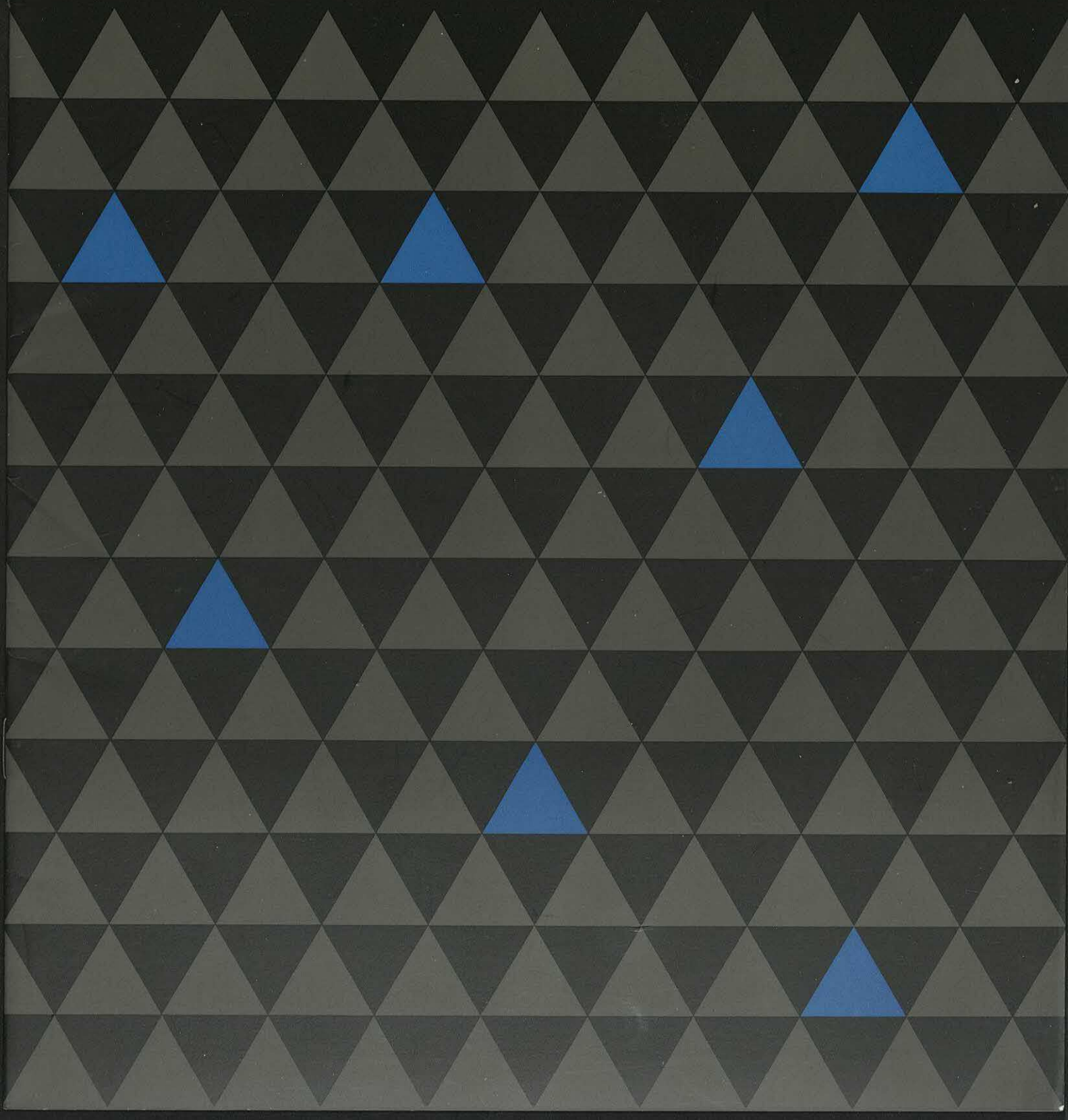


Outsourcing Information
Systems Services

BUTLER COX
FOUNDATION

A Directors' Briefing
April 1991



Outsourcing Information Systems Services

A Directors' Briefing
by David Eggleton and Graham Otter

The contracting out of systems activities can seem an attractive option to senior business managers. What are the risks and benefits? How should such contracts be managed? What skills should be retained in-house?

