

EDITED BY EDWARD FINCH

# Facilities Change Management



WILEY-BLACKWELL



## **Facilities Change Management**



# **Facilities Change Management**

Edited by

**Edward Finch**

Professor in Facilities Management  
The University of Salford

 **WILEY-BLACKWELL**

A John Wiley & Sons, Ltd., Publication

This edition first published 2012 by Blackwell Publishing Ltd  
© 2012 Blackwell Publishing Ltd

Wiley-Blackwell is an imprint of John Wiley & Sons, formed by the merger of Wiley's global Scientific, Technical and Medical business with Blackwell Publishing.

*Registered office:*

John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

*Editorial offices:*

9600 Garsington Road, Oxford, OX4 2DQ, UK

The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

2121 State Avenue, Ames, Iowa 50014-8300, USA

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at [www.wiley.com/wiley-blackwell](http://www.wiley.com/wiley-blackwell).

The right of the author to be identified as the author of this work has been asserted in accordance with the UK Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

*Library of Congress Cataloging-in-Publication Data*

Finch, Edward.

Facilities change management / edited by Edward Finch.

p. cm.

Includes bibliographical references and index.

ISBN-13: 978-1-4051-5346-1 (pbk. : alk. paper)

ISBN-10: 1-4051-5346-6

1. Buildings—Remodeling for other use. 2. Facility management. I. Title.

TH3411.F46 2011

658.2—dc23

2011030350

A catalogue record for this book is available from the British Library.

This book is published in the following electronic formats: ePDF 9781444346060; Wiley Online Library 9781119967316; ePUB 9781444346077; MobiPocket 9781444346084

Set in 10/12pt Minion by Thomson Digital, Noida, India.

---

# Contents

---

<i>Preface</i>	xi
<i>Contributors</i>	xiii

<b>1 Facilities Change Management in Context</b>	1
Edward Finch	
Chapter Overview	1
1.1 Forces of Change Affecting the Built Environment	1
1.2 Inertia and Change	2
1.3 Understanding the S-curve	3
1.4 The Context of Change	5
1.4.1 State Versus Direction	6
1.5 Facilities Management and the Business of Change	8
1.6 The Scope of Facilities Change Management	9
1.7 Replacing Like with Unlike	11
1.8 The Intelligent Client	11
1.9 The Change Management Cycle	12
1.9.1 Recognise	13
1.9.2 Evaluate	14
1.9.3 Adjust	14
1.9.4 Carry Out	15
1.9.5 Track	15
1.9.6 Treasure	15
1.10 Summary	16
References	16
<b>2 Change Readiness</b>	17
Edward Finch	
Chapter Overview	17
2.1 Service Providers and Partnering	18
2.2 Outsourcing Relationships	18
2.3 The FM Supply Chain	20
2.4 Flexibility in Support of Change Readiness	21
2.5 Building Design Decisions and Flexibility	22
2.6 Types of Flexibility	23
2.7 Conclusions	24
References	25

<b>3 Form, Function and the Economics of Change</b>	<b>26</b>
James Pinder, Simon Austin, Rob Schmidt III, and Alistair Gibb	
Chapter Overview	26
3.1 Introduction	26
3.2 Changing Demands	27
3.3 Designing for Adaptability	31
3.4 Adaptive Re-use	35
3.5 Conclusions	38
3.6 Acknowledgements	38
References	39
<b>4 The Change Management Challenge in Growth Firms</b>	<b>42</b>
Paul Dettwiler	
Chapter Overview	42
4.1 Introduction	43
4.2 The Dynamic Relation of Facilities Management Variables and Growth Firms	44
4.3 The External Factors Relevant to FM	47
4.4 External Factors Relevant to FM Requirements	50
4.5 Discerning the Relevance of Needs	51
4.6 Summary	55
References	55
<b>5 The Business of Space</b>	<b>57</b>
Danny Shiem Shin Then	
Chapter Overview	57
5.1 Introduction	58
5.1.1 Space as a Business Resource	58
5.1.2 Technology and Its Impact on the Corporate Workplace	59
5.2 Context of Space Planning and Management	59
5.2.1 Business Management and Economic Drivers	59
5.2.2 Business Planning and Space Planning	60
5.3 Strategic Space Planning – The Accommodation Strategy	61
5.4 Assessing Demand – Organisational Needs	63
5.5 Assessing Supply – Premises Audit	65
5.6 Reconciling Demand and Supply – Facilities Solutions	67
5.7 Maintaining Strategic Relevance	69
5.8 The Need for Dialogue	70
5.9 Managing Occupancy Cost – Monitoring Utilisation	70
5.10 Managing Space Demand Over Time	72
5.10.1 Future Role of Work and Workplace Design	72
5.10.2 Implications on Workplace Management	73
5.11 Acknowledgements	74
References	74

