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Published version

PRICE, Ilfryn and AKHLAGHI, Fari (1999). New patterns in facilities management: industry best practice and new organisational theory. *Facilities*, 17 (5/6), 159-166.

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Patterns in facilities management: industry best practice and new organisational theory

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Abstract

Examines practices in several areas of facilities management (FM), based on case work completed over the last four years by FMGC (formerly UFMR). Compares them by reference to two dominant paradigms, or patterns, of modern organisational theory and argues that a view of organisations as living, learning systems better explains – and more importantly better enables – best practice. The challenges facing facilities managers in the future are, as in other areas, those of finding new ways of leading, of cultivating environments for performing, and of finding new conversations with clients, customers and staff.

Keywords

Facilities management, Learning, Organizational theory, Trends

Introduction

The 1990s have been the decade of the service productivity challenge: the growing need to increase the value added from “white-collar” or “non-manufacturing” activity. The new profession of facilities management, spanning the total integration of people, processes and places in the service of a core business (Akhlaghi and Tranfield, 1995), was one response to that challenge; a search for means to simultaneously reduce the cost base and increase the value generated from “service” or “knowledge-based” enterprises. That same imperative confronted “public” or “private” sector organisations and spawned explosive growth in the “provider” market for facilities management (FM) service.

It also spawned an increasing rise in both the “fad” end of management practice and the serious theoretical investigation of the art and science of management. Operational FM managers tend to be practical, and frequently have “engineering” backgrounds. Many senior managers mistakenly view facilities as a necessary evil rather than a strategic asset and therefore as something to be managed for minimum cost rather than optimum value.

For both reasons, FM has been particularly exposed to fads, such as re-engineering, grounded, at least superficially, in the classical mechanistic or Taylorist managerial paradigm. We seek here to redress the balance and demonstrate the relevance of “new” managerial concerns with “learning” (Senge, 1990) or “living” (Price, 1995; Price and Shaw, 1998) organisations to FM.

Management trends of the 1990s

Despite the explosive growth of business recipes, or fads claiming to hold the clue to organisational transformation (Pascale, 1991; Price and Shaw, 1996), most, if not all, can, however, conveniently be grouped under the two banners of business process reengineering (BPR) and the learning organisation. Between them these two themes have come to be seen as the major movements in managerial thinking and consultancy in the 1990s (Price and Shaw, 1996). Both have been hailed by their adherents as providing the clue to organisational transformation, and criticised by others for failing to do so. Between them they encompass the major managerial innovations of the decade.

Do they, though, encompass a sufficient change of paradigm concerning the role of management? Pascale (1991) anticipated the managerial challenges of the 1990s, suggesting the work of management as the making and breaking of paradigms (cf. Akhlaghi and Tranfield, 1995), in the search for organisational transformation.

Transformation, he argued, involves finding completely different ways of approaching the conceptions an organisation holds about its strategy and management and a different “being” for people in the organisation. Unfortunately, as Pascale put it, “we are devoting our efforts to squeezing more and more out of the existing paradigm .and. it’s killing us”. BPR emerged from a plethora of competing “business process” labels as the dominant expression of that existing mind-set, the mechanistic or Taylorist view of organisations, with its roots in the Prussian military transition and the mass manufacturing technologies of the early part of this century (Morgan, 1986). One of the best, and most famous, descriptions of that paradigm comes from M. Konosuke Matsushita, former executive director of the Matsushita Electric Industrial Corporation:

We are going to win and the industrial West is going to lose. There is nothing much you can do about it, because the reasons for your failure are within yourselves. Your firms are built upon the Taylor model; even worse, so are your heads. With your bosses doing the thinking while the workers wield the screwdrivers, you’re convinced deep down that this is the right way to run a business. For you, the essence of management is getting the ideas out of the heads of the bosses in to the hands of labour.

Put shortly, the pattern of thinking remains that, with a big task to be accomplished, management should break down that task into smaller components manageable by others. As we specialise, people will be doing smaller and smaller jobs and organisations need greater co-ordination mechanisms (administration). In addition, some of these jobs will be so small that we can employ unskilled and interchangeable labour and concentrate on improving efficiencies at the operator level (operation). To do this and to offset the

The underlying assumptions are well described by Walton (1985):

- There is a single best way to perform a job.
- Highly specialised, narrowly defined jobs assure optimal performance.
- Jobs are simplistic and easy to perform: training periods are short, to assure quick replacement of employees who do not make the standard.
- Rewards are based on individual performance against “scientifically set” standards.
- Technology and process flow are designed for optimal performance and then workers are fitted into jobs.
- Controls are external.
- Job alienation is an accepted phenomenon of industrial life.