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.

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A Directors' Briefing

Outsourcing Information Systems Services



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Graham Otter is an experienced IT professional who moved into consultancy after a successful career in IT management. Before joining Butler Cox, he was the group systems manager for a UK-based international manufacturing and distribution organisation, where he was responsible for formulating IT strategy.

Of late, the concept of 'outsourcing' — contracting out all or part of the information systems activity — has been attracting growing attention. Some senior business managers see outsourcing as a way of relieving themselves of a peripheral concern, leaving them free to concentrate on core business matters. Others perceive it as a way of using the chequebook to resolve complex management issues, and in so doing, placing a long-term strategic element of the business in the hands of outsiders. What is certain is that a growing number of highly regarded service companies see outsourcing as an area of major potential and have made substantial investments to provide the professional and equipment resources to meet the foreseen demand. What, therefore, is the scope and likely future role of such services? In today's market, how might they be sensibly exploited? Are there lessons to be learned from experience to date?

Outsourcing can be a viable alternative to in-house systems services

Why did Unilever hand over responsibility for managing its European telecommunications network to a third-party service supplier? Why did Eastman Kodak Company in the United States take a similar step, contracting out the management of its network, its mainframe and all its personal computer support? Many major companies in France, the Netherlands, the United Kingdom and Scandinavia have done the same. Outsourcing, as this activity is known, is a rapidly growing business. It is already well established in the United States, and the trend is spreading into Europe. Electronic Data Systems (EDS), the world's largest outsourcing supplier, estimates the current market potential in the United Kingdom alone to be £3 billion and growing at 20 per cent a year. Other parts of Europe are moving in the same direction, albeit more slowly.

Many chief executives are attracted by the outsourcing concept, seeing it as a better way of managing information systems, controlling costs and getting value for money. Others argue that outsourcing means handing over a strategic resource to outsiders. In short, outsourcing can provide benefits, but there are also risks in taking this approach. In this Directors' Briefing, we describe the benefits and identify the risks.

Outsourcing can apply to a wide range of services

Since the early days of computing, contracting of systems and programming work to outside parties has been common practice,

particularly to handle peak workloads or to obtain access to specialist skills. Later, contractors were used for 'turnkey' projects, where they undertook to deliver a complete working system, often including hardware, to the client's specification. During the 1980s, the term 'facilities management' was coined to describe the management of a client's computing services by a third-party supplier.

Outsourcing goes beyond traditional facilities management because it includes management tasks as well as the provision of a 'raw' service. In essence, an outsourcing supplier defines, manages and performs the tasks required to deliver clearly specified results within a fully agreed contractual framework. Outsourcing is therefore of far greater strategic importance. The range of services that can now be considered as candidates for outsourcing is shown below.

Outsourcing is of far greater strategic importance than facilities management

A wide range of services can now be outsourced

Telecommunications

- Network planning and design.
- Network management, operation and maintenance.

Computer operations

- Hardware capacity planning.
- Provision and maintenance.
- Operational software support.
- Complete operations service.

Systems development

- Maintenance of existing systems.
- 'Turnkey' contracts for new systems.
- Complete development and support service.

Other services

- Technical planning.
- Information systems research.
- Management and technical education and training.