---

<b>6 Project Inception: Facilities Change Management in Practice</b>	<b>76</b>
Jim Smith and Peter Love	
Chapter Overview	76
6.1 Introduction	76
6.2 Project Inception	78
6.3 Definition of Project Inception	79
6.4 The Decision to Build	81
6.5 Framework for the Decision to Build	82
6.6 Gaps/Discontinuity in the Process	82
6.7 Model of the Project Inception Process	83
6.8 Performance Briefing	84
6.9 Example Performance Brief	86
6.10 Summary	86
Appendix A: Key Performance Criterion	87
Service Delivery (including effectiveness of individual service)	87
Key Performance Criterion	89
Accessibility	89
References	90
<b>7 Pre-design Evaluation as a Strategic Tool for Facility Managers</b>	<b>92</b>
Sheila Walbe Ornstein and Cláudia Andrade	
Chapter Overview	92
7.1 Introduction	92
7.2 The Pre-design Evaluation Stage	93
7.3 Pre-design Evaluation: Methods and Techniques	96
7.3.1 Facility Audit (Performance Evaluation of the Building Infrastructure)	97
7.3.2 Space Audit (Performance Evaluation of the Physical Occupation)	97
7.3.3 Survey and Analysis of the Legislative Restrictions	98
7.3.4 Financial Feasibility Studies	98
7.3.5 User Satisfaction Evaluation	98
7.3.6 Data Gathering for the Project Briefing	99
7.3.7 Design Team Briefing (Focus on the Definition of the Design Team)	100
7.3.8 PDE final report	101
7.4 Case Study Example	102
7.5 Conclusions	105
References	106
<b>8 Implementing Change</b>	<b>108</b>
Melanie Bull and Tim Brown	
Chapter Overview	108
8.1 Participation in the Move	108
8.2 The Project Team and Preparing the Stage	109
8.3 Alternative Workplace Strategies and Space Utilisation	111

8.4	Communication	112
8.5	Change Management Theory	112
8.6	Communication in Change Management	113
8.7	Communication Methods/Mediums	114
8.8	Case Study	115
8.9	Communication Methods Used	115
8.10	Feedback	116
8.11	Satisfaction with Method Used	117
8.11.1	Communicating Impact and Reason for Change	117
8.11.2	Suggested Methods for Improving Communication	118
8.12	Satisfaction	118
8.13	Communication of Change Not Appropriate or Effective	118
8.13.1	Case Study: Conclusion and Recommendations	119
8.14	Recommendations	120
	References	120
<b>9</b>	<b>User Empowerment in Workspace Change</b>	<b>123</b>
	Jacqueline C. Vischer	
	Chapter Overview	123
9.1	The 'Science' of User Participation	123
9.2	Facilities Managers and User Participation	124
9.3	The New Workspace Opportunity	125
9.4	Principles of Workspace Transformation	128
9.4.1	Transformation as Imperative	129
9.4.2	Play Out the Process	130
9.4.3	Embrace Conflict	131
9.4.4	Avoid the Default	132
9.4.5	Not a Zero-sum Game	133
9.4.6	Empowerment is Key	133
9.4.7	Change is Positive	134
9.5	Results of Empowering Building Users	135
	References	136
<b>10</b>	<b>Post-occupancy Evaluation of Facilities Change</b>	<b>137</b>
	Theo J.M. van der Voordt, Iris de Been and Maartje Maarleveld	
	Chapter Overview	137
10.1	Introduction	138
10.2	Aims and Objectives of Poe	138
10.2.1	Testing Aims and Expectations	138
10.2.2	Exploration and Testing of Theory	139
10.2.3	Improving Understanding of Decision-making Processes	139
10.2.4	Database of Reference Projects	140
10.2.5	Input to Existing or New Decision-making Processes	140
10.2.6	Tools, Design Guidelines and Policy Recommendations	140
10.3	Data-collection Methods	140
10.3.1	WODI Light	143

