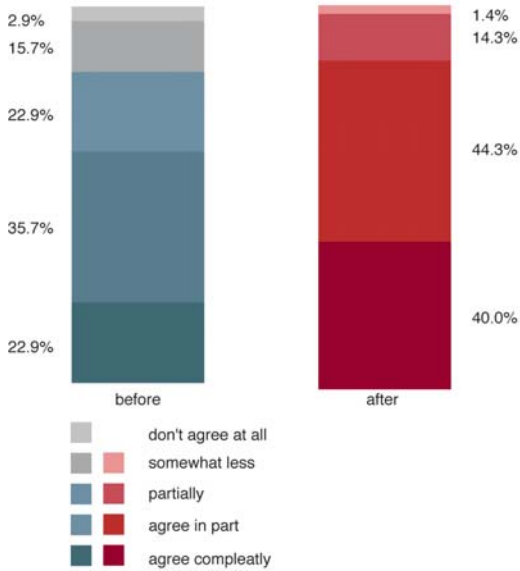
■ In practice, the considerable amount of time that people often suspect will be needed for planning activities constitutes a barrier to be overcome. Since Time/System offers an appropriate concept for the structuring of one's own planning, this obstacle could be overcome. The study showed that the time used for mid- to long-range planning was clearly reduced with the help of the Management System. This reduction was from 31.5 minutes a day to 21.8 minutes a day.

Planning Categories of Tasks and Projects

Does written planning and comprehension of tasks and projects follow according to.....



Time spent for mid- to long-range written planning (chart)
 Mid- to long-range written planning in my work takes too much time.



Partial Results

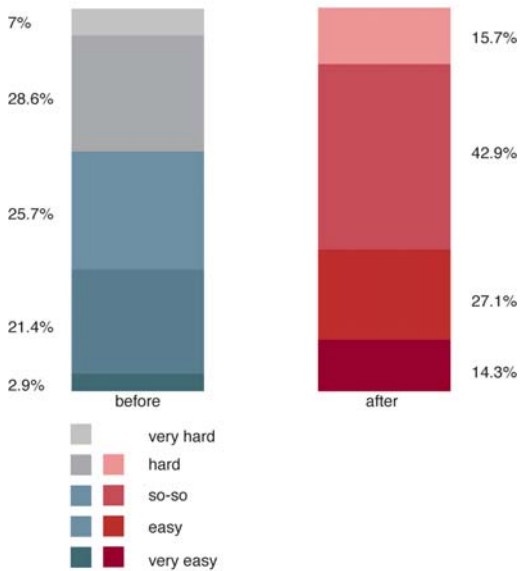
■ If one looks at individual tests, one sees some interesting individual results, precisely in the domain of planning:

■ The group of specialists only became aware of the significance of optimal planning through the introduction of Time/System.

■ In the case of respondents who are active in managerial capacity, the efficiency index on “written project planning” improved on the average by 49.6%. That means that, in our estimate, Time/System represents a valuable and accepted aid in this field, which is so clearly defined by project and planning activities.

■ In addition, the efficiency index “Ease of Planning” improved by 9.6%. For the respondents, not only did planning become generally easier, but also written planning in a timely fashion.

Degree of difficulty of written planning (chart)
 Is it hard or easy for you to make written plans for mid- to long-range professional tasks and projects?



Overall View of the Study

■ Time/System heightened awareness of the significance of written planning.

■ Time/System intensified planning. That means that planning became more frequent and more timely – even beyond operative daily business.

■ Through Time/System, planning became more transparent, more differentiated, more all-encompassing and more reliable.

Exact Realization

Phases of Management Process

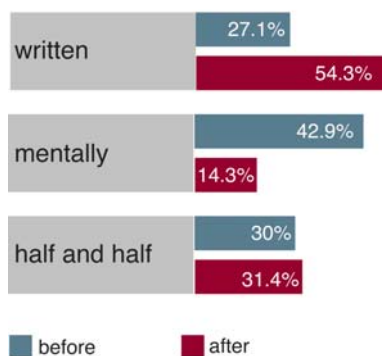


■ In the A5 Management System, all data and information are gathered and prepared in such a way that they finally end* in their relevant daily planning.

