FLEXWORK

- Explanation of the Flexible Work Calculation Tool -

1 Application area of the Flexible Work Calculation Tool

The Flexible Work Calculation Tool is for calculating the profitability of implementing flexible work forms where some or all employees are to be equipped with an additional or exclusive workplace at a second location. Examples are:

- Permanent telework at home (i.e. a telework place is set up in the home of the employee which is then the only workplace);
- Alternating telework (i.e. the telework place in the employee's home is only used for part of the working hours, the rest of the time is spent in the central office or travelling);
- Alternating or permanent work in a telework centre near the home to save employees long commuting journeys.

Using this tool the increases or reductions in the total or per capita costs such investment would incur can be determined over a fixed period (here four years). The calculation and presentation of results is carried out by means of the calculation of amortisation, capitalised value method and internal rate of return method.

The basic principle of the calculation is as follows: The additional costs equipping the decentralised workplace are set off against the reduced costs gained through saving (part of) the central infrastructure. In addition, there are overheads on the cost-side, on the benefit side there are positive effects as regards productivity, absenteeism due to illness and other personnel cost factors.

The accuracy of the calculation is reduced for very low numbers of participants (less than 10), because in such cases it is difficult to determine the relationship between overheads and variable costs

2 Concept for the calculation of increased profitability

The calculation works on the assumption of increased profitability. Various criteria which differ from each other in their measurability are used:

Type 1: **Directly monetarisable** criteria are those which can be expressed directly in monetary terms, they immediately influence the operation's result.

Examples of Type 1 criteria: Investment costs for the purchase of hardware and software, telecommunication costs, reduced costs due to commissioning central workplaces

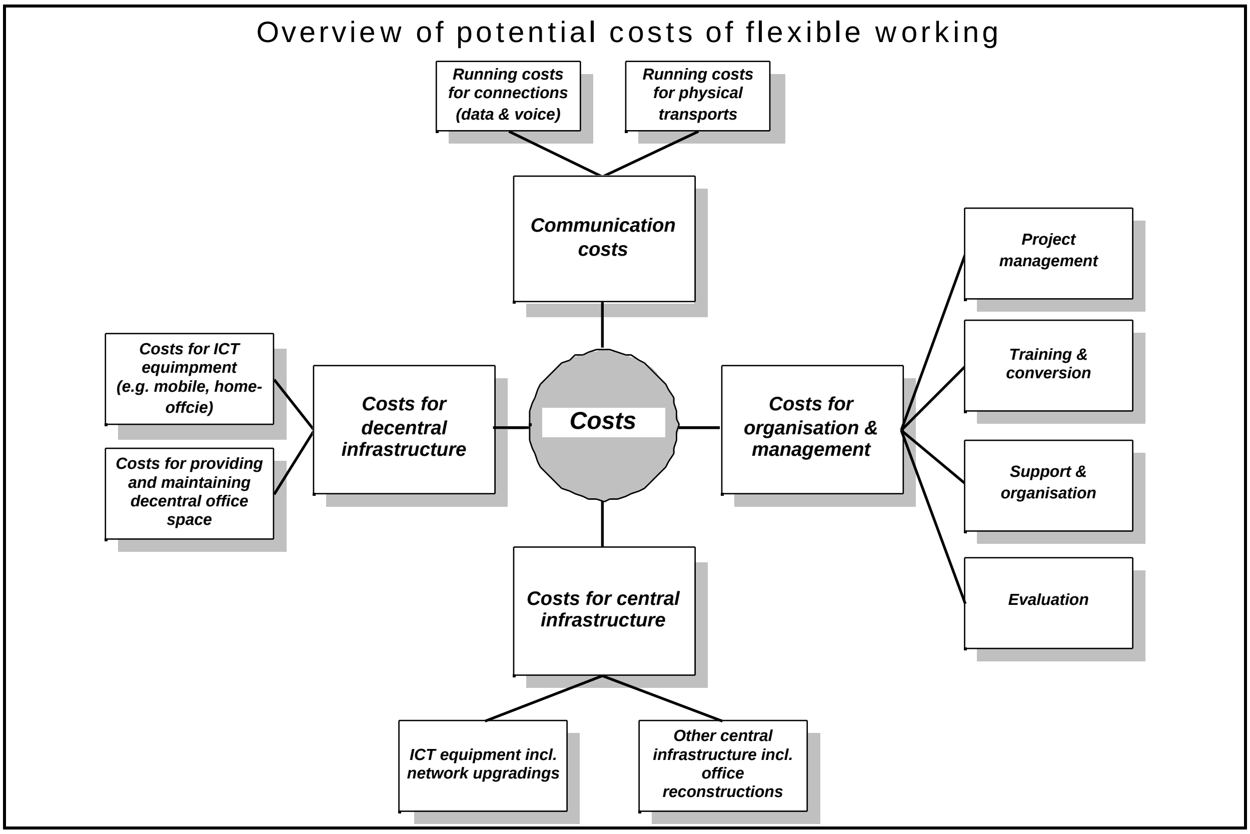
Type 2: **Indirectly monetarisable evaluation criteria** cannot be expressed directly on a monetary scale, but can be transformed into DM values by means of auxiliary variables and by definition of specific assumptions. Benefits or expenditures must at least be cardinally measurable (e.g. in units of time). These quantifiable properties are then made accessible for monetarising by means of auxiliary variables (e.g. estimated benefit/cost factors).