An organisation is perceived as an instrument or machine to get something done. Management equates to control. People are recruited for their fit with the packages of work that have been designed and described as jobs. They are “resources”, which need to be maintained (motivated by threat/fear and reward), occasionally upgraded (trained), and sometimes replaced (fired). This paradigm of management has been challenged, since at least the 1920s (Morgan, 1986), by the “human relations school” which drew more inspiration from biology (the metaphor of organisation as a living system) and the assumption of work as an intrinsic human activity. One could regard the move for “learning organisations” as the latest expression of that challenge. While no agreed definition of what a learning organisation is exists, there is a widespread consensus, supported by numerous empirical studies (Matzdorf *et al.*, 1997), that higher rates of innovation and adaptation characterise more successful organisations and that faster “learning” is an adjunct to, if not a prerequisite of, success. The learning approach is also achieving a synthesis with a newer theoretical standpoint, with a view of organisations’ complex adaptive systems (Price and Shaw, 1998). Among its underlying assumptions are:

- There are many ways to achieve the same level of result.
- Jobs are broadly defined and skill sets diverse to assure quick adaptation to change and effective resource utilisation.
- Jobs require a variety of skills and areas of knowledge; training and development is considered a life-long endeavour.
- Work teams control work design and administrative responsibilities.
- Rewards are based on contributions made to the effectiveness of the team.
- Technical systems and processes are designed to enable rather than control.
- Controls are more internal. Common motivations and purposes, shared visions and values (Senge, 1990) are as important as or more important than checks made by someone else.
- Job alienation is considered detrimental to organisation performance.
- The organisation is more flexible.
- Practices which include questioning the status quo, and scanning the outside world for ideas or benchmarks, are encouraged.

The pattern of thinking is that with a big task to be accomplished, management must ensure that those who will accomplish it possess the skills, motivation and understanding to generate a solution. People are likely to do more varied jobs that require the facilitation of co-operation. Development of individual skills is encouraged, to improve effectiveness and motivation, reducing the need for supervision. The work of management is to create the environment that enables the outcome to be achieved rather than to specify how it will be done. The perspective of a company is of a living organism or community to get something done. Management equates to design and leadership. People are recruited for their fit with the skills and values of a team and viewed as “members”, who need to be developed and encouraged.

In practice, many organisations, even as they proclaim a move towards learning or “people are our greatest resource”, fail to challenge the deeper expression of the underlying “Western” managerial paradigm exposed in the quotation above. Management, even of would-be learning organisations, is still perceived as a function of control, by those who have the answers, over those who “do”. The same problem has arguably (Pascale, 1991) impeded many applications in practice of other moves towards management from a “human relations” perspective. We are seeking here to contrast, not so much the Taylorist /human relations divide, as the distinction between the deeper paradigm of “control” and the newer view of organisations as adapting, learning, or evolving systems.

FM and the two paradigms

How do the two perspectives manifest themselves in practice in various facilities management arenas and which generates the greater result? Answering that question has been one of our primary research aims since 1994. Our major research vehicles were our research and application forums in health, higher education and local government. We have also worked on a number of institution-specific projects, appraising various FM options for individual organisations. This observational data set embraces what practitioners themselves consider to be among the most successful instances of good practice in several areas of concern to the profession.

In Table I we set out a number of aspects of FM operations, judged in several polls to be the more critical facing the profession today. We also summarise examples of the two dominant stances encountered in case study work with FM organisations, and examples

of especially good or innovative performance we have noted. In each case the innovation seems more attuned to the learning paradigm than the control.

Facilities managers are often responsible for the lowest paid, least skilled staff in an organisation. Their early professional training in more quantitative subjects such as surveying and engineering, as well perhaps as their early professional experience, may predispose them to a more “mechanistic” approach to management; a bias reinforced if FM is seen as a marginal activity. There is much pressure on the manager to “cut costs”. Yet, as the examples show, successful innovation in many areas of FM shows various hallmarks of management closer to the “learning” or “living systems” paradigm of organisations than to the more classical mechanistic view. In fact, by avoiding the hidden costs and risks of extra absenteeism, poor service, rework, and breakdowns of operational effectiveness, the “learning” approach is able to generate both lower costs and added value. There is a cycle of success possible in FM (Clark, 1999).

