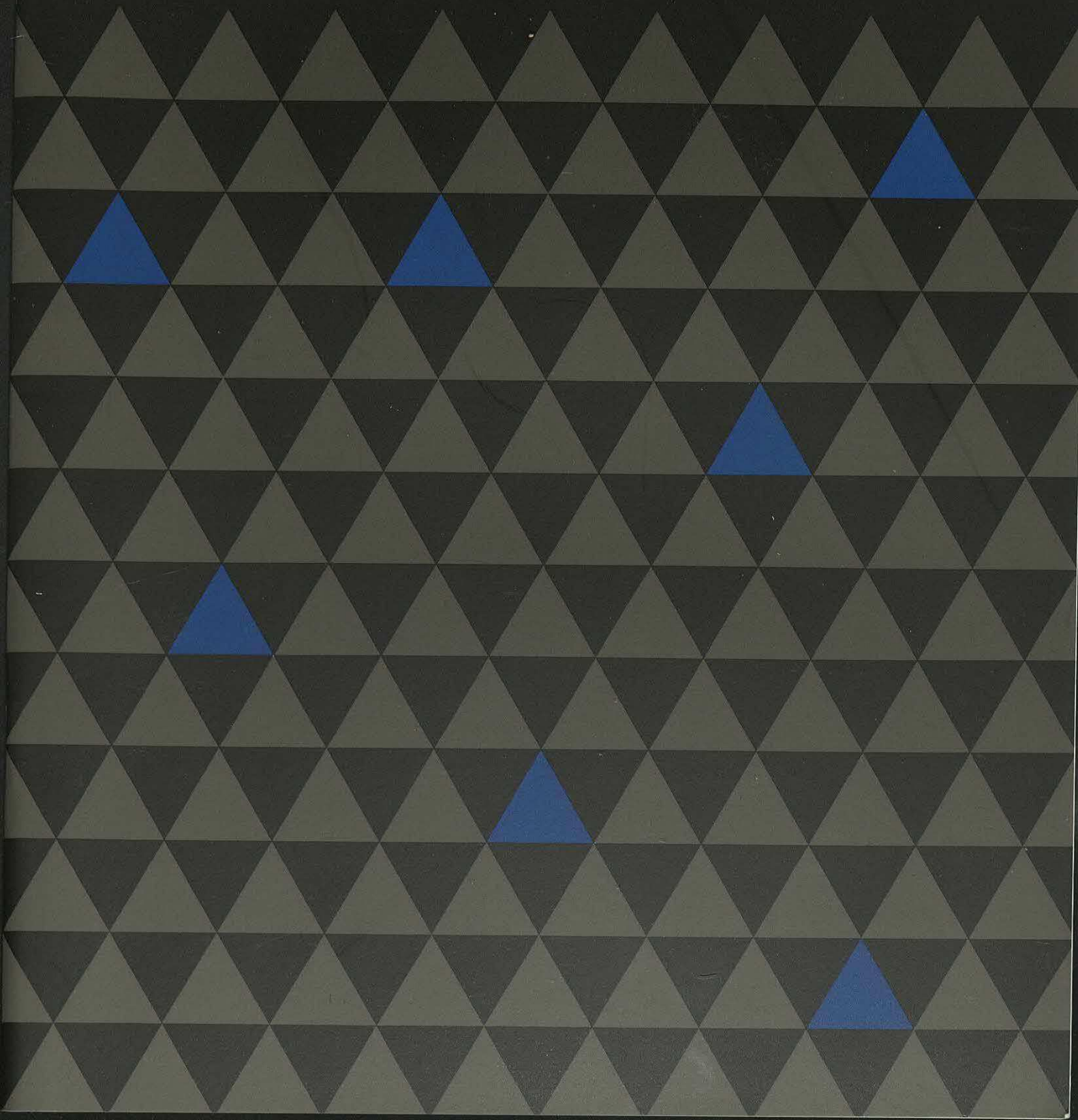


# Managing Information Systems in a Decentralised Business

BUTLER COX  
FOUNDATION

A Directors' Briefing  
March 1989



## Managing Information Systems in a Decentralised Business

A Directors' Briefing  
by Roger Woolfe

**Many organisations are devolving responsibility for information systems away from the centre. What central role — if any — should be retained to ensure that future strategic and competitive options are not compromised?**

Directors' Briefings are published by the Butler Cox Foundation, and provide directors and senior general managers with practical guidance on the effective exploitation of information technology within their enterprises.

Further information about the Butler Cox Foundation can be found inside the back cover of this paper.

