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An EuroFM Research Initiative

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*Published in:*  
FM in the Experience Economy

*Publication date:*  
2010

*Document Version*  
Early version, also known as pre-print

[Link back to DTU Orbit](#)

*Citation (APA):*  
Jensen, P. A. (2010). Facilities Management and Added Value: An EuroFM Research Initiative. In FM in the Experience Economy: CIB W070 International Conference in Facilities Management (pp. 217-228). São Paulo, Brazil: University of São Paulo.

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# Facilities Management and Added Value: An EuroFM Research Initiative

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## Abstract

**Aim:** This paper aims to present different models of the concept of the added value of Facilities Management (FM), including the FM Value Map, which forms the basis of research group in EuroFM, and to present some of the results of this research collaboration.

**Approach and methodology:** The paper is based on literature reviews of the most influential journals within the academic fields of FM, Corporate Real Estate Management and Business to Business Marketing and discussions between participants of the research group working on a further exploration and testing of the FM Value Map.

**Conclusions:** The research shows a number of different definitions and focus points of Added Value of FM, dependent on the academic field and the area of application. The different research perspectives explored a holistic view on the added value of FM by the integration of an external market based view (with a focus on the aimed output) and the internal resource based view (with a focus on the input from FM and RE). Good relationship management and building on trust shows to be equally important as delivering the agreed services. In order to measure the multi-dimensional components of adding value both qualitative and quantitative approaches are needed.

**Keywords:** Facilities Management, Corporate Real Estate Management, Added Value, Strategic Mapping, Service Marketing.

# 1. Introduction

Both from an academic point of view as well as in daily practice there is a need to improve our understanding of how FM can become more effective and add value to the core business and different stakeholders. For this reason the EuroFM Research Network Group established a working party on this topic to search for answers on the following questions:

- What is (or could be) the added value of FM?
- How is added-value defined in the literature?
- What kind of data are used to document and measure the added value of FM?
- What are the methodological potentials and barriers of measuring the added value of FM?

The group includes researchers from Denmark, the Netherlands, Norway, Finland, Switzerland, and the UK. Participants have met at workshops in Copenhagen on 11-12 May, in Helsinki on 21 October 2009, and in Madrid 31 May 2010. The first meeting started with discussions and reflections on a variety of definitions and theoretical frameworks to conceptualise the added value of FM, in order to reach a more coherent understanding. It was decided to divide in sub-groups, one group with a focus on comparing and testing frameworks for mapping added value of FM and another group with a focus on comparing and testing frameworks for value chains in FM. The first results were presented at the conference EFMC2019 in Madrid 1-2 June 2010 (Jensen et al., 2010).

One starting point for the research group has been the FM Value Map, which was presented at the research symposium during EFMC 2009 in a paper by Jensen (2009), see Figure 4. The FM Value Map is a conceptual framework to understand and explain the different ways that FM can create value for a core business as well as the surroundings for the benefits of multiple stakeholders: owners, staff, customers and society.

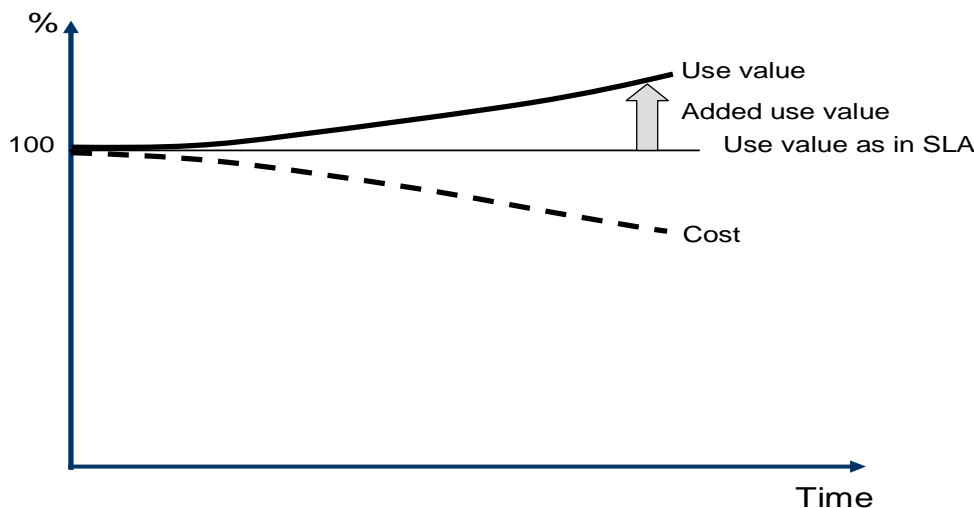
Literature reviews of recent volumes of the most influential journals within the academic fields were made divided between the group members. It was clear from the outset, that the researchers had different academic and theoretical backgrounds. Even though they all did research in relation to FM, some of the researchers were more engaged in the related field of Corporate Real Estate Management (CREM). There were also differences with some researchers from architectural and engineering backgrounds and others from Service Marketing and other marketing related backgrounds. These different backgrounds were seen as fruitful in providing different types of insights and frameworks and challenges in reaching common understanding of the benefits and shortcoming of the different theoretical frameworks and if possible develop a common framework to explain the different ways of how FM can create added value. The full literature review is included in Jensen et al. (2010).

