

Working Time Arrangement Options in The Slovak Republic

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Abstract

In recent years, the standard model for organizing working-time has been placed under strong pressure and the need to make adjustments to changing circumstances is increasing. The Slovak legal practice has had to react to this situation. An amended Labour Code, which came into force on 1 September 2007, has built up an internal labour market conditions for enforcing working time flexibility. The aim of this report is to present options and possibilities of working time arrangement according to the Slovak Labour Code and to design ways on how they should be included in the decision making process of an enterprise.

Key words: working time, working time arrangement, flexibility, decision making process

1 INTRODUCTION

Working time arrangements define when, where, and how work gets done. Flexible working time arrangements or Flexible Work are terms used to describe a wide range of work styles and employment practices. They represent all kinds of employment which differ from the traditional 8 hours long day, the standard workweek, permanent contract or the traditional workplace.

From the employee's point of view, flexible work may allow more freedom to organize their employment to fit in with other parts of their life. For an employer, the flexibility may come with the ability to organize labour resources more in line with the varying needs of customers, or with peaks and troughs of demand. [1, 2]

For that reason flexible working time arrangements are used as tools, which help organizations adapt to a change, as well as improve the work/life balance of employees. If their application is well managed, they can significantly increase competitiveness of the enterprise.

2 WORKING TIME ARRANGEMENT AND ENTERPRISE COMPETITIVENESS

The competitiveness of the enterprise is defined as an ability to offer products and services that meet the quality standards of the local and world markets at prices that are attractive for consumers and provide adequate returns on the resources employed or consumed in producing them.

This ability can be enhanced by increase of productivity, by cost reduction, by expanding the enterprises' capability, by pursuing innovations and technology upgrading, by increase product or service quality, by expanding market opportunities and by human capital enhancement. [3, 4]

The working time arrangement **has important impact on enterprise competitiveness**, because it influences *the productivity of enterprise, the high of cost, the employee's motivation and the ability of flexible reaction on the need to change enterprises' capability* (Fig. 1).

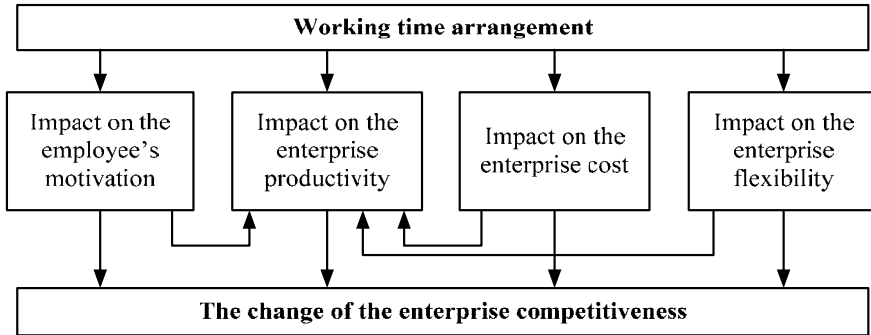


Fig. 1 – Impacts of working time arrangement, Source: Author

The change of the *employee's motivation* is caused by many impacts. The modification of working time arrangement influences:

- his / her ability to participate on arranging working time,
- his / her social security,
- his / her social interaction,
- his / her wage,
- his / her duty to work during unsocial hours,
- his / her ability to realize own potential and
- his / her ability to work despite personal obstacles.

The change of the *enterprise productivity* is caused by many impacts too. The modification of working time arrangements influences:

- the intensity of distractive factors,
- the rate of absenteeism and
- the quality of work activities requiring face-to-face contact.

The change of the enterprise productivity depends also on the level of employee's motivation and satisfaction, the amount of cost savings and the level of enterprise flexibility. The level of employee's motivation and satisfaction influences his concentration and creativity and therefore determines the level of the enterprise productivity. The amount of cost savings can be invested in production, so it determines the level of the enterprise productivity too. The level on enterprise flexibility determines the level of its ability to transform demand opportunities to revenues.

The change of the *enterprise cost* is caused by many impacts. The modification of working time arrangements influences:

- the number of stoppage and amount of unused working time,
- the wage cost and overtime cost,
- the payment for energies and rent premises,
- the payment for equipment of working places and
- the recruitment cost.

The change of the *enterprise flexibility* is caused by many impacts. The modification of working time arrangements influences:

- the enterprise ability to choose an employee and
- the enterprise ability to react on changes in demands. [5, 6]

This paragraph demonstrates that the change of working time arrangement has important impact on the enterprise competitiveness. This demonstrates that the enhancement of general knowledge about working time arrangement options is very important.

