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Satisfaction

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Abstracts from:

**Facilities Management and Corporate Real
Estate Management as Value Drivers**

How to manage and measure adding value

Edited by

Per Anker Jensen and Theo van der Voordt

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Theo van der Voordt and Per Anker Jensen

Preface

This book is a result of many years collaboration in a research group of the European Facilities Management (FM) network EuroFM. The research group launched a first book on “The Added Value of FM” at the European FM Conference 2012 in Copenhagen, where 18 researchers representing 7 nationalities explored the concept of added value and various conceptual frameworks in connection to research data from different sectors. The reviewers from practice as well as academia were very positive. However, they also told us, that the book should not be seen as the end, but more like the beginning of investigating this important topic. This response gave us a strong incentive to continue our collaborative research across European borders.

One of the learnings from our book from 2012 was that developing conceptual frameworks for mapping, analysing and visualising added value was useful but also had its limitations by being rather static and not very action oriented. Therefore, in our follow-up research we put more focus on investigating how to manage and measure added value in practice and developing a practical management tool, which we call Value Adding Management. We have for instance investigated how practitioners in FM and Corporate Real Estate Management (CREM) deal with value adding by interviewing professionals from companies in Denmark and the Netherlands. We also conducted a cross-paper analysis of 18 value added related papers of the European Facility Management Conferences 2013-2015 in Prague, Berlin and Glasgow, and 3 papers from the CIB Conference 2014 in Copenhagen.

The current book is a follow-up of our book from 2012. This second book is driven by the need to develop a widely accepted and easily applicable conceptual framework of adding value by FM and CREM and to support FM and CREM managers and other decision makers in how to manage and measure added value. It intends is to compile and create overview of evidence from the many research activities that are going on in this area. As part of this process we observed that companies increasingly work on documenting added value of FM and CREM. In the European research group we have created a strong network, which has made it possible to engage contributors from different countries and disciplines in developing the book.

The purpose of the book is to raise awareness of opportunities and risks of adding value by FM and CREM and the need for a more holistic approach with balanced interests between benefits and sacrifices of interventions. We defined 12 specific value parameters and the invited authors discuss how to manage and measure them based on a state of the art of theoretical knowledge, practical experience and empirical data for each value parameter and across the different parameters. Furthermore, the authors discuss ways to select and prioritize (conflicting) values and connected impact factors such as the vision, mission and strategy of the organisation, its maturity, and external context.

The book is research based with a focus on guidance to practice. The target groups are practitioners, researchers and teachers from the field of FM and CREM as well as students on both undergraduate and postgraduate level. It is not intended as a core textbook, but it will be suitable for supplementary reading on courses in FM and CREM.

The ambition of the book it to be transdisciplinary by integrating the two closely related disciplines and professions FM and CREM with a view on, how they can be value drivers for the organisations they support and their surroundings. Therefore, the editors have asked Ron van der Weerd,

chairman of EuroFM, former Dean at the School of Facility Management and current project director at the Hanze University of Applied Sciences, Olav Egil Sæbøe, FM/CREM practitioner and external lecturer at higher educations in Norway, and Hans de Jonge, CREM practitioner and professor in Real Estate Management at the Delft University of Technology in the Netherlands to write forewords.

23 authors from universities in 5 European countries have been involved in writing the 18 chapters in the book. We have established teams of two or more authors to write the chapters and thereby ensuring that the topics are presented with diverse inputs and perspectives within a common framework. The book also includes 12 interviews with practitioners from FM and CREM in 6 European countries about their perception and practice in relation to adding value. The background, purpose and structure of the book are explained further in chapter 1. As editors we want to thank all the contributors and the people from Routledge for the collaboration on the book. We also thank Ron van der Weerd (EuroFM), Olav Egil Sæbøe (Pro-FM) and prof. Hans de Jonge (Brink Group) for their kind words and recommending this book to an international audience.