Planning and Realization of the Working Day

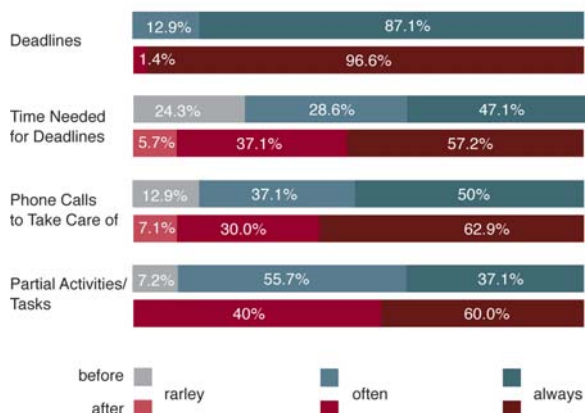
■ Time/System sought to produce within the domain of daily planning and realization a clear effect on behavior. Before the introduction of Time/System, only 27.1% of respondents made a written plan of their day. After Time/System was introduced, the percentage was 54.3%. Purely mental daily planning in the head, on the other hand, fell strongly (relative decrease of 66.6%).

Planning of the Work Day (chart)



■ Time needs in particular were a great deal more frequently planned and documented in written form through the use of Time/System. So was the setting of priorities for activities to be carried out during the work day. This is shown in the improvement of the efficiency index for “written planning” by about 14.3%:

Written Planning of Activities during the Work Day (chart)

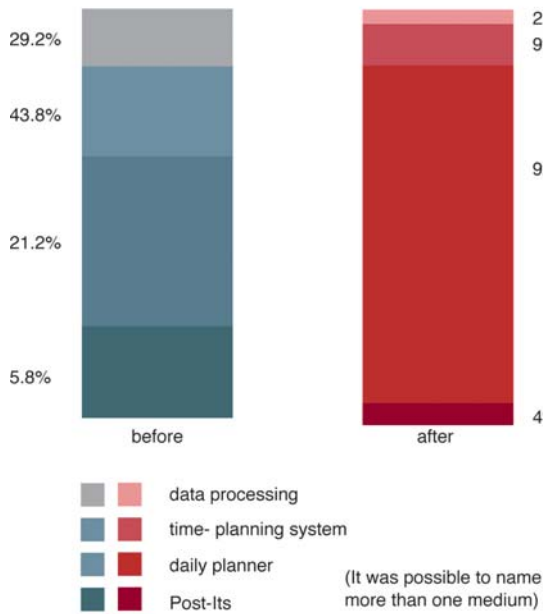


Time Savings

■ As already in the case of mid- to long-range planning, the time needed decreased also for written daily planning. This last fell from on average 19 minutes to 15.9 minutes a day (a difference of 16.3%). In addition to this, there is a clear reduction of the use of other media for the planning and setting of the daily course of activities. While the percentage of Time/System within daily planning rose from 21.2% to 92.6%, one could detect a marked fall in the use of daily planners and notepads (decrease of 84.1%).

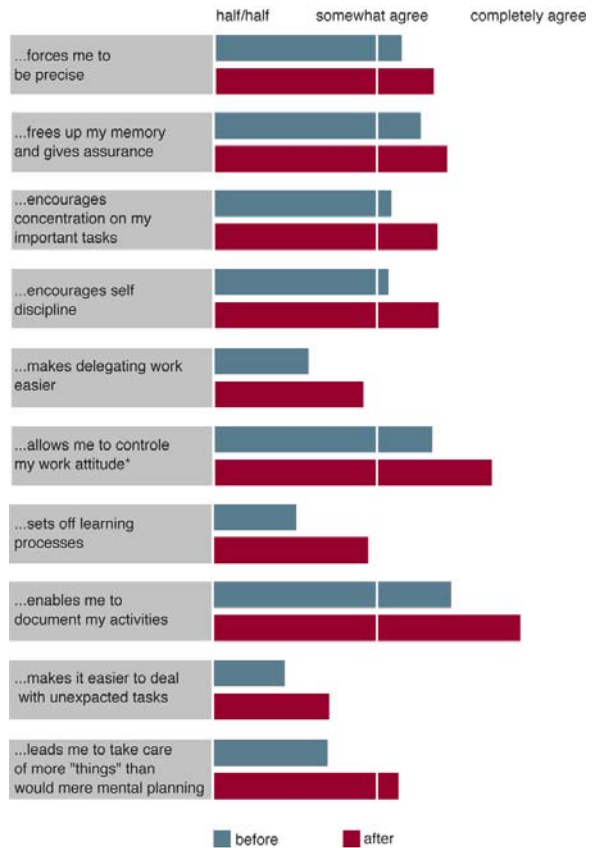
- The heightened overview and the transparency of tasks and deadlines led to:
 - less time spent on daily planning
 - fewer phone calls
 - fewer unplanned contacts

