Information Technology in the Public Sector

ELEVENTH REPORT TO THE PARLIAMENT
MAY 1995
PUBLIC ACCOUNTS AND ESTIMATES COMMITTEE

ELEVENTH REPORT TO PARLIAMENT

INFORMATION TECHNOLOGY IN THE PUBLIC SECTOR

MAY 1995

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No. 45
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CHAIRMAN'S INTRODUCTION

The Committee's inquiry is in response to concerns raised by the Auditor-General, in his May 1993 report titled *Information Technology in the Public Sector* and the May 1993 report of the Victorian Commission of Audit. Given the issues raised by both the Victorian Commission of Audit and the Auditor-General in relation to outsourcing, the increasing emphasis on outsourcing within the public sector and the importance of information technology in ensuring that future needs of the public sector are met, the Committee believed that a review of this area had the potential to provide substantial benefits.

Outsourcing of information technology services is a means of introducing competition into service areas thereby providing opportunities to improve the quality and/or reduce the cost of services to taxpayers. The contracting out of non-core activities also enables public sector management to concentrate on critical core business activities. There are potentially significant benefits to be achieved and risks to be managed. Each public sector agency must balance the risks and benefits to arrive at the optimal sourcing solution. Outsourcing of information technology services however, must not compromise an agency's parliamentary accountability.

The Committee has recommended that ministerial directions issued by the Minister for Finance, pursuant to the *Financial Management Act* 1994, should require public sector entities to include details of outsourcing arrangements above a specified value in their annual reports to the Parliament. The Committee, in its ninth report to the Parliament, has previously highlighted how parliamentary accountability is best served if critical matters of this nature are enshrined in the *Financial Management Act* 1994 itself, or in regulations issued under the Act.

The Committee's inquiry has led to the preparation of a 'How to Outsource Checklist' which lists key best practice issues for outsourcing of information technology services. Key areas addressed in that checklist include the outsourcing process itself, performance management, strategic independence, risk management, cost issues and accountability (refer Appendix A).
The Auditor-General in his special report expressed concerns about the use of unauthorised and illegal software within government agencies. The Auditor-General found that software control practices were either ineffective or non-existent in most of the agencies reviewed. As such, substantial business risks had not been addressed by these organisations. The Committee's 'How to Outsource Checklist' also raises a number of best practice software issues.

In particular the Auditor-General's report highlighted the problem of computer viruses. The Committee's inquiry found that the ongoing importance of maintaining stringent virus protection measures and regular software audits has again been highlighted by the 24-hour shutdown of the Australian Taxation Office's computer network, due to a virus attack. The Committee also noted that the Victorian Government Purchasing Board's recent government-wide purchasing arrangement for Microsoft products is intended to reduce the unit costs for agencies and to obviate the potential for illegal copying of software. This arrangement will help to minimise one avenue for the introduction of computer viruses, that is the illegal copying of software.

I thank the other members of the Public Accounts and Estimates Committee for their contributions to this Inquiry. On behalf of the Committee, I thank Mr Craig Burke, Director of Research and Mrs Sarjeet Kaur, a seconded research officer, for their briefing of the Committee, advice, analyses and drafting of the report.

Hon. G. Graeme Weideman, MP, JP
Chairman
EXECUTIVE SUMMARY

The Auditor-General, in his special report titled Information Technology in the Public Sector (May 1993) identified a number of significant deficiencies in relation to the use, by government agencies, of information technology. The report also identified outsourcing of information technology as an emerging issue that requires careful planning and management by public sector agencies. The Victorian Commission of Audit, in its May 1993 report, referred to the many potential benefits of outsourcing. However, it also took the view that past contractual arrangements had not always been structured in a way which would optimise the benefits to the public sector.

A key focus of the inquiry was the identification of lessons for public sector information technology outsourcing to avoid the repeat of such problems in the future. The overall objective of the inquiry is to provide informed and practical direction to ensure that existing and future outsourcing arrangements will meet agencies' current and future needs, minimise risk and provide cost-effective and quality service delivery. The inquiry focused on best practice in several key areas including the outsourcing process itself, performance management, strategic independence, risk management, cost issues, accountability and software issues.

A key outcome of the inquiry has been the preparation of a 'How to Outsource Checklist' which lists key best practice issues for outsourcing of information technology services (refer Appendix A). That checklist is supplemented by a second checklist of relevant legislation, policies, guidelines and stakeholders (Appendix B).

The Committee's report:

- highlights the importance of the advice and support available from the various public sector stakeholders, in particular the Department of the Treasury and Finance (Chapter 2);

- emphasises that public sector agencies cannot 'outsource' their responsibilities to maintain the integrity of their own service delivery, agencies must continue to take a strategic and risk management approach to the use of information technology services (Chapters 6 and 7); and

- stresses that outsourcing of information technology services must not compromise the public and parliamentary accountability of public sector agencies and that details of outsourcing arrangements should be included in agency annual reports to the Parliament (Chapter 8).
FINDINGS AND RECOMMENDATION

Finding 2.1  (Page 24)

The Committee finds that:

a) numerous policies, guidelines, pieces of legislation and public sector stakeholders have an important impact on the outsourcing of information technology services;

b) in the absence of a consolidated and up-to-date reference list of all relevant legislation, policies, guidelines and public sector stakeholders agencies may not have adopted best practice in the examination and implementation of outsourcing decisions;

c) the new Outsourcing and Contract Management Guidelines however, to be issued shortly by the Outsourcing Evaluation and Contract Management Unit, will be a welcome addition to the existing wealth of policies and guidelines as they are believed to include a consolidated list of relevant legislation, policies, guidelines and related contacts; and

d) the role of the Outsourcing Evaluation and Contract Management Unit as a central reference point for all matters related to public sector outsourcing is both timely and appropriate.

Finding 2.2  (Page 25)

The Committee finds that the Outsourcing Evaluation and Contract Management Unit could promote greater and more coordinated information sharing concerning best practice for outsourcing of information technology services, and outsourcing generally, by:

a) widely publicising its role as a central reference point for all matters related to outsourcing;
Finding 2.2 (cont.)

b) enhancing the list of relevant legislation, policies and guidelines by categorising it into those applicable to the budget and non-budget sectors and clearly indicating their mandatory or advisory status;

c) convening user groups (for agencies that have outsourced, are in the process of outsourcing or are considering outsourcing);

d) facilitating independent education programs;

e) issuing and maintaining a register of contacts in those public sector agencies which have outsourced; and

f) providing regular updates to the consolidated reference list of relevant legislation, policies, guidelines and public sector stakeholders.

Finding 3.1 (Page 36)

The Committee finds the following key principles provide a sound basis for public sector management in undertaking the process of information technology outsourcing, and acknowledges that at times individual key principles may be in conflict leading to critical value judgements:

a) Outsourcing is not a substitute for an Information Technology Strategy;

b) Need clear business-driven objectives, both in terms of the specific service to be outsourced and the overall goals of the agency;

c) Use Extraordinary Events Clauses;

d) Value for the public's money, both on a short and long term perspective;

e) Identify legislative requirements and stakeholders, including all related policies and guidelines;

f) Avoid duplication and waste by learning from experiences of other agencies, by participating in active information sharing;
Finding 3.1 (cont.)

g) Employ open and effective competition;

h) Support local industry;

i) Set out explicit expectations in the tender documents;

j) Assign adequate time and the right resources to the task;

k) Open and timely communication with employees;

l) Retain sufficiently skilled staff;

m) Use experienced consultants, with technical and legal skills as required; and,

n) Ensure service quality.

Finding 4.1 (Page 44)

The Committee finds there are several sources of performance evaluation best practice advice available to public sector agencies, including guidelines issued and under development by the Department of the Treasury and Finance. The Committee highlights the following best practice issues for agencies to consider for the effective performance management of outsourced information technology services:

a) review performance evaluation procedures, including benchmarks and current service levels, before evaluating outsourcing options;

b) performance measures must have a direct linkage to agency objectives and focus on outputs;

c) specify comprehensive performance measures and targets, which can adapt to future technological improvements: a key part of the agreed contractual arrangements;

d) use experienced and independent personnel to set desired performance levels;
Finding 4.1 (cont.)

e) reward above standard performance, penalise below standard performance;

f) develop and agree appropriate reporting mechanisms for all performance measures; and

g) conduct post implementation reviews, as part of continuous improvement and quality control procedures.

Finding 5.1 (Page 61)

The Committee highlights the following best practice cost related issues, some of which have contractual implications, for agencies to consider when outsourcing information technology services:

a) cost is an important factor in outsourcing, but not above all else and not the only factor;

b) cost comparisons should use sensitivity analyses and take all relevant costs into account, including transition costs, cost of capital, monitoring costs and hidden and/or dispersed costs;

c) involve independent costing, legal, technical and other expertise, internally or externally sourced, to advise and review progress;

d) several fee setting models exist - each pose potentially significant risks and benefits - must be sufficiently flexible and suited to current and projected needs of agencies;

e) termination clauses and fees require careful consideration;

f) low bids do not necessarily mean greater efficiency;

g) be wary of vendor mark-ups for supplies;

h) ensure competition in bids to get the best possible price;
Finding 5.1 (cont.)

i) ensure all activities and related charges are detailed in the contractual arrangements - assume nothing;

j) agencies should protect their investment in the vendor;

k) be wary of standard vendor contracts and change-of-character clauses; and

l) avoid signing incomplete contracts: a risk with both cost and service implications.

Finding 6.1 (Page 69)

The Committee finds that the Auditor-General and the Committee's own Consultant have raised some critical strategic and management considerations for the outsourcing of information technology services. The Committee highlights the following related best practice principles:

a) maintain access to independent strategic and technical management expertise;

b) don't become captive to the vendor through skills or systems knowledge transfer - foster competition and flexibility;

c) balance the sometimes competing need for flexibility with the need to ensure ongoing access to particular vendor expertise and services; and

d) manage the issue of technological obsolescence.

Finding 7.1 (Page 81)

The Committee finds that:

a) outsourcing of information technology services changes the risk environment of agencies and should lead to a review and modification of risk management strategies. Agencies must continue to take a risk management approach to the provision of information technology services;
Finding 7.1 (cont.)

b) agency responsibilities for the integrity of its service delivery cannot be outsourced, however the conduct of strategies to minimise risks related to the provision of information technology services can be outsourced;

c) risks continue to revolve around the need to ensure the reliability of information, the continuity of operations and the safeguarding of public assets and information; and

d) there are many critical elements of agency risk management strategies such as access controls (both physical and logical), vendor undertakings in respect of confidentiality and service delivery, data back-up, disaster recovery, contractual redress for breach of agreement, specification of events which trigger termination and turn back arrangements.

Finding 8.1 (Page 90)

The Committee finds that:

a) agencies should ensure that their public and parliamentary accountability is not compromised as a result of the outsourcing of information technology services;

b) public sector agencies cannot hide behind confidentiality requirements that they have agreed to, or inserted into outsourcing arrangements to avoid accountability. Nor can they outsource their very important responsibility to be accountable for public resources or legislative functions under their control; and

c) outsourcing agreements must clearly set out the accountability framework within which the vendor must operate.
Recommendation 8.1  (Page 90)

The Committee recommends that ministerial directions issued by the Minister for Finance, pursuant to the Financial Management Act 1994, should require public sector entities to include details of outsourcing arrangements above a specified value in their annual reports to the Parliament. Required details should comprise a schedule listing the vendor engaged, summary particulars of the service provided, the total fees incurred and future commitments in relation to each outsourcing arrangement.

Finding 9.1  (Page 99)

The Committee highlights the following best practice software related issues for agencies to consider when outsourcing information technology services. These issues compliment the Computer Software Policy issued by the former Department of Finance and the Auditor-General's 1993 performance audit report on Information Technology in the Public Sector:

a) make clear contractual provisions concerning intellectual property rights arising from software created or developed under outsourcing arrangements;

b) clarify the agency's ability to assign or transfer existing software licenses to vendors as required;

c) establish contractual provisions to ensure vendors use licensed software only and exercise effective virus protection and detection measures; and

d) clarify the impact of proposed outsourcing arrangements on existing externally provided services, such as third party software maintenance arrangements.

Finding 9.2  (Page 99)

The Committee finds that the ongoing importance of maintaining stringent virus protection measures and regular software audits has again been recently highlighted by the 24-hour shutdown of the Australian Taxation Office's computer network, due to a virus attack. The Committee also notes that the Victorian Government Purchasing Board's recent government wide purchasing arrangement for Microsoft products is intended to reduce the unit costs for agencies and to obviate the potential for illegal copying of software. This arrangement will help to minimise one avenue for the introduction of computer viruses, that is the illegal copying of software.
FUNCTIONS OF THE PUBLIC ACCOUNTS AND ESTIMATES COMMITTEE

The Public Accounts and Estimates Committee is constituted under the Parliamentary Committees Act 1968, as amended. It presently consists of nine members of Parliament drawn from the Legislative Council and the Legislative Assembly.

The Committee carries out investigations and reports to Parliament on matters associated with State financial management. Its functions under the Act are to inquire into, consider and report to the Parliament on -

a) any proposal, matter or thing connected with public administration or public sector finances;

b) the annual estimates or receipts and payments and other Budget papers and any supplementary estimates of receipts and payments presented to the Assembly and the Council;

if the Committee is required or permitted so to do by or under the Act.
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# ACRONYMS AND ABBREVIATIONS

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<tr>
<td>ATO</td>
<td>Australian Taxation Office</td>
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<td>BSAA</td>
<td>Business Software Association of Australia</td>
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<td>DBE</td>
<td>Department of Business and Employment</td>
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<td>DR</td>
<td>Disaster Recovery</td>
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<td>Force</td>
<td>Victoria Police</td>
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<td>GITC</td>
<td>Government Information Technology Conditions</td>
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<td>GOSIP</td>
<td>Government Open Systems Interconnection Profile</td>
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<td>IIP</td>
<td>Infrastructure Investment Policy</td>
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<td>IT</td>
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<td>IT&amp;T</td>
<td>Information Technology and Telecommunications</td>
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<td>LAN</td>
<td>Local Area Network</td>
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<td>MITS</td>
<td>Melbourne Information Technology Services</td>
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<td>OPSM</td>
<td>Office of Public Sector Management</td>
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<td>Open Systems Interconnection</td>
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<td>PCs</td>
<td>Personal Computers</td>
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<td>PMA</td>
<td>Port of Melbourne Authority</td>
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<td>Public Transport Corporation</td>
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<td>VGPB</td>
<td>Victorian Government Purchasing Board</td>
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<td>VGTG</td>
<td>Victorian Government Telecommunications Group</td>
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<td>VWA</td>
<td>Victorian WorkCover Authority</td>
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LIST OF WITNESSES

The following is a list of public hearing witnesses for the Committee’s inquiry into Information Technology in the Public Sector.

Port of Melbourne Authority - 3 November 1994

Mr M. McCarthy, General Manager, Finance and Administration
Mr R. Shute, Manager, Information Technology

Department of Finance - 8 February 1995

The Hon J. Smith, MLA, Minister for Finance
Mr F. King, Acting Secretary to the Department
Mr R. Paice, Comptroller-General, Department of Finance
ORGANISATIONS PROVIDING SUBMISSIONS

Public Transport Corporation
VicRoads
Victorian WorkCover Authority
Victoria Police
Department of Planning and Development
Port of Melbourne Authority
Department of Finance
Melbourne Water
EXTRACTS FROM THE RECORDS OF PARLIAMENT

MINUTES OF THE PROCEEDINGS OF THE LEGISLATIVE COUNCIL

Tuesday 10 November 1992

PUBLIC ACCOUNTS AND ESTIMATES COMMITTEE - The Honourable R.I. Knowles moved, by leave, That, contingent upon the Royal Assent being given to the Parliamentary Committees (Amendment) Bill, the Honourables P.R. Hall, T.C. Theophanous and D.R. White be members of the Public Accounts and Estimates Committee.

Question - put and resolved in the affirmative.

VOTES AND PROCEEDINGS OF THE LEGISLATIVE ASSEMBLY

Friday 13 November 1992

JOINT INVESTIGATORY COMMITTEES - Motion made, by leave, and question - That contingent on the coming into operation of the Parliamentary Committees (Amendment) Act 1992 -

Mr Baker, Mr Hyams, Mr Plowman (Benambra), Mr Smith (Glen Waverley), Mr Thomson (Pascoe Vale) and Mr Weideman be members of the Public Accounts and Estimates Committee.

(Mr Gude) - put and agreed to.
# Reports of the Public Accounts and Estimates Committee

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<td>The Performance Audit of the Auditor General of Victoria</td>
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<td>1992-93 Budget Estimates and Outcomes</td>
<td>November 1993</td>
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<td>Victorian Public Hospitals - Arrangements with Contracted Doctors</td>
<td>May 1994</td>
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<td>7</td>
<td>Interim Report on the State's Budget and Financial Management Framework</td>
<td>May 1994</td>
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**Other**

- Thrift and the Noiseless Step; 100 Years of Public Accounts Committees of the Parliament of Victoria | July 1994
- Appointment of an Auditor to Conduct a Performance Audit of the Auditor-General | April 1995
- Appointment of an Auditor to Conduct a Financial Audit of the Victorian Auditor-General's Office | April 1995
- Special Report: Investigation into a Possible Breach of the Standing Orders | May 1995
1.1 Background to the Committee's Inquiry

The Auditor-General, in his special report entitled Information Technology in the Public Sector (May 1993) identified a number of deficiencies in relation to the use, by government agencies, of information technology. The Report noted:

The findings in this Report indicate that there has been a failure of government agencies in the past to address fundamental IT controls which has exposed the Government to a number of risks such as excessive costs, ineffective systems and penalties under the Copyright Act 1968.

As the Government moves to contract out IT services, it will be even more important to ensure that adequate IT standards are promulgated by the Government to ensure that private sector providers do not repeat the mistakes outlined in this Report.¹

The report has identified outsourcing of information technology as an emerging issue that will require careful planning and management by public sector agencies. Specifically the Auditor-General stated that agencies will need to:

- evaluate their corporate goals and determine whether their existing IT strategy is appropriate to the achievement of those goals given the increased business opportunities arising from outsourcing;

- understand the challenges and management implications of IT and to assume effective management control of planning, development of strategies, technical performance and quality control;

- ensure that all external services are delivered with due regard to competition and in the most effective and cost-efficient manner;

- develop IT management frameworks which are conducive to controlling the agencies' relationships with external providers; and

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¹ Auditor-General's Special Report No. 23, Information Technology in the Public Sector, May 1993, page 3


**Information Technology in the Public Sector**

- establish performance indicators whereby the quality and efficient delivery of external services can be measured in relation to meeting an agency's objectives.²

Outsourcing can be summarised as the purchase of goods or services that were previously provided internally. It generally involves two different activities:

- the contracting out of the provision of services on a service agreement basis; and

- the disposal of functions previously performed internally where there is a desire to purchase back the services of that function.³

The trend towards outsourcing of activities fits with the objective of becoming more efficient by transferring in-house services and support activities to firms specialising in each function, provided those specialist firms do it better and more cheaply. In recent times, the delivery of information technology services is one example of a service which is potentially a prime candidate for outsourcing throughout the Victorian public sector.

The Victorian Commission of Audit, in its May 1993 report, stated that outsourcing is a ... means of introducing greater competition into the provision of what are traditionally regarded as public goods and services ... ⁴ The Commission believed that as well as increased competition, the benefits of outsourcing might include a greater focus on outputs and outcomes. Notwithstanding this, the Commission took the view that past contractual arrangements had not always been structured in a way which would optimise the benefits to the public sector. It recommended:

- an appropriate sharing of risk between the government and the contracting supplier;

- that payments to the supplier be based on direct user charges rather than on leasing arrangements or 'take or pay' contracts with the government; and

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³ *Outsourcing - The Critical Issues*, Papers Delivered at a BLEC Conference, November 1994
that arrangements be made on an arm's length basis and involve competitive tendering on an ongoing basis.

Outsourcing is viewed as a means of introducing competition into service areas thereby providing opportunities to improve the quality and/or reduce the cost of services to taxpayers. The contracting out of non-core activities also enables management to concentrate on critical core business activities.

The Minister for Finance, in May 1993, announced that the Government expected to increase information technology (IT) outsourcing in public sector agencies from the level which existed at that time (approximately 30 per cent) to around 70 per cent by December 1994, subject to value for money, agency efficiency and public policy considerations.\(^5\)

The Victorian Government Information Technology Policy Statement - Outsourcing of Information Technology Services states that:

*It is the Victorian Government policy to maximise the outsourcing of Information Technology (IT) service provision in public sector organisations, consistent with the objective of efficient and effective IT.*

*Agencies are required to test the market for the outsourcing of both new and existing IT service requirements as an alternative to the maintenance of in-house capabilities. It is the Government's objective to maximise outsourcing subject to value for money, agency efficiency and public policy considerations.*

*Outsourcing of IT activities is to be considered for all IT functions with the exception of policy setting.*

*Outsourcing is not preferred in the following circumstances:*

- *where it cannot be justified on economic grounds.*

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\(^5\) Percentages are calculated on the recurrent or non-capital cost of all IT functions and services in agencies. Victorian Government Information Technology Policy - Policy Statement: Outsourcing of Information Technology Services, April 1993
Information Technology in the Public Sector

- where the requirements for security and confidentiality of data or systems cannot be adequately provided by a commercial outsourcer.6

Given the issues raised by both the Victorian Commission of Audit and the Auditor-General in relation to outsourcing, the increasing emphasis on outsourcing within the public sector and the importance of information technology in ensuring that future organisational needs are met, the Committee believed that a review of this area had the potential to provide substantial benefits.

The Auditor-General in his special report Information Technology in the Public Sector also expressed concerns about the use of unauthorised and illegal software within government agencies. The Auditor-General found that software control practices were either ineffective or non-existent in most of the agencies reviewed.7 As such, substantial business risks had not been addressed by these organisations. Given the concerns raised by the Auditor-General in his special report, the Committee's review also incorporated this issue.

1.2 THE COMMITTEE'S OBJECTIVE AND TERMS OF REFERENCE

1.2.1 Overall Objective

The outsourcing of information technology is a key initiative in the public sector, both at the Commonwealth and State level. While there are potentially formidable barriers to outsourcing such as loss of control, hidden costs, confidentiality, inflexibility and irreversibility, there are potentially substantial economic and other benefits. Expected benefits include:

- IT cost control and potential cost reduction and service improvements;

- an increased concentration of management time within Government agencies on key business outcomes; and

- the growth of the Victorian and Australian IT industry.8

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6 Victorian Government Information Technology Policy - Policy Statement: Outsourcing of Information Technology Services, April 1993
7 Auditor-General's Special Report No. 23, Information Technology in the Public Sector, May 1993, page 15-26
8 For a complete outline of the advantages and disadvantages of outsourcing refer Appendix C, page 4
Each organisation must balance the risks and benefits to arrive at the optimal solution.

There is little practical and comprehensive information on the real problems that have been encountered and how organisations have overcome them or are dealing with these problems. It is through research and analysis, such as the Committee's Inquiry, that organisations will be provided with an objective discourse to realistic expectations and practical solutions if the public sector is to achieve optimal performance and efficiency.

The overall objective of the Inquiry is to provide informed and practical direction to ensure that existing and future outsourcing arrangements will meet agencies' current and future needs, minimise risk and provide cost-effective and quality service delivery. This review of information technology outsourcing looked into the effectiveness of the outsourcing approach adopted across a number of State Government agencies.

A key outcome of the inquiry has been the preparation of a 'How to Outsource Checklist' which lists key best practice issues for outsourcing of information technology services (refer Appendix A). That checklist is supplemented by a second checklist of relevant legislation, policies, guidelines and stakeholders (Appendix B).

1.2.2 Terms of Reference

In accordance with the Parliamentary Committees Act 1968, the Public Accounts and Estimates Committee conducted its Inquiry with the following terms of reference:

To inquire into, consider and report to Parliament on the Auditor-General's special report entitled 'Information Technology in the Public Sector', including:

- an assessment of the level of public sector compliance with policies, guidelines and directives issued by the central agencies on the outsourcing of information technology; and
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• a review of selected public sector agencies that have outsourced information technology services in order to determine the problems encountered by such agencies and the methods used to resolve those problems.

1.3 Method of Investigation

The Public Accounts and Estimates Committee inquired into the outsourcing of information technology in the Victorian public sector through:

• seeking written and oral submissions;

• an examination of submissions received from government agencies and other interested parties;

• an examination of contractual arrangements and other documentation relating to information technology outsourcing arrangements, within selected government departments and agencies;

• formal and informal discussions with relevant parties;

• an analysis of relevant reports or documents issued by other bodies;

• consideration of key issues at several public hearings; and

• an examination of central agency guidelines and directives, and the legislative/regulatory framework.

The Committee also sought the services of a consultant as a means to access independent specialist expertise. The Consultant was required to examine the following aspects of two selected government agencies' IT outsourcing arrangements:

• assess the adequacy of agreed performance measures and benchmarks, including an evaluation of the way in which performance is measured and reported;
• assess the fee structure with a view to ensuring that fees have been set in a manner which is conducive to minimising overall costs to the agency over the term of the contract;

• ensure that the arrangement has been structured in a way that enables the agency to maintain an appropriate level of strategic independence from its outsourcing supplier; and

• evaluate whether the agency has retained sufficient in-house skills to effectively manage and monitor the supplier's performance as well as ensure the ongoing development of IT enhanced business strategies.

The Consultant was engaged to identify problems encountered by the agencies under review and the solutions that were adopted or recommended. A key focus of the consultancy was the identification of lessons for public sector IT outsourcing to avoid the repeat of such problems in the future. The agencies included in the Consultant's review were not selected on the basis of any known or perceived deficiencies, rather they were selected as being representative of the diverse nature of the public sector and IT outsourcing. A copy of the Consultant's report has been included as Appendix C.

1.4 Legislative Requirements - Response by the Responsible Minister

Section 40(2) of the Parliamentary Committees Act 1968 provides that:

Where a report to the Parliament of a Joint Investigatory Committee other than the Public Bodies Review Committee recommends that a particular action be taken by the Government with respect to a matter, the appropriate responsible Minister of the Crown shall, within six months of the report of the Committee being laid before both Houses of the Parliament, report to the Parliament as to the action (if any) proposed to be taken by the Government with respect to the recommendation of the Committee.

Consequently this section of the Parliamentary Committees Act 1968 requires the responsible Minister to respond to the recommendations of the Committee in the Parliament within six months of the Committee's report.
Information Technology in the Public Sector
2.1 Introduction

2.1.1 Outsourcing of Information Technology Services Policy

The Victorian Government policy on *Outsourcing of Information Technology Services* was released in April 1993. The policy statement expected that 70 per cent of all Victorian public sector IT service provision was likely to be outsourced by December 1994, subject to certain considerations (refer Chapter 1). The then Department of Finance conducted a survey in April 1994 to assess progress against this expectation.\(^1\)

The IT outsourcing survey was sent to all departments, and aimed to provide authoritative information on the current IT&T outsourcing status and trends across government.

The following summarises the major findings of the survey:

- The surveyed departments incurred total expenditure (including overheads) on IT&T of $250 million in 1993/94.

- There had been a reasonable increase in the level of IT&T outsourcing within government over the last two years. The level of outsourcing has increased from 47 per cent in mid-1993 to 54 per cent by mid-1994. By mid-1995, the survey expected an outsourcing level of 70 per cent of recurrent, or non-capital cost, of IT functions and services.

- The traditional areas of IT&T outsourcing, that is facilities management and telecommunications, will have reached high levels of outsourcing by mid-1995, that is, 71 per cent and 88 per cent respectively.

- Progress and planned progress in outsourcing the system development area had been poor; the level of outsourcing in this area increased from 26 per cent to 39 per cent over the last two years (to April 1994).

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\(^1\) *State Government of Victoria, Information Technology Outsourcing Survey Findings, 1994*
Consequent to the survey, the then Department of Finance recommended that:

- the survey be conducted again in early 1995 to provide up-to-date information on staff numbers and its impact on industry development;
- departments that have been slow to examine IT outsourcing options should submit to the Department of Finance their future plans for outsourcing;
- where departments are not planning substantial outsourcing of IT, they should demonstrate the feasibility of outsourcing individual service components; and
- departments demonstrate to the Department of Finance plans to contain fragmentation and growth of internal Local Area Network (LAN) and PC Support, with a view to evaluating the outsourcing of all or parts of these services.