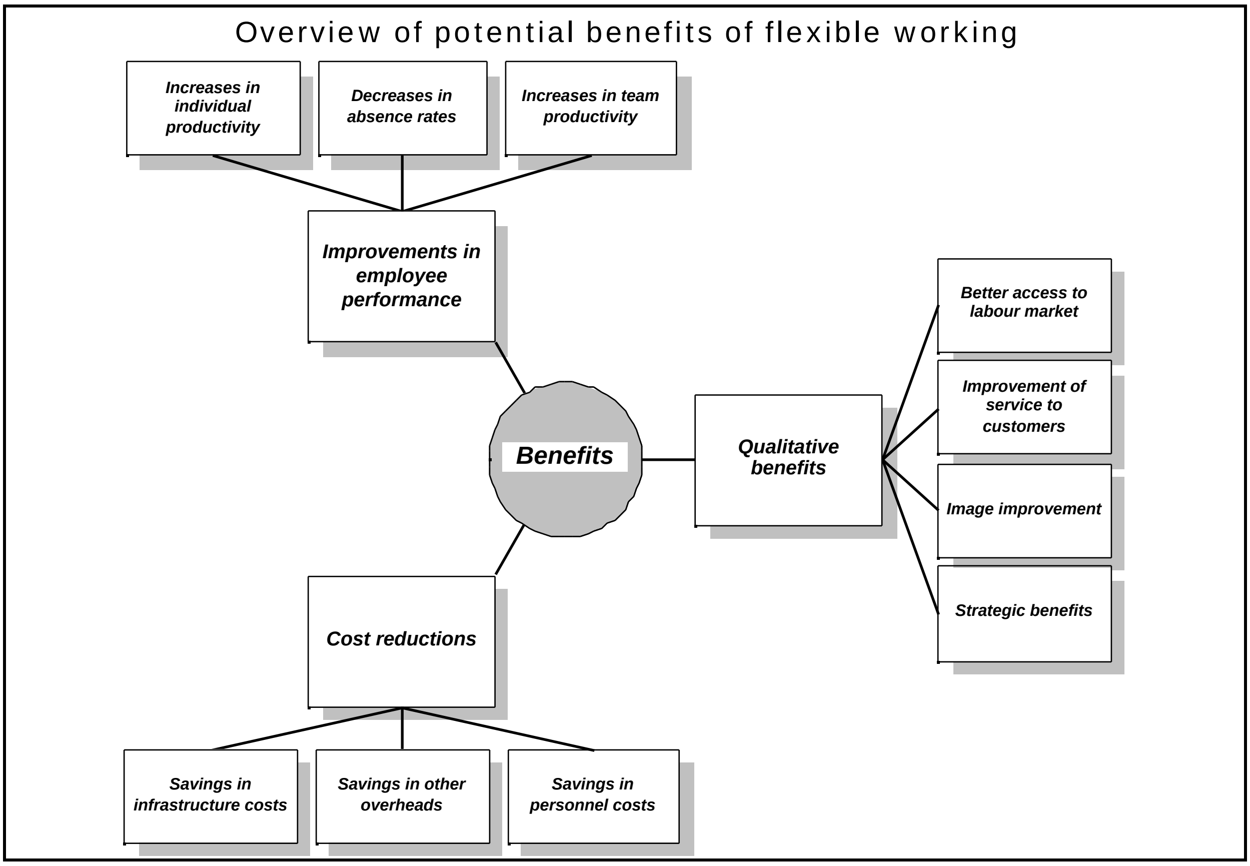
Examples of Type 2 criteria: productivity effects, freed office space, changes in absenteeism, increased flexibility of working hours

