



# Facility management value dimensions from a demand perspective

Facility  
management  
value dimensions

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## Abstract

**Purpose** – This paper aims to introduce and describe the concept of the facility management (FM) value network which takes a subjective perspective and reflects upon the relationships amongst key FM stakeholders. The FM value network focuses on demand by considering client, customer and end-user perceptions of value, providing a conceptual foundation for considering a demand driven, service-oriented and user focused approach to FM. It introduces concepts drawn from related fields such as services marketing, business economics and management and identifies an agenda for future research.

**Design/methodology/approach** – This paper is based on results of an extensive literature review, research workshops and a pilot case study, to explore stakeholder's perceptions of value within FM relationships.

**Findings** – This paper proposes an alternative view of FM stakeholders and the outcomes they value in comparison to a conventional built environment perspective. It provides examples of value dimensions relevant to the demand-side of organisations, collated from different sectors of the economy.

**Research limitations/implications** – Due to a conceptual approach including a pilot case study that still has to be explored in a qualitative/quantitative empirical setting within the field of FM, this paper has limitations.

**Practical implications** – The FM value network described and the research agenda proposed provide valuable insight into issues that have to be addressed in future work and sheds light on this under-researched field of value of FM. Further work could build on these conceptual foundations in order to contribute to evidence-based FM.

**Originality/value** – This paper makes an original contribution to research into the value of FM by focussing on the demand side. It raises issues about the nature of the discipline and its practice and it offers an understanding of the further research necessary to support evidence-based decision making.

**Keywords** Facility management, Value, Stakeholder, Network

**Paper type** Conceptual paper



## Introduction

Analysing what customers value most has long been a challenge in research and practice in service industries. But “gaining a comprehensive understanding of the value of a market offering in a particular customer setting may appear monumentally difficult”

(Anderson and Narus, 1998, p. 55). Recently, there has been a growing interest in the value construct and its significance for business success (Woodside *et al.*, 2008; Lusch and Vargo, 2009; Ramaswamy, 2009; Kotler *et al.*, 2010; Porter and Kramer, 2011). Anderson (1995) states that the essential purpose for a customer firm and a supplier firm engaging in a collaborative relationship, is to work together in ways that each organization benefits from the exchange of value between the organizations. According to Anderson (1995) “value creation and value sharing can be regarded as the *raison d'être* of collaborative customer-supplier relationships”.

On a high level of abstraction, value is defined as the trade-off between benefits (“what you get”) and sacrifices (“what you give”) in a market exchange (Zeithaml, 1988). Value, to the customer, is benefits received for sacrifices given. Benefits refer to needs and wants and are what the customer seeks to buy, whereas sacrifices have both a monetary component (economic costs) and a non-monetary component (e.g. inconvenience or time invested) (Berry, 2009). Delivering a superior value entails maximizing the benefits and minimizing the sacrifices for customers within their relationship with suppliers. However, practitioners often mistake high value by assuming it is the equivalent to low price: the lower the price, the better the value. Yet, this is not necessarily true for most customers.

When considering value, three key issues have to be considered (Ulaga and Chacour, 2001):

- (1) *Multiple components of value.* Value is presented as a trade-off between benefits and sacrifices perceived by the customer in a supplier’s offering.
- (2) *The impact of roles and perceptions.* Customers are not homogenous and therefore, different customers perceive different values within the same offering. The assessment of value is not a rational process, but influenced by individual emotions, beliefs, expectations and context.
- (3) *The importance of competition.* Value is relative to competition. The value customers perceive is often judged in terms of additional advantages expected or experienced compared to competitive offerings in case of substitutability.

