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Accommodation Choice Model**

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## Chapter 18

### **Evidence-based decision-making on office accommodation:**

#### **Accommodation Choice Model**

Theo J.M van der Voordt, Yolanda M.D. Ikiz-Koppejan and Anca Gosselink

### **18.1 INTRODUCTION**

Based on a literature review, case studies, and personal involvement in accommodation processes, the authors developed an “Accommodation Choice Model” in order to support organization-centered accommodations. The model involves making, coordinating, elaborating, and implementing accommodation choices through a consciously designed process. The model includes four steps that focus on the substantive choices, a “drive belt” for steering the process, a lynchpin for aligning and testing these steps and process related issues, and a playing field in which the process occurs. The assumption is that a structural and coordinated progression through substantive and procedural choices in a number of steps will generate a better accommodation that is appropriate to the organization. In addition, the more explicit approach to making choices will make the process run more smoothly.

This chapter discusses the various components of the Accommodation Choice Model, as well as critical success factors in its application. The model is illustrated with practical applications in the development of new accommodation strategies.

## **18.2 MODELING ACCOMMODATION PROCESSES**

Every organization eventually faces the question of whether the accommodation is still consistent with their ambitions, new ways of working, and changed situations. The presence of many different objectives and stakeholder priorities makes re-arranging the accommodation within an organization a complex process of change. A clear and well-structured model of “evidence based” process management could help to support decision-making, from initiation to elaboration and implementation. For this reason, the Delft Center for People and Buildings (CfPB) developed a choice model for organization-centered office accommodation. The model consists of four steps, a lynchpin, a drive belt, and a playing field. Figure 1 shows the basic components of the model. In paragraph 28.3 the model will be elaborated.

### *18.2.1 Goal*

The Accommodation Choice Model aims to enhance awareness regarding the many steps that must be taken and choices that have to be made in order to realize a successful accommodation policy or a new working environment that corresponds to organizational objectives, that fits with internal and external constraints, and that copes with the needs of all stakeholders. It aims to support decision making on organization-centered accommodation and to facilitate reflection, both during the development process and after completion, on intended and unforeseen effects. The model is not intended to be prescriptive or normative but can be used as a frame of reference and as a tool for communication and management. Pre-design and post-occupancy evaluations can support evidence-based reasoning.