Table I Critical aspects of FM operations

Topic	Control paradigm	Learning paradigm
1 Basic stance towards FM	FM is a cost centre, from which top management have to cut expenditure	FM and the organisation’s serviced environment are seen as an integral part of the strategy of the organisation
<p>(Example: an NHS trust, widely regarded as having developed the generic ward support worker to an unusual extent, happens to be one of the few where the chief executive has an FM background. Another which achieves the highest ratings in independent surveys of facilities standards and among the lowest costs (as a percentage of the trust budget) integrates FM and specialised clinical services in one management operation. In benchmarking exercises best standards of FM performance for a given cost level are encountered in organisations which have a facilities director or equivalent integrated into the strategic management of the institution)</p>		
2 Organisation	Organisations tend to be highly functional. with a central manager responsible for staff in many locations	Multifunctional work teams with a responsible staff in many locations shared emphasis on the external customer
<p>(Example: in interviews with most grades of FM staff, the internal barriers to integration emerge as the major obstacle to improved performance. Research into multi-skilling among support staff indicates that a common factor in the achievement of higher output standards per unit of cost is the integration of “support” staff into the core team, providing, say, patient care. The difference is generated partly through improved motivation and partly through dramatic reductions in short-term absenteeism levels.</p>		
3 Choice of FM provision	Made by rigorous reliance on formal procurement and compulsory competitive tendering	Emphasis placed in the first instance on relationship with “open book” negotiation of a provision contract
<p>(Example: some innovative public sector organisations have now followed best private sector practice, by inviting prospective FM providers to pre-qualify against an outline proposal and then negotiating a final contract from a short list of typically three providers. Where whole sectors are moving to this approach (e.g. the CRINE initiative in the North Sea oilfields), a hidden cost of tendering complexity is removed from the industry as a whole. Individual organisations report cost savings from the tendering process and from the improved working relationship with the provider)</p>		
4 Focus of improvement initiatives	Internal costs and systems	External relationships with both suppliers and users
<p>(Example: benchmarking studies of catering operations in the NHS revealed that the greatest opportunities for cost reduction lay in improved use of information systems in food ordering. The greatest opportunities for service enhancement lay in integration of the operations of</p>		

catering and medical staff at ward level)

5 “Customer” “Provider” relationship **Tendency to assume that if it is not formally specified will not be done. Much informal negotiation** **Providers more concerned with receivers/customers (the two terms are not synonymous). What can be done will be done**

(Example: lowest cost per available bed charges in the NHS, correlate in instances of best practice with both porter job satisfaction and satisfaction of customers with the portering service. Porters' job satisfaction has an inverse relationship with the amount of supervision imposed. Their motivation comes from helping people. Cultures of lower costs, self-regulating delivery are possible (Smith, 1999))

6 Attitude to staff, especially the lower paid **Top-down definition of jobs and standards. Systems such as time recording are there to control** **Encouragement of highest standards possible with available resources. Systems seen as there to generate information which helps**

(Example: significant reductions of costs (faster processing, less repeat work, less absenteeism, better co-ordination) are observed in operations which have increased the empowerment granted to both direct labour and contract staff in matters like time-sheeting and job recording).

7 Multi-skilling **Either not attempted, or imposed with the clear objective of reducing costs by up-skilling lower paid to do more** **Treated as a development exercise to enhance self-esteem and motivation**

(Example: in-depth ethnographic research in multi-skilling indicates that institutions which have treated it as a long-term, development-driven initiative have seen the results which come from greater motivation, improved service and lower wasted costs (Clark, 1990)

8 Service level agreements and contracts **Lengthy and detailed with an emphasis on costs. Operate in practice as “the best you will get without paying more”** **Focus on outputs. Operate in practice as “the minimum you can expect from a given resource level”**

(Example: organisations which have adopted output-based “minimum” standards and implemented information systems that are perceived as enabling all concerned to do a better job are seeing the greatest improvement).

9 Help desk systems and other work allocation processes **Designed from the perspective that they are there to control work allocation** **Designed from the perspective of enabling speedier response times and less waste of resources**

(Example: benchmarking suggests that many organisations have the opportunity to eliminate up to five approval stages, and several days of paper processing time by ensuring that help desk staff have the knowledge, information and authority to deal with up to 80 per cent of routine enquiries).

