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ABSTRACT
Purpose - New ways of working challenge workplace management: increasing mobility and diminishing organizational boundaries require re-evaluation of both workplace design and service delivery. However, structures and processes of workplace management are still traditional and managers, together with outsourced facility service providers, often do not succeed at fulfilling the needs of mobile employees.

The abovementioned changes stimulate discussions in many areas in both industry and academy. Nevertheless, workplace literature from business perspective seems to be scarce. In this paper, the focus is on workplace service offering for mobile knowledge workers. The aim is to study the current state of workplace servitization. To answer this, we identify value offering elements that are used in office business market to deliver workplace as a service.

Methodology - This study follows multiple case study methodology including 5 case studies. We took business model design approach in order to study selected business offerings.

Results - The results indicate that workplace business models include elements of servitization on various levels. Physical space is no longer the central offering in the office business; instead, it acts as a component on which the service portfolio is built. Highest value from workplace comes from experience-related service offerings.

Implications - Academically, research contributes to the workplace management studies by providing servitization perspective to a topic previously approached with a more technical and psychological point of view. This study can also support service providers and customer organisations in their quest to make service provision more flexible and experience-oriented.

Keywords
Workplace, services, servitization, business models, mobile work, facilities management services
1 INTRODUCTION
New ways of working challenge workplace management: increasing mobility and diminishing organizational boundaries require re-evaluation of both workplace design and service delivery. Thus, service providers need to re-evaluate their offerings. However, managers are often used to traditional workplace management processes and structures, which lead them (and their outsourced service providers), to underachieve in serving the needs of mobile employees.

The main objective of facility management (FM) and corporate real estate management (CREM) is to add value to the core business. Discussions about added value and value co-creation in the academy have been continuing for many years already. The most well-known authors in the field, Jensen and van der Voordt, have published many studies about FM and CRE management practices being value drivers for organisations (look, e.g. Jensen and van der Voordt 2016). The underlying idea of value co-creation is to change the perspective of the roles of customers and firms and how the new needs of customers can be served through various configurations of people, technology, and value propositions (Saarijärvi et al. 2013; Vargo and Lusch, 2008). This value-centred approach, common in economic and business research, has become a standard nowadays.

The quest to support services with “added value” thinking has lead researchers towards studying service systems and service science. Servitization aims to provide better customer-focus for businesses (Vargo and Lusch, 2008). Vandermerwe and Rada (1988) started the discussion about servitization in the late 1980’s by stating that servitization goes beyond the change of sales from products to services: it is more about a strategic process with customer-focus through which competitiveness is reached (e.g. Crozet and Milet, 2015). Although some research shows mixed evidence between service business models and firm performance (e.g. Suarez et al. 2013; Kohtamäki et al. 2013), service market is growing and occupying traditionally product-based industries. However, in a world where everything has become as-a-Service, Workplace-as-a-Service is not really discussed.

Changes in workplace development have been researched from spatial transformation (e.g. Rytkönen et al. 2016), organizational relationship (e.g. Ross and Myerson 2006), privacy (e.g. DEGW 2001) or sharing levels (Meel and Brinko, 2014) perspectives. Also, attempts to categorize various concepts of business offices (Weijs-Perrée et al. 2016) and serviced offices (Troukens 2001; Harris 2015). Although some categorizations from business perspective within a single organization has been made (Termaat et al 2014; Cole et al 2014), literature with the business viewpoint is still scarce. To start filling this gap, we examine workplace business models of five different service providers. We explore whether and to what extent their business models already contain service-oriented elements. The aim of this study is to discover if recent trends have influenced the business models of workplace service companies.

The article is structured as follows: in section two, we explore literature on servitization and business model innovation, which is followed by explication of methods used in the research in section three. The fourth section contains results of the analysis. Finally, conclusions are drawn.

2 LITERATURE REVIEW
The context of workplace
According to multiple studies and industry reviews (e.g. Harris 2015; Weinbrenn 2016; Gou 2016), there are few key drivers for a change in workplace, namely, new workstyle, technological development and organizational needs. People work time and place-independently, meaning that
they are working not only at offices but also in public locations, on the move, at home and other spaces (Cole et al. 2014). Technological development allows executing tasks any time from any location (Laing, 2013). Harris (2015; 2016) notes that organizations are becoming much more flatter and work is more team-based. Moreover, the differences between sectors are disappearing, thus, requirements for space are changing as well. An example here could be one financial services company changing its strategy towards diversified services company.

