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# Experiences of Open Office Environment Transformation – a Case Study

## SUMMARY

The research was made for exploring employee satisfaction in new open office environments at a multinational company, after the decision of the management about the refurbishment of the European offices. As a result, the Czech and Hungarian office should have been transformed into an open office area. The goal of the research was to measure employee satisfaction in the new work environment and to make a proposal for management team for further office investments. For exploring the situation, a primary research was conducted among Czech and Hungarian employees, if they are satisfied with the realized new work environment in Czech Republic and in Hungary. The survey was done by in-depth interviews using an interview questionnaire. As a result of the research it may be stated that employees are generally satisfied with their working environment. They reported their needs regarding wider space and extended own work environment and about more meeting rooms and rest zones. Respondents noticed excessive noise and direct and rapid communication between each other during operation.

**Keywords;** *open office, employee, satisfaction, Czech Republic, Hungary*

**JEL Classification;** *M12, D23, O15*

## INTRODUCTION

Human resource is essential asset in achieving goals of any companies, therefore the well-being and satisfaction of employees play a key role in the successful performance. Research was made in the selected company on measurement of employee satisfaction in new open office environment based on a management decision about the refurbishment of European offices. Thus, the Czech and Hungarian office must also had been transformed into an open office area. The goal of the research is to measure employee satisfaction in the new work environment when the work environment became open area after office refurbishment, and to make a proposal for management team for further office investments.

For exploring the existing results in relation with work environment and employee satisfaction a secondary and a primary research was conducted discussing the literature existing in the topic and to explore the employee satisfaction in the analysed company's two offices.

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## LITERATURE REVIEW

From the end of the 19th century, during the Industrial Revolution, society and the economy underwent a huge reformation thanks to the technological explosion, which separated the office in its present sense from the production line. This period saw the beginning of the construction of office buildings and with it the concept of the “open office”, which meant huge halls without any internal boundaries, serving as a space for the employees, crowded with desks. Managers had their own offices, located on a higher floor of the building. Cost efficiency was a key design consideration, and the large open space made it easy to control the large number of subordinates (Klein, 2018). After the World War in Germany, the “Bürolandschaft” style of office space appeared and was soon introduced in the USA. The new image is a combination of private offices and “open office”, called “office landscape”, decorated with dividing walls and plants. The office space was divided according to schedules and tasks, with a more optimal distribution of space. The widespread of open office environment firstly realized in Hungary due to international companies (Illés et al., 2021).

Today, thanks to the tools of digitalization, the flow of information has become instantaneous, either in centralized offices or working remotely (Marciniak et al., 2020). The “home office”, i.e. working from home, was also introduced and became widespread during the COVID-19 pandemic. Furthermore, it is still an approved way of work and will stay in the future as possible working option (Samani-Alavi, 2020, Hervie et al., 2022).

There are both advantages and disadvantages to open office. Basically, communication is faster and more efficient. An open office is more transparent, more welcoming and allows for an interactive exchange of information between colleagues. Interaction has been shown to be more frequent between colleagues who do not have a direct task relationship (De Croon et al., 2005, Hervie et al. 2021). This atmosphere may improve integration of people with special needs (Sharma et al., 2018).

The constant sense of community that results from open spaces strengthens the team, fostering a sense of belonging to a team. Regardless of position, a sense of approachability contributes to a more cohesive yet relaxed working environment, and the more direct contact among colleagues within and outside the organisation can also provide an effective platform for creative ideas that can make project-based working more effective (Bernstein, Turban 2018).

Aesthetic and fashionable office space can be designed and furnished in a number of ways to best meet both employee and company expectations. In single-space offices, it is possible to decorate, create a relax zone or change the layout of desks. In

order to maintain a peaceful and productive operation, it is important to take into account the needs of people in different positions with different responsibilities (Sailer, Thomas, 2021).

Privacy is essential even when work is essentially carried out in a single airspace. The impact on employees is positively enhanced if the working environment can be personalised and rearranged to suit the needs of the individual, leading to a commensurate increase in their attachment to the workplace and their commitment to the employer (Bernstein-Waber, 2019).

