Features of the optimum working conditions organization in modern society

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ABSTRACT

Modern society dictates changes to personnel management, and imposes stricter requirements to the working space organization.

Labor market assumes existence of two products: from the applicant - labor (work), from the employer - workplace with compensation for work. For the maximum involvement of applicants it is necessary to think of creating favorable work conditions.

The complex view of the matter, according to authors, will create the best conditions for work and, as a result, will increase efficiency of employees. In article it is offered to consider: office design, questions of working space illumination, working process soundtrack, etc.

Authors of article come to conclusion that there are no insignificant moments in the organization of a workplace. It is necessary for employees to create the most favorable and comfortable conditions, and as a result, workers loyalty to the organization increases, as well as quality of work.

Keywords: Management, motivation, HR department, working space, competitiveness, color, audio-marketing, aroma-design, psychology, dynamic approach.
1. Introduction

In our time so unstable, heads of various enterprises and organizations are interested in involving highly skilled employees, and reduction of staff turnover. It is impossible to speak about competitive advantages of the organization disregarding personnel at the same time.

The approaches considered in the present article in different degree were studied and used in actions realization of scientific labor organization (the Soviet, American, Japanese schools; the German labor front in nazi Germany), and also in Taoist practice of symbolical development (organization) of spaces feng shui.

It should be noted that at the beginning of SLO organization the working space was considered from the point of view of general emotional perception by person.

The founder of scientific labor organization American engineer Frederik Winslow Taylor (1856-1915) considered in total 4 elements: development of working rational methods and methods of work; selection of employees; training and development of workers; close cooperation of administration and workers.

The Gilbrets considered work measurement to be the basis for SLO, applied filming to studying of labor processes; divided process of work into micro-elements. At the same time they also thought of the time off organization for workers and breaks in work.

G. Emerson: studied questions of management and created the "12 principles of productivity" technique according to which success of any enterprise was defined as a deviation from offered 12 principles of productivity. Among these 12 principles only one "The fair relation to personnel" is directly connected with perception the activity by the worker.

A. Fayol applied the principle of functionality to creating management personnel, functional labor division in production, functional system of workplaces service.

G. Ford created mass conveyor production by use of work specialization, its standardization and division into operations.

However, as we can see from the above, founders of SLO considered the worker as some kind of mechanism in need to be correct for optimum use and provided financially as well as with the period for rest and restoration.

Subsequently the theory of the human relations according to which it was supposed that labor productivity depends on the relation to work, on relationship with managing directors, solidarity in group was developed. The theory of human relations regards the person needs; sociology of small groups; labor control at the enterprise as paramount importance. The production master as key link, had to be engaged all the time in communication with workers and inform them on affairs of the enterprise, also participation of workers in management through a) participation in decision-making; b) participation in rationalization; c) participation in profit; d) organizations of leisure was considered. [16]
It should be noted that the human relations theory though did not consider workers as the mechanism, however was limited only to use of the "feedback" principle for human resource management. Having become a huge step forward in comparison with approach of SLO founders, it, at the same time, reacted to moods of workers post factum, practically without being engaged in influencing on it.

Such approach can be compared to the thermometer which can show temperature in the refrigerator, but cannot change it.

Independently there are methods applied in the 30th years by the German labor front - DAF (German. Deutsche Arbeitsfront, DAF), for work "harmonization". For this purpose even special management on beauty of work was created. (German. Amt für Schönheit der Arbeit). It is necessary to consider that the International military court in Nuremberg did not call DAF among the criminal organizations of the Third Reich.

Activities of Management for the "Beauty of Work" organization were directed to creating comfortable workplace conditions. In cooperation with the director, authorized representatives and the state production supervision this management demanded purity and order at the enterprises, good rooms for rest in free time, the good sanitary equipment, gardening of the territory and protection against professional diseases. Each educational propaganda campaign took place under the special slogan. "The sun and greens for all the worker" was the first, further followed "Fight against noise", "Good light – good work", "Pure people at the pure enterprise", "Healthy air in the working room", "Hot food at the enterprise".

Without being beyond the far present article, authors at the same time note that the used DAF means and ways of active impact on workers both on production, and out of it, liquidated a gap between promotion and life and provided unprecedented loyalty of the population to the regime and perception of all its brutal ideas hitherto. Thus, impact on the worker can be the lever by means of which (together with promotion) it is possible to change even social fabric and morals.