Per Anker Jensen and Theo van der Voordt

ABSTRACTS

1. Introduction and Overall Framework

Per Anker Jensen and Theo van der Voordt

Chapter 1 explains the background and purpose of the book and gives an overview of the structure with three different parts. The current book is a follow up to a book on the same topic published in 2012 by the same research group. It aims to integrate the two related disciplines Facilities Management (FM) and Corporate Real Estate Management (CREM) and to discuss how to manage and measure added value in FM and CREM practice. The most important conceptual frameworks from earlier research are briefly summarised and analysed. Chapter 1 finishes by the presentation of a generalised “Value Adding Management Model”, which condenses a common underlying cause-effect model in the earlier frameworks and follows the triplet of input-throughput-output. This new model provides the overall framework for the book, which is explained further in the following chapters in part I.

Keywords: Background, Purpose, Conceptual frameworks, Process model, Value Adding Management.

2. FM and CREM Interventions

Per Anker Jensen and Theo van der Voordt

This chapter explains the first part of the generalised Value Adding Management model, i.e. “Intervention” or “Decision on type of change”, in a FM and CREM context. The chapter presents a typology with 6 types of FM and CREM interventions concerning the physical environment, facilities services, interface with core business, supply chain, internal processes, and strategic advice and planning. All types of interventions are explained based on literature and with examples from practice. The examples both include text boxes with small cases and interventions from interviews with practitioners from Denmark and the Netherlands, where the interventions are related to the prioritized values and KPIs mentioned by the interviewees.

Keywords: Interventions, Typology, Decision on change, Cases, Interviews

3. Value Adding Management

Per Anker Jensen and Theo van der Voordt

This chapter explains the throughput part of the generalised Value Adding Management model, i.e. “Management” or “Implementation”, in a FM and CREM context. It introduces the concept of Value Adding Management and presents various conceptual models and research findings on strategic alignment between FM/CREM and core business. Furthermore it explores the topics stakeholder management and relationship management. Stakeholder management and relationship management are closely related. A distinction is made between stakeholder management as related to management of multiple stakeholders, and relationship management concerning a dyadic relationship between two parties. The chapter finishes with a presentation of some results from recent research into the current practice of adding management.

Keywords: Value Adding Management, Implementation, Stakeholder management, Relationship management

4. Value Parameters (Theo van der Voordt and Per Anker Jensen)

Theo van der Voordt and Per Anker Jensen

This chapter explains the third part of the generalised Value Adding Management model, i.e. “Added Value” or “Outcome”, in a FM and CREM context. It gives an overview of the different added value parameters that have been included in various studies on the added value of FM and CREM and presents the results from our recent research on how FM and CREM practitioners in Denmark and the Netherlands prioritize added value parameters. Based on literature and our recent research we have made a selection of 12 added value parameters, which form the basis for the chapters in part II. The chapter is finished by showing how added value can be measured according to the literature and how it is measured in practice.

Keywords: Performance measurement, Prioritized values, Added value parameters, Measuring added value, Performance indicators.

5. Satisfaction

Theo van der Voordt, Sandra Brunia, Rianne Appel-Meulenbroek

This chapter presents the findings from employee surveys on employee satisfaction with different work environments in the Netherlands and various other European countries. It first discusses why employee satisfaction is relevant for organisations and which factors may influence employee satisfaction. Then the chapter discusses empirical data about employee satisfaction with various building characteristics, facilities and services, and which items are perceived as most important. Based on these analyses typical interventions are presented with related benefits and sacrifices. Furthermore the chapter discusses how to measure employee satisfaction and suggests a list of 11 topics that should be included in employee surveys to measure employee satisfaction: opportunities to communicate and to concentrate, meeting rooms, seclusion rooms, personal storage facilities, indoor climate, noise levels, chairs, desks and other office equipment, office leisure (e.g. tea/coffee, washroom/shower, restaurant/canteen), general cleanliness and IT-services. The chapter ends with a number of research questions for future research.

Keywords: Employee satisfaction, Important aspects, Interventions, KPIs, Future research

6. Image

Theo van der Voordt

This chapter explores the concept of image in connection to FM and CREM. It presents state of the art knowledge on the influence of buildings and building related facilities and services on the image of an organisation and how FM and CREM can be used to support a corporate’s identity and to express brand values. Furthermore it discusses a number of typical interventions to support a positive corporate image. Finally this chapter presents various ways to measure corporate image and possible Key Performance Indicators. The chapter ends with perspectives on further research. The chapter is based on a review of literature with a focus on FM and CREM related journals and various graduation theses.