### ACCOMMODATION CHOICE MODEL - BASIC FRAMEWORK

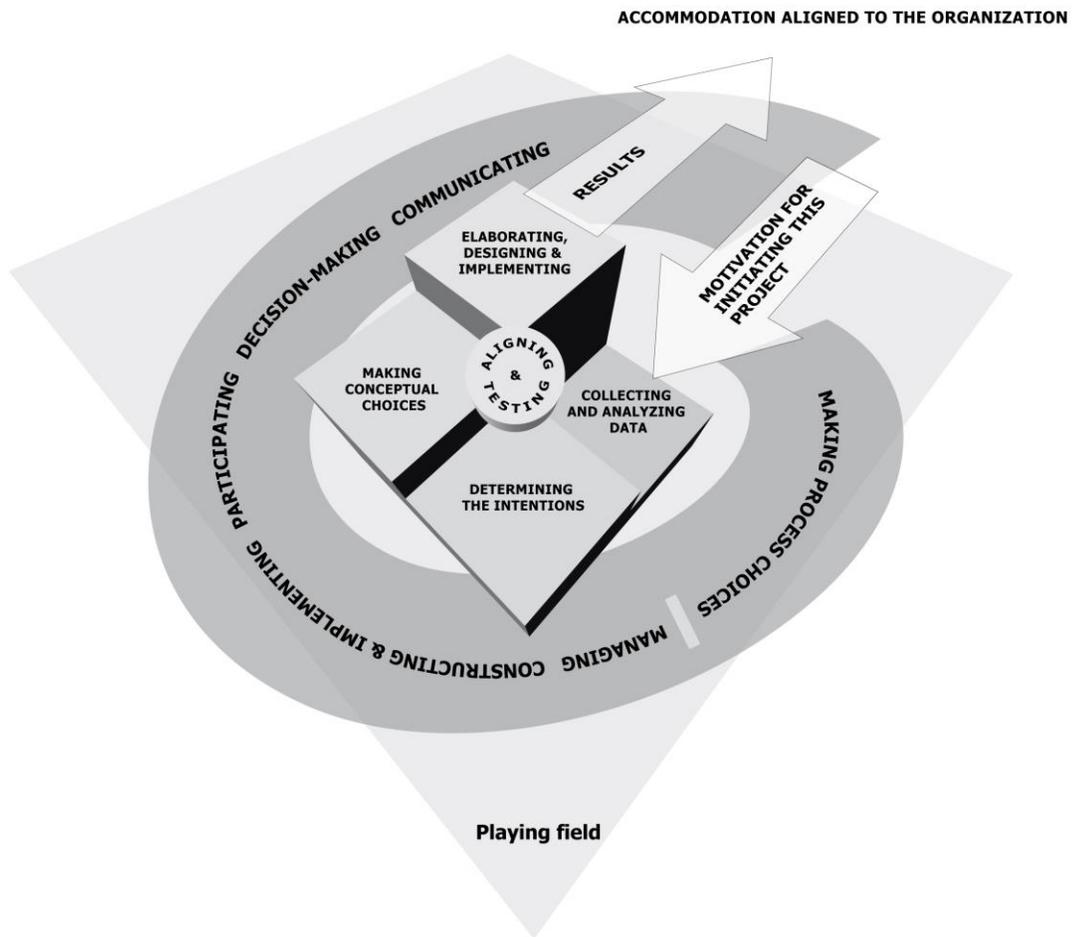


Figure 1: Accommodation Choice Model: Basic components

#### 18.2.2 Key characteristics

Key issues of the model are:

- The model focuses on accommodation processes in which an organization aims to make essential changes in its accommodations.
- Its scope includes both substantive and procedural choices.

- It proceeds from the perspective of the organization rather than from the usual steps specified in design and construction management.
- The steps are followed several times throughout the process, in a cyclic and iterative fashion, at varying levels of detail, and from the perspective of various target groups.
- The model provides in regular reference to previous steps and the anticipation of future steps in order to determine whether the process of choice is progressing consistently and whether it corresponds to the available information.

### **18.3 ELABORATION OF THE MODEL**

The components of the Accommodation Choice Model have been elaborated in a number of issues that should be considered in accommodation processes (Figure 2).

#### *18.3.1 Motivation and results*

The motivation is what sets the accommodation process in motion. The process ends with results that are customized to the organization. The final result could be agreed documents such as an elaborated program of requirements, an accommodation policy, a corporate standard, or a new working environment with a code of conduct how to use the new environment.

#### *18.3.2 Four steps concerning the content*

Step 1 involves the collection and analysis of information regarding the context, vision, and mission of the organization, conditions, organizational processes, expected changes,

costs, and satisfaction with (and use of) existing accommodations. Additional input is provided by the available knowledge regarding organization-centered accommodations.