Published by Butler Cox & Partners Limited  
Butler Cox House  
12 Bloomsbury Square  
London WC1A 2LL  
England

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Photoset and printed in Great Britain by Flexiprint Ltd., Lancing, Sussex.





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*Today, most businesses are managed in a more decentralised way than was the case 10 years ago. There has been a recent similar trend towards decentralising the information systems function. It is now increasingly commonplace to find responsibility for computer operations devolved to business-unit level, and responsibility for systems policy and standards retained at the centre. Dividing responsibilities is never easy, however, and practice varies widely between companies. What guidelines exist for top management in allocating these responsibilities and, just as important, how can the allocation be made to work in practice?*

## Devolving the information systems function is an established trend

Faced in recent years by mounting competitive pressures and rapid market changes, more and more large businesses have chosen to decentralise. To manage the resulting decentralised group structure, head offices allow individual business units a degree of autonomy while remaining involved in the business units' strategy planning, in approving their plans and capital spending, and in overseeing their financial performance.

Decentralisation is widely held to deliver worthwhile benefits. Breaking up an organisation into smaller business units and delegating authority and responsibility to the business-unit managers brings management closer to the customer, helps to improve operational flexibility and responsiveness, and encourages innovation and specialisation. Decentralisation, it is also claimed, helps to sharpen awareness of market and competitive trends, because decision-making managers are brought closer to the action.

*Decentralising the business is widely held to be beneficial*



Devolving the information systems function is just as much in evidence as decentralising the business itself. Typically centralised until the late 1970s and early 1980s, information systems functions have since followed the path to devolution. Not to be confused with merely distributing computer systems physically to divisions and departments, devolution implies decentralising management authority as well. Today, it is commonplace for business units themselves to buy and operate computers, and to develop and maintain the systems that run on them. Devolution has often been advocated by managers seeking a means of raising the influence of the information systems function amongst the business units. Certainly, the trend has been encouraged by advances in computing technology. The economies of scale that used to favour centralised installations disappeared years ago, with the advent of department-supporting minicomputers and personal microcomputers.

*Devolution of the  
information systems  
function has been  
encouraged by  
technical  
developments . . .*

Devolving responsibility for information systems has been encouraged by most business-unit managers. They have claimed lots of benefits. Reduced costs, closer control over priorities, systems better tailored to business needs, and relief from dependence on the central function with its order backlog and ageing core systems are some that are often quoted.

*. . . and has brought  
business benefits*

Devolution is not, however, something that can be achieved simply by management edict, and certainly not overnight. It is much more difficult than devolving other functions, such as personnel or marketing, because complex equipment and systems are involved as well as people. Devolution also presents some very real risks. At business-unit level, there is the danger of information systems staff sacrificing quality by cutting corners to meet delivery pressure from local managers. Retaining skilled systems staff can be a problem when the first allegiance of the staff is to their profession, rather than to the business. At corporate level, there is the risk of systems being expensively and unnecessarily replicated between different business units with common needs. Worse still,

*But devolution is risky  
as well*





different business units may build their own incompatible 'islands of automation', compounding the difficulty of linking up electronically in the future.

The common result of these opposing pressures is information systems functions that are divided, in part devolved to business-unit level and in part remaining centralised at head office. That means a matrix organisation and, for the centralised part, a new hybrid role. Most head office top managers now accept this as inevitable, yet several questions remain. How significant is the role of the centre, and how should responsibilities be divided between it and the business-unit functions; in other words, how far should devolution go?

*Many organisations are unclear about how to divide responsibilities between the centre and the business units*

Dividing responsibilities between the centre and the business units is a complex trade-off. There is no easy answer, no ready cookbook of instant recipes, because of the many considerations that are involved, but two guiding factors exist to point a group in the right direction. One is the management style of the group, and the other is the strategic importance of information technology to the group.

## The natural tendency is for the management style of information systems to mirror that of the group

A range of possible management styles exists for a group, from full control by head office at one end of the spectrum, to full devolution at the other. For simplicity, it helps to divide the spectrum into four categories, each identified by the degree to which head office gets involved in the formulation of business-unit strategies:

*There are four basic business-management styles*

- At one end of the spectrum is the *fully integrated* style, in which head office has total control over the functional divisions. Separate business units do not exist; there is no decentralisation.



