



Total Facilities Management

Brian Atkin & Adrian Brooks

THIRD EDITION

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Preface to the Third Edition

The rate of facilities management development since the publication of the second edition in 2005 has been such that we felt it necessary to expand our coverage of the subject. New chapters have, therefore, been added and new material has been contributed to other chapters.

As facilities management develops to embrace still wider interests, so too have we brought new topics into the structure of this edition. Social and environmental interests have continued to challenge those with responsibility for our buildings and facilities and these are reflected in this update. Specialist services and information systems have their own chapters, allowing us to examine the diversity of service provision falling under the umbrella of facilities management, and the information and communication technology (ICT) infrastructure required to support it. The connection between facilities management and facilities planning, and related issues of space management, design briefing and real estate management complete our expansion of the subject.

In the course of our professional work, we have been encouraged by the extent to which practitioners have used our work and by the valuable feedback they have provided from their own experiences. Knowing that our advice and information is being put to effective use in the routine practice of facilities management reconfirms our original intention – to make our work accessible to the widest possible readership. Finally, our special thanks go to Dr Robert Wing for his contribution in the area of smart sensors and controls and to Gunnlaugur B. Hjartarson for his work in briefing and information systems.

Brian Atkin
Reading

Adrian Brooks
London

Preface to the Second Edition

The first edition of *Total Facilities Management* was, at the time of its publication, the latest phase in a collaboration that had begun five years earlier. This collaboration was illustrative of how serious research into an ill-defined problem can yield not only improved and even new insights, but also how it can provide answers for practitioners who need guidance based on tested theory. The original work was 'a study of value for money in facilities management' in a key area within the public sector in the UK. The study helped us understand how real organisations were coping with issues such as best value, customer satisfaction and the development of the professional discipline of facilities management. From this work, we were able to set out practical guidance which we were pleased to see published by the UK government through the Stationery Office (formerly known as HMSO). The guidance was written for practitioners, not an academic readership, and was well received by the public sector and, to our delight, by many organisations and individuals in the private sector. This reaction was instrumental in taking the decision to draft *Total Facilities Management* as a means for others to access our research findings and practical guidance.

The success of the first edition encouraged us to update and expand the treatment of the subject and to draw in a broader appreciation of how facilities management is practised in parts of the world other than the UK and North America. In this connection, we are especially grateful to Dr Keith Fitcher, Managing Director of EastPoint Management Services Limited¹, and his colleagues for providing access to so many examples of best practice facilities management. The location of EastPoint – in Hong Kong – has added a further dimension, one of managing a different organisational culture and context to that found in the UK and North America. What is also interesting about EastPoint is that it has taken and applied, tested and refined, many model practices and procedures. This has allowed us, as authors, to establish this broader international appreciation and to enable readers to access material from a market leader.

We are also grateful to several organisations in the UK that have helped us deepen our treatment of a number of issues which we introduced into the first edition. Important changes have taken place in the UK during the past five years and these are reflected in an expansion of our concern for human resources management, change management, workplace productivity

¹ Now ISS EastPoint Facility Services Limited.

and the dramatic growth in public–private partnerships. Particular thanks go to Karen Gunther of Sun Life of Canada (UK) Limited, a prominent life assurance and pensions provider, and Ruth Saunders of Diageo plc, one of the world’s leading premium drinks businesses, for allowing us to incorporate case studies of their in-house activities. Finally, we should like to thank Dr Roine Leiringer for his input on public–private partnerships, drawing as it does from his doctoral research in this area.

We trust this second edition of *Total Facilities Management* will go some way towards satisfying a market need for balanced guidance based on best practice underpinned by robust theory. If it does, it will demonstrate the important connection between research and practice, as well as offering something for everyone with a professional interest in facilities management.

Brian Atkin
Reading

Adrian Brooks
London

Introduction

Managing non-core business services enables an organisation to function at its most efficient and effective level. Implicit in this management role are the issues of customer satisfaction and best value. The focus for these issues is facilities management, which has traditionally been seen as the poor relation of the main real estate and construction disciplines. The significance of facilities management is now recognised and this book offers a progressive look at how facilities management applies to organisations of all kinds. The book contains many examples of how facilities can be better managed; these are largely derived from practices known to work well, although the approach is not intended to be prescriptive.

The organisation

This book is directed at organisations within both the public and private sectors. The types of organisation addressed might therefore range from colleges to entertainment companies, from manufacturers to airport operators. The structure, management and accommodation of these organisations will vary widely; nevertheless, the information contained in this book is intended to have a correspondingly wide application. It is necessary, of course, for each organisation to consider the relevance to itself, its sector and its country of each of the points raised. Thus, where specific public sector regulations, or UK and European legislation, are referred to, it is the principles embodied within that legislation that should be noted if the legislation itself is not directly applicable.