Another benefit of an open office is that team or functional managers working in the same room can more easily monitor the performance of colleagues in their immediate team. Many people are nervous about sitting too close together or seeing their screens. However, administrative staff doing monotonous work can perform better when they are in the same room as their colleagues. However, it is a proven fact that when complex tasks requiring concentration need to be performed, a closed, quiet space is necessary to achieve the right level of performance in the optimum time, so noise can make the work stressful (Sander et al., 2021).

Effective communication, more frequent cooperation, rapid interactions and a working environment that provides a cohesive atmosphere in the fashionable “open office” can be highly motivating. A unique look that allows for an expressive interior design compared to the usual sterile and functional office spaces, through which the company can communicate its branding elements on demand, or create a higher quality working environment that shows more appreciation towards its employees (Rekettye, 2018).

Overall, people who like open offices tend to praise the positive atmosphere, environmental benefits and creative output of their staff. In open-plan offices, employees are free to roam, socialise, collaborate, communicate more intensively, and better meet the demands of the community and respond more quickly to changes in their environment. All of this, of course, has a positive impact on employee morale, not forgetting cost efficiency, which is also seen as a positive by the company.

Nevertheless, numerous disadvantages of open offices are mentioned in the international literature. Laurence et al. (2013) concluded that employees tend to be more dissatisfied with large open-plan offices compared to enclosed office spaces. A fair amount of research has been undertaken to explore how to make them more functional spaces and create a more positive impression on employees.

Yildirim et al. (2007) found that among employees working in open-plan offices, colleagues sitting next to a window are significantly more satisfied. They were also found to have a more positive correlation with their perceived privacy and the quality of their working environment in general, due to the high separation elements. Workers showed a demonstrable preference for workstations with windows. Without windows, there is less natural light, even if this can be replaced by adequate lighting wattage, but there is still an inherent need to be in contact with nature (Yildirim et al., 2007).

Basically, the main problem is the lack of privacy. According to a research, privacy is absolutely necessary. It can be noisier and more disturbing to work together some feel insecure and unprotected. At the same time, they are exposed to too many stimuli in their daily lives. Lack of personal space can have a negative impact on productivity in both the short and long term. Also, sound and noise spread more easily in large spaces. Constant alertness can disturb concentration, leading to frustration and consequently increased tension. Crowdedness leads to higher turnover and lower performance. (Sander et al., 2021). According to the overload theory, when a huge amount of information is showered on a worker and the relative distance between them is small, concentration difficulties can occur.

To summarise the advantages and disadvantages of single-space offices. Privacy is declining, while the role of social communication and a collaborative approach is increasing. Information flows are increasing, while flexible work cultures are coming to the fore. Open office space is also cost-effective, as more staff can be accommodated in a smaller area. Or more staff can be accommodated in the same space (Gerlitz-Hülsbeck, 2023). Workstations integrated into a single space result in significant cost savings, which also have a positive impact on greener, more environmentally friendly solutions. It is important to consider all the features of an open-plan office together, with its advantages and disadvantages, before it is implemented in an organisation. A high level of organisational, psychological, architectural and interior design knowledge is required to create the right design for the company (Gjerland et al., 2019).

Based on a management decision about the refurbishment of European offices, the Czech and Hungarian office must also had been transformed into an open office area. The goal of the research is to measure employee satisfaction in the new work environment and make a proposal for management team for further office investments.