2.1.2 Policies, Guidelines, Legislation and Stakeholders

The Committee engaged a consultant to conduct an assessment of the outsourcing arrangements and experiences of two agencies, the Victorian WorkCover Authority and the Victoria Police to assist it in this inquiry (refer Chapter 1).

The Committee's Consultant noted that agencies are not always aware of relevant legislation, policies and government stakeholders that they will need to consider and/or comply with, tending to find these out in a haphazard manner. There may also be uncertainty, particularly among the outer budget agencies, as to which policies and guidelines are mandatory and which are not. The Consultant recommended that a reference list be published with a brief summary of considerations relevant to outsourcing.

The Consultant also suggested that the establishment of an official network of agencies that have outsourced, are in the process of outsourcing, or are considering outsourcing, will facilitate sector-wide learning and information sharing. Further it was identified that there was a need for an outsourcing education program as agencies may embark on outsourcing arrangements

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2 Refer Appendix C, page 80, paragraph 6.7.2
without a comprehensive understanding of the advantages and disadvantages, decision making frameworks, the process and approaches. Importantly the Committee was advised that in such circumstances vendors may drive the outsourcing process rather than it being driven by the agency.\(^3\)

In his special report *Purchasing Practices*, the Auditor-General pointed out that although individual agencies should be responsible for decisions relating to the purchase of goods and services, appropriate monitoring mechanisms should be established both within the agency and at a central level. The aim of these monitoring mechanisms should be to evaluate the extent of compliance with regulations and policies, evaluate outcomes against policy objectives and identify the scope to improve practices. While internal and external audit functions play an important role in this regard, central agencies also have a key responsibility in performing an overview function.\(^4\)

In response to the above concerns raised by the Auditor-General in his report on *Purchasing Practices*, the then Department of Finance stated that the new Victorian Government Purchasing Board (VGPB), which became operational on 1 February 1995, would be responsible for the development of purchasing policy and guidelines for agencies, monitoring compliance with those guidelines and reporting to portfolio Ministers and the Minister for Finance. The VGPB also provides consultancy services for outsourcing, advice on supply management practices and staff training.\(^5\)

Paragraphs 2.2 to 2.5 consider the recommendations of the Consultant and provide comprehensive information on existing legislative and policy requirements, and stakeholders, for agencies intending to outsource their information technology function. It is later proposed that the responsibility for the maintenance and dissemination of this information in the future will be assumed by a single public sector agency.

### 2.2 Relevant Legislative and other Requirements

#### 2.2.1 Inner Budget Sector

In response to the Consultant’s findings the Committee initially sought to establish for itself the extent of legislative and other requirements impacting on

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\(^3\) Refer Appendix C, page 80  
\(^5\) Ibid
outsourcing of information technology. This first attempt at establishing current requirements is intended as the basis for future refinement and updating. (Refer to Appendix B for a checklist of relevant legislation, policies, guidelines and stakeholders).

Before embarking on any outsourcing contract, it is necessary for departments to review and examine all relevant legislation so as to ensure that there is complete compliance and no legislative impediments to information technology outsourcing. Departments should conform to the standards of fair competition, value for money, effective service and rigorous public scrutiny. Consequently, they must adhere to the various statutory and other requirements for the purchase of goods and services.

*Interim Supply Policies and Guidelines - Victorian Government Purchasing Board*

Purchases by budget sector agencies have traditionally been made within a regulated framework characterised by central approval processes and the need to comply with centrally developed regulations and policies. Administrative reform in recent years, such as the changes to the *Supply Management Regulations* in 1993, resulted in the increased devolution of responsibilities to inner budget agencies with the aim of enabling them to conduct their business with minimum intervention by central agencies.\(^6\)

The procedures to be followed in the purchasing process within the budget sector are defined by the Victorian Government Purchasing Board (VGPB) *Interim Supply Policies and Guidelines*.\(^7\) These policies and guidelines are issued pursuant to section 54L of the *Financial Management Act* 1994 and became effective from 1 February 1995 when the *Supply Management Regulations* were revoked. They specify requirements in areas such as the seeking of oral and written quotations and public tendering and also require that large purchases exceeding a specified dollar value be approved by the VGPB. All departments must comply with the supply policies of the VGPB.\(^8\)

All inner budget departments should also use the Board's Common Use Contracts for the purchase of all information technology and

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\(^7\) First issued 1 February 1995

\(^8\) *Financial Management Act* 1994, section 54L (4)
telecommunications goods and services.\textsuperscript{9} In accordance with the Victorian Government Supply Policy Guideline 2.4.2, all agencies and departments are required to comply with the Approved Supplier Policy when purchasing computer hardware and services whose estimated value is less than $1.5 million. In the absence of a VGPB contract or the Approved Supplier Agreements, departments should procure goods in accordance with Policy Numbers 1.3, 1.4, or 1.5.

\textit{Public Sector Management Act 1992}

The \textit{Public Sector Management Act 1992} provides terms and conditions of employment when employees transfer to private sector organisations (that is designated bodies). In particular, section 81A provides a framework for the movement of staff out of the public service and addresses the requirements and entitlements of public servants employed in the functions to be contracted out.

The \textit{Public Sector Management Act} Guidelines on Section 81A, prepared by the Office of the Public Service Commissioner and the Department of Business and Employment, provide a mechanism for dealing with staff affected by outsourcing.\textsuperscript{10} The Guidelines state that

\begin{quote}
\textit{where an organisation or a function of an organisation covered by the Public Sector Management Act is to be corporatised, privatised or contracted out and staff members are to move to the new entity, the provisions of section 81A must be used as the mechanism for dealing with affected staff...}
\end{quote}

For advice on superannuation entitlements of staff members affected by action under Section 81A, departments should contact the Superannuation Division, Department of the Treasury and Finance.

\textit{Audit Act 1994}

Because of the public accountability issues involved, there is a need to take into account the requirements of the \textit{Audit Act 1994}, which essentially provides for the free and unrestricted access by the Auditor-General and his authorised


\textsuperscript{10} Guidelines on Employment of Staff Members by Designated Bodies, issued by Office of Public Service Commissioner
officers to source documents and computer files necessary for his audit. Section 12(1) of the Audit Act 1994 requires public sector departments and agencies to make available to the Auditor-General certain information required for his audit, which may cease to be under the direct control of public sector agencies where IT functions have been outsourced:

No obligation to maintain secrecy or other restriction on the disclosure of information obtained by or furnished to persons employed in the public service or by an authority, where imposed by an enactment or rule of law, applies to the disclosure of information required by the Auditor-General or a person authorised by the Auditor-General for the purposes of an audit under this Act.

It may be prudent therefore for the contractual arrangements related to the outsourcing of IT services to expressly provide appropriate access for the Auditor-General, internal audit and other representatives of the agency.

Information Technology and Telecommunications Policy Manual

It is Victorian Government policy to maximise the outsourcing of Information Technology service provision in public sector organisations, consistent with the objective of efficient and effective IT delivery. As the department responsible for Information Technology Policy and coordination of whole of government initiatives in IT&T, the then Department of Finance (now part of the Department of the Treasury and Finance) has compiled a manual of IT&T 'best practices'.

The Minister for Finance in his foreword to the Manual (February 1995) states that:

Each policy and guideline is a broad statement of direction leaving departments with the responsibility for, and flexibility in, their implementation.

A number of the guidelines in the IT&T policy manual are directly relevant to the IT outsourcing policy, particularly IT&T-13 Outsourcing Policy, which is a best practice guide to be used for outsourcing of IT functions. Attached to IT&T-13 is the Outsourcing Best Practice Methodology which was issued in April 1993. This methodology outlines the systematic approach to outsourcing and it should be
read in conjunction with the Contracting Out Guidelines., which were developed by the Office of State Owned Enterprises of the then Department of the Treasury.

The following policies contained in the manual enable departments (and agencies) to achieve uniformity in information systems across government and can impact on the outsourcing of IT:

- IT&T-07 Open Systems Environment Policy commits the Victorian Government, in common with all Australian Governments, to the adoption of Open Systems Interconnection (OSI) standards in their networks. By introducing OSI standards the Government is seeking to ensure that there is a common IT applications architecture linking all its computer installations to facilitate access to, and transmission of, information within and between departments. Consequently, all Victorian Government tenders should seek the provision of GOSIP (Government Open Systems Interconnection Profile) compliant solutions;

- IT&T-08 Telecommunications Guidelines requires departments to use the appropriate telecommunications data network services contracted to the State. The Victorian Government Telecommunications Group (VGTG) was established by the then Department of Finance to coordinate the implementation of "whole-of-government" telecommunications services;

- IT&T-16 Software Copyright Policy stipulates that departments should implement policies and procedures to ensure compliance with the requirements of the Copyright Act 1968 in relation to software;

- departments are expected to acquire Information Technology-related goods and services under the terms of the Government Information Technology Conditions (GITC). The GITC documentation has been developed as a set of standard conditions to be used by all Australian Governments for their acquisition of Information Technology-related goods and services (IT&T-17);

- IT&T-18 Purchasing Guidelines is intended to assist IT managers and purchasing staff involved in IT&T procurement to understand current policy and legislative requirements. All inner budget departments should use Victorian Government Purchasing Board contracts when purchasing IT&T goods and services. Alternatively, competitive offers must be invited by the
department in accordance with the Approved Supplier Policy or VGPB Interim Supply Policies and Guidelines; and

- departments should also ensure that their Information Technology outsourcing advisers are free of conflict of interests (IT&T-20).

Guidelines for the Engagement and Management of Consultants

Departments and agencies are expected to take into consideration the Guidelines for the Engagement and Management of Consultants issued by the Office of Public Sector Management (OPSM), of the Department of the Premier and Cabinet, when engaging consultants to handle their outsourcing process and for other purposes. The Guidelines reflect best practice in the engagement and management of consultants and strict adherence to some of the procedures outlined in the Guidelines is mandatory for all departments and agencies.

The Guidelines require departments and agencies to:

- adhere to various statutory provisions for the purchase of services, eg the Victorian Government Purchasing Board Interim Supply Policies and Guidelines;

- provide details of consultancy engagements in annual reports pursuant to the requirements of the Annual Reporting Act 1983 and the Financial Management Act 1994; and,

- ensure that good consultancy engagement and management practices as outlined in the Guidelines are observed.

Contracting Out Guidelines

The Department of the Treasury and Finance's Contracting Out Guidelines have been developed to assist the public sector in achieving a consistent approach to contracting out. Departments and agencies in considering opportunities to contract out are expected to manage their business consistent with the principles outlined in these Guidelines. The Guidelines are intended to assist organisations in assessing opportunities to contract out services and should be adapted to suit the needs and risks of the organisation.
Infrastructure Investment Policy

The Infrastructure Investment Policy (IIP) applies to all projects including contracting out activities, with a total project value in excess of $10 million, undertaken on behalf of the Victorian Government and which involve private sector investment or financing. The Policy sets out the principles for assessing the merits of proposals for private sector investment and the process to be adopted in developing infrastructure projects with the private sector.

Equal Opportunity Act 1984

The Equal Opportunity Act 1984 may potentially have to be taken into consideration in an outsourcing contract as it renders unlawful certain kinds of discrimination and promotes equality of opportunity between persons of different status.

Australian Copyright Act 1968

Victorian Government agencies are required to ensure that they comply with the requirements of the Australian Copyright Act 1968, when making use of proprietary computer software, that is, software developed by any person or organisation other than the Agency and marketed commercially; this again may become a consideration when framing an outsourcing arrangement.

Certain Policies administered by the Department of Business and Employment

The Department of Business and Employment is responsible for the administration of a number of government policies relating to purchasing. The Department communicates purchasing policies to departments and agencies and assists in their implementation through the Supply Policy Manual.

The Supply Policy Manual was issued to budget sector bodies and statutory authorities in 1986. Since then, it has been updated on a number of occasions to include guidance on several purchasing functions such as the preparation of tender documentation and contractual arrangements. The latest Supply Policy Manual, revised in 1994, includes guidelines reflecting the impact of Victorian Government policies on industry development and the economy.
The following policies were developed at the Commonwealth level in conjunction with the States and are believed to be mandatory:

- the Government Procurement Agreement requires departments and agencies to give consideration to the benefits of purchasing goods and services of local origin and, wherever possible, to maximise local content in purchasing. When evaluating tenders, the goods of New Zealand suppliers are to compete on an equal footing with those available within Australian States;

- Arising from the Bevis Report\textsuperscript{11}, Government agencies are now required to prepare Industry Impact Statements for projects of $10 million or more to identify and maximise opportunities for industry development. Industry Impact Statements will include a statement on the opportunities for the involvement of small-to-medium enterprises. Companies tendering for Government contracts valued at $10 million or more are required to submit their offers in two separate envelopes. One envelope will detail how the tender meets the product/service specification and will include the offer price. The other envelope will specify Australian industry development associated with the tender;

- Under the Industry Support Policies, overseas suppliers of computer software, hardware and services to the Commonwealth and State governments are encouraged to enter into activities that foster industry development within Australia. The Fixed-Term Arrangements and the Partnerships for Development Program are aimed at initiating activities which will be of benefit to Australia from an industry development perspective; and

- The Victorian Government Offsets Program is relevant for all other goods and services not covered by the Fixed-Term Arrangements and the Partnerships for Development Program. Suppliers of goods with significant imported content are required to enter into an agreement, prior to the awarding of tenders, setting out activities the supplier agrees to perform which will be of benefit to Victorian industry.

\textsuperscript{11} House of Representatives Standing Committee on Industry, Science and Technology, Government Purchasing Policies: Buying our Future (the Bevis Report), 1994
2.2.2 Outer Budget Sector

Outer budget agencies enjoy greater autonomy in conducting an outsourcing arrangement than do departments. For example, outer budget agencies do not come under the mandate of the Victorian Government Purchasing Board (VGPB) and hence are not obliged to comply with specific provisions of the VGPB *Interim Supply Policies and Guidelines* in relation to the purchase of IT goods and services.\(^{12}\) Nevertheless the VGPB's policies and guidelines represent authoritative advice for outer budget sector bodies.

*Legislation*

Outer budget sector agencies are, however, expected to observe the accountability provisions of the *Audit Act* 1994 (where applicable), which gives the Auditor-General the right of access to the information he requires. Compliance with the *Equal Opportunity Act* 1984 and the *Australian Copyright Act* 1968 is also mandatory (refer paragraph 2.2.1). Wherever applicable the requirements of enabling legislation and any other legislation under which the agency operates must be complied with when outsourcing information technology services.

*Information Technology and Telecommunications Policy Manual*

The IT&T Manual's policies and guidelines on *Government Information Technology Conditions, GOSIP, Software Copyright Policy* and *Telecommunications Policy* represent best practice for outer budget agencies when they outsource their information systems (refer paragraph 2.2.1).

*Guidelines for the Engagement and Management of Consultants*

The application of all procedures in the OPSM *Guidelines for the Engagement and Management of Consultants* should be considered where they are relevant to the outsourcing arrangements in the outer budget sector (refer paragraph 2.2.1).

*Certain Policies administered by the Department of Business and Employment*

The Department of Business and Employment is overseeing the contracting out function across the whole of government from the industry development perspective (refer paragraph 2.2.1).

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State Owned Enterprises Guidelines on Employee Entitlements

The Office of State Owned Enterprises (SOE) within the Department of the Treasury and Finance has issued guidelines relating to employee entitlements when a function is contracted out (refer paragraph 2.2.1). All agencies whose employees are not covered by the Public Sector Management Act are required to address their staffing issues in accordance with the State Owned Enterprises Guidelines on Employee Entitlements. An Employee Entitlements Working Party has been established to provide a forum for discussion and resolution of all matters associated with the transfer of staff and employee entitlements, including superannuation.\(^{13}\)

2.3 Role of Stakeholders

The Auditor-General in his Special Report No. 31 Purchasing Practices identified a number of agencies as having a central role in budget sector purchasing activities.

Department of the Treasury and Finance

The Department of the Treasury and Finance plays a key role in overseeing and monitoring purchasing activities, including the issue of guidelines and policies relating to sound financial management practice in the outsourcing of information technology services. In its submission (dated April 1994) to the Committee’s inquiry into Information Technology in the Public Sector, the then Department of Finance outlined its role in the outsourcing program as:

- providing policy advice to agencies on the Victorian government’s outsourcing policy;
- ensuring consistency of approach with outsourcing by encouraging membership on the Departmental Steering Committee;
- reviewing outsourcing decisions by departments;
- providing advice to the Minister of Finance and the Budget and Economic Review Committee;

\(^{13}\) Refer paragraph 2.2.1 and the Public Sector Management Act 1992
• providing lists of appropriate outsourcing companies;
• in the case of PTC/VicRoads, leading the evaluation process; and
• overall monitoring of IT outsourcing.

Key areas within the Department of the Treasury and Finance which impact on IT outsourcing include:

• Information Technology and Telecommunications Division;
• Office of State Owned Enterprises; and
• Outsourcing Evaluation and Contract Management Unit.

The Information Technology and Telecommunications (IT&T) Division is responsible for the development and implementation of policies and guidelines appropriate to the government's information technology outsourcing program.\textsuperscript{14}

The Office of State Owned Enterprises (SOE) issued guidelines aimed at assisting all agencies in achieving a consistent approach to the contracting out of services. The guidelines address areas relating to the identification of contracting out opportunities, the evaluation of proposals in terms of costs, benefits and risks, and the management of the tender implementation and monitoring processes.

The SOE also coordinates the initiatives of the government's reform program in conjunction with portfolio agencies. Where it is proposed to corporatise or privatise a Government service, the SOE has to be consulted from the concept stage. Following consultation, an officer from SOE will be appointed to the project and will work with the department to assist with the implementation of its reform program.\textsuperscript{15}

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\textsuperscript{14} Department of Finance, \textit{Annual Report}, 1993-94
\textsuperscript{15} Office of State Owned Enterprises, \textit{Information Sheet on Employee Entitlements}, July 1994
The objective of the Outsourcing Evaluation and Contract Management Unit is to:

*identify and support outsourcing opportunities for those functions of Departments and Agencies that can be more appropriately supplied by external specialists.*

The Unit is expected to provide advice and consultancy support to departments and public sector agencies and to identify and disseminate outsourcing best practice information and advice.

**Victorian Government Purchasing Board**

The Victorian Government Purchasing Board (VGPB), which replaces the State Tender Board with effect from 1 February 1995, has statutory responsibility for developing purchasing policies and guidelines for departments, monitoring departmental compliance with these supply policies and reporting irregularities to relevant Ministers and the Minister for Finance.

Pursuant to the legislative changes to the *Financial Management Act* 1994 departments are now responsible for ensuring that their purchasing processes are in line with established guidelines. Each departmental accountable officer is responsible for ensuring an audit of procedures addressing purchasing/supply management issues and that these audit reports are provided to the VGPB each year.

**Department of Business and Employment**

The Department of Business and Employment (DBE) is overseeing the contracting out function across the whole of government from the industry development perspective. The DBE is responsible for the administration of a number of government policies relating to purchasing (refer paragraph 2.2.1).

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17 Executive Officer Position Classification Proposal, *Director Outsourcing Evaluation and Contract Management Unit*
18 *1994 Response By the Minister For Finance to the Auditor-General's Report on Ministerial Portfolios and Special Reports*, page 154
Department of Premier and Cabinet - Office of Public Sector Management

The Department of Premier and Cabinet issued guidelines in November 1994 for the engagement of consultants. The guidelines are aimed at ensuring engagements are based on consistent standards in relation to fair competition, value-for-money, effective service and the ability to satisfy public scrutiny. The Office of Public Sector Management provides a central advisory service to all departments and agencies relating to the engagement and management of consultants in general. From time to time, the Premier may require random reviews of department/agency adherence to these Guidelines to be undertaken.19

2.4 Information Sharing and Education Programs

It became clear during the Consultant's review that there is a need for an education program in the public sector regarding outsourcing, and the formation of an outsourcing users' group.20

Agencies may embark on outsourcing arrangements without a comprehensive understanding of the advantages and disadvantages, decision making frameworks, the process and approaches. Their possible lack of comprehensive knowledge about the process, alternatives and requirements leaves the vendors driving the process by default. A well constructed and objective education program will help better decision making. The Committee's consultant has expressed concern that some privately run conferences or seminars on outsourcing tend not to project an objective approach to outsourcing.

An outsourcing user group, comprising an official network of agencies that have outsourced IT services, was also proposed as a regular forum for information sharing to assist in the education process. Sharing their collective knowledge will enable sector wide learning for all agencies that have outsourced as well as those considering outsourcing.

19 Office of Public Sector Management, Guidelines for the Engagement and Management of Consultants, November 1994
20 Refer Appendix C, page 80, paragraph 6.7.1 and 6.7.3
2.5 Central Reference Point

It is clear that many policies, guidelines, pieces of legislation and several stakeholders have an important impact on outsourcing of IT services. It is also clear that a need exists to ensure that consistency of advice is provided in a coordinated way to avoid duplication and waste. In addition, there is no doubt as to the urgency for information sharing (through user groups, independent education programs and a register of contacts in those public sector agencies which have outsourced) and the creation of an up-to-date reference list of relevant legislation, policies (highlighting those practices that are mandatory and those that are advisory) and government stakeholders.

The Committee understands that the new Outsourcing and Contract Management Guidelines to be issued shortly by the Outsourcing Evaluation and Contract Management Unit, will include a consolidated list of relevant legislation, policies, guidelines and related contacts. That list however, will apparently not be categorised into those elements applicable to the budget and non-budget sectors, nor indicate their mandatory or advisory status.

The responsibility for the maintenance and dissemination of all this information should be assumed by a single public sector agency. That agency could provide a referral service or expert advice as appropriate. The role of the Outsourcing Evaluation and Contract Management Unit as a central reference point for all matters related to public sector outsourcing is therefore both timely and appropriate.

Finding 2.1

The Committee finds that:

a) numerous policies, guidelines, pieces of legislation and public sector stakeholders have an important impact on the outsourcing of information technology services;

b) in the absence of a consolidated and up-to-date reference list of all relevant legislation, policies, guidelines and public sector stakeholders agencies may not have adopted best practice in the examination and implementation of outsourcing decisions;
c) the new Outsourcing and Contract Management Guidelines however, to be issued shortly by the Outsourcing Evaluation and Contract Management Unit, will be a welcome addition to the existing wealth of policies and guidelines as they are believed to include a consolidated list of relevant legislation, policies, guidelines and related contacts; and

d) the role of the Outsourcing Evaluation and Contract Management Unit as a central reference point for all matters related to public sector outsourcing is both timely and appropriate.

Finding 2.2

The Committee finds that the Outsourcing Evaluation and Contract Management Unit could promote greater and more coordinated information sharing concerning best practice for outsourcing of information technology services, and outsourcing generally, by:

a) widely publicising its role as a central reference point for all matters related to outsourcing;

b) enhancing the list of relevant legislation, policies and guidelines by categorising it into those applicable to the budget and non budget sectors and clearly indicating their mandatory or advisory status;

c) convening user groups (for agencies that have outsourced, are in the process of outsourcing or are considering outsourcing);

d) facilitating independent education programs;

e) issuing and maintaining a register of contacts in those public sector agencies which have outsourced; and

f) providing regular updates to the consolidated reference list of relevant legislation, policies, guidelines and public sector stakeholders.
3.1 Introduction

The Consultant's report to the Committee provided an in-depth review of the outsourcing process, from the feasibility to the implementation stage, in the Victorian WorkCover Authority (VWA) and Victoria Police (the Force).¹ These agencies have outsourced different IT services using different approaches and their combined experiences serve as useful lessons for other agencies intending to outsource their IT.

With the exception of the VWA, the agencies considered during the Committee's inquiry were primarily seeking to reduce their costs through outsourcing.

The VWA's regulatory role, arising from the December 1992 legislative changes and the move towards privatising the WorkCover scheme, led to a decision that it was inappropriate for the VWA to continue to operate the computerised transaction processing system supporting the authorised insurers.² The VWA used transitional outsourcing to divest itself of a core service that was inconsistent with its role as a regulator.³

The Force, on the other hand, used short-term contracting out to meet immediate staffing requirements and to assist in the implementation of the Victorian Government's outsourcing policy. The Force outsourced staffing requirements for the Help Desk and the Data Entry Bureau separately, that is, each activity was assessed for outsourcing independently and by different departments within the Force. The outsourcing vendor supplies the personnel in each case while the Force retains ownership of all the assets and conducts training of the vendor's personnel.

The Victorian public sector has embraced outsourcing as one of a range of measures designed to improve efficiencies and reduce costs. Any outsourcing decision therefore has long term strategic consequences and involves expenditure of potentially large amounts of public monies over long periods. It is

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¹ Refer Appendix C, pages 11 and 29
² Submission of the Victorian WorkCover Authority, April 1994
³ Refer Appendix C, page 11
critical that the correct processes are followed. The best business decisions result from a careful assessment of all the benefits and costs and detailed planning.

The Committee highlights the following key principles for the consideration of public sector management when outsourcing information technology services.\(^{4}\)

The Committee does not propose to duplicate the recommendations of its consultant, instead it has highlighted some of the key issues raised by its consultant and recommends all public sector agencies review the report at Appendix C.

3.2 Key Principles for Information Technology Outsourcing

3.2.1 Value for Money

The price for delivery of services by an external contractor is only one factor associated with outsourcing decisions. Recent IT outsourcing initiatives in Australia have focussed almost solely on cutting agency costs.\(^{5}\)

Public sector agencies have to consider all relevant non-price factors such as competency and experience of the contractor, financial stability, fair market prices, timely delivery, quality of service and strategic issues. This is part of a comprehensive analysis of all the costs and benefits of any sourcing decision (refer Chapter 5).

While cost reduction is desirable, it should not be pursued with a short-term focus at the expense of longer-term considerations, such as domestic or local industrial development. The central objective of the Commonwealth Government's approach to industrial development is the creation of internationally competitive manufacturing and service industries able to survive and grow within a global economy (refer Chapter 2, paragraph 2.2, in respect of related policies administered by the Department of Business and Employment).\(^{6}\)

3.2.2 Open and Effective Competition

Open competition implies the opportunity for all potential suppliers to do business with Government and public sector agencies being accountable for the probity of the process. Effective competition is directed at obtaining the best

\(^{4}\) Outsourcing - The Critical Issues, Papers Delivered at a BLEC Conference Papers, November 1994

\(^{5}\) IT Outsourcing: Reducing Costs At Any Cost, John Houghton, CIRCIT, September 1993

\(^{6}\) Auditor-General's Special Report No. 31, Purchasing Practices, May 1994
possible outcome with true competition. Sound judgement is required to
determine the strategy which best takes into account the competitive principle
while safeguarding the value for money objective.

3.2.3 Support for Local Industry

The failure of some governments in the past to take local industry development
issues seriously has caused some concern to Australian IT industry players who
feel that foreign competitors can win major government contracts without
showing a commitment to Australian industry development.\(^7\)

Under the Victorian Government Offsets Program, suppliers of goods with a
significant imported content are required to undertake to perform activities
which will benefit Victorian industry (refer Chapter 2, paragraph 2.2, in respect of
related policies administered by the Department of Business and Employment).\(^8\)

3.2.4 Other Best Practice Issues in Outsourcing

Experience has shown that outsourcing may not always achieve intended
objectives, partly due to failures in the competitive process, management of the
process, unreasonable expectations on the part of the participants or failure to
monitor external consultants' performance.\(^9\)

The report of the Committee's consultancy identified a number of issues that
arose in relation to the outsourcing process in the Victoria Police (the Force) and
the Victorian WorkCover Authority (VWA). How these issues were resolved
serves as useful lessons for public sector IT outsourcing generally.

*Outsourcing is not a substitute for an Information Technology Strategy*

Each agency should have a strategic plan and know where IT fits in. If an agency
does not know where it wants to be and how IT is going to help it get there, it is
caller to make good corporate decisions and achieve objectives.