In the present article the list of simple actions which, at the same time, can also actively influence a condition of the person and his perception of reality is offered.

Marketing of personnel, undoubtedly, can help with the matter. It is a rather new direction for Russia which appeared at the end of the XX century. However only the single Russian enterprises apply this knowledge in management of the organization and in HR department. The foreign organizations also do not differ in special eagerness in the matter [2].

Marketing of personnel is the type of administrative activity aimed at long-term providing the organization with human resources [1].

Marketing of personnel as goods considers: on one hand a position, on the other hand – the employee (work). At the same time marketing mix will also change (see Table 1).

Table 1.

Marketing - a mix depending on goods (Author's remark)
product – vacant post | product – human work
---|---
price – time\education\qualification | price – payment
place – working place | place – working place
promotion - announcement of hiring (motivation and work incentives) | promotion - work application

The workplace stays stable in these two systems, thereof the tools considered below in this article are relevant.

The principles of personnel marketing include [3]:

1. Certain philosophy and strategy of human resources management. Where employees are considered as clients of the organization. Goal: to create as much favorable work conditions as possible.
2. Function of HR department which is directed to identification and satisfaction of the enterprise in a personnel resource.

Application of the personnel marketing basic principles creates system of relationship with the employee where everyone feels the value, realizes the influence on activity of the organization and receiving corresponding remuneration.

In discussing the matter, it is also necessary to remember Hawthorne experiment [4] which showed dependence between physical working conditions and labor productivity. And as the science does not stand immovable, authors suggests to integrate bases of neuro-linguistic programming into personnel marketing that will lead to subsequently more favorable conditions for workers and respectively to receiving bigger profit by the employer, due to increase in labor productivity and reduction of staff turnover.

Authors certainly take into account, on one hand, the existing ambiguous assessment of the NLP in scientific community, and, on the other hand, the neo-coupled efficiency of the offered NLP tools.

### 2. Neuro-linguistic programming

Modern society is characterized by instability which influences personnel extremely negatively. Depressions, psychological failures and stresses occur even more often. Discussing matters of personnel management of the enterprise it is necessary to place emphasis on psychology and, as option, on neurolinguistic programming.

Neurolinguistic programming (NLP) – option of practical psychology which also includes: psychotherapy, programming and linguistics [5].

In this article authors would like to concentrate on the representative systems offered in the NLP and on their basis to consider features of personnel marketing.

The representative system is the main system showing a primary way of obtaining information from the outside world [6].

There are three types of representative systems:

1. Visual. This system is based on visual perception.
2. Auditory. This system promotes orientation of the person in space and information field by means of operating the acoustic analyzer.

3. Kinesthetic. This system is characterized by advanced receptors of skin which actively react to mechanical, physical and chemical impacts.

We will treat each system separately through a prism of personnel marketing.

3. **Color and light as instrument of impact on visual representative system of employees**

Visional images have impact on 80-85% of inhabitants of all planet [7], respectively the way office is colored: walls, furniture, workplace illumination - has basic value, both for employees, and for clients.

**Color**

Color is a signal which is read out by the person and it will be transformed to emotions (author's interpretation [18]). Therefore, every color has a certain influence which can promote work, or distract, cause aggression, irritation.

Color should not just be pleasant to the company executive and employees, but it should also correspond to the room in which it is used. For workplace adornment it is necessary to use colors which will stimulate activity, at the same time will not distract from working process, held focus and increase attention, dispose to long stay and reduce fatigue. All this can be achieved at the expense of correctly chosen color palette.

Colors are subdivided on cold and warm, at the same time addition of yellow "warms", and blue makes color colder (see Table 2).

**Table 2.**

<table>
<thead>
<tr>
<th>cold</th>
<th>warm</th>
</tr>
</thead>
<tbody>
<tr>
<td>dark blue</td>
<td>yellow</td>
</tr>
<tr>
<td>sky blue</td>
<td>red</td>
</tr>
<tr>
<td>violet</td>
<td>orange</td>
</tr>
<tr>
<td>gray</td>
<td>green</td>
</tr>
<tr>
<td>terracotta</td>
<td>brown</td>
</tr>
<tr>
<td>jade</td>
<td>beige</td>
</tr>
<tr>
<td>black</td>
<td>turquoise</td>
</tr>
<tr>
<td>lilac</td>
<td>willow-green</td>
</tr>
</tbody>
</table>

In work offices it is acceptable to use warm shades. It is known that they promote creation of working mood, exert positive impact on workers. These colors calm and improve sight.
It should be noted that if the room is not big, then warm shades visually increase it, at the same time rich colors – reduce it.