There are many reasons for outsourcing

Different companies have different reasons for outsourcing. Kodak set out to improve its computing-service levels while reducing and controlling costs. This has left Kodak's in-house resources free to concentrate on the strategic use of IT. The Rank Organisation, a UK hotels and leisure group, also used outsourcing to reduce and control its computing costs. Hoover, another UK manufacturer, handed over its complete systems department to an outsourcing supplier when the business moved from London to South Wales. Hoover was concerned about its ability to retain key staff following the move. Esso (Australia) uses an outside supplier to maintain all its operational software. This allows the in-house staff to concentrate on major new developments aimed at improving Esso's competitive position.

The great appeal of outsourcing to many chief executives is the strong emphasis that suppliers place on cost reduction, particularly for computer and network operations. Suppliers frequently claim that costs can be reduced by 25 per cent or more. These savings can be achieved through the economies of scale provided

The main appeal of outsourcing is cost reduction

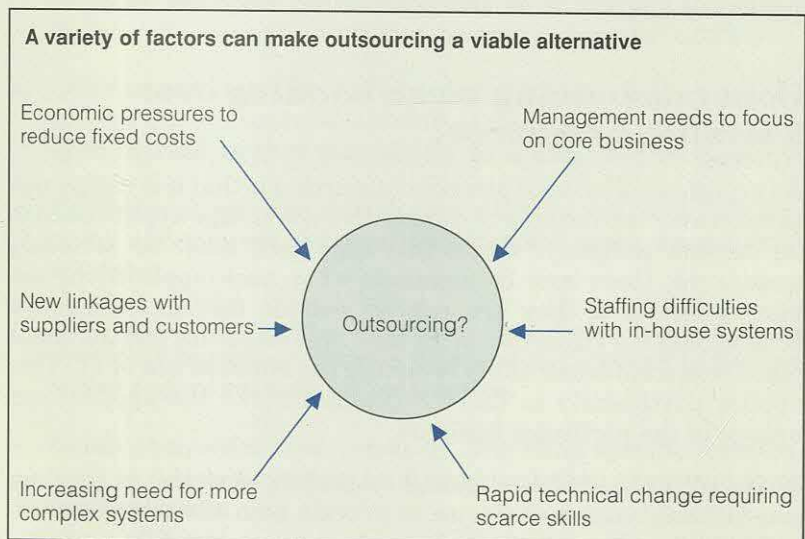
by the supplier's data centres and networks, and by sharing technical resources among several clients.

Apart from the obvious and important area of cost reduction, other potential benefits include improved control and greater ability to assess value for money. Clients may also achieve technical flexibility and have access to the latest technology without having to make large capital investments. Outsourcing can also reduce the problems associated with skills shortages, and provide greater flexibility in coping with organisational change. Perhaps most important, as Kodak's experience emphasises, outsourcing enables an organisation to focus on the strategic use of IT rather than on the day-to-day problems of service provision. One large user of such services told us, "You can achieve the solution to your *business problem*, not the solution that fits the capability of your systems people".

"Outsourcing enables the client to focus on the strategic use of IT"

A recent survey by Romtec, a UK market research organisation, concluded that, although cost reduction is often the main benefit initially sought by clients, they subsequently find that the improved operational and backup facilities and the availability of value-added services from the suppliers become more important. One supplier claims that outsourcing may offer smaller companies, in particular, "continuity without concern".

Before embarking on any form of outsourcing, managers must clearly understand the reasons for taking such a radical step and agree on clear objectives and expectations. The diagram below shows the main factors that could lead organisations to consider outsourcing as a viable alternative to in-house systems services.



Outsourcing does not mean abdicating responsibility for the effective use of IT

In recent years, many organisations have devolved bottom-line responsibility to smaller businesses, including the responsibility for controlling IT investments and procuring systems services. To the business managers concerned, a third-party supplier can appear very similar to a central systems department. We would

strongly advise against abdicating responsibility in this way. Several companies have found it to be a costly mistake.

Some years ago, the French operating arm of a major oil company contracted out virtually all its information systems activities. A few years later, it found itself operating in an aggressive marketplace with old, unresponsive and expensive systems. The company was forced to re-establish an internal systems-analysis capability, closely linked to the business units, although it continued to outsource operational services.