Where outsourcing involves entering into long term contractual arrangements,
it is important for agencies to clearly identify their long-term strategic directions.

\(^7\) *IT Outsourcing: Reducing Costs At Any Cost*, John Houghton, CIRCT, September 1993
Strategic planning includes the clear identification of the objectives of an organisation. This approach enables agencies to assess possible sourcing options and to develop appropriate goals and strategies. If outsourcing of information technology services is considered, it must be evaluated from a position of strength.\textsuperscript{10}

The Committee's consultant noted in her report that:

\textit{Fundamental strategic flaws cannot be sold off, they must be understood and addressed.}\textsuperscript{11}

Contracting out is not necessarily a solution for resolving problem service areas within organisations. If an internal service area is not working effectively, transporting it to an external provider may only magnify the problem if the problems are not first understood and addressed.

The best sourcing strategy, whether insourcing or outsourcing, is determined by taking a broad perspective of the various approaches available to the agency. Learning from the experiences of organisations that have outsourced their information systems will also enhance an agency's strategic position.

The Port of Melbourne Authority (PMA) is a good example of an agency that took a strategic approach by first downsizing (or rightsizing) its IT function and then subsequently turning to outsourcing as a means of possible additional efficiencies. To test the market for outsourcing, the PMA undertook the rigorous process of preparing a specification, calling for tenders and engaging professionals to conduct an independent assessment of the outsourcing option.

In its submission to the Committee, the PMA indicated that:

\textit{doubts were raised about the likelihood of a provider being able to provide the service and make a profit whilst reducing PMA's overall costs because of what was seen as limited opportunities to reduce PMA's existing IT costs any further.}\textsuperscript{12}

\textsuperscript{10} Department of Finance, \textit{Information Technology Outsourcing Best Practice Methodology}, January 1995

\textsuperscript{11} Refer Appendix C, page 49

\textsuperscript{12} Submission of the Port of Melbourne Authority, April 1994
It became clear that it was not financially viable for the PMA to undertake the outsourcing option. Learning from PMA's experience, outsourcing should not be done for a quick fix or without a clear corporate strategy. It is very easy to confuse efficiencies arising from rightsizing IT functions and outsourcing if both occur at the same time.

Clear business-driven objectives

An agency should be perfectly clear about its objectives, both in terms of the specific service areas within the agency and the overall goals of the agency. It should know exactly what services it wants to outsource and anticipate, as much as possible, the impact of all issues that may come up during the life of the contract, such as change in government, agency privatisation and changes in requirements.

An agency with a real commitment to outsourcing will facilitate the tendering process and instil in the vendor a sense of urgency in meeting project deadlines.

On the other hand, vendors are often reluctant to contract for a service if an agency does not define its business objectives, the processes and procedures or the key performance indicators before it investigates the sourcing options. This lack of a structured methodology makes it difficult for vendors to quote a price.13

Use an Extraordinary Events Clause

Agencies entering into high dollar value, multi-year outsourcing arrangements need to build safety valves into those arrangements in case of extraordinary changes in their needs, which can for example arise from changes in government and/or agency privatisation.14 An agency that has locked itself into a long-term contract of say ten years, may find its business, location, assets or service mix change dramatically during the life of the contract. Building "extraordinary events clauses" into the contract is smart business sense and it is designed to ensure flexibility for both the agency and the vendor.

The need for "extraordinary events clauses" spans both the private and public sectors. In his article Get Ready for Bailoutsourcing, Willie Schatz cites the foresightedness of the Meritor Savings Bank. In 1989 the Philadelphia-based bank

13 Refer Appendix C, page 30
14 Get Ready for Bailoutsourcing, Willie Schatz, Computerworld, January 1993

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was worth $12 billion when it signed a 10-year, $300 million contract with Electronic Data Systems Corp (EDS). However, three years into the contract, the Bank had closed down two-thirds of its branches and had shrunk to $4 billion in assets. The Bank suspected that downsizing might take place some time in the future but did not know what form it would take. As a precautionary measure, it put in a provision into the contract about downsizing. So when the management of Meritor Bank decided to rethink the contract to better reflect the Bank's shrunken assets and processing needs, EDS was forced to honour the clause. EDS worked out a more realistic deal that satisfied both partners.

Identify legislative requirements and stakeholders

Before moving towards any outsourcing within the public sector, it is necessary to review and examine all relevant legislation so as to avoid a situation where the required procedures are not followed, albeit unknowingly. Each agency must realise its responsibilities to ensure that the correct procedures are undertaken.

Agencies should identify all the stakeholders, internal and external, and the impact outsourcing may have on stakeholders and their objectives.

The Committee's Consultant recommended in her report that the Victorian government can help in this area by publishing a reference list of legislative requirements and stakeholders with a brief summary of relevant considerations appropriate to outsourcing decisions (refer Chapter 2).

Avoid duplication and waste by learning from experiences of other agencies

Agencies may embark on outsourcing arrangements without a comprehensive understanding of the advantages and disadvantages, decision making frameworks, the process and approaches. This lack of comprehensive knowledge about the process, alternatives and requirements leaves the vendors driving the process by default. Chapter 2 recommends that one agency act as a central reference point for public sector information technology outsourcing and facilitate information sharing concerning best practice in the outsourcing of information technology services.
Explicit expectations stated in the tender documents

The agency should be very precise about its expectations of the vendor in the tender document. By treating the tender document as if it were the contract, the outsourcing agency can be certain of obtaining what it requires.\textsuperscript{15}

A record keeping system which records all queries made by the vendor and the responses given by the outsourcing agency would minimise any potential misunderstanding between the two parties at the negotiating table.

Adequate time and the right resources allocated to the task

Agencies should be aware that tendering can take a great deal of time in the public sector because of the procedures that are required to be followed, the complex nature of these arrangements and the different departments/branches/divisions that may be involved. As agencies are responsible for the accountability of the public's money, the tender process can also fall under close public scrutiny.

Each agency must plan for the need to continuously refine the documentation as issues get resolved and new ones surface. The agency could end up with overworked staff and a great rush to sign the contract if it does not allocate sufficient time and the right resources to negotiate the final agreement. The VWA involved senior management, extending to the Board, extensively during the tender process.\textsuperscript{16} It is equally important to ensure that staff involved in the development of the contract, service level agreement and supporting schedules are not among those who will transfer to the vendor, in order to avoid potential conflicts of interest.

Open and timely communication with employees

The loss of key technical and specialist staff from agencies which outsource is a major area for concern and attention. The poor morale and stress associated with organisational re-engineering may also result in lower productivity, more sick leave, more accidents, poorer quality work, loss of self esteem, low morale and loss of motivation.

\textsuperscript{15} Refer Appendix C, page 35
\textsuperscript{16} Ibid, page 13
Open and timely communication with employees could prevent delays in the implementation of the project or loss of key staff needed by the agency or outsourcing vendor to ensure continuity of service. Staff morale can be upheld through constant communication with the potentially affected employees. Positive motivation can be provided by outlining to the affected staff their career options and opportunities and the benefits of outsourcing to the agency and to each individual. This approach reduces the level of uncertainty which often leads to high staff turnover or de-motivation.

The Committee’s consultant noted in her report that VWA handled its staff relations very efficiently and kept its affected employees informed of the status of the outsourcing project at regular intervals during the outsourcing process. Since most of the experienced staff transferred to the vendor, the transition did not cause any operational disruptions.17

If the outsourcing involves the transfer of staff to the outsourcing vendor, care must be taken to ensure that the displaced staff are not unfairly treated. The outsourcing agency must have the policies, the severance packages or the transition policies in place, well defined, articulated and communicated in order to ensure a successful outsourcing experience; the turmoil that can result from employee mismanagement can be significant and can derail the process.18

When an agency outsources its information technology division, vendors may not want to take on the agency’s IT staff or may only take them on a short-term contract. Where this arrangement is unacceptable the agency could make it a non-negotiable position. Moreover it may be very important for the vendor to take on knowledgeable staff and the agency has to make it attractive for its staff to take up employment with the outsourcing vendor.

Retain skilled staff

It is important to retain sufficiently knowledgeable and skilled people to manage the outsourcing vendor and to look after the needs of users within the agency. The agency should use experienced personnel who will not be transferred to the vendor to define the performance levels and how they will be objectively measured. In this way, the agency’s position would not be prejudiced (refer Chapter 6).

17 Refer Appendix C, page 19
18 Conference on Outsourcing, Evaluation and Contract Management, Melbourne, December 1994
Use experienced consultants where appropriate

It is to the agency's benefit to employ expertise equal to the outsourcing vendor's and to have both legal and technical skills represented to ensure its interests are protected. The outsourcing vendor's prime concern must be to make profit and stay in business and an agency cannot expect the vendor to put its interests behind the agency's. It is important, therefore, to retain experienced legal counsel to prepare a comprehensive tender document and to put in a strong negotiation position.

External consultants can provide significant benefits by determining the value of the services outsourced, in being independent and providing additional personnel resources. Unless sufficient resources are available within the agency to handle negotiations and related work, it is advisable to retain consultants to provide an alternative view and make recommendations regarding contract issues and administration. Agencies considering outsourcing require many diverse skills such as project management, market valuation, tendering, legal, technical, negotiation, strategic planning and change agent skills. It is also important that consultants are not let go of too early. Guidelines are available for the engagement of consultants, refer Chapter 2.

Ensure service quality

An important issue is how contracting out affects the quality of service. The selection of the vendor should be based not just on the lowest price offered but also on the quality aspects of the service. The agency should assess the value that the vendor offers in terms of knowledge of the agency's business and public sector processes, the range of skills and technology that the vendor possesses, the responsiveness to change and the willingness to undertake continuous improvement.

The agency should specify in the contract, where feasible, the mechanisms to control the quality of service and the techniques to measure and evaluate quality (refer Chapter 4).

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19 Refer Appendix C, page 16
20 Ibid, page 32
Finding 3.1

The Committee finds the following key principles provide a sound basis for public sector management in undertaking the process of information technology outsourcing, and acknowledges that at times individual key principles may be in conflict leading to critical value judgements:

a) Outsourcing is not a substitute for an Information Technology Strategy;

b) Need clear business-driven objectives, both in terms of the specific service to be outsourced and the overall goals of the agency;

c) Use Extraordinary Events Clauses;

d) Value for the public's money, both on a short and long term perspective;

e) Identify legislative requirements and stakeholders, including all related policies and guidelines;

f) Avoid duplication and waste by learning from experiences of other agencies, by participating in active information sharing;

g) Employ open and effective competition;

h) Support local industry;

i) Set out explicit expectations in the tender documents;

j) Assign adequate time and the right resources to the task;

k) Open and timely communication with employees;

l) Retain sufficiently skilled staff;

m) Use experienced consultants, with technical and legal skills as required; and,

n) Ensure service quality.
CHAPTER 4: PERFORMANCE MANAGEMENT

4.1 Introduction

Performance evaluation is an important element of public sector management. As public sector managers are given more discretion in the manner in which scarce public resources are being utilised, it is vital for management accountability to be increased through improved reporting and performance measurement. This is no less important for outsourced information technology services.

The Victorian Government's target for the performance standard of Information Technology (IT) facilities is that 90 per cent of all IT facilities and services should be consistent with industry standards by December 1994.¹

4.2 Performance Measures

The Department of Finance Customer Service Policy (IT&T-15)² addresses the issue of IT industry-accepted performance measures and provides guidance on a basic set of measures and minimum levels of service that agencies should be seeking for each of those measures. The Customer Service Policy identifies several characteristics which performance measures should have:

- usefulness - indicators should contain information that is important to know and not just information that is easy to quantify;

- validity - indicators should demonstrate the real performance of the function being measured;

- reliability - indicators should provide information that can be validated and reproduced;

² Information Technology and Telecommunications Policies and Guidelines IT&T-15: Customer Service Policy
Information Technology in the Public Sector

- timeliness - indicators should deliver information to clients, who need the information, when they need it and in the form they require; and

- cost-effectiveness - the cost of collecting, analysing and reporting the measure should be reasonable compared to the benefits gained.

The Committee's Ninth Report to Parliament - Final Report on the 1993-94 Budget Estimates and Outcomes found:

Meaningful quantitative and qualitative performance measures are critical for the analysis of the efficiency and effectiveness of service delivery and for the identification of achievements from improved management practices.\(^3\)

The Committee, also in its Ninth Report, found that the general issue of performance measurement needs further research and development and will continue to evolve over time. The Committee notes that the Department of the Treasury has recently sought submissions from consultants to work on a project titled Specification of Outputs and Performance Measurement Project. That Project seeks to develop an output specification methodology, an output performance standard methodology, a guidance manual and to provide training to key Treasury staff.\(^4\)

The Committee's Ninth Report stated that performance measures, such as output and outcome measures, should be (wherever possible):

- a mix of quantitative and qualitative measures;

- linked directly with program objectives;

- clearly related to the cost of service delivery;

- relevant, meaningful and measurable;

- set against benchmarks, targets and prior period results;

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\(^4\) Advertisement in The Age, 8 April 1995, page 8
• simple as possible;
• constrained to a minimum number of key indicators for the purposes of reporting to the Parliament;
• standardised for comparative purposes;
• required by legislation;
• prominently presented in the Budget Papers and each agency's annual report;
• audited by the Auditor-General, who should express an opinion on the performance indicators as to their relevance and appropriateness; and
• developed under the general guidance of the Department of the Treasury, which should have overall responsibility for their development within the public sector.\footnote{Public Accounts and Estimates Committee, \textit{Final Report on the 1993-94 Budget Estimates and Outcomes}, November 1994, page 32-33}

While the foregoing attributes of performance measures may not all be directly relevant to the performance management of outsourced information technology services, they comprise a sound framework for the development of such performance measures.

The Committee's Consultant's report notes that the objectives of reporting on performance should be to:
• determine whether the vendor is performing satisfactorily; and
• determine whether the agency is using resources wisely.\footnote{Refer Appendix C, page 41}

Further the Committee's consultant commented:
• People manage by what they are measured by; and
• You can't manage what you can't measure.\footnote{Ibid, page 77}
In paragraph 4.3 the Committee highlights some best practice issues that agencies should consider in the evaluation of vendor performance.

4.3 Key Issues in Best Practice Performance Management

To determine whether agency objectives for outsourcing have been achieved, appropriate policies, systems and procedures must be developed to enable management to monitor the performance and progress of the outsourcing arrangements. As part of an agency's public accountability, it should also include its outsourcing achievements in its Annual Report to the Parliament.8

*Review performance evaluation procedures, including benchmarks and current service levels, before evaluating outsourcing options*

If not already in operation, agencies should establish performance evaluation procedures, including benchmarking, before they go to tender. Agencies will be less able to effectively evaluate what is an acceptable level of service, or how proposed service levels compare with former and industry service levels, after the vendor has begun delivery if those procedures were not already in place.

Agencies are in a better position to judge the vendor's actual or proposed performance if they have been previously measuring their own performance before outsourcing. This enables an agency to clearly determine if outsourcing has resulted in a more efficient provision of the service. Further, having established and proven performance criteria before seeking outsourcing proposals also helps the agency to highlight specific performance requirements to outsourcing proponents early in the selection process and to ultimately make them a contractual obligation.9

The Port of Melbourne Authority (PMA) is an agency that downsized its IT function first and then subsequently turned to outsourcing as a further means of possible additional efficiencies. To test the market for outsourcing, the PMA prepared a specification, which covered existing service levels and expectations and documented all of the current site activities and resource utilisation, and invited Expressions of Interest in providing IT services to PMA.

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9 Refer Appendix C, page 40
In its submission to the Committee's inquiry into Information Technology in the Public Sector (April 1994), the PMA indicated that:

One of the key outcomes from the outsourcing investigation was the fact that there were no organisations that could really match the cost structures for an existing open systems site which had already been through a rigorous downsizing phase. Given that outsourcing really depends on being able to save on existing "fat" within the organisation, this should not have been a surprise.

On the advice of its consultants, the PMA decided that outsourcing was not an economically viable option. This however, will not always be the case for all agencies, but nevertheless the approach taken by the PMA is instructive.

*Performance measures with direct linkage to agency objectives and a focus on outputs*

The measurement of vendor performance should also be linked to the agency's business objectives. Performance indicators used to assess outsourcing vendors should link directly to corporate objectives.10 Meaningful corporate objective-orientated performance measures require careful design and refinement. Further performance measures should focus on outputs, not on process.

*Comprehensive performance measures and targets, which can adapt to future technological improvements: a key part of the agreed contractual arrangements*

 Outsourcing vendors may not perform up to expectations, could contribute to high error rates or prove unresponsive to user requests. Preventing vendor non-performance depends upon establishing clear service level agreements within the outsourcing contract. Importantly the service level agreement should also make provision for the impact of future technological and other improvements in software and hardware capabilities on performance measures and targets.11

Service level measures require vendors to deliver a defined amount of output in a set period of time. For every service that the vendor is expected to provide, a service level measure should clearly express the required level of service. For example, if the vendor agrees to process 90 per cent of a certain transaction type

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10 Refer Appendix C, page 39
11 Ibid, page 76
within three days, then the agency should also require that the remaining 10 percent be completed within say five days and that any exceptions be fully documented and reported.\textsuperscript{12} The best way to avoid having unfulfilled obligations is for the agency to specify 100 percent service accountability through its service level agreement.

\textit{Use experienced and independent personnel to set desired performance levels}

The Victorian WorkCover Authority (VWA) utilised an experienced systems programmer, who chose not to transfer to the vendor, to negotiate the data centre operations performance levels. Consequently the performance levels were very well defined and have proven to be most effective and objective.\textsuperscript{13} WorkCover has retained the services of the programmer to come in once a month to evaluate the performance levels achieved.

If skilled and objective technical personnel are not available internally, the agency should bring in external consultants to help it to define the measurement of the vendor's performance.

\textit{Reward above standard performance, penalise below standard performance}

Performance sanctions should be built into the contract, which make the contractor liable to meet the required service levels of the contract or incur cost penalties. Agencies should also have positive incentives in place to reward above targeted performance levels.\textsuperscript{14}

The vendor should be given sufficient time to correct any performance deficiency. For example, VWA allows the vendor up to three months to fix performance problems, failing which VWA has the option of terminating the contract. Fee abatement penalties apply where the vendor's efforts to rectify performance deficiencies have been unsuccessful.\textsuperscript{15}

\textsuperscript{12} \textit{The Information Systems Outsourcing Bandwagon,} M C Lacity & R Hirschheim, \textit{Sloan Management Review,} Fall 1993
\textsuperscript{13} Refer Appendix C, page 20
\textsuperscript{14} Ibid, page 41
\textsuperscript{15} Ibid, page 20
Develop appropriate reporting mechanisms for all performance measures

During the negotiations agencies may spend a significant amount of time developing performance measures but fail to require the vendor to report on all measures or ensure appropriate systems are in place to capture necessary data. Service delivery reports should document the targeted service level, the actual performance for the current period and a trend analysis of the performance from previous reporting periods. An investment in the development of appropriate reporting systems, even if agencies have to pay for the creation of these reports, is well worth it as service levels cannot be monitored without an appropriate reporting system.16

The Force's vendor prepares a weekly report providing statistics on performance measures at the help desk. It also looks at initiatives being undertaken and issues that need to be brought to the attention of management.17 The vendor also conducts a quarterly survey to assess the quality of the service to the Force and makes suggestions on how to improve the service.

Conduct post implementation reviews: part of continuous improvement and quality control procedures

Post implementation reviews enable agencies to evaluate whether their objectives have been achieved and whether the strategies by which they had anticipated achieving those objectives have been effective. This is not a once in a lifetime event, it should be part of an ongoing process of continuous improvement and quality control.18

The Force hired consultants to conduct a review of its outsourcing arrangements. The report of the consultants provided a thorough evaluation of the vendor's and the Force's performance and made recommendations relating to reject and feedback systems and quality control.

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16 The Information Systems Outsourcing Bandwagon, M C Lacity & R Hirschheim, Sloan Management Review, Fall 1993
17 Refer Appendix C, page 40
18 Ibid, page 41
Finding 4.7

The Committee finds there are several sources of performance evaluation best practice advice available to public sector agencies, including guidelines issued and under development by the Department of the Treasury and Finance. The Committee highlights the following best practice issues for agencies to consider for the effective performance management of outsourced information technology services:

a) review performance evaluation procedures, including benchmarks and current service levels, before evaluating outsourcing options;

b) performance measures must have a direct linkage to agency objectives and focus on outputs;

c) specify comprehensive performance measures and targets, which can adapt to future technological improvements: a key part of the agreed contractual arrangements;

d) use experienced and independent personnel to set desired performance levels;

e) reward above standard performance, penalise below standard performance;

f) develop and agree appropriate reporting mechanisms for all performance measures; and

g) conduct post implementation reviews, as part of continuous improvement and quality control procedures.
5.1 Introduction

As part of the review of the outsourcing arrangements at the Victorian WorkCover Authority (VWA) and the Force, the Committee’s consultant undertook an assessment of the fee structure. The aim of that review was to ensure that fees have been set in a manner which is conducive to minimising overall costs to the agency over the term of the contract. The consultant’s report also provides advice on whether the Information Technology (IT) arrangements at the two agencies are cost effective when compared to their projections and former cost structures.¹

The outsourcing arrangement at VWA was not primarily motivated by cost considerations; rather, it was strategically driven.² VWA’s cost/benefit analysis yielded only marginal projected savings. VWA had initiated outsourcing as part of its strategic realignment. The contract was awarded to the vendor who best met the strategic goals of VWA (as a regulatory body).

The Force’s outsourcing initiatives arose primarily from the desire to assist in the implementation of the Victorian Government’s and the Department of Justice’s outsourcing policy. The contract was awarded to the complying tender with the lowest price.³

Agencies can ensure that their expectations are realised and interests protected by signing a tight outsourcing contract. The contract is the only mechanism that establishes a balance of power in an outsourcing relationship and is the key to a successful outsourcing relationship.⁴ The following paragraph discusses some best practice cost issues, with a view to their contractual implications, that agencies should consider in order to protect their interests when outsourcing.

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¹ Refer Appendix C, pages 22 to 25, 42 to 45 and 71 to 73
² Ibid, page 10
³ Ibid, page 32
⁴ The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
5.2 Best Practice Issues in Cost Management

Cost is an important factor in outsourcing, but not above all else and not the only factor.

The Committee's Consultant cautions against relying on cost savings as a basis for outsourcing because these savings are often not delivered. Cost overruns can occur because of unexpected developments not specified in the contract. In addition costs are sometimes difficult to gather and measure both internally and based on vendor proposals. Agencies must however, make outsourcing decisions based on a careful evaluation which includes an analysis of the full internal cost against vendor/s offers, on comparable terms. In its First Report to the Parliament, the Committee noted that the relative cost efficiency of any project should be only one of several considerations to be undertaken in assessing whether to proceed with the project.

Organisations sometimes outsource information technology services for reasons other than cost, including, for example, achieving greater reliability and/or access to disaster recovery at a lower cost than can be achieved in-house. As noted in paragraph 5.1, the VWA's outsourcing arrangement was strategically driven. The overriding factor which influenced the decision to outsource was that the provision of a transaction processing system was not consistent with VWA's role as a regulator. The contract was ultimately awarded to the vendor that had the best offer and who met the strategic goals of the VWA.

Take all relevant direct and indirect costs into account, use sensitivity analyses.

When outsourcing of information technology services is being considered, agencies should be careful to identify all relevant costs. This will enable an objective analysis of vendor proposals and support comparisons of projected future costs under outsourcing with current costs. When conducting a cost analysis, the agency should include all direct and indirect costs (both operating and capital) incurred in the outsourcing process, starting from the feasibility stage through to the implementation phase.

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5 Refer Appendix C, page 71
6 Public Accounts and Estimates Committee, First Report to the Parliament, Private Investment in the Provision of Public Infrastructure, November 1993
Cost Issues

Cost refers not only to the vendor's charges but also to the cost of internal resources required to prepare and conduct the tender, to assist in the implementation phase and to manage, train (where applicable) and assess the service providers. It may also be prudent to include an amount for contingencies, inflation and other relevant variables.

The table below illustrates the different types of costs that should be taken into account in a cost comparison when evaluating vendor proposals.

Table 5.1
Cost Types for a Comparison between Internal and External Provision of Information Technology Services

<table>
<thead>
<tr>
<th>Cost of Internal Provision</th>
<th>Cost of External Provision</th>
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<tbody>
<tr>
<td>• Salaries and wages (including on-costs and paid overtime)</td>
<td>• Vendor charges</td>
</tr>
<tr>
<td>• Materials and operating costs</td>
<td>• Additional agency costs:</td>
</tr>
<tr>
<td>• Capital costs</td>
<td>a) Transition costs</td>
</tr>
<tr>
<td>• Depreciation of owned assets</td>
<td>b) Monitoring costs</td>
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<tr>
<td>• Accommodation costs</td>
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<tr>
<td>• Overheads</td>
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<tr>
<td>• Hidden and/or dispersed costs</td>
<td></td>
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<tr>
<td>• Cost of existing inefficiencies</td>
<td></td>
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</tbody>
</table>

The following is a brief overview of the cost types, direct or indirect, that an agency should be aware of in computing the total cost of in-house provision of IT services:

• **Salaries and wages (including on-costs and paid overtime)**
  This category includes all salaries and wages costs associated with the IT function. The Committee's Consultant noted that overtime is often overlooked as part of the analysis of the cost of providing IT services.\(^7\) Paid overtime should always be factored into any cost analysis of sourcing proposals. Where overtime is not paid or claimed by salaried employees it represents an additional service without additional cost for the agency. A vendor on the other hand, will charge based on the cost per unit of service.

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\(^7\) Refer Appendix C, page 73
The inclusion of an imputed cost for unpaid overtime in a cost comparison
will distort the cost relativities between internal provision and external
provision and therefore should not be taken into account. On the other hand,
if agencies are attempting to establish if vendor proposals represent value for
money, rather than whether they should accept a proposal on cost grounds,
then an imputed cost for unpaid overtime will assist agencies to establish the
cost of efficiently provided services.

The on-costs associated with salaries and wages comprise a significant
proportion of total labour cost and should not be overlooked. The costing
guidelines in the Information Technology Outsourcing Best Practice
Methodology, issued by the former Department of Finance, provide the
following guidelines for costing these additional elements of labour costs:

- the average WorkCover rate is 3 per cent of direct salaries and wages;

- the superannuation contributions of New or Revised Scheme members
  may be costed at a flat rate of 13 per cent;

- the holiday loading allowance for employees under federal awards is 1.4
  per cent; and

- the provision for long service leave is 2.5 per cent of annual salary.

• Materials and operating costs
  This category comprises all materials associated with the provision of the IT
  service and miscellaneous operating expenses, including items such as
  hardware and software maintenance, travel expenses, stationery and
  incidentals.

• Capital costs
  Where cost forecasts include the purchase of capital items, with a unit value
  of say $5000 or more, these outlays should be replaced with an appropriate
capital charge. The former Department of Finance's costing guidelines\(^8\)
provide for a return of 8 per cent per annum on assets to cover the
opportunity cost of capital to the government. The Committee believes that
the cost of capital should relate to future asset purchases and existing assets

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\(^8\) Department of Finance, Information Technology Outsourcing Best Practice Methodology,
January 1995
required to provide IT services. It should not apply to existing assets not required to provide IT services (but perhaps still deemed part of the IT area's asset base) as calculating the opportunity cost of those assets is irrelevant to decisions about the future.

- **Depreciation of owned assets**
The former Department of Finance's costing guidelines\(^9\) require agencies to determine the replacement cost of its assets and, after deducting estimated residual values at the end of the working lives of the assets, to calculate annual depreciation charges. These depreciation charges are to be included when assessing the total cost of internal IT facilities.

In the Committee's view, depreciation on the remaining useful life of proposed and existing assets required to provide IT services should be included in the analysis. Further, the disposal value and the expected return on the capital generated from the disposal of such assets, are also relevant factors when evaluating alternative courses of action. Depreciation charges and disposal values for existing assets not required to provide IT services (but perhaps still deemed part of the IT area's asset base) is, on the other hand, irrelevant when evaluating alternative courses of action.