**METHODOLOGY AND SAMPLE**

The primary research investigated the “open office” working environment in the Czech and Hungarian organisation with a focus on employee satisfaction. Research questions focused on the following: (1) Whether they are really satisfied with the new

**Table 1. Questions of the interviews**

<b>Satisfaction</b>	Satisfaction with current (new) work environment	Q1, Q2,
	How environment motivates and supports the work	Q3, Q4
	How environment influences work performance	Q5
<b>Influencing factors</b>	Furniture	Q6
	Office temperature, humidity, air-condition	Q7
	Office lighting (general, work station)	Q8, Q9
	Atmosphere (colours, smell)	Q10, Q11
	Rest areas (rest rooms, kitchen)	Q12, Q13
<b>Satisfaction</b>	Work environment on employees’ feelings	Q14
	Work environment on employees’ health	Q15
	Office environment and company brand	Q16
	Satisfaction with the new layout	Q17
	Satisfaction with new office compared to original office environment	Q18

Source: own research

working environment implemented, and (2) Which factors influence their satisfaction and to what extent?

In the Czech and the Hungarian organisation, in order to answer these questions, in-depth interviews were conducted to investigate employee satisfaction in the same way. 9 employees were selected to answer a total of 18 questions (Table 1), they are full-time employees, working 8 hours a day, with duties performed in the office at their own workplace in Czech Republic and in Hungary. All members of the surveyed group are “back office” employees, with different tasks in their assigned positions. The in-depth interviews were handled via Webex online conference call at the Czech organization and they were handled personally in Hungary.

The samples are not representative due to the fact only two companies analysed, but representativeness was not the goal of the research. At the end of the research, recommendations were made for management team for further investments.

## PRESENTATION OF THE RESULTS IN CZECH REPUBLIC

Firstly, changes in employee satisfaction with the new environment were discussed after introducing open office environment. Compared to the original working environment (pre-refurbished office), the renewed working environment has a different impact on the daily satisfaction of employees. The results were classified by indicating the level of satisfaction on a scale of 1 to 5, where 1- not satisfied, 2- less satisfied, 3- neutral, 4-almost fully satisfied, 5-fully satisfied. Czech employees responded positively about the new office style.

For the question (Q3 and Q4), how new work environment motivates the employees, colleagues reported that the good quality equipment could motivate and support employees, but the reduced working place due to the new environment may raise problems as more space needs shared. Overall they feel good when they go to work because of the team spirit.

Czech colleagues think that actual work environment does not effect on their performance, they highlighted other factors in connection with their work performance, like flexibility and salary, benefits.

For the questions, which factors influence their wellbeing and satisfaction, diverse answers were reported. In terms of office furniture, two employees were generally satisfied with their office furniture, but others made critical remarks about “shared desk”, which indicates less comfort feeling. Almost all Czech employees find the temperature, humidity and climate in the office satisfactory, but they agreed that it is difficult to find the right temperature as priorities and needs are different for different colleagues.

The lighting of the office and all workplace are consistent with enough natural and industrial light application due to LED lighting application. It is well-designed and up to all standards and all employees were fully satisfied. The colours of the office is up to individual preferences, half of the respondents liked the colours, the other half did not, as the colours suggest an industrial style. They generally agreed that company logo and brand are in line with colours used in the office. Based on the interviews the smell of the place is neutral, generally feel cleanliness smell, but they reported that practically they never thought about it. Restrooms were assessed as appropriate, but rest rooms capacity should be increased. Addition-

ally, the number of rest zones where they can relax have not been added to the layout to have a private call or give a chance to stay alone for a couple minutes were missed. Colleagues are satisfied with the refurbished kitchen, but capacity is low. The comfort is good and design is acceptable, but it would be great idea to increase capacity.

Employees expressed satisfaction with the design of the office, which has positive effect on their feelings and well-being. More than two third of respondents say it is significantly or maximally consistent, both in design and composition. For the question, how do the actual work environment effect on health, employees think neutrally, i.e. working environment has not effect on their health. The clear statement of the employees is that the office design is clearly in harmony with the brand, with image of the company, they stated that its design is industrial but this is a current fashion style.

The question about the office layout was one of the weakest point in terms of satisfaction. The layout is acceptable but the area would be great to increase in general. During the day the office is extremely crowded, but they emphasized the attention they pay for each other.

Final question was about the comparison the new office (open office) compared to original environment (before the refurbishment). Colleagues mentioned several advantages and disadvantages of actual open area, some of them missed the old, large and cozy furniture.