Consequently, traditional offices become out-dated and companies need more engaging spaces to attract people to the office (Määttä, 2012). They need more spaces such as informal meeting areas and event spaces (Harris, 2015). The office becomes a mediator between people, tasks, and other activities people perform and is used for social interactions (Vischer, 2008; Sykes, 2014). New types of offices allow people to locate in the most convenient places for them to complete their tasks instead of being forced to stay at one place like it used to be in Taylorist-office setting (Gou, 2016). This role of workplace as a social setting with user-centred approach requires both organizations and service providers to change their logic. As Knoll (2016) notes, workplace becomes an experience and starts providing value to customers through flexibility, community, and shared resources. Thus, organisations start demanding more flexibility and higher level of services at the same time trying to save costs on real estate (Troukens, 2001). These contrasting requirements lead to the changes in office sector - organizations that are not capable of having own buildings, are motivated to move into other types of offices such as serviced offices (Weijs-Perrée et al. 2016). And organisations that do have their own offices, change workplace management focus from “managing buildings” to “managing people” (Harris, 2015).

In this paper, workplace is referred in a broader context than a single organisation’s office. Besides a traditional single-tenant office building, we also include serviced offices, hubs, coworking spaces and refer to all of them as workplace businesses as we take physical space provider’s perspective. Weijs-Perrée et al. (2016) identifies four main concepts of business centers and Harris (2016) categorizes serviced offices based on types of buildings, occupier profiles and space needs. Other categorizations (e.g. Troukens, 2001) are available as well. However, due to the nature of this study and proximity of main interest, we take a similar approach to Weijs-Perrée et al. (2016). Further, we explain briefly the three types we include in the further analysis – serviced offices, coworking offices, and incubators.

Serviced offices are fully equipped and are run by an operator, which rents individual offices or floors to other companies. That is the closest typology to a “traditional” office space but offers some shared services (such as reception), facilities (such as restaurant) or technologies (such as virtual conference rooms)(Weijs-Perrée et al. 2016). Coworking spaces are referred as shared spaces with a short-term lease (from an hour upwards) and a service package (Kojo and Nenonen, 2016). According to Weijs-Perrée et al. (2016, pg.6), coworking offices offer “a community-driven environment with services and activities that stimulate relationships”. An incubator refers to a central building or area, which integrates various activities, facilities, and organisations to form a platform for collaboration, access to external networks and learning opportunities (Weijs-Perrée et al. 2016).

Into the world of services
Service-dominant (S-D) logic, where services are considered as a basis of any exchange, has been introduced nearly 20 years ago as a marketing theory term (e.g. Gummesson, 1995; Grönroos, 1997). Recent precision of the concept by Vargo and Lusch (2006) highlights that S-D logic is
more than a marketing logic: it is a revision on all economic actors’ relationships and service systems’ theories. Thus, people buy experiences and the value they bring, instead of an object itself. The term *servitization* is often used when the focus is on service development of manufacturing companies. According to Baines et al. (2009), servitization occurs due to financial (revenues), strategic (competition), or marketing (customer relationship) needs of a product-based company. Service ontology and service design are popular terms in IT research (e.g. Baida, 2006; Peng, 2012). The term *service ontology* refers to models that describe different elements, properties, and their interrelationships. Service ontology models can be used to formalise the knowledge from different domains and capture service components in a systematic perspective by combining service offering and revenue models (Kindström and Kowalkowski, 2014). The same S-D logic has been recently adopted in a concept of Product-Service Systems (PSS) by Pawar et al 2009. *PSS* term is widely used in Scandinavia to describe the concept of total service solution to satisfy unmet customers’ need through a system of products, services, networks, and infrastructure (Lee and Kao 2014).

Differences between these terms (S-D logic, servitization, service ontology, PSS) are mostly based on their origins. Servitization and S-D logic literature gives good insights into marketing but lacks clarification on service development. To overcome this limit, PSS literature gives more insights about business models.

Business models (BMs) are described as set of elements and their relationships, which express the business logic of a specific firm: the value that company offers to customers, the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital in order to generate profitable and sustainable revenue streams (Osterwalder et al. 2005; Osterwalder & Pigneur 2010). BM should also define company's role in the value chain: how consumers and producers are connected, who the competitors are and which actors can add value to company's offerings (Chesbrough 2007).