- **Accommodation costs**
The former Department of Finance's costing guidelines\(^10\) specify that, where possible, actual accommodation and property related costs should be reflected in the full cost of internally provided IT functions. If only a portion of the premises is used for the IT activity, costs should be allocated on a pro-rata basis according to the proportion of floor space used (or other method). The guidelines also provides for an allowance for general building out-goings such as air-conditioning maintenance, cleaning, security and general maintenance. Again these costs should be allocated on a proportional basis as appropriate.

- **Overheads**
Some overhead costs will be transferred to the vendor and may include equipment and software maintenance, IT personnel training and cost of utilities. They represent a potential saving of outsourcing which should be included as a cost of internal provision in a cost comparison.

\(^9\) Ibid
\(^10\) Ibid
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Not all overhead costs can be transferred to an outsourcing vendor or eliminated when an internal function is contracted out. The cost comparison should only include those costs that will be avoided if the IT function is outsourced.

- **Hidden and/or dispersed costs**
  Identification of all IT costs is often made difficult by the dispersal of costs throughout the organisation.\(^{11}\) For instance, data centre accommodation costs may be found in the corporate facilities budget, user help desk costs may appear in the administrative budget, and training expenses may surface in the human resources budget. It is therefore important for the outsourcing agency to conduct a rigorous examination of the current cost of IT services, paying special attention to hidden and dispersed costs. These costs should, where appropriate, be included in the cost analysis.

- **Cost of existing inefficiencies**
  Agencies need to be clear on the reasons why outsourcing proposals may be cheaper on a cost basis. One possible cause may be that the existing internal arrangements contain a number of inefficiencies. The effect of making a cost comparison between an inefficient internal arrangement with that proposed by a vendor is that the value added by the vendor may become confused with those savings which the agency should be able to achieve by restructuring internally. It is important to establish for the purposes of a cost comparison if the vendor is able to deliver savings that are in excess of existing internal inefficiencies. If not, it may be in the agency's interest to restructure internally unless other factors outweigh cost considerations.

The Committee's Consultant proposes that the cost of existing inefficiencies be removed from cost comparisons. This amounts to a comparison of 'what should be' with 'what is proposed by the vendor'.\(^{12}\) An equally instructive alternative, but perhaps more reliable, is to compare 'what is', after downsizing or restructure, with 'what is proposed by the vendor'. This, in fact, was the approach adopted by the Port of Melbourne Authority (PMA). The PMA indicated in its submission to the Committee that having gone through a rigorous downsizing phase, no vendor could reduce PMA's existing IT costs any further.\(^{13}\)

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\(^{11}\) Refer Appendix C, page 68

\(^{12}\) Ibid, page 72

\(^{13}\) Submission by Port of Melbourne Authority, April 1994
The following is a list of cost types, direct or indirect, that an agency will incur as a consequence of outsourcing (and that would not form part of the vendor's proposal). These costs should be included in a cost comparison as an additional cost (to the agency) of outsourcing proposals.

- **Transition costs**
  Making the transition to outsource information technology incurs several additional costs which should be factored into the analysis. These costs include the cost of information gathering, valuing equipment, hiring specialist services, refitting facilities and personnel costs (redundancy and leave payouts). In addition, some owned or leased equipment, network contracts and software licenses might not be useable under outsourcing. The cost of these assets should be included as outsourcing transition costs, (refer below).  

The *Contracting out Guidelines* require agencies to incorporate the costs associated with employee terminations when evaluating outsourcing proposals. The guidelines, however, do not specify which redundancy costs ought to be included. A portion of redundancy package pay-outs relate to accumulated liabilities such as superannuation, long service leave and annual leave. In the Committee's view, these costs relate to the past and at least, in part, will be paid regardless of future sourcing decisions. Clearly, a change in the timing of these payments will occur as a consequence of redundancy caused by outsourcing. That part of redundancy costs which are payable regardless of future sourcing decisions are irrelevant when evaluating future alternatives and should therefore not be incorporated into the costings. The remaining redundancy costs, however, are relevant to the decision and should be included.

Some equipment leases might not be transferable to the vendor, either due to lease provisions or because lease payments for the remainder of the term exceed the current market value of the equipment. Further, certain network contracts might not be transferable to the outsourcing vendor, either due to contract terms or because the facilities would be redundant to new facilities to be provided by the vendor. These costs are not relevant to future sourcing

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15 Office of State Owned Enterprises, Contracting out Guidelines, February 1994
decisions, being the product of past decisions and a sunk cost, and will be incurred regardless of sourcing. They should only be factored into the cost analysis as part of the cost of outsourcing where such sunk costs have been included in the cost of internal provision. In so doing, this removes the effect of these costs from the analysis as they are already part of the cost of internal provision. This approach is consistent with that recommended by the Committee's Consultant (in respect of retained costs).17

Licenses for some systems software might not be transferable to the outsourcing vendor because of license terms or redundancy with existing vendor licenses. The cost of these abandoned software licenses should be charged as outsourcing transition costs for the same reasons as for the equipment leases referred to above.

- **Monitoring costs**
  Agencies may need to redirect internal resources and/or hire experienced or specialist personnel to define their business requirements, negotiate and manage the contract, measure performance on an ongoing basis and resolve problems. Expert assistance may also be required to ensure proper internal controls, billing practices and compliance with clauses in the contract such as technology refreshment. These costs need to be included in the cost analysis of the agency as additional costs consequent to outsourcing.

*Involve independent costing, legal, technical and other expertise, internally or externally sourced, to advise and review progress*

Outsourcing vendors usually have a host of technical and legal experts to represent their interests during negotiations. Agencies should ensure that they have access to appropriate expertise to protect their interests. Although buying that expertise through consultants may be costly at times, it may also be unavoidable and may help prevent costly mistakes. It should be noted that advisory services are provided by the various central agencies and these services should be fully used by agencies intending to outsource.

The Information Technology Policy Division of the former Department of Finance provides policy advice on IT&T issues within the public sector and also ensures consistency of approach with outsourcing via membership on

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17 Refer Appendix C, page 71
Departmental Steering Committees. In addition, the *Guidelines for the Engagement and Management of Consultants* were developed by the Office of Public Sector Management (OPSM) in the Department of the Premier and Cabinet to promote best practice in the engagement and management of consultants. OPSM continues to provide a central advisory service to all departments and agencies to answer any queries arising from these Guidelines. The Guidelines also provide a sample contract for the engagement of consultants, (refer to Appendix 2 of the Guidelines).

Various fee-setting models exist - each pose potentially significant risks and benefits - must be sufficiently flexible and suited to current and projected needs of agencies

Various fee-setting models exist, such as cost plus, fixed, variable, take or pay, and a variety of combinations. Each pose potentially significant risks and benefits. The model used must be sufficiently flexible and suit current and projected needs of the agency. Agencies should work out a pricing structure with the vendor which provides appropriate control over costs for the agency and will provide value for money. In addition, pre-outsourcing costs should not be automatically assumed to be a reasonable basis upon which to judge proposed pricing arrangements. Further the agreement should provide for regular reviews of pricing levels and structures.

The table below summarises some of the risks and benefits of two types of fee-setting structures, each having its own advantages and disadvantages.

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18 Submission of Department of Finance, dated 19 April 1994
### Table 5.2
Types of Cost Structures

<table>
<thead>
<tr>
<th>Model</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Price</td>
<td>Costs and responsibilities specified;</td>
<td>May not provide for rapid technological and demand changes or keep up to date</td>
</tr>
<tr>
<td></td>
<td>Facilitates forecasting and financial planning;</td>
<td>with technological and demand changes;</td>
</tr>
<tr>
<td></td>
<td>Locked-in fee rates may be favourable in long run;</td>
<td>Locked-in fee rates may become unfavourable in long run;</td>
</tr>
<tr>
<td></td>
<td>Cost effective when agency's needs likely to expand over term of contract</td>
<td>Costly when agency's needs shrink over time;</td>
</tr>
<tr>
<td></td>
<td>and can do so without price change;</td>
<td>May result in the agency being locked into a particular vendor;</td>
</tr>
<tr>
<td></td>
<td>May assist in locking in a particular vendor;</td>
<td>Quality and service levels may decline;</td>
</tr>
<tr>
<td>Cost Plus (e.g. based on hours worked, material costs, overheads and margin)</td>
<td>Flexibility to add or delete services based on demand;</td>
<td>May encourage excessive use of IT services;</td>
</tr>
<tr>
<td></td>
<td>No minimum use requirement;</td>
<td>May encourage excessive IT costs;</td>
</tr>
<tr>
<td></td>
<td>Agency can match supply and demand without restrictions;</td>
<td>May ignore economies of scale in the supply of certain IT services;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May not assist in locking in a particular vendor;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May become uneconomic in light of rapid technological change or encourage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>uneconomic practices within the vendor;</td>
</tr>
</tbody>
</table>

In the case of the Force, both the Help Desk and Data Entry Bureau services are provided at an hourly rate per contractor, that is fixed for the term of the contract.

Agencies should account for unexpected or unanticipated events such as significant service requirement changes and be aware of their impact on the base charges. Agencies may need to protect themselves from excessive charges by including a clause in the contractual arrangements for severe volume fluctuations caused by, for example, acquisitions, mergers or sales of business units. In these circumstances agencies may require a major change in the fixed-fee expense and, in turn, the vendor may insist on several months' notice to
allow time to redirect resources and/or on charging the agency a transition fee for the volume adjustment.\textsuperscript{19}

*Termination clauses and fees require careful consideration*

Termination may arise as a result of the expiry of a fixed term, the expiry of a specified transaction, breach of the agreement or insolvency of the vendor. Most contracts require either party to notify the other within a specified time period of such events occurring.

It is important that termination costs be spelled out in the outsourcing contract and the conditions under which they are applicable. Termination costs can vary widely depending on the business situations of the parties involved, the amount paid by the outsourcing vendor for user assets, the length of the contract, the point of termination, which party requests termination and the cause of termination. Without adequate coverage in the contract, should the agency terminate the contract, it may be liable to pay the vendor the entire payment stream for the full contract term.\textsuperscript{20}

Agencies may impose fee abatement penalties for persistent non-performance, which may eventually lead to termination. In turn, vendors may seek to include a termination fee based on recovering their initial investment and even loss of prospective profits. Agencies should safeguard themselves from unreasonable demands of vendors by including carefully worded termination clauses in their contract. The following example is provided by the Sample General Conditions of Agreement (Appendix 2) of the OPSM Guidelines for the Engagement and Management of Consultants:

> The Secretary at any time upon giving written notice to the Consultant of its intention so to do may abrogate or constrict the Agreement or any part or further part thereof and upon such notice being given the Consultant shall cease or reduce work according to the tenor of the notice and shall forthwith do everything possible to mitigate the losses consequent thereto.

\textsuperscript{20} *Economics of Outsourcing - Paper on Financial Analysis of an Outsourcing Agreement*, Rob Westcott, TTC Conference, March 1993
In that event the Consultant may submit a claim for compensation and the Department shall pay to the Consultant such sums as are fair and reasonable in respect of the loss or damage sustained by the Consultant in unavoidable circumstances provided always the Consultants shall not be entitled for the loss of prospective profits.

Termination clauses are critical to the flexibility available to agencies during the life of the contract; they may also become a trade-off to lock in favourable fee rates. Nevertheless they require careful consideration and a weighing up of the pros and cons.

Low bids do not necessarily mean greater efficiency

If a vendor submits a bid that undercuts current IT costs and, in particular, well undercuts other tenderers, the agency needs to understand how the vendor managed to reduce costs. The vendor may be inherently more efficient, but this should not be accepted without scrutiny. Agencies need to be satisfied, for example, that the vendor:

• is not proposing a dramatically different service to that required;

• is not proposing to make up baseline losses through excessive variations and other add-ons later, or to charge excessively for other additional resources such as tape mounts or disk space; and

• can in fact deliver the service offered at the cost quoted. It may be that the vendor has underestimated the task due to lack of experience in the field concerned and this, at best, will create inconvenience for the agency at a later date when the vendor fails.

Lacity and Hirschheim offer three approaches commonly used by vendors to reduce IT costs. First, the vendor may offer a purely financial package that artificially understates the cost of outsourcing by requiring separate cash infusions for IT assets and postponement of payments until the end of the contract. These arrangements are not based on sound IT management decisions but are solely a moneitary arrangement.

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21 The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
Secondly, outsourcing vendors can often achieve savings simply by taking advantage of improvements in price-performance ratios. Lacity and Hirschheim note that such price-performance improvements can be quite significant; a unit of today's computing resources may cost 20 per cent to 30 per cent less the following year. Vendors know that cost per resource unit falls significantly over time. They can take over a data centre, offer 10 per cent savings over a ten-year period, and enjoy the profits generated by riding the price-performance curve.

Thirdly, the vendor may initiate cost-saving strategies that the agency could implement on its own. Agencies which run multiple data centres could reduce overhead costs by consolidating data centres. Optimising current resource use by getting rid of redundant hardware and software will also enable the agency to achieve savings on its own.

Analysis of the cost savings offered by a vendor proposal should be assessed not just against current operations, but also against an achievable scenario of improved internal operations. In testing the market for contracting out its IT function, the Port of Melbourne Authority (PMA) decided that no vendor could offer it any further cost savings, having already downsized itself.\textsuperscript{22}

\textit{Be wary of vendor mark-ups for supplies}

Vendors have been known to add up to 20 per cent of an item's price to cover administrative costs.\textsuperscript{23} Vendors are assumed to have lower average hardware and software costs due to volume discounts and the sharing of software lease costs over multiple customers. Yet vendors are known to impose a mark-up in order to increase their gross margins. For instance, they may charge excess for tape mounts or disk space. The VWA has ensured that there is no mark-up for reimburseable expenses or for procurement of supplies by the vendor.\textsuperscript{24}

\textit{Ensure competition in bids to get the best possible price}

Agencies need to be sure that there is sufficient competition in the provision of bids for the services they require, as this will help to ensure that vendors are encouraged to pass on the greatest possible portion of any potential cost savings.

\textsuperscript{22} Submission by the Port of Melbourne Authority, April 1994
\textsuperscript{23} Refer Appendix C, page 23
\textsuperscript{24} Ibid, page 22
to the agency. It is not enough to know that there are economies of scale to be enjoyed; the fullest possible extent of those savings must be passed on to the agency. If the vendor is in a near monopoly position, such as a sole tenderer or supplier, it can reap those economies without the pressure to pass them on to agencies.

Ensure *all activities and related charges are detailed in the contractual arrangements - assume nothing*.

The scope of the function to be contracted out must be clearly defined at the outset. This involves critically analysing the IT function to identify current service levels, excess service levels, unnecessary activities, possible improvements and expected benefits. The emphasis must be on what services are required, rather than the services currently provided. The agency's required information services should be documented as the baseline period, which is the yardstick that determines what services the vendor is obligated to provide to the customer. The vendor may charge a fixed fee for delivering this bundle of services and an excess fee for services above and beyond the baseline. Failure to measure all the required information services during the baseline period will result in service problems and excess charges.

In full-blown outsourcing arrangements, agencies may neglect to account for some activities for the following reasons:

- the services are not reflected in current IT budgets;
- they are not currently monitored or measured; or
- agencies may assume they fall within other service areas.

If the outsourcing agency does not document and measure these residual services, the vendor will not include them in the base charge. Residual services may include such items as disaster recovery testing, environmental scanning for new hardware and software, microcomputer support (installation, training, repair), office relocation services such as rewiring, and node changes and teleconferencing support.

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25 *IT Outsourcing: Reducing Costs At Any Cost*, John W. Houghton, CIRCIT September 1993
26 Office of State Owned Enterprises, *Contracting out Guidelines*, February 1994
Cost Issues

All services covered under the base charge should be clearly defined. The agency should be very specific about what services are included in the base charges and what will be charged separately. Any services not documented in the contract are likely to attract excess fees.

After the agreement is signed the vendor may not provide the level of service the customer expects or understood to be included. The vendor may rely on the expressed written conditions of the contract as the only source of obligation. Customers may subsequently be charged excess fees for services that they assumed were in the contract.27

Agencies should protect their investment in the vendor

Where agencies have to invest time and resources in training the vendor's personnel, it should ensure that it is compensated for this investment or that it will continue to enjoy the benefit of that training. The agency could include a non-billable period in the contract to reflect the time required for the vendor's personnel to become effective service providers, a reimbursement of the agency's training costs or penalty if key personnel are replaced.28

The Consultant's review of outsourcing arrangements at the Force revealed that the Help Desk manager, whom the Force trained, is now marketing his services elsewhere as a leading consultant in help desk activities. The Force may not be able to benefit from its investment in the vendor's personnel as the contract was only for one year.

Be wary of vendor standard contracts

Vendors typically offer a generic contract to their customers. The standard contract obligates the vendor to perform the same level of service that the agency's internal IT department provides during a baseline period. Typically these contracts do not set performance standards or include penalty clauses if the vendor fails to meet requirements.29 The payment schedules in these standard contracts may also favour the vendor.

27 The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
28 Refer Appendix C, page 43
29 The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
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Each outsourcing arrangement has its own set of issues and great care should be taken to ensure that the agency and the vendor decide what is required and what will satisfy those requirements. Agencies should not use the vendors' standard contracts as they may be one-sided. The key to successful outsourcing arrangements is to develop a site-specific contract. The OPSM Guidelines for the Engagement and Management of Consultants includes a sample contract for the engagement of consultants in Appendix 2 which provides a useful guide for the types of clauses that should be considered.

Be wary of change-of-character clauses

These clauses usually state that the customer will be charged for any changes in functionality. They have the potential to trigger disputes as to what comprises a change in functionality and require careful consideration. If service requirements change, vendors may add charges for new or expanded services. Vendors may also pass on costs for adding computer capacity or upgrading equipment.

In a study conducted by Mary C. Lacity and Rudy Hirschheim of fourteen Fortune 500 companies that faced outsourcing decisions, it was found that one outsourcing vendor had wanted to charge for the changing of word processing software. The vendor argued that this represented a change of character, as the new product was not supported during the baseline period. The customer's view was that the function, word processing, had not changed, only the software. The study also revealed personal computers (PCs) to be another area of contention. The same company's contract stated that the vendor will service all PCs for a fixed fee. However, when the number of PCs doubled and were connected to Local Area Networks (LAN), the vendor claimed that LAN technology represented a change in character. The vendor also wanted to charge for each additional personal computer (PC) installed that it would have to support. The customer argued that doubling the number of personal computers did not justify a doubling of cost to support them.\textsuperscript{30} Other hidden costs to look out for include those associated with moving the agency's software systems to a vendor's facilities.\textsuperscript{31}

\textsuperscript{30} The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
\textsuperscript{31} Outsourcing Confessions, Louis Fried, Computerworld, February 8 1993
Avoid signing incomplete contracts: a risk with both cost and service implications

In a rush to complete the negotiations, the vendor or agency may wish to sign the contract before all items are clearly specified or to commence operations before the contractual arrangements are finalised. One likely outcome of this approach may be a costly dispute. This approach also dramatically reduces the agency's bargaining position and should be avoided wherever possible. The benefits of an earlier commencement, or locking in the desired vendor, should be weighed against the potentially substantial risks. One risk may be having to pay additional fees for services not specified in the contract at the time of signing the contract, but which were intended by the agency to be included as part of the base charge.32

Finding 5.1

The Committee highlights the following best practice cost related issues, some of which have contractual implications, for agencies to consider when outsourcing information technology services:

a) cost is an important factor in outsourcing, but not above all else and not the only factor;

b) cost comparisons should use sensitivity analyses and take all relevant costs into account, including transition costs, cost of capital, monitoring costs and hidden and/or dispersed costs;

c) involve independent costing, legal, technical and other expertise, internally or externally sourced, to advise and review progress;

d) several fee setting models exist - each pose potentially significant risks and benefits - must be sufficiently flexible and suited to current and projected needs of agencies;

e) termination clauses and fees require careful consideration;

32 The Information Systems Outsourcing Bandwagon, MC Lacity & R Hirschheim, Sloan Management Review, Fall 1993
f) low bids do not necessarily mean greater efficiency;

g) be wary of vendor mark-ups for supplies;

h) ensure competition in bids to get the best possible price;

i) ensure all activities and related charges are detailed in the contractual arrangements - assume nothing;

j) agencies should protect their investment in the vendor;

k) be wary of standard vendor contracts and change-of-character clauses; and

l) avoid signing incomplete contracts: a risk with both cost and service implications.
6.1 Introduction

An important need will always exist for agencies to maintain access to independent internal or external IT expertise for strategic planning purposes and for the management of the IT function, including that part outsourced. This need remains regardless of the extent of outsourcing undertaken. Sole reliance on an outsourcing vendor for the provision of all IT services and expertise leaves the agency at the mercy of the service provider. This can have disastrous long term strategic consequences and is not in the public interest.

The Committee's consultant notes in her report that:

The use of outsourcing does not imply less effort in managing IT, only a different emphasis. The agency will need to concentrate more on direction, strategy and implementation paths than with routine service delivery and staff management. A failure to recognise this will inevitably mean that the potential benefits may not be realised.¹

6.2 Melbourne Water

The importance of the need to maintain strategic independence from outsourcing vendors can be illustrated by the experiences of Melbourne Water.

In October 1990 Melbourne Water outsourced its IT services under a management buy-out involving senior executives of two in-house divisions. A private company, Melbourne Information Technology Services (MITS), was appointed the sole supplier of all existing information technology services.²

A consequence of this decision was that all significant IT expertise formerly in Melbourne Water was transferred to MITS. This situation rendered Melbourne

¹ Refer Appendix C, page 47
Water dependent on the vendor for IT strategy and advice on all technical aspects of decisions regarding application systems.

It was during 1992 that Melbourne Water became concerned that it was becoming more and more strategically dependent on MITS, the outsourcing vendor, especially in relation to specialist technical knowledge of its key business systems. Arising from this concern, Melbourne Water engaged external consultants to review its outsourcing arrangement, particularly in view of the importance of establishing a commercial and strategically-independent relationship with the vendor.

During 1993 Melbourne Water directed significant effort to upgrading its strategic and technical management capabilities for IT functions. In a move to consolidate its internal IT management capabilities, an experienced IT professional was appointed to head the corporate business systems division. Consistent with its objective of overcoming strategic exposure, the division established a strategic IT management framework.

In his Report On Ministerial Portfolios, May 1993, the Auditor-General made the following observations on the lessons to be learned from Melbourne Water's experience with strategic control of outsourced IT services.3

Firstly, it is important for the outsourcing organisation to assume effective management control of IT services through:

- the development of an IT management framework designed to strategically plan and control IT services;

- access to technical expertise, either in-house or external but independent of the service provider, to support the IT management framework; and

- the early development of Service Level Agreements which provide a standard for monitoring the vendor's performance and a basis for charging in terms of service usage.

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3 Ibid, page 83
Secondly, it is crucial for the outsourcing agency to manage the on-going relationship with the IT service provider through the creation of a management structure and the conduct of periodic reviews of the outsourcing arrangement.

Thirdly, competition should be encouraged to avoid dependence upon a single provider for all IT services. In the event where competition is not desirable or feasible, both parties should reach an agreement on externally-derived benchmarks for assessing costs and quality of services.\(^4\)

As a result of its initiatives, Melbourne Water has been able to assume more effective management control of business applications planning, information technology strategy and technical performance and quality.

### 6.3 Best Practice Issues in Information Technology Strategic Management

**Introduction.**

The Committee highlights the following best practice issues for the consideration of public sector management when reviewing the strategic implications of outsourcing information technology services. The Committee does not propose to duplicate the recommendations of its consultant or the Auditor-General, instead it has highlighted some of the key issues and recommends all public sector agencies review the consultant’s report at Appendix C and reports of the Auditor-General.\(^5\)

**Maintain access to independent strategic and technical management expertise**

Agencies need people with varied skills to make sourcing decisions and to implement those decisions. Where some or all of these skills are not available in-house, the agency should seek to gain those skills through training, recruitment or on a consultancy basis as appropriate.

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\(^4\) Ibid, page 83

The agency must ensure that it is well represented in the following skills, independent of outsourcing vendors, in making sourcing decisions:

- writing tender documents and evaluating options;
- costing/valuation matters;
- legal and technical skills in developing and negotiating the contract;
- project management; and
- change agent.\(^6\)

It is also important to retain access to sufficiently skilled and independent people to both manage the outsourcing vendor and to look after the ongoing strategic needs of the agency. Where such skills cease to be available in-house, the agency should again seek those skills through training, recruitment or on a consultancy basis as appropriate.

The Victorian WorkCover Authority (VWA) retained 28 IT staff and contractors to support its regulatory and business functions and to manage the contract. VWA has sufficient skills in-house to evaluate and explain changes that the vendor proposes to the hardware or software and the potential impact on service levels.\(^7\)

The Force also recognised the need to retain skills in the data entry bureau to monitor the vendor's performance and to direct operations.\(^8\) A feature of their arrangement is that there are clear lines of authority. The supervisors of the bureau are employees of the Force, rather than the vendor's.

Agencies must be in a position to assess whether the vendor is delivering services as required and consistent with current industry standards. It needs capable independent technical support to manage performance levels and to provide strategic advice. The Committee's consultant advised that it is the agency's responsibility to detect when things are sub-optimal and intelligently query and evaluate information. The consultant reported that at the time of the

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\(^6\) Refer Appendix C, page 54

\(^7\) Ibid, page 26

\(^8\) Ibid, page 46
review, VWA did not have an in-house expert to determine the accuracy and reasonableness of the time required to perform application development tasks. Consequently, the VWA sought to engage the relevant expertise to verify the estimates.\(^9\)

Agencies may also use outsourcing in order to get greater access to IT expertise. The only way to ensure that access to technical talent will occur is to have it specifically spelt out in the contract. Informal understandings and appeals to "strategic partnerships" are ineffective. Agencies should also be clear on the agreed cost of the additional technical skills they need.\(^10\)

The agency and the vendor must educate each other on their respective business environments, needs and processes. This is essential for the achievement of mutual goals. VWA spent much time and effort on instilling in the vendor a sense of compliance and urgency in meeting government deadlines.\(^11\)

*Don't become captive to the vendor through skills or systems knowledge transfer - foster competition and flexibility*

When an agency outsources its IT function, most of the knowledge about the company's applications and systems may no longer remain in-house, particularly when its former employees are engaged by the vendor. The transfer of systems and application knowledge to vendors may in effect lock an agency into that vendor. Agencies may also find it very difficult to rebuild the outsourced infrastructure and knowledge from scratch at reasonable costs.\(^12\)

The help desk contract at the Force was for one year only, with no contractual options for renewal. The Force had no fallback position as it has transferred the knowledge required to provide the service to the vendor's personnel and relocated internal personnel that had such knowledge.\(^13\) As the knowledge now held by the vendor is specific to the Force, inevitably a form of private monopoly may have been created in the vendor who then enjoys a strong bargaining position. Moreover, it will be costly and time consuming for the Force to replace this knowledge internally.

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\(^9\) Ibid, page 27  
\(^11\) Refer Appendix C, page 26  
\(^12\) *Targeting IT Activities for Outsourcing*, John Houghton, CIRCIT, October 1992  
\(^13\) Refer Appendix C, page 47
Information Technology in the Public Sector

The Committee's Consultant cautions agencies against falling into a 'ransom' position through the creation of a private monopoly by skills transfer. In the absence of the retention of key skills in-house, the agency should ensure that there are contractual provisions for it to capture the vendor's knowledge at the end of the contract term or helping other competitors to gain parity.\textsuperscript{14} Outsourcing contracts could include provisions for repurchase of assets, transfer of data and software, and return of key personnel in the event of contract termination.\textsuperscript{15} Procedures to manage the return of outsourced services in-house should be defined as one of the alternatives available at the end of the contract.

\textit{Balance the sometimes competing need for flexibility with the need to ensure ongoing access to particular vendor expertise and services}

It is important to avoid being locked into a single vendor. However, it is also critical to balance this against the sometimes equally important need to guarantee access to a particular vendor expertise or services on an ongoing basis. Particularly if the agency has made a significant investment in the creation of an outsourcing arrangement and valuable skills transfer has occurred.