3 LABOUR LAW AND WORKING ARRANGEMENT

Working time arrangement is determined by legal framework. Therefore Slovak Labour Code was amended several times in recent years. The new Labour Code created the conditions for making the labour market more flexible and broadening the use of flexible working time arrangements.

1.1 Working time

Working time is one of the most important labour-law institutes. It is defined *as the time segment when an employee shall be at the disposal of the employer, performs work and discharges obligations pursuant to the employment contract. Maximum weekly working time of an employee shall be 40 hours.* This is the net working time excluding breaks. There is an exception for an adolescent employee, for employee, who is working shift work, and for employee who works with proved chemical carcinogens or who performs activities leading to the irradiation. In these cases, maximum weekly working time of an employee is less than 40 hours. *An employee's average weekly working time including overtime may not exceed 48 hours.* The working time of an employee may be more than 48 hours per week in average, for the period of maximum four following months only for a health employee according to the special regulation.

1.2 Employment relationship with reduced working time

The labour contract may be concluded for a period shorter than the weekly working time. Shorter working time need not be distributed over all working days. A part-time employee is entitled to wages corresponding to the shorter working time. The reduced legal security of the employee with a working time shorter than 15 hours weekly has been canceled from 1.3.2010. An employee in an employment relationship with reduced working time may not be advantaged nor constrained in comparison to a comparable employee. The employer shall inform employees in an employment relationship with reduced working time and employees' representatives in a suitable manner of any indefinite term vacancies that become available.

1.3 Overtime work

The Labour Code defines overtime work as *the work performed by an employee by order of the employer (ordered overtime work) or with the agreement of the employee (agreed overtime work) above the set weekly working time*. The Labour Code determines the maximum level of overtime work, representing 150 hours annually. The volume of the agreed overtime work must not exceed 250 hours annually. When an employee works for longer periods of time per day or shift in exchange for a day off, it isn't considered as overtime work. Overtime work may be ordered by employer only in cases of temporary and urgent increases in work demand, or if public interest is concerned. Continuous rest between two shifts may not at the same time be reduced to less than eight hours.

1.4 Distribution of working time

An employer may distribute working time evenly. Working time is distributed evenly, if are fulfilled following conditions:

- The difference in the lengths of working time pertaining to individual weeks may not exceed three hours.
- Working time for individual days may not exceed nine hours.
- The average weekly working time over a defined period may not exceed the limit set for the determined weekly working time.
- Weekly working time is arranged in general for a five-day working week.

If the character of the work or operating conditions does not permit working time to be distributed evenly in individual weeks, *the employer may distribute working time unevenly* after agreement with employees' representatives or the employee.

The average working time may not however exceed, in a maximum period of four months, the established weekly working time.

Employer may distribute working time unevenly for individual weeks for a period longer than four months, at most for a period of 12 months, if the work involves activities that require different need of work at different times of the year. The average working time may not however exceed the established weekly working time. Equally, working time may be distributed for specific organizational units or types of work.

Working time may not exceed 12 hours within 24 hours. An employer shall be obliged to arrange working time in such a way that, between the end of one shift and beginning of another shift, an employee has the *minimum rest of duration of 12 consecutive hours within 24 hours*. Such rest period may be reduced to eight hours for an employee older than 18 years of age in continuous operations and with work batches, when performing urgent repair work concerning the averting of a threat endangering the lives or health of employees and in case of extraordinary events. If an employer shortens the minimum rest period, he/she is obliged to provide additionally the employee with continuous equivalent rest as compensation within 30 days. An employer shall be obliged to arrange working time in such a way that an employee has *two consecutive days of continuous rest once per week, which must fall on Saturday and Sunday or on Sunday and Monday*. Where the nature of work and conditions of operation do not allow this arrangement, two consecutive days of continuous rest in the week shall be granted on other days of the week. If it is not possible, the employer may, after agreement with the employees' representatives or with the employee, arrange working time in such a way that an employee has at least 24 hours

of continuous rest, which should be on Sunday. Alternative continuous rest shall be provided in the week within eight months of the date when continuous rest should have been provided during the week. If the character of the work and the operational conditions do not permit this scheduling of working time, the employer may schedule working time so that the employee has at least 35 hours of continuous rest once a week. Such continuous rest shall fall on a Sunday and a part of either the day preceding or following the Sunday. Such a schedule shall be agreed with employee representatives or, if there are no employee representatives in the workplace, agreed with the employee.

1.5 Flexible working time

The Labour Code defines flexible working time as a type of organizing working time where the employee may choose the beginning or also the end of working time for individual days within the frame of time segments as determined by the employer. These segments are called as optional working time. A time segment, when the employee shall be obliged to be present at the workplace, is called as basic working time. Basic working time together with segments of optional working time shall constitute daily operational time.

