

Employee's preferences for services and facilities offered in serviced offices

Citation for published version (APA):

van de Kar, M. A. P., Appel-Meulenbroek, H. A. J. A., van den Berg, P. E. W., & Arentze, T. A. (2017). Employee's preferences for services and facilities offered in serviced offices: results of an empirical study. In S. Balslev Nielsen, P. A. Jensen, & R. Brinko (Eds.), *EFMC 2017: Research Papers for EuroFM's 16th Research Symposium, 25-28 March 2017, Madrid, Spain* (pp. 193-202). Euro FM/IFMA.

Document status and date: Published: 01/01/2017

Document Version:

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.

• The final author version and the galley proof are versions of the publication after peer review.

• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- · Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.tue.nl/taverne

Take down policy

If you believe that this document breaches copyright please contact us at:

openaccess@tue.nl

providing details and we will investigate your claim.



RESEARCH PAPERS FOR EUROFM'S 16TH RESEARCH SYMPOSIUM EFMC 2017 25-28 APRIL 2017 IN MADRID, SPAIN

 $\frac{\text{SUSANNE BALSLEV NIELSEN, PER ANKER JENSEN AND RIKKE BRINKØ}{(\text{EDITORS})}$





Employee's preferences for services and facilities offered in serviced offices: results of an empirical study

Mike van de Kar Eindhoven University of Technology <u>mikevdkar@gmail.com</u>

Rianne Appel-Meulenbroek Eindhoven University of Technology <u>h.a.j.a.appel@tue.nl</u> +3140-2472092

Pauline van den Berg Eindhoven University of Technology p.e.w.v.d.berg@tue.nl

Theo Arentze Eindhoven University of Technology <u>t.a.arentze@tue.nl</u>

ABSTRACT

Purpose and theory: Serviced offices are popular, offering many services and facilities to attract tenants. As research showed that most business centres occupy similar buildings, services are important to differentiate. They are also an important reason for choosing a specific serviced office. All kind of organizations (from freelancers to large corporates) use them and their characteristics are likely to influence how they value different services. This study identifies which services/facilities are perceived as most important by which types of end-users.

Approach: Data were collected through a questionnaire among 137 end-users in 13 serviced offices in the Netherlands. With principal component analysis 31 services and facilities could be reduced to six independent factors and four additional services. Multiple regression analyses was used to determine effects of user characteristics (employee demographics, job characteristics and reasons for using serviced offices) on perceived importance of each service/facility (factor).

Findings: Results showed that age and educational level influence importance of services/facilities, especially interactive ones (e.g. workshops). Organizational characteristics had little effect on perceived importance. The reasons for using serviced offices showed expected effects on importance of services, e.g. those using the office to work in a certain atmosphere found interactive facilities more important.

Originality/value: So far, research on effects of user characteristics on perceived importance of services/facilities has focused largely on single-tenant offices and large corporates. Serviced office owners and operators can use the insights obtained from this study to differentiate their product offer from the rest and aim for specific tenant market segments.

Keywords: Serviced offices, user preferences, services and facilities, co-working.

1 INTRODUCTION

Vacancy rates for office space in the Netherlands and many other Western European countries have increased dramatically since the start of the economic downturn. New Ways of Working further increases office vacancy, as the average number of square meters per FTE is decreasing that way (Lokhorst, Remøy & Koppels, 2013). Furthermore the labour market has become more flexible recently. Both the number of employees with a flexible labour contract and the number of freelancers have increased substantially over the last ten years (CBS & TNO, 2015). These developments have caused landlords to convert vacant single-tenant office buildings to business centres to offer a variety of smaller floor areas to multiple tenants. These business centres offer more flexibility with shorter lease terms (e.g. monthly).

Weijs-Perrée et al. (2016) identified four different types of business centre concepts in the Netherlands, namely regular business centres, serviced offices, co-working offices and incubators. Regular business centres are the oldest type. They simply offer office space with few or no services and facilities to those that are too small to afford their own office. Business incubators specifically focus on supporting start-ups and have been used mainly as an economic development tool. They have been the subject of many academic studies (e.g. Hackett & Dilts, 2004). Serviced and co-working offices have surfaced more recently and are upcoming. They generally offer a large range of services and facilities and so far scientific research on these concepts remains scarce. This is surprising, as specifically this market is growing strongly without the necessary insight in user preferences to offer what is really demanded.