Agencies can learn from the experience of the Force in this matter. The Force trained the help desk manager, an employee of the vendor. As the contract with the vendor was only for one year, the Force may not be able to enjoy the maximum possible return on the investment incurred in training the vendor's personnel or may be at risk of excessive cost escalations. The vendor is now marketing the services of the manager as a leading help desk consultant.\textsuperscript{16} Having such a short time span contract may have disadvantaged the agency. Given that there is a great deal of specificity in the knowledge held by the help desk and the investment in training the vendor's personnel by the Force, it could have been more advantageous for the Force to have locked in the vendor for a longer period.

\textit{Manage the issue of technological obsolescence}

The Auditor-General, in his Report on Ministerial Portfolios May 1993, commented on the need for Melbourne Water to ensure that it does not place

\textsuperscript{14} Ibid. page 48
\textsuperscript{15} Economics of Outsourcing: Paper on Financial Analysis of an Outsourcing Agreement. Rob Westcott, TTC Conference, March 1993
\textsuperscript{16} Refer Appendix C, page 46
itself at the risk of being locked into a service or technology provider who is constrained by technology platform or systems design.\textsuperscript{17}

Rapid developments in technology have resulted in a short life span for "state of the art technology." From the time an agency decides to purchase particular computer hardware to the time of installation of its customised software programs it may find that its system is already second rate to what is then on offer in the marketplace. On the other hand, outsourcing vendors, by the very nature of their business, have a greater incentive to continually update their technology if it is to remain competitive and to continue to attract new customers.\textsuperscript{18}

Unless the agency creates specific contractual conditions to address the issue of technology refreshment, outsourcing contracts may motivate vendors to run older technology as long as possible. Agencies can create a specific contractual condition that requires the vendor to manage, develop and implement new technology. This is an issue with significant strategic implications for service levels and cost, and raises many complex considerations impacting on the entire outsourcing arrangement.

\begin{figure}
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Finding 6.1 \\
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The Committee finds that the Auditor-General and the Committee's own Consultant have raised some critical strategic and management considerations for the outsourcing of information technology services. The Committee highlights the following related best practice principles:
\begin{itemize}
\item [a)] maintain access to \textit{independent} strategic and technical management expertise;
\item [b)] don't become captive to the vendor through skills or systems knowledge transfer - foster competition and flexibility;
\item [c)] balance the sometimes competing need for flexibility with the need to ensure ongoing access to particular vendor expertise and services; and
\item [d)] manage the issue of technological obsolescence.
\end{itemize}
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\end{tabular}
\caption{Finding 6.1}
\end{figure}

\textsuperscript{17} Victorian Auditor-General's Office, \textit{Report on Ministerial Portfolios}, May 1993, page 81
CHAPTER 7: RISK MANAGEMENT

7.1 Introduction

There are many existing and additional risks which need to be managed as part of the establishment of an outsourcing arrangement. Risks of the provision of information technology services however, continue to revolve around the need to ensure reliability of information, the continuity of operations and the safeguarding of public assets and information.

All potential risks should be identified, assessed and documented as part of the risk assessment process. Security risks for example, include physical, application access and data.¹

Not all risk areas will remain under the direct control of agencies after outsourcing has occurred; for example, the control and maintenance of user access rights and privileges may become a duty of the vendor. Further, Disaster Recovery Plans and insurance coverage may also be delegated to the vendor through contractual provisions. Ultimately, however, the agency cannot assign its responsibilities for the integrity of its own service delivery and in the event of a breakdown in service delivery it will be held responsible, regardless of whether it may be able to seek some redress from its vendor. While agencies have certain responsibilities which cannot be passed on to vendors, the conduct of strategies to minimise risk can be delegated to vendors.

Issues such as the vendor's liability, should there be any fault in the vendor's system, or if there is any output error or delay are part of the risk management process.

Outsourcing itself introduces new risks in the operation of IT services and systems. For example, the vendor's staff, who are not employees of the agency, will have some level of access to agency data, which may be confidential, and will directly impact on the reliability of service delivery. The loss of direct control over the operation of an agency's IT services represents a risk. Undertakings of

¹ Outsourcing - The Critical Issues, Papers Delivered at a BLEC Conference, November 1994
the vendor and its staff in respect of confidentiality and service delivery are critical for risk management.

Termination, and its causes, represents an important area with both service and cost implications requiring a careful risk management approach.

Technological obsolescence is a major risk to be managed as part of outsourcing arrangements. Chapter 6 highlights this risk and its management.

Turnback arrangements, or their absence, directly impact on the longer term strategic risks of agencies.

7.2 Security of Information and Service Delivery

7.2.1 Overview

The amount of information held on Government computer systems is substantial and the nature of this information necessitates proper security measures being in place at all times.\(^2\) From a financial point of view, the value of Government computer assets is significant as is the level of Government expenditure on computer systems, facilities and services.

Unauthorised or improper use of computer facilities may place data, hardware, software and output at risk of being altered, destroyed or compromised. Environmental disasters or system failures may result in prolonged and costly interruptions to computing operations and/or loss of computing facilities, data and programs.

Outsourcing arrangements should contractually establish a sufficiently tight security regime to govern the agency's use of the system or service and the vendor's operation. Apart from general statements requiring appropriate security precautions to be taken by both parties to prevent unauthorised access to the system, there may be particular audit control requirements which agencies may wish to build into the contract.\(^3\) For instance, the agency may require regular independent audits of the vendor's information security practices.

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\(^2\) Report of the Auditor-General, South Australia, for the year ended 30 June 1994

\(^3\) *Some legal aspects of outsourcing*, Anna Sharpe, *Australian Accountant*, October 1991
Recognising that the implementation of effective computer security measures is critical to the continued reliance on computer based information, the former Department of Finance has issued guidelines for Information Technology security. These guidelines constitute a minimum set of required information security measures and address a wide range of security issues in relation to human resources, the use of modems, virus protection, the applications environment and access to networks. These security issues are addressed in detail in IT&T-14 Information Security Policy.\(^4\)

### 7.2.2 Security of Information

**Overview**

Agencies should address the following security measures in their contractual arrangement with the vendor:

- each organisation should have detailed security policies and procedures that are kept up-to-date with computing developments;

- regular monitoring of staff who have high levels of access to information;

- limit access to information to those individuals who have an authorised requirement to access and maintain suitable registers of those authorised to access data;

- provide means of identifying unauthorised access to information;

- prompt removal of terminated employees' authority to access financial systems; and

- individual accountability for access to information systems and for actions taken.\(^5\)

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\(^5\) Report of the Auditor-General, South Australia, for the year ended 30 June 1994

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Physical and logical security access

One important issue which is often overlooked in outsourcing arrangements is that of physical access to the premises of the vendor. Contractual provisions for physical as well as logical security access must be explicit.\textsuperscript{6} One measure to ensure that only authorised physical access occurs is the wearing of photographic identification tags and related security arrangements.

Confidentiality agreement

In any outsourcing arrangement, agency staff may require access to vendor software and related documentation. Equally the vendor’s staff will have access to agency data. It is in the interest of both parties that each formally acknowledge that all aspects of their relationship are to be treated confidentially. The outsourcing contract may require each party’s employees to sign a confidentiality agreement which sets out what constitutes "confidential information" and the obligations of the recipient of confidential information. For example where such information has to be disclosed to a third party, the vendor may have to obtain from the third party duly binding agreements to maintain in confidence the information disclosed. On expiry or termination of the contract, the vendor should also undertake to return or destroy such information.

Security checks

The agency could subject vendor employees to security checks as a means of reducing any potential security risk that may arise during the period of the outsourcing arrangement. The Committee is aware that one of the agencies reviewed by its Consultant has undertaken to individually approve the employment of each staff member proposed by the vendor and any staff of the vendor not satisfying the entry requirements of the agency is immediately dismissed by the agency.

\textsuperscript{6} Some legal aspects of outsourcing, Anna Sharpe, Australian Accountant, October 1991. Refer also to IT&T-14 Information Security Policy, Department of Finance, Information Technology and Telecommunications Policies and Guidelines, 1995
Risk Management

Software disclosure, modification or distribution

With respect to software, both the agency and the vendor should formally undertake to ensure that there is no unauthorised disclosure, modification or distribution of software.

7.2.3 Security of Service Delivery

Overview

Risk management is a crucial issue in any outsourcing arrangement. There may be a risk that severe loss and damage could result from a failure of the arrangement to work in accordance with the agreed regime. Contractual arrangements with the vendor should provide for adequate business recovery or contingency planning to ensure the continued availability and integrity of information and systems.\(^7\)

Liquidated damages and insurance

The agency should not limit its ability to recover from the vendor, particularly in circumstances where insurance does not provide adequate coverage, in the event of systems failure or data loss. The vendor will naturally seek to minimise his liability in these circumstances. A common approach is to insert a liquidated damages provision under which a fixed amount of damages is set as the maximum recoverable against the vendor.\(^8\)

Back-up and disaster recovery procedures

The risk of a system crash or a temporary failure is minimised if detailed back-up procedures are in place. Responsibilities for back up procedures should be explicit in the contractual arrangements. Data back-ups and application back-ups should be conducted in accordance with industry practice and provide back-up of all production systems and data. In addition, sufficient back-up data should be retained off-site to meet all Disaster Recovery (DR) requirements.

\(^7\) Report of the Auditor-General, South Australia, for the year ended 30 June 1994
\(^8\) Some legal aspects of outsourcing, Anna Sharpe, Australian Accountant, October 1991
There should be contractual arrangements for the vendor to provide comprehensive DR procedures and facilities. The agency should ensure that the vendor will provide access to a DR Hot Site (as appropriate) and that the vendor is responsible for providing the personnel and meeting all costs pertaining to a DR site. In addition, back-up and disaster recovery capabilities should be periodically tested in accordance with industry standards.

*The vendor's technical and financial capabilities*

The continuity of service delivery depends very much on the reliability and capability of the service provider. Before deciding on a particular vendor, agencies must ensure that the vendor meets the following requirements:

- That the service is one of the vendor's core businesses;

- That the vendor has sufficiently invested in the resources and infrastructure necessary to support the service;

- That the vendor has people with the appropriate skills to provide the service; and

- That the vendor has the expertise to manage the technology and willingness to upgrade.\(^9\)

Reference checks are also essential to enable the agency to further verify the capability and financial soundness of the vendor. For instance, discussions with the vendor's bankers, or their representations, will enable the agency to assess the financial position and ability of the contractor to perform over the contract period.\(^10\) The Victorian WorkCover Authority (VWA) actively queried references provided by potential vendors and tested the flexibility of the potential vendors by modifying the structure of the arrangement from a straightforward service contract to a form of transitional outsourcing that eventually led to complete vendor ownership. As a result, a number of potential vendors opted out and the VWA finally selected the successful tenderer from the four finalists, based on the following attributes:

- financially and commercially sound;

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\(^9\) Refer Appendix C, page 73

Risk Management

• offered the best cost/benefit of all tenders;

• offered the best development opportunity for the outsourced function;

• had the best customer fit with insurers; and

• presented the lowest risk.

System changes

Another related risk management issue is the right of the agency to be consulted over system changes, which are likely to impact on ongoing service delivery. The agency could specify in the contract its right to veto any modifications to the system which might adversely affect the vendor's provision of the service.

Virus protection

Where an agency contracts out part of its information technology function to an external organisation, it is at risk of computer virus infection. Agencies should safeguard themselves from the substantial damage that virus infection can inflict in terms of lost production and time required to recover any lost data. Chapter 9 addresses this issue in more detail.

Technological obsolescence

Technological obsolescence is another major risk to the quality of service delivery, as highlighted in Chapter 6.

Termination as a deterrent

Specification in the contract of events which lead to termination and penalty for the vendor also help to minimise risk in this area (refer paragraphs 7.2.4 and 7.3).

7.2.4 Liability

Due to the sometimes high risk nature of information technology services, liability for service failure can be a particularly contentious source of negotiation between the agency and the vendor. From the agency's perspective, it is looking
for substantial and appropriate recourse in the event that the proposed system fails in its implementation or in its operation. On the other hand, the vendor will price the arrangement based on an assessment of risk and total liability.

The vendor could take precautionary measures in the form of insurance which may assist in the resolution of this matter and ensure adequate financial resources are made available under specified circumstances, (therefore the issue of a vendor having inadequate financial resources to meet its liability for a disaster or to rectify is no longer an issue). However, often the premium together with the excess that the insured must pay, could make insurance (such as professional indemnity insurance) prohibitively expensive.11

Generally, the vendor would be seeking to cap his liability. The vendor's liability could be set at an agreed level of insurance held by the vendor, the contract price, a multiple of the contract price, some other amount or to simply rectify the fault whatever the cost. The issue of liability can be the subject of tough negotiation between the vendor and the agency.

7.3 Termination

Introduction

Termination may arise as a result of the expiry of a fixed term, the expiry of a specified transaction, breach of the agreement or insolvency of the vendor. Most contracts require either party to notify the other within a specified time period of such events occurring. Termination, and its causes, represents an important area with both service and cost implications requiring a careful risk management approach and expressed contractual provisions.

Breach of agreement and dispute resolution

The vendor or agency may have an expressed right to terminate the contract immediately by notice in writing if the other party is in breach of the agreement and if the breach is not remedied within a stipulated time. However, it may not be in the interest of either party to terminate the contract instantaneously if a breach is not cured within the agreed period of time. A reasonable period of time

11 Outsourcing - The Critical Issues, Papers Delivered at a BLEC Conference, November 1994
should be allowed to investigate and resolve problems. In addition, adequate dispute resolution processes should be explicitly stated, perhaps including arbitration.

An example of what may constitute a breach include vendor failure to deliver the agreed services at the agreed price. The issue of termination penalties is considered at paragraph 7.2.4.

System responsiveness

The agency is entitled to rely on the vendor's assurances as to the response times offered and accepted. Any contractual provisions for response times should deal with the range of response times applicable to particular uses of a system and the consequences of a failure to meet them. Where the agency cannot tolerate any persistent failed response times, it should have a right to terminate the agreement and recover any loss suffered.

Insolvency

The customer may need the contractual ability to terminate the contract immediately if the vendor (or guarantor) becomes insolvent, suffers the appointment of a receiver, becomes subject to any proceeding under any bankruptcy or any insolvency law or is wound up or liquidated voluntarily.

Sub-standard performance

Where performance levels consistently fail to meet the required standard, the customer may terminate the agreement.

Vendor Misconduct

The contract could allow for immediate termination on the grounds of specified forms of misconduct.

12 Get ready for bailout outsourcing, W. Schatz, Computerworld, January 25 1993
7.4 Turn-back Arrangements

Turnback arrangements, or more so their absence, directly impact on the longer term strategic risks of agencies. Turnback involves the right of the agency to abandon the outsourcing arrangement in the absence of any breach or any other terminating event. It might involve an option to back out of the arrangement during the transition period or it might involve the right to back out of the arrangement prior to the expiry of the initial term of the agreement.

 Agencies could create a framework within the contract that allows both parties to deal with the possible need to revert to in-house provision. One of the agencies reviewed by the Committee, the Victorian WorkCover Authority (VWA), has made contractual provisions for potential change of circumstances that may require it to terminate its contract and revert to in-house provision of the IT function.¹³ Turn-back could come into play as a result of a change of Government and/or Government policy, change in business/strategic needs, and agency privatisation or amalgamations.

 Agencies might insist upon a right of turnback without any obligation to compensate the supplier, but in other instances there might be a formula by which a payout figure can be calculated.

An example of how payout costs could be calculated is provided by the Sample General Conditions of Agreement (Appendix 2) of the OPSM Guidelines for the Engagement and Management of Consultants:

The Secretary at any time upon giving written notice to the Consultant of its intention so to do may abrogate or constrict the Agreement or any part or further part thereof and upon such notice being given the Consultant shall cease or reduce work according to the tenor of the notice and shall forthwith do everything possible to mitigate the losses consequent thereto.

In that event the Consultant may submit a claim for compensation and the Department shall pay to the Consultant such sums as are fair and reasonable in respect of the loss or damage sustained by the Consultant in unavoidable circumstances provided always the Consultants shall not be entitled for the loss of prospective profits.

¹³ Refer Appendix C, page 18
In the event of contract termination, the outsourcing contract should include provisions for repurchase of assets, transfer of data and software, and return of key personnel. Procedures to manage the return of outsourced services in-house should be defined as one of the alternatives available at the end of the contract.\textsuperscript{14}

\begin{table}
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Finding 7.1 \\
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The Committee finds that: \\
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a) outsourcing of information technology services changes the risk environment of agencies and should lead to a review and modification of risk management strategies. Agencies must continue to take a risk management approach to the provision of information technology services; \\
\hline
b) agency responsibilities for the integrity of its service delivery cannot be outsourced, however the conduct of strategies to minimise risks related to the provision of information technology services can be outsourced; \\
\hline
c) risks continue to revolve around the need to ensure the reliability of information, the continuity of operations and the safeguarding of public assets and information; and \\
\hline
d) there are many critical elements of agency risk management strategies such as access controls (both physical and logical), vendor undertakings in respect of confidentiality and service delivery, data back-up, disaster recovery, contractual redress for breach of agreement, specification of events which trigger termination and turn back arrangements. \\
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\textsuperscript{14} Economics of Outsourcing: Paper on Financial Analysis of an Outsourcing Agreement, Rob Westcott, TTC Conference, March 1993
8.1 Accountability Framework

Outsourcing of Information Technology (IT) services has the potential to have a significant impact on public sector accountability. The need for accountability in the public sector stems from the use of taxpayers' funds by the sector and that taxpayers expect their money to be used for the ultimate benefit of the community. Consequently, they have a right to assurance that funds provided through taxes and charges are spent in accordance with legislation and that services provided by the government reflect value for money.¹

Accountability in the public sector refers to the obligation of those entrusted with public resources to manage them responsibly and account to the Parliament for their use.² In its First Report to the Parliament, the Committee acknowledged that the purpose of public accountability is to enable informed public debate and participation in decision making processes.³ Within this context, the outsourcing process should be subject to public scrutiny. This report highlights the issue of outsourcing of IT services for that very purpose and to promote best practise.

Having a clear accountability framework makes it possible to determine who is accountable and for what. Contractual arrangements for IT outsourcing must recognise and convey a clear understanding of the accountability framework within which the vendor must operate. Further, program managers must have a clear understanding of how the vendor's activities will contribute to overall program performance and accountability.

The accountability framework is an amalgam of many different aspects and includes the Auditor-General (Audit Act 1994), the tabling of Annual Reports of public bodies in the Parliament (Financial Management Act 1994), the Freedom of Information Act 1982, Parliamentary Committees, including the Public

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² Auditor-General's Special Report No. 31, Purchasing Practices, May 1994, page 75
Information Technology in the Public Sector

Accounts and Estimates Committee (Parliamentary Committees Act 1968) and the Victorian Ombudsman (Ombudsman Act 1973).

The accountability framework for public sector agencies is usually provided through the agency's enabling legislation. The legislation generally establishes the mechanisms by which an agency accounts for its operations to the responsible Minister and the Parliament and delegates authority to the governing board or council to oversee and direct the agency in achieving its objectives.

It is the responsibility of public sector agencies to ensure services are provided efficiently and effectively. The Financial Management Act 1994 provides the legislative framework under which public sector agencies are expected to maintain a high standard of accountability.

In his Special Report No. 31 Purchasing Practices, May 1994, the Victorian Auditor-General noted that with the trend towards devolution of responsibilities, it has become increasingly important for centrally developed regulations and guidelines on outsourcing to be supplemented by internal policies and procedures, which should encompass:

- documented policies and procedures on all aspects of contracting out including purchasing procedures, which should be clearly communicated to all relevant personnel;

- clearly assigned responsibilities and up-to-date delegations of authority in order to minimise the risk of fraudulent or erroneous transactions;

- maintenance of appropriate documentation providing evidence to indicate whether actions have been undertaken in an accountable, open and efficient manner by staff within the agency; and

- a strong internal audit and review function to monitor compliance with internal controls, regulations and procedures.5

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5 Auditor-General's Special Report No. 31, Purchasing Practices, May 1994, page 75
8.2 Impact of Outsourcing on Parliamentary Accountability

8.2.1 Commonwealth and Victorian Ombudsman

Under Victoria’s IT policy framework, potentially many millions of public records will be managed by the corporate sector as part of IT outsourcing arrangements. Public sector records include a large data base of confidential information, which must be accurate and protected from unauthorised access. There are significant privacy issues to be considered. Federal privacy laws do not apply to Victorian State Government records. This further substantiates the need to maintain the existing accountability framework.

In a submission to the Industry Commission, the Commonwealth Ombudsman noted that as the Commonwealth Government’s contracting out programme gains momentum, it is crucial that the responsibility for accountability should lie with the principal agency. Government agencies need to retain sufficient powers to administer contracts to ensure service quality. The Ombudsman also pointed out that government agencies should not view contracting out as *buck passing the responsibility between the various agents.*

The Commonwealth Ombudsman has called for greater powers to investigate complaints following criticism of the outsourcing of Commonwealth Government services. At present, the Commonwealth Ombudsman can only investigate complaints levelled directly at a Commonwealth department or agency. The Commonwealth Ombudsman has no formal investigatory power where complaints involve the actions of an independent contractor.

In her report the Commonwealth Ombudsman refers to a case study concerning a pensioner who had asked Australia Post for compensation for damage done to his letterbox. Australia Post had contracted out a range of mail delivery services including that involving the pensioner’s complaint. Its advice to the complainant was that the issue of compensation should be sorted out with the contractor, since the contractor was not an employee of Australia Post and the mail delivery contract excluded it from any liability. The contractor had offered only a third of the cost of the repair and Australia Post said it could not force the

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7 Ibid, page 2
contractor to meet the cost of the damage. The Ombudsman pointed out that the actions of the contractor fell outside her jurisdiction. Subsequently however, the Ombudsman intervened using her good relationship with the department concerned, to persuade Australia Post to agree to reasonable compensation with the complainant. The outcome of the investigation was that Australia Post agreed to amend its contract so that it could compensate aggrieved customers and subsequently seek recompense from the contractor.

The Ombudsman expressed concern that:

Just because the delivery of a traditional function of government is shifted to an agency, contracting out does not mean that the government department or agency responsible for outsourcing should, or can, automatically contract out the responsibility or risk for the delivery of service.8

Clearly, the Commonwealth Ombudsman's jurisdiction is not sufficiently wide enough to directly investigate government services that have been contracted out. In short, what the Commonwealth Ombudsman was asking for is to be able to 'follow the dollars' from the government agency to the service provider.9

There is no specific provision in the Victorian Ombudsman Act 1973 to deal with complaints arising out of a contracted service. However, depending on the circumstances, the Ombudsman may be able to exercise his jurisdiction, using Section 13(7) of the Ombudsman Act 1973, to investigate any complaint that arises in relation to a contracted service:

Where any administrative action is taken by an authority or body to which this Act does not apply under any powers or functions conferred on or instructions given to it by an authority to which this Act applies, the administrative action so taken shall, for the purposes of this Act, be deemed to be the administrative action of the authority to which this Act applies, and the powers of the Ombudsman in respect of that action may be exercised accordingly.10

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8 Ibid, page 9
9 Ibid, page 20
10 Section 13(7) of the Ombudsman Act 1973
As significant purchasers of goods and services, public sector agencies should encourage and expect 'best practice' performance from contractors or service providers. In the view of the Commonwealth Ombudsman, if the rights of contractors are to be protected and consumers assured of an acceptable level of accountability and quality of service, then departments and agencies need to ensure that contracts are explicit in a number of respects, including:

- stating the expectations required of contractors;
- providing performance criteria which include provision for continuous improvement;
- providing for fair and accessible dispute resolution mechanisms;
- prohibiting an unfair use of statutory power; and
- clarifying from the outset where the risk and liability lies, that is. with the principal (the department/agency) or the agent (the contractor).#11

8.2.2 Industry Commission Issues Paper

Public sector agencies have specified responsibilities and are accountable to governments and parliaments through the respective Ministers for ensuring services are provided efficiently and effectively. The Industry Commission in its Issues Paper on Contracting Out by Public Sector Agencies, January 1995, referred to the effect of contracting out on accountability as being a key issue. The Commission suggested that all agencies should address the following accountability issues during the contracting out process:

- What measures have government agencies used to ensure that they remain accountable for services which have been contracted out? What is the appropriate delegation of responsibility between Ministers, government agency and service provider where services are contracted out?

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Information Technology in the Public Sector

- What are the reporting requirements with respect to contracting out (eg publication in annual reports or government gazettes)? Should the reporting requirements for contracted services differ from those required for services provided internally?

- What independent scrutiny of contracting out takes place (such as audit by the Auditor-General)?

- How does contracting out impact on consumer rights? For example, how will the agency handle privacy concerns (eg where services involve collecting personal information)? Can rights of review and other protection (eg recourse to Ombudsman, Administrative Appeals Tribunal, Freedom of Information Act) be safeguarded?

- What impact does contracting out have on government control over the provision of services? How does the contracting out of service delivery impact on the government's ability to plan and respond to changing needs in the community (eg changing levels of unemployment, urban planning)?

8.2.3 Committee's Position

The Committee strongly believes that in all cases where public money is utilised to provide public services, whether through outsourcing or by direct provision, there is a need to ensure that appropriate accountability mechanisms remain despite the service delivery arrangements. In all circumstances it is an important responsibility of public sector agencies to ensure that their public accountability is not compromised as part of outsourcing arrangements for IT services.

It is acknowledged that in limited circumstances commercial considerations may come into play as part of an IT outsourcing arrangement. Public sector agencies, however, cannot hide behind confidentiality requirements that they have agreed to, or inserted into outsourcing arrangements to avoid accountability. Nor can they outsource their very important responsibility to be accountable for public resources or legislative functions under their control. The Committee's inquiry

has not identified an agency which has sought to do so, however, it raises this matter given its importance in the public interest.

For example, IT outsourcing arrangements should not prejudice or unduly adversely impact on the audit of an agency by the Auditor-General. The requirements of the Audit Act 1994 are a very important element of the accountability framework. That Act essentially provides for the free and unrestricted access by the Auditor-General and his authorised officers to source documents and computer files necessary for his audit. These records may cease to be under the direct control of public sector agencies where IT functions have been outsourced. Section 12(1) of the Audit Act 1994 provides:

No obligation to maintain secrecy or other restriction on the disclosure of information obtained by or furnished to persons employed in the public service or by an authority, where imposed by an enactment or rule of law, applies to the disclosure of information required by the Auditor-General or a person authorised by the Auditor-General for the purposes of an audit under this Act.

It is prudent therefore for the contractual arrangements related to the outsourcing of IT services to at least expressly provide appropriate access for the Auditor-General, internal audit and other representatives of the agency.

The Committee is aware that at least one public sector agency that has outsourced IT services has explicit contractual provisions granting its auditors and its representatives all reasonable access to the outsourced IT systems and all associated production and performance information for specified purposes.

Independent scrutiny of agency outsourcing arrangements by the Auditor-General is an important element of the accountability framework. Such scrutiny will ensure appropriate competitive tendering processes have been applied and a valid cost-benefit basis has been used for decision-making on outsourcing a service.

The ministerial directions issued by the Minister for Finance, pursuant to the Financial Management Act 1994, are also an important element of the State's accountability framework. Those Directions provide that departments and public bodies should include details of consultancies above a certain value in their annual reports to the Parliament. Required details comprise a schedule listing
the consultants engaged, particulars of the projects involved, the total fees incurred and future commitments in relation to each consultant. Similarly, and in the interests of adequate parliamentary accountability, details of outsourcing arrangements above a specified value could also become part of the Minister for Finance's Ministerial directions under the Financial Management Act 1994. Required details could include a schedule listing the vendor engaged, summary particulars of the service provided, the total fees incurred and future commitments in relation to each outsourcing arrangement.