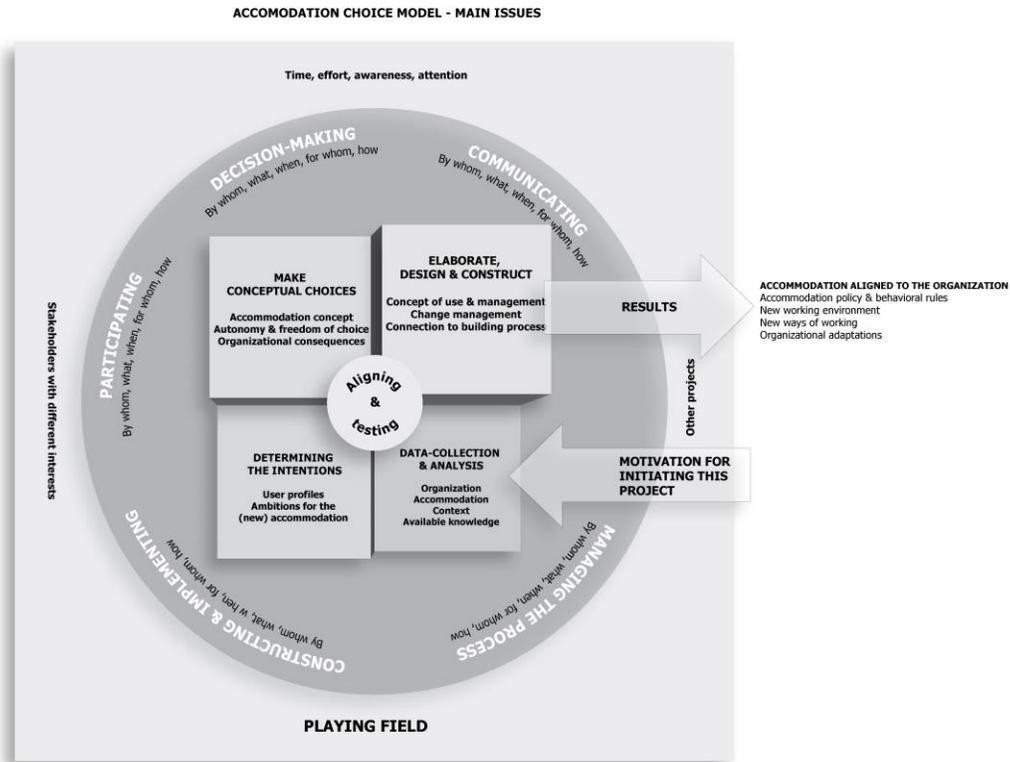


Figure 2: Elaboration of the Accommodation Choice Model

In Step 2, the intentions are specified: What does the organization wish to accomplish with the accommodations and what does this mean for the organization? Real estate objectives usually include increasing labor productivity by improving communication and collaboration, accelerating the exchange of knowledge, reducing costs, achieving flexibility, and supporting culture or cultural change (Arge & de Paoli, 2000; Van der Voordt, 2003; Van Meel et al., 2006, Lindholm et al., 2006; De Vries et al., 2008). See table 1 for an overview.