For indirectly monetarisable criteria **Best Case und Worst Case-Scenarios** should be calculated because of the uncertainty of the assumptions on which the often only estimated costs and benefits are based. To this end two runs of data entry are carried out, the first run is based on optimistic, the second on pessimistic assumptions. This helps prevent the mock objectivity of the result.

Finally there are non-monetarisable criteria (Type 3) where the expenditure is either not at all quantifiable or only in a dimension which cannot be utilised for a quantitative analysis of profitability because no auxiliary variables are available for the transformation. Examples: reduction or increase in running times, employees' satisfaction and motivation, change in the quality of work, qualitative revaluation or devaluation of client services. These criteria cannot be recorded in the form of a monetary efficiency calculation and therefore are not included in the Flexible Work Calculation Tool.

3 Components of the profitability calculation: Cost and Benefit factors





From the organisation's point of view telework costs are basically split into four groups (see Figure 1). These are:

- costs for the **decentralised (workplace related) infrastructure** (e.g. equipping the domestic workplace),
- and on the other side savings in the **central infrastructure**, however, to a degree, expenses for additional central infrastructure must be taken into consideration (e.g. router technology),
- **communication** and transport costs
- costs for the **organisation** and **management** of implementing flexible work

Further factors to be included are changes in **productivity** as well as **down time**.

The direct cost factors can mainly be allocated to the **directly monetarisable evaluation criteria (type 1)**. Certain reduced cost variables are exceptions (e.g. savings of office space), which are initially estimates and are therefore included in the **indirectly monetarisable evaluation criteria (type 2)**. The same is true for effects on productivity and down time. These reduced costs are only realised by using the erstwhile estimated gains within the framework of a company reorganisation (e.g. by moving parts of the organisation to smaller facilities). This generally only happens in the medium term, i.e. outside the observation period of the profitability calculation.

Furthermore, often there is uncertainty about whether certain self-generated efforts should be included in the analysis or not. This generally relates to the personnel expenditure of employees participating in project planning and implementation. These are generally **opportunity costs** for which only estimated costs can be calculated.

4 Data Entry

The tool scans the necessary data sequentially. To a degree, instructions which need to be observed (e.g. avoidance of duplicate entry of certain cost factors) are given. The respective pages include additional explanations to help avoid misunderstandings (in italics, bottom left). The units of the data entered (e.g. DM, days, %) is given to the right of the data entry cell. To the very right, default values are given. These are standard values which have been determined on the basis of numerous practical examples from organisations which have implemented flexible decentralised work.