- In the *bear-hug* style, separate business units exist, but head office exerts close control over their strategy-setting. The style is well suited to decentralised groups where the business units can share common functions, such as manufacturing and distribution.
- In the *helping-hand* style, head office encourages the business-unit managers to devise their own plans and strategies, but monitors and reviews them carefully to ensure that they fit together. It is a compromise between the bear-hug and arm's-length approaches, aiming to capture the advantages while avoiding the weaknesses. For this reason, it is the style most commonly adopted.
- In the *arm's-length* style, at the other end of the spectrum, responsibility for strategic development is fully devolved to the business-unit managers. Head office avoids formal planning and reviews. Its overriding concern is to encourage managers to improve their profit performance. The style works well for highly diversified groups, but it fails to exploit internal synergies.

Figure 1 Centralised style for information systems

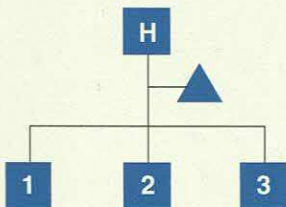
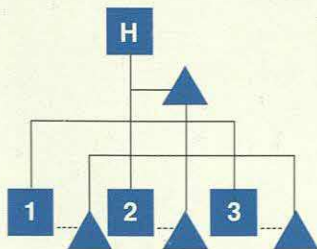


Figure 2 Coordinating style for information systems



In much the same way as with group management, there is a range of possible styles for managing information systems. For simplicity, they too can be divided into four categories, known as centralised, coordinating, guiding, and autonomous:

- Naturally enough, the *centralised* style corresponds to the traditional approach in which a single information systems function is responsible for every aspect of providing information services throughout the group (see Figure 1).
- In the *coordinating* style, the single central function yields part of its operating responsibilities to business-unit functions, but keeps them on a tight rein. The reporting line between the centre and the devolved functions is firm; between devolved functions and the business units, it is dotted (see Figure 2).

Key:

- H** Head office
- ▲** Information systems function
- n** Business unit





- In the *guiding* style, most systems-development and operating responsibilities are devolved to the business-unit functions, which have a considerable amount of freedom. The line between the centre and the devolved functions is dotted; between devolved functions and the business units, it is solid (see Figure 3). The centre has to work more by persuasion than by edict.
- In the *autonomous* style, there is no central information systems function. All responsibilities and activities are devolved to business-unit level (see Figure 4) — the opposite of the traditional centralised style.

It is tempting to match these management styles for information systems with the management style of the group as a whole, so that misalignments are avoided. This correspondence is illustrated by the matrix in Figure 5.

Figure 3 Guiding style for information systems

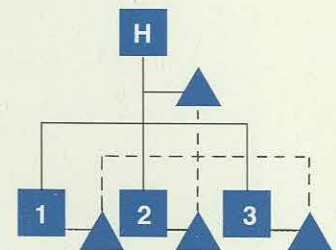


Figure 4 Autonomous style for information systems

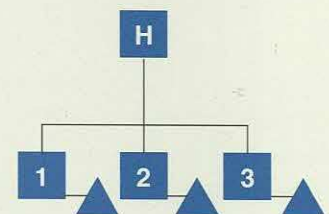


Figure 5 Matching group and information systems management styles

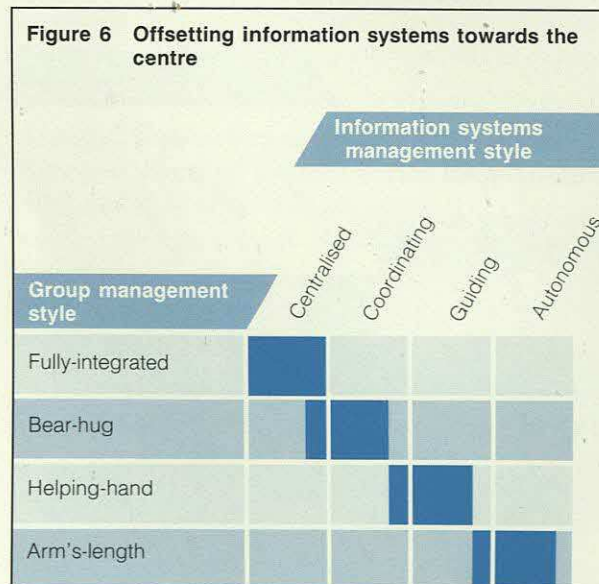
Group management style	Information systems management style			
	Centralised	Coordinating	Guiding	Autonomous
Fully-integrated				
Bear-hug				
Helping-hand				
Arm's-length				





## In practice, it helps to offset the style for managing information systems towards the centre

In practice, however, many groups are well advised to adopt an organisational style for information systems that is offset towards the centre (see Figure 6). Of course, a group may find itself in this position simply by virtue of devolving the information systems function more slowly than the group as a whole, but some groups that have deliberately devolved their information systems functions to align with the group organisation have recently been retrenching. There are two important reasons in favour of offsetting the organisational style towards the centre. One is the need for excellence in systems; the other is the need to avoid imposing constraints on the group's future organisation.