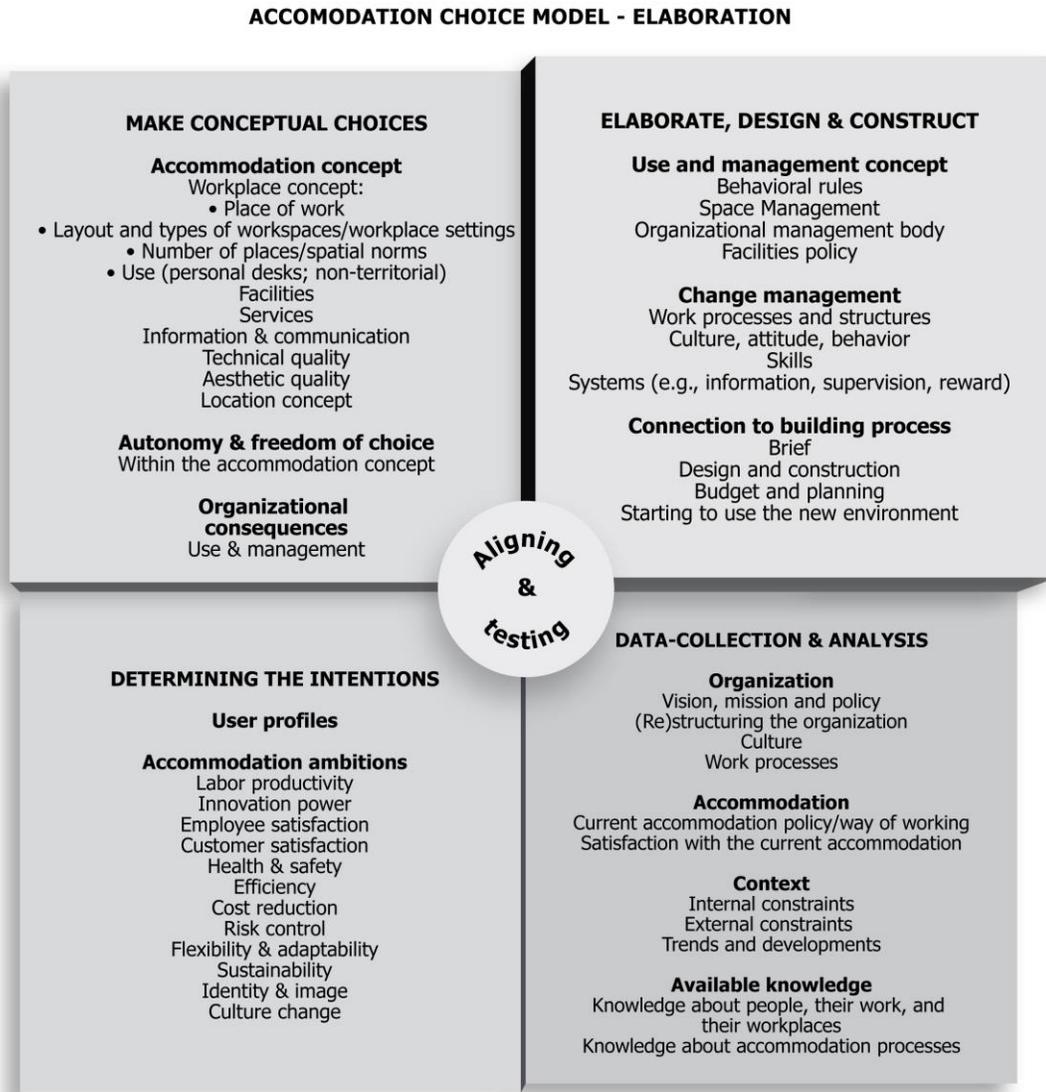


Figure 18.3 Further elaboration of the four steps

A second component of Step 2 involves the specification of user profiles and the choice between one size fits all or differentiation in the plan in relation to different functions, activity patterns, or the organizational structure.

Table 1: Frequently mentioned accommodation ambitions

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• Increase labor productivity	• Reduce costs
• Enhance innovation power	• Control risk
• Increase employee satisfaction	• Increase flexibility and adaptability
• Increase customer satisfaction	• Increase sustainability
• Improve health and safety	• Enhance identity and image
• Increase efficiency	• Facilitate cultural change

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Step 3 consists of making conceptual choices for the accommodation plan, regarding the workplace concept, facilities, services and resources and IT as well as the esthetic and technical quality. An important component of Step 3 involves determining the degree of freedom of choice that will be open to the various levels within the organization and the organizational consequences of choices (e.g., rules of conduct and archiving procedures). Step 4 involves the elaboration and implementation of the choices into a program of requirements regarding such matters as building choice, design, usage and management plans, budget, and planning. The first three steps are crucial to the smooth progression through the fourth step.

### *18.3.3 A drive-belt concerning process choices*

In addition to substantive choices, procedural choices are necessary. Procedural questions to be addressed pertain to the direction, execution, participation, decision-making, and communication; in summary: by whom, what, when, how, for whom, and with what

instruments. The procedural choices are what actually launches a project. Various instruments are available for addressing the question “with what instruments,” including: a diagnostic toolkit for the working environment that can be used to measure employee satisfaction and occupancy levels (Maarleveld et al., 2009); a workplace game for exploring and discussing people’s knowledge, attitudes, and behavior (De Bruyne and De Jong, 2008); a Workplace Guide that explains the characteristics of different types of workplaces (van Meel et al., 2007); and PACT (Places and ACTivities), a computer model that helps to determine the required number of each type of work space. In line with the model we also developed a “choice matrix” to support the translation of ambitions into accommodation choices. This matrix draws connections between organizational objectives and conceptual accommodation choices. The aim of the matrix is to make ambitions explicit and to translate these into choices for various elements of the accommodation plan. It can also help to establish priorities with regard to the different ambitions involved.

#### *18.3.4 Lynchpin*

The lynchpin in the center of the model connects all elements through continual evaluation, the coordination of information, intentions, conceptual choices, and elaboration, in addition to procedural choices. Relevant questions are whether all aspects of an accommodation concept have been sufficiently addressed, whether the choices (or freedom of choice) correspond to the collected information and ambitions, and whether sufficient attention has been paid to procedural matters in all phases of the model. The lynchpin also involves the documentation of choices and what has and has not been done

with the knowledge and ideas from parties. Systematic reflection increases the chance of an optimal result.

