

# Long-Term Effects of Activity-Based Working

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**Little is known about the effects of activity-based working in the long term. Even if staff are happy with the concept of activity-based working when it is first introduced, are they still as happy after a few years? Does the concept provide adequate support for activities involving communication or concentration? Does it affect employees' productivity and health? And how sustainable is the concept of activity-based working in any case?**

As part of her final-year research project at the Center for People and Buildings (CfPB), Nicky Mosselman (a student at the NHTV Breda University of Applied Sciences) contributed to research into the long-term effects of activity-based working. This involved looking at the employee satisfaction, productivity and health of office staff (Beijer, Maarleveld, and Brunia, 2009). Activity-based working is a form of flexible working: the workplace is best fitted for specific activities, such as focused working, making phone calls, group work, meetings and filing.

The long-term effects were studied at the Facility Services Centre of the Tax Administration (B/CFD) in Utrecht. Five research methods, derived from the CfPB's working environment diagnostic tool (WODI), were used in the study: literature review, document analysis, measurement of occupancy rates, questionnaire (WODI) and focus group interviews. WODI measures in a systematic manner the use and perception of the working environment.

## Motivation

In April 2002, the B/CFD moved into a new building in Utrecht with an activity-based workplace concept. The old premises had become too small on account of the growth of the organisation.

In 2003, shortly after the B/CFD had

moved in, the CfPB carried out a study into the staff's perception of and satisfaction with the working environment, their health and the image of the new workplace. The staff were generally very satisfied with their new premises and workplace concept. There were some issues surrounding filing and the perceived lack of privacy resulting from the new, more open working environment. Almost seven years after they moved in, what are the long-term effects of this new workplace concept? How satisfied are the staff now? How is the concept being used and how are new employees introduced to it? What about occupancy rates? Are there any differences in perception between 2003 and 2009 and, if so, what are the causes and consequences of these differences?

## Changes after moving in

Over the past seven years, the workplace concept of B/CFD has hardly changed. There have been no structural alterations, internal relocations, new policies implemented or large-scale replacement of furniture. There are, however, a number of aspects that have changed:

- on account of the low occupancy rate in the early years, it was decided to lease out part of the building to another business unit within the organisation. The result is that in

2009 there are fewer workspaces available for B/CFD than in 2003.

- in recent years the organisation has grown and expanded with the addition of a new department. There are more employees in 2009 than in 2003.
- the 'phone zones' have been removed because they were not being used. The 'push zones' (charging and updating points for laptops) are no longer in use on account of developments in technology.
- the 'landing zones' have disappeared because they were in the wing that has been leased out.
- the 'web zones' (separate areas for accessing the Internet) have been reduced in number as a result of cutbacks.
- a number of lockers and filing cabinets have been added.

## 2009 research results

In 2009, the staff are still very satisfied with their premises (figure 1), also in comparison with other organisations surveyed by the CfPB. In terms of their working environment, the staff are most satisfied with:

- the atmosphere and look of the interior (79% satisfied)
- the layout of the building (77% satisfied)
- opportunities for communication and social interaction (72% satisfied)

The employees are also very satisfied with the accessibility of the building, the opportunities for working outside the office and the content and complexity of their work. The 2009 evaluation has highlighted some issues requiring attention, including:

- the indoor climate (40% dissatisfied)
- the filing and storage facilities (39% dissatisfied)
- privacy (37% dissatisfied)

## Long-term effects

The results in 2009 were compared with the results in 2003. We examined significant differences with  $p < 0.05$ . This represents a certainty of at least 95% that the difference actually exists and is not the result of chance.

## Habituation and image

Many employees are satisfied with the image of the office and their working environment, but the score is lower than in 2003. The same applies to the facilities (such as coffee and tea vending machines, photocopying facilities and furniture). Habituation to the working environment and the facilities may be playing a role here. The facilities are no longer as exciting and new as they were seven years ago. More than three quarters of the staff indicate that they would not want to go back to the old traditional concept.

## Openness and accessibility of colleagues

In 2002 B/CFD chose to adopt a transparent and open structure. In 2009 its employees are significantly more satisfied than in 2003 with both the physical accessibility and the

accessibility by telephone of themselves and of other people (colleagues and external parties). This also applies to their satisfaction about being accessible at all times.

## Change in working patterns

The employees' working patterns have changed. In 2003 the employees indicated that they spent 44% of their time on focused working. In 2009 this percentage has fallen to 32%. More time is spent on meetings in 2009 than in 2003. According to the staff, the office has become more of a 'meeting place' where people mostly work in teams and there is a lot of consultation. Work which requires focused concentration is, as far as possible, carried out at home, on the train or at another office.

## Use of the working environment

The number of employees has risen, while at the same time fewer workspaces are available as a result of one wing of the building being leased out. The working environment is therefore much busier in 2009 than it was in 2003. This has led to a more intensive use of the available workspaces. On average, 76% of workspaces (cabins, open workspaces, lounge area and cubicle area) are occupied. The maximum occupancy rate rises as high as 97%. This rate does, however, include a significant proportion of workspaces that are temporarily unoccupied: between 30% and 40%. Temporarily unoccupied means that employees have left their things at a workspace, but the employees themselves are not present. The multifunctional spaces (library, project table, team rooms and lounge) are occupied on average 48% of the time.