Excellence in systems is a goal sought by many groups, but achieved by only a few. Fragmenting the systems effort usually makes it harder, not easier, to achieve the goal. The point was well made by a Group Chief Executive recently who



said: "We have a policy of complete autonomy, but I would no more permit inadequate systems in any part of my organisation than I would permit inadequate financial controls". Of all the components of a business — products, facilities, management, even image — the systems component is the one that can take the longest to change. Businesses simply cannot afford to get their systems wrong.

Avoiding constraining a group's future organisation is a second powerful argument in favour of offsetting the organisational style of information systems towards the centre. Autonomous systems make it impossible — certainly in the short term — to realign the boundaries between business units. In practice, group organisations are dynamic. What group can risk permitting tomorrow's strategy to be dictated by the cheapest and quickest way of developing and installing systems today?

*The information systems function is too important to be fully decentralised*

For these reasons, it helps to adopt an organisational style for information systems that is more centralised than is implied by the group management style. Making it more influential enables the central information systems function to place more emphasis on its responsibilities for integrating its plans with those of the group as a whole, for developing group resources, and for defining standards. This raises the question of how the responsibilities for information systems should be divided between the centre and the business-unit functions.

## The degree of decentralisation determines how the responsibilities for information systems should be divided

The more a group leans towards a decentralised style of management for information systems, the more responsibilities it will want to devolve. But





*Four categories of responsibilities have to be considered*

which ones should they be? To answer the question, it helps to divide the range of responsibilities into four categories:

- *Delivering head office services:* These services are either used by head office staff or, because of their scope and economies of scale, delivered from the centre (a corporate-wide private network is a case in point). Figure 7 lists some of the more common of these responsibilities.
- *Setting strategy, policy, and standards:* In a decentralised group, head office has to add value by managing effectively *across* the business units. This requirement emphasises the importance of coordinating the exchange of information throughout the whole group, which in turn places demands on head office to conceive and manage a common technical infrastructure. The need for coordination also requires that information systems functions at the business-unit level should adhere to common standards and policies. These are crucial issues that give rise to several responsibilities. Some typical ones are listed in Figure 8.
- *Developing staff:* Everybody who uses information technology in one way or another within the group, together with the information systems professionals themselves, are included here. Management training and the recruitment and development of professional staff are responsibilities in this class (see Figure 9).
- *Developing and operating business-unit systems:* These are the computer-based, telecommunications and electronic office systems that are required by the business units to improve their operating efficiency and to enable them to compete more effectively (see Figure 10).



**Figure 7 Responsibilities of information systems**

**1 Delivering head office services**

- Providing systems for head office
- Providing group-wide networking
- Making central bureau services available
- Organising central purchasing of equipment
- Developing systems shared by business units
- Watching trends in information technology

**Figure 8 Responsibilities of information systems**

**2 Setting strategy, policy, and standards**

- Integrating information systems and business-unit planning
- Monitoring competitors' use of information technology
- Maintaining a strategy for information technology
- Defining technical architectures
- Defining standards and interfaces
- Defining policies and methods
- Reviewing systems development plans
- Auditing quality and security

**Figure 9 Responsibilities of information systems**

**3 Developing staff**

- Building management awareness of information technology
- Promoting and catalysing the use of information technology
- Training staff in the use of information technology
- Recruiting and developing information systems staff

**Figure 10 Responsibilities of information systems**

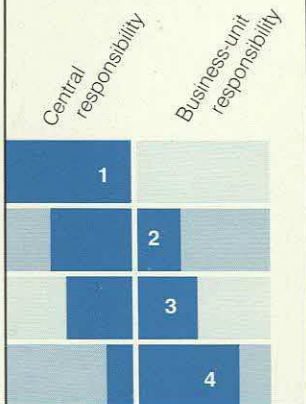
**4 Developing and operating business-unit systems**

- Budgeting and planning systems
- Designing and implementing systems in accordance with policy and standards
- Buying and operating hardware and software
- Maintaining systems
- Providing support for end users

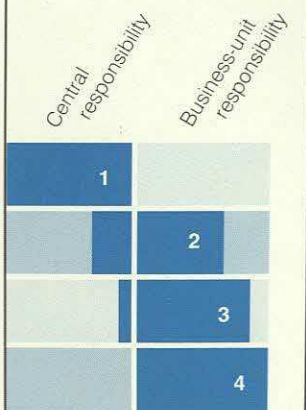




**Figure 11 Allocation of responsibilities: coordinating style**



**Figure 12 Allocation of responsibilities: guiding style**



Most groups will recognise at least some of the responsibilities set out in Figures 7 to 10. Many could add more (the lists are indicative, not exhaustive). Which of the responsibilities should be discharged by the central information systems function and which by the business-unit functions depends largely on management style.