Finding 8.1

The Committee finds that:

a) agencies should ensure that their public and parliamentary accountability is not compromised as a result of the outsourcing of information technology services;

b) public sector agencies cannot hide behind confidentiality requirements that they have agreed to, or inserted into outsourcing arrangements to avoid accountability. Nor can they outsource their very important responsibility to be accountable for public resources or legislative functions under their control; and

c) outsourcing agreements must clearly set out the accountability framework within which the vendor must operate.

Recommendation 8.1

The Committee recommends that ministerial directions issued by the Minister for Finance, pursuant to the Financial Management Act 1994, should require public sector entities to include details of outsourcing arrangements above a specified value in their annual reports to the Parliament. Required details should comprise a schedule listing the vendor engaged, summary particulars of the service provided, the total fees incurred and future commitments in relation to each outsourcing arrangement.
9.1 Introduction

In 1993, the Auditor-General conducted a performance audit to determine:

- the extent to which illegal and unauthorised software existed on microcomputers within the public sector; and

- whether existing policies and procedures were effective in the detection and prevention of its use.

Six agencies, which were considered to be representative of the public sector, were included in the audit.¹

The main findings of the Auditor-General's report are summarised as follows:

- Most agencies had not developed appropriate policies and procedures to control software use;

- Most agencies were unable to identify the location of software due to the non-existence or unreliability of software and hardware registers;

- Only one agency had conducted a software audit to ascertain the extent of illegal and unauthorised software;

- The audit revealed that 34 per cent of the software in use was not authorised by management or unrelated to business use and the agencies could not produce licenses or proof of ownership for approximately 25 per cent of the software loaded onto microcomputers. This breach exposed the agencies to potential prosecutions under the Copyright Act 1968; and

- The detection of viruses in two of the agencies reviewed clearly reflected the inadequacy of protection measures against computer viruses, leaving the agencies at risk of data corruption and disruption to their business operations.

¹ Auditor-General's Special Report No. 23, Information Technology in the Public Sector, May 1993
The Auditor-General's report concluded that there has been a failure of public sector agencies in the past to address fundamental IT controls and this has exposed the government to considerable risks such as excessive costs, ineffective systems and massive penalties under the Copyright Act 1968. As the Victorian Government's outsourcing program gathers momentum, it is crucial to ensure that adequate IT standards are adopted to avoid a repetition of the mistakes outlined in the Auditor-General's report.

The Business Software Association of Australia (BSAA) noted in its submission to the Industry Commission\(^2\) that 50 per cent of all business software products used in Australia have been obtained illegally. An independent research study conducted on behalf of the BSAA in 1992 found that there were an estimated 6.5 million software programs installed in that year, compared to 2.2 million software products sold. This indicates around 4.3 million illegally copied software programs, or 1.92 illegal copies for every one software program sold. The cost of illegal copying in Australia amounts to between $300 and $400 million a year in lost sales.

The BSAA submission\(^3\) also states that although the protection of computer software is covered by the Copyright Act 1968, copyright owners often face serious difficulties in enforcing their rights against infringers. Some of these obstacles include:

- The relatively small penalties prescribed by the Act for criminal offences and the lenient attitude of the courts to these offences;

- The low level of damages and costs awarded to the copyright owners serves to discourage future civil actions against infringers, thereby defeating the original intention of acting as a deterrent to potential infringers; and,

- The difficulties of proving ownership and subsistence of copyright.

\(^2\) BSAA Submission to Industry Commission Public Inquiry into Computer Hardware and Software, December 1994

\(^3\) Ibid
9.2 Computer Software Policy

Overview

Following the issues raised by the Auditor-General in his report, the former Department of Finance advised public sector agencies of the possible penalties associated with the use of unauthorised and illegal software. Through wide consultation with agencies, the Information Technology Policy Division within the former Department of Finance also developed a policy on Software Copyright, which was released in November 1993.

The Policy applies to all Victorian Government offices and assigns responsibility to the Secretary or Chief Executive Officer of the respective departments and agencies to ensure compliance with the Policy. To reduce the risk of exposure to penalties, all public sector agencies are required under the Policy to:

- maintain a register of computer software;

- ensure that regular software audits and inspections are performed and any adverse findings rectified by management;

- ensure the existence of appropriate policies and procedures regarding the acquisition, control and use of software;

- ensure that there is a Code of Practice for the use of software which clearly states the agency's position on illegal and unauthorised use of software;

- ensure that staff understand the Code of Practice and the consequences of breaches; and,

- continue to forward regular reminders to all staff outlining the consequences of breaching the Act and reinforce the disciplinary action for violation of copyright.

The BSAA, in its submission to the Industry Commission\(^4\), has recommended that agencies appoint a Software Auditor, either internally or externally, to carry out occasional full software audits. Regular unannounced spot checks could be

\(^4\) Ibid
another way of keeping staff aware of the agency's software policy and the risk of being caught. The increasing availability of new network management software has made the task of software auditing easier and more automated. To assist management in keeping track of what software is running, the BSAA suggests products such as GraceLAN for Mac networks and Print or AppMeter for PC networks.

Government-wide software purchasing arrangements

As set out in the Software Copyright Policy in November 1993, the Information Technology Policy Division of the former Department of Finance, in association with the then State Tender Board (now known as Victorian Government Purchasing Board), has negotiated with major software vendors to establish Government-wide software purchasing arrangements. The Victorian Government Purchasing Board has finalised a purchasing arrangement with Microsoft products that is intended to reduce the unit cost to agencies and to obviate the potential for illegal copying of software.

9.3 Software Issues In Outsourcing Arrangements

Make clear contractual provisions concerning intellectual property rights arising from software created or developed under outsourcing arrangements

Copyright and other intellectual property laws establish intellectual property 'title' in goods and services. Legislation such as the Copyright Act 1968 is intended to create a clear basis for the development and marketing of these goods and services by providing the owner with remedies for infringement of their rights. These laws provide the basis for trade in intellectual property.

From the point of view of industry development, protection of intellectual property is critical for the growth and maintenance of a viable software industry. On the other hand, organisations using illegal or unauthorised software risk financial penalties and serious disruption to business.

A number of intellectual property issues may arise in the context of an outsourcing arrangement. Although they may not appear difficult, they may
prove to be both contentious and major issues during the course of contract negotiations and/or the life of the contact. Issues include:

- Who owns the intellectual property contained in software written by the vendor to enhance the agency's systems?

- Who owns the intellectual property contained in software written by the agency for use specifically in connection with the vendor's services?

- Who owns the intellectual property contained in modifications effected by the vendor on the agency's software?

- Who owns data processed on the system?

- Who owns the intellectual property contained in a database collated by the vendor on the agency's system?\(^6\)

The following example of an outsourcing arrangement between the Tricontinental Royal Commission and its vendor, ICL Australia Pty Ltd, serves to highlight the significance of the issue of intellectual property rights. In 1990 the Tricontinental Royal Commission sought the services of ICL to provide the Commission with its IT requirements.\(^7\) A specific clause was included in the contract by ICL relating to intellectual property rights, stating that:

\[\text{The user hereby grants the supplier a non-exclusive, unrestricted licence to use the application programmes.}\(^8\)\]

To ICL's understanding, the contract allowed it to use, and further develop, the software designed for the Commission in subsequent contracts. This raises the issue of whether the contractual arrangements could have provided for any royalty type payments being made to the Commission for subsequent use of the software. Alternatively, the agreed charges under the original contract with the

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\(^7\) Outsourcing Information Technology Services: A Case Study of the Contract Between the Tricontinental Royal Commission and ICL Australia Pty Ltd, Dianne Northfield, CIRCIT Research Report No. 1.

Commission could have been struck on the basis that ICL could use the software in the future.

*Clarify the agency's ability to assign or transfer existing software licenses to vendors as required*

Contractual provisions should include conditions on permitted use and assignment of existing software licenses, as appropriate. Steps should be taken to ensure that the vendor's use of agency software is not jeopardised by any third party.\(^9\) If it is intended that software licensed to the agency will be used by the vendor, any restrictions under the related software licenses will need to be considered. If there is a prohibition on assigning the benefit of a software licence, there will be no alternative but to seek the licensor's consent to the assignment or purchasing a new software licence.

If the agency has developed its own software, the contractual provisions will need to include either a licence under which the agency licenses the vendor to use the software, for the sole purpose of fulfilling its obligations under the outsourcing agreement, or an assignment of copyright under which the agency sells the intellectual property rights to the vendor.\(^10\)

When the VWA outsourced the development and maintenance of the central transaction processing system (ACCTion), it retained intellectual property rights and collects royalties from the vendor who is licensed to market the software.\(^11\)

*Contractual provisions to require vendors to use licensed software only and to exercise effective virus protection and detection measures*

It is crucial for government agencies to ensure that vendors use only licensed software and exercise effective virus protection and detection measures. The use of unlicensed software may expose both the vendor and the agency to the risk of heavy penalties under the *Copyright Act 1968*. The Auditor-General pointed out in his report\(^12\) that the lack of control over unauthorised software creates an avenue for the introduction of computer viruses, which can incur substantial costs in terms of lost production time and time taken to recover lost data.

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10. [Ibid](#)
11. Refer Appendix C, page 10
Clarify the impact of proposed outsourcing arrangements on existing externally provided services, such as third party software maintenance arrangements.

The proposed outsourcing arrangement may replace existing externally provided services or need to work with those existing arrangements. For example, existing software maintenance agreements will require close scrutiny as part of the process of establishing an outsourcing arrangement. A third party software maintenance provider may be reluctant to continue its relationship with the vendor on the same terms as those governing its relationship with the agency. Alternatively a third party software maintenance provider may seek to recover damages should his contract be terminated on the basis of the new arrangements. It may become a matter of negotiation as to what can be agreed.

9.4 Software Audits

The Auditor-General’s performance audit (refer paragraph 9.1) pointed to the risks that agencies faced in the use of illegal and unauthorised software, which include:

- introduction of unstable or unpredictable software resulting in system breakdowns, with a high cost of down-time and loss of data;

- use of specialised software which can by-pass security controls and could potentially be used to change or destroy corporate data;

- increased risk of losses because of computer virus infection; and

- the risk of losing information and the subsequent cost of recovering lost information.\(^{13}\)

The performance audit found that about 25 per cent of the software installed on the microcomputers was unlicensed and 34 per cent of the software used by agencies reviewed had not been authorised by the agencies. The Auditor-General concluded that the public sector was exposed to substantial penalties arising from breaches of copyright and recommended that agencies conduct regular software

\(^{13}\) Auditor-General’s Special Report No. 23, Information Technology in the Public Sector, May 1993
audits to address the purchase and use of all software utilised on microcomputers.

Software audits involve comparing software on agency microcomputer systems and floppy disks, with licensing agreements and agency software registers. The Auditor-General is of the view that software auditing is the most effective method of detecting the existence of illegal and unauthorised software.\textsuperscript{14} The use of such software exposes government agencies to not only financial prosecution under the \textit{Copyright Act} 1968, but also to substantial risks of system breakdowns and data corruption due to viruses. Software audits are also a requirement of the Software Copyright Policy issued by the former Department of Finance. To make the task of software auditing easier and more automated, the BSAA has recommended certain software products for network systems (refer paragraph 9.2).

In a recent incident, a computer virus contracted from a floppy disk caused a week-long shutdown of the Australian Taxation Office's (ATO) computer network at Box Hill. The national system was also shut down to stop the virus from spreading any further. This episode led the ATO's information technology professionals into reassessing their virus protection measures. According to the first assistant commissioner of IT services, Mr. Geoff Seymour, a mistake was discovered in the virus checking process and the experience has highlighted the necessity to take virus protection more seriously. Previous virus checking procedures were done manually and measures are being taken to implement an automatic check for viruses.\textsuperscript{15}

The Auditor-General's performance audit report commended one agency, which already had an on-going program of software audits, on having a clean record of legal and authorised software, free of any computer virus.\textsuperscript{16}

\textsuperscript{14} Auditor-General's Special Report No. 23, \textit{Information Technology in the Public Sector}, May 1993
\textsuperscript{15} New Accountant, 2 March 1995
\textsuperscript{16} Auditor-General's Special Report No. 23, \textit{Information Technology in the Public Sector}, May 1993
Finding 9.1

The Committee highlights the following best practice software related issues for agencies to consider when outsourcing information technology services. These issues complement the Computer Software Policy issued by the former Department of Finance and the Auditor-General's 1993 performance audit report on Information Technology in the Public Sector:

a) make clear contractual provisions concerning intellectual property rights arising from software created or developed under outsourcing arrangements;

b) clarify the agency's ability to assign or transfer existing software licenses to vendors as required;

c) establish contractual provisions to ensure vendors use licensed software only and exercise effective virus protection and detection measures; and

d) clarify the impact of proposed outsourcing arrangements on existing externally provided services, such as third party software maintenance arrangements.

Finding 9.2

The Committee finds that the ongoing importance of maintaining stringent virus protection measures and regular software audits has again been recently highlighted by the 24-hour shutdown of the Australian Taxation Office's computer network, due to a virus attack. The Committee also notes that the Victorian Government Purchasing Board's recent government wide purchasing arrangement for Microsoft products is intended to reduce the unit costs for agencies and to obviate the potential for illegal copying of software. This arrangement will help to minimise one avenue for the introduction of computer viruses, that is the illegal copying of software.

Committee Room
Appendix A

HOW TO OUTSOURCE CHECKLIST

This checklist of best practice principles for the outsourcing of information technology services has been developed based on the observations of the Committee's Consultant in her review of two selected government agencies, and the Committee's own analysis of important aspects of an outsourcing arrangement. The following represents the key areas that agencies need to consider when contracting out all or part of their IT functions:

**Chapter 3: The Outsourcing Process**

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<td>Maintain an IT strategic plan.</td>
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<td>Have clear business-driven objectives.</td>
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<td>Identify all relevant legislative requirements and stakeholders. (Refer Appendix B)</td>
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<td>Seek out the experiences of other agencies.</td>
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<td>Adequate time and the right resources allocated to the task.</td>
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<td>Conduct open and timely communication with employees.</td>
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<td>Employ open and effective competition.</td>
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<td>Retain skilled staff.</td>
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<td>Use experienced consultants where appropriate.</td>
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Chapter 3: The Outsourcing Process (cont.)

- Explicit expectations stated in the tender documents.

- Obtain value for money.

- Insert an extraordinary events clause into the contract.

Chapter 4: Performance Management

- Review performance evaluation procedures, including benchmarks, before evaluating outsourcing options.

- Develop comprehensive performance measures and targets, which can adapt to future technological change.

- Link performance indicators to agency objectives.

- Use experienced and independent personnel to set target performance levels.

- Reward above standard performance, penalise below standard performance.

- Develop and agree appropriate reporting mechanisms for all performance measures.

- Conduct post-implementation reviews.
Chapter 5: Cost Issues

- Cost is an important factor in outsourcing, but not above all else.

- Conduct a rigorous cost/benefit analysis - take all relevant costs into account - use sensitivity analyses.

- Utilise appropriate expertise to protect your interests.

- Tailor an appropriate fee structure to suit your needs.

- Give careful consideration to termination clauses and fees.

- Low bids do not necessarily mean greater efficiency.

- Be wary of vendor mark-ups for supplies.

- Ensure competition in bids to get the best possible price.

- Ensure all activities and related charges are detailed in the contractual arrangements.

- Protect your investment in the vendor.

- Be wary of standard vendor contracts and change-of-character clauses.

- Avoid signing incomplete contracts.
Chapter 6: Strategic Independence and Skill Retention

- Maintain access to independent strategic and technical management expertise.

- Ensure access to vendor expertise on an ongoing basis as appropriate.

- Don't become captive to the vendor through skills or systems knowledge transfer - foster competition and flexibility.

- Manage the issue of technological obsolescence.

Chapter 7: Risk Management

- Ensure effective physical and logical security access to vendor's systems.

- Require vendor undertakings in respect of confidentiality and service delivery.

- Conduct security checks of vendor employees as appropriate.

- Insist on back-up and disaster recovery procedures.

- Conduct reference checks on vendor (technical and financial capabilities).

- Insist on right to be consulted over system changes.

- Ensure adequate contractual redress for breach of agreement.

- Use specified termination events as deterrent for inadequate service delivery.

- Insert liquidated damages and insurance clauses in contract.
Chapter 8: Accountability

- Outsourcing must not compromise an agencies' public and parliamentary accountabilities.

- Outsourcing agreements must clearly set out the accountability framework within which the vendor must operate.

- Details of outsourcing arrangements, where above a specified value, should be included in agency annual reports to the Parliament.

Chapter 9: Software Issues

- Clearly identify ownership of intellectual property rights in the contract.

- Clarify the ability to transfer or assign existing software licenses, as required.

- Consider impact of current proposals on existing outsourcing arrangements.

- Ensure vendor utilises only licensed software and has effective virus protection procedures.

- Utilise Victorian Government Purchasing Board's government wide purchasing arrangements for software products, where possible.
CHECKLIST OF LEGISLATION, POLICIES, GUIDELINES AND STAKEHOLDERS

The Committee has sought to develop a list of legislative and other requirements that may have an impact on the outsourcing of information technology services. This first attempt at establishing current requirements is intended as the basis for future refinement and updating.

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**Policies and Guidelines**


- Information Technology and Telecommunications Policies and Guidelines, January 1995:
  - IT&T-07 Open Systems Environment Policy
  - IT&T-08 Telecommunications Guidelines
  - IT&T-13 Outsourcing Policy
  - IT&T-16 Software Copyright Policy
  - IT&T-17 Government Information Technology Conditions (GITC) Policy
  - IT&T-18 Purchasing Guidelines
  - IT&T-20 IT Advisers Conflict-of-Interest Policy
Policies and Guidelines (cont.)

- Outsourcing Best Practice Methodology, January 1995
- Guidelines for the Engagement and Management of Consultants, November 1994
- Contracting Out Guidelines, February 1994
- Infrastructure Investment Policy for Victoria, June 1994
- Supply Policy Manual 1994 (particularly Approved Supplier Policy Guidelines)
- Proposed Outsourcing and Contract Management Guidelines

Stakeholders

- Department of the Treasury and Finance:
  - Outsourcing Evaluation and Contract Management Unit;
  - Information Technology and Telecommunications Division; and
  - Office of State Owned Enterprises.
- Victorian Government Purchasing Board
- Department of Business and Employment
- Office of Public Sector Management
CONSULTANT'S REPORT
Information Technology Outsourcing

Agency Case Study Analyses and Recommendations for the Public Sector

Prepared for the Public Accounts and Estimates Committee

December 1994
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Appendix A - Selected Glossary
1 TERMS OF REFERENCE

The consultancy will examine the following aspects of two (as nominated by the Committee) government agencies' IT outsourcing arrangements:

- assess the adequacy of agreed performance measures and benchmarks including an evaluation of the way in which performance is measured and reported;

- assess the fee structure with a view to ensuring that fees have been set in a manner which is conducive to minimising overall costs to the agency over the term of the contract;

- ensure that the arrangement has been structured in a way that enables the agency to maintain an appropriate level of strategic independence from its outsourcing supplier; and

- evaluate whether the agency has retained sufficient in-house skills to effectively manage and monitor the supplier's performance as well as ensure the ongoing development of IT enhanced business strategies.

The report of this consultancy will detail conclusions and recommendations in respect of those aspects of IT outsourcing which have been reviewed. The Consultant's recommendations may encompass wider related issues and is expected to identify solutions to problems encountered which in particular may have general application for IT outsourcing in the public sector. A key focus of the report will be lessons for public sector IT outsourcing as whole (which arises from the consultancy).

The report will also provide an opinion on the following issues:

- are the IT outsourcing arrangements at the two government agencies cost effective when compared to their projections and former cost structures?

- has each agency maintained the skills necessary to independently develop IT strategies and manage and monitor the IT supplier?

- has each agency maintained an appropriate level of strategic independence from its IT supplier?

- has each agency taken appropriate steps in appointing its IT supplier?

- is the method used to set fees appropriate? For example, does the outsourcing arrangement make provision for performance based incentives or penalties and does the pricing mechanism/outourcing arrangement ensure fees remain competitive in light of future technological advances and other factors?

The following page provides a schematic for the major activities of the consultancy.
The Approach

This schematic provides an overview of the major project activities.
2 EXECUTIVE SUMMARY

This report has been prepared to help public sector agencies learn from the information technology (IT) outsourcing experiences of two agencies, the Victorian WorkCover Authority (the VWA) and the Victoria Police (the Force). These agencies have outsourced very different IT services using very different approaches. The VWA used transitional outsourcing to divest of a major service that was inconsistent with their role as a regulator and the Force used short term contracting to meet immediate personnel needs. Their combined experiences, highlighted in this report, offer valuable insight for any agency.

A number of basic recommendations over what an agency must consider when making a sourcing decision, be it insourcing or outsourcing, have been provided in this report. Following these recommendations will give an agency a higher probability of success at the outset and on an ongoing basis. Briefly, these are that each agency must recognise that:

- Outsourcing is not a replacement for a well thought out IT strategic plan - each agency should have a strategic plan and know where IT fits in.
- There are many specialist skills that will be required including a strategic perspective, project management, market valuation, tendering, legal, technical, negotiation and internal change agent.
- Outsourcing should be part of a sourcing strategy - each agency should evaluate outsourcing candidates across its entire IT infrastructure using a number of perspectives to determine its optimum sourcing strategy.
- Outsourcing should follow a structured project management methodology - outsourcing is a series of stages and tasks and each agency must be manage it as such, particularly as the public sector is exposed to scrutiny.
- The contract, service level agreement(s) and support schedules should be developed before going to tender - the agency must do it at some point and it will make the entire process more efficient.
- The collection of required cost information includes many indirect and off budget costs and the internal costs associated with moving to the market should be added to cost/benefit analysis.
- Outsourcing is a fundamental shift from internal service provision - a profound adjustment is required.

Recommendations were also directed to the Victorian government. Identified was the need for an outsourcing education program, a centralised reference source and an outsourcing users’ group. Agencies embark on outsourcing arrangements without a comprehensive understanding of the advantages and disadvantages, decision making frameworks, the process and approaches. A well constructed and objective education program will help better decision making. Agencies are not often aware of relevant legislation and government stakeholders that they will need to consider and/or comply with, tending to find these out in a haphazard manner. The Victorian government can help by publishing a reference list with a brief summary of considerations relevant to outsourcing. Finally, establishing an official network of agencies that have outsourced will enable sector-wide learning and information sharing.

Further research was recommended in the areas of longitudinal studies on the impact of outsourcing on organisations, the effect of outsourcing on customers’ competitiveness over time and the potential of an oligopolistic outsourcing market on competition within the outsourcing market itself.
Summary of Agencies' Advantages and Disadvantages from Outsourcing

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td><strong>Organisational Flexibility</strong></td>
</tr>
<tr>
<td>Cash flow relief by vendor buying assets and hiring agency staff.</td>
<td>Extra use charges.</td>
</tr>
<tr>
<td>Flexible budgeting position through transfer of capital costs to operating expenses.</td>
<td>Market rates inherently higher than agency internal rates due to need for vendor's to pay taxes and have a profit margin.</td>
</tr>
<tr>
<td>Convert cost centre within organisation to a profit centre within the vendor's operation, of which the agency obtains a royalty.</td>
<td>Higher long term costs offsetting satisfaction of short term need.</td>
</tr>
<tr>
<td>Identifiable, predictable and controllable costs.</td>
<td>Transitional personnel related costs - remuneration payouts and placement costs.</td>
</tr>
<tr>
<td>More frugal use of IT resources as money is paid to external parties, avoiding traps of internal cost allocation.</td>
<td>Cost of tender, negotiation and implementation.</td>
</tr>
<tr>
<td>Charge rebates for non performance of agreed service levels.</td>
<td>Additional cost of skills and resources required to manage the relationship and arrangement.</td>
</tr>
<tr>
<td><strong>Efficiency and Effectiveness</strong></td>
<td><strong>Less return on the training investment regarding vendor personnel.</strong></td>
</tr>
<tr>
<td><strong>Catalyst for organisational change.</strong></td>
<td><strong>Potential litigation costs for contract breaches.</strong></td>
</tr>
<tr>
<td>Accommodate agency need to restructure.</td>
<td>High exit barriers and irreversibility.</td>
</tr>
<tr>
<td>Address problem of resource supply constraints and skill shortages.</td>
<td>Loss of control over decision making, resource management, and daily operations.</td>
</tr>
<tr>
<td>Access to personnel with greater motivation, leading edge skills and more flexible work practices.</td>
<td>Vendor inflexibility to economically meet changing business requirements on a timely basis.</td>
</tr>
<tr>
<td>Shorter lead times to take advantage of new technology and ideas.</td>
<td>Loss of in-house expertise.</td>
</tr>
<tr>
<td>Predetermined and guaranteed service levels and deadlines which are outcome, rather than process, orientated.</td>
<td>Exposure to vendors' financial strength, lack of understanding of agency and public sector, and placing a lower priority on agency's needs.</td>
</tr>
<tr>
<td>Focus and release agency's limited resources to core purpose and services.</td>
<td>Supply restrictions - can be locked into a single supply source or create a private monopoly.</td>
</tr>
<tr>
<td>Access to technology without capital investment allowing incremental increases in IT resources as opposed to a step and plateau function.</td>
<td>Possibility of being tied to obsolete technology in order for vendor to achieve economies of scale.</td>
</tr>
<tr>
<td>Wish pay for performance, vendors more responsive to performance complaints.</td>
<td>Exposure to vendors' lack of commitment to outsourcing resulting in technology or service degradation.</td>
</tr>
<tr>
<td>Centralised user support, resulting in fewer distractions to other staff.</td>
<td>Potential loss of service levels as vendor may only meet the contract, not exceed it, without incentives.</td>
</tr>
<tr>
<td>Added discipline to planning and specifying agency's user requirements.</td>
<td>Support likely to be offsite.</td>
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<tr>
<td></td>
<td>Homogeneous, rather than tailored service.</td>
</tr>
<tr>
<td></td>
<td>Need for more careful and rigorous monitoring of performance.</td>
</tr>
</tbody>
</table>
3 BACKGROUND

3.1 OVERVIEW OF THE REPORT

This report forms part of the Public Accounts and Estimates Committee’s Inquiry into Information Technology Outsourcing in the public sector. The primary focus of the report is to identify problems and solutions encountered by agencies that have outsourced.

Two agencies have been selected for an in depth review of key strengths, weaknesses and lessons on a number of outsourcing issues including the process from feasibility to implementation, vendor performance and cost management, and in-house capabilities. The review was not been designed to question the agencies’ actions, rather provide useful information for all public sector agencies on how they can achieve the benefits these agencies obtained, incorporate areas that could have been improved with hindsight and learn from which areas they would perform things differently or in the same way.

The report begins with an overview of outsourcing, historically and in the public sector. Each agency’s outsourcing arrangement and the lessons observed are then presented. Recommendations follow, offering practical advice of benefit to all agencies - those that are considering outsourcing, those that have outsourced and those that are sourcing internally.

3.2 HISTORICAL VIEW OF IT OUTSOURCING

It is important to recognise that there is no robust definition of IT outsourcing. A survey of 251 US CIOs (chief information officers) conducted by Gateway Information Services concluded that there is little precision in the term.\(^1\) Some use it to mean contracting out any task, service, or function; while others refer exclusively to external governance of the data centre. Vendors, attempting to distance themselves from the outsourcing label, have begun to use other terms including “multi-sourcing”, “co-sourcing” and “right sourcing”.

It has been described by practitioners as a contractual abdication of IT responsibilities within an organisation - a literal handing over of the keys to the DP shop to an external party.\(^2\) The Australian Commonwealth defines it as “a contractual arrangement where an external organisation takes responsibility for performing all or part of an agency’s IT functions.”\(^3\) It has been defined in academia as the “significant contribution by external vendors of the physical and/or human resources associated with the entire or specific components of the IT infrastructure”\(^4\).

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1. As cited in *I/S Analyzer*, September 1993, p. 3.
In practice, organisations have been outsourcing IT for decades. Since the early years of computing, contracting of systems and programming work was common practice as was using service bureaus for transaction processing and time sharing. Later, contractors were used for "turnkey projects" to deliver a complete working system. During the 1980's, the term "facilities management" was coined to describe the management of a processing centre by a third-party. Today, the provider may buy all or part of a customer's computer resources and rehire the employees - playing a greater management role rather than just a supplier role.