---

10.3.2	WODI Light Performance Indicators: Satisfaction and Dissatisfaction	143
10.3.3	Workplace Game	144
10.3.4	Space Utilisation Monitor (SUM)	146
10.4	Application in Practice: A Case Study	146
10.4.1	Context and Aims of the Case Study	146
10.4.2	Data Collection	147
10.4.3	Moving in	148
10.4.4	Post-occupancy Evaluation	149
10.4.5	Lessons Learned	151
10.5	Concluding Remarks	151
	References	153
<b>11</b>	<b>Change and Attachment to Place</b>	<b>155</b>
	Goksenin Inalhan and Edward Finch	
	Chapter Overview	155
11.1	The Age of Everything	155
11.2	Loss and Grief	156
11.3	Is Place Attachment Healthy?	158
11.4	Dimensions of Place Attachment	160
11.5	The Process of Place Attachment	161
11.6	Evidence of Place Attachment and Territoriality in the Workplace	165
11.6.1	Employees' Predisposition to Change	167
11.6.2	Attitudes Towards Existing Workspaces	167
11.6.3	Retrospective Views of the Change	167
11.7	Findings	169
11.8	Implications	170
	References	172
<b>12</b>	<b>Change Management and Cultural Heritage</b>	<b>175</b>
	Ana Pereira Roders and John Hudson	
	Chapter Overview	175
12.1	Introduction	175
12.2	Cultural Heritage	176
12.2.1	Cultural Significance	178
12.3	Cultural Heritage Management	181
12.3.1	Cultural Heritage Assessments	182
12.3.2	Cultural Heritage Impact Assessments	185
12.4	Change Management and Cultural Heritage	187
	References	187
	<i>Index</i>	191



---

# Preface

---

## **FACILITIES CHANGE MANAGEMENT**

It would appear that we no longer need many buildings – or so some would have us believe. In their view, offices, hospitals, prisons and education buildings, among others, are becoming a relic of the past. That is the argument put forward by the advocates of virtualisation, sometimes on the grounds of carbon reduction, convenience or cost savings. Technology, it is suggested, is brushing aside the need for such costly physical assets. Home working, community based health, electronic tagging and online learning are presented as inevitable alternatives that make the need for such building types redundant.

The evidence however suggests otherwise. The demands for such buildings are just as great as ever, despite the apparent option of remote working, remote telemetry and remote learning. How can this be explained? People are sentient beings, who seek the stimulation that the built environment presents. They embrace the opportunity to be part of a vibrant physical congregation, an organisation, housed in a facility with a definable purpose. What is evident is that the future demand for such buildings is assured, in meeting the needs and motivations of individuals. However, just what form they take is much less certain. Businesses, public authorities and local communities have to rethink exactly what is required by the familiar concepts of school, police station, hospital or workplace. In short, they require reinvention. The design of such buildings is no longer tethered by constraints of the past. New technology satisfies the need to access resources that previously could only be met by a journey to this building or that one. Now that such a need can be met in other ways, we are forced to question the very rationale for their existence.

This book in facilities change management is designed for those entrusted with this challenge – the challenge of making the physical environments we inhabit fit for a future that will be significantly different. Such professionals include facilities managers, property managers, architects, building users and those responsible for investing in our future environments.

Looking specifically at the role of the facilities manager, which previously had been described as a ‘Cinderella’ profession in the construction industry, it is now being challenged with deep, searching questions about how to meet the demands of future building users. This professional stance is unfamiliar to many facilities managers, whose track record has traditionally been proven in terms of ‘delivery’ – can you deliver on time and to budget with the least amount of aggravation to building inhabitants? In short, can you deliver what the client thinks he needs?

This unquestioning mental position, inevitably leads to a process of self talk of the form ‘we can achieve anything’ and ‘nothing can stop us’. This attempt to banish doubts is seen to be part of the recipe of the facilities manager’s success. However, it may indeed be their undoing. Enabling a degree of doubt to enter into the equation might be what is required.