Furthermore, these standard values have already been entered into the data entry fields. Should you not have any data for some of the required entries you will still achieve a realistic calculation result using these default values. However, if you have data on the cost/benefit item available, please enter these into the data entry fields instead of the default values.

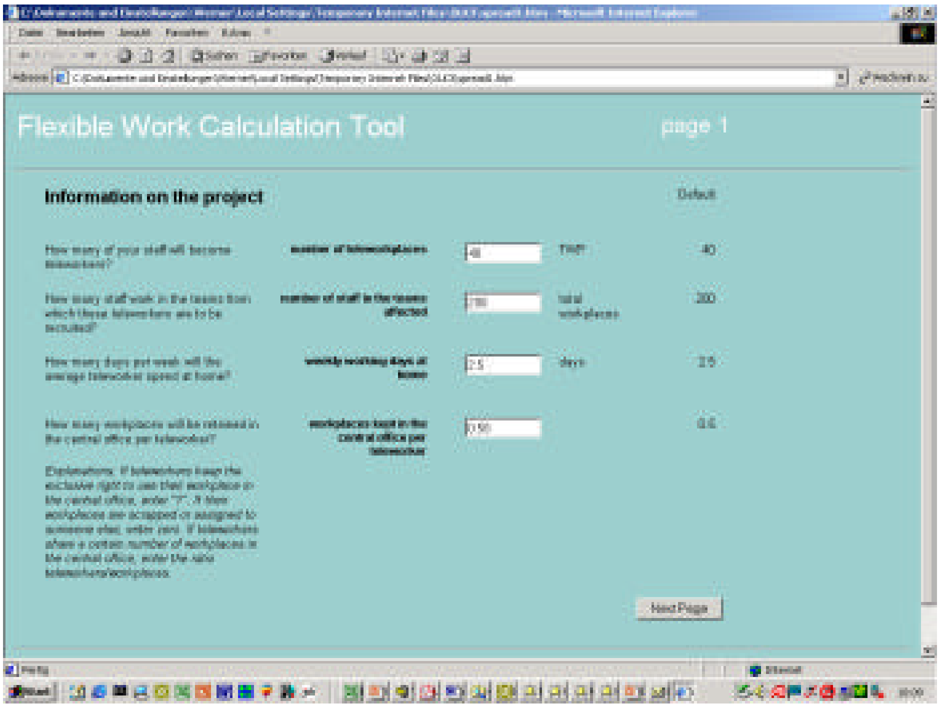
Abbreviations used in the Flexible Work Calculation Tool