Specifically in the facility management (FM) domain, value is mostly based on economic rules of thumb. Value is created when financial value is added, i.e. lower costs and/or higher revenue for the client organization. Due to the mostly cost-driven and technical approach of FM, the discipline appears to still be largely driven by a counting mind-set. A possible reason for this practitioners’ bias might be a lack of understanding the added value of FM. Dodds (1999) suggested that when quality and customer service are difficult to discern, price information becomes stronger in determining value. However, this also implicitly assumes FM can add value. The value topic recently has gained significant attention in the FM research field (Wauters, 2005; Lindholm and Leväinen, 2006; De Toni *et al.*, 2007; De Vries *et al.*, 2008; Jensen, 2010; Kok *et al.*, 2011; Alexander, 2012; Jensen *et al.*, 2012), focussing on different aspects of value, especially quality, productivity, time, risk and relationship quality. Value can be regarded as the cornerstone of FM, because its activities are used as inputs into the client’s resource-integrating and value-creating activities as clearly described in the value chain of Porter (1985) where FM is part of the organizations’ infrastructure.

Much value research focuses on understanding how FM adds value, and takes on a supply-side perspective. We propose a complementary view of value research in FM and

take the demand-side perspective of value in FM which is also reflected in the European standard EN 15221 (CEN, 2006). Our primary objective in this article is to provide an overview of different stakeholders in the FM-demand collaborative relationship and identifying different perspectives of value exchange/creation. Our starting point is the European standard EN 15221 (CEN, 2006, p. 5) defining FM as the “integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of its primary activities”. By extension, Kok *et al.* (2011) suggest that FM is an intrafirm mechanism that coordinates the demand and supply of facility services and, by doing so, supports the effectiveness of an organisation. We characterize the key stakeholders of value exchange/creation in FM before we describe and analyse the various dimensions of value in the field. Following this, we introduce the concept of co-creation of value in FM. Furthermore, a research structure and research agenda with regards to value in FM are presented.

### FM value network

#### *A demand side perspective of value perception*

In his work on the FM value map, Jensen (2010) takes the supply-side perspective of value in FM and establishes the map “as a conceptual framework to understand and explain the different ways that FM can add value to a core business” (Jensen, 2010, p. 181). The author uses a standard logic model (input-process-output) to indicate the possible effects to different stakeholders. This work must be considered rudimentary for the different perspectives incorporated in the model (e.g. real estate management, FM, process management, in-house delivery and community) seem to lead to a collection of categories whose comprehensiveness is unclear. Also, the meaning of value to the FM stakeholders has not been tackled. However, four of the key conclusions taken from this previous work serve as a foundation for our approach (Jensen *et al.*, 2012):

- (1) *Value in FM reflects a holistic value concept.* This changing focus from economic value towards a holistic value of FM is reflected in the fact that whereas previously shareholder value was the main perspective, nowadays a more holistic stakeholder perspective has become more accepted.
- (2) *Value in FM takes several stakeholders into account.* The appraisal of value in FM depends on who benefits from the value and who bears the risks and burdens. So it is important to take into account the views and interests of different stakeholders such as the organisation itself (policymakers, staff, controllers, FM managers), owners (investors, shareholders), visitors, suppliers, customers, and society (local, regional, national, global).
- (3) *Value in FM is created within a network of relationships.* When considering value in FM, FM has to be acknowledged as a relationship management discipline. On a high level of abstraction, FM is the management of internal or external customer/client supplier relationships.
- (4) *Value in FM is subjective.* The character of value within these relationships includes a strong subjective element that is dependent on the customer’s perception. Only the subjective perception of the customer, client and end-user determines the value of the relationships within FM and the rule “perception is reality” should be applied here. Perceived value can only exist and be produced within this specific network of relationships.

In contrast to the FM value map, we take the demand-side perspective of value in FM. Instead of focusing on the provision of value in FM, we change the perspective into the perception of value in FM. This understanding of value in FM reflects the service oriented and stakeholder perspective mentioned previously. Also, in reference to the different stakeholders, Thomson and Austin (2006, p. 4) point out that:

[...] when faced with the same object, or the same information describing it, stakeholders will seldom evaluate it identically. They typically have different judgements of the object because they are each influenced by their own set of values. These values, in turn, give rise to different stakeholder expectations.