A recent study by three US social scientists (Ibrahim Senay and Dolores Albarracin of the University of Illinois, along with Kenji Noguchi of the University of Southern Mississippi) explored the difference between what is called ‘declarative’ self talk (‘We will get it done’) to ‘interrogative’ self-talk (‘Can we get this right?’). A simple experiment involving the resolution of some anagrams was conducted. But prior to this, participants were split into two groups: one half took a minute to consider whether the task could be completed; the other half took the time to tell themselves that they could complete the task. The result? The group of self-questioners was able to resolve significantly more anagrams than the self-affirming group. So what is going on here? One of the researchers, Albarracin, explains in a UK national newspaper (cited by Pink, 2011) that the process of ‘... setting goals and striving to achieve them assumes, by definition, that there is a discrepancy between where you are and want to be. When you doubt, you probably achieve the right mindset’.

The authors in this book raise just such seeds of doubt in relation to the management of change in the built environment. They make no apologies for doing this and common to each of the chapters is a searching and questioning predisposition. Leading authors from Australia, Brazil, Canada, Netherlands, Turkey, China and the UK, among others, each present part of a holistic framework for raising such questions and developing the evidence base to resolve them. It is hoped that this book will be instrumental in supporting a new generation of facilities professionals that are able to ask the right questions.

Pink, D.H. (2011). ‘Can we fix it’ is the right question to ask. *The Daily Telegraph*, 29 May.

Edward Finch, Editor

---

## Contributors

---

**Cláudia Miranda de Andrade**

Andrade Azevedo Arquitetura  
Corporativa  
São Paulo, Brazil

**Simon Austin**

Department of Civil & Building  
Engineering  
Loughborough University  
Loughborough  
UK

**Iris de Been**

Center for People and Buildings  
Delft  
The Netherlands

**Melanie Bull**

Sheffield Business School  
Sheffield Hallam University  
Sheffield, UK

**Tim Brown**

Sheffield Business School  
Sheffield Hallam University  
Sheffield, UK

**Paul Dettwiler**

Institute of Facility Management  
Zurich University of Applied Sciences  
Zurich, Switzerland

**Edward Finch**

School of the Built Environment  
University of Salford, UK

**Alistair Gibb**

Department of Civil & Building  
Engineering  
Loughborough University  
Loughborough, UK

**John Hudson**

School of the Built Environment  
University of Salford  
Salford, UK

**Goksenin Inalhan**

Faculty of Architecture  
Istanbul Technical University  
Istanbul, Turkey

**Peter Love**

School of Built Environment  
Curtin University  
Western Australia, Australia

**Maartje Maarleveld**

Center for People and Buildings  
Delft, The Netherlands

**Sheila Walbe Ornstein**

Faculty of Architecture and Urbanism  
University of São Paulo  
São Paulo, Brazil

**James Pinder**

Department of Civil & Building  
Engineering  
Loughborough University  
Loughborough, UK

**Ana Pereira Roders**

Faculty of Architecture, Building and  
Planning  
Eindhoven University of Technology  
Eindhoven, The Netherlands

**Rob Schmidt, III**

Department of Civil & Building  
Engineering  
Loughborough University  
Loughborough, UK

**Jim Smith**

Institute of Sustainable Development &  
Architecture  
Bond University  
Queensland, Australia

**Danny Shiem Shin Then**

Hong Kong Polytechnic University  
China

**Jacqueline C. Vischer**

School of Industrial Design  
University of Montreal  
Canada

**Theo J.M. van der Voordt**

Department of Real Estate & Housing  
Faculty of Architecture  
Delft University of Technology  
Delft, The Netherlands

---

# 1 Facilities Change Management in Context

Edward Finch

---

## CHAPTER OVERVIEW

The number of books, training seminars and missives on the subject of change management continues to grow unabated. Yet few of these consider the importance of the *physical* change which inevitably accompanies the change of 'minds'. It is the physical change in the form of workplace redesigns, procurement of new buildings or perhaps the reengineering of a facilities service, which present the tangible evidence of change. People often discard the wise words which appear in the mission statement or the new process hardwired into the corporate intranet. If change is going to succeed, evidence suggests that a transformation in what we see, touch and experience is the only kind of change that people within an organisation are likely to understand and internalise.