In PSS literature, Reim et al. (2015) have distinguished three main categories on how the value to the customer is created, delivered, and captured. These are grouped as product-oriented, use-oriented, and result-oriented business models. The main differences of these models can be described by how they affect some core elements of the business model (Osterwalder et al. 2005; Osterwalder & Pigneur 2010) (Table 1). In product-oriented BMs, company that sells the product also delivers service related to the product (e.g. delivery or take-back services) but the ownership of the product goes to the buyer. Use-oriented BMs are more traditional lease/rent-based models where the product is given to customer to use for a certain period. It can be anything from car rental to traditional office space rent. The provider has ownership and responsibility for the availability of the service; therefore, there are more risks for the provider. In result-based PSS BMs, the whole risk goes to the provider, as it has to deliver an agreed-upon result. How the product or service is delivered, becomes obsolete.

Generally, when applied in workplace business context, servitization, S-D logic, and PSS highlight the understanding of workplace as an experience for the end-user of the customer. Despite that, business relationship happens between customer organisation and space provider. In BM concept, this would mean serving the end-user better and providing service for the end-user. However, this would require changes in business models.

**Changes in business models**

Product-centric companies can ease their movement towards service-based model by creating new
services and activities (Kindström and Kowalkowski 2014). For traditional office space providers, new services and upgraded versions of workplace provide a way to establish new business models. Even though some studies on how to support business model innovations exist (Chesbrough 2010), we still lack knowledge on how to change from product-based BMs to service or PSS business models. Steps towards the transformation from product to service-centric business model include identification of six key elements of service-centric model: value proposition, key resources, key activities, partnerships, customers, revenues and costs (Adrodegari et al. 2016). Also, Beuren et al. (2013) have identified challenges that companies have when moving from selling products towards selling services. Both of these papers (Adrodegari et al 2016, Beuren et. al. 2013) emphasize the need to re-evaluate the value proposition (how product/service creates value for the targeted customer segment) (Osterwalder and Pigneur 2010), and company's relation to its partners and customers.

Adrodegari et al (2016) suggest that value should be created and captured throughout the whole product life cycle, meaning that providing solutions to customers becomes dependent on the extension of service components in the total offering. While planning of implementing PSS, Beuren et al (2013) encourage companies to change to system thinking, extending their responsibility throughout the product life cycle. Thus, companies should ask what value is created when the service is used (Adrodegari et al. 2016). The emphasis on the service usage means that in PSS business model the financial timescales become longer (Mont et al. 2006) and information requirements on product usage increase (Neff et al. 2014). Thus, key resources for creating a value proposition (Osterwalder and Pigneur 2010) centre around financial resources, good information management, and ICT (Adrodegari et al. 2016).

In PSS, several revenue models can be applied (Kindström 2010). However, Spring and Araujo (2013) note that applying more service-oriented BMs means taking more responsibility for customer operations. To avoid negative revenue flows, specific agreements on rights and liabilities of each party and inclusion of risk prevention in pricing schemes are crucial (Adrodegari et al. 2016). Also, in company’s key activities – the most important things a company must do to make its BM work (Osterwalder and Pigneur 2010) – concentrating on choosing products that can be easily maintained, upgraded, and reused is advised (Adrodegari et al. 2016).

Reim et al. (2015) note that companies get new tasks when using PSS business models. PSS business models often require cooperation with other companies (Baines et al. 2009), demanding strategic level coordination and greater need for information exchange between partners (Adrodegari et al. 2016). Similarly, the relationship between the company and the consumer is fundamental to the success of PSS, where early involvement aims to achieve better solutions to meet specific consumer demand (Beuren et al. 2013). Information exchange between the provider and the customer and understanding the customer are crucial (Adrodegari et al. 2016), since service offering should be based on customers’ needs (Raddats and Easingwood 2010). This requires a shift from transactional to interactive relationships is required (Wind 2006).

To summarise, this literature study presents that the key elements of business models are subjects to change when companies move towards providing services. For our data analysis, we create a framework for service business models based on Reim et al. 2015; Osterwalder et al. 2005; Osterwalder and Pigneur 2010 where we identify six main elements in Service business models that are subjects to change (Table 1).