The customer

In the broadest sense, the customer is the client organisation acting as a purchaser of services. These will sometimes be procured in-house and sometimes from external providers. Although the distinction between purchaser and provider is more obvious in the case of external provision, it is important that the same distinction is recognised within in-house provision. The customer in this instance might be an internal department being served by the organisation's facilities management team, with a financial exchange between the two different cost centres. The relationship between the two parties therefore remains a formal one requiring guidelines and procedures for its formulation and implementation.

In most organisations, customers will therefore be the organisation's employees and constituent departments, as the principal facility users. In some, such as leisure centres or department stores, the external user of the organisation's facilities becomes an additional type of customer whose needs must be considered within facilities planning and operations. This book generally refers to the former type of customer (internal user), with these users typically providing the interface between the external user and facilities management service providers.

Abbreviations

AEC	architecture, engineering and construction
ANSI	American National Standards Institute
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
B2B	business to business
B2C	business to consumer
BIFM	British Institute of Facilities Management
BIM	building information model or modelling
BOT	build-operate-transfer
BPR	business process re-engineering
BREEAM	Building Research Establishment Environmental Assessment Method
CAFM	computer-aided facilities management
CCT	compulsory competitive tendering
CCTV	closed circuit television
CDM	Construction (Design and Management) Regulations 2007
CIOB	Chartered Institute of Building
CIPS	Chartered Institute of Purchasing and Supply
COSHH	Control of Substances Hazardous to Health Regulations 2002
CPD	continuing (or continuous) professional development
CSF	critical success factor
CSR	corporate social responsibility
DBFO	design, build, finance and operate
EBITDA	earnings before interest, taxes, depreciation and amortisation
EC	European Commission
EDI	electronic data interchange
EU	European Union
EVA	earned value added
FM	facilities management
GIS	geographic information system
GPS	global positioning system
HRM	human resources management
HSE	Health and Safety Executive
HVAC	heating, ventilating and air-conditioning
IAI	International Alliance for Interoperability
ICF	informed (or intelligent) client function
ICT	information and communication technology
IFC	industry foundation class or classes

IFMA	International Facility Management Association
ISO	International Organization for Standardization
JCT	Joint Contracts Tribunal
KPI	key performance indicator
LAN	local area network
M&E	mechanical and electrical
NEBOSH	National Examinations Board in Occupational Safety and Health
OJEU	Official Journal of the European Union
PACE	Property Advisers to the Civil Estate
PDA	personal digital assistant
PES	project execution strategy
PEST	political, economic, social and technological
PFI	private finance initiative
PPE	personal protective equipment
PPM	planned preventive maintenance
PPP	public–private partnership
QA	quality assurance
RFID	radio frequency identification
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995
SBS	sick building syndrome
SLA	service level agreement
SME	small and medium sized enterprises
SQL	structured query language
SWOT	strengths, weaknesses, opportunities and threats
TFM	total facilities management
TUPE	Transfer of Undertakings (Protection of Employment) Regulations 2006
VR	virtual reality

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1

Background to Facilities Management

Key issues

The following issues are covered in this chapter.

- There are a number of definitions of facilities management. One that is commonly used is 'an integrated approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organisation in order to create an environment that strongly supports the primary objectives of that organisation'.
- In any discussion of facilities management it is, however, necessary to stress the importance of integrative, interdependent disciplines whose overall purpose is to support an organisation in the pursuit of its (business) objectives.
- The proper application of facilities management techniques enables organisations to provide the right environment for conducting their core business on a cost-effective and best value basis.
- If buildings and other facilities are not managed, they can begin to impact upon an organisation's performance. Conversely, buildings and facilities have the potential to enhance performance by contributing towards the provision of the optimum working and business environment.
- In practice, facilities management can cover a wide range of services including real estate management, financial management, change management, human resources management, health and safety and contract management, in addition to building maintenance, domestic services (such as cleaning and catering) and utilities supplies.
- There is no universal approach to managing facilities. Each organisation – even within the same sector – will have different needs. Understanding those needs is the key to effective facilities management measured in terms of providing best value.
- Quality of service or performance is a critical factor in any definition of value, and the relationship between quality and cost or price has to be properly understood in this respect.
- Cost savings cannot be looked at in isolation from value. Organisations must be able to demonstrate what they are getting for their money and should not assume that paying less today is proof of better value for money.