Therefore, we argue value has to be considered from the perspective of the stakeholders in FM.

### Key stakeholders in FM

From the earlier mentioned definitions (CEN, 2006; Kok *et al.*, 2011) and positioning of FM (Porter, 1985) it is clear that FM's primary responsibility lies within the organization. Therefore, a demand perspective should focus on internal stakeholders in terms of building users, or broader, users of the facilities that are part of the responsibility of FM. When trying to profile these users, a rudimentary understanding of marketing tells us that not all users are the same: they have different characteristics and needs, behave differently (Johnson and Scholes, 1993).

Markets are therefore most usefully thought of in terms of market segments which are groups of buyers with corresponding behaviour. When looking at the nature of the market as proposed by Jain (1993) FM serves both a consumer market and organizational market. The organizational market is concerned with organizations for which the products and services delivered to them (e.g. FM services) are being used as inputs for their primary processes to produce end products and/or services to target markets (Kotler, 1984). Buyer-seller relationships – in the sense of business-to-business (B2B) relationships – in these markets can be both inter-organization and intra-organizational. A support organization delivering services to another organization is an example of the former, a support unit delivering services to business units within the same organization of the latter. In contrast, the consumer market is concerned with (groups of) individuals who are users of the products and/or the services delivered to them (Kotler, 1984). Buyer-seller relationships – in the sense of business-to-consumer (B2C) relationships – in these markets can be found when a service organization delivers their products to households, whereas a typically intra-organization example is a service unit delivering services to employees. We also acknowledge the existence of an internal market, within the organization, where an intermediary unit, e.g. a business unit, serves as the customer of FM.

FM cannot entirely be allocated to one of these markets and takes a hybrid form. FM functions in a B2B environment when considering for example the collaborative relationship between the in-house FM-department and external service providers in case of outsourcing facility services, or FM as a support unit providing services to other organizational units. But when FM is, e.g. serving employees and visitors in an intra-organizational situation, the discipline also shows typical characteristics of a B2C environment. Therefore, we would like to make clear that our FM understanding reflects both of these disciplines; consequently we refer to FM as a B2B2C management discipline.

Following this line of thought, CEN 15221 (2006, p. 5), suggests that the term “customer” may be differentiated as either:

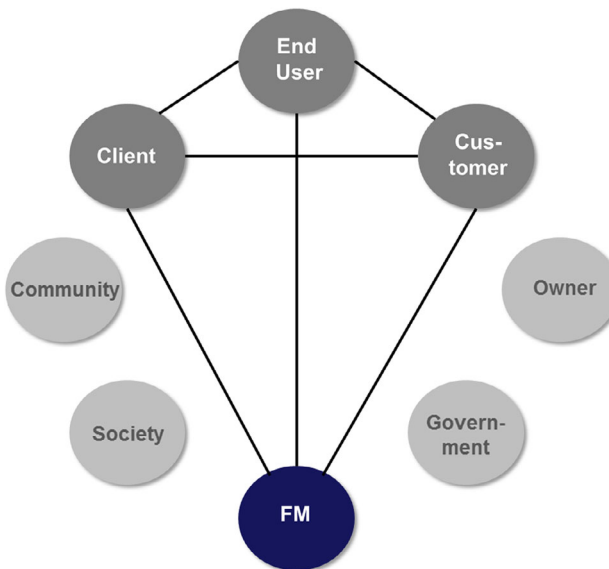
- *Client*. Meaning “organization that procures facility services by means of an FM agreement”.
- *Customer*. Meaning “organizational unit that specifies and orders the delivery of facility services within the conditions of an FM agreement”.
- *End user*. Meaning “person receiving facility services”.

For a graphic explanation of these three key stakeholders in FM, please refer to Figure 1.