The employees' favourite workspaces are the cabins and the open workspaces. These workspaces have the highest average occupancy rates (88% and 83%). What is striking is that both areas are temporarily unoccupied around 40% of the time. When the concept was first introduced, various policies were established for the use of the working environment, including an agreement that employees would leave a workspace empty if they were not using it for more than two hours. In spite of this clean desk rule, almost two thirds of the employees indicate that they never or only occasionally leave their desk empty. Many employees find this difficult, because they would have to clear away all their things and log out. They prefer not to have to take their things with them and find it annoying to have to reconnect and boot up the laptop on their return. This takes too much time, according to the employees. In general, it appears that the policies have been watered down and that new employees are not made fully aware of the policies or of how the workplace concept should be used.

## Availability of workspaces

The flexibility factor has changed over time. The flexibility factor

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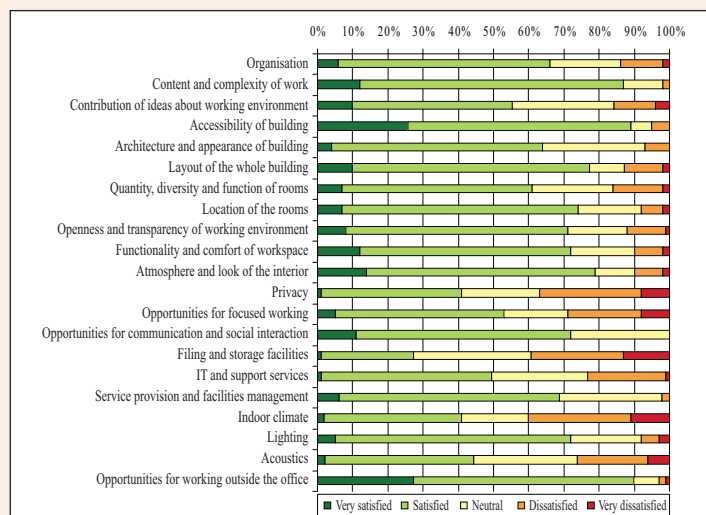


Figure 1: percentage of B/CFD employees (dis)satisfied with their working environment in 2009 (topics taken from WODI-light)

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represents the ratio between the number of workspaces and the number of employees. When the concept was introduced, the flexibility factor was 1.2, i.e. 1.2 workspaces were available for each employee. In 2009 this has fallen to 0.8 workspaces per employee. This means that it is less easy for employees to find a workspace that suits the activity they wish to work on at that time. In 2003, 88% of employees indicated that they could always find a workspace and 80% of people found the space they wanted. In 2009, 60% of employees say they can always find a workspace and 50% can always find the space they want.

In particular, employees are less satisfied in 2009 about the opportunities for focused working: 30% are dissatisfied compared to 3% in 2003. In interviews, employees indicate that the problem is mainly the result of the cabins being occupied. These are the first areas to be occupied in the morning and then remain so throughout the day. It is striking that focused working has decreased significantly as an activity, but that nonetheless employees use the cabins for the whole day or (often) keep them occupied by leaving their things there. It will therefore be necessary to talk to the staff again about the activity-based use of workspaces.

In 2009, people are significantly less satisfied with the rooms for (in)formal meetings and the support that the

working environment provides for scheduled meetings. This is connected with the use of these areas. The meeting and team rooms are occupied on average 60% of the time. In particular, Mondays, Tuesdays and Thursday mornings are busy times.

### IT facilities becoming outdated

After seven years, not much has changed in the organisation in terms of IT. The staff are significantly less satisfied with the technology (wireless working, electronic access, computers) than they were in 2003. One possible explanation is that the technology is outdated, combined with the fact that employees are accustomed to using new technology at home. At B/CFD, full Internet access is only possible from just a few separate Internet areas. At their workspace, employees only have limited Internet access (only approved sites that appear on a 'white list' can be accessed) and there is no wireless network in the office for security reasons.

### Productivity and health

In 2003, half the people believed that the working environment encouraged productivity. In 2009 this has fallen to a third. The employees believe that in general the working environment has a positive effect on productivity, communication with colleagues and interactive office work. They feel it has a less positive effect on focused working, making phone calls and filing activities. The dissatisfaction with regard to making phone calls may be explained by the disappearance of the 'phone zones'. The cabins are not

sufficiently available for quiet work and/or making phone calls. The closed team areas are the only alternative space for these activities.

The working environment does not lead to any workplace-related health problems. In 2009 there has been a decrease in problems such as headache, fatigue, shoulder, wrist or arm complaints, stress and colds. The fall in health problems ranges from 12% (fatigue and stress), 19% (headaches) to 29% (colds and shoulder, wrist and arm complaints).

### Conclusion

In general, the employees are still very happy with the working environment and the workplace concept. The development of the concept has in the long term produced a pleasant working environment in which employees feel at home and can carry out their work. A significant increase in staff numbers and a changed activity pattern have been handled without any problems. B/CFD's activity-based workplace concept appears to be sustainable and successful. There are a few minor issues, which may be explained partly as the result of habituation and partly as the result of advances in technology and knowledge. Furthermore, continued attention needs to be paid to appropriate employee behaviour with regard to occupying workspaces and the introduction of the concept to new employees.

### Recommendations for FM

A number of lessons may be learned from this study. If you are a facilities manager who is about to introduce a

new office concept in your organisation, you might want to pay attention to the following points:

- Provide a detailed explanation of the workplace concept in the induction programme for new employees
- Avoid any dilution of the policies. This may lead to rooms being temporarily unoccupied for long periods. Continue to inform the organisation about the concept and the associated policies. Make management and the employees themselves responsible for enforcing these policies.
- Highlight any signs of facilities becoming outdated by regularly evaluating services, resources and the working process.

Beijer, M., Maarleveld, M. and Brunia, S. (2009). *Remaining flexible in the Forum Flex - A long-term evaluation of experiences and productivity in B/CFD's innovative office concept*, Delft, Center for People and Buildings

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