Based on the in-depth interviews disadvantages are summarized as follows. Many people missed the large spaces and the more spacious private working environment of the old office. Crowded area is noisy which more than normal, which interrupts their work, especially when guests arrive or when additional managers enter the office from the area. The lack of rest zones reported and minimal number of meeting rooms. Indeed, there is only a small canteen available for a break from work or a private phone call. In addition, some of them need to handle conference calls in the car due to lack of space. In actual office the modern design is absolutely reported as positive fact. Communication is very quick in open area therefore interactions increasing, which is also a positive fact. In addition, open office area is acceptable by Czech colleagues.

## PRESENTATION OF THE RESULTS IN HUNGARY

Hungarian employees are satisfied with their new work environment, which has become an open office area.

For the question, how the new environment motivates and supports them, colleagues reported that the office is inspiring and provides good atmosphere for them, but other factors are more important in motivation, such as communication style of the management, flexibility and different benefits.

Hungarian employees think that actual work environment does not effect on their performance directly, they mentioned other factors like flexible working hours, improved equipment, salary, benefits etc.

In terms of office furniture, employees are satisfied. Modern, closable cabinets and comfortable office chairs were appreciated. Hungarian respondents were more satisfied with furniture than Czech colleagues. Almost all employees find the temperature, humidity and climate in the office satisfactory. The highest number of votes was for the fourth grade on a scale of 5,

with the majority rating the office air as adequate. Office lighting was reported as appropriate in general. Colleagues who sit nearby windows were more satisfied due to natural light, but other colleagues were also satisfied. The layout of the office allowed to allocate lighting access to each desk, which may help in increasing light if needed.

Colours of the office were reported by the respondents differently, these answers were the most diverse and subjective. The blue, white and grey colors in the office were slightly acceptable, they were considered as too industrial and cold. Half of the respondent did not care about the colors (neutral opinion), while the other remaining three respondents consider the colors in the office to be significantly appropriate. Based on the interviews the smell of the place is normal, they did not smell anything. Maybe cleanliness, but very neutral.

Rest rooms are appropriate (clean, equipped, etc.). Colleagues shared their opinion about general cleanliness and well-equipped areas. Kitchen is appropriate (clean, equipped, etc.) and well accepted by the employees, but it is too small. There is only a small canteen available for a break from work or a private phone call. Colleagues feel good and have a great mood to go to work, but they do not believe that is it because of the new work environment. Most of the people in Hungarian office think, that actual work environment does not effect on their health.

The employees opinion is that the office design is clearly in line with the image of the company. More two thirds of respondents say it is significantly or maximally consistent, both in design and composition.

Hungarian employees expressed satisfaction with the design of the office. However, they made suggestions regarding the layout. In the previous office, they sat in a large circle, everyone could see each other, but now they sit in a row, so they have to walk to the two tables further away from each other to avoid communicating in a raised voice.

For the question, how positively effect on your daily satisfaction the new office (open office) compared with original environment (before the refurbishment), Hungarian colleagues shared positive thought regarding the new open office in comparison with the old one. The old design has not followed the company structure. The new one gives more variability and flexibility and modern look like. Colleagues more satisfied with the new environment in general.

Of course, every office has advantages and disadvantages even in the Hungarian office. Many people missed the large spaces and the more spacious private working environment of the old office. They also pointed to the noise level, which is often more than the permitted level. Especially when guests arrive or when additional managers enter the office from the area. They report that their work is often interrupted by the ringing of a telephone or simply distracted by loud background noise. They reported the lack of rest zones. In addition, a storage area of a few square meter is used to organize office supplies is the only rest zone to handle private calls.

## CONCLUSIONS AND RECOMMENDATIONS

In case of both organizations, the following conclusions are stated. Previously old-fashion design, dis-functional zones, old and huge furniture stayed in the office. Due to changes of the organization, increase or decrease the number of employees,

and business transformation, the office design and layout have not followed the changes. That is the reason why, based on top management team decision European offices transformed into open office areas including Czech office. An internal professional project team managed the refurbishment including European procurement director, EHS director, lawyer, project team lead and technical director. The project realized on time, quality, quantity and cost due to the project plan. Fortunately, construction costs have not been increased significantly due to fixed contracts.