If the office of the company is in the hot country or the most part of day the sun heats the room, then cold color and shades (gray, blue, blue, saturated-green) can become salvation, they will counterbalance the room and will make it comfortable for stay. If it is necessary to warm an office, then warm colors (yellow, coffee, cream, gentle-green), are the best option.

As it was told earlier, every color can cause a certain emotion, both positive, and negative. This feature needs to be considered in adorning the office (see Table 3).

Table 3.

<table>
<thead>
<tr>
<th>Color</th>
<th>Emotion</th>
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</thead>
<tbody>
<tr>
<td>black</td>
<td>Exhaustion</td>
</tr>
<tr>
<td>brown</td>
<td>Anxiety</td>
</tr>
<tr>
<td>gray</td>
<td>depression</td>
</tr>
<tr>
<td>white</td>
<td>spirituality</td>
</tr>
<tr>
<td>red</td>
<td>Rage \ over-excitement</td>
</tr>
<tr>
<td>orange</td>
<td>Activity \ vigilance</td>
</tr>
<tr>
<td>yellow</td>
<td>uplift \ joy</td>
</tr>
<tr>
<td>green</td>
<td>Poise \ trust</td>
</tr>
<tr>
<td>sky blue</td>
<td>Relaxation</td>
</tr>
<tr>
<td>dark blue</td>
<td>Rest</td>
</tr>
<tr>
<td>violet</td>
<td>Tranquility</td>
</tr>
<tr>
<td>Pink</td>
<td>flippancy</td>
</tr>
</tbody>
</table>

Many designers suggest to use an extraordinary combination of colors due to which they seek to draw attention of visitors. However it can affect staff of the company extremely negatively, sharply reducing performance of personnel.

Furniture palette is also worth mentioning. Undoubtedly, the bright furniture stimulates growth of employees efficiency if they are busy with creativity (designers, psychologists, journalists, etc.), in the other case, it will distract and tire.

The interior sustained in white-black-silvery tones gives the best effect: maximum labor productivity - minimum stresses. The furniture with tree pattern slows down attention, forces employees to distract, causes melancholy. Quiet shades (pastel or warm) will provide high efficiency of workers for all day.

Considering these aspects, it is necessary to select an interior for office and production reasonably. Skillful use of color palette, will help organize working process with the maximum productivity.

Light
Light is a crucial element necessary for normal activity of the person, influencing labor productivity and health (author's interpretation). Lighting influences emotional condition and mentality of the person, and is also subdivided into different types (see fig. 1).

![Figure 1. Light types](image)

We will consider influence each type of lighting on employees. Natural lighting is sunlight which gets through glass or open surfaces into the room (author's interpretation).

Researchers have saved up a significant amount of data on biological effect of light on an organism. It is established that light, besides ensuring visual perception, influences endocrine system through nervous visual-vegetative system, system of immune protection formation, body height and development of an organism, and influences many main processes of vital activity, regulating metabolism and fastness to influence adverse factors of environment. The comparative assessment of natural and artificial lighting on its influence on working capacity shows a benefit of natural light. The leading factor defining biological inadequacy of natural and artificial light is the difference in spectral structure of radiation, and also dynamism of natural light during the day. Illumination levels at the same time have to make 1000-1500 lx and can be provided with a daylight if it is available, or electric light from the general or localized lighting, for example desk lamps or combination of day and natural light. Working at illumination of bad quality or low levels, people can feel eye fatigue and over-fatigue that leads to decrease in working capacity. In some cases it can lead to headaches. Too low levels of illumination, the blinding action of light sources and ratio of brightness which is insufficiently well balanced on workplaces are the reasons in many cases. Headaches can be also caused by a lighting pulsation that generally is result of use of the electromagnetic start-control devices (SCD) for the gas discharge tubes working at frequency of 50 Hz. From the point of work safety view visual ability and visual comfort are extremely important.
4. Music as instrument of impact on auditory representative system of employees

Use of music on production and at the office, as the employee stimulation instrument is no new idea.