### Value dimensions in FM

Generally speaking, when dealing with the value construct, literature suggests multiple dimensions, e.g. exchange value (Bowman and Ambrosini, 2000; Lusch and Vargo, 2009), use value (Woodruff, 1997; Ostrom *et al.*, 2010; Bowman and Ambrosini, 2000; Lusch and Vargo, 2009), social value (McMillan, 2004), environmental value (Senge *et al.*, 2008), relationship value (Anderson *et al.*, 1993; Gwinner *et al.*, 1998) and financial value. Elsewhere, Alexander (2012) builds on the work of business economists such as Ng *et al.* (2010) to summarise these value dimensions from a user perspective.

On the basis of the literature, it is apparent that value is multi-dimensional and extends beyond financial considerations. A number of authors have considered dimensions of value in the built environment, including Duffy and Hannay (1992), CABE (2002), McMillan (2006), Saxon (2005) and Thomson and Austin (2006). In particular, McMillan’s work summarises this work and suggests six key categories of the value in the built environment – exchange, use, image, social, environmental and cultural value. Most of this work focuses on the role of design as the prime value driver



**Figure 1.**  
Key stakeholders  
of value in FM

in the built environment. In contrast, work to identify the added value of FM from a managerial perspective is in its infancy.

Price (2004) argues that, despite many claims concerning added value, FM remains rooted in an operational and cost focussed stance, unable to enunciate its contribution to “the core business”. In their current RICS research report, Ware and Carder (2012, p. 6) point out that “FM has become a commodity rather than a professional skill in many organisations, to be procured at lowest cost”. The two authors go on in stating that until today, many: [...] executives and heads of FM, together, are not asking the right questions. They should be asking how the facilities function can strengthen the company’s strategic positioning with customers, with employees (and prospective employees), and with the communities where they are located or want to do business (Ware and Carder, 2012, p. 6).

Thus, we argue that the primary focus on financial considerations (i.e. cost minimization) has impeded the development and influence of FM in organisations. The narrow focus on cost has compromised greater recognition of the strategic importance of FM and its potential impact on business outcomes. Benchmarking of costs and performance has emphasised short-term expediency and has failed to promote innovation and quality improvement.

Despite the efforts of both facility professionals and researchers, financial stringency still dominates the FM agenda. We propose a demand side perspective that offers a new insight on value. This is not to suggest that financial considerations are unimportant. However, through this research we address the issues from a different perspective, to widen the horizons of decision makers.

So, building on this background, and considering the dimensions of the typology offered by McMillan (2006), the following sections will describe value dimensions that we consider to be of direct relevance in the field of FM. Therefore, we exclude exchange and financial value for these concepts explicitly imply some monetary transaction between demand and supply, which in the situation of in-house FM is not always the case.

#### *Use value*

A recent review highlights that a key research priority for managers and academics alike is creating and enhancing tools for capturing use value for services and communicating value to customers (Ostrom *et al.*, 2010, p. 26). Lindgreen and Wynstra (2005) mention that financial value cannot be ignored but use value ultimately determines financial value and, thus, the long-term success of the firm. Use value is the subjective quality of a product or service customer’s (as users) experience in relation to their needs (Bowman and Ambrosini, 2000). Building on Woodruff (1997), Vargo and Lusch (2004) and Woodruff and Flint (2006) use value is defined as a customer’s outcome, purpose or objective that is achieved through service. From this we conclude that use value is strongly related to the effectiveness of FM whereas the earlier mentioned financial value has a strong relation with efficiency. MacDonald *et al.* (2011, p. 672) argue that an use value perspective is superior to the embedded financial value perspective which may be defined as the presence of service attributes, and performances against those attributes, for which the customer is prepared to pay (Vargo and Lusch, 2004).

In reference to McMillan (2006) use value of design can be described as FM’s contribution to organizational outcomes, such as productivity, profitability, competitiveness and repeat business. The use value of FM arises from supporting and improving the effectiveness of the primary processes as stated in the definition

of FM (CEN, 2006), for instance by providing a working environment that is safe, that promotes staff health, well-being and job satisfaction, that encourages flexible working, teamwork and communication, and that enhances recruitment and retention while reducing absenteeism.