The result of office refurbishment is a new 'open office' work environment. Two external suppliers supported the construction and finished in a couple weeks, while colleagues can work. Therefore, workflow has not been stopped. Some colleagues worked from home, or taken some extra days. Refurbishment includes brand new carpet in blue colour due to company logo, which is the combination of white and blue. The walls painted in two-layer white colour, as interior doors as well. LED lighting implemented in the whole office. Interior walls changed to glass walls for better visibility. The office was mechanically separated, including the ventilation system, the flow of cold and hot air. A separate electric cabinet has been isolated, as well as an individual water meter installed.

At the end decoration, marketing materials, plants implemented. In addition to the mentioned material realizations, a close professional relationship and excellent cooperation were also established as a result of the project. I feel glad to be able to part of this project. As this project is a perfect example of joint cooperation, long and persistent work both within organization and with suppliers.

All in all, project could not have been implemented without cooperation. Project team worked closely in direct context, authentic, and truth-based communication carried the project forward. The use of quality materials further strengthened the cooperation, thereby created trust between project members. Weekly project meetings and its reports clearly defined next milestones. Due to the complexity of the office refurbishment project, it was necessary to work together effectively both online and offline.

Overall, Czech workers are generally satisfied with their working environment and consider their working conditions to be good. However, they think it has no impact on their work performance. They are quite satisfied with the furniture, keep it functional, but the small "shared desk" caused less comfort feeling. After the renovation, they are satisfied with the air temperature and ventilation. They are also satisfied with the lighting and the amount of natural light in the common areas and above their work area.. The rest areas, including the kitchen and toilets are highly appreciated, as they have also been renovated during the investment project, making them more functional spaces. Well-being comfort is also very good in everyday life thanks to the refurbished working environment.. They agree with the design of the current ergonomics and consider the composition to be appropriate.

Hungarian workers are satisfied with their working environment and consider their working conditions to be good. However, they think it has no impact on their work performance. They are clearly satisfied with the furniture and its functionality. After the renovation, they are satisfied with the air temperature, the ease of adjustment and the adequate ventilation. They



are also satisfied with the lighting and the amount of natural light in the common areas and above their work area. The rest areas, including the kitchen and washrooms, are highly appreciated, as they have also been renovated during the investment project, making them more functional spaces, they agree with the design of the current ergonomics and consider the composition to be appropriate.

Based on the results of the interviews recommendation were addressed to European management team.

It is important to create closable offices for functional leaders to handle face to face meetings within the organization members and also to be able to receive external experts. Furthermore, it is also important to construct rest zones where employees are able to spend their free time to have a private call or just be able to stay alone for a couple minutes to have rest. Those rest zones have not been constructed yet in any European office, but employees reported high needs. Therefore, it would be great to consider the possibility to implement in case of further design.

It is important to review noise reducing possibilities, actually only the carpet reduces noise at present.

Attention should be paid for furniture comfort and choosing variable version, therefore layout can be anytime changed, which bring new feeling to the working environment with low investment and also gives the possibility to follow organizational changes as business growing or moving. It represents a real value for employees. Research does not reflect on ergonomic environment, but it is necessary to provide optimal space for working environment of each employee.

These suggestions were appreciated by the manager of the Hungarian office, who highlighted that the Hungarian project was one of the most successful ones in Europe. The refurbishment of the Hungarian office took place within eight weeks, which is an excellent performance in Europe, no other country had been able to finish the project within this short term based on project plan. The manager agreed on suggesting own and closable offices for functional leaders, choosing functional, good quality office furniture in case of further investments. Designing and constructing resting zones was also appreciated. The research highlighted the importance of employee satisfaction about working environment and helped to point out further direction of development for the managers.

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