This paper presents different models of the concept of the added value of Facilities Management (FM), including the FM Value Map, and presents some of the results of this research collaboration.

## 2. Cost Reduction or Added Value?

An investigation of 36 cases of best practice in FM from the Nordic countries concluded that there has been a change in recent years from mostly focusing on cost reduction towards a need to also focus on adding value. The case studies were made in 2006-7 and published in a book in English (Jensen et al., 2008). This conclusion was evident both for in-house FM organizations and external FM providers. The trend towards outsourcing has been very strong within FM over the last 15 years, which is the reason for the large and fast growing market. The possibility to reduce cost has been a dominating driver behind this trend.

The difference between added use value and cost reduction is illustrated in Figure 1. It shows the relative development over time of cost and use value of a service compared to a base line with use value as specified in a Service Level Agreement (SLA). The use value of the service can for instance be measured by a Key Performance Indicator (KPI) with a minimum level of customer satisfaction. A cost reduction occurs, if the cost/price of the service over time goes down without lowering the customer satisfaction below the minimum level. Contrarily, an increase in use value will occur, if the customer satisfaction over time gets higher than the minimum level of customer satisfaction. This does not necessary involve a change in the SLA, but it means that added use value is created.



*Figure 1: Added use value and cost reductions*

The current financial crisis has probably for a period changed the focus back to again being mostly on cost reductions. However, there is for me no doubt that the FM profession and industry need to increase their competencies towards adding value. It is a necessity, if we want to become a more important industry, capable of getting attention from top managers and attracting demanding youngsters. This change has some important impacts on the knowledge and competences needed for FM. To reduce cost we can use past experiences and similar management tools and methods like outsourcing, benchmarking and process development as many other management fields. To add value we need to develop new knowledge and competences specific to our field. Research and development will become more and more

important. So far the FM providers have been able to expand into new market areas without being forced to innovate. This situation will change when the market becomes more mature and saturated.