10 Space design **Focuses on density of occupation and utilisation** **Focuses on optimising output and internal communication**

(Example: the biggest observed progress in the UK public sector to date is in estates teams themselves. Innovations in design are still more common in the private sector (see Duffy, 1997; Hurst, 1995))

Complexity, learning and FM in the future

The instances reported above support the case that the still widespread mechanistic or control conceptualisation of facilities management is unlikely to meet the challenges facing industry and profession in the future. This conclusion may not be surprising, given the evidence accumulated in other professions and industries for the benefits of the

learning approach and the underpinning to that approach now coming with gathering momentum from the so-called “new sciences” (Waldrop, 1992). We turn now to an examination of those new sciences as they impact on organisational theory and consider their possible impact in the future on both the business sector and the profession of FM.

The fundamental claim of the new sciences is that very similar processes might be at work in organisations and economic systems as operate in organisms and ecosystems. Both are examples of complex adaptive systems (Waldrop, 1992). This view of organisations as species in an economic ecology belongs in a wider appreciation of the parallels between natural and human organisational systems (Price and Shaw, 1998; Morgan, 1986; Hodgson, 1993). Managerial “patterns”, or ways of thinking, are agents engaged in a process of evolution by natural selection, a game in which they compete by enabling and limiting the organisations which carry them (Price and Shaw, 1998).

Complex adaptive systems arise from the inter-relationships between their members, cells in a biological body, organisms in an ecosystem, firms in an economy or people and teams in an organisation. Those “players” adopt implicit or explicit strategies and rules of interaction with the other players. Rules which may be based in competition for differential access to resources, but rules under which, in certain circumstances, collaboration can be a sensible strategy (Axelrod, 1984). The order emerges out of the web of interactions of the agents, and it is maintained by DNA or the thinking patterns of an organisation – its “memes” in technical jargon (Price, 1995; Price and Shaw, 1998).

Complex adaptive systems, and the agents in them, evolve. Some mutations and variations which are more in tune with the surrounding environment prove better at accessing resources and reproducing and as such are more likely to show up in a next generation. In cultural systems we tend to refer to the same process as learning, or innovation, but the end result is the same. Computer simulations of such systems have given rise to a new metaphor for such conditions of rapid change, the so-called “edge of chaos” (Waldrop,

1992). The term arises from experiments in which various model systems are simulated. One large class, well-known to classical physics, settle quickly to a stable equilibrium. A second class never settle. Their behaviour remains completely random or chaotic. In between the two experimenters have found a third class of system; one which can generate recognisable patterns, or order, but one in which the precise pattern is neither predictable nor static. Such simulations can be generated in systems with remarkably few rules. (A well-known example is the simulation of flocks of dinosaurs in *Jurassic Park*, derived from setting a few rules about how one model will move relative to its neighbours.) The edge of chaos is the zone in which new order emerges: where, in effect, evolution occurs. It seems to depend primarily on the degree of interconnection and feedback between agents in the system.

Organisations have a natural tendency to seek order and stability: to manage risk by reducing uncertainty, to institute processes and procedures which maintain a routine. In complexity science terms, they have natural pull towards the more ordered domain. Over geological time, organic adaptive systems show the same preference. Unfortunately it costs both of them adaptive capacity. When the actions of other firms/species or any other larger change affects their ecosystem they lack the capacity to evolve, and risk extinction (see Price and Kennie, 1997, for a discussion of these principles applied to UK higher education as a microcosm of a system undergoing a perturbation event).

If the complex adaptive systems view of organisational ecosystems is correct, its message is that the organisations which will survive in a rapidly changing world are those which can master the art of living closer to the edge of chaos and permitting beneficial self-organisation. What might that look like for FM?

Third generation FM? Self-organisation and space

Dominant “patterns” underpin the informal rules of behaviour which govern organisational results. In the health service, a pattern of concern for patients is a significant motivator, even, or perhaps especially in non-clinical auxiliary staff (Clark, 1990; Smith, 1999). The resulting rules frequently motivate staff

to do what is best for patients, even when management controls and activities such as CCT, imposed from a traditional managerial paradigm, impede rather than enable the process. Research cited above suggests that, with enabling management, these systems can self-organise to conditions of best, and least costly, service.

