

Workspace 2020 - Club, Hub and Coworking space - a practitioners' view

Brenda H. Groen & W. Arrien Termaat

Saxion University of Applied Sciences, Netherlands

Abstract

The workplace is in a state of transition. Providing an inspiring working environment and continuous innovation are key success factors, with an increasingly important role for the hospitality industry and active participation of user communities. This research reports on a 2-year project into current visions on Workspace 2020, based on literature review, expert interviews, panel discussions, case studies, and a survey among HR professionals and managers. The central research question of the whole project was: What is the optimal FM support for office workers in 2020? In phase 1 a preliminary vision was drafted, based on extensive literature review and a triple case study. Three workspace concepts (besides the traditional office and home-office) with future potential were identified: Club, Hub and Coworking space. The subsequent validation process during phase 2 and 3 encompassed a survey with HR professionals, and in-depth interviews with those responsible for the office concepts of the three concepts (club, hub, coworking space). This paper reports on the results of the in-depth interviews. Results will show the experiences with these concepts, suitability, and business model for each of the concept, based on the Business model canvas.

Keywords: future workspace, business model canvas, facility management

1. Introduction

Since the last quarter of the 20th century, there is a keen interest in the influence of office design on productivity. Examples are the introduction of the landscape office by Duffy; the ORBIT studies in the 80s by Duffy, Laing and Crisp (1993), the concept of alternative officing (Becker, 1999) and the COPE study (Newsham, 1997).

And the development is ongoing: the workplace is (still) in a state of transition (Saurin & Radcliffe, 2011). Nowadays, life-long permanent contracts are slowly disappearing, and more and more people are working on flexible contracts, free-lance, and/or as independent entrepreneur (European Commission, 2007). Knowledge workers no longer spend their 9-5 workday at their private desk at the office. Developments in ICT enable them to work anywhere, anytime. In 2013, 17% of the total Dutch workforce was involved in telework; on average, Dutch employees spend 3.8 hours per day on computer work (Van Zwieten et al.,

2014). In 2012 a total number of 1,1 million Dutch people work as independent entrepreneur, of which 752000 without employees (Ybema et al., 2012). We are in the middle of the process; question is how and where will we work in 2020 (and beyond)? What will be the implications for the business model facility and real estate management? To what extent will the present facility managers be involved in providing workspace in 2020?

In 2020, the work force will consist of different generations, which have been shown to have different needs, expectations and skills (Howe & Strauss, 2007; Lub, 2013). A shortage of skilled labour is expected, as the younger generations will need to replace the retired Boomers (Phillips and Roper, 2009). Increased productivity will not be the sole solution, and companies may have to compete for talents (Phillips & Roper, 2009; Ware & Grantham, 2003). In this respect, it is important to envision workers' preferences for 2020.

In 2020, the importance of networks and communities will increase (Palmer, 2006; Johns & Gratton, 2013). To meet the required quality standards and level of flexibility, temporary teams will be common. Team members are selected on their added value, and will increasingly be self-employed (Spinuzzi, 2012), or employed by multiple organisations on smaller contracts.

In 2020, the office worker will enjoy more freedom in exchange for increased responsibilities. Time and place independent work is standard. This will suit employees' need to balance work life and home life (Sok et al., 2014).

At the moment, there is already a diverse array of workplaces, ranging from a private desk at the corporate head office, a hotdesk in one of the regional offices, a rented desk in a local office building, to incidental workplaces in coffeehouse, and of course the home office. The added value of the physical workspace is meeting others, sharing knowledge and ideas and for networking (Van Baalen et al., 2007; Gensler, 2008). Knowledge creation is an important outcome of collaboration. Appel-Meulenbroek (2010) found that spontaneous informal interaction is a better predictor for innovation than scheduled formal meetings. According to Haynes (2007), the work environment has a physical dimension (layout and comfort of the work environment) and a social dimension (level of interaction and distraction). Building on Haynes' theory, it was hypothesized that both the *physical and social dimensions of the work environment affect the production and transfer of knowledge as well as the satisfaction and perceived labour productivity of knowledge workers*. The physical environment has an impact of knowledge creation; open office concepts increase knowledge transfer, cooperation and sharing (Aznavorian. and Chevez, 2010; Appel-Meulenbroek, 2010), but is less suitable for work that requires deep concentration (Erlach and Bichard, 2008; Van Sprang et al., 2013). It's

partly corporate real estate, partly suppliers of workplaces as core business, and partly entrepreneurs that offer a number of services, e.g. workspace. Workspace and workplace is business, and many researchers have taken up this topic to show how the physical, social, managerial and psychological aspects of workspace and its influence on e.g. productivity and knowledge creation.