Most business centres are quite similar with regard to physical aspects and should thus differentiate themselves with characteristics like services, contract types or social spaces (Weijs-Perrée et al., 2016). Gibson & Lizieri (2000) showed that the access to support services is an important reason for tenants to choose for a serviced office. Moreover, 40 percent of the tenants indicated that the available services were in the top three of selection criteria for a specific serviced office (Gibson & Lizieri, 2000). Serviced offices therefore continuously adapt their concept, services and facilities (Laterveer, 2011). But end-users of business centres are likely not homogeneous and it is expected that end-users with varying characteristics do not value these services and facilities to the same extent. Business centre operators could use such variations to differentiate their product offer and attract specific tenant segments. As up until now no studies have been conducted on this subject, this paper aims to give insight in service menu differentiation possibilities, by exploring how user characteristics influence to what extent services and facilities are considered important. Although a distinction between serviced offices and co-working offices exists, it is hard to see this in practice. The main difference lies in the intention of operators of co-working offices to stimulate collaboration and interaction between tenants (Kojo & Nenonen, 2014). Many serviced offices apply a hybrid concept, also offering co-working space in part of their building. Therefore this paper focuses on serviced offices and includes hybrid variations with co-working concepts.

The next section reviews existing literature on serviced offices, the characteristics of their users and the services and facilities that are offered. Next the approach and results are discussed of a survey among 137 end-users of 13 serviced offices in the Netherlands on importance. Last, a conclusion is drawn and recommendations are given for practice and for future research.

2 SERVICED AND CO-WORKING OFFICES

There are multiple overlapping markets for serviced office space, defined by quality of space, location and occupier (Gibson & Lizieri, 2000). The sector is relatively fragmented and operators vary in terms of their scale and scope (Dabson & McAllister, 2014). There seems to be a distinction between a few large, often international, operators that have a mix of large corporate and SME tenants and multiple small operators that focus on a more local market of SMEs, start-ups and freelancers (Peltier, 2001; Troukens, 2001; Dabson & McAllister, 2014). Due to the diversity of the market it is hard to generalise about the serviced office sector. The different types of tenants will likely have different needs regarding the offered services (Troukens, 2001).

Peltier (2001) showed that large and small serviced office operators do offer different products, aligned with their diverse tenant target groups. Large serviced office suppliers operate on a multinational scale in order to serve their corporate clients. Generally they are located on prime locations in grade-A buildings and offer a sophisticated set of products and services. Consistently, their clients expect to pay a premium for the offered product and services, compared to regular office space. On the other hand, small serviced office suppliers operate on a local or regional level, are located in ordinary adequate offices and offer a limited number of products and services. Their clients are willing to compromise product for cost and consequently expect to pay less compared to regular office space (Peltier, 2001). This lower price for the space and services can be offered because they can procure a large range of services at discounted rates, due to scale advantages and existing relationships with suppliers (McAllister, 2001).

The business model of serviced offices is funded based on the same principles as other forms of outsourcing, namely the conversion of fixed costs to variable costs and the transfer of risk to another party (Dabson & McAllister, 2014). Instead of the fixed costs associated with regular long-term leases and facility contracts, serviced offices offer products with flexible contracts that can be classified as variable costs. As corporate real estate managers see a lack of flexibility in real estate as a very important risk (Bartelink et al, 2015), leasing space at serviced offices could help to reduce this risk. Tenants also benefit from the advantage of a 'one-stop-shop', which means that the search costs that clients may incur in procuring office equipment and facility services when they would lease regular office space are reduced substantially (Dabson & McAllister, 2014).