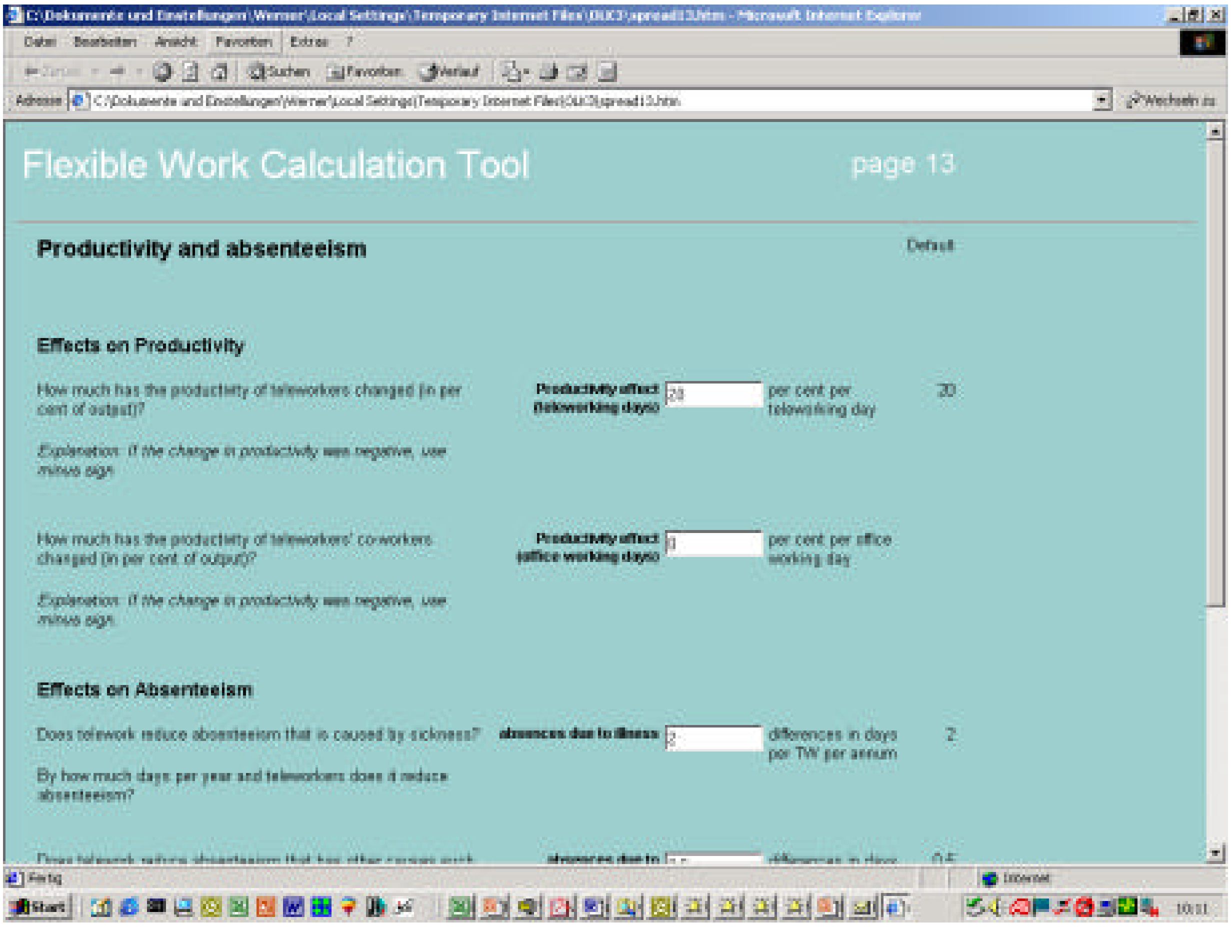
TWP = Telework place (flexible workplace)

TW = Teleworker, flexible worker

CWP = Central workplace (traditional workplace in the central office)

E = Employee


Flexible Work Calculation Tool
page 1
Information on the project
Default
days
40
200
2.5
0.6
Next Page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Datei Bearbeiten Ansicht Favoriten Extras ?
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Wechseln zu
Flexible Work Calculation Tool
page 13
Productivity and absenteeism
Default
Effects on Productivity
How much has the productivity of teleworkers changed (in per cent of output)?
Productivity affect (teleworking days)
20
per cent per teleworking day
20
Explanation: If the change in productivity was negative, use minus sign.
How much has the productivity of teleworkers' co-workers changed (in per cent of output)?
Productivity affect (office working days)
0
per cent per office working day
Explanation: If the change in productivity was negative, use minus sign.
Effects on Absenteeism
Does telework reduce absenteeism that is caused by sickness?
absences due to illness
2
differences in days per TW per annum
2
By how much days per year and teleworkers does it reduce absenteeism?
differences in days
0.5
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Internet
Start
10:11