The facility manager has a pivotal role, translating the company's strategy into a suitable accommodation, and providing optimal workspace for its employees. In 2004 CoreNet Global described the workspace 2010 in a Workspace Strategist Model; the core characteristic of the model is the integral approach of workspace-related issues. With the rise of (virtual) network organisations, the facility & real estate management role changes from service provider and tactical real estate manager to supervisor and strategic manager of “networked business process systems”. Key words are: connectivity, strategic partnerships, flexible, mobile network driven work environment, co-operation, and digital (paperless) in both policy and behaviour (CoRENet Global, 2004).

What will be the FM support for office workers in 2020? Termaat et al (2014) has reported on two-year project into the future of workspace. In the first 3 phases of the project, a vision was drafted on workspace in 2020, which included 5 office main concepts:

1. Traditional office, used exclusively by the organization itself. The office(s) is/are located in the focus area of the organization that is associated with the core activities, key resources, and/or key partners, usually as a derivative of the company's history. The traditional office is the regular workspace for staff and management, targeted for use in the medium and long term. Staff will generally spend most of their working time within the office. Organizations with multiple offices use one of them as headquarters that houses the Board of Directors.
2. Club, the headquarters of the organization and focused exclusively on the organization itself. This location is intended for long-term use. The club is the place where the Board of Directors is housed and functions as meeting place for the organization. The head office has a wide range of high quality services that facilitate the users in a hospitable manner. Notably, the club conveys the image and culture of the organization. In some cases a number of special traditional offices surround the club, a so-called campus.
3. Hub, a regional office with space and/or workplace for rent for short or medium periods. These kinds of offices facilitate diverse activities, not only individual work and teamwork, but also consultation, and meetings with customers. A reception and printing facilities are also provided. Hubs are usually at logistics-friendly locations: near highways or public

transport. Multiple organizations share a hub; however, the business model of the hub determines to what extent spaces and facilities are common are dedicated for individual organizations.

4. Coworking space: locations where you can work, consult, or meet for short duration. These locations are often on an attractive location near public transport, or in the inner city. The co-workspaces not always exclusively facilitate office activities, but may also, for example, have a F&B or social function. A coworking space offers you a place to sit and work, with Wi-Fi, and you can have something to drink or eat.
5. Home office: the workspace at home. This may be a dedicated furnished space, or just a seat at the kitchen table, depending on the activities that the employee wants to or needs to perform. The facilities at the home offices may be partly provided by and determined by the organization, and partly by the employees themselves.

In the fourth and last phase of the problem, the Business model canvas of Osterwalder and Pigneur (2010) was used to further elucidate the concepts Club, Hub and Coworking space.

2. The Business model canvas

A business model is the value that an organization may offer to its customers in terms of the skills, capabilities and tools needed to make, market and deliver added value to its stakeholders with the aim of generating profitable and sustainable revenue streams. The Business Model Canvas is described as a rationale of how an organization creates, delivers and retains value (Osterwalder & Pigneur, 2010). It consists of nine building blocks, namely: value propositions, customer segments, channels, customer relationships, revenue streams, key resources, core activities, key partners and cost structure. These nine building blocks can be divided into four main areas of an enterprise, namely: customers, supply, infrastructure and financial viability (Figure 1).

<i>Resources</i>	<i>Activities</i>	<i>Values</i>	<i>Customer relationships</i>	<i>Customer segments</i>
	<i>Partners</i>		<i>Channels</i>	
<i>Cost</i>			<i>Revenue</i>	

Figure 1: Business model canvas

1. The building block 'customers' defines the various groups of people or organizations that a company aims to reach and serve.