In dependence on time period, during which employee shall achieve the determined working time, are distinguished following arrangements:

- Flexible working day
- Flexible working week
- Flexible four-week working period

Flexible working time may be applied to both even distribution of working time for individual weeks as well as for uneven distribution.

1.6 Shift work

Shift work is defined as manner of organizing working time in which employees alternate at the same workplace according to a certain schedule and, in the course of a certain period of days or weeks, work at differing times. This also applies in the event that workers from consecutive shifts work at the same time for a period of up to one hour.

Where working time is arranged into two work shifts, this shall be a two-shift work mode. If an employer arranges working time in three shifts, this shall be a three-shift work mode. A work mode in which a work activity runs consecutively through all days of a week shall be a continuous work mode. The employer may not schedule working time such that an employee works the night shift in two consecutive weeks except in cases where the character of the work or operating conditions prevent any other schedule of working time.

1.7 Work standby

If employee remain in a place determined in advance for a period of time outside the schedule of working shifts and beyond the set weekly working time and is prepared to perform work, it is called a work standby. The Labour Code distinguishes three types of work standby:

- *The inactive part of work standby that is considered to be working time.* It is the time during which the employee remains in the workplace and is prepared to perform work but does not perform work.

- *The inactive part of work standby that is not considered to be working time.* It is the time during which the employee remains in an agreed location outside the workplace and is prepared to perform work but does not perform work.
- *The active part of work standby, which is treated as overtime work.* It is the time when an employee on standby performs work.

The employer may order at most eight hours of work standby per week and at most 100 hours in the calendar year. Work standby above and beyond these amounts is permitted only by agreement with the employee.

1.8 Fixed term employment relationship

The duration of employment relationship may be defined explicitly in the employment contract. Fixed term employment relationship shall be agreed in writing.

A fixed term employment relationship may be agreed for at most two years. A fixed term employment relationship may be extended or renewed at most two times in the two year period. A further extension or renewal of the fixed term employment relationship to two years or over two years is possible to agree only in the following cases:

- Deputization of an employee.
- The performance of work in which it is necessary to significantly increase the number of employees for a transitional period not exceeding eight months per calendar year.
- The performance of work that is linked to a cycle of seasons, which repeats every year and does not exceed eight months in each calendar year (seasonal work).
- The performance of care services under special regulation.
- The performance of work for which an education in the arts is required.
- The performance of work as a creative employee in science, research and development.
- The performance of work agreed in a collective agreement.

An employee in a fixed term employment relationship may not be given either more or less favorable treatment than in comparison to a comparable employee. The employer shall inform employees in fixed term employment relationships and employees' representatives in a suitable manner of any indefinite term vacancies that become available.

1.9 Home work

Home work is defined as work for an employer at home or at another agreed place, within the working time arranged by himself or herself. Therefore the provisions on the arrangement of determined weekly working time shall not apply to such employee and he or she is not entitled to wages for overtime work, wage benefits for working on national holidays, for night work and for work in an environment hazardous or damaging to health. He or she is also not entitled to compensatory wages in personal obstacles at work or in the case of work stoppage.

If employee works at home or at another agreed workplace occasionally or in exceptional circumstances, it shall not be considered as homework.

The employer shall adopt measures to prevent employees performing home work from becoming isolated from other employees and give them an opportunity to meet with other employees. Working conditions for employees who work from home may not disadvantage such employees in comparison with comparable employees who work in the employer's workplace.

1.10 Telework

Telework is kind of homework, when employee performs work for an employer using information technology, within the working time arranged by himself or herself. Home employee and teleworker have the same rights and obligations. However employer has some additional responsibilities:

- He/she shall provide, install and perform regular maintenance of hardware and software necessary for the performance of telework, except in cases where an employee performing telework uses his/her own equipment.
- He/she shall ensure, especially with regard to software, protection for data processed and used in telework.
- He/she shall inform the employee of all restrictions on the use of hardware and software and also of the penalties for any breach of these restrictions.

1.11 Agreements on work performed outside employment relationship

The labour law relations may be based also on agreements on work performed outside an employment relationship. The Labour Code distinguishes *work performance agreement*, *agreement on work activities* and *agreement on temporary work for students*.

An employer may conclude a **work performance agreement** with a natural person if the anticipated extent of work for which the agreement is concluded is not in excess of 350 hours in a calendar year. The anticipated period of work shall include work performed by the employee for the employer pursuant to a different work performance agreement.

