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## NEW MODEL FOR ADDING VALUE BY FM AND CREM

Escaping the  
commodity trap

*Prof. Dr. C. Coenen*

FM in Swiss  
Hospitals

*Susanne Hofer*

EIR template and  
guidance for FM

*S. Ashworth,*

*M. Tucker*

# NEW MODEL FOR ADDED VALUE BY FM AND CREM



by Per Anker Jensen and Theo van der Voordt

## Introduction

The book “Facilities Management and Corporate Real Estate Management as Value Drivers – How to manage and measure adding value” (Jensen and Van der Voordt, 2017) edited by us has just been published by Routledge. This issue of FM Insight presents a critical review of the book based on a presentation by Olav Egil Sæbøe at a Nordic FM conference arranged by the Centre for Facilities Management – Realdania Research (CFM) in Copenhagen August 2016. In our article, we present the new Value Adding Management (VAM) model to support decision-makers in how to add value by FM and CREM. The new book is a follow up to the book

”The Added Value of Facilities Management – Concept, Findings and Perspectives” (Jensen, Van der Voordt and Coenen, 2012), which was published by CFM in 2012.

Facilities Management (FM) and Corporate Real Estate Management (CREM) are two closely related and relatively new management disciplines with fast growing professions around the world. Both disciplines have from the outset had a strong focus on controlling and reducing the cost of property, workplaces and related services. In recent years, there has been a shift towards a higher degree of focus on how FM/CREM can create value for the organisation. This has also been the case within research, which

has resulted in the development of a number of conceptual models and tools and much empirical information. However, the practical application of this knowledge turned out to be difficult. The different models are perceived as too complex and there is a lack of a common terminology and a clear operationalization of input-output/outcome relations.

Therefore, in the new book we introduce a simpler model for creating added value from FM and CREM to support implementation in practice. At the same time, we strive for creating a knowledge integration of FM and CREM, to establish a common foundation that utilises the strong sides of these two closely related disciplines.

## Conceptual models

One of the existing conceptual models is the FM Value Map, which Per Anker Jensen developed approx. 10 years ago. Around the same time similar models were developed within CREM; both at Delft University of Technology in the Netherlands and by Helsinki University of Technology (today Aalto University) in Finland. Since then these models have been developed further and supplemented by new ones. The models formed an important basis for the book from 2012, where they were compared and analysed for strong and weak sides. One of the conclusions was that the models are too static. There is a need for more dynamic and instrumental tools to manage the process of creating added value.

Both the FM Value Map and some of the CREM models are based on a simple process model of input → throughput → output; even though used in different ways. However, a closer analysis of the models revealed that they all implicitly build on cause-effect relationships that have major similarities with interventions that are cause for creating added value as an effect.

This led us to use this basic idea as a starting point for the new Value Adding Management (VAM) model:

**Input → Throughput → Output → Outcome = Added Value**

By combining this general process model with cause-effect relation-

ships and including management of added value creation as a link between cause and effect we came up with the following Value Adding Management model:

**Intervention → Management → Added Value**

This is in line with one of the important insights from the book from 2012 that management is a prerequisite for implementation of interventions in FM/CREM to create added value for the organisation. The model can also be expressed in the following way:

**Decision about change → Implementation → Results/Effect**

And also more generally as:

**What → How → Why.**

*What* is the kind of change and the improvement FM/CREM intends to make to add value; how is the way FM/CREM manages the change and implements the improvement, and why is the benefit the core business organisation is expected to achieve, i.e. the positive outcome of benefits minus sacrifices in terms of costs, time and risks. Actually, *Why* is also included in the *What* part: *what* interventions are needed and *why*, whereas the *Why* part at the end includes a feedback loop to test if the aimed effects have been attained.

In the following the three elements: Interventions, Value Adding Management and Added Value Parameters in the VAM-model will be presented briefly. In part I of the book there is a chapter about each element.

**FM/CREM interventions**

In the book, we divided FM/CREM interventions in 6 types:

1. Changing the physical environment (on different scale levels: portfolio, building, space)
2. Changing facilities services
3. Changing the interface with core business
4. Changing the supply chain
5. Changing the internal processes
6. Strategic advice and planning

*Ad 1. Changing the physical environment.*

Typical examples are moving to another location, new building, rebuilding, refurbishment, changing workplace layout and changing appearance, e.g. to support corporate branding.