2. 'Value Propositions' are the bundle of products and services that creates value for a specific customer segment. Possible values are cost reduction, accessibility, convenience/usability, branding, customization, or improving the performance of a product or service.
3. The building block 'channels' describes how a company communicates with and reaches its customer segments. Integration with customers' routines, impact, and cost efficiency are important topics with respect to the channels.
4. 'Customer relationships' describe the types of relationships that a company enters into with specific customer segments. Relationships vary from personal assistance, to self-service, automated service, and formation of user communities.
5. 'Revenue Streams' represent the profit that a company generates per customer segment, including how and for what customers pay (ownership rights, usage fee, subscription fee, rent, or licensing).
6. The building block 'key resources' describes the main assets that are required to ensure the value propositions, e.g. the distribution channels, customer relationships, revenue streams, or production facility. Key resources may be physical assets, intellectual, human or financial resources.
7. 'Key activities' are the most important activities a company should do to ensure that a business model works; these may be production activities, consultancy, or networks.
8. The building block 'key partners' describes the network of suppliers and partners who ensure that the business model works. Key partners e.g. deliver key activities or resources to the organisation.
9. And 'cost structure' sums up the most important costs incurred to a business model to make it work. The core activities and key resources are main costs.

The central research question of this paper is:

What is the impact of new ways of work (e.g. coworking spaces) on the business model of facility management in 2020? The results of the previous phases in the project (Termaat et al., 2014) was that facility managers at corporates as well as suppliers foresee that 'club', 'hub' and 'coworking spaces' will increase in importance in 2020. A number of workspace suppliers that offer these concepts have been interviewed. Results are present in the form of the Business model canvas.

3. Methods

This paper is part of a 4-year project on future workspace. Data were collected from September 2011 to July 2013. Firstly, a preliminary vision was drafted, based on extensive literature review and exploratory research in the business context in 3 organisations. The subsequent triple validation process encompassed in-depth expert interviews, panel discussions with future user groups, and a survey focused at core business perspective; it resulted in a validated vision on Workspace 2020, describing the concepts of Club, Hub and Coworking space. In phase 4 these concepts were translated to business models using the Business model canvas (Osterwalder & Pigneur, 2010). The business models were completed with the input from entrepreneurs of similar business concepts in the current market: Club (7 in-depth interviews), Hub (4 in-depth interviews), and coworking space (6 in-depth interviews). All interviews were recorded, transcribed, and analyzed using open and axial coding. The coding was based on the 9 fields of the Business model canvas of Osterwald and Pigneur (2010).

4. Results

The central research question was: What will be the FM support for office workers in 2020? A number of workspace suppliers that offer these concepts have been interviewed. Results are present in the form of the Business model canvas.

4.1 Club

HR managers or facility managers of 7 large profit, government or semi-government organisations were interviewed. Results are summarised in Figure 2. These organisations provide a workplace for their employees, and occasionally for customers or guests. Locations for these building have been carefully chosen, often to provide easy access by public transport, and they serve to strengthen the identity of the organisation. They all have embraced the new ways of work and provide activity-related workplaces. Values are strengthening the brand of the organisation, and improving knowledge sharing and communication. One organisation explicitly mentioned sustainability. Security was an important item for a number of organisations.

Profit organisations discussed costs and revenues in terms of their core business, expenses for facility services were either based on a budget or on transfer pricing. (Semi) governmental organisations are fully government-funded and did not discuss revenues. The interviewees are responsible for the quality of workplaces and services, but the business model is one for the

whole organisation, not just for the delivery of workplaces. Efficiency and productivity are often mentioned as important aspects; most facility services are outsourced, but they do have a facility manager at strategic level. Hospitality was mentioned by a number of interviewees; interior design, hostesses, reception and codes of conduct in the workplace were mentioned. Main costs are those for the real estate, as well as catering and cleaning. The employees, the customers, contact the facility department via intranet and/or service desk; channels to inform employees are intranet and newsletters.

<i>Resources</i> offices meeting rooms facility services Wifi	<i>Activities</i> offering workspace and facility services	<i>Values</i> communication and exchange; knowledge sharing; sustainability	<i>Customer relationships</i> via service desks and intranet	<i>Customer segments</i> employees of the organisation small number of guests and customers
	<i>Partners</i> suppliers of facility services		<i>Channels</i> newsletter intranet meetings	
<i>Cost</i> rent, building-related costs like maintenance and energy; staffing		<i>Revenue</i> subsidized by government, budget, or transfer pricing		

Figure 2: Business model canvas for the Club

Even though the Club is becoming more and more common for large organisations, the majority of companies in the Netherlands is small or medium-sized; the number of independent professionals and home workers is increasing. Two types of workplace support their need for office space: Hub and Coworking space.