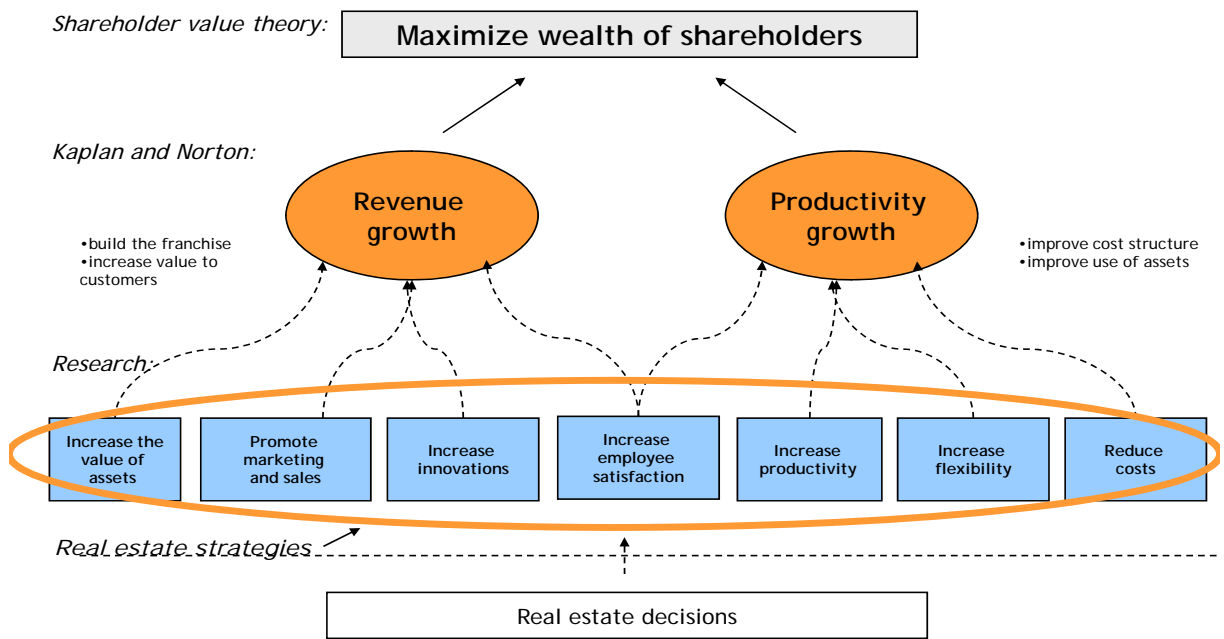
### **3. Models for Added Value**

There has both within research and in practice been quite a lot of efforts to develop models and methods to investigate and measure the added value of real estate and FM. Corporate Real Estate Management (CREM) is a field closely related to FM, where there has been several suggestions for models to investigate added value. A seminal work within CREM was published by Joroff (1993) in the US introducing the concept of the fifth resource proposing that real estate is a corporate resource in line with capital, human resources, technology and knowledge, which had been more or less neglected so far and needs to be managed in a more professional way.

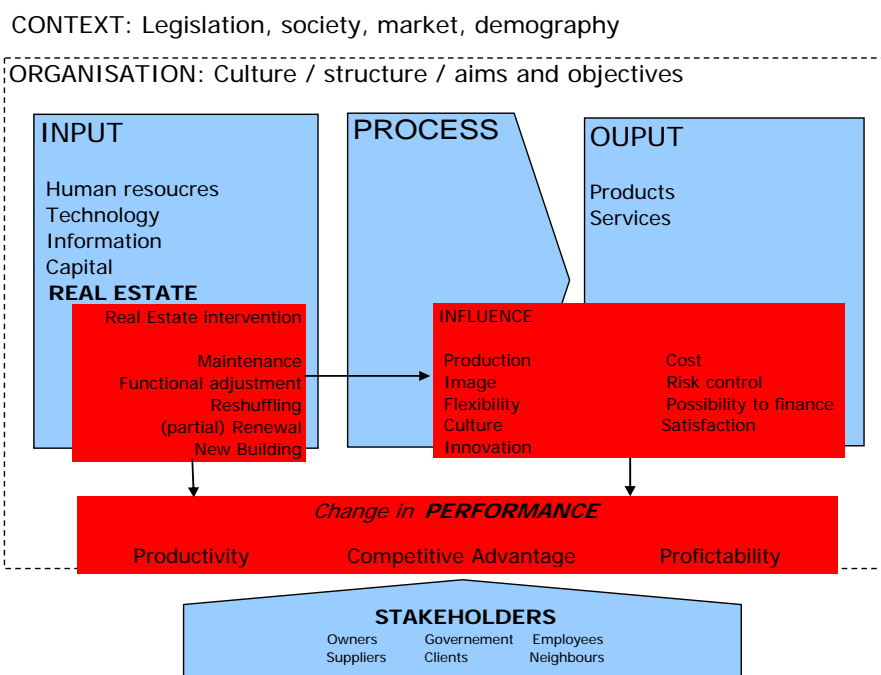
One of the models within the field of CREM was developed by Lindholm (2008) in Finland as part of a PhD-study including investigation of case studies in several European countries and the US. The model is shown in figure 2. It is based on strategic mapping (Kaplan & Norton, 2001) from Balanced Scorecard methodology and identifies 7 different real estate strategies that can increase revenue and/or productivity and thereby lead to shareholder wealth.

In the Netherlands there has been a number of attempts to develop such models and the most recent one shown in figure 3 was developed by De Vries et al. (2007) also based on a PhD study. The concept of real estate as the fifth resource is included in this model which is based on input-process-output. A main difference to the Finnish model is the inclusion of multiple stakeholders and not only shareholders.