Table 1 Service business model framework (based on Reim et al. 2015; Osterwalder et al. 2005;
<table>
<thead>
<tr>
<th></th>
<th>Product-oriented</th>
<th>User-oriented</th>
<th>Result-oriented</th>
</tr>
</thead>
</table>
| **Product/service offering** | Product owned by the customer  
Customization is very limited | Product owned by the provider  
Some customization for large customers | Product owned by the provider  
High degree of customization |
| **Value proposition** | Providing the product and agreed-upon service | Provider responsible for the availability of the service | Provider responsible for the result of the service |
| **Customer relationship** | Contacts through dealers or providers  
Regular or on demand interaction  
Relation building | Frequent interaction  
Trust building | Frequent, direct interaction  
Trust is necessary |
| **Revenue logic** | Customer pays for the product and agreed service  
Low risk level | Customer makes continuous payments over time (leasing etc.)  
Medium risk level | Customer makes payments based on outcome units; the result  
High risk level |
| **Value chain** | Dealers and providers between manufacturer and customer | Third-party providers commonly used | No intermediaries |

### 3 METHODOLOGY
Through studying the current state of servitization of workplace business we seek to understand the development of workplace and identify the elements of servitization, e.g. researchers are interested to see if new types of office offerings are more service-oriented than “traditional” office offerings. This is achieved by combining theories with empirical data and building propositions based on the evidence from cases as Eisenhardt (1989) suggests.

**Research approach**
This research is qualitative by its nature. Case studies were selected as a research strategy to gain an in-depth understanding on the servitization of workplace. Moreover, multiple case study allows researchers to conduct cross-case analysis for deeper understanding of the phenomenon (Yin, 2003).

Previously conducted literature review on Servitization and PSS lead researchers to construct conceptual framework with identified main categories in which changes are likely to appear. These categories, namely, product/service offering, value proposition, customer relationship, revenue logic and value chain based the case selection for purposive sampling. Purposive sampling is used when samples are chosen for a specific purpose rather than taking random samples (Miles and Huberman, 1994; Curtis et al. 2000). Selected cases represent diverse examples of existing workplace business models assigned for a range of customer organisations excluding single-tenant
offices. These different offices correspond to Weijs-Perrée et al. (2016) and Harris (2016) serviced office and business center typologies which can be seen in the market - from traditional rent office to coworking offices or hubs. Thus, assumingly, servitization elements are likely to appear in all cases but in a different modes.

**Description of the case studies**
Five purposively selected cases are introduced in Table 2. The cases represent different workplace businesses that are available in the market and are distinguished by their offerings, customer groups, and value chain.

<table>
<thead>
<tr>
<th>Case</th>
<th>Type of workplace business</th>
<th>Service provider</th>
<th>Main customer group</th>
<th>Location of the case site</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Traditional rented office</td>
<td>Property owner, property management organisation</td>
<td>Governmental institutions and agencies</td>
<td>Helsinki, Finland</td>
</tr>
<tr>
<td>B</td>
<td>Serviced office</td>
<td>Property developer, owner</td>
<td>SMEs and individual entrepreneurs</td>
<td>Helsinki, Finland</td>
</tr>
<tr>
<td>C</td>
<td>Coworking office</td>
<td>Private company</td>
<td>Micro companies and self-employed people</td>
<td>Copenhagen, Denmark</td>
</tr>
<tr>
<td>D</td>
<td>Coworking office</td>
<td>Real estate investment company</td>
<td>Various-sized companies and self-employed people</td>
<td>Helsinki, Finland</td>
</tr>
<tr>
<td>E</td>
<td>Incubator</td>
<td>Public academic property management organisation</td>
<td>Various-sized R&amp;D-oriented companies, university faculties and students</td>
<td>Tampere, Finland</td>
</tr>
</tbody>
</table>

In Case A, an organisation manages a large portfolio of governmentally owned real estate and provides physical space and services for governmental institutions and agencies. In Case B, an international property owner offers its workplace services mainly to SMEs. In Case C, case organisation is the only organisation that does not own property and the case site is located in Denmark. In Case D, an investment company offers a coworking office space as part of their business. In Case E, business is run by an academic property management organisation together with private service providers. They mainly serve university and R&D-oriented companies. Although case organisations A, B and D, are doing businesses in multiple locations or countries, the studied office and related workplace services in each case are located in two Nordic countries - Finland and Denmark.

**Data collection and analysis**
Data collection and analysis is based on five case studies including different workplace business
models. Data collection in each case study followed the same structure. Primary data was collected through interviews with service providers focusing on business logics of workplace services. In total, eight managers responsible of the studied workplace service were interviewed. Semi-structured interviews included all relevant elements of business model: value proposition, customer groups, customer and partner relationships as well as revenue logic and value chain. Interviews were conducted during April 2016 - March 2017, transcribed and analysed. Secondary data for the analysis included observations and publicly available material such as marketing material and brochures in companies’ websites, reviews, and blogs. The observations were documented in selected case sites during the same period in 2016-2017 typically by two researchers.