4.2 Hub

Four managers/owners of Hubs were interviewed. The hub is a regional office with space and/or workplace for rent for short or medium periods. These kinds of offices facilitate diverse activities, not only individual work and teamwork, but also consultation, and meetings with customers. A reception and printing facilities are also provided. Hubs are usually at logistics-friendly locations: near highways or public transport. Multiple organizations share a hub; however, the business model of the hub determines to what extent spaces and facilities are common or dedicated for individual organizations (Termaat et al., 2014).

The key activity of Hubs is that they offer a physical asset, workspace. Hubs are multi-tenant buildings that rent office units to different customer segments: independent professionals,

entrepreneurs (SME), and also (larger) organisations with a temporary need for extra workspace. The interviewed hubs do not consider home workers an attractive segment. An important value for hubs is to offer contracts for office units with a good value for money.

'my prime revenue, more than 80%, is simply the office'

'four companies are here to stay... and four companies have a virtual office here'

The minimum duration of a contract varies between 3 months and 2 years. Meeting rooms and extra desks can be rented per hour, though the latter is not core revenue.

'renting desks per hour doesn't deliver any money'

Hubs offer a professional reception of customers of their lessees.

'my prime target groups are coaches, psychologists, consultants, people that help other people and therefore receive guests'

The contracts may cover extra services, but some hubs charge for e.g. printing and coffee, to keep the rent as low as possible. Other sources of revenue can be secretarial services, and virtual offices. Small hubs have few staff, and cut costs by taking care of maintenance and cleaning themselves.

'companies simply pay a monthly fee; and that fee includes everything. Including cleaning, coffee, tea, and some back office support'

'we try to keep costs for facility services as low as possible, by being creative and by purchasing for low prices'

Word of mouth is the most important channel to reach new customers, more than social media. 'Key partners' may be suppliers, or caterers.

The business model that is characteristic for hubs is much more finance-driven than that for the coworking space (Figure 3).

<i>Resources</i> multitenant building, offering office units, meeting rooms, desks per hour, shared services, Wifi	<i>Activities</i> offering workspace and additional services like reception and secretarial support	<i>Values</i> reasonable price: value for money either central location or cheap location	<i>Customer relationships</i> small hub: individual contact between owner and lessee large hub: business club	<i>Customer segments</i> independent professionals, small businesses
	<i>Partners</i> larger hubs have preferred suppliers	(e.g. temporary use of vacant buildings)	<i>Channels</i> word of mouth (social media)	
<i>Cost</i> rent, building-related costs like maintenance and energy, staffing; to lower costs, in small hubs the owner acts as FM and takes care of (part of the) maintenance and cleaning		<i>Revenue</i> contracts for office units, pay-per-use for meeting rooms; sometimes also services like printing, coffee, secretarial support, virtual office		

Figure 3: Business model canvas for the Hub.

4.3 Coworking space

Coworking space: locations where you can work, consult, or meet for short duration. These locations are often on an attractive location near public transport, or in the inner city. The workspaces not always exclusively facilitate office activities, but may also, for example, have a F&B or social function. A coworking space offers you a place to sit and work, with Wi-Fi, and you can have something to drink or eat (Termaat et al., 2014).

Five managers of coworking spaces were interviewed. Two coworking spaces are part of an international chain, one is the initiative of a coffee house that added a coworking space to its premises, two are independent entrepreneurs. The primary customer of the coworking spaces is the independent professional, who is an entrepreneurial, highly educated, knowledge worker. Coworking spaces cater for people that either do not have an office or are (frequent) travellers or commuters that need to work on the go. One of the interviewees referred to them as 'knowmads'. One coworking space also mentioned students as (potential) customers.

'they are primarily independent entrepreneurs, rather highly educated, their expertise varies but they are all knowledge workers, people that may work from their laptop'
'knowmads, people that can cooperate with almost anyone anytime anyplace'

Some coworking spaces do not accept everyone. The host decides who may join.

'if people want to join, we have a meeting over coffee, and then I explain the concept. I ask who they are and what they do. When I think, oh, this would be a valuable member, than I say 'welcome, join us'; and if I think that I wouldn't want this person to join, than I will sum up the disadvantages ... then I try to discourage this person'

Values often mentioned are accessibility, both in the sense that anyone may walk in and use the space, or easy-to-reach location (inner city location, convenient for public transport and bicycles). Furthermore, a good place to work. Flexibility.