A third model was developed from research in the field of FM as an outcome of the study mentioned above of 36 cases from the Nordic countries in Europe (Jensen et al., 2008) as well as from discussion in a work group with practitioners in the NordicFM network. It is called the FM Value Map and is shown in figure 4. It is a conceptual framework to understand and explain the different ways that FM can create value for a core business as well as the surroundings for the benefits of multiple stakeholders: owners, staff, customers and society. It maps which resources FM uses as inputs into the internal processes to produce outputs like space, services, development and relations, and which impacts the provisions from FM can have on core business in terms of satisfaction, cost, productivity, reliability, adaption, and culture, and on the surroundings in terms of economical, social, spatial and environmental aspects.

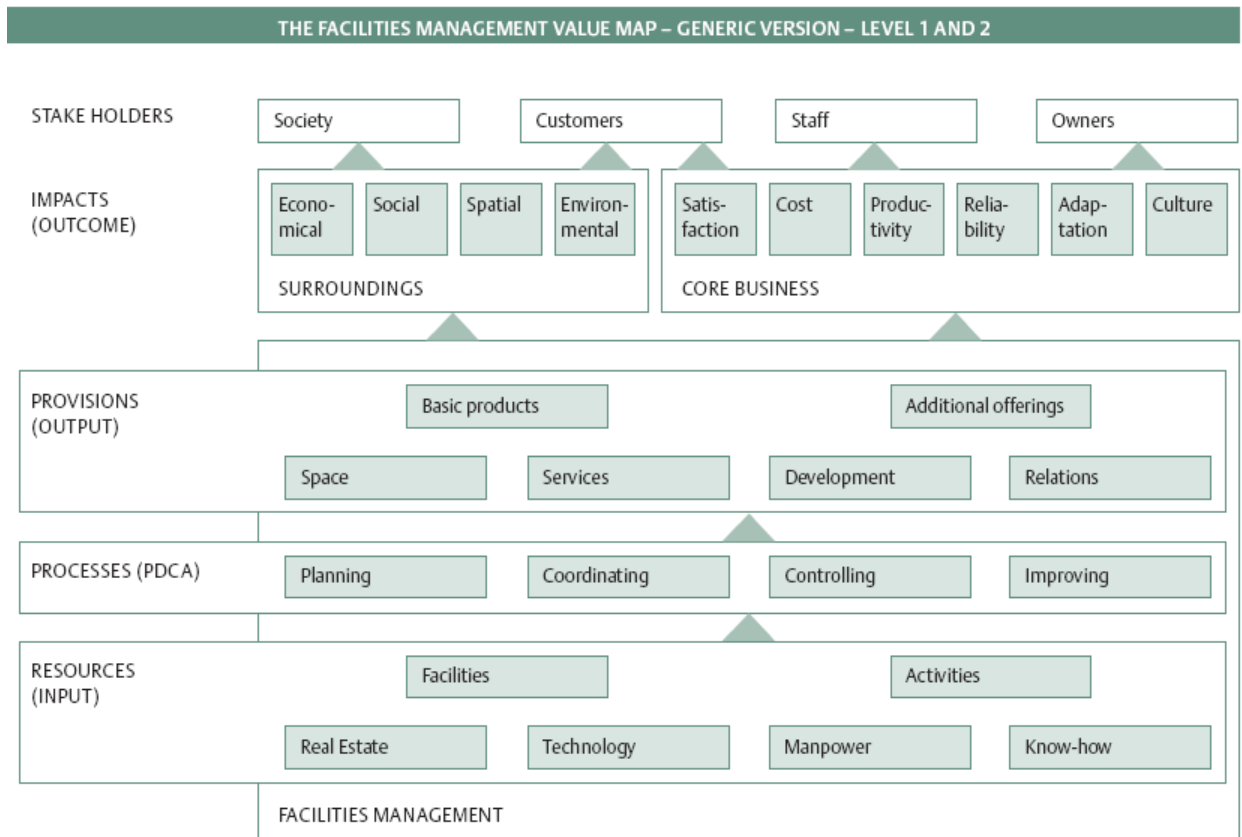


**Figure 2: Model for Added Value of CREM from Finland**



**Figure 3: Model for Added Value of CREM from the Netherlands**

The FM Value Map was developed from inductive reasoning based on case studies of FM best practice in the Nordic countries in Europe (Jensen et al., 2008). It is like the Finnish model developed by inspiration from strategic mapping in Balanced Scorecard methodology (Kaplan and Norton, 2000). It includes input-process-output like the model from the Netherlands, but with a separation between FM and core business, which is crucial in FM theory. It distinguishes between the impacts of FM on the core business and on the surroundings. Like the Dutch model is operates with multiple stakeholders.