Canada Post also retained a strong in-house business-analysis capability when it moved to outsourcing. It recognised that one of the dangers of outsourcing is that it may become more difficult to promote the use of IT as a means of supporting the business. The business analysts' role is to bridge the gap between business users and the outsourcing service provider.

Bunzl, an international manufacturing and distribution conglomerate based in the United Kingdom, transferred all its central systems staff and hardware to an outsourcing contractor as part of a major decentralisation programme. Although the move to outsourcing resulted in lower operational costs, Bunzl found that the rate of business-related developments slowed down, and this caused the company to scale down its outsourcing activities considerably.

These experiences show that it is vital that business managers, particularly in a devolved organisation, retain the freedom to exploit IT as part of their business strategy. This does not mean, however, that all systems services have to be provided from within the organisation.

Business managers must retain the freedom to exploit IT

Does outsourcing mean handing over a strategic resource?

An argument often used against outsourcing is that it is dangerous to hand over the running of competitive-advantage applications to an outside company. While this argument must be seriously considered, there may be occasions when such applications are more effective if they are run on outside facilities. Selective outsourcing is a viable option for most organisations, but the client must retain sufficient skills to ensure the effective use of IT. This applies particularly to those skills that make the applications unique to the particular business.

Selective outsourcing is often a viable option

When BP Oil introduced global oil-trading systems, it used an international external service to provide both the telecommunications network and the initial operational running of the systems. However, BP Oil insisted that the applications software was written and controlled in-house, because this was the element of the system that was crucial to the company's competitive performance.

Even companies that see information as a strategic asset, as in banking or financial services, may take advantage of outsourcing. In the United Kingdom, Midland Bank has placed significant outsourcing contracts for systems operations, and Companies House (the UK national registry for companies), whose only real

Achieving the benefits of outsourcing requires a change of management emphasis

asset is information, has used third parties for computer operations for a long time.

The use of outsourcing does not imply less effort in managing IT, but it does introduce a different emphasis. A failure to recognise this will almost inevitably mean that the potential benefits of outsourcing will not be realised.

Selecting the right suppliers is crucial

There must be a high degree of trust between supplier and client

Outsourcing contracts typically cover periods of five to seven years, and sometimes longer. The effort involved in moving to outsourcing, or in changing suppliers, therefore deters clients from making frequent changes. In a long-term business relationship of this sort, it is essential that the relative roles and responsibilities of client and supplier are clearly understood from the beginning. Most successful users of outsourcing attribute their success to building a partnership with their suppliers. A high degree of trust, based on a clear and unambiguous business relationship, must be established at the outset.

It is crucial to understand the current capabilities and future directions of potential suppliers before making a commitment. The rapidly growing number of vendors in this field can mean that there is a confusing choice. The origins and backgrounds of suppliers will influence their approach. We have identified five categories of outsourcing supplier:

- Vendors of hardware or communications equipment and services. For them, outsourcing may be an attempt to expand their product range, but it may be only a marginal activity.
- Offshoots of in-house systems departments. Such suppliers may be attempting to become full-scale service providers in the open market, or they may simply be selling surplus capacity.
- Professional services consultants, offering software development and support services, and in some cases, operational services.
- Information services companies that have evolved from providing bureau or systems development services to become wide-ranging outsourcing contractors.
- Small companies that began by providing specific services, such as disaster recovery, and are now trying to expand their product range.

The supply side of the outsourcing market is likely to change significantly

As the outsourcing market develops and matures, we expect to see significant changes in the supply side. Rationalisation is inevitable, some suppliers will fail, and the industry may polarise between suppliers offering low-cost 'commodity' services and those that provide high-quality added-value services. In order to serve international customers, there will be a trend to globalisation — a few suppliers, notably EDS, already have a worldwide presence. It is likely that those communications and computer vendors who already operate globally will see the outsourcing market as a natural extension of their business.