The concept described as co-working offices (Weijs-Perrée, 2015) or co-working spaces (Kojo & Nenonen, 2014) is a more recent development (Deijl, 2012). The upcoming of new information and communication technologies made it possible for people to work outside of the traditional office environment. Furthermore, many freelancers and employees that worked at home felt the need to interact, socialise or collaborate with others. For users of co-working offices the immaterial benefits of co-working (e.g. knowledge sharing, collaboration and interaction with others) are not just a side-effect but the main reason to work in this kind of office space (Döring, 2010). Co-working is mainly practiced by small enterprises and freelancers. Therefore it is likely that the more flexible labour market and higher number of freelancers have contributed to the increased popularity of this type of office. The popularity of the co-working phenomenon may be an important reason why many serviced offices have integrated a co-working concept in (part of) their office space. Van Meel & Brinkø (2014) mention that co-working offices differ on multiple aspects from serviced offices, e.g. on business model, target group, spaces, work mode, and management. However, as mentioned earlier, during the past decade in the Netherlands several commercial landlords have converted their vacant office buildings to serviced offices that often (partly) apply a co-working concept. Those serviced offices have a for-profit business model and offer private office space, but they also offer flexible open plan workspaces, organise networking events and have hosts instead of help desks (examples can be found on <u>www.tribes.world</u>). Furthermore these serviced offices have a broad tenant target group that consists of freelancers, SMEs and large corporates that operate in varying sectors. Thus, although a distinction between the two types of offices is justified, it is observed that (in the Netherlands) there are many business centres that apply a hybrid concept. Therefore, this study uses a definition of serviced offices that is only partly based on Dabson & McAllister (2014, p.4, underlined words are added/changed by the authors):

"a serviced office is a <u>fully furnished office</u> space within a building that is let, sub-let or licensed to third parties on a serviced basis. The services will tend to comprise all of the building services and a menu of business support services. It is an umbrella term that includes..." <u>hybrid forms of serviced offices and co-working offices</u>.

3 OFFICE USERS AND SERVICES AND FACILITIES

Serviced offices are used by a broad spectrum of organisations, employees and freelancers. Laterveer (2011) differentiates ten types of users of serviced offices based on a literature review: starting businesses; businesses that enter a new market; freelancers; virtual workers; flexible corporate employees; flex workers between appointments; organisations that need temporary office space; project teams; meeting teams; and video conference users. Although it has not been tested empirically and additional user types might exist, his typology provides an overview of users that have also been mentioned in previous studies (e.g. Dabson & McAllister, 2014). Moreover, his study provides valuable insights in relevant characteristics on which serviced office users differ from each other.

A serviced office manager has to deal with two levels of office users, namely companies, often referred to as tenants or occupiers, and the end-users, the people who work at these companies. For freelancers this is the same person, but for larger organisations it is not. Although this paper focuses on the importance of services and facilities for the end-user, some basic organisational characteristics (e.g. primary activity and size) are also relevant to define the end-users more completely.

A literature review on office user characteristics resulted in a list including three organisational characteristics, four demographic characteristics, seven job characteristics, and eight different purposes for using the serviced office. The purposes distinguished were based on the studies of Laterveer (2011) and Dabson & McAllister (2014), as they are considered a relevant characteristic for this research as well.

Weijs-Perrée et al. (2016) created a comprehensive list with services, facilities and spaces in business centres. It was complemented with services and facilities mentioned by Peltier (2001) and Gibson & Lizieri (2001) and those that were found on websites of serviced office operators. This resulted in 31 services and facilities, which includes among others building related services and facilities (e.g. cleaning and maintenance); food and drinks related services and facilities (e.g. catering); work related services and facilities (e.g. secretarial services and facilitie

vice); non-work related services and facilities (e.g. gym, childcare); and all sorts of spaces and areas (e.g. conference room, outdoor area). All user characteristics and services and facilities are visible in the conceptual model presented in Figure 1.

