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From the 'Action Office' of the 1960s to the 'Office for the Future' of the 1990s

by Lars Klusell

From the 1960s ...

Offices adapted to the requirements of the activity in question are nothing new. One of the forerunners to many of those ideas we see carried out today is Robert Propst's *Action Office*, an office concept that was formulated at the beginning of the 1950s, and fully described in the book 'The office – a facility based on change' which was published in 1968 by the Herman Miller Research Corporation. In his book Robert Propst takes up a number of the factors that are still emphasised today by advocates of 'Offices for the future'; workplaces designed according to needs of the type of work to be carried out, ergonomic and economic aspects as well as efficiency as regards the way in which work is carried out. At the end of the book Propst takes up one of the factors that constitutes the basis for the accomplishment of alternative offices – activity analysis.

Propst is very thorough in his approach, and in an article published in the magazine *Human Factors* (1966) he takes up a number of basic questions: What is the reason for having offices? What sort of work is carried out in the office? How shall materials, design, activities and human aspects be coordinated in such a way that the net effect of this interaction will be as big as possible?

These questions might at a first glance appear easy to answer, but after some consideration their complexity becomes apparent. Propst deals with these by setting up a comprehensive programme



During recent years much has been written about new alternative office environments and changing ways of working. The traditional office has been questioned, and a large number of pilot projects - 'Offices for the future' have been carried out in Sweden (about 50 up to March 1996). Office space designed according to the requirements of the activity in question has been the aim. In the following article the author attempts to describe developments to date as well as looking into the future.



The illustration shows a conceptual design for an office for specialist staff.

for research where the focus is on issues which describe the office and office work from the point of view of aspects such as "is the office adaptable to change?", "can the office be adapted to the different members of staffs' ways of working and capacity for work?", "is the office adaptable both, as regards to being 'open' from the point of view of communication, and as regards to being 'closed' from the point of view of concentration?".

These are problem areas och issues which are still relevant when it comes to today's flexible offices, and current studies show that the special balance between being open and being closed has not yet been solved in a satisfactory manner. In his programme for research Propst carries out a study where he compares the productivity of three groups accommodated in three different office layouts – from a poorly illuminated dull environment, to a cheerful and varied environment where the variation even includes the opportunity to change working positions (standing/sitting). The findings illustrate that the stimulation of vision and variation in working positions lead to a significant increase of productivity as defined in the study.

... to the 1990s

Alternative solutions for offices have acquired a strong commercial accent, and as a result a large number of terms have come to be used. Examples of terms used in literature are as follows:

- · Lean office
- · Office of the future
- Offices for the future
- Office 2000
- Non-territorial office

- · Ring-in office
- JIT Just-in-time office
- KIFE

These 'flexible office environments' have become commonplace to a large extent since the end of the 1980s, and by definition they have been described in English language literature as follows:

The concept of the non-territorial or free address office, in which a given desk, office or workstation is intended to be used by different people at different times.

Research within the field of offices, with special emphasis on offices for the future, has during the 1980s and 1990s been successfully carried out at Cornell University in USA under the leadership of Professor Frankling Becker. This research has however a more global perspective, where office design and ways of working are set in relationship to community formation, external environmental issues, distance work, etc.

Comparable studies of different offices where the 'concept for the future' has been accomplished have however been carried out, and here the importance of staff participation and a well executed analysis of activities has been verified. Becker et al take up three different companies where the 'shared office' concept has been implemented in three different ways. The evaluations of these offices that have been carried out take up the effective use of space, the staffs' degree of work satisfaction, questions of efficiency, as well as an estimation as to the degree of personal freedom resulting from the changed layout of the offices.



An example of 'Offices for the future' - Digital Equipment 1994.

The report is concluded by a description of the factors critical to success which were found to be of importance in all three of the projects described. These factors constitute:

- · clear identification of the owner of the project
- to allow those factors contributing to productivity rather than cost to be the driving force in the project
- the advantages for the staff must be identified and also brought into being
- staff participation in the development and implementation process
- overall view of the project floorspace, furnishing, technology, organisation and usefulness
- good standard of interior design
- flexibility in order to be able to meet fresh demands regarding organisation, etc.

Why 1995/96?

One may of course ask what the factors are that cause the notion of flexible offices to germinate such interest just now, and why it has taken as many as 35 years to go from word to action. There are naturally many such factors, but during the first half of the 1990s several of these began to interact in a manner that promoted the 'concept of the flexible office'.

Reduced levels of staffing place greater demands on efficiency for those that remain, excessively large volumes of floorspace have been inherited from the 1980s, technological progress within both information technology and telecommunications, demands for greater and quicker market adjustment for organisations, opportunities for working at home, as well as demands for the better ergonomic design of workplaces and organisation of work. There are certainly additional factors, but these listed have had a great influence on the design of the office.

What can we expect to happen during the coming period?

Flexible offices i.e. offices where people, employees and consultants, work sporadically will increase in number before the 2000s. Mobility on the labour market, less rigid terms of employment, work carried out away from the office in different forms will place such demands on the design of offices and changed working methods that the traditional office structure of today will no longer be able to compete.

The development of new furnishing systems will be necessary. The furniture used in the pilot office schemes which has been produced in recent years is not sufficiently well developed, either in terms of function or quality. As a case in point it can be

mentioned that the flexibility offered by tables of adjustable height is not used. Can this be because the fixed height of the top of the sliding drawers means the adjustable surface of the table is adapted to this height and not to functional height i.e. that of the person using the table? Other issues which one has to face up to may be: which provides the best flexibility, a mobile telephone or an adjustable table?

Practical experience from 'future solutions' suggests that factors such as the *opportunity of working undisturbed* and *concentration* are regarded as changes for the worse in comparison with the office layout one previously sat in. This is a real problem which emerges in several of these alternative solutions, and must be tackled in some way. The solution probably lies both in the design of the premises and the organisation of work, and Propst's question "is the office adaptable both, as regards to being 'open' from the point of view of communication, and as regards to being 'closed' from the point of view of concentration" is therefore still relevant.

But most important of all is to create a process for implementation. The experience available today indicates very clearly that it is the process of implementation which is the A-Z if the changes are to be successful.

This kind of scheme is a project focusing on change rather than a project focusing on property, and thus one cannot accomplish flexible work by means of furnishing!

The development of the flexible office and flexible work will be accentuated during the coming years, and it is therefore of great importance that this line of development is allowed to take place on peoples' conditions.



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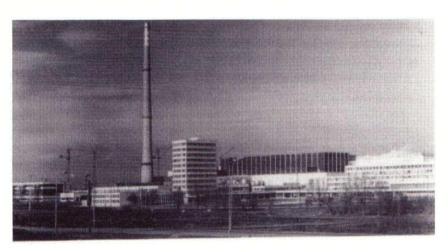
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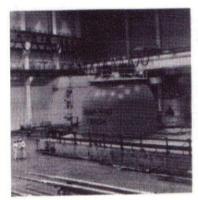
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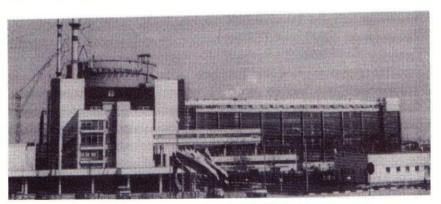


Fig. 1. Nuclear power plant in Kozlodui