Keywords: Image, Identity, Brand values, Corporate Real Estate, Facilities, Management

7. Culture

Theo van der Voordt and Juriaan van Meel

Facilities are not just a functional means of production, but also ‘cultural artefacts’. They tell a story about a company culture and corporate identity. Vice versa, facilities can help to shape cultural values and support cultural change, provided that physical change goes hand-in-hand with organisational change and management commitment. This chapter tries to operationalise the relationship between the physical environment and organisational culture. Furthermore it discusses typical interventions such as the implementation of new workplace concepts. Benefits can be found in the very visible and tangible nature of the physical environment, making it a powerful means of communication. Sacrifices may come from a ‘culture clash’ when the chosen interventions are too ‘alien’ to the organisation. The intangible nature of culture makes it hard to formulate and measure KPIs. The chapter suggests to conduct surveys and to ask people about their organisation’s culture and the extent to which there is a ‘cultural fit’ with the work environment. Concerning the future, it is interesting to assess how organisational cultures will evolve, if new generations of workers will adopt other cultural values, and how these cultural changes affect and are affected by buildings, facilities and services.

Keywords: Organisational culture, Workplace design, Facilities Management, CREM

8. Health and Safety

Per Anker Jensen and Theo van der Voordt

Buildings, facilities and services can have a substantial influence on health and safety (H&S). Ergonomic furniture may help to prevent or reduce complaints of the arm, neck and/or shoulder. Insufficient lighting, too much noise, and unhealthy indoor air may result in work fatigue, head ache, irritation of eyes, nose or throat, and increased blood pressure. Hazardous materials, harmful substances and radiation may lead to severe diseases. Slippery floors and stairs may cause fall accidents. In plants, ill-considered production processes and unthoughtful designed machines may even kill people. So H&S are relevant values by itself, but also have an impact on other values such as productivity, employee satisfaction, Corporate Social Responsibility, sustainability, profitability and risk. This chapter discusses the responsibility of FM and CREM managers and presents a state of the art of FM/CREM related research on H&S, with a focus on the indoor climate and workplace layout. It also presents the benefits and costs of various interventions to improve H&S. The chapter ends with examples of input KPIs to measure H&S characteristics of the supply side, output KPIs to measure the actual and perceived impact of facilities on health and safety of the end users, and suggestions for further research.

Keywords: Health, Safety, Indoor climate, Lighting, Noise, Spatial layout

9. Productivity

Iris de Been, Theo van der Voordt and Barry Haynes

The economy of developed countries is strongly based on the productivity of knowledge workers, both quantitatively and qualitatively. Measuring the productivity of knowledge workers can be quite a challenge, let alone measuring the specific impact of the building, facilities and services on labour productivity. Research has shown that occupant surveys are an effective and cost efficient method to gain insight into the impact of these factors on (perceived) labour productivity. More objective

measures, such as the amount of absenteeism, can complement the more subjective outcomes. Various studies show that physical conditions such as the indoor climate and greenery, spatial layout, ergonomics and aesthetics can have a substantial effect on the productivity of knowledge workers. In particular the support of conducting focused work, concentration and communication is essential. It is therefore recommended to at least measure the extent to which people perceive the work environment as supportive to these activities.

Keywords: Labour productivity, Knowledge work, Communication, Concentration, Spatial layout

10. Adaptability

Rob Geraedts, Nils O.E. Olsson and Geir Hansen

Due to its long technical life time a building must be flexible in order to be able to cope with qualitative and quantitative changes in demands. The added value of flexibility is the ability to adapt the building to changing market or changing user demands, the reduction of the risk of future vacancy, less adaptation costs of buildings-in-use, higher rental income, more happy users, a longer life span and as such a more sustainable building. A potential risk is that costly provisions made for future adaptability will not actually be used in a certain given period. This chapter explores the concept of adaptive capacity that can be split into three different appearances: organisational flexibility, process flexibility, and product flexibility. A first version of a method to define the demand for and to assess the supply of the adaptive capacity included 143 indicators. To make it more practically applicable a light version (called Flex 2.0) has been developed with 17 most important key performance indicators.