Use of Media for Written Daily Planning (chart)



Advantage of Written Daily Planning (chart)

Written daily planning in the context of my special work situation...



Group Effect

■ Through the use of Time/System, participants in our investigation were less frequently and easily disturbed or distracted from their work. At the same time they were also less frequently interrupted. This once more points to the synergistic effects which occur when several working people use Time/System within a company.

The Subjective Estimate of the Respondents

- The respondents valued the advantages of written daily planning through the use of Time/System substantially higher. This was particularly true for:
 - encouragement of concentration and self-discipline
 - increase of assurance
 - initiation of learning processes
 - documentation of unexpected tasks

■■■ Overview of the Study

- Time/System made possible an overview of contacts to be made
- Time/System encouraged concentration on individual tasks and consistent conversion.
- Time/system increased the transparency of tasks to be performed and the connection of resources.

Optimal Control of Activity

Phases of Management Process



■ Optimal control of processes does not only take effect at the end, but also during and after the

- setting of goals
- planning
- realization

Documentation

■ Through clearer definition and more frequent written setting of goals, and by more structured planning, the documentation of these activities was automatically improved during the course of the investigation. In addition to this, respondents were increasingly able to grasp in advance how long they would need for the carrying out of specific tasks.

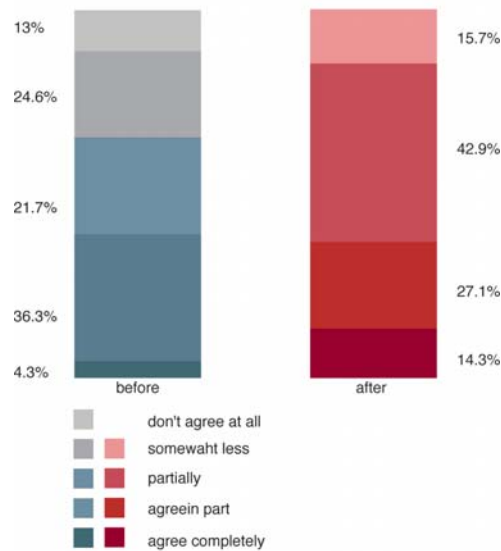
■ In this way the respondents found it easier to estimate the time necessary for the carrying out of certain tasks. Closely tied up with this was the ability to account for the necessary time to oneself or to others.

■ Independently of the structural characteristics of the test, there was an improvement of about 14% in the efficiency index for "control of daily course of work." This means a considerable regulating and control of

- deadlines
- time needed for deadlines
- phone calls to make
- partial tasks/activities
- time needed for these activities

Quiet hours for undisturbed work were increasingly planned for. These aspects resulted in an improved estimation of personal time management.

Judgment of Personal Time management (chart)
I believe my personal time management in not efficient



Learning Ability

■ Through the use of Time/System's concept, learning effects were aimed at among the respondents.