Perhaps the single most significant facet of edge of chaos conditions is that futures cannot be predicted with clarity (Stacey, 1995). Detailed strategic planning and business planning which are treated as an accurate forecast of some years’ duration become, by definition, an exercise which will only be right by good luck. In its place a premium will arise to those organisations who are flexible

enough, and sensitive enough to their environment to change plans quickly. Such a view would argue for the FM profession paying much less attention than has traditionally been the case to the specific development of detailed service levels, and much more to the relationship with “customers/users”.

Paradoxically this may demand a profession which traces many of its roots to the traditional management of buildings, and which then evolved to embrace people and place (Akhlaghi and Tranfield, 1995), paying more attention, in a different way, to organisational space. If buildings management represents first generation FM, and the integration of people, processes and places second generation, then third generation FM might be seen as more concerned with the creation of spaces which enable different levels and forms of performance.

The view is not new. Becker and Steele (1995), for example, use the term organisational ecology to describe the space in which an organisation’s business is enacted, and emphasised the increasing need to find different kinds of space which foster different forms of interaction between users. In complexity terms, this amounts to the fostering of self-organisation and the creation of space which

is more chaotic than regimented. Price and Shaw (1998), in making the case that organisations are the product of “mental DNA” transmitted through the language and cultural artefacts of an organisation, make much the same point. Changes to language and environment can release different levels of performance.

Innovation in complex systems has been observed to happen fastest in small, isolated populations (see Price, 1995, for wider references). In fast-changing industries, such as modern retailing or electronics, small and often temporary project teams have become the almost ubiquitous organisational answer for creating new products and services.

Firms which are succeeding seem to have developed the simultaneous capability to permit such innovation yet ensure spontaneous co-operation for the benefit of the larger entity. Shared values and belief systems, shared identity, are a vital aspect in engendering such behaviour in firms such as 3M (Baskin, 1998). It is our impression that no single FM provider has yet developed the same phenomenon within the industry and that the next prizes will go to the firm or firms that do so. Among the reasons why is another lesson from complexity.

FM as a complex adaptive system

FM is, we have argued above, both a new profession and a business sector which has evolved because of the opportunity space presented by the changes sweeping the larger

adaptive system that is the service economy. Studies of similar system-wide events in other industries (Moore, 1993) have identified common cycles which all new business ecosystems, and new technologies, seem to undergo. It is again a dynamic with parallels in organic evolution.

In the pioneering phase, many players compete. The system undergoes an evolutionary bloom. Recent examples include personal computers, video recording formats, and new entrants to the DIY super-store market in the UK during the 1980s. As a sector matures, one or a small number of technologies or firms come to dominate. The system is “locked-in” to a default standard, or set of business assumptions, which dominates a particular niche, much as certain flora or fauna dominate a particular ecosystem. The lockers-in set the rules for the sector. Microsoft provides the classic recent example.

FM as a business sector has reached the transition phase. Firms with backgrounds in construction, property, engineering services, catering and domestic services, have all sought, and are seeking, various positioning as FM providers. Recall a similar, albeit less diverse, wave of entrants by major retailers to the DIY sector alluded to above. The lock-in process is probably already under way. The challenge is to find the market share, and the culture of adaptability, to be among the survivors.

A similar challenge faces the profession. Companies are not the only organisational form of complex adaptive system. Professions are also forms of organisation. They evolve to fill a particular niche. For example, the surveying profession became, in the UK, dominant in all niches involving estimates of, and transfer of, value attached to any form of property. In Europe, other professions dominate the equivalent niche and the term surveyor does not translate for European audiences[1]. Professions, like companies, are enabled by a collective pattern (of standards, ethics and institutions) which both enables and limits. FM emerged when the traditional professions from which it sprung were unable to evolve fast enough to escape their patterns, their “professional DNA”, as the world around them changed. It, too, risks extinction if it fails to adapt to a world where innovation and genuine added value replace the blind adherence to managerial fads drawn from a very traditional paradigm. Alternatively, if management of the future concerns creating the physical and cultural context for new forms of working, then facilities managers can become central to, as Pascale put it, the making and breaking of organisational paradigms, the patterns which simultaneously enable and limit organisational performance.

Note

1 According to European delegates at the 4th ECLC Conference when exposed to a presentation on “Learning in the surveying profession”.

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