Keywords: Adaptable, Flexible, Sustainable, Life Cycle, Added Value, Circular Economy

11. Innovation and Creativity

Rianne Appel-Meulenbroek and Giulia Nardelli

This chapter outlines how dedicated FM and CREM practices in workplace management may contribute to the added value of FM and CREM by sustaining innovation across all layers of the served organisation. The chapter presents the core benefits and sacrifices of interventions for innovation and creativity of the served organisation, and proposes a list of the related KPIs and how to measure them. In addition, the chapter highlights how innovation of FM and CREM processes/services may be specifically managed to contribute even more to the added value for clients and end users, by increasing effectiveness and efficiency of FM and CREM practices. The chapter finishes with a presentation of perspectives and reflections towards future research.

Keywords: Innovation, Performance measurement, Knowledge sharing, Workplace management, Creativity.

12. Risk

Per Anker Jensen and Alexander Redlein

Risk control in FM/CREM should definitely be seen as a benefit while risks as such constitute potential sacrifices. Risk Management in practice is a strategic management activity and is usually based on tactical or operational activities concerning Risk Assessment. The chapter identifies seven types of interventions to control risks in FM/CREM related to business continuity, analyses how

these interventions can be managed to avoid, reduce or transfer risks and discusses what sacrifices the interventions might incur. Typical general KPIs for RM are cost related, but in relation to business continuity KPIs often concerns time, for instance uptime and recovery time. In recent years awareness of climate change has increased the focus on risk in terms of resilience of the built environment.

Keywords: Risk, Risk Management, Risk Assessment, Business Continuity, Resilience

13. Cost

Alexander Redlein and Per Anker Jensen

Since 2005 the Vienna University of Technology has analysed the demand side of FM on a yearly basis in different European countries such as Austria, Germany, Bulgaria, Italy, Romania and Spain. The goal is to determine the value added of FM and FM departments and the parameters influencing the magnitude. Areas of savings and increase of productivity, and reasons for these effects are derived directly from a statistically sounded sample. The populations for the surveys were the Top 500 companies in the different countries. The research is based on a mixed method approach. The studies provide information about which specific areas are responsible for costs, why they cause costs, and why different cost drivers require differentiated cost planning and cost control. The chapter mainly focus on cost savings; particularly concerning whether organisations with a FM department have more facility services with savings than organisations without a dedicated FM department, and whether outsourcing can be seen as a cost-saving approach.

Keywords: Cost, Value added, Demand side, Mixed method approach, Statistical analysis

14. Value of Assets

Hilde Remøy, Aart Hordijk and Rianne Appel-Meulenbroek

This chapter focuses on the financial side of Corporate Real Estate (CRE). First, the effect of ownership or lease on the balance sheet is discussed. In addition, the lifecycle effects of ownership are looked at in connection to renovation, restructuring or alternative use. Particular attention is paid to the importance of regularly valuing CRE at market value and the financial risks of not valuing and not strategically managing CRE. The chapter shows that CRE is not always easy to value. Buildings may have specific characteristics without any particular market value or that are only valuable for similar enterprises and specific use. The value might also be influenced by industry trends or labour costs followed by shifts of the company's activities to other locations or even other countries. Consequently, active CRE financial management should have high priority. Involvement in business plans and decisions is essential to fulfil that role.

Key words: CRE ownership and lease, Valuation, Alternative use, Value monitoring, CRE, Financial risk

15. Sustainability

Susanne Balslev Nielsen, Antje Junghans and Keith Jones

This chapter introduces the societal goal of sustainable development and offers a range of indicators to set targets and measure the sustainable performance of FM and CREM. Through an understanding of sustainability theory and practice FM and CREM professionals will be able to formulate strategic goals and set performance targets that measure the sustainability of their service provision and support the development of alternative service solutions. The indicators can be set against generic FM standards or building certification schemes; or be bespoke, reflecting an individual organisation's priorities, specific challenges and aspirations. Whichever approach is adopted a whole life cycle perspective is essential for assessing the sustainable performance of products and services; and a balanced scorecard approach is recommended to evaluate and compare alternative service delivery options. The indicators and approach presented in this chapter can be applied at the single service delivery level; to the design of new building development and refurbishment projects; to single buildings; or to a portfolio of buildings to provide FM and CREM support to organisational transition to more sustainable future.