■ As the graphic chart on the facing page makes clear, inefficient ways of working were sharply reduced through use of Time/System. It happened substantially less often to the respondents that

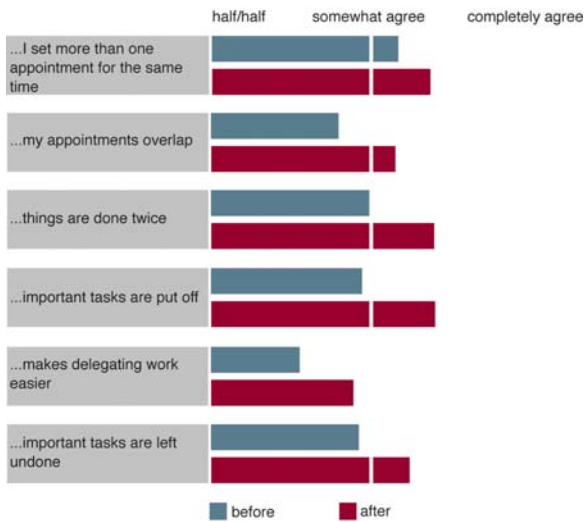
- deadlines were set twice
- deadlines overlapped
- they came too late for meetings or appointments
- partial tasks were done twice (duplicated)
- important tasks were delayed or put off
- important tasks were neglected

The "work efficiency" index which was set up as the result of this rose on the average about 18.4%! That means for us: more efficient work with Time/System!

Quote

"Since I have been working with Time/System, I know for the first time how many deadlines and especially phone calls I have on an average day." (Quote from a respondent.)

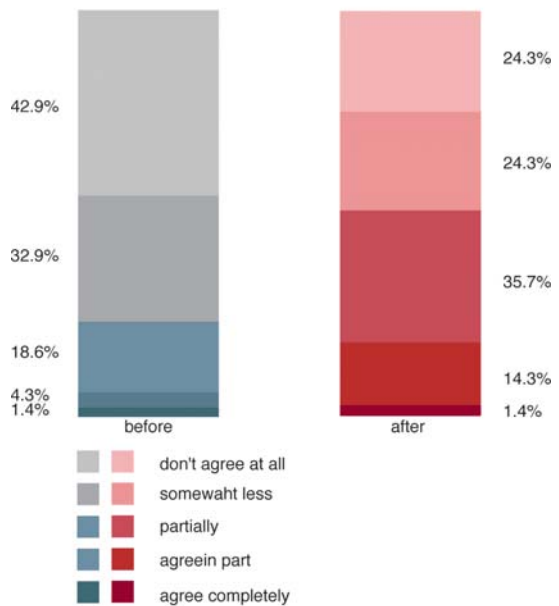
Frequency of inefficient work modes (chart)
It happens often that...



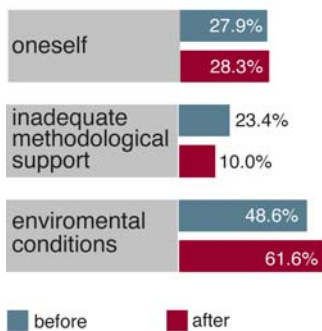
■ In addition, there was a clear improvement in personal time management. Inadequate methodological ability as a reason for inefficient self-management receded. On the other hand, unexpected external disturbances and environmental conditions were perceived more clearly.

■ A further positive effect was higher satisfaction with personal time management and the certainty that one would get things done during the day. The numbers of those who before the introduction of Time/System believed their day was too short fell during the course of the investigation by 27%.

Evaluation of the Length of the Working Day (chart)
I have in the evening the sense that the day was too short



Reasons for inefficient time management (chart)



■■■ Overview of the Study

- Time/System made easier the documentation of one's own activities
- Time/System increased learning abilities with regard to the handling of time.
- Time/System created more satisfied coworkers and colleagues