'and they like being able to go to work by bicycle'

'you pay for a desk, but then you have a quiet workspace, with all necessary facilities'

Furthermore, coworking spaces encourage community building, both providing a home-base and facilitating exchange of assignments. The ambiance and grandeur of the building can also be a value, and a channel as well: the location and looks of the building also act as a channel. The main channel however, is social media.

'we do a lot online, all our activities that we have are posted on LinkedIn, Facebook, Twitter'

The main 'customer relationship' is based on community building.

'some only come here to connect to others'

'I try to get an overview of everyone's expertise and connect the right people'

'if you book a seat than we expect you to bring in social capital, that you want to connect to other users'

Personalized service is a second aspect that is closely linked to the building block 'revenue streams'. There are in fact two main set-ups for revenue streams. One option is free access to a desk in a shared workspace, but a usage fee for e.g. private desks, meeting rooms, F&B, and extra facilities. In the latter case, meeting rooms are the largest revenue stream. Another option is subscription, ranging from a few hours a month to unlimited access.

'there are different subscriptions, from small to extensive. A small one is for example for 25 hours per month; that means that you may work 25 hours per month in the common flex space. The most extensive subscription is for full-time access'

'you pay for a desk, but then you have a quiet workspace, with all necessary facilities'

'the subscriptions are made to measure'

The main 'key resource' is the physical asset, the building, which in some cases is an essential part of the brand, being a well-designed and furnished old building. In some cases also the ownership of a domain name or a user-friendly and intuitive IT tool are key resources.

Opening hours range from standard office hours to 24/7. Besides desks and meeting rooms, standard office facilities are provided (scanning, printing). Good coffee, ample amount of sockets and Wi-Fi are indispensable. Security of internet connections maybe an issue, as is privacy: people sit close together and may see what you are doing on your laptop. Intellectual resources are the networks, which in some cases are actively supported by the coworking space. In a number of coworking spaces IT-tools are being used to show the names and expertise of the users on site, thereby supporting exchange of knowledge and assignments. Often a host is present, a human resource, to ensure a hospitality ambiance.

'I have a lot of personal contact with my customers; I am the host here, and I'm present four days a week. People can come to me for many things.'

'every location has a community dashboard, so you may see who is present ... you can see what knowledge is available and which tweets have been posted recently'

'we facilitate that people meet; we combine offline and online; that means, that the moment that you start to work in this room, or when you are having a meeting, that you can see who else is working on the same topic ... you can invite these people via twitter ... to meet'

'enough sockets, good coffee and Wi-Fi'

'a nice ambiance'

This aspect is stronger in coworking spaces that have their origin in the hospitality industry. Coworking spaces, by offering workspace, primarily facilitate networks and communities ('key activities').

'our business is to rent to entrepreneurs, especially independent freelancers that we offer office space'

Key partners may be the network of suppliers and partners who ensure that the business model works. Some co-workspaces that are part of a chain, some have an IT partner, but most are independent businesses. Main costs for co-workspaces are rent, maintenance and staff.

'the main costs is rent'

Coworking spaces can in terms of the Business model canvas be either characterized as a multi-sided platform or as 'free' as a business model. Multi-sided platforms bring together distinct but interdependent groups of customers. This requires that different kinds of customers are present at the coworking space at the same time. The platform creates value by facilitating interactions between the different groups, often using IT-tools to show who is on site or to show who its members are. A multi-sided platform grows in value to the extent that it attracts more users, a phenomenon known as the network effect.

<i>Resources</i> workspace, IT-tool to support networking, Wi-Fi, coffee	<i>Activities</i> offering workspace and F&B	<i>Values</i> accessibility networking with other users	<i>Customer relationships</i> community- building	<i>Customer segments</i> independent professionals, 'knowmads', knowledge worker; either without his/her own office, or need to work anywhere/anytime
	<i>Partners</i> suppliers	the building itself host/hospitality	<i>Channels</i> social media	
<i>Cost</i> rent, building-related costs like maintenance, staffing			<i>Revenue</i> desk in a shared workspace is free; revenue streams are F&B, usage fee for individual workspace and renting meeting rooms; personalized service	

Figure 4: Business model canvass for coworking space, type multi-sided platform

Those co-workspaces that do not charge a membership fee have characteristics of 'free' as a business model. This model allows at least one substantial customer segment to benefit from a free-of-charge offer. This is financed by another part of the business model, usually renting out meeting rooms and private workspace, as well as offering extra services like F&B.