### *18.3.5 Playing field*

The steps are taken on a playing field with various players, each with their different wishes and priorities, energy, and attention that the organization can unlock for the process and for relations with other processes. The awareness of and ability to chart this playing field can help to gain insight into possible difficulties in the process and to make optimal use of the possibilities that are available.

## **18.4 JUSTIFICATION OF THE ACCOMMODATION CHOICE MODEL**

The usual methods of project management are not well suited to the complex process of change management. Most methods lack an integrated orientation on both content and process. The new model builds on existing models and concepts of classical mechanistic management process; a human relations perspective regarding participative decision-making and communication; input from the personal experiences of the authors and their colleagues in accommodation processes and evaluations of cases in the public and private sectors. Among other devices, the model draws upon the People-Process-Place model (Duffy, 1992), the process models developed by Horgen and colleagues (1999), theoretical developments from the field of Corporate Real Estate Management that link organizational goals to real estate interventions (e.g., De Jonge et al., 2009), and research on conceptual development, decision-making, and implementation strategies (e.g., Guiza et al., 2002). Valuable concepts that have been integrated into the model include:

- the alignment of various sub-systems (i.e., organization, space, technology, and social-psychological issues);
- the integration of information about present and future organizational characteristics, the accommodation, and the context;
- short-term and long-term perspectives in order to anticipate future demand and supply;
- the alignment of accommodation choices with organizational objectives;
- a focus on both the intended product and the management of the process with feed-back and feed-forward loops

## **18.5 APPLICATION IN PRACTICE**

In 2009, together with six consultancy firms we established a knowledge group in order to discuss the choice model in relation to their own projects. Participants confirmed the value of the model as a tool for communication, management and sound decision-making and as a checklist to help parties involved in the process to avoid overlooking important issues. The model has also been applied in a number of accommodation processes in which the authors have been involved. Two of these processes are described below.

### *18.5.1 Developing a common governmental workplace policy in the Netherlands*

The Dutch government recently developed a new “corporate” real estate standard. Up until now each department makes its own choices about the design and use of their working environments. This strategy has resulted in a variety of workplace concepts (from single offices with private desks to innovative work environments with flexible use of activity-based workplaces), ratios of people to desks ranging from 0.9 to 1.4 workstation per FTE, and space allocated for each workstation ranging from 29.8 m<sup>2</sup> to

56 m<sup>2</sup> gross floor area per workstation. The new standard specifies that because of rather similar activities the main accommodation choices are to be made at the corporate level, rather than consigning them to the workplace policies of the various departments. Based on the ambitions and all former information, the new corporate standard workplace concept consists of a variety of open and closed workstations with several flexible meeting areas. The aimed gross floor area (GFA) in new projects for each FTE is 16.1 m<sup>2</sup> (based on 0.75 workstations per FTE and 21.5 m<sup>2</sup> GFA per workstation). This represents a major change from the current situation.

During developing the new standard, the model helped to make people aware of the subjects to be considered and the actions to be taken. Prior attention was given to ambitions and user profiles, as well as to workplace concepts and facilities associated with them. Separate projects have been initiated with regard to other accommodation aspects of the model (e.g., services and IT). The model also helped to structure the communication within the process. The aspects were used as table of contents for the draft and final version of the report and provided a common structure and vocabulary for all participants in the process. In workshops involving participants from different departments, the model has been used as a guide for defining areas to be discussed and choices to be made. It also facilitated their ultimate reflection on the process and results. But the decision-making process also had its own unique dynamics. The limited possibility of direct interaction with the actual decision-makers made it impossible to agree and decide on all aspects.. Apart from a logic and sequential reflection on

information, intentions, and decisions, a visionary and attractive story with clear images showed to be important as well.

### *18.5.2 A new accommodation for RIVM*

The Dutch National Institute for Public Health and the Environment (RIVM) is planning to move to another location. RIVM used the Accommodation Choice Model to elaborate their previously specified organizational ambitions and location choices into an integrated accommodation concept. The model provided the project team with a common point of view on what had already been done and what remained to be done. The project team consisted of representatives from the various departments, including the RIVM housing team.