Many outsourcing suppliers have already made considerable investments. The photograph below shows EDS's new facility close to a major European airport. Telehouse, which is owned by a consortium of Japanese and European companies, has invested heavily in a purpose-built facilities management centre in London's Docklands, which is being redeveloped as a major business area. AT&T ISTEEL, a European subsidiary of the world's largest telecommunications company, has established a pan-European network infrastructure so that clients can contract out their networking to ISTEEL instead of investing in their own private networks.

Outsourcing suppliers have made substantial investments in equipment and staff



The choice of outsourcing supplier in this fast-changing marketplace must be made with great care. Since contracts will extend over five or more years, several factors are important in addition to the normal checks on financial viability. Potential clients should:

- Be sure that the service being bought is part of the supplier's core business and not just a marginal activity. Ask to talk to other clients (be wary if there are none).
- Look for evidence of substantial investment in the resources needed to support the service.
- Ensure that the supplier has people with the skills to handle their needs. Since staff can change quickly, this should be rechecked regularly throughout the contract period.
- Ensure that the supplier has skills in managing their particular technology base. The supplier should demonstrate his ability and willingness to upgrade the technology used as their business needs evolve.

There are several factors to consider in selecting a supplier

Suppliers should adhere to a professional code of practice

- Be satisfied that the supplier demonstrates an understanding both of their business and of their current and likely future information systems requirements.
- Ensure that there is a good fit between the cultures of the two companies. There must be mutual understanding of each other's business language, management attitudes and behaviour patterns. In particular, potential clients should establish how the supplier proposes to interact with their staff.

In short, the client should ensure that the supplier demonstrates a totally professional approach. In this context, adherence to a professional code of practice is an indication of a sound approach. Such a code of practice has recently been produced by the Computer Services Association in the United Kingdom and could be of great help in drawing up contracts.

It is vital to negotiate a good contract

The contract itself is of particular importance. Advice should be taken from experienced legal sources at an early stage in the negotiations. As well as price and timescales, the following should be spelled out in the contract:

- Clear and measurable service levels that the supplier has to attain, and the penalties for failure to deliver them.
- Procedures for extension, termination or breach of the contract. A statement of goodwill or best endeavours is not sufficient.
- The ownership and exclusivity of any software involved. This applies particularly to applications software.

If different suppliers are to be used to provide different services, it can be difficult to define where the boundary between them lies, and what each is expected to deliver to the others. The way to resolve this difficulty is to appoint one supplier as the prime contractor, with the others as subcontractors.

Some suppliers are prepared to go much further than simply signing a contract for the provision of services. One example is Programator, a leading Swedish supplier, which sets up joint-venture service companies with its clients. Each joint venture delivers services to its parent company. Programator believes that this arrangement creates a stronger commitment to success. A second example is provided by EDS, which has acquired shareholdings in some of its major clients to demonstrate its commitment to their success. We would expect to see similar partnerships being formed in the future.

There are still significant risks and problems with outsourcing

There may be problems with existing systems staff

Even after identifying a suitable outsourcing supplier and negotiating an apparently watertight contract, there are still significant risks to be managed. The greatest and most obvious problem concerns the management of existing systems staff. Sometimes, the outsourcing supplier will take on the client's staff, as well as his equipment, as part of the contract. If not, some of the staff may

need to be made redundant. Considerable management effort will be required to ensure that they continue to be productive before their employment is terminated.

Some outsourcing deals have foundered because of adverse staff reaction within the client organisation. In the United States, for example, staff have taken legal action to prevent outsourcing. Consultation with the staff likely to be affected by a move to outsourcing should therefore be given high priority. Some companies have facilitated the move to outsourcing by offering bonuses to their staff if the handover to the service supplier goes smoothly.