*Ad 2. Changing facilities services.*

This concerns the operational FM activities and covers development of service offering for users, for instance introduction of a new food concept in the canteen, changes in cleaning level or introduction of a new user interface like a new IT based helpdesk.

*Ad 3. Changing the interface with core business.*

When organisations reach a certain size and complexity, FM and CREM are typically established as separate functions or departments. The interface between the core business and FM/CREM is defined specifically for each organisation and is not static. If the FM/CREM function is successful, it may get the opportunity to

increase its area of responsibility. This is often part of a centralisation of the responsibility from several parts of the core business organisation to the FM/CREM function, thereby creating opportunities for economies of scale.

*Ad 4. Changing the supply chain.*

FM/CREM is in most cases organised as a mixture of in-house functions and a number of external providers of facility services, which together constitute a supply chain. Changes in the supply chain are primarily changes in the delivery process, but they often also have consequences for the incentives for the different parties and the management of the mutual relationships between the parties.

*Ad 5. Changing the internal processes.*

What we deal with here is increasing the efficiency of opera-

tional processes within a specific organisation without necessarily changing, neither the product, nor the supply chain. The organisation can be in-house or an external provider. Within management theory and practice there are a number of concepts aimed at increasing productivity and process efficiency, for instance Total Quality Management, Business Process Re-engineering, Benchmarking and Lean Management. Typical elements in such concepts are eliminating waste, implementing new technological solutions and optimising the workflow.

*Ad 6. Strategic Advice and Planning.*

The areas for strategic advice and planning can cover many different aspects and they will typically change over time according to what is of strategic importance for the company.

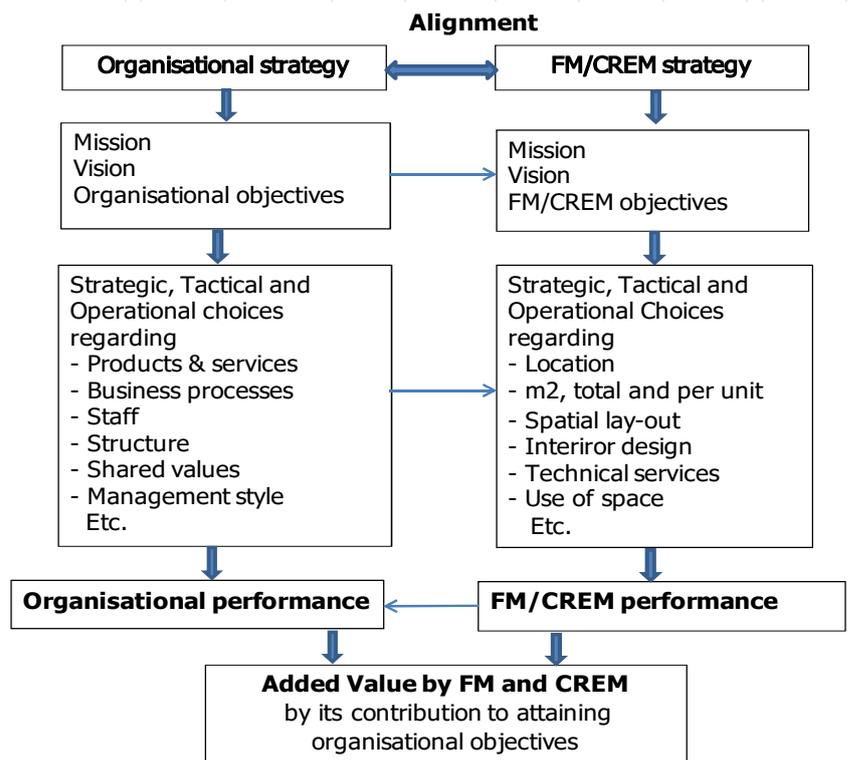


Figure 1: Connections between alignment and added value (Van der Voordt, 2014)

A typical area of strategic advice to top management concerns the development of a long-term strategy for the corporate property portfolio. Another typical area is investment planning and feasibility studies for building projects.