<i>Resources</i> workspace, IT-tool that supports networking, Wi-Fi, coffee	<i>Activities</i> offering workspace and F&B	<i>Values</i> accessibility networking with other users; the building itself host/hospitality	<i>Customer relationships</i> community- building	<i>Customer segments</i> independent professionals, 'knowmads', knowledge worker; either without his/her own office, or need to work anywhere/anytime
	<i>Partners</i> suppliers		<i>Channels</i> social media	
<i>Cost</i> rent, building-related costs like maintenance, staffing			<i>Revenue</i> subscription for workspace and meeting rooms 150-300 Euro for unlimited use more subscribers than desks	

Figure 5: Business model canvass for coworking space, type 'free' as a business model

5. Discussion and conclusion

The objective of this paper was to show what the FM support will be for office workers in the near future. The results of the previous phases in the project (Termaat et al., 2014) was that facility managers at corporates as well as suppliers foresee that 'club', 'hub' and 'coworking spaces' will increase in importance in 2020. A number of workspace suppliers that offer these concepts have been interviewed. Results have been presented in the form of the Business model canvas.

Large organisations will continue to have headquarters and regional offices. Even though employees may often work outside the office as well, these offices will offer activity-related workplaces, stimulating interaction, communication and knowledge sharing. Specialized suppliers, coordinated by a FM from the demand organisation, will supply the facility services offered.

However, employees could also work elsewhere, and a growing group of independent professionals and entrepreneurs with small businesses are looking for a professional location to work and receive customers too. Depending on the size of their company, they may seek a small office, or just need a desk; either full-time or part-time. Two concepts cater for their needs: Hub and Coworking spaces. Hubs are multi-tenant buildings that offer office units as well as additional services; value for money is key, as owners are aware of the present economic situation, and are creative entrepreneurs that offer short-term contracts for competitive prices. A number of hubs create extra revenues by charging for extra services, printing and/or catering. Owners of small hubs keep their prices low by (partly) taking care of facility services like maintenance and cleaning themselves.

Independent professionals may also opt for coworking space. There are already many coworking spaces available, worldwide. Most present themselves on the Internet. They range from small buildings, offering about 10 workplaces, to international chains and franchises. Some offer workspace for free, or for as little as 2.50 Euros per hour. Others offer subscriptions ranging from a few hours per month to fulltime use. Most coworking spaces promote interaction and networking between users, using apps or website as tools to show who is a subscriber and who is in the building at any time. This supports networking and community building. And even though the workspace itself shows the brand of the owner of the coworking space, individual users may present themselves to the public.

We may conclude that new ways of work are increasingly applied by large organisations, but also that more people choose for small businesses or as independent professionals. May large organisations will have a Club, a main office or regional office that serves as (local)

headquarter. Employees working in the Club use activity-related workspace, but may still spend many hours at the office. Facility management for Clubs is largely outsourced to one or more specialized suppliers, the facility manager being active at strategic level.

Hubs and coworking spaces are initiatives of entrepreneurs without FM background. They offer comparable services, but have not been educated as facility managers. Furthermore, large organisations that want to keep costs for accommodation low by lowering the numbers of desks per FTE may want to use Hubs to supply sufficient workspace at peak time. Subscriptions for unlimited access maybe in the range of 250-350 Euros per month, compared to a median 750 Euros per workplace per month according to the NFC index for the Netherlands (NFC, 2014).

We conclude that entrepreneurial FM with an interest in operational and tactical FM seem to be missing opportunities regarding these workplaces, and FM of large organisations could be more creative in lowering costs for workplaces and at the same time providing employees with more options to work anywhere anytime.