Music is an emotional stimulator which promotes increase of intellectual and physical activity (author's interpretation).

Impact of music on a human body is based on such features of mentality as emotional susceptibility and involuntary submission to the set musical rhythm. Besides, in a human body the majority of physiological, biophysical and biochemical processes proceeds rhythmically. Thus, it has been established that when using audio-marketing the general efficiency of employees increases by 15%, activity in the first hour of work increases by 10%, the quantity of mistakes decreases by 30% [9].

Audio-marketing is the kind of activity representing a versatile complex of actions creating audio atmosphere stimulating various emotions of the employee (author's interpretation).

Undoubtedly music influences labor productivity [10]: average performance improvement of crew on assembly of radio receivers (21 workers) made in a day shift 7%, and in the evening — 17%. Besides poll has shown that music in operating time is pleasant for employees (see fig. 2), and also it cleans away unnecessary sounds and noise.

Figure 2. Perception of music by employees [11]
It should be noted that effective music use on workplaces depends on personal preferences of workers, age and gender distinctions. When drawing up a play-list it is necessary to consider time of day, and also nature of work (see Table 4).

**Table 4.**

Dependence of musical content on the characteristic of work (author's interpretation)

<table>
<thead>
<tr>
<th>Characteristic of work</th>
<th>Features of music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental</td>
<td>Instrumental music reserved, light, soft</td>
</tr>
<tr>
<td>Monotonous</td>
<td>Vocal works in a foreign language &quot;it has to be heard but not listened&quot;</td>
</tr>
<tr>
<td>Physical</td>
<td>Rhythmical music vigorous, cheerful, bright</td>
</tr>
<tr>
<td>Requiring special attention</td>
<td>Background instrumental music silent and easy</td>
</tr>
</tbody>
</table>

Competently picked up melodies remove nervous tension and fatigue (see fig. 3). Help concentrate, improve attention and perception. During the monotonous work music helps concentrate and keep in tone, levels the monotonous lulling noise. Music promotes improvement of relationship in collective, reducing quantity of conflict situations.

![Figure 3. Decrease in fatigue of workers with music playing: 1 without music; 2 days with music [10]](image)

The office or production is not a concert hall, the specifics of music perception is different here. Having addressed various musical genres, it is possible to allocate that most at play-lists have to be instrumental and popular music. Experience of many enterprises confirms that in case of musical content creation of a song genre works should get an advantage.
In operating time playing various works of concert character with recitatives and melodeclamation is inadmissible (for example: Yulia Savicheva and Dzhigan - LET ME GO). Content has to consist of works, free from sharp changes in key or rhythm; works have to have accurately outlined, melodic line which would be maintained throughout the soundtrack, to possess constant level of loudness of 80-90 DB. In the play-list constituted for manufacture workshops use of sad lyrical works is absolutely undesirable.

The perception of music in essential degree depends on specifics of working process, on requirements which are presented to employee attention. Music can distract workers, thereby impeding the successful implementation of the task delivered before them.

Proceeding from above, during creation of musical content it is necessary to consider in the greatest possible extent the properties of working process, time of day as well as employee tastes. This task is certainly no simple, yet quite feasible.

5. Aromas as instrument of influencing kinesthetic representative system of employees

Olfactory feelings have influence on psychological, physical and social levels. In most cases inhaling surrounding aromas people do not realize their influence on the life and

furthermore on working process. At the same time sense of smell on force of emotional impact on people advances other sense organs by 75% and is the second for importance degree after sight.

Aroma (smell) is a stimulator which influences mood and behavior of the person (author's interpretation).

Currently by means of various aromas enterprises raise labor productivity and reduce mistakes quantity for IT specialists. Practice of an aroma design use at the office and on production quite pays off as smells influence psycho-emotional condition of employees, and in case of positive emotional level work proceeds quicker and more effectively.

Aroma design is the type of activity representing the complex of actions directed to influence people by means of essential oils, aromatic plants and other aromas bound to improve work performance, harmonize the relations in labor collective, customer acquisition, etc.