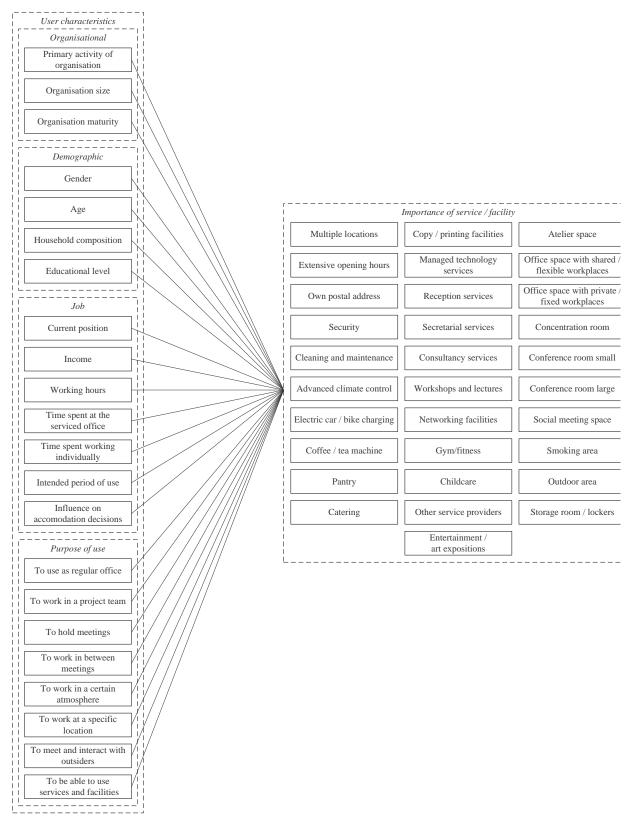


Figure 1 Conceptual model.

4 SURVEY, SAMPLE AND REDUCTIONS OF VARIABLES

A questionnaire was used to record demographics, job characteristics and purpose(s) for using serviced offices. It also included self-stated rating scales for measuring importance of 31 services and facilities on a 5-point scale ranging from very unimportant (1) to very important (5). In general respondents find this type of questions easy to answer and they provide more stable weights than other direct methods (Bottomley, Doyle, & Green, 2000; Gustafsson et al., 2004). The questionnaire was distributed physically in serviced offices in June 2016, but users also had the possibility to fill it in online. In total 137 respondents that work in thirteen serviced offices spread across the Netherlands filled in the questionnaire. Although it was not possible to obtain a randomly selected sample group, it has been attempted to include endusers of a diverse range of serviced offices. The respondents work 40.5 hours a week on average, 65 percent of the sample group is male and the age ranges from 17 to 63 years (average = 40.0).

Principal component analysis was used to reduce the data on importance by combining the 31 variables into a more limited number of factors (see Table 1). This resulted in a reduced list of six factors defined as linear combinations of in total 22 variables.

Four services and facilities were left out of the factor analysis due to a lack of correlation with other characteristics (which are multiple office locations, offering of an own postal address, catering and outdoor area for breaks). These services plus the identified factors are used in a regression analysis to find effects of user characteristics on perceived importance of services and facilities (factors). Associations are first explored with bivariate analyses. Only those characteristics that significantly relate to a service/facility (factor) were entered into multiple regression analyses to identify effects, as the sample was too small to include all variables and an effect is not likely when there is no bivariate effect in the first place.

5 **RESULTS**

An overview of the results of is presented in Table 2, in which the bivariate analyses results are shaded and the multiple regression analyses results not. When possible, the type of effect is indicated as well with + (positive effect) and – (negative effect). Overall, the proportion of the variance that is explained by the regression models is quite small (3.5% to 13.6%). This indicates that the known user characteristics explain only a very small proportion of the total variance of perceived importance of services and facilities.

It is striking that only three associations were found between the organisational characteristics and the importance of services and facilities. This is surprising because literature on serviced office users up until now mainly focussed on organisational aspects. Moreover, other studies mention a division of the market between major international operators and small local operators that cater the needs of respectively large corporate organisations and small businesses. The results of this study do not indicate that employees of these small and large organisations have varying preferences regarding services and facilities.

Demographic characteristics also only have a small effect on the importance of services and facilities. Previous research on single tenant office users did find effects of age on end-user satisfaction. In this sample only two categories of services and facilities are associated with demographic characteristics. It was found that users with a lower income and users with a lower educational level consider supportive services and facilities relatively more important

(e.g. reception, consultancy services, atelier space). Interactive services and facilities (e.g. networking events) are considered more important by users with a yearly income below \in 30.000 and users that use the serviced office because of its atmosphere.