How does the facilities manager achieve such transformations? A starting point in this journey is the process of 'sense making' or understanding the nature of change. This chapter describes the changing landscape in which facilities management teams operate. In so doing, it seeks to contextualise facilities management. This chapter explains how each of the elements of the change management process is addressed in each of the book's chapters. This is achieved by (1) an analysis of current thinking on change management; (2) an exposition of how facilities management needs to be redefined to accommodate contemporary approaches and (3) an explanation of a framework (described as the REACTT model) which identifies the key stages of facilities change management which in turn correspond with each of the chapters of this book.

**Keywords:** Change context; REACT model; Facilities management definition; Punctuated change; Transformation.

## 1.1 FORCES OF CHANGE AFFECTING THE BUILT ENVIRONMENT

A change can be described as any 'alteration in the state or quality of anything' (Shorter English Dictionary). Changes can involve people, technology, services or buildings. Indeed, most changes of any significance impact on a number of these facets. Thus, the facilities

manager is never entirely concerned with buildings in isolation. One of the most popular quotes in the field of architecture is that of Winston Churchill:

We shape our buildings; thereafter they shape us. (Winston Churchill, 1874–1965)

This prophetic observation is indispensable to our understanding of facilities in the context of organisations. It makes clear that the buildings which we find ourselves in are at the outset an expression of all the elements that go to make up an organisation. They represent an expression of its people, what they stand for, their mode of operation, as well as their actual and espoused values. The quote highlights that from the day a facility is occupied such buildings themselves become the agents of change (or inertia). A modern day counterpart to this quote given by Denison and Mishra (1995) contends that:

Structures are both the medium and the outcome of interaction. They are the medium because structures provide the rules and resources individuals must draw upon to interact meaningfully. They are its outcome, because rules exist only through being applied and acknowledged in interaction – they have no reality independent of the social practices they constitute. (Denison and Mishra (1995), p. 206)

Ironically, the quote conceives of structures as organisational structures. However, it is most apt in describing the importance of ‘physical structures’ (buildings, floor layouts and supporting services) which provide the ‘hardwired’ rules that dictate organisational interaction and social practices.

## **1.2 INERTIA AND CHANGE**

Early thinkers on the nature of change construed change as an incremental process. This view of the world is described as the ‘gradualist’ paradigm. Continuous improvement (*Kaizen*; Japanese for ‘change for the better’) was proposed as the key method for managing change in an environment which was perceived as largely predictable. Based on this concept, changes to individual subsystems such as people, missions or facilities provide the necessary intervention to allow small but continuous change that allows adaptation to the internal and external environment. In such a model it is possible to tinker with one part of the system without affecting the whole (Choi, 1995).

However, in parallel with modern day reinterpretations of biological evolution, it has been argued by Gersick (1991) that change in most organisations is not continuous, but is characterised by events involving rapid change. In just the same way as evolution in the natural world undergoes major transformative events, so it can be seen that organisations are also subject to such rapid and often unexpected change. Gersick (1991) studied change in individuals, groups and in organisations as well as the history of science. She found in all of these change categories a recurring pattern of relatively long periods of stability or equilibrium ‘punctuated’ by short bursts of metamorphosis. The paradigm known as ‘punctuated equilibrium’ was used to describe this pattern.

How can we explain this process of punctuated equilibrium and more importantly what are the ramifications for facilities management? The model is explained in terms of in-built organisational inertia which arises from persistent *deep structures* which allow only small incremental changes. It is these embedded structures which resist change and pull an organisation back to a condition of equilibrium. Such deep structures are highly stable. This stability arises from the establishment of a number of key choices in the organisation’s

history that exclude many options which might be deemed inconsistent. These mutually interdependent choices reinforce and strengthen one another over time. Gersick (1991) suggests that three sources of inertia are at play in organisations.

- Sense making: the organisation's way of seeing things (cognitive framework). Organisations evolve shared mental models in the way that they interpret reality and learn. In reaction to change, the natural response is to look at ways of 'doing things better'. Notice that this contrasts with a more open approach which considers all options and also considers doing 'better things'. The focus is thus on efficiency and alignment rather than the exploration of new opportunities.
- Motivation: change brings with it a fear of loss as well as a realisation that such change may bring about a 'sunk cost'. For example, the change in choice of air-conditioning manufacturer may render the expertise of a plant engineer redundant, having gained years of experience in the maintenance and regulation of an existing system.
- Obligation: with any change comes disruption and the severing of interdependencies. Relationships with particular service providers may have to be terminated: short-term disruptions to customer services may ensue. In the short term, the attraction of change may be lacking and the turmoil and loss of goodwill may be the dominant concern.