Content analysis was done after primary and secondary data combination within cases and cross-case (Yin, 2009). In the analysis, identified value propositions were reflected towards the literature study on servitization and PSS. For simplicity, analysed value propositions are illustrated here as a stack of layers (Youseff et al. 2008) where each layer encompasses one or more types of services.

4 RESULTS

Value proposition

Nearly in every case, marketing material included a word related to the physical work environment such as “working environment”, “address”, “hub” or “workplace”. Physical spaces were thus clearly a central part of the offering. Two case companies (C, D) highlighted the community aspect, e.g. “Community of (…)” or “Join the movement (…)”. It is worth noting that “hub” can be assigned to both physical work environment and community as it means a central part connecting virtual places, physical spaces, and people.

Based on the cross-case analysis, six value proposition elements were identified. The first two elements cover the physical space. In the cases, physical space was offered either as a traditional private office or as a desk.

Third element includes the FM support services. In all cases, FM support services are offered as a part of value proposition. Fourth element, business support services, such as marketing, legal and/or accounting services, are provided in every case although the range of offered of business support services varied. For example, in Case B, the services included mainly sales & marketing related services and in Case E R&D related services. The business support services are not further sub-categorised in this paper.

Based on the analysis, business community services were identified as the fifth value proposition element. In Cases B, C, D and E, community services included events, networking opportunities and corporate training offered by the case organisation.

The last value proposition element is personal service including for example access to gyms, hairdressers, yoga classes, health care, and transportation services. Personal services were found in two value propositions (Cases B, D).

Table 3 Product/service offering in case organisations

<table>
<thead>
<tr>
<th>Elements in the value proposition</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical space: private office</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Physical space: desk</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
The value propositions are summarised in Table 3. Table 3 shows that the main differences between the cases are related to offered physical space (elements 1 and 2), business community (element 5), and personal services (element 6). Customization was limited in Cases A and E, which are more traditional office space providers. In rest of the cases, organisations offered a wide range of services as a package but part of them were charged and could be ordered separately without any prior notice or even without including the case organisation. Value propositions differed based on service delivery – either they were provided as agreed (Case A), promised (Cases B, E) or provided through creating a network of service providers (Cases C, D):

“services can be ordered directly through us and we agree on SLAs” (Case A)
“you have a service and within the service you can tick – there are features that you can either have or don’t have.” (Case B)
“We have everything from banking to insurance to in-house printing house. <...> everyone can select the service they want and pay only for them.” (Case D)

Customer interaction
Table 4 presents interaction in each case. Based on the cross-case analysis, interaction was grouped into six categories: information availability, face-to-face (f2f) interaction, frequency of f2f interactions, the use digital platforms, partner networks, and organized events.
In all cases, only part of the information is public and part of the information is available only for the customers. F2f interaction was mentioned in all cases necessary for creating a feeling of community, fast feedback collection and for marketing and sales purposes. The frequency of interactions, however, varied in cases. For example, in Cases C and D, interactions with the users were daily whereas in Cases B and E the interactions were occasional on the organisational level. Digital platforms were used in three cases (Cases B, C, D) although all the case organisations were in a process of investigating the opportunities of digital platforms. At the moment of the study, in Cases B and D, digital platforms were used to order services:

“We have started developing our own meeting booking system.” (Case B)
In Case C, a digital platform was used for social networking.

“In facebook group they find the advice and help they need, share social interactions, experiences. It is very personal and closed group, only for members. We also have created a member site on our website, where members create their profiles with skills listed and professional experience described, so external customers and other members can find the right person to collaborate with.” (Case C)

Partnering opportunity was utilised only in Case C. In this case, partner network was used to extend the office network: customers of the case organisation C had access also to the offices provided by its partners.

Events were a way to interact with customers. The audience and frequency of organising events varied from case to case. For example, in Cases C and D, public and members-only events were organized frequently.

“We also co-create those events together.” (Case C)
“On a very small level, like today, for example, we had an Easter egg hunt.” (Case D)

In Case A, events were organised only few times per year mainly for their customer organisations only.