A second problem is the impact that outsourcing has on the mix of skills required within the systems department. It is important to retain in-house the skills and knowledge necessary to define the requirements of the business very clearly, to negotiate and control contractual arrangements and to measure subsequent performance and resolve any problems. Both the strategic and contract-management roles may require people with different skills and backgrounds from those that are typical of traditional systems professionals.

The role of the systems director will also change. He will find that he needs to concentrate more on working with senior business management to define direction, strategy and implementation paths, to provide appropriate IT education and to encourage the use of IT. He will concern himself less with routine service delivery and staff management.

A third potential problem with outsourcing is that the business may find itself locked in to ageing application systems, running on obsolete hardware. This makes it difficult to upgrade the use of IT to meet competitive pressures, and it may be expensive, if not impossible, to resolve this problem. Such a situation not only puts great strain on the supplier/client relationship, but can also jeopardise the client's business performance. Properly managed, however, outsourcing can offer considerable flexibility in the use of technology.

Regardless of the good intentions that may be expressed by the client's senior business managers while drawing up the outsourcing agreement, there is always a risk that they will regard the move to outsourcing as a problem solved and requiring no further attention. This temptation must be resisted. Outsourcing creates a shared responsibility with a new business partner. Great care must be taken during the handover period to ensure that the new relationship becomes fully effective. At all stages, business managers should be involved to ensure that they understand precisely the nature of the relationship they are entering.

In conclusion, we believe that arguments about the benefits and risks of outsourcing have often been muddled and unclear. The real issues have been clouded both by the almost instinctive reaction against the idea from many systems staff, and by the over-simplified views of the potential benefits held by many business managers. In this briefing, we have set out the potential benefits and highlighted the risks associated with outsourcing.

There is an ever-widening range of outsourcing services available from suppliers who are investing heavily for the future. The availability of these services almost inevitably means that most

The mix of skills required in the systems department may change

There is a risk of being locked in to obsolete hardware

Business managers must understand the implications of an outsourcing partnership

organisations will contract out some of their systems services within the next few years.

Greater use of outsourcing will not eliminate the need for in-house systems managers or staff, but their role will change. Outsourcing will free them from the problems of managing day-to-day service activities, enabling them to work alongside business management, and to concentrate on the strategic application of IT to support and develop the business.

The Butler Cox Foundation

The Butler Cox Foundation is a service for senior managers responsible for information management in major enterprises. It provides insight and guidance to help them to manage information systems and technology more effectively for the benefit of their organisations.

The Foundation carries out a programme of syndicated research that focuses on the business implications of information systems, and on the management of the information systems function, rather than on the technology itself. It distributes a range of publications to its members that includes research reports, management summaries, directors' briefings and position papers. It also arranges events at which members can meet and exchange views, such as conferences, management briefings, research reviews, study tours and specialist forums.

Membership of the Foundation

The Foundation is the world's leading programme of its type. The majority of subscribers are large organisations seeking to exploit to the full the most recent developments in information technology. The membership is international, with more than 450 organisations from over 20 countries, drawn from all sectors of commerce, industry and government. This gives the Foundation a unique capability to identify and communicate 'best practice' between industry sectors, between countries, and between information technology suppliers and users.

Benefits of membership

The list of members establishes the Foundation as the largest and most prestigious 'club' for systems managers anywhere in the world. Members have commented on the following benefits:

- The publications are terse, thought-provoking, informative and easy to read. They deliver a lot of messages in a minimum of precious reading time.
- The events combine access to the world's leading thinkers and practitioners with the opportunity to meet and exchange views with professional counterparts from different industries and countries.
- The Foundation represents a network of systems practitioners, with the power to connect individuals with common concerns.

Combined with the manager's own creativity and business knowledge, membership of the Foundation contributes to managerial success.

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The Butler Cox Foundation is one of the services provided by the Butler Cox Group. Butler Cox is an independent international consulting company specialising in areas relating to information technology. Its services include management consulting, applied research and education.

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