At some point in time, the forces of inertia, despite their attractive forces (e.g. efficiencies achieved through interdependency) become overwhelmed by external changes. The ensuing change is inevitably shattering to the status quo, resulting in 'punctuation in time'.

The punctuated equilibrium paradigm explains much about why facilities management change initiatives are so often challenging and problematic. Initiatives such as hot-desking or energy-awareness are often only able to impact on the outer superficial structures without penetrating more resilient deeper structures (culture and behaviour). This explains the legacy of failed attempts to introduce 'new ways of working' that directly challenge the deep structures of an organisation. Much of the literature on change in facilities is founded on the 'gradualist' paradigm of change, whereby, through a process of continuous adjustment, it is possible to respond to the changing environment.

As well as explaining why facilities managers encounter resistance when implementing change, the punctuated equilibrium model also highlights the significance of major facilities initiatives. The decision to relocate from a central business district to a suburban location may coincide with a change in business model, for example, a change from face-to-face to online customer service support. The relocation is thus a 'punctuation' or radical departure from the past way of doing things: the facilities change is simply a physical manifestation of a deep structural change. As such, every opportunity is taken in such a move to realign and transform systems: not as separate systems but as part of a holistic entity. The opportunity for transformative change which arises from a relocation or change in service provider is clear. However, it is incumbent on the facilities manager to realise this opportunity. As such, it involves working in concert with other systems within an organisation to overcome deep structural inertia.

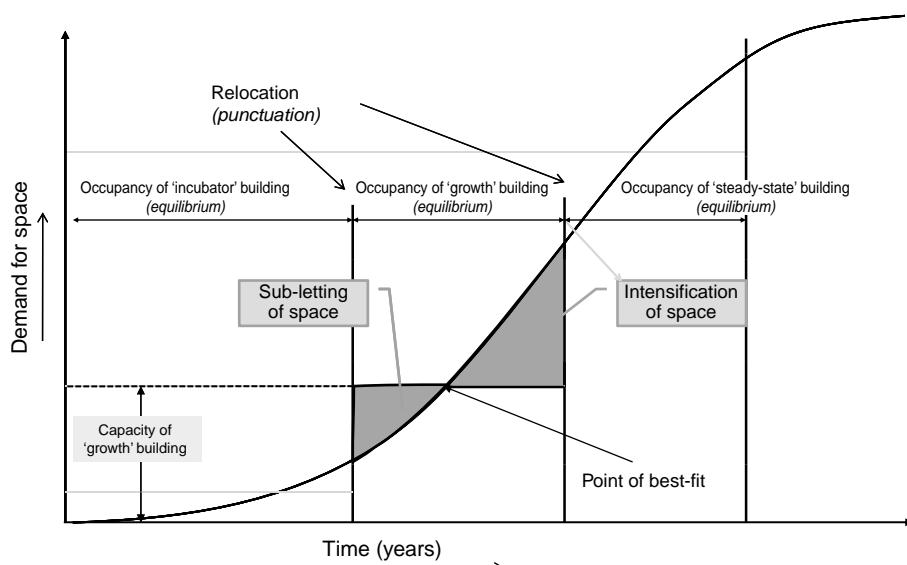
### 1.3 UNDERSTANDING THE S-CURVE

Facilities management is driven by space forecasts and space budgets. Often such forecasts of change are based on simple extrapolations of what has gone before. A pattern of 5% growth in personnel over the last ten years is assumed to be repeated for the next five years.

However, such a forecasting approach is fraught with dangers based on business as usual. One of the most widely recognised predictor of change, the sigmoidal curve or S-curve, has consistently proven to be a reliable tool. Early work by Tushman and Romanelli (1985) showed how the S-curve (so described because of its characteristic S-shape) accurately describes the growth pattern of innovations and organisations. The curve illustrates the slow growth rate associated with start-up organisations whose initial growth is tempered by resource constraints and market acceptance. This is then succeeded by a period of rapid (exponential) growth during which time the organisation undergoes successive periods of growth. Finally, as the service or product offering is exhausted, the growth rate reaches maturity, with a tapering of growth.