Table 4 Customer interactions in cases

<table>
<thead>
<tr>
<th>Customer interactions</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information availability</td>
<td>Mainly customers only</td>
<td>Partial availability</td>
<td>Public information about the community</td>
<td>Partial availability</td>
<td>Mainly customer only (information on community available when present physically)</td>
</tr>
<tr>
<td>F2F interaction</td>
<td>Mainly</td>
<td>Mainly</td>
<td>Mainly</td>
<td>Mainly</td>
<td>Mainly</td>
</tr>
<tr>
<td>Frequency/level</td>
<td>On demand/regular interaction, relation building</td>
<td>Frequent, direct interaction</td>
<td>Frequent, direct interaction</td>
<td>Regular interaction, relation building</td>
<td></td>
</tr>
<tr>
<td>Digital platform</td>
<td>-</td>
<td>For service &amp; maintenance orders</td>
<td>Intranet for community members</td>
<td>For service orders</td>
<td>-</td>
</tr>
<tr>
<td>Partner network</td>
<td>-</td>
<td>-</td>
<td>Sales through partner channels and public</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
platforms

<table>
<thead>
<tr>
<th>Events</th>
<th>platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seldom,</td>
<td>Medium frequency, private</td>
</tr>
<tr>
<td>private</td>
<td>Medium frequency, private</td>
</tr>
<tr>
<td>Frequent,</td>
<td>Frequent, private &amp; public</td>
</tr>
<tr>
<td>private &amp;</td>
<td>Medium frequency, private &amp; public</td>
</tr>
<tr>
<td>public</td>
<td></td>
</tr>
</tbody>
</table>

To summarise, interaction with customers mainly happens via face-to-face communication and events. Outside networks and digital platforms are still not common when providing workplace services.

**Revenue models**

Table 5 presents the revenue logic in each case. The analyses identified different pricing types for physical space, services, and coworking spaces. In addition, differences were also found in contract types and lengths, and additional revenue options. These are explained next in more detail.

Pricing of a physical space was instrumented either on square meter based leases or on a membership-based contracts. In Cases A, B and E square meter based leases were mainly used while in Cases C and D only memberships contracts were used:

“*We use traditional square meter-based pricing.*” (Case A)

“It is a cost-based pricing.” (Case E)

Services were mainly charged as add-ons in the cases where square meter based lease contracts were used. Cases, where membership was used (Cases C and D), most of the services were included in the membership fee:

“*[…] has 3 types of memberships.*” (Case C)

“*Membership typically suits the best for the needs of the people.*” (Case D)

In the cases, coworking space was included in the pricing of the physical space (lease agreement or membership) or as an add-on for the existing physical space or a hybrid model was used. Because of this, coworking space is treated in this analysis as a separate service. For example, in Cases C and D, the case organisations were profiled as coworking space operators and thus their main service was membership-based coworking space whereas in Case A the use of coworking space was included to some extend to the existing lease agreement.

Based on the case material, the length of contracts has decreased significantly. The minimum length of contract in square meter based leases was 12 months (Cases A, B). In coworking spaces the contract is valid until further notice and can be terminated within 1-3 months (Cases B, C and D). The longest contracts were offered in Case E where minimum length of the contract was 3 years.

Four out of five case organisations received additional revenues from other sources. In Cases B, C, and D, additional revenues were attained by renting meeting rooms on hourly rate also for outside users. In Case E, organisation did workplace related development project with companies and universities and thus generated revenue that was based on the workplace expertise in their own
organisation.

Table 5 Revenue logic in cases

<table>
<thead>
<tr>
<th></th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pricing of physical space:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease-based</td>
<td>x</td>
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<td>Membership</td>
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<td>x</td>
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<tr>
<td><strong>Pricing of services</strong></td>
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<td>Add-on to rent price</td>
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<td>Separately: business support</td>
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<td>Add-on to rent price</td>
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<td>Separately: business support</td>
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<td>Included in lease agreement. Separately: services from other providers (business support)</td>
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<td>Included in lease agreement. Separately: services from other providers (business support)</td>
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<td>Add-on to rent price</td>
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<td>Separately: business support</td>
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<td>Included in lease agreement. Separately: services from other providers (business support, some personal services)</td>
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<tr>
<td>Included in lease agreement. Separately: services from other providers (business support, some personal services)</td>
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<tr>
<td><strong>Pricing of coworking spaces</strong></td>
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<tr>
<td>Included in the lease agreement, no separate payments</td>
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<tr>
<td>Charged separately as memberships</td>
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<td>Same membership allows usage of other coworking spaces</td>
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<tr>
<td>Membership-based contracts for selected members</td>
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<tr>
<td><strong>Contracts &amp; Duration</strong></td>
<td>min. 12 months</td>
<td>min. 12 months/ memberships with 1 month termination notice</td>
<td>memberships with 3 months termination notice</td>
<td>memberships with 1 month termination notice</td>
<td>min. 12 months/ memberships with 3 years agreements</td>
</tr>
<tr>
<td><strong>Additional revenue</strong></td>
<td>Rent of meeting rooms</td>
<td>Rent of meeting rooms &amp; other spaces after standard work hours.</td>
<td>Rent of meeting rooms</td>
<td>Research project financing</td>
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</tbody>
</table>

To conclude, the main factor determining pricing difference between the 5 cases is the physical space. The decision whether to instrument pricing on square meter based leases or on membership is the base of the revenue model. Customers are not willing to commit for long term and thus flexibility is increased through shorter agreements and termination times.