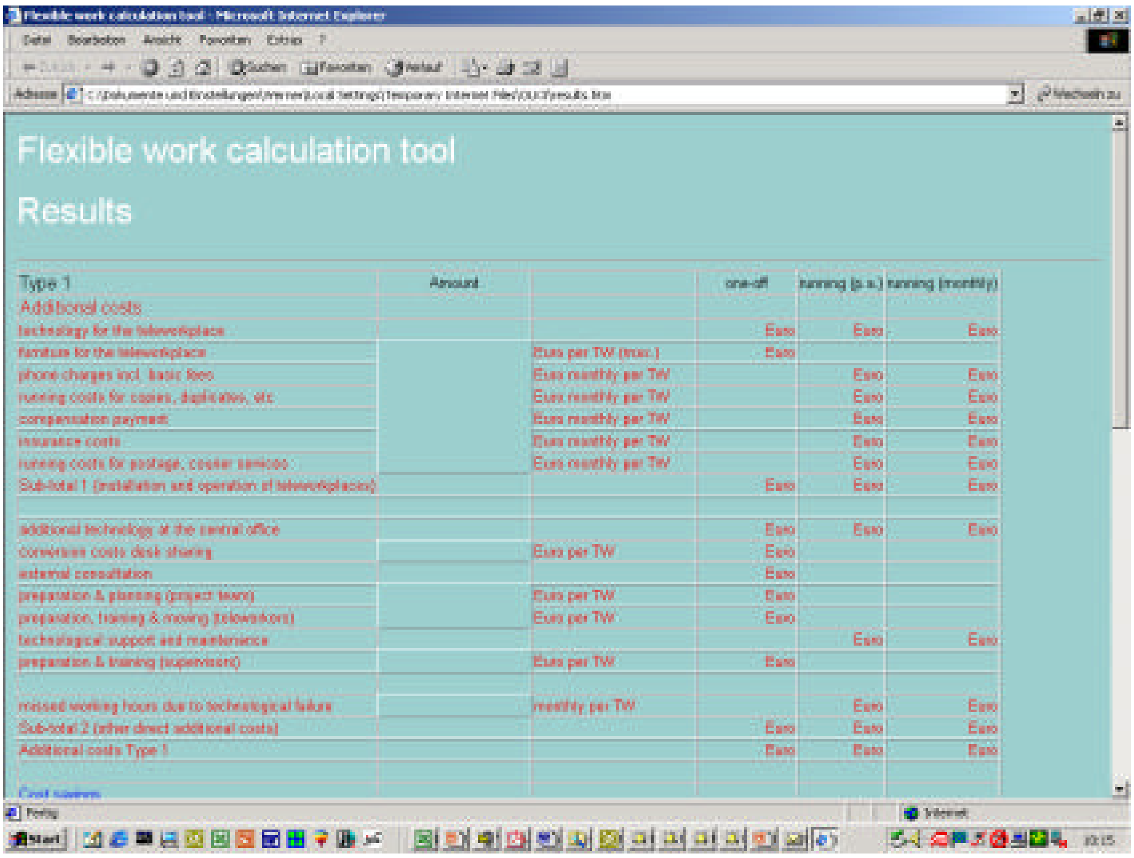
5 Presentation of results

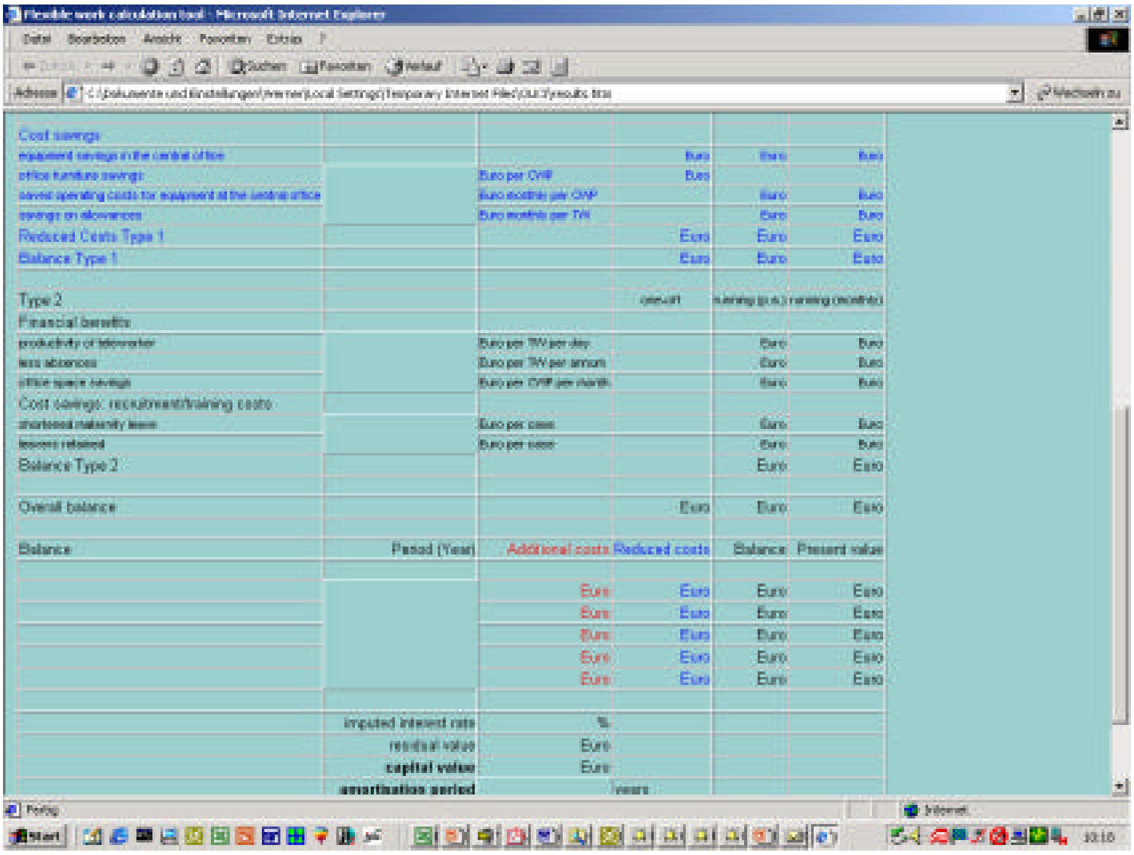
The results are presented in table and diagram form. In the tabular presentation we differentiate between Type 1 (directly monetarisable) and Type 2 – criteria (indirectly monetarisable), as well as one-off, annual and monthly running costs. One-off costs for technological infrastructure (workplace equipment) are transformed into running costs by means of AfA amortisation periods. Expenditure for organisation and management remain as one-off costs which occur and are accounted for in the first year.