A work performance agreement shall be concluded for a determined period. However it can be renewed at the end of this period and the number of renewals is not limited.

A work performance agreement shall be concluded in writing, otherwise this agreement is invalid. The work performance agreement must include the definition of the work tasks, agreed remuneration for performance of it, the period in which the work task is to be performed and the anticipated extent of work, if its extent is not directly influenced by the definition of the work task.

An employer may withdraw from an agreement if work tasks are not performed within the period as concluded. An employee may withdraw from an agreement if unable to discharge the work tasks because the employer has not created the working conditions as agreed upon for him/her. The employer shall be obliged to compensate the employee for damages arising from such.

An employer may conclude an **agreement on work activities** with a natural person if the extent of work does not exceed 10 hours per week.

An agreement on work activities may be concluded for a definite or indefinite period.

An employer must conclude an agreement on work activities in writing otherwise it shall be invalid. The agreement on work activities must state the agreed work, the agreed remuneration for work performed, the agreed extent of working time and the period for which the agreement is concluded.

The agreement may include an agreement on the method of its termination. Termination of the agreement with immediate effect may be agreed only for those circumstances in which an

employment relationship may be terminated with immediate effect. This agreement may be also terminated by the agreement of participants as of the agreed date or unilaterally only by giving notice without stating a reason with a 15-day notice period beginning on the day when the written notice was delivered. It means that the notice period of agreement on work activities is shorter than the notice period of labour contract, which is at least two months.

An employer may conclude **an agreement on temporary job of students** with a natural person who has a status of a student. On the basis of this agreement work exceeding half the determined weekly working time on the average may not be performed. Adherence to the agreed and maximum extent of working time shall be assessed for the entire period for which the agreement is concluded, however for the maximum of 12 months.

An agreement on temporary job of students shall be concluded for a determined period or for an undetermined period of time.

An employer shall be obliged to conclude an agreement on temporary job of students in writing, otherwise it shall be invalid. The agreement must state: the agreed work, the agreed reward for the work performed, the agreed extent of working time and the period for which the agreement is concluded.

The method of termination of the agreement may be agreed in the agreement. Immediate termination of the agreement may only be agreed in cases where an employment relationship may be terminated immediately. This agreement may be also terminated by the agreement of participants as of the agreed date or unilaterally only by giving notice without stating a reason with a 15-day notice period beginning on the day when the written notice was delivered. It means that the notice period of the agreement on temporary job of students is shorter than the notice period of labour contract, which is at least two months. [7, 8, 9]

4 WORKING TIME ARRANGEMENT OPTIONS

The labour relation between employer and employee can be characterized by several characteristics. These characteristics determine a difference between individual working time arrangements and represent individual employer decisions towards certain labour law relation. *According to previous chapter, following characteristics of working time arrangement are distinguished:*

- The form of a labour law relation
- The duration of a labour law relation
- The working time per calendar year
- The distribution of working time
- The basic working time per day
- The time account balancing period
- The ordered overtime work
- The agreed overtime work
- The alternation of employees at the same workplace
- The need of work stand by
- The workplace
- The way of communication between employer and employee

The form of a labour law relation has these values:

- The labour law relation based on employment contract
- The labour law relation based on work performance agreement
- The labour law relation based on agreement on work activities
- The labour law relation based on agreement on temporary work for students.

The duration of a labour law relation has two values:

- Definite period
- Indefinite period

The working time per calendar year contains values from interval:

$$(0; 40 \times \text{number of working weeks in particular calendar year}) \quad (1)$$

It has to be noted that the maximum value of this characteristic is lower for an adolescent employee and for employee who works with proved chemical carcinogens or who performs activities leading to the irradiation.

The distribution of working time has two values:

- Even
- Uneven

The Labour Code defines a difference between the distributions of working time evenly and unevenly only with connection with a labour law relation based on employment contract. However work performed outside an employment relationship can be distributed evenly and also unevenly too.

The basic working time per day expresses a time segment, when the employee shall be obliged to be present at the workplace during working day. This characteristic is sometimes called as core hours. Working time may not exceed 12 hours within 24 hours therefore this characteristic contains values from interval:

$$\langle 0; 12 \rangle \quad (2)$$

The time account balancing period expresses time period, during which employee shall achieve the determined working time. It has these values:

- Day
- Week
- Month

The ordered overtime work expresses employer's attitude towards ordered overtime work. It means, if he/she used to order overtime work. This characteristic has two values:

- Yes
- No

The agreed overtime work expresses employer's attitude towards agreed overtime work. It means, if he/she used to allow overtime work or not. This characteristic has two values:

- Yes
- No

The alternation of employees at the same workplace expresses if employees alternate at the same workplace according to a certain schedule. This type of organizing working time is called shift work and also job sharing. Although shift work is defined only for employment relationship, alternation of employees at the same workplace according to a certain schedule is possible also when their work is performed outside an employment relationship. This characteristic has two values:

- Yes
- No

The need of work standby expresses if work character require employees to remain in the workplace or at another agreed place and be prepared to perform work. This characteristic has three values:

- The work standby at workplace
- The work standby at another agreed place
- No work standby

The workplace expresses a place from which work is performed. It has two values:

- The employer’s premises
- The another agreed place outside the employer’s premises

The way of communication between employer and employee expresses if work character require employees to use information technology in communication with employer. This characteristic has two values:

- Yes
- No

These characteristic can be modeled by variables with finite sets of values. Each working time arrangement can be then defined as:

$$a = (a_1, a_2, a_3 \dots a_m) \tag{3}$$

Variable a_i models i -th characteristic of given working time arrangement and $a_i \in A_i$. A_i can be defined as set of all possible values for i -th characteristic. Set of all possible working time arrangements can be than defined as cartesian product of sets of characteristic values:

$$A_1 \times A_2 \times \dots \times A_m \tag{4}$$

It has to be noted that **some combinations of characteristic values are not feasible**. *It is caused by reciprocal elimination of some characteristic values*. Our next research will deal with this phenomenon.

5 DECISION MAKING TOWARDS WORKING TIME ARRANGEMENT

The management of enterprises has to deal with different situations and solve different decision problems. Decision making is a process in which an individual decision maker contemplates a choice of certain action and evaluates possible solutions. When a decision maker has to

choose an action among several alternative actions, he usually wants to select the “best” one according to certain criterion.

Possible criteria in decision making towards working time arrangement are **productivity, cost and flexibility**. The achievement of better productivity is closely connected to employee’s motivation. So other criteria in decision making towards working time arrangement are **employee’s ability to arrange his working time according to his preferences, his social security and his ability to achieve promotion**.

As you can see, decision making towards working time arrangement is multicriteria decision problem. Mathematical model of general multiple criteria decision problem is as follows:

$$\begin{aligned} & \text{Max/Min } \{f_1(\mathbf{x}), f_2(\mathbf{x}), \dots, f_n(\mathbf{x})\} \\ & \text{subject to } \mathbf{x} \in B \end{aligned} \tag{5}$$

Where \mathbf{x} is the vector of the decision variables, $f_1(\mathbf{x}), f_2(\mathbf{x}) \dots f_n(\mathbf{x})$ are the objective functions that express criteria to be optimized and B is the set of feasible solutions. [10, 11]

This model has multiple utility functions and therefore is hard to solve. In most cases, this model is transformed into mathematical model with one utility function formulated as follows:

$$\begin{aligned} & \text{Max } U = c_1 \cdot f_1(\mathbf{x}) + c_2 \cdot f_2(\mathbf{x}) + \dots + c_n \cdot f_n(\mathbf{x}) \\ & \text{subject to } \mathbf{x} \in B \end{aligned} \tag{6}$$

Where U is objective function that express the utility for the decision maker, \mathbf{x} is the vector of the decision variables, $f_1(\mathbf{x}), f_2(\mathbf{x}) \dots f_n(\mathbf{x})$ are the objective functions that express criteria, $c_1, c_2 \dots c_n$ are criteria weights and B is the set of feasible solutions.

Decision making towards working time arrangement is then modeled as follows:

$$\begin{aligned} & \text{Max } U = c_1 \cdot f_1(\mathbf{x}) + c_2 \cdot f_2(\mathbf{x}) + \dots + c_n \cdot f_n(\mathbf{x}) \\ & \text{subject to } \mathbf{x} \in B \\ & B \subset A_1 \times A_2 \times \dots \times A_m \end{aligned} \tag{7}$$

Where U expresses utility for the enterprise, $f_1(\mathbf{x}), f_2(\mathbf{x}) \dots f_n(\mathbf{x})$ express criteria, $c_1, c_2 \dots c_n$ express importance of each criterion and B expresses set of working time arrangements which are feasible according to external and internal conditions of the enterprise.

The importance of each criterion should become clear from appointed strategic goals, so they depend on decision maker and his goals and preferences that should correspond to enterprise goals.

6 CONCLUSION

This paper presents twelve characteristics of working time arrangement, their values and possible working time arrangements as cartesian product of sets of characteristic values. Then mathematical model of decision making towards working time arrangement is created. Our next research will deal with this specification of this model and also with identification of working time arrangement feasibility.

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