**Value chain in case organisations**

Table 6 summaries the roles and connections between participating actors in the value chain. First, case organisations require a network of other service providers in order to provide their services. The selection of services can be based on feedback and benchmarking (*Cases B, C, D*):
“Locally they can choose more depending on our customer profile.” (Case B)  
“[The service provider] reacts to situations quickly, responds to members needs.” (Case C)  
“We continually take into consideration the users’ wishes and suggestions.” (Case D)  

The role of the case organisation can vary from the main negotiator for service provision (Cases A, B) where service contracts are negotiated on the behalf of customers to connector (Cases C, D):  

“organisations can order services directly through […] where we put them into tender.” (Case A)  
“all of our service providers are actually our […] members.” (Case D)  

When case organisation does not have any contract with another service provider, but acts as an intermediate introducing potential service providers to their customer. In these partnerships, financial incentives for case organisation are not included.  

Table 6 Value chain in case organisations  

<table>
<thead>
<tr>
<th></th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main actors</strong></td>
<td>Network of service providers.</td>
<td>Network of service providers. Service availability - based on feedback and benchmark</td>
<td>Partnerships and network with other coworking spaces, service providers, organisations based on feedback and benchmark</td>
<td>Network of service providers. Service availability - based on feedback</td>
<td>University and business. Network of service providers - secondary.</td>
</tr>
<tr>
<td><strong>Contracts with service providers</strong></td>
<td>Maintenance contracts - SLAs Customer services - strategic partnerships</td>
<td>SLAs</td>
<td>Partnership agreements, no monetary exchange with partners</td>
<td>SLAs Partnerships with other service providers for events</td>
<td>Cost and risk sharing between university and business. SLAs with service providers</td>
</tr>
<tr>
<td><strong>Role of case organisation</strong></td>
<td>Negotiator</td>
<td>Negotiator and intermediary</td>
<td>Connector</td>
<td>Intermediary and connector</td>
<td>Intermediary</td>
</tr>
</tbody>
</table>

To summarise, the biggest difference in cases appear from the function of the case organisation in the network of service providers.
Figure 1 visualizes cross-case analysis results where business model elements are put into the level of PSS system: moving from Product-oriented towards Result-oriented models. Results of the study imply that Case D applies the most result-oriented business model followed by Case C. Meanwhile, Case A is the least service-oriented, thus, employs product-oriented system. The main differences can be noticed in the Product/Service offering and Customer relationship elements while Value chain is the least changing element in business models. This indicates that although workplace as an offering changes—this case, including additional attributes to the offer—the value chain does not change significantly. Main stakeholders do not change, only new ones are introduced in the value chain but the relationship with them as well as customers is changing. Customer relationship becomes closer in result-oriented business models which helps on understanding customer needs better. This also affects collaboration with other service providers or players in the value chain as satisfying customer needs require stronger collaboration.

Experience is the highest value
Based on studied case companies, it is evident that overall workplace experience is replacing the physical space in value offerings. The visualisation in ontology mode is introduced in Figure 2. In this ontology, higher level of workplace elements are offered after the lower level elements are implemented. The figure represents a gradual move from product-based towards result-based business model. The basic level offering includes physical space (as private office space, small private space or desk), together with FM and support services (as identified in Table 3). The next level includes community-related services and value offering is customer-business focused. The last level leads towards overall experience of the workplace. This progress corresponds well with Sugiyama’s et al. (2012) identified stages of experience economy - changing relationships and roles of customers and providers - first, trading goods, then offering customized services, and last, offering the experience.
Changes are most visible in: 1) end-user orientation and value co-creation with the user; 2) partnering (instead of outsourcing) with service providers and adding new partners; and 3) more flexible agreements and payment options. First, the end-user involvement is noticeable in the selection of services in organisation’s value offering. Also, constant feedback collection and service portfolio adjustment based on it. Second, new types of partnerships are formed between workplace and service providers. For example, in some cases we notice that although the negotiations are done between the space operator and service provider, the actual contracts are signed between the end-user and service provider. Third, increased requirement for flexibility also affects space rental and service level agreements. They have become noticeably shorter, varying from 1 month to few years. Increased flexibility brings more risks to service providers so they have to go “an extra mile” to keep their customers happy and wanting to stay. Customers, on the other hand, are becoming more demanding. They know they can choose the place to work and leave it easily if they do not like it.