**Figure 4: The FM Value Map**

A comparison shows that quite different parameters have been used in the three models. However, a closer analysis reveals that all the parameters can be grouped in the following three main categories related to impacts on core business: People, processes and economy. The exception is that only the FM Value Map includes a category for impacts on the surroundings. The results of the comparison are shown in Table 2.

*Table 2: Comparison of parameters of FM value adding*

	<b>Lindholm (2008)</b>	<b>Vries et al. (2008)</b>	<b>Jensen et al. (2008)</b>
<b>People</b>	Increase employee satisfaction	Image Culture Satisfaction	Satisfaction Culture
<b>Process</b>	Increase innovation Increase productivity Increase flexibility	Production Flexibility Innovation Risk control	Productivity Reliability Adaptability
<b>Economy</b>	Increase value of assets Promote marketing and sale Reduce cost	Cost Possibility to finance	Cost
<b>Surroundings</b>			Economical Social Spatial Environmental

## 4. Measurements of Added Value in Corporations

Within the field of marketing Heskett et al. (1994) have presented an equation to measure customer value:

$$\text{Customer value} = \frac{\text{Results produced for the customer} + \text{service process quality}}{\text{Price to the customer} + \text{cost and effort in acquiring the service}}$$



By inspiration from this customer value equation the Danish financial corporation Nykredit, has defined a so-called user value ratio:

$$\text{User value} = \text{Quality \& Process} / \text{Price \& Difficulties}$$

The user value ratio was introduced to supplement the cost related factors in the internal decision making process to force the decision makers to take a broader value oriented perspective. It was not developed into a quantifiable tool, although the manager who introduced it did have intentions to do so. It was used as a situation specific, qualitative tool to assist decision making (Jensen et al., 2008).

An example of a company, who have gone further to quantify measurements of added value comes from the Danish based LEGO corporation, where the FM organisation has found a specific way to quantify their contribution to the core business as value add. The LEGO Service Centre has value creation as one out of five strategic focus areas – the other being customers, processes, innovation, and employees – and uses Balanced Scorecard as a management tool. They have defined that their key objective is to deliver a minimum of 5% value add every year. To measure this, they have defined the following value equation:

$$\text{Value add} = \text{Volume} * \text{Quality} * \text{Flexibility} / \text{Cost}.$$

Volume represents the level of scalability and is calculated as the number of standard services (part of the service catalogue) delivered. Quality is the user perceived quality measured by use of surveys among randomly selected users. Flexibility concerns the number of not standardised services delivered. Cost covers the total company cost of providing services (Møllebjerg, 2009).

## 5. Perspectives on FM and Added Value

The literature review revealed the following points of interest:

### 1. *The concept of added value puts focus on the strategic aspects of FM*

FM is often considered as management of mainly operational services, but by introducing the concept of added value the focus can be changed towards the business impacts and effects of FM. Thereby, it becomes easier to address the corporate top management, because adding value relates to their language and perspective.

### 2. *The focus has changed from economical value towards a more holistic value concept*

This is particular the case within the fields of FM and CREM and can be related to the phases in the development of FM. This changing focus is reflected in the fact that whereas previously shareholder value was the main perspective, nowadays a more holistic stakeholder perspective as included in the FM Value Map has become more accepted.

Inspirations for value mapping has been found in management models like Balanced Score Card and EFQM Excellence Model.

**3. *FM value is a result of linking input and throughput to output***

Most of the issues from marketing and relationship management concern the top of the value map, thus focusing on an external market-based view of value perception. As such this field adds an outside-in perspective to the inside-out perspective of most FM and CREM literature with a focus on an internal resource based-view. Both approaches should not be considered as contradicting extremes but as complementing elements of a holistic view.

**4. *FM value is multi-dimensional***

Research on value conceptualisation in relationship management literature shows very explicit portraits of benefits and cost dimensions. E.g., authors describe the differences between “core benefits” and “add-on benefits” as well as “acquisition costs”, “operations costs”, and “purchase price”. In addition, it is worth considering that relationship benefits are stronger correlated with value measures than relationship sacrifices. This distinguished characterisation of various value dimensions helps to differentiate between several FM-specific dimensions of benefits and costs.