References

- Appel-Meulenbroek, R. (2010): Knowledge sharing through co-presence: Added value of facilities, In: *Facilities*, 28(3/4), pp. 189–205.
- Aznavorian, L. & Doherty, P. (2011): The forces driving change'. In Coles, D. (ed.) '*Work on the Move. Driving Strategy and Change in Workplaces*', Houston, Tx, IFMA Foundation.
- Baalen, P. van, Dupain, W., Engels, R., Go, F., Van Heck, E., Kieboom, F., Legerstee, M., Van Nunen, J., Van Oosterhout, M. & Vermeulen, V. (2007): *World of Work, Results from the New World of Work research Report 2007*. Rotterdam, RSM, Erasmus University.
- Becker, F. (1999): Beyond Alternative Officing: infrastructure on demand. In: *Journal of Corporate Real Estate*, 1(2), pp. 154-168.
- CoreNet Global (2004): *Synthesis Report: A Framework for Thriving in the Networked Enterprise*. CoreNet Global: Atlanta, USA.
- Duffy, F., Laing, A. & Crisp, V. (1993): *The responsible workplace*, Oxford: Butterworth.
- Erlich, A. & Bichard, J. (2008): The welcoming workplace: Designing for ageing knowledge workers, In: *Journal of Corporate Real Estate*, 10(4), pp. 273–285.
- European Commission (2007): *Towards Common Principles of Flexicurity: More and better jobs through flexibility and security*. Luxembourg: Office for Official Publications of the EC.
- Gensler (2008): Workplace Survey 2008. United States. Available at: http://www.gensler.com/uploads/documents/2008_Gensler_Workplace_Survey_US_09_30_2009.pdf [accessed June 2012].
- Haynes, B. P. (2007): Office productivity, a theoretical framework, In: *Journal of Corporate Real Estate*, 9(2), pp. 97–110.
- Howe, N. & Strauss, W. (2007): The next 20 years: How customer and workforce attitudes will evolve, In: *Harvard Business Review* Jul-Aug, pp. 41-52.

- Johns, Y. & Gratton, L. (2013): The third wave of virtual work. In: *Harvard Business Review* Jan/Feb, pp. 1-9.
- Lub, X. D. (2013): *Generations and their psychological contracts*. PhD Thesis, Tilburg University, the Netherlands.
- Newsham, G. (1997): Cost-effective open plan environments (COPE): A new research initiative., In: *Construction Innovation*, 3(1), pp. 32-34.
- NFC (2014). NFC jaarbericht Kantoren 2013, NFC Index Coöperatie, Naarden.
- Osterwalder, A., & Pigneur, Y. (2010): *Business Model Generation*. Amsterdam, the Netherlands: Modderman Drukkerwerk.
- Palmer, A. (Ed.) (2006): *Foresight 2020. Economic, Industry and Corporate Trends*. London, United Kingdom Economist Intelligence United.
- Phillips, D.R. & Roper, K.O. (2009): A framework for talent management in real estate. In: *Journal of Corporate Real Estate Management*, 11(1), pp. 7-16.
- Saurin, R. & Radcliffe, J. (2011): Using an adaptive scenarios approach to establish strategies for tomorrow's workplace. In: *Foresight*, 13(4), pp. 46-63.
- Sok, J., Lub, X.D. & Blomme, R.J. (2014): Generations and work-home values: the interplay between historical trends and events, and generational work-home identity, In: Parry, E. (Ed.) *Generational Diversity at Work: New Research Perspectives*. Palgrave/MacMillan.
- Spinuzzi, C. (2012): Working alone together: Coworking as Emergent Collaborative Activity. In: *Journal of Business and Technical Communication* 26(4), 3pp. 99-441.
- Termaat, W.A., Van Sprang, H. & Groen, B.H. (2014): Workspace 2020 - Club, Hub and Cowork space: business models for optimal FM support for office workers in the future. In: *International Journal of Facilities Management* March 2014, pp. 117-128.
- Van Sprang, H., Groen B.H. & Van der Voordt, D.J.M. (2013): Spatial Support of Knowledge Production in Higher Education. In: *Corporate Real Estate Journal* 3(1), pp. 75-88.
- Van Zwieten, M.H.J., De Vroome, E.M.M., Mol, M.E.M., Mars, G.M.J., Koppes, L.L.J. & Van den Bossche, S.N.J. (2014): *De nationale enquête arbeidsomstandigheden*. Hoofddorp: TNO.

- Ware, J. & Grantham, C. (2003): The future of work: changing patterns of workforce management and their impact on the workplace, In: *Journal of Facilities Management* 2(2), pp. 142-159.
- Ybema, J.F., Van der Torre, W., De Vroome, E., Van den Bossche, S., Lautenbach, H., Banning, R. and Dirven, H.J. (2012): *Zelfstandigen Enquete Arbeid*. TNO/CBS, Hoofddorp/Heerlen.