The S-curve equally describes the characteristic growth patterns of individuals and indeed their lifestyles. This was illustrated in the seminal work of Becker (1990) in *The Total Workplace*. This describes how life changes impact on our choice of residential property. This begins with modest requirements to support a singles lifestyle, succeeded by shared living and the arrival of a family. Finally, in the maturing stage, married couples become 'empty nesters' and begin to downsize. At each stage there is punctuation in their existence associated with a change of accommodation. Houses and apartments are bought and sold to realign with their changing needs.

Figure 1.1 illustrates organisational growth in the form of an S-curve and the way this impacts on facilities and relocation decisions. During the early stages of growth, organisations typically occupy 'incubator' facilities, providing the flexibility for experimentation unencumbered by constraints and standards. The organisation at this stage is involved in inventing its 'deep structure'. As the organisation becomes too large for its original facility, the pressures for a transformative change overwhelm the forces of inertia. Thus a 'punctuation' in an organisation's timeline occurs. The organisation has established its deep structures, including its characteristic way of doing things, its mission and underlying



**Figure 1.1** S-curve patterns of growth and space demand within an organisation. Reproduced by permission of John Wiley & Sons, Inc.

culture. The new building (unlike the incubator building) attempts to formalise and express this emergent view of itself. At the same time, the organisation seeks out standards and efficiency measures. This is what is described by Becker (1990) as the transition from the 'loose fit' to the 'tight fit' organisation. This in turn is reflected in the facilities management operation, with the emergence of formal policies and standards (such as space standards) which attempt to rationalise the service provision. Becker also refers to the concept of 'elastic fit' as the form of building solution (and facilities management solution) which succeeds the 'tight fit' approach. The constraints imposed by operating standards, whilst allowing efficiencies, prevent the organisation from growing. Only by engineering a degree of flexibility can an organisation extend its life on the S-curve: it needs to reinvent itself. The 'elastic' model relinquishes formal 'standards' in favour of 'frameworks' and 'templates' tuned to the individual needs of each part of the organisation. During the growth and downsizing stages, further moves and relocations inevitably occur, ranging from the relocation of individuals or departments to whole organisations. Moves inevitably are associated with 'punctuation' — an opportunity for transformation. They present a chance to realign the space and service offering; an opportunity to bridge the emerging gap between what is required and what is available. Treating the relocation as simply a resizing operation is fundamentally flawed. Such a 'punctuation' needs to embrace all of the levels of change in an organisation; in other words, to enable a 'punctuation' which addresses some or all of the forces of inertia.

Figure 1.1 also illustrates the constant state of inexact fit which arises between the space demands of the organisation (the demand side) and the capacity of the building (the supply side). At almost no point is entire equilibrium between these two forces met. The shaded zones identify areas where the facilities manager is constantly having to compensate for the deficiencies in this mismatch. During the early period of occupancy (or during periods of downsizing) there may be a surfeit of space. Facilities managers, however, are rarely presented with this problem as departments undertake unsanctioned 'creep' into unoccupied areas. The problem then becomes one of preventing encroachment and of using excess space. Sub-letting is one such approach, as is the homogenising of capacity between more than one building. However, having too much space can be as challenging as having too little space. Beyond a specific 'tipping point' in the organisation's growth cycle, the challenge becomes one of limited space. Measures to intensify the use of space (in tandem with innovations such as hot-desking or desk-sharing) can significantly extend the capacity of the building. Indeed, more and more buildings are built on this premise from the outset. Even for large multinational organisations, this problem of fit in relation to a single building or campus remains. The option of distributing staff between geographical locations may not be an option where co-location or adjacency to market is an imperative. The S-curve becomes an essential weapon in the facilities manager's armoury in forestalling simplistic projections.

## 1.4 THE CONTEXT OF CHANGE

Most theory relating to change management lacks context. Many address only an isolated aspect of change (e.g. culture, workplace design, process design); whilst others put forward a single approach to change (e.g. 'organisation development', 'systems thinking' or 'strategic planning'). No wonder the facilities management profession is reluctant to spend time making sense of such a convoluted collection of 'recipes'. However, as we have seen in the