Sense of smell is directly connected with limbic system (set of a number of brain structures) which, in turn, unites emotions, memory, etc. Powerful influence of smells on a condition of the person is also explained by this.

Results of numerous researches show that some aromas excite, others help to concentrate, the third – irritate (see Table 5).
Table 5.

Influence of aromas on a psycho-physiological condition of the person (author's interpretation)

<table>
<thead>
<tr>
<th>Aroma</th>
<th>Change of a psycho-physiological condition of the person</th>
</tr>
</thead>
<tbody>
<tr>
<td>rosemary</td>
<td>Stimulates memory, improves process of knowledge acquiring</td>
</tr>
<tr>
<td>orange</td>
<td>Reduces stress, refreshes perception</td>
</tr>
<tr>
<td>bergamoth</td>
<td>Increases concentration of attention</td>
</tr>
<tr>
<td>jasmine</td>
<td>Eliminates fatigue, mobilizes forces</td>
</tr>
<tr>
<td>ylang-ylang</td>
<td>Increases self-confidence</td>
</tr>
<tr>
<td>lavender</td>
<td>Stimulates cerebration</td>
</tr>
<tr>
<td>mint</td>
<td>Stimulates intellectual re-exhaustions, softens tension condition</td>
</tr>
</tbody>
</table>

As it was told earlier, smells influence labor productivity, especially mark out aromas of pine and fresh-printed money.

In 1939 the Soviet physiologist Shatenstein D. I. proved that some olfactory irritations considerably increase efficiency of the person [14].

In 1983 in the USSR experiment has been conducted. In the dispatching hall of the Kiev airport "Borispol" the batcher of smells "Fiton-1" created by Botany Institute of Academy of Sciences of the USSR has been installed. The special composition of aromas passing through the batcher has considerably increased operability of air traffic controllers [15].

Some Japanese companies stimulate the employees, injecting certain aromas into central air. In the morning the invigorating smell of lemon meets workers on workplaces; it is replaced by 10:00 by the gentle flower aroma influencing additional concentration of attention. After lunch at the office and on production aroma of the weakening pink aroma arrives, and to the end of the working day the rooms "start" to fill with cypress, eucalyptus and citrus aroma. Also it is recommended to employees inhale a santalaceous smell in combination with wood notes before going to sleep.

At the same time it is noted that the number of employee mistakes in such firms are on average 20% lower, than of their colleagues from other offices, and the labor productivity in general is 50% higher.

In some organizations there are special rooms in which aromas restore strengths of workers and adjust them on working harmony [13]. In such rooms smells are used: rosemary; carnations; basilica; marjoram; thyme, etc.
The same Japanese have noticed: the number of programmer mistakes decreased at inhalation of a jasmine scent by 3%, lavenders – by 20%, lemon – by 54%.

It is revealed that smells influence men and women differently. Women are much more sensitive to olfactory irritants. So aroma of orange helps only the weaker sex, men are indifferent to it.

Considering the above-mentioned moments, it should be noted that aromas on production and at the office can become the irreplaceable instrument of employee efficiency stimulation which it is necessary to approach very accurately. It is necessary to consider a gender component, features of working process and many other things. At the same time competent use of aromas will bring notable increase in profit.

6. Dynamic approach to formation of the production environment.

Authors consider that the tools of emotional impact on personnel considered above, shall have dynamic character. If in relation to music and smells it seems rather obvious (change of music and the sprayed aromas during the working day is described above), then color and light also need "dynamism". Modern technical capabilities allow to regulate and change also color scale and illumination and the directions of illumination in rooms. Thereby in one room it is possible to create at the same time several options of color and light registration and, to change these options depending on solvable tasks and time of day.

Besides, dynamic approach assumes periodic (and if specifics of work allow, then continuous) influence monitoring of various fragments, aromas and light-color design on indicators of worker activity, with the subsequent analysis and adjustments.

7. Conclusion.

In this article various ways of employee stimulation, based on the representative systems offered in neuro-linguistic programming have been considered.

Impact in color on visual learners, music on audial and smell on kinesthetic was offered.

The competitive workplace implies a complex of actions impact on the employee via all representative channels that will lead subsequently to working capacity increase, increase in resistance to stress and decrease in mistakes.

At the same time it is noted that any influence assumes the long preparatory process considering gender, age and national component, features of working process, geography of rooms and many other things.
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