## Value Adding Management

The term “Value Adding Management” (VAM) and related terms are widely used in business and management literature. The industrial consultant Carlo Scodanibbio even calls VAM the philosophy of the second industrial revolution and the guiding light for the year 2000 industries (www.scodanibbio.com).

In relation to FM/CREM the most essential aspects of VAM are strategic alignment between FM/CREM and the core business, stakeholder management and relationship management as part of implementing changes. Alignment, in an active sense, implies

moving in the same direction, supporting a common purpose, being synchronized in timing and direction, and being appropriate for the purpose, and in a passive sense the absence of conflict. Figure 1 illustrates the relationships between the concepts of alignment and added value and shows that FM/CREM only creates added value, when they support the organisational objectives. Thus, FM/CREM interventions should not only be evaluated on their effect on FM/CREM performance and organisational performance, but also whether they contribute to the objectives of the organisation.

A better performance does not per definition deliver added value. For instance, if an intervention results in a higher ranking on “green buildings” but the organisation was fully satisfied with the original ranking, this higher ranking does not add any value to the organisation.

## Added Value Parameters

Based on the existing conceptual models we have compared the different value parameters they include. From that we selected 12 parameters divided under 4 headlines: People, Process and Product, Economy and Societal (see Table 1 in the article with the book review by Olav Egil Sæbøe). In part II of the book there are 12 chapters, where different groups of authors have written a chapter about each value parameter. Between the chapters we included 12 interviews with practitioners about how they cope with adding value by FM/CREM in practice. The whole VAM model with 6 types of interventions and 12 Added Value Parameters is shown in Figure 2. Table 1 shows examples of interventions, tools to measure results and a Top 3 with KPI’s for each of the 12 value parameters.

## The extended VAM-model

To make the VAM model for FM/CREM more instrumental and usable as decision support and management tool we have in the final part III of the book extended the very simple model to include the often used quality cycle Plan-Do-Check-Act, see Figure 3. The cyclical character underlines that VAM is or should be a continuous process. The evaluation of realized out-put/outcome/added value can be a starting point for new interventions.