	Factors Services & Facilities							
PCA with varimax rotation converged in 7 iterations (N=137)	building relat- ed	amenities	technology	supportive	interactive	rooms & spac- es		
Security	0,575	0,132	0,185	0,103	-0,125	-0,046		
Cleaning and maintenance	0,744	-0,127	-0,097	0,087	0,129	-0,048		
Advanced climate control	0,631	0,106	-0,138	-0,019	0,083	0,126		
Electric car / bike charging	0,303	0,469	0,336	-0,001	0,108	0,164		
Gym / fitness	0,057	0,639	0,067	-0,033	0,213	-0,076		
Childcare	0,069	0,780	0,110	0,042	-0,040	0,079		
Other service providers	-0,047	0,800	-0,005	0,222	0,008	0,080		
Entertainment / art expositions	-0,047	0,650	-0,154	0,206	0,278	0,025		
Copy / printing facilities	0,037	-0,031	0,693	0,221	0,216	0,075		
Managed technology services (e.g. LAN, phone)	-0,142	0,129	0,792	-0,009	0,088	0,041		
Reception services	0,074	-0,083	0,423	0,422	-0,013	0,370		
Secretarial services	0,267	0,099	0,144	0,798	-0,017	-0,078		
Consultancy services	0,119	0,156	0,228	0,743	0,197	-0,224		
Workshops and lectures	0,038	0,235	0,159	0,246	0,756	0,119		
Networking facilities	0,099	0,095	0,128	0,089	0,820	0,062		
Atelier space	-0,321	0,330	-0,107	0,491	0,211	0,180		
Storage room / lockers	-0,080	0,077	-0,039	0,569	0,097	0,308		
Social meeting space	-0,066	0,188	0,114	-0,081	0,504	0,485		
Office space with shared / flexible workplaces	-0,217	0,028	-0,005	0,093	0,054	0,673		
Concentration room	-0,051	0,031	-0,061	0,107	0,307	0,667		
Conference room small	0,308	-0,081	0,084	-0,048	0,049	0,708		
Conference room large	0,173	0,248	0,325	-0,045	-0,155	0,697		

Table 1 Rotated component matrix (PCA) for importance of services & facilities

Table 2 shows that job characteristics particularly affect how important users consider an outdoor area. Income and time spent at the serviced office are both identified as negative predictors, but no logical explanation comes to mind. The importance of an own postal address shows the most associations, especially with job characteristics and the purposes of use. It is a relevant service to offer, as it is considered more important by those users that can influence accommodation decisions.

The results also show logical effects of the purpose of using a serviced office on perceived importance of services and facilities. Respondents that use the serviced office as a regular office find technology and an own postal address more important, while users that work in a project team find shared workspaces and rooms relatively important and attach less im-

portance to a postal address. Respondents that use the serviced office to hold meetings find rooms and spaces (e.g. meeting rooms), catering and an outdoor area relatively more important, while people that use the serviced office to work at a specific location find multiple office locations more important. And respondents that use the serviced office for its services and facilities find the amenities (e.g. gym, childcare) and an own postal address relatively more important. Although many associations were found, it is surprising that no relation was found between the usage purpose 'to meet and interact with outsiders' and the importance of interactive services and facilities.

Table 2 Overview of results of bivariate and multiple regression analyses											
		Importance of services & facilities									
		Building related	Amenities	Technology	Support	Interactive	Rooms & spaces	Multiple locations	Own postal address	Catering	Outdoor area
	Variance explained by model (%)	7.4	4.4	7.3	10.6	13.6	5.4	3.5	10.3	6.1	9.3
Organis.	Primary activity of organisation			**						**	
	Organisation size	*									
	Organisation maturity										
Demograph.	Gender										
	Age					+*					
	Household composition										
	Educational level				_**	-	+* *				
Job	Current position	**							*		
	Income				_**	_**					_**
	Time spent at the serviced office (hours)							_*	+* +		_*
	Time spent working individually (hours)										
	Intended period of use										
	Influence on accommodation deci- sions		**		* _				+		
Purpose of use	To use as regular office			+					+* +		
	To work in a project team						+		-		
	To hold meetings						+			+* +	+
	To work in between meetings										
	To work in a certain atmosphere					+**					
	To work at a specific location							+* *			
	To meet and interact with outsiders										
	To be able to use services and facilities		+						+**		
	*Significant at 90% confidence intervo	ıl									

Table 2 Overview of results of bivariate and multiple regression analyses

**Significant at 95% confidence interval

**Significant in bivariate analyses only

6 CONCLUSION AND RECOMMENDATIONS

This exploratory study indicates that user characteristics significantly influence how important services and facilities are considered to be by end-users of serviced offices, especially job related characteristics and the purpose of using a serviced office. However, the regression models only predict a small proportion of the variance of the importance of studied aspects, thus further research is needed to confirm the exploratory results. Although the results of this study do not offer direct tools that can be used to differentiate service menu's from competitors, the results of the analyses do indicate that job characteristics and reasons for using a serviced office are likely more relevant for differentiation strategies than organisational and demographic characteristics.