Keywords: Sustainable Facilities Management, Building assessment, Qualitative and quantitative data collection, Environmental performance

16. Corporate Social Responsibility

Brenda Groen, Martine Vonk, Frans Melissen and Arrien Termaat

This chapter discusses the contribution of Facilities Management (FM) and Corporate Real Estate Management (CREM) to Corporate Social Responsibility (CSR). After a brief introduction into definitions and guidelines for CSR, the chapter discusses the choices companies may make regarding the required maturity level of CSR, touching on the level of ambition of the company as a whole, and the responsibilities of FM. Next, an input-throughput-output model for CSR is discussed, showing both prerequisites and outcomes of CSR. In order to determine the contribution of FM and CREM to CSR, a long list of KPIs is described, and illustrated by means of examples in annual reports. The chapter ends with a discussion on the underestimation of the contribution of FM and CREM to CSR and calls for further development of relevant KPIs.

Keywords: Corporate Social Responsibility, Sustainability, Triple P, Annual reports

17. Tools to Measure and Manage Adding Value by FM and CREM

Jan Gerard Hoendervanger, Feike Bergsma, Theo van der Voordt and Per Anker Jensen

This chapter connects the simple Value Adding Management (VAM) model from chapter 1 to the Plan-Do-Check-Act cycle, also known as the Deming cycle. The Plan-phase is related to the input part of the VAM-model. It includes a strategic analysis to identify the drivers to change, to define the organisational and related FM/CREM objectives, and to explore internal and external conditions. Furthermore strategic choices have to be made of interventions that are expected to add most value to the organisation. The Do-phase regards the throughput part and is called 'strategy-in-action'. Its focus is on the implementation of change and change management. The Check-phase elaborates the output/outcome part of the VAM model. It includes a check whether the interventions have resulted in improved performance of FM and CREM (output), whether the

output improves organisational performance (outcome), whether the outcome fits with the organisational objectives and as such adds value to the organisation, and what side effects (positive or negative) have come to the fore. This step includes performance measurement and evaluation of appropriate KPIs. The findings form the basis for the Act-phase, where decisions on further actions are considered, e.g. extend the current interventions, reconsider other interventions, or redefine the organisational objectives.

Keywords: Value Adding Management, PDCA-cycle, tools, Strategy, Interventions, KPIs

18. Reflections, Conclusions and Recommendations

Theo van der Voordt and Per Anker Jensen

This final chapter reflects on the comprehensive analyses of how to manage and measure 12 different value parameters that were presented in chapter 4-16. Furthermore it links the findings to the background and purpose of this book (chapter 1) and the input-throughput-output components of the Value Adding Management model (chapter 2-4). A cross-chapter analysis of the State of the Art sections for each value parameter shows that much theoretical and empirical work has been conducted to operationalise the 12 value parameters, to develop ways to measure and manage performance and added value, and to collect evidence about input-output/outcome relationships. The overview of appropriate interventions, ways to measure its impact, and a shortlist of Key Performance Indicators per value parameter (chapter 17) can be used to support decision makers in selecting appropriate interventions to solve current problems and to add value to the organisation. The cross-chapter analysis also shows that it is difficult to quantify cause-effect relationships, due to the many factors that affect organisational performance and adding value by FM and CREM. In addition to the impact of interventions in buildings, facilities and services, the way interventions are implemented play an important role as well. The internal context (e.g. leadership, staff, culture, resources) and the external context (e.g. legislation, labour market, benchmark with competitors) may also affect the relationship between facilities and organisational performance. Further research is still needed to disentangle the complex relationships between input factors and organisational outcomes, and to develop new ways to measure the outcomes, for instance by using sensors and apps, narratives, longitudinal observations, focus group discussions, and ‘big data’.

Keywords: Value parameters, Evidence, Measuring, Data collection, Cause-effect