**Implications to practitioners**

Results of this paper imply that the servitization of workplace has begun. There is a growing business opportunity that service providers can harvest but based on the results of this research, it cannot be done by a single workplace service provider alone. Networks, partnering, and alliances are formed in order to be able to deliver this value to the customer.

In service ontology model, the conceptualization of value into experience is the highest level of servitization of a workplace. For companies, this means a strategic decision to transform. Service ontology provides a map for service providers to decide which stage to choose. In addition, for the demand side, i.e. real estate or facility managers, the ontology provides an insight what they could demand from the supply side to support their employees’ core activities.
5 CONCLUSIONS

Changing ways of working and the concept of workplace create challenges for workplace providers. New players entering office space markets push towards the development of workplace experience. Although, most of the organisations talk about experience at workplace, traditional office space providers and operators often do not succeed in attempts to deliver it. Increasing attention to servitization and value co-creation in literature motivated researchers to analyse workplace from a business perspective. Our analysed examples show that companies are trying to adapt but have not been yet able to replace space with experience in their value propositions.

In order to understand the change in workplace business models, we study the current state of servitization in workplace. For this, we made a qualitative analysis of 5 cases and identified the differences in the elements of their business models.

As a result, we developed a service ontology showing evolving value offerings, analysed value chain and revenue models. Value offerings have moved from basic space and FM service offering towards adding services related to community such as networking events, expert consulting, and education of companies/user. The most advanced value propositions offer services related to personal experience such as personalised events (e.g. hobbies, self-development), wellbeing (e.g. jogging-peer groups, personal trainer/dietologist consultations) and even transportation (free use of bikes, electric cars). These result-based business model elements are more commonly found in coworking spaces where they promote the spirit of workplace. Value chain analysis concentrated on relationships between service providers and their partner companies. The way services are chosen and bought is changing - from using traditional SLAs towards creating a network of service providers to deliver the services. In revenue model, we noticed that the agreements’ time span has clearly shortened. Workplace is charged based on membership rather than lease agreement and prices vary on the type of physical space choices.

This research has some limitations. The selection of cases is limited to three cities in two Nordic countries. Further research with wider geographical selection could be useful. However, the growth of demand of flexible office spaces and coworking spaces is seen all around the world. According to Weinbrenn (2016), the growth of coworking spaces across the world reached 300% increase in five years and coworking and WeWork are more popular search terms in Google than executive suites. Since trends of New Ways of working and, hence, space flexibility and new workplace concepts, are global, patterns identified in this research can have a wider relevance. According to Colliers International (2016) Nordic and North-West European markets are much more open to collaborative and flexible work, for that reason, cases from these countries can be a good example of future direction of workplace development around the world.

The results and insights can be used to understand similar cases and the development of business models, however, the results do not aim for statistical generalisation.

This study implies that even though some parts of business model are changing, the way in which workplace is offered is still rather traditional. Companies’ slogans still promote physical space rather than experience. The new cases of coworking hubs start taking into account the experiences of people. Still, experience-based models are a new and rather small part of all office business market. We believe that in order to move towards the “experience of workplace”, companies should concentrate on developing their value propositions, changing their partnerships with other service providers and relationship with customers.

In terms of academic topic development, real estate, added value of FM and workplace are still very much product-oriented academic fields with a clear scope at a physical asset. While PSS, S-D logic, and servitization are widely discussed in other academic fields, this approach is quite new
in workplace research. We move from single-organisation management perspective towards looking at workplace as a business for serving the customer and end-user. Academic research can benefit from this attempt to connect different logics for analysing changes in the elements of real estate business models. Workplace studies are often done in relation to facilities management, corporate real estate management and architecture but seldom any studies about workplace can be found following theories used in business schools and business research. With this attempt, we challenge FM and CREM academics to look at workplace as a service business just the same as in industry serviced offices and new players are challenging traditional office market.
REFERENCES


Peng, Y. (2012), Modelling and Designing IT-enabled Service Systems Driven by Requirements and


Wind, Y. (2006), “Blurring the lines: Is there a need to rethink industrial marketing?”, Journal of