We conclude that use value of FM is created with clients, customers and end-users when internal or external FM providers' products, services, information, and support personnel are incorporated into specific client, customer or end-user processes, operations, and facilities that constitute varied use situations (Woodruff and Gardial, 1996; Flint and Mentzer, 2006).

#### *Social value*

Markus (1993) argues that buildings are most often described as art, technical or investment objects, but are more rarely regarded as social objects and considered as products of societal processes and relations. Whilst conventional fields of enquiry, such as environmental behaviour and environmental psychology, consider man-environment systems and spatio-social phenomena, they are concerned primarily with the effect of the built environment on behaviour, rather than taking a social and organisational perspective. For more recent exceptions in this field see, e.g. Van der Voordt and Van Wegen (2005), Mobach (2009) and Finch (2012).

Building on the early work of Markus (1993) and Becker (1990), Alexander and Price (2012) consider organisations as ecologies and have explored FM as a social construct. In man-environment studies it is found that human reactions and performance change in response to the effects of the characteristics of the environment (Rapoport, 1982). These effects are social but the cues on the basis of which the social situations are judged are environmental, e.g. the size of the room, its location, its furnishings, the clothing. The physical environment provides cues for behaviour but also communicates meanings about the occupants (Rapoport, 1982). From this we conclude that FM – being responsible for this built environment – can create social value by organizing the physical setting according to organizational goals and desired behaviour as suggested by Bitner (1992).

Apart from offering a workplace or a shelter to keep one dry, the purpose of the built environment is increasingly to provide for a social setting where people meet and interact. In accordance with the developments of New Ways of Working, offering possibilities to work anytime and anyplace, one could argue that FM creates social value to employees by enabling a better work-life balance.

According to McMillan (2006) social value is:

[...] created by making connections between people, creating or enhancing opportunities for positive social interaction, reinforcing social identity and civic pride, encouraging social inclusion and contributing towards to improved social health, prosperity, morale, goodwill, neighbourly behaviour, safety and security, while reducing vandalism and crime.

Examples of indicators or metrics for social value are for example sense of community, sense of place, civic pride, neighbourly behaviour, reduced crime and vandalism.

#### *Environmental value*

Ever since the Brundtland Commission of the United Nations in 1987 reported the need for a sustainable development and the change of politics needed for achieving that,

organizations are including sustainability as a part of corporate social responsibility (CSR) in their business strategies (Sarkis, 2003; Málóvics *et al.*, 2008). Porter and Kramer (2011) even propose that creating shared value (CSV) supersedes CSR in guiding the investments of companies in their communities. In contrast to CSR that mostly focuses on reputation with limited connection to business, CSV is integral to an organization's profitability and competitive position. It leverages the unique resources and expertise of the organisation to create economic value by taking a triple bottom line perspective, also known as people, planet and profit, into account. But until today, organizations tend to focus on the performance on organizational level only (the single bottom line), rather than on the performance of the supply chain as a whole (Gerbens-Leenes *et al.*, 2003). When considering the public discussion about environmental issues and sustainability, organizations in general and FM in specific must balance more carefully their goals with the need to pursue sustainability: "Companies need to make drastic changes in their research and development, production, financial, and marketing practices if sustainability is to be achieved" (Kotler, 2011, p. 132). Corporate sustainability is about better decision-making around trade-offs between the triple bottom line or sustainability elements such as social, environmental and economic value. This requires compromises between financial and non-financial sustainability elements (Elkington, 1998). For FM this means integrating sustainable practices with the desire for cost-effectiveness.

McMillan (2006) describes environmental value as value arising from a:

[...] concern for intergenerational equity, the protection of biodiversity and the precautionary principle in relation to the consumption of finite resources. Principles include adaptability and/or flexibility, robustness and low maintenance, and the application of a whole-life cost approach. Immediate benefits are to local health and pollution.