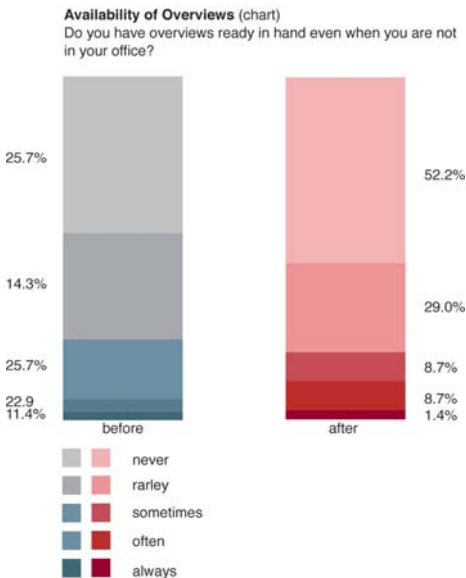
Further Positive Effects

Phases of Management Process



Constant Availability of All Relevant Information and Data

■ The investigation shows clearly that through the introduction of Time/System, overview and availability of data and information relevant to decision making was improved at all phases of the management process. The respondents gained more of an overview. and had these last more frequently at their disposal, even when they were not at their work place. Therefore they forgot their plans less frequently when they were on appointment outside the office and needed fewer documents. The availability of computer-stored data was also improved by its inclusion in the A5 Management System.



■ Goals were increasingly documented and set down in fewer media.

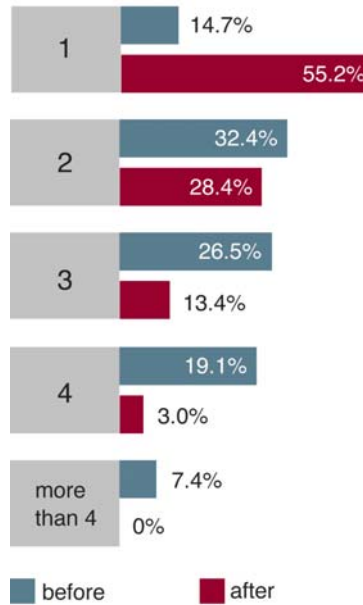
■ Mid- to long-range planning activities were intensified and more often set down in writing.

■ Daily planning was more intensively set down in writing. The efficiency indexed “written overview” was improved by 23%. This meant a clear improvement of overview about:

- daily appointments
- activities for the next months
- daily tasks to be fulfilled
- activities tied to current projects
- daily phone calls
- all tasks to be carried out short or mid-range

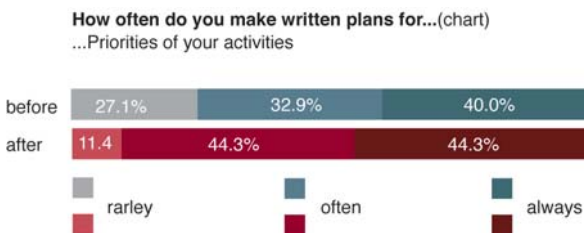
■ Although the respondents gathered more overviews, these were available to them in fewer documents.

Number of Documents (chart)



Encouragement of Priority Setting

- The study shows that Time/System raised awareness of priority setting. Corresponding methods were especially improved.
- By raising awareness, many respondents first became conscious of the difficulties of setting priorities (or hierarchies). Thus their increased awareness did not influence their behavior in an enduring way during the course of the investigation.
- Our conclusion: a lasting change in the domain of setting priorities may be attained via a common definition in the team, as well as by heightened engagement of the supervisors or by training measures.



Quote

“Before I worked with Time/System, I never wrote up certain activities, and thus did not assign them any conscious priorities. Today I notice that I cannot always control priorities, and this is something I would like to improve on. For sometimes I notice that I have often spent my time with less important or urgent tasks. During the first questionnaire, I answered that I would always keep control over my priorities. I meant with this that I only take care of important things, because, well – so I thought – everything I do is pretty important.” (Statement of a Respondent)

Less Stress

- Along with the positive effects we have already listed, which were brought about by the introduction and use of Time/System, the following points especially indicated that Time/System reduced personal feelings of stress:
 - The stress index which we gathered fell about 13% by the introduction of Time/System.
 - The respondents claimed that they felt less stressed since they began working with the A5 Management System.
 - The participants in the investigation could improve their own time management. Improved working with time is directly tied up with diminished feelings of stress.
 - Through using Time/System, the respondents concentrated on goal-directed and thus important activities, which may be tied up with a diminution in feelings of stress.

Overview of the Study

- Time/System improved the availability of knowledge relevant to decision making.
- Time/System encouraged a daily course of work which is structured according to importance and urgency of tasks.
- Time/System reduced personal feelings of stress.