In two instances, there is no dispute because there is no choice — where the style is centralised, and where it is autonomous. However, groups adopting one or other of these styles are in the minority. Most opt for either the coordinating or the guiding style. In Figures 11 and 12, the four boxes represent responsibilities corresponding to the four categories identified in Figures 7 to 10. Figure 11 shows how responsibilities should be allocated between the centre and the business units for the coordinating style; Figure 12 shows the allocation for the guiding style.

In the coordinating style, the central function has an important role to play — it is the sole deliverer of head office services, and it takes the lead in setting strategy, policy, and standards, and in developing staff. In the guiding style, the central function's role is still important in delivering head office services. Now, however, it is the business-unit functions that, in addition to their sole responsibility for delivering and operating business-unit systems, take the lead in setting strategy, policy, and standards, and in developing staff.

In practice, many businesses that are adopting a helping-hand management style for the group as a whole are choosing to offset the management of information systems towards a coordinating style, for the reasons that we have explained. The role of the central information systems function is a hybrid one: it shares responsibility with the business-unit functions, taking the lead in all but developing and operating business-unit systems. The common result is organisational tensions between the central and the business-unit functions. The first step towards resolving these problems is to clarify responsibilities where they



are currently blurred. The second step is to improve the ability of the central function to persuade business units to take a desired course of action.

## The influence of the centre can be increased in three ways

The central information systems function has to rely as much on persuasion as on direct authority to influence the business-unit functions. It is a difficult role at the best of times. There are three factors that are particularly significant in improving the effectiveness of the centre in playing this persuasive role.

The first is the *character* of the person in charge of the central function. Known as the Chief Information Officer or Director of Central Information Services, he or she often headed a traditional centralised information systems function some years ago and has since overseen its devolution. The new role is a particularly difficult one to discharge. To be effective in persuading business units to take a certain course of action, this person has to combine three special attributes. The first is competence — in terms of both business knowledge and systems issues. The second is vested authority — not authority in the direct sense, but in the sense that the role carries the backing and recognition of the main board and, preferably, of the Chief Executive Officer. That implies earning the confidence and respect of top management, and high-level reporting. The third attribute is skill with people: combining leadership with sensitivity. To find all three attributes in a single person is a challenge, to say the least, but a challenge that has to be met.

*The important factors are the character of the head of the central information systems function, . . .*





... the financial policy  
adopted by the central  
unit, and ...

The second factor that is particularly significant is *financial policy*. The central function has a dual role to play. One is to act as a brake on unwise spending, through a formal process of project review. The other is actively to encourage spending on the right sort of systems. Rather than an area in which expenses should be minimised, systems are often the very place in which business units should invest. Here, the central function can provide the seed-funding that enables business-unit systems to be developed. It can do this by providing products and services to the business units at a discount, or even free of charge.

... the mechanism for  
setting and reviewing  
plans

The third, and probably most important, factor is the *planning process*. Life is far easier for the central information systems function when its plans and policies win the allegiance of the business units on sheer merit. For this to happen nearly always requires a group-wide computer steering committee, or policy group, through which representatives from both central and business-unit information systems functions meet formally, at intervals, to review plans and progress. Success depends on a host of things. They include the choice of representatives, the skill of the chairman, the agenda, external influences, feedback — and, of course, the planning process itself.

In conclusion, it pays to  
keep the management of  
information systems more  
centralised than the  
management of the  
business itself

To conclude, we have described how more and more groups are adopting a decentralised style for managing information systems. The style can deliver worthwhile benefits, but there are considerable risks as well. Because of this, it pays to keep the responsibility for information systems more centralised than is dictated by the style of the group as a whole. In the resulting organisation, the central information systems function still has a role to play, albeit a difficult one. By easing the difficulties, top management can help to ensure success in systems — which, for more and more groups, is becoming crucial to success in business itself.



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