The model helped the project team to reflect on eight site visits to similar organizations with new work environments. The representatives divided their remarks into categories related to the workplace concept (most remarks), facilities, location concept, aesthetic quality and services offered, as these items were of primary interest to the team. Second the former ambitions and conceptual choices were placed into the matrix in order to draw connections with the set ambitions. This facilitated the exchange of previous ideas. For example, because of its ambition to stimulate innovation power by creating a knowledge-sharing environment, the RIVM chose a location on a campus with an academic hospital, a university, and extensive parking places (location aspects), as well as a meeting facility and “Educatorium” (facility aspects). Based on new ideas these conceptual choices to

stimulate innovation power were extended and refined by including workstations for visitors in the meeting area (IT aspects), a more transparent design (aesthetic quality), hospitality services (service aspects), and voids (building aspects).

After the site visits, the “choice matrix” based on the model was used to connect the ideas that the representatives had regarding conceptual choices for their own building to their subconscious ambitions. Why were employees so enthusiastic about the workplace concept of one of the sites, and why did one of the buildings seem to address the needs of their own organization very well? The matrix helped the representatives to enter discussion with each other, reflect on their choices, and become aware of conflicting choices. The exercise resulted in a filled out matrix with elaborated ambitions and substantiated conceptual choices in relation to one or more ambitions.

## **18.6 CONCLUSION**

The experiences clearly show that the Accommodation Choice Model can indeed serve as an important aid and frame of reference for the use of unambiguous terms and to enable a systematic and clearly structured accommodation process. It makes people aware of the necessity of formulating their ambitions clearly, the many choices to be made, and the required balance between goals and resources. The model can also help to compare an organization’s own process and choices with other accommodation processes, enhancing the possibility to derive vital lessons for the organization. For advisors and researchers, the model offers a framework for the structural presentation of both existing and newly developed knowledge. It can increase the transparency of processes while facilitating the

search for new answers. The Center for People and Buildings will collect data from different cases based on this model (including both substantive and procedural data) in order to build a knowledge database. This database is intended to generate descriptive data for conducting benchmark studies and exploring connections (e.g., between objectives and accommodation choices or between processes and the policies that were chosen). This knowledge will contribute to further theory development concerning choice processes. When connected to project evaluations with regard to the effects on employee satisfaction, perceived productivity and other items, the data can be used to support evidence based decision-making.

#### **Lessons learned and next steps for improvement of the model**

- Application of the accommodation choice model and its supportive tools enhances integral and evidence based decision making, from the first initiation to writing a brief, design, implementation and management of the building-in-use.
- Connect the four steps of the model to the common phases in a building process
- Pay particular attention to the different (information) needs of various stakeholders
- Align accommodation goals and accommodation choices to organizational goals, in terms that are familiar to the particular organization
- Make a concise distinction between the building concept (building structure, relations between facilities) and the location concept (e.g., accessibility, facilities nearby).
- Develop simple tools to support the completion of the matrix that links organizational goals to accommodation choices

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**Yolanda Ikiz-Koppejan** received her MSc in environmental psychology from the Eindhoven University of Technology (1995) and followed additional courses in management skills and real estate management. After ten years of working as a consultant in real estate and process management she joined the Center for People and Building in order to conduct research on the design and management of new working environments and to support accommodation change management..This job is being

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**Anca Gosselink** studied Dutch Language and worked for 12 years at the Dutch Government Building Agency, in communication and joining studies with regard to sustainable buildings and working environments. Since 2001 she is a researcher at the Center for People and Buildings. She works on research and decision support tools such as the Integrated Workplace Roadmap, the so-called Places and Activities model (PACT) - a computer model that counts the required number of work spaces per type of work space with the level of desk sharing, number of employees and activity patterns of employees as input, and the CfPB Accommodation Choice model. In 2006 she received her Master in Organization, Culture and Management' from the Utrecht University. Anca published papers on personalization at the workplace and on decision making processes.