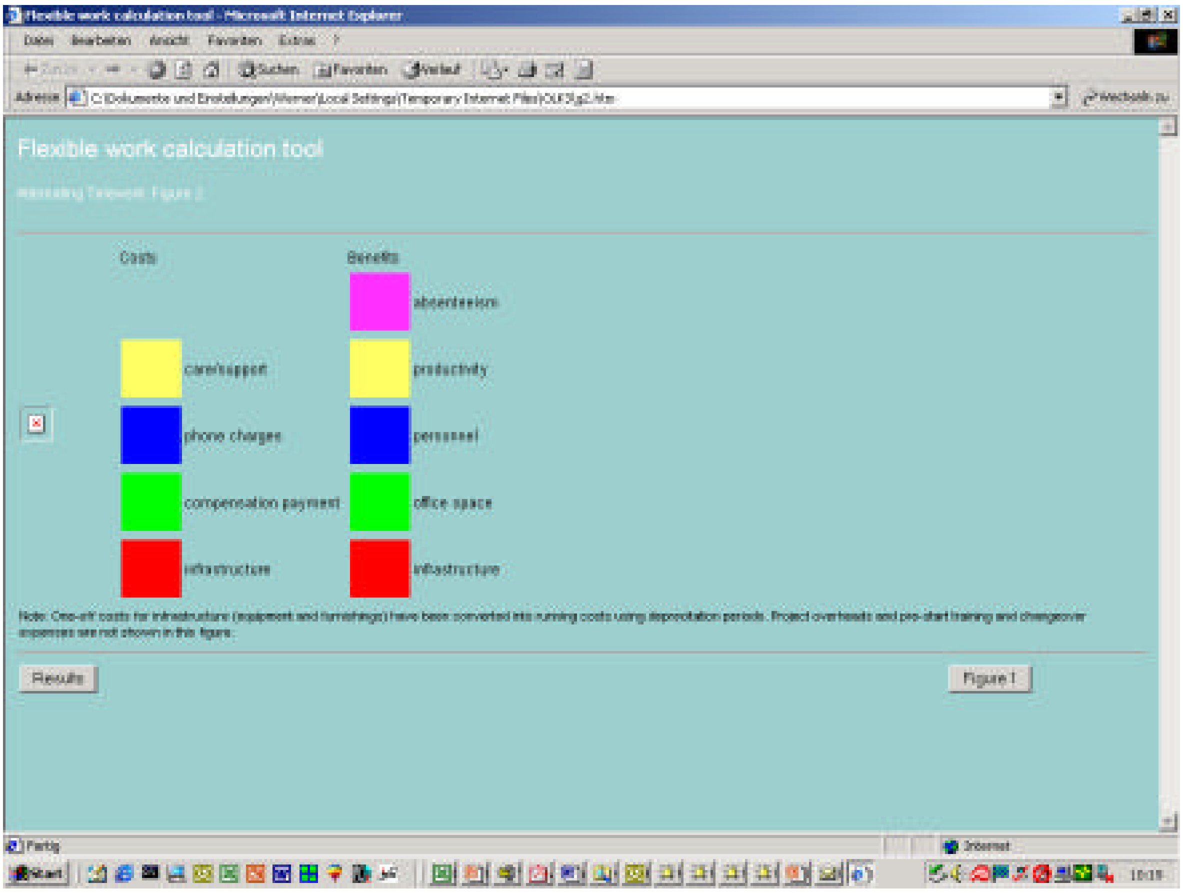
The result of the calculation is given in the form of the following values:

- ***Capital Value***: Balance of cash value of takings (current zero coupon takings or reduced costs) and cash value of expenditure (current zero coupon expenditure or costs). The ***residual value*** is the one-off liquidation profit of the investment at the end of the planned observation period (i.e. the repurchase value for not yet depreciated investment goods where these are sold at the end of the observation period). A positive capital value means: based on the calculated rate of return, the cash value of takings is greater than that of the expenditure. The investment is deemed to be profitable with a minimum capital value of 0.
- ***Amortisation period***: The amortisation period is that period in which the capital put into the investment is returned through respective takings or reduced costs. An investment is deemed advantageous if the amortisation period lies within a predetermined framework.
- ***Internal rate of return***: Here the rate of return is calculated where the capital value (see above) is set at 0. The evaluation of profitability depends on whether the calculated internal rate of return is equal or higher than the expected imputed interest rate (= the interest rate generally used for internal investment calculations, eg market interest rate).

The diagram distinguishes between cost/benefits for the total project and costs/benefits per participating workplace. Only running cost and benefit items are presented. Expenditures which only occur in the first year (overheads) are not included.




Flexible work calculation tool - Microsoft Internet Explorer
Cost savings
Reduced Costs Type 1
Balance Type 1
Type 2
Financial benefits
Cost savings: recruitment/training costs
Balance Type 2
Overall balance
Balance
Period (Year)
Additional costs
Reduced costs
Balance
Present value
Euro
imputed interest rate
residual value
capital value
amortisation period
years


Flexible work calculation tool - Microsoft Internet Explorer
Flexible work calculation tool
Costs
Benefits
absenteeism
care/support
productivity
phone charges
personnel
compensation payment
office space
infrastructure
infrastructure
Results
Figure 1