Because this study focuses on importance, it was possible to gather data on users' opinions on services and facilities also of those that are not offered in their serviced office, in contrast to studies that measure satisfaction of end-users with aspects of the current office. Consequently the research gives insight in the relevance of less common services and facilities (e.g. atelier space; concentration rooms; secretarial services; consultancy services; gym/fitness; child-care).

Although it was attempted to include end-users of a diverse range of serviced offices, the selection of the sample group is not random. Combined with the small sample size of 137 respondents this negatively affects the external validity. Also the proportion of the variance that is explained by the regression models is quite small. This means that there are likely other aspects that also affect the user's opinion on the importance of services and facilities. For further research it is recommended to gather data from more respondents and include personality characteristics. Furthermore, this study explored the effect of the purpose of use on users' opinions on importance of services and facilities and showed some promising results. Elaborating on this subject, further research could be conducted on serviced office users' motives, activities and needs, both on organisational and end-user level. Conjoint analysis would be an appropriate, more advanced method to study importance rating.

REFERENCES

- Bartelink, R., Appel-Meulenbroek, R., Van den Berg, R. & Gehner, E. (2015), "Corporate real estate risks: a survey on risk perception amongst corporate real estate practitioners", *Journal of Corporate Real Estate*, 17(4), 301-322.
- Bottomley, P.A., Doyle, J.R. & Green, R.H. (2000), "Testing the reliability of weight elicitation methods: direct rating versus point allocation", *Journal of Marketing Research*, 37 (4), 508-513.
- CBS & TNO (2015), Dynamiek op de Nederlandse arbeidsmarkt De focus op flexibilisering, CBS, Heerlen.
- Dabson, A. & McAllister, P. (2014), *Evolution and change in the serviced office sector: a decade later*, Henley, University of Reading, Reading.
- Deijl, C.M. (2012), Two heads are better than one, Erasmus University, Rotterdam.
- Döring, S. (2010), Zusammen flexibel ist man weniger allein? Eine empirische Analyse der neuen Arbeitsform Coworking als Möglichkeit der Wissensgenerierung, University of Applied Sciences, Jena.
- Gibson, V.A. & Lizieri C. M. (2000), *Change and flexibility: the role of serviced office space in office markets and corporate property portfolios*, University of Reading: Department of Land Management & Development, Reading.

- Gustafsson, A. & Johnson, D. (2004), "Determining attribute importance in a service satisfaction model", *Journal of Service Research*, 7 (2), 124-141.
- Hackett, S.M. & Dilts, D.M. (2004) "A systematic review of business incubation research", Journal of Technology Transfer, 29, 55-82.
- Jones Lang LaSalle (2012), Occupier Special 2012 Flexkantoren als onderdeel van de huisvestingsstrategie, Jones Lang LaSalle, Amsterdam.
- Kojo, I. & Nenonen, S. (2014), "Evolution of co-working places: drivers and possibilities", *Intelligent Buildings International*, 1-12.
- Laterveer, M. (2011), Serviced Offices; een dynamische markt in opkomst. Utrecht University, Utrecht.
- Lokhorst, J. Remøy, H. & Koppels, P. (2013), "Verborgen leegstand", *Real Estate Research Quarterly*, 12 (3), 6-16.
- McAllister, P. (2001), "Offices with services or serviced offices? Exploring the valuation issues", *Journal of Property Investment & Finance*, 19 (4), 412-426.
- Peltier, S. (2001), *Analysis of the supply of serviced office space*, Massachusetts Institute of Technology. Cambridge.
- Troukens, P. (2001), *Demand for serviced office space*, Massachusetts Institute of Technology, Cambridge.
- Van Meel, J. & Brinkø, R. (2014), Working apart together. FMWorld.
- Weijs-Perrée, M., Appel-Meulenbroek, H.A.J.A., De Vries, B.D. & Romme, A.G.L. (2016), "Differences between business center concepts in The Netherlands", *Property Management*, 34 (2), 100-119.