The contemporary form of outsourcing is considered to go beyond traditional contracting out as it includes management tasks, as well as "raw" services and is often a fundamental reconstitution of the overall IT infrastructure strategy. The factors that differentiate today's outsourcing from the previous term of contracting out are:\footnote{5}

- the size and duration of the project,
- the breadth of responsibility assumed by the supplier,
- the possible transfer of assets and/or staff, and
- the partnership style of relationship between customer and supplier.

The market rush began with Kodak's announcement that IBM will run the data centres and local communications, DEC will manage worldwide telecommunications, and Business Land will provide support for personal computers. Researchers at the Massachusetts' Institute of Technology found that the current IT outsourcing diffusion pattern was motivated more by imitative behaviour, beginning after Kodak, than any other influence through a study of 60 US media articles beginning in January 1985 to August 1990 (figure 1). This finding led the authors to coin the recent phenomenon as the "Kodak effect" because of the sharp increase in outsourcing announcements after Kodak's highly publicised arrangement in 1989.\footnote{6}

The Kodak effect resulted in the prevailing impetus of outsourcing diffusion being the emulation of prior adopters. For the majority of organisations, the idea only became thinkable when an increasing number of large and visible entities publicised their plans and openly discussed their expectations of the benefits of outsourcing. This type of imitative influence dominates when an innovation is socially visible and not adopting it is perceived to place social system members at a disadvantage.

\footnotesize{Sources and the Kodak Effect", Information Systems Research, December 1992, pp. 334 - 358.}


\footnotesize{6 Loh and Venkatraman (1992).}
In this case, the prominence of the organisations involved (Kodak, IBM, DEC, etc) and the size of the contract ($500 million) gave a higher level of visibility than existed in any prior user-vendor relationship. Kodak, as an opinion leader, reduced the uncertainty inherent in the process of adoption by providing information access, a source of reliability, and a symbol of legitimacy to potential adopters. Kodak occupied a critical boundary spanning role in the network of potential adopters and the media campaign provided a very effective channel through which the innovation was communicated.

3.3 OUTSOURCING IN THE PUBLIC SECTOR

Although international media and research tend to focus on the private sector, in Australia it is the public sector that is outsourcing significantly more. A recent study of 90 Australian organisations found that 37% of public sector organisations were outsourcing over half of their total IT services compared to only 15% in the private sector (figure 2). 7

Figure 3 below shows that the public sector is also considering outsourcing at a far greater degree than the private sector. The only decision making where the private sector had more activity was in rejecting outsourcing, with 21% showing a high rejection rate, compared with 8% in the public sector (figure 4). This rejection rate is even more striking as it was greater than the high degree of performing (15%) and considering (8%) outsourcing in the private sector.

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7 Cullen, Sara (1994), *Information Technology Outsourcing, Myths Exploded: Recommendations for Decision Makers*, research prepared for the University of Melbourne.
The IT services and the frequency they are being outsourced in each sector are given in Figure 5. The only similar statistics are with communications and operations which 34% to 37% and 9% to 11%, respectively, of Australian organisations are out-sourcing regardless of sector. The public sector favoured outsourcing systems development and applications support over twice as much, systems integration three times as much, and has outsourced a considerably greater degree of strategic planning.

The reasons each sector is performing or considering outsourcing are given in Figure 6. The private sector is far more interested in cost savings than the public sector, which gave improved service as the primary reason. This is supported by the research conducted by IDC that found that the Australian public sector rated cost control as its sixth most pressing IT concern and the private sector rated cost third.8

Prior research has highlighted unique barriers to outsourcing for the Australian public sector.9 The three major barriers that affected agencies' ability to take effective outsourcing decisions found in that study were:

- availability of funds
- staff relations
- tender time scales

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While the primary barriers were internal, there were several other factors on the supply side regarded by agencies as barriers to outsourcing, including the vendors':

- insensitivity to agency requirements
- lack of relevant customer application skills
- lack of a "cooperative culture"
- ability to acquire transferred resources
- financial strength

Notwithstanding these barriers, outsourcing initiatives have had their effect. Figure 7 shows where the outsourcing is occurring according to a study by Telepartners and Reark Research.10 At the time the study was performed, Victoria had the highest relative percent of its recurrent IT budget outsourced. However, the implementation of the recent outsourcing arrangement between the SA government and EDS is certain to put them in the leadership position.

The next two sections describe the experiences of two public sector agencies, the Victorian WorkCover Authority and the Victoria Police.

10 MIS, November 1993 p. 30.
4  THE VICTORIAN WORKCOVER AUTHORITY - CASE STUDY 1

4.1 BACKGROUND

During 1993, the Victorian WorkCover Authority (the VWA) investigated outsourcing as part of a strategic realignment, while recognising the pro-outsourcing views of new State government. They became the first agency under the new government to outsource on such a large scale the following:

1. Operation of the IBM data centre supporting a state wide network of approximately 2000 terminals serving 50 sites. The data centre assets were sold to the vendor. The centre and office space were sublet to the vendor.
2. Development and maintenance of a central transaction processing system (ACCTion) used by the 16 Authorised Insurers of WorkCover to operate the scheme. The VWA retained intellectual property rights and collects royalties from the vendor who has a licence to market the software.
3. Development and support of the management reporting database.
4. Facilities management VAX legacy computers from the Accident Compensation Tribunal, WorkCare Appeals Board and the Victorian Accident Rehabilitation Council. The VWA retained ownership of the assets and most applications are being eliminated or converted to a LAN platform.
5. Facilities management for an AS/400. The VWA retained asset ownership.

The VWA had already outsourced a number of peripheral IT areas or “finger and toes”, but the data centre and ACCTion application support were the first of what was considered a core service or “heart and lungs”. Providing a transaction processing system was not consistent with the role of a regulator. If outsourcing did not proceed, it was expected that the ACCTion system would be closed down after three years at an estimated cost of $2M, the accumulated investment written off and up to 100 jobs progressively lost. There were many other supporting reasons including that it:

1. implements the Government’s outsourcing policy.
2. offers projected operational savings of $3.8M over three years and avoids close-down costs of $2M.
3. saves jobs of staff transferring from the public to the private sector.
4. fosters competition and service improvements in the insurer markets.
5. has a potential revenue stream from intellectual property royalties
6. promotes industry and export development in Victoria.11

The three year “transitional outsourcing” contract was awarded to the vendor that had the best offer and best met the strategic goals of the VWA. During the three year period, the fee paying customer of the ACCTion service will change from the VWA to the authorised insurers. The vendor is solely responsible for marketing ACCTion and retaining the insurers as customers.

11 There is a contractual obligation to locate the service facility in Victoria for the life of the contract.
4.2 THE OUTSOURCING PROCESS

4.2.1 Feasibility

The VWA did not know who would be interested and what form outsourcing would take at the time it placed a public advertisement in June 1993. Originally intending to outsource the entire IT function, it was decided to package and sell the services that had synergy and were no longer compatible with the VWA’s changed role. The sale was performed through a transitional outsourcing arrangement in which the data centre processing and ACCtion application support services are funded on a decreasing level by the VWA, with the vendor responsible for capturing the insurer’s continued business.

Strengths

Clear business driven objectives

The VWA had very clear and business driven objectives for outsourcing and communicated these to its personnel and potential vendors. According to the vendor, only 20% of outsourcing intentions are real for a variety of reasons. The vendor stated that the VWA’s real commitment to outsourcing increased their commitment to the VWA.

Obtained external experts

The VWA was astute enough to realise it required assistance in determining the best way forward and acquired the help of two consulting agencies - one with strategic IT advice the other with corporate advisory services. They worked together to package, add value and present the set of services that went to tender.

Changed requirements as learning progressed

The VWA recognised it was on a learning curve and continuously clarified its goals and requirements as it became more knowledgeable. Rather than commit too early to a "standard" outsourcing arrangement, it incorporated its learning into evolving an arrangement that was in the best interest of the VWA’s role and its customers.

Areas for Improvement

Gathering of other organisations’ experiences

The VWA did not gather much information about other organisations' outsourcing experiences. For this reason, the organisation embarked on its learning curve during the tender and negotiation process rather than before it. However, this was offset by the use of experienced consultants.

Lessons

Remain flexible

An agency should not be reluctant to change its mind about what and how it wants to outsource and what it wants in a vendor. The agency should recognise it will be on a learning curve about the vast array of arrangements that can be constructed to best suit its needs.
Acquire expert knowledge the agency does not have  

An agency should also recognise that vicarious learning can be a very effective tool, particularly if the stakes are high. Where it lacks the necessary comparable skills that exist in the market (in the VWA’s case - packaging and valuing their product), it should consider going to the market to buy them.

Identify potential stakeholders  

Agencies have a responsibility for the welfare of the specific and general community it services. Consequently, each agency should also identify all the stakeholders, internal and external, and the impact outsourcing may have on the stakeholders and their objectives. This then should be communicated to them, progressively as appropriate.

4.2.2 Tendering

There were 25 enquires following a public Request for Proposals (RFP) advertised in The Age and The Australian newspapers and 14 organisations collected the RFP document. After a briefing session by the VWA’s management, eight written proposals were received and four were given the opportunity to tender.

Two finalists were selected who were then allowed to perform due diligence on the information provided in the VWA’s tender documents and subsequently confirm their bid. The winning vendor was chosen because it:

1. was financially and commercially sound
2. offered the best cost/benefit of all tenders
3. offered the best development opportunity for ACCtion
4. had the best customer fit with insurers
5. presented the lowest risk.

Strengths

Used experts to prepare RFT information  

The consultants wrote the RFT including rigorous financial and other information about the “product” offered for sale that enabled potential vendors to make full and well-judged responses without the need for due diligence at the early stage. Buying such resources enabled the VWA to minimise disruptions to the business and keep it running as usual. The vendor also noted that the consultants added value to their processes as well, as they were not there to shield the customer from the vendor as experienced in other cases, but were there to ensure full disclosure of the information the vendors needed to know.

Comprehensive RFT  

The VWA was also very clear and comprehensive in the RFT, stating that the tenders should be based solely on the information contained therein and there were no significant issues excluded from the document. The vendors found the VWA much easier to tender for as a result and the tendering process was more direct and meaningful.
Research and testing of vendor characteristics

The VWA actively queried references, including the flexibility and reasonableness to negotiate mid-contract term and willingness to fix problems encountered. In addition, the VWA inadvertently tested the flexibility (a characteristic considered critical to success) of the potential vendors by significantly changing the structure of the arrangement from a straightforward service contract to a form of transitional outsourcing that phased in complete vendor ownership. A number of vendors were no longer interested due to the lack of a guaranteed cash flow and limited desire to make the ACCtion-based service a viable business.

Assessment of qualitative vendor criteria

Recognising that the tender evaluation requires more than just an assessment of price, the VWA developed intangible evaluation criteria to rate the short listed vendors. These values were weighted according to their importance and the vendor rated according to each. The two figures were then multiplied for a weighted score.

Top management involvement

The VWA’s Director of Finance was in charge of the tendering process. This provided independence from the IT functions, a structured tender process and rigorous record keeping. The active involvement of the CEO and Board of Directors was also critical. They interviewed the four finalists and selected the eventual winner. Their queries and observations raised significant issues and provided valuable insight. Even the vendor was impressed by the level of detail and insight the Board presented, noting this is often a function of the degree of real commitment.

Agency commitment

The timetable was very ambitious. All project deadlines were achieved other than the final contract signing which was a few weeks late. The vendor attributed the achievement of milestones again to the VWA’s commitment. There were no roadblocks as the vendor’s due diligence did not yield any ambiguous or conflicting information and access to personnel during the due diligence process was considered exceptional.

Used power as a potential customer to have vendor to invest time and resources

In having the two finalist vendors perform a due diligence on information provided by the VWA, significant cost savings were achieved. Typically, vendors will delay investing significant resources in due diligence until after the cash flows have begun by including a “refinement period” in the contract during which the final arrangement and service levels are developed. This is the equivalent of paying for a car and then determining what kind of car. In keeping the tender “carrot” dangling, the VWA forced the vendor to invest time without having to make a cash outlay itself.

Areas for Improvement

Time estimates

The VWA had required the vendor to provide an expiration date for their offer. Furthermore, each day that the contract signing was delayed meant
the value of the arrangement to the vendor was diminished. This resulted in a greater degree of rushed activity to sign the contract than would have been desired as the expiration deadline grew closer.

**Lessons**

**Perform legwork up front**

The agency should perform its legwork before the tendering and negotiation processes. Although the contract and service level agreements (SLAs) are typically written after selecting the vendor, the earlier the agency defines the contractual obligations that the parties will enter into and the services that the vendor will provide, the more efficient and effective the entire process will be.

**Detail the services and potential service scenarios**

An agency should know exactly what services it wants to outsource, clarify the impact of all issues that may not be certain during the life of the contract (e.g., change in government, agency privatisation or amalgamations, varying demand - up and down), the potential resource use scenarios during the life of the contract. The agency should separate all issues it is certain of and all those that there is a degree of uncertainty. Vendors are usually eager to help potential customers with the uncertain aspects and available alternatives.

**Write clear, complete and honest RFTs**

The agency should write clear and forthright RFTs. Often RFPs/RFTs are written ambiguously and agency personnel perceptions differ when queried by interested vendors. A carefully crafted and forthright tender produces meaningful and accurate responses, minimises the time needed to clarify issues and improves the agency’s negotiation power. The less clear the information provided to vendors the greater range, ambiguity, and inaccuracy of responses. The agency may also want to charge a fee for the RFT to eliminate unnecessary administration time and costs involving potential suppliers who may not be earnest.

**Identify and state position on controversial issues in tender**

The agency should put all controversial contract clauses (e.g., vendor liability and indemnity) in the RFT. These types of clauses have stalled many negotiations and have cost both parties in legal fees. By making them part of the up front bid, time and resources will be saved during negotiation. However, agencies should be cautioned that such clauses in the RFT may scare off vendors, thus each agency must assess its bargaining power compared to the bargaining power of the vendor - who has the most to gain and lose by outsourcing and the clauses?

**Recognise power as a potential customer**

An agency should try to obtain as much time and resources from the vendor while the tender remains open. Once the winning vendor has been selected, an agency’s bargaining power is eroded and vendors are less inclined to invest time and resources until their cash flow from the agency has begun.
Determine synergy between strategic goals

The agency should determine the degree of synergy between its strategic goals and those of potential vendors. The VWA did not place major importance on this initially, but it became one of the most crucial factors in choosing the vendor. An agency should also attempt to test the potential vendors for the critical qualities it is seeking to obtain valuable insights into the vendor’s culture, rather than accept proposal rhetoric. If flexibility is important, as it was found to be in the VWA’s case, it is best to test that flexibility earlier, before any contract is signed.

Determine net economic benefit

The VWA favoured domestic providers, as do most Commonwealth and State Governments. This is because the government has a responsibility for the country’s and state’s best economic interests. Each agency should look at the net economic impact of each vendor’s proposal. If it is not favourable, let the vendors propose how they could make it favourable.

Recognise possibility of vendor lobbying

Each agency should be prepared for some degree of political lobbying from vendors, particularly if the potential revenue is great. Vendors that are knowledgeable and shrewd in public sector processes will use the means they perceive are available. The more rigorous, controlled and objective the tender processes are, the less likely an agency may be exposed to confronting lobbying efforts.

4.2.3 Negotiation

The table below describes what issues the VWA had thought would require negotiation or discussion and what issues actually did, from both the VWA’s and the vendor’s perspectives.

<table>
<thead>
<tr>
<th>Issues Anticipated Before Negotiations Began</th>
<th>Issues that Occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service performance</td>
<td>• Service performance</td>
</tr>
<tr>
<td>• Termination arrangements or “turnback”</td>
<td>• Liability and indemnity provisions and caps</td>
</tr>
<tr>
<td>• Confidentiality and security</td>
<td>• Providing incentives for the vendor to improve service and reduce cost to the agency</td>
</tr>
<tr>
<td>• Data ownership</td>
<td>• Working conditions (pay, leave, etc.) and transfer of leave liability for transferred employees</td>
</tr>
<tr>
<td>• Intellectual property and marketing rights</td>
<td>• Intellectual property and marketing rights</td>
</tr>
</tbody>
</table>

Strengths

Had vendor verify information during tender

By requiring the vendor to obtain all their required facts during the tender due diligence process, the final agreement was able to be negotiated - not an agreement to provide services while a final agreement is being determined, as is common when customers are not well prepared.

Tracked queries and responses

The VWA had a rigorous record keeping system for the due diligence that the vendor performed as part of the tender process. All the vendors’
queries were required to be in writing and the responses made by the VWA were meticulously recorded. Consequently, when it came time for negotiation there was little room for conflict as all representations made by the VWA and the vendor had an audit trail.

Involved top management

The CEO was actively involved in negotiations and developed a face-to-face relationship with the vendor. This enabled an understanding of each other’s business issues and underlying drivers of the positions taken during negotiation.

Negotiated flexible terms early with third parties

As soon as the VWA had thought outsourcing may occur, it negotiated more flexible software licence and maintenance agreements with its suppliers, reducing the contract periods such that they would not be out of pocket or liable for payments after outsourcing. It also obtained current copies of contracts, licences, etc., in preparation for due diligence.

Used only retained staff to assist

The VWA chose to use personnel who were not transferring to the vendor to negotiate various aspects of the contract, service level agreement and supporting schedules. In this manner, they did not have to deal with the issue of prejudice towards the vendor’s position (their future employer)

Areas for Improvement

Continued use of experts

Although the VWA used an experienced lawyer, it felt it let go of its other external consultants too early. They provided significant benefits by determining the value of the services outsourced, in being independent, and providing additional personnel. The resources available to handle negotiations and related work while also trying to maintain business as usual put considerable strain on those involved. In hindsight, retention of the consultants for a longer period to provide an alternative view and make recommendations regarding contract issues and administration would have been beneficial.

Mutual understanding of business constraints

Both the VWA and the vendor were willing to walk away at a couple of stages when certain contract clauses reached a stalemate. This occurred because of the significant gap between each other’s business priorities and constraints.

Allowing for negotiation effort required

The extent of time and resources required to negotiate the final agreement while supporting normal operations resulted in some of VWA’s staff to performing the equivalent of two jobs. In addition to usual responsibilities, there were at least two half day negotiation sessions with the vendor per week for a couple of months, besides meetings with its legal representatives and contract reviews and revisions. On occasion, this required superhuman efforts working all hours and weekends. The additional stress and dispersion of focus is not recommended for successful negotiating.
Lessons

Selection of personnel used to negotiate

An agency should use personnel experienced in each area of the service to be outsourced who will not be transferred to the vendor to define and negotiate the service level measurements. Experience is necessary because a great level of detail is required to adequately define the performance levels and how they will be objectively measured. Objectivity is necessary because potentially transferred personnel may be motivated to set performance levels at levels that they know they can achieve rather than the levels the agency requires, which may differ.

Employ expertise equal to the vendor's

Agencies should be aware that legal representatives may know contract law, but rarely have an in depth knowledge of the technological and business implications of the issues under negotiation. Each agency must have all skills represented to ensure its interests are provided for in the legal documents - the vendor does.

Plan time and resources for negotiation and normal operations

Negotiation typically requires more time and resources than most organisations allocate. There will be large blocks of time required from people in the agency who also have a business to run. There will inevitably be issues with clauses in the contract (often the liability and personnel provisions) and agreeing meaningful and measurable performance levels. The agency will be continuously refining the contract as issues get resolved and new ones come to light. Each agency must plan for and schedule this commitment.

Negotiation is for clarification, not for gathering new facts

There should be no new facts when negotiations begin. The process should centre on the interpretation and writing of the exact wording of contractual obligations. The majority of both parties’ legwork and investigation should have been done during the feasibility and tendering processes. In addition, the agency should have a process where all representations made by the parties are recorded for future reference during negotiation. In this manner, the agency is in a better position to ensure all implied warranties are made explicit and that potential misunderstandings can be quickly tracked to their source and resolved.

Establish mutual understanding early

Both the agency and the vendor must attempt to fundamentally understand how each other operates, how business performance is measured, and operating constraints and priorities. There are basic differences between the private and public sectors that are often not explicitly recognised but can cause communication difficulties.

Negotiate early with other affected suppliers

It is the agency’s responsibility to ensure any existing agreements with other suppliers will not cause difficulties. The time to negotiate and collect current documentation regarding software licence and maintenance agreements is as soon as it believes outsourcing is possible. The agency should not assume suppliers will be willing to novate their agreements.
4.2.4 The Contract

The VWA contract was a large one. The general terms of the contract comprised 32 pages and there were 29 supporting schedules.

Strengths

* Tailored, comprehensive contract*

The VWA has a contract tailored to its relationship with the vendor and used an external lawyer experienced in contract law and intellectual property. Although the GITC was used as a reference, it was felt to be too cumbersome and did not represent a practical negotiable position. The contract is comprehensive and the detailed supporting schedules demonstrate the rigour with which the contract was prepared.

* Required service facility to be in Victoria*

By having a contractual obligation to have the service facility located in Victoria, the VWA ensured the State would not be adversely affected in terms of lost jobs and revenue. In fact, an increase may be likely as the vendor considering moving some of its interstate services to Victoria to gain economies of scale.

* Provided for agency's intellectual property*

The contract preserves the VWA's intellectual ownership of the ACCtion software. Covers potential changes of circumstances that may require contract "turnback", and includes incentives and penalty provisions for vendor performance.

Areas for Improvement

* Contract administration*

The VWA had not considered or planned for the administration, logistics and development processes of the contract documentation. The vendor ended up administering because they had more resources, but had to make quick arrangements for a legal secretarial firm that would work late into the night so the process would be completed in a timely manner.

Lessons

* Determine contract development procedures and responsibilities*

Each agency should consider how contract development will be administered and by whom. There are effectiveness and efficiency issues that need to be addressed if either the vendor or the agency administers the legal documents. If the agency administers the contract it will need advanced word processing skills and document management. If the vendor does, the agency will need to review each draft in extensive detail.

* Manage the potential creation of a private monopoly*

Each agency must recognise that it may be in a position that converts its monopoly service provision to a private one. The agency must decide if this is in the best interests of its stakeholders, then ensure that a competitive market will exist at the time the contract ends or include appropriate "corporate citizen" contractual obligations for the vendor.
4.2.5 Implementation and Transition

The VWA's contract was signed on 13 December 1993 and the vendor took over the business as a going concern at the VWA's premises a week later. The vendor made 75 offers to staff, of which 65% were accepted and the staff not wanting to transfer subsequently took volunteer departure packages or were redeployed. All the 30 contractors were transferred, some as permanent employees.

**Strengths**

*Communicated with and motivated employees*

Since the time of initial feasibility exploration until well after the contract had been signed, the VWA involved and communicated with its potentially affected employees. Positive motivation was provided through driving the outsourcing process internally, emphasising the benefits to the agency and to each individual, and outlining employee options and career opportunities. Furthermore, staff were kept very busy with challenging work.

The head of the IT area regularly issued staff bulletins and held staff meetings regarding the status of the project, any issues they had and encouraged questions. This set a tone of openness and decreased the level of uncertainty that often leads to employee turnover or demotivation. In addition, although the vendor could not make an offer until the contract was signed, once the vendor was selected communication occurred with the VWA's employees that may be transferred including describing what being an employee for them would be like, the working conditions and how the transition would occur.

*Transferred experienced staff*

Since most staff experienced in the operation and support of the system transferred to the vendor and the physical location remained the same, the transition did not cause any operational disruptions.

**Areas for Improvement**

*Realistic expectations of transferred staff*

The VWA and the vendor performed such an effective job of selling the benefits of moving to the vendor, the transferred employees had very high expectations. After the vendor took over operations, these expectations had to be aligned with the reality of business as usual for a while and that opportunities for advancement, training and new work would come in due course.

**Lessons**

*Establish ongoing communication with staff*

How the agency manages staff relations can make or break the entire process. The agency must communicate why it is considering outsourcing, the impact it may have on its employees, how it intends to involve them and what they can gain from it. This is most effectively
done by top management. The agency must also educate its employees that may transfer to the vendor on how their working environment may change and set realistic expectations on when and how it might change. The vendor should be involved in this education program early and should be available to the agency's staff to discuss any issues that arise.

An agency's work does not end when the contract is signed. Vendors typically require significant assistance in setting up the service and the agency will likely need to restructure its internal operations and work flows. Large outsourcing projects often require a few months after the contract is signed to bed down the service, performance measuring and procedures.

4.3 VENDOR PERFORMANCE

4.3.1 Measurements

Strengths

*Used experienced personnel to set measurements*

The VWA utilised an experienced systems programmer who chose not to transfer to the vendor to negotiate the data centre operations performance levels. For this reason, coupled with the fact that more robust and known measurements are generally available for assessing data centre performance, the performance levels for this area of the outsourced services were the best defined and have proven to be the most effective and objective.

*Set realistic performance penalties*

The VWA contract has penalty provisions for performance deficiencies. It allows the vendor up to three months to fix performance problems, then the VWA has the option terminate the contract. Fee abatement will apply where the vendor's actions to rectify significant performance deficiencies are unsuccessful. The VWA has not had to enforce this part of the agreement.

Areas for Improvement

*Hard to measure performance indicators left undefined*

Application development measurements are notoriously difficult to measure. As a result, the performance levels for this area of the outsourced services were not defined at the time the contract was signed, only the procedures both parties are to follow. The VWA is still in the process of determine how to cost effectively define and measure "good" applications development. The vendor perceives that the VWA and most public sector agencies are less generally disciplined in measuring mechanisms than private sector customers.
Lessons

Use experts to set measurements

Setting appropriate measurements requires skilled and objective technical personnel who can make the measurements meaningful and reportable. If such personnel are not available internally, the agency may want to consider bringing in a specialist to help define the measurements. Agencies do not want to be defining “good” service after the vendor has begun delivery, or the effectiveness of evaluating and measuring performance over time will be reduced.

Create incentives to meet performance levels

Each agency should ensure that the proper incentives exist to meet the performance levels. This can be in the form of non performance penalties, but the agency may want to consider delaying the application of penalties until the vendor has had time to correct the deficiency. In this manner, the relationship can be built using carrots not sticks - critical to a successful long term partnership. Furthermore, it is important to realise that service levels are a minimum. At times, the agency’s actual requirements may be greater and the contractual obligations must be flexible enough recognise this.

4.3.2 Reporting and Evaluating

Strengths

Use of experienced part-time contractor

To measure data centre performance, the VWA contracted the programmer who set the performance levels for them during negotiations to come in once a month to evaluate the levels achieved. In this manner, it obtains an experienced assessment without needing to employ a full time resource.

Collection of raw data

Data centre performance reporting is rigorous and extensive. Raw systems data is collected directly from the operating system logs then imported into a database for trend analysis. The reports include the trends, an evaluation and recommendations for further action. In this manner, the VWA has been able to not only objectively assess the vendor’s performance, but also anticipate and manage its own use to ensure additional charges are not incurred and recommend to the vendor where they can be more efficient. In addition, the VWA is continuously seeking better ways of reporting both the vendor’s performance and the VWA’s efficient use of the vendor’s resources.

Areas for Improvement

Undefined indicators continue to be an issue

The VWA is still struggling with the best approach to evaluate the vendor’s performance regarding application development. The only key performance indicator currently reported is the meeting of work request implementation deadlines. These are reported on an individual work
request basis, but not as a service performance trend. The VWA is currently seeking assistance from consultants to improve the evaluation of application development and is evaluating more sophisticated software to improve the reporting of actual versus estimated hours.

Lessons

Performance levels must be reportable

An agency will not be able to effectively evaluate performance that it cannot report upon. Furthermore, the agency’s performance reporting should not be limited to only vendor performance, it must also report on how efficiently the agency is using the services that it has contracted for.

Measure performance before outsourcing

An agency is in the best position to judge the vendor’s performance if it has been previously measuring its own performance before outsourcing. This establishes a meaningful benchmark to determine if service is improving as a result of outsourcing, not just since it began.