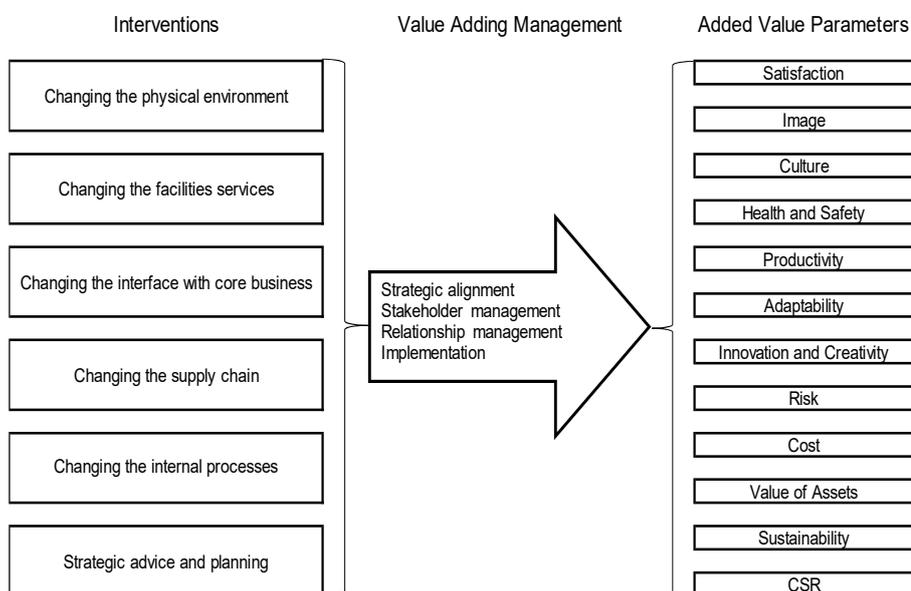


Figure 2: VAM model with 6 types of interventions and 12 Added Value Parameters

Value	Interventions	Tools to measure impact	KPIs (Top 3)
Satisfaction	More suitable spatial layout. More collaborative spaces. Better indoor climate.	Employee surveys. Interviews. Walk-throughs.	Employee satisfaction with: - Workplaces - Collaborative space - Indoor environment
Image	Move to a new location. High quality surroundings. Reorganisation of spatial layout.	Stakeholder surveys. Group discussions. Analysis of social media	Perceptions of Corporate identity, Corporate value, Corporate brand
Culture	More open settings to support collaboration. Shared desks/places. New behavioural rules.	Employee surveys. Observations. Interviews. Workshops.	Perceptions of - Corporate culture - Match between culture and work environment
H&S	Higher level of personal control. Ergonomic designed furniture. Better indoor air quality	Capture and react on complaints. Workplace H&S assessment.	Sick leave. Number of accidents. % of satisfied employees.
Productivity	Higher level of transparency to support collaboration. Facilities for concentrated work. Ergonomic furniture.	Observations. Measuring time spent or saved. Employee surveys.	Output per employee. Perceived support of: - Individual productivity - Team productivity
Adaptability	Surplus of spaces, load-bearing capacity, installation capacity, and facilities. Removable and relocatable units and building components.	Building performance assessment, i.e. using Flex 2.0 or Flex 2.0 Light. Observation of adaptations of the building-in-use.	Weighted assessment values, i.e. scores on scales of Flex 2.0 or Flex 2.0 Light.
Innovation and Creativity	Better visibility and overhearing. Different types of meeting spaces and informal areas. Virtual knowledge sharing ICT.	Spatial network analysis. Social network analysis. Logbooks on knowledge sharing activities.	Level of enclosure/openness. Average walking distance. Diversity of workspaces and meeting places.
Risk	Emergency and recovery plans. Back-up supply systems. Insurances.	Measuring time of business interruptions. Measuring risk expenses	Uptime of critical activities. Total risk expenses. Total insurance expenses.
Cost	Cost saving by - Establishing FM department - Process optimization - Outsourcing	Accounting with an appropriate cost structure. Measuring space, number of workstations and f.t.e.	Cost/m <sup>2</sup> , workstation or f.t.e of Total FM, Space, Workplace
Value of Assets	Disposal of CRE. Sale and lease back. Improve owned CRE by adaptive reuse.	Estimate annual potential gross income and annual operational expenses. Market valuation. Estimate cost of new development.	Capitalization. Market value. Cost of new development.
Sustainability	Sustainability framework. Reduction of energy consumption. Reduction of travel and transport activities.	Critical success factors from corporate strategy Survey with multi-criteria scoring methodology Continuous review process.	Consumption of primary energy and water. CO <sub>2</sub> emissions. Access to transport.
Corporate Social Responsibility	Employing challenged workers. Promoting public transport. Circular purchasing model.	Depends on corporate CSR policy and target.	People: diversity of staff Planet: Utilization of space Profit: Total FM/CREM cost

Table 1. Examples of interventions, assessment methods and KPIs (Van der Voordt et al., 2016)