**5. *FM value is relationship value***

When considering the value of 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. Perceived value can only exist and be produced within this specific network of relationships.

**6. *FM value is subjective***

The character of value within these relationships includes a strong subjective element that is dependent on the customer's/client's perception. As pointed out by the presented research on the value of relationships, customer organisations tend to emphasise relationship benefits, whereas suppliers mainly focus on sacrifices. Only the subjective perception of the customer/client determines the value of the relationships within FM and the rule “perception is reality” applies here as well.

**7. *FM value depends on conditions***

In addition, the subjective value of FM can be very different, depending on market settings, type of relationship, industry sector, specific situation, etc. This leads to a major challenge when conceptualising a holistic formula for determining the value of FM.

**8. *FM value research needs both qualitative and quantitative research methods***

To determine the multidimensional and subjectively perceived value of FM, surveys are needed that integrate the different perspectives mentioned above, with differentiated measurement methods such as using multi-item scales and structural equation modelling

(SEM). Quantitative surveys should be triangulated by applying qualitative data collection methods such as personal interviews, focus groups with professionals, and content analysis.

In relation to the FM Value Map the focus on broad stakeholder value rather than shareholder value has been supported by the recent development in FM and CREM research, while the focus in Business to Business Management is mostly limited to customers and clients/owners. The crucial part of value adding lies in the interface between provisions from FM and the impact on the core business as perceived by the stakeholders. Business to Business Management puts particular focus on the relationship aspects of this interface. There are some examples on categorising the performance indicators for the core business impacts, particularly within CREM, while both FM and Business to Business Management provide examples of ratios to measure the added value, including the very interesting example from LEGO.

These differences between the different academic fields give good promises for the possibilities and benefits of developing a common trans-disciplinary framework of mapping added value. The categorisation of the impact parameters in the FM Value Map can be further refined in this process. The FM Value Map is unique in including the impacts on the surroundings, and the general increase in the focus on sustainability and corporate social responsibility supports the importance on including such parameters.

## **6. Conclusion**

FM has become an important industry and profession. Outsourcing and cost reduction has been and still is an important trend within FM, but in recent years this has been combined with a new trend with more focus on adding value to corporations and increasingly also for society at large as sustainability and corporate social responsibility has become an important concern for both public and private corporations. This change in focus is evident not only in the field of research but also as a practical reality in corporations. There are even examples of corporations, where the FM organisations are developing both qualitative and quantitative measures to document how and how much they add value. This shows that the most forward looking facilities managers are beginning to talk the language of top management and want to be taken serious at the strategic levels in corporation.

From the findings from the fields of FM and CREM it is interesting to see that the FM Value Map provides a very broad and qualitative framework, while from relationship marketing and practice cases several examples came up of more simplified equations and ratios with attempts to quantify the results in various degrees. The case from LEGO represents a unique example of a quantification of added value of FM. It is a very recent development and it will be interesting to see what the experience over time will be and whether other organisations will take up similar models of managing and measuring the added value of FM. Whereas quantification is an important mean to simplify and put all factors on a comparable footing, the intentions with the value map are to be able to explain the different ways that FM can create added value. In

combination, the equations or ratios can give inspiration to further development of the FM Value Map.

The research shows a number of different definitions and focus points of Added Value of FM, dependent on the academic field and the area of application. Good relationship management and building on trust shows to be equally important as delivering the agreed services. In order to measure the multi-dimensional components of adding value both qualitative and quantitative approaches are needed. Usually the concept of Added Value is discussed from a mono-disciplinary point of view. The different research perspectives presented in this research review provides in combination a holistic view on the added value of FM by the integration of an external market based view (with a focus on the aimed output) and the internal resource based view (with a focus on the input from FM and RE). The findings have improved our understanding of the added value of FM, both on a conceptual level and from an instrumental point of view.

This is of great importance to FM-research and evidence-based FM as a sound basis for the long term recognition of FM. The differences between the different academic fields represented in the research group give good promises for the possibilities and benefits of developing a common trans-disciplinary framework of mapping added value. So far this collaborative research includes joint discussions and reflections on definitions and research findings to be found in international journals. A next step will be to start case studies in different countries with comparable research methods.

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