SLAs should stand on their own

The VWA feels that it is not an essential to have the same personnel that were involved in the feasibility, tendering or implementation processes also involved in evaluating the vendor’s performance. The service level agreements (SLAs) should stand on their own and not require hidden knowledge. However staff involved in contract management must fully understand the services to be provided and their business impact.

4.4 COST

4.4.1 Fee Structure

Strengths

Set charges for all contract terms

The vendor selected for the VWA contract had the lowest service usage rates and these charges have been set for the duration of the contract in addition to any subsequent terms.

No markups for procurements

No vendor markup has been allowed for reimbursable expenses or procurement of supplies requested by the VWA. Mark ups of 5% to 10% are not uncommon.

No termination fee

The VWA has fee abatement penalties for persistent non performance, with the ability to ultimately invoke termination. Such termination does not have a fee. Vendors often attempt to include a termination fee which can be based on recovering their initial investment (which has been amortised over the life of the contract), but also can be purely punitive.
Amounts in dispute held in bank account

The contract stipulates that any payment amounts in dispute will be paid by the disputing party into an interest-bearing escrow account until the dispute is resolved.

Areas for Improvement

Detailed base charges
Experience has shown that not all services covered under the base charge were as clearly defined as had been thought. Services such as the help desk and DBA support for application problems were viewed by the VWA as included in the base data centre charge, but viewed by the vendor as separately chargeable. This matter is currently being resolved through negotiation.

Lessons

Detail all activities and related charges
An agency should be very rigorous and detailed in specifying what services are included in base charges and what will be charged for separately. Separate services should have the charged rate also specified.

Be wary of termination fees
Agencies should beware of termination fees. Many vendors will include them as a matter of course without appropriate business justification for the charge, hence it is a penalty. Also beware of markups attached to procurement services as vendors have been known to add up to 20% of the item’s price to cover their administration costs.

Consider a bank account for amounts in dispute
Typically, performance penalties are required to be collected from the vendor in the form of a rebate, allowing the vendor the use of the capital until it is returned. Independent safekeeping of amounts in dispute (i.e., holding in a bank account) motivates both parties towards a resolution because neither receive the benefit of having the working capital.

4.4.2 Comparison with Expectations

Strengths

On budget
The VWA did not enter into outsourcing for cost savings, rather it was strategically driven. The cost/benefit analysis yielded only marginal projected savings. The VWA projected the cost saving from outsourcing over insourcing to be $3.8M over the three years of the contract. Costs incurred to date are currently on budget.

Selected a non opportunistic vendor
The vendor has significantly contributed to the ability to be on budget as they have not been opportunistic regarding the use of incremental or separate service charges. Furthermore, they have been flexible and willing to resolve issues.
Areas for Improvement

Plan for staff not to transfer

Some unplanned cost was incurred due to the need to give voluntary termination packages to staff not wanting to transfer to the vendor.

Plan for unexpected service requirements

Planned ACCtion development been more extensive than expected, thus overall costs are likely to be higher. Had the impact been known beforehand, it may have influenced the outsourcing arrangement. The VWA and the vendor are currently negotiating a more favourable cost structure for the additional work.

Lessons

Predicted requirements are only estimates

Each agency should perform sensitivity analyses regarding all activities that use the vendor’s services and the impact that new, delayed, enhanced and overdue events may have on the charges. Almost inevitably, the agency’s predicted level of resource use will change and project deadlines moved.

Need for contingency planning

Not everything will go according to the plan and the agency should have contingency plans for key events such as missed deadlines, over or under staff transfers, and last minute requirement changes. The willingness of the vendor to be flexible and quick to react will play an important part in overcoming hurdles.

4.4.3 Management

Strengths

Focused on improving both parties’ efficiency

The VWA is currently focusing on how their use of the vendor’s services affects the charges. In this manner, they are concentrating on their own efficiency and opportunities for cost reduction. It is also working with the vendor to identify opportunities for efficiency and reductions in application maintenance cost by moving to a more efficient hardware/software platform.

Flexible timing of non base charges

Rather than have a paper war regarding additional or reduced charges billed or claimed each month, the VWA is tracking the unders and overs regarding application development hours on an ongoing basis. The net effect will be provided for at the end of the year.

Areas for Improvement

Managing indeterminate value

Costs are being managed very well. However the management of applications development value delivered is less effective, due to the lack of key performance indicators.
### Lessons

**Sensitivity analysis regarding charges**

The agency must be able to determine which charges are sensitive to its activities and which are not and the degree to which they are sensitive. In this manner the agency will be able to concentrate on managing the resources that have the greatest impact on charges.

**Manage value, not just cost**

It is not enough to manage absolute costs, an agency must manage the value that it has derived from its expenditure. This can be done by assessing stakeholder satisfaction, performance improvements and what the agency and vendor have been able to achieve relative to cost.

### 4.5 AGENCY STRATEGIC CAPABILITIES

#### 4.5.1 Technological

As the VWA has outsourced a service it has strategically divested. There are no related technological capabilities it needs to retain. The areas where it believed skills are required for ongoing effective use of IT have not been outsourced (i.e. relational database development).

#### 4.5.2 In-house Skills

**Strengths**

**Targeted staff to be retained**

Recognising that it would need to retain some skills, the VWA set out to retain 28 IT staff and contractors to support its ongoing regulatory and business operations and to manage the contract. It ended up retaining more than it had planned and had to redeploy or offer packages to the excess personnel.

**Monitoring by experienced staff**

One of the experienced systems programmers informed the VWA early that he would not be transferring to the vendor. The VWA immediately dedicated him to defining the service level agreement for the data centre and he is now in charge of evaluating the vendor's performance. The role of managing the application development services is shared between IT and an experienced business user. This includes approving work requests submitted to the vendor, setting priorities, monitoring the vendor's progress, tracking costs against budget and managing the VWA's internal procedures.

**Incorporated acquired discipline**

The VWA has installed additional management practices relating to the commissioning of IT work. It has found this to be a good discipline that was difficult to implement with in-house operations.
Areas for Improvement

*Educating the vendor* Much discussion and education were required to create within the vendor the VWA's same sense of compliance and urgency regarding government deadlines. The vendor had extensive experience in the industry and supporting software, but had to develop a managerial approach to cope with government deadlines and the impact changes have on their operations, and to coordinate numerous competing customers who were often reluctant to work together.

*Expert help in setting performance measurements* The VWA had not sought an expert skill base to define and structure the development and reporting of the application development key performance indicators. Hence, it remains the most troublesome area in determining the vendor's performance. The VWA is currently considering bringing in external consultants to assist to fill this gap.

Lessons

*Outsourcing as impetus for change* Outsourcing can provide the impetus for positive cultural change. The earlier the agency recognises this and begins to restructure its internal process to take advantage of the benefits, the earlier it will receive them.

*Mutual training* The agency and the vendor must train each other on their respective business environments, needs and processes. Mutual understanding is critical to achieve mutual goals.

*Embrace market practices* The skills and practices which provided value to determining the outsourcing strategy, tendering, negotiating the final agreement and managing the relationship on an ongoing basis can provide value to improving internal procedures and service delivery. Each agency can improve its own operations by assessing which practices provide benefits that warrant internal adoption.

4.5.3 Dependence on the Vendor

Strengths

*Retained staff that can explain vendor propositions* The VWA has retained the knowledge required to evaluate and explain changes that the vendor proposes to the hardware or software and the potential impact on service levels, charges and the VWA's activities regarding the data centre services.
Areas for Improvement

Staff that can determine reasonableness of vendor time estimates

The VWA is dependent upon the vendor to provide accurate estimates of the time required to perform application development tasks. There is no in-house expert that can determine if the estimates are accurate or reasonable. Comparisons are performed to the time required when application development was performed in-house, however these become less meaningful over time as the software evolves, the developers' expertise increases and the technological platform changes. Consequently, the VWA is evaluating the alternatives available, internally and in the market, for knowledge verification of estimates.

Lessons

Need skills to interpret impact of events at the vendor

It is the agency's responsibility to ensure whatever is happening at the vendor doesn't adversely impact its charges. It is also important to realise vendors can make mistakes and the agency will need the skills to know when things are not right and intelligently query and evaluate information. An agency can need any number of appropriately skilled technical support people to measure performance, validate charges and improve its efficient use of the vendor's service.
5 THE VICTORIA POLICE - CASE STUDY 2

5.1 BACKGROUND

The Victoria Police (the Force) has a pro-outsourcing perspective resulting primarily from the desire to assist the implementation of the Victorian Government’s and the Department of Justice’s outsourcing policy. Their preference is to outsource unless concerns over the following limit the potential benefits:

- security and confidentiality
- criticality
- value for money

The Force has outsourced the provision of personnel required for an information systems help desk and perform centralised data entry of crime information, both of which are the subjects of this case study. These are both short term contracts (one year or less) solely for the provision of personnel. The two are managed by different departments within the Force, the help desk by CITD (Communications and IT Department) and the data entry bureau by IMD (Information Management Division). The Force has retained ownership of all assets involved and conducts training of the vendor’s personnel.

The Force has also outsourced applications development on a project-by-project basis, outsources capacity overloads when they occur, used consultants for strategic planning assistance and uses contractors for network and some mainframe systems support and to replace staff on temporary leave. PC maintenance, radio repair and equipment maintenance are under preparation for tender and potential for market provision of telecommunications (data and voice) and development of a standard operating environment are under evaluation.

5.1.1 Information Services Help Desk

During 1993, CITD investigated the outsourcing potential of all IT functions. The IT help desk was the first service outsourced because of an immediate need to obtain and retain personnel and improve service levels. A consultancy service was purchased to develop an interim solution to the current problems within the help desk. They recommended the use of contractors. The help desk, in the past, was staffed by police officers from the Force Reserves who were temporarily allocated to assist. The officer’s knowledge of computers was limited and turnover was high.

There are approximately 8,000 users at 450 sites of the Force’s computer mainframe, local area network (LAN) systems and personal computers.

With the intent of making the outsourcing arrangement a trial rather than a long term solution, a one year contract was signed for the provision of up to 10 contractors. The contract expires...
in February 1995. The contracted services are to:

- resolve 85% of mainframe, local area network and personal computer application and operating enquires, referring complex problems to appropriate areas
- provide material and assist in the publication of CITD publications
- participate in the quality review process and develop standards

5.1.2 Data Entry Bureau

The use of a centralised and computerised data entry bureau for reported crime began as a trial within one district in 1989. It moved to two districts in 1991 as part of a corporate database project, then was revised and became state wide in 1993 and is now under IMD.

Since its inception, the data entry operators have been external contractors because of the scarcity of personnel. For efficiency and accuracy reasons, the Force’s IT strategic plan under development is favouring decentralised data entry occurring at the source to avoid duplication of recording effort. Until the practical implementation of the strategy, the Force will continue to use external operators.

The vendor supplies a pool of 80 trained data entry staff available 24 hours a day, 365 days a year. The contract term was for six months and was renewed in July 1994 for one year. The bureau and the vendor’s staff are directly managed by unsworn Force employees, one manager and eight supervisors. All the data entry facilities and assets are owned by the Force.

5.2 THE OUTSOURCING PROCESS

Sourcing decisions throughout the Force have been made using an ad hoc, piecemeal approach that results in each discreet IT activity being assessed for outsourcing independently. Each area of the Force conducts outsourcing feasibility, tenders and manages the service separately from the IT outsourcing activities conducted by the other areas.

5.2.1 Feasibility

To determine the form and feasibility that outsourcing the help desk may present, three vendors were initially approached for their ideas. All three rejected the concept of total outsourcing. The vendors’ competencies were in handling large volumes of queries over a narrow scope of hardware and software, however the Force’ requirements were for a large volume of a limited number of queries over a wide scope of the hardware and software in use. Instead, the vendors offered to supply limited support services in line with their capabilities.

CITD then had to return to the drawing board. The primary operational issue was determined to be availability and type of personnel to work in the help desk. It felt it needed a pool of
motivated, skilled people who were keen to learn. The Force felt if it had people with these characteristics, it could train them in the technical aspects of the service. As a result, the decision was made to outsource the personnel with an IT contracting agency while retaining ownership of the assets and management.

Since the inception of the data entry bureau in 1989, data entry operators have been externally provided. The decision to continue to outsource the provision of operators in the medium term was based on comparison of salary cost options of police, public servants and contractors. The long term strategy is currently under development and indicates that there may be a return of the data entry tasks to internal employees when the appropriate systems and internal structuring are in place.

**Strengths**

**Sought ideas from the market**

Before going to tender for help desk services, the Force sought ideas from the market on what it could provide and what the cost might be. This provided valuable information regarding the potential of the market before the Force investing any scarce resources in preparing a tender that may not have been feasible or meaningful.

**Recognised agency inexperience**

It also recognised that CITD was inexperienced in outsourcing and specified that the help desk outsourcing was to be a one year trial in which the lessons learnt could be incorporated into the next sourcing decision and tender, if the outsourcing proved more beneficial.

**Learned importance of benchmarking**

One of the lessons learnt involved the need to benchmark existing services. As a result, CITD is identifying key performance indicators for all of its services in which it can benchmark with "best practice" organisations and vendors to determine which mode (internal or external) may deliver better and more efficient service for the cost.

**Areas for Improvement**

**Development of outsourcing strategy**

The Force did not have a comprehensive outsourcing strategy or a structured feasibility assessment methodology. Outsourcing has occurred on a piecemeal basis by default, not by a strategy that actively addresses the benefits and risk of that approach versus other approaches.

**Definition of services**

The Force did not define the business objectives, the processes and procedures, or the key performance indicators of the help desk before it decided to investigate outsourcing. Hence, after spending up to a day analysing the service, the attitudes of three vendors initially approached for their thoughts changed from a "positive we can do it" to a more restrained "we possibly can do something in this area but not in this other area" opinion. Vendors are often reluctant to contract for a service that is ill or not defined as it is arduous to gauge the service complexity or the expectations of the customer, making it difficult to quote a fixed price.
Whilst benchmarking has been recognised by the Forces as valuable, it has not been officially recognised as a desired feasibility assessment strategy when making sourcing decisions. Furthermore, as cost and key performance indicator data for all individual service areas are not collected as part of the Force's standard internal procedures, doing so requires significant resources. It has taken approximately two person months of highly skilled staff to collect, record, verify and report the information required for each CITD service area that is currently undergoing a sourcing investigation.

The tender of the help desk was designated to be a trial, hence only a one year contract was entered into. However, no formal means of identifying the nature of the learning objectives and gathering the lessons from the personnel involved were put in place. Responsibility for the help desk has been moved to another area under CITD and some of the key personnel involved in the tender will be moved on before the contract term ends. Furthermore, lessons learnt from other outsourcing experiences within the Force, IT or otherwise, have not been actively sought. Consequently, although individuals are learning about outsourcing, the Force as a whole has not.

Before making a sourcing decision, the agency should evaluate the business value of the service(s) and determine whether the service, as it is currently operating, is aligned with the needs of the business. The agency should prioritise exactly what aspects of the service provides the most value and what types of business operations (internal or otherwise) are needed to deliver that value. The agency may find the service or aspects of the service are not needed at all, it may be under or over utilised, or that there may need to be some internal restructuring as part of the sourcing decision.

The best way of finding out what the market can offer is to ask. Vendors are accustomed to informal inquires and typically will readily spend some time with potential customers and provide ideas the agency had not previously considered.

If the agency is outsourcing on a trial basis, in order to learn from the experience and improve later arrangements, it must put in place mechanisms to identify and evaluate the lessons that occurred and a method to transfer individual's learning experiences to the entire organisation.

By conducting benchmarking of its services, an agency will gain valuable knowledge about determining meaningful performance indicators,
measuring them and establishing a baseline to which the vendor’s performance can be compared. However, the agency must be careful when benchmarking against the market. Care must be taken to ensure it measures the same things, or “apples with apples”, regarding the nature of the benchmark and the associated costs. Furthermore, internal employees often perform many tasks (i.e. reception, office duties, equipment maintenance, etc.) other than the specific key performance indicator that the agency is attempting to benchmark. In particular, this may make the internal service productivity measurements appear very low. The agency must do more than compare benchmarks, it must also analyse the reasons for differences to determine whether the market is indeed more efficient.

5.2.2 Tendering

The public advertisement was placed in the “Age” for the supply of 10 help desk personnel was answered by 18 companies and 36 individuals. A short list of four was made and the winning proposal was awarded to the bid that lowest price per hour and enough detail to assess compliance with the ad. The public advertisement for the supply of data entry personnel had 20 replies as well, again from both companies and individuals. There were six short listed and the winning proposal was based first on compliance with the tender requirements and second on price.

Strengths

*Developed a tender procedures checklist*

The tender for the help desk operators ran into internal administration difficulties in the Force’s attempt at a faster process. Because of that experience, the Force created a one page checklist for the engagement of consultants, based on the *Guidelines for the Engagement of Consultants* issued by the Department of Premier and Cabinet, which is now required for all service provision tenders. This is a simple checklist that specifies the documentation, bids, approvals and procedures required.

*Documented service procedures and requirements before tender*

The data entry bureau’s key procedures and requirements were formally documented before the tender and included in the tender document. These included minimum skill levels, expected productivity levels, and set out expectations regarding the ability to be able to interpret and not just enter data, the interaction required with members of the Force and other duties. The vendor was also required to use an automated time recording system and make the data available to the Force for verification.

Areas for Improvement

*Focus on value, not cost*

The help desk tender was given to the vendor with the lowest price, without a formal determination of value for money. As a consequence, the Force made assumptions about the vendor that were not explicitly
made part of the tender. The tender asked for the provision of up to 10 help desk personnel which is what the vendor supplied. The Force had wanted the vendor to be a supplier of help desk best practice as well, but this expectation was not communicated to the potential vendors.

*Recognise that public agency processes are under scrutiny*

In balancing the need to solve an immediate problem, the Force performed the tender and the vendor began providing services according to procedures that it believed were appropriate. An expression of interest was advertised, but it became the actual tender due to the urgency of resolving the help desk staff shortage. The process was later called into question as required internal procedures were not followed, albeit unknowingly.

*Need for staff skilled in tendering*

Process difficulties were compounded as the preparation of the help desk tender process and documents were performed by an inexperienced person who was temporarily assigned due to staffing shortages.

*Lessons*

*Use project management*

Agencies must recognise that outsourcing is a strategy and that each outsourcing arrangement is a project with a series of stages and tasks that should follow a structured project management methodology.

*Plan for accountability*

Tendering can take a great deal of time in the public sector because of the procedures that are required to be followed and the different departments/branches/divisions that may be involved - all to ensure the public’s money is handled in an accountable manner. Each agency must recognise this accountability and that the tender process can fall under scrutiny at any time. To ensure that the agency meets the expectations of due process that any agency may be bound, it must have a clearly defined tender process in line with the agency’s requirements and any legislation under which it is to abide.

*Assign staff that know the rules of tendering*

The agency should have a dedicated and knowledgable “process” person throughout the tender. This person should have, as a minimum, the following responsibilities:

- Approval and evaluation processes:
  - procedures
  - approve rules and controls
  - criteria for evaluation
- Record keeping processes:
  - document filing system
  - management reporting system

*Determine desired qualitative vendor attributes*

The agency should base its decisions on value for money, not cost in the absolute. Value is often intangible, thus it must develop a way of assessing the value that the vendor offers in terms of quantifyable attributes such as knowledge of the specialist area, the agency’s business and public sector processes, range of skills and technology, flexibility.
responsiveness and demonstrated continuous improvement, etc. This is most commonly done with a weighted value matrix.

Make all expectations explicit in tender

The agency should state the values and characteristics that it wants in a vendor in the tender. In addition, if the agency expects the vendor to help the agency improve as part of the service under tender it must set out how and in what areas (remembering this is likely to add to the price). Each agency must make its expectations explicit to have them met.

5.2.3 Negotiation

The table on the following page describes what issues the Force had thought would require negotiation or discussion and what issues actually did.

<table>
<thead>
<tr>
<th>Issues Anticipated Before Negotiations Began</th>
<th>Issues that Occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No negotiation issues were believed to exist at the time each contract was awarded</td>
<td>• Breach of performance due to force majeure</td>
</tr>
<tr>
<td></td>
<td>• Responsibility for the supply of personnel in the event of a strike</td>
</tr>
<tr>
<td></td>
<td>• Responsibility for vendor personnel indemnity while using Force motor vehicles and performing duties</td>
</tr>
<tr>
<td></td>
<td>• Provision of experienced help desk skills to institute best practice</td>
</tr>
<tr>
<td></td>
<td>• Not to require replacements for sick contractors in order to reduce costs</td>
</tr>
</tbody>
</table>

Strengths

Tender written in contract form

The data entry tender specifications were written in contract form. This enabled it to become part of the final contract. Hence, there were only a few minor points that required negotiation.

Areas for Improvement

Business interpretation of contract law

The correspondence regarding the impact of standard contractual provisions indicates that business application of contract law may not be well understood within the Force. Standard provisions and conditions of breach were requested to be clarified by the vendor.

Lessons

Employ skills equal to the vendor's

Agencies must recognise that vendors use professional commercial legal advisers to ensure contractual obligations represent their best interests. The agency's best interests will be best represented if it uses equal, if not more skilled legal representatives, who also understand the agency's business objectives.
If the agency prepares the tender document as if it is the contract, the agency will increase the probability of obtaining exactly the service it requires, under the conditions it requires and will gain considerable negotiation efficiency.

5.2.4 The Contract

The initial term of the data entry contract was for six months with an option to extend for agreed subsequent terms of up to two years. It has been renewed once, for a one year term. The help desk contract is for one year and ends February 1995. It is planned to go to tender again at that time in accordance with Force policy.

Strengths

Control over vendor's employees

The Force has complete control over the help desk workforce as the contract specifies that all contractors must be approved by the Force in writing. Both contracts state that any vendor contractor can be replaced or terminated at the request of the Force, which provides flexibility not allowed with public sector employees. Recognising that the vendor's personnel are not liable for discipline under Acts of Parliament, the data entry contract allows for immediate termination for misconduct.

No termination fees

Both contracts also allow for the Force to cancel with one month's notice with no termination fees. Termination fees are popular where the vendor has taken on business or investment risks, has allocated service start up costs over the life of the contract, or has been obligated to provide assistance to the customer to transfer the service to a new vendor or in-house as part of the base charge.

Areas for Improvement

Disadvantageous assumptions

The Force specified that requests for changes to data entry staff numbers will be submitted two weeks in advance. However, the Force specified this notice without first asking the vendor how much notice they required. The vendor has the potential capability supply changes in demand with 24 notice that would give the Force greatly improved flexibility.

Vendor allowed voluntary termination

The help desk contract can be terminated by the vendor with one month written notice and no recourse available to the Force. This provision has the potential to leave the force without any help desk personnel in too short of a time to obtain and train a new supplier.

Lessons

Validate assumptions

The agency should find out what the vendor is willing to provide regarding notices for increased or decreased service requirements. Had
the Force known what the market was willing to provide for flexible work practices, it could have improved the conditions of the contract. An agency should not assume that the market operates under the same constraints as the agency.

Termination assistance responsibilities of the vendor

An agency should not allow the vendor to terminate voluntarily, without appropriate provisions for their responsibility to assist the agency in obtaining a new supplier or return the service in-house and to continue the service until the new situation is fully operable.

5.2.5 Implementation and Transition

Strengths

Recognised need to train vendor's personnel

The Force recognised that it would need to devote a considerable amount of time to train the vendor’s personnel to provide an efficient service because of the degree of organisationally specific knowledge required. It dedicated an internal supervisor for on-the-job training of the help desk contractors and now the help desk is providing 94% problem resolution rates. It also dedicated sworn police officers to be present at the data entry bureau to help the operators interpret the reports they are to enter. This has enabled to bureau to have 98% of the reports entered into the LEAP database within 24 hours of receipt - no meagre task considering, at times, up to 50% of the reports have been complete and error free.

Conducted internal marketing

A marketing campaign was performed at the time the vendor began supplying help desk personnel to let users know that the Force had implemented a solution to address the issue of poor service and supply shortfalls and to encourage them to increase their use of the service. That campaign helped the users understand what had occurred, how they were to benefit, and set up their expectations regarding the service the vendor was expected to provide. As a result, use of the help desk increased 60%.

Areas for Improvement

Assessing impact of users' prior experience

In attempting to write service level agreements between each user area and the help desk, the user areas erroneously thought that they may begin to be directly charged for using the help desk that had always been provided as an organisational overhead. This perception was based on a past experience with an experimental radio chargeback program. Consequently, some districts discontinued using the service and used their local internal resources instead.

Allowing for post-education ramp up

Five half day training sessions were conducted for the inaugural group of 70 data entry operators before the service went state-wide. However, it went state-wide shortly thereafter. The subsequent close supervision and
work checking requirements regarding new personnel meant that the bureau was not operating at peak efficiency and a large backlog resulted.

**Formal implementation plan**

Neither outsourcing arrangement had devised a formal implementation plan. Such plans typically detail what mutual training will occur, assistance each party will provide to the other, asset transfer procedures and verification (if applicable), how long the “start up” period is expected to be and performance expectations during this period, and how the transition from start up to fully functional operations will occur.

**Lessons**

**Implementation plan**

Implementation will occur with or without a plan. However, a well thought out plan will enable an agency to anticipate the resource both it and the vendor will need to provide for and set out mutually agreed targets and processes. This will help to ensure the transition is efficient.

**Mutual education plan**

It is important for each agency to realise that the vendor’s personnel will require training in those aspects of the service that require organisationally specific knowledge to be effective. The agency’s personnel may also require such training by the vendor, if there is a significant level of knowledge about the vendor’s organisation required for the agency to be efficient as well. This training must be recognised and provided for as part of the implementation plan.

**Determine impact of user experiences**

When using a piecemeal approach to outsourcing, by design or default, an agency must recognise that other experiences users have had will influence their behaviour in ways the agency may not have anticipated. The agency will need to continually assess the influence that other past, current and future outsourcing arrangements have on each outsourcing arrangement.

### 5.3 VENDOR PERFORMANCE

#### 5.3.1 Measurements

**Strengths**

**Used team and individual performance measures**

There are both overall service measurements and individual personnel measurements regarding the help desk. The team approach allows peer pressure to encourage better performance when an individual degrades the service measurements. Individual measure can provide early warning signals to the agency and assists performance accountability. Continued non performance and team feedback has resulted in three vendor personnel being fired to date.
**Creating SLAs for each user group**

The help desk is in the process of writing one service level agreement (SLA) for every customer group and second level service provider. In this manner, the service will be tailored to the specific needs of the Force.

**Actively improving measurements**

The Force has recognised the difficulty in setting and measuring performance levels in both outsourcing arrangements and is actively attempting to define “good” service and improve the meaningfulness and objectivity of related measurements. Even though this learning is occurring after the arrangements have been in place, the investment should improve the quality and efficiency of the vendor’s services and the agencies’ internal processes. Unfortunately, non performance of the new performance levels will not offer breach unless the contact is modified.

### Areas for Improvement

| Robust measurements before tendering | Both outsourcing arrangements had specified only ambiguous key performance indicators in the contract. How the indicators would be measured was not known before the contract was put into effect. Meaningful and measurable indicators were developed during the first six months of the help desk arrangement and are still under development at the data entry bureau. |
| Performance measures adding to 100% | The help desk contract require 85% immediate problem resolution. However the time in which the other 15% is required to be resolved, or whether that 15% is required to be resolved at all, has not been stated. |
| Ability to thwart measurement intent | One measurement that was designed for the help desk was the average time to resolve a problem from the time the call was logged to the time of resolution as recorded in the on-line software. This measure was quickly circumvented as the personnel would manually record the information until the conversation was completed, then enter it into the system. The measure was removed as a consequence, however the practice continues. |
| Focus on output, not procedures | The data entry contract included some limited performance specification regarding the minimum volume of reports that must be entered per shift and a general condition that high data accuracy was expected. However, most of the requirements focused on procedures that must be followed, not the key performance indicators that would provide the Force with a method by which is can measure whether it is receiving good service. |

### Lessons

**Measurements must be complete**

Percentiles of service