Examples of indicators or metrics are, e.g. environmental impact, carbon reduction, percentage of waste recycled, or ecological footprint.

FM is able to generate environmental value, e.g. by reducing energy and water consumption, through purchasing decisions, e.g. local supply, green transport and by enacting recycling and waste strategies. It is also important to recognise the need to balance green strategies with spatial policies to ensure a balanced approach.

#### *Relationship value*

Although value issues enjoy recent popularity in FM research, they typically focus on the financial value that FM is creating for primary business, therefore neglecting – amongst others – relational dimensions of customer-perceived value. This seems surprising, since value creation and value sharing can be regarded as vital elements in customer-supplier relationships (Anderson, 1995, p. 349).

Generally speaking, demand and supplier firms do not only do business with each other because of the value of the good or service being exchanged. Besides any technical or economic benefits explicitly embodied in the offering, there may be factors on the level of the supplier firm that make one offer more attractive than another one (Lindgreen and Wynstra, 2005). To customers, "value also has a perceptual dimension, for example, trust, commitment and attraction" (Grönroos, 2011, p. 242) and can be described as (Lindgreen and Wynstra, 2005, p. 734):



- getting high-quality service and customized products;
- experiencing social (e.g. friendship/fraternization with the suppliers) and special treatment (e.g. economic and customization), especially in services where there is a high degree of contact between the customer and supplier; and
- perceiving a reduced sense of anxiety because they trust the supplier.

Relationship value consists of relationship benefits and sacrifices (Anderson *et al.*, 1993; Gwinner *et al.*, 1998; Ulaga and Eggert, 2005). Thus, higher value in relationships can come either from increasing the benefits or decreasing the sacrifices (Ravald and Grönroos, 1996).

Coenen *et al.* (2012) list a variety of definitions and dimensions of relationship value that differentiate between benefits and sacrifices, e.g. Ulaga (2003, p. 682) describes several dimensions of relationship benefit, e.g. service support, delivery performance, supplier know-how, or personal interaction, thus implying that there is a value in the relationship itself. According to Ulaga and Eggert (2006) relationship value can be defined as the trade-off between the benefits and the costs perceived in the supplier's core offering, in the sourcing process, and at the level of a customer's operations, taking into consideration the available alternative supplier relationships. Relational value is the outcome of maintaining a customer relationship, which has significance for providing added value in terms of an increase of mutual trust, customer loyalty and tolerance, and two parties attempting to meet each other's objectives (Ravald and Grönroos, 1996; Lindgreen and Wynstra, 2005). Kok *et al.* (2011) argue that the alignment of the core business and FM is also a key element to the achievement of FM added value and that, besides the service specifications in terms of quality and performance required, the relationship between FM and the customer must also be considered.

### FM value matrix

To explore the various research opportunities within the field of value in FM, we propose to use a cross-tabulation to combine the knowledge of different dimensions of value in FM with the FM key stakeholders. By doing this, a grid of research fields evolves for exploration. The matrix can be used as a grid to structure research and develop a methodology (Figure 2).

### Co-creation paradigm within the FM value network

When exploring value dimensions of the FM-demand collaborative relationship it is obvious to consider this to be delivered by one party (supplier of value, e.g. FM) to another party (recipient of value, e.g. client, customer, or end-user). But as MacDonald *et al.* (2011) emphasise, in current discussions of value an increasing recognition of the importance of value created through the customer's own processes and/or jointly created between the customer and supplier can be observed (Möller, 2006; Vargo and Lusch, 2008). In this spirit, Ramaswamy (2009, p. 17) points out that in modern management it is time to stop thinking of customers as mere "passive recipients of value" that firms traditionally deliver to. Instead he suggests engaging customers as active co-creators of value. In accordance to this, O'Casey and Ngo (2010, p. 7) argue that value is not added into the offering by the firm in isolation, but customers are part of an extended enterprise and co-producers of the firm's services and products. According to DeSarbo *et al.* (2001) and Ramirez (1999) "the goal is not to create value for customers but to mobilize customers to create their own value