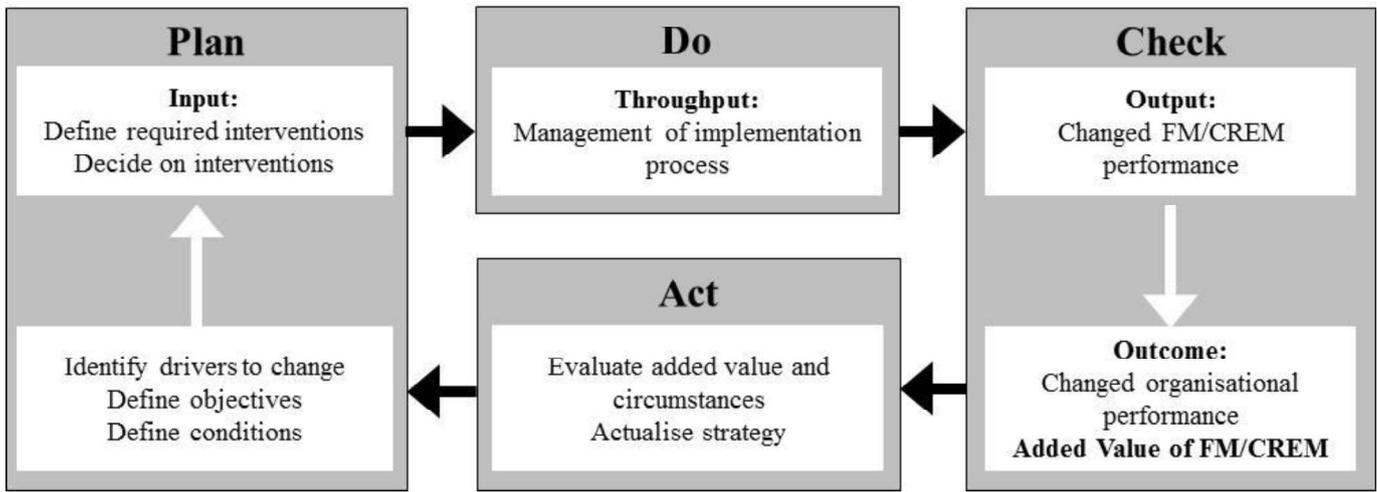


Figure 3: Extended Value Adding Management model (Van der Voordt et al., 2016)

To analyse and evaluate the creation of added value we recommend to use cause-effect chains as shown in Figure 4 with a number of examples. It is important to check, whether the organizational objectives are fulfilled, whether different interventions result in synergy, for instance by supporting more than one value parameter, whether there is a conflict between different results, and whether the results seen as a whole are reasonable in relation to the costs - seen from the view of relevant stakeholders.

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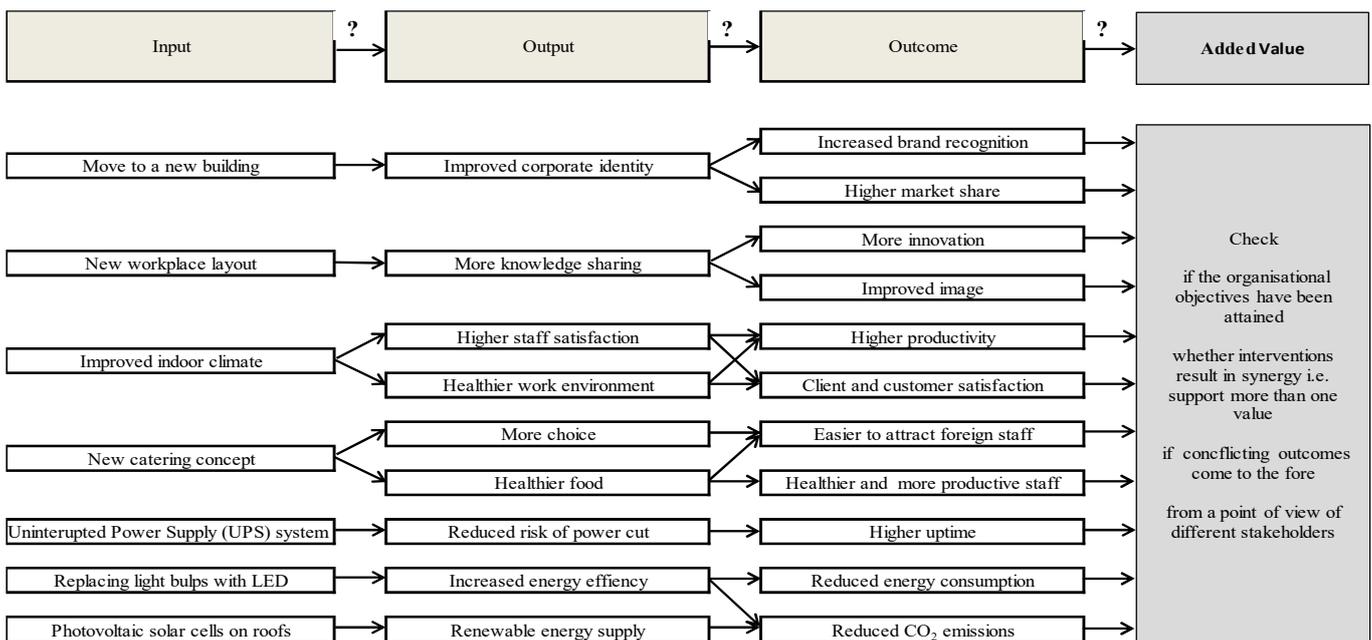


Figure 4: Examples of cause-effect chains with input -> output -> outcome -> added value (Jensen and Van der Voordt, 2017)