<i>Relationship</i> <i>Value Dimension</i>	FM ↔ Client	FM ↔ Customer	FM ↔ End User
Use Value			
Social Value			
Relationship Value			
Environmental Value			

**Figure 2.**  
Research Grid of  
FM Value Network

from the firm’s various offerings” (Normann and Ramirez, 1993, p. 69) in conjunction with the firm. Lusch and Vargo (2009) state that “both the customer and the firm are co-creating by sensing and experiencing together, integrating resources for the individual and collective benefit, and learning how to better serve each other”. That is, “co-creation value rests on the premise of firm-customer working together to create a consumption experience” (O’Cass and Ngo 2010, p. 7).

According to Lusch and Vargo (2009) and Ramaswamy (2009, p. 17) this co-creation movement must be seen as a journey in organizational transformation to the next paradigm of value creation. Co-creation of value is projected to rise over the next decade and thus organizations including FM need to learn not to fear it but embrace it as a healthy part of a highly networked market economy. Organizations must wake up to the fact that customer, supplier, and stakeholder involvement in their business will not go away and in fact will rise over the forthcoming planning horizons (Lusch and Vargo, 2009, p. 10).

In accordance to the above mentioned discussion of value co-creation, we argue that the client, customer, and end-user are co-creators of value in FM. At least one of these three stakeholders is a co-creator of value as there is no value created until the proposed value offering is consumed (Vargo and Lusch, 2004). FM is not able to deliver value, but value creation in FM is only possible by combining the different resources (e.g. monetary, know-how, personnel) of the client, customer, and/or end-user in this process (Coenen and von Felten, 2012). Co-creation in FM then focuses on an equal dialogue and exchange of ideas between FM and demand (being client, customer and end-user). Co-creation in the narrow sense is an intensive cooperation between FM and demand to generate new product ideas. It is not about outsourcing a task to others, but about cooperation. Through co-creation FM and demand can jointly create value, and the FM Value Network can be used to test ideas and to show what dimensions FM must pursue in order to create value.

We propose that FM and its key stakeholders are no longer seen as separate but rather as an integrated economic system to co-create value in FM. Thus, we summarize that the co-creation of value in FM is not optional, but an integral part of working

together in a collaborative relationship. The co-creation issue has a significant impact on the value perception by key stakeholders, because the degree in which every stakeholder is asked to invest time and resources to co-create value in FM, determines his/her assessment of perceived value. In case, the perceived sacrifices provided by stakeholders for the co-creation process exceed the perceived benefits of the FM activity, the value assessment by stakeholders is likely to be negative.

### Conclusions

Our current work on the FM value network presents a demand-driven, co-creating, and subjective perspective of value and differentiating between various dimensions of perceived value in FM. We propose to consider FM as a network of relationships which creates perceived value amongst intra-organizational stakeholders. Strong relationships in FM are built through the co-creation of services, through integration of resources and through effective communication.

We conclude that the FM Value Network offers a conceptual foundation to reflect on the idea of FM as an open system of relationships. Within this framework of FM and its diverse stakeholders, we identify the most relevant key stakeholders, i.e. clients, customers and end-users. Several dimensions of value in FM are presented and characterised. In addition, we present value co-creation within the FM network setting as a new paradigm of value research in FM and propose various fields for future research.

In FM, you might know the costs of the offering and you are able to calculate the price of the offering, but you are not able to determine the value of the offering, because all stakeholders define the value in FM. Thus, we argue that FM should break away from current thought patterns and adopt this new way of thinking.

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Herman Kok is lecturing Facility Management. His areas of interest and research are the alignment of primary processes and FM, the multi-level collaborative relationships between FM and demand and FM added value. The sectors he is primarily aiming at are Education and Healthcare. He graduated as marketer in 1988, now he is working on his PhD titled "The added value of FM in the educational environment". He combines his academic career with working as freelance management consultant in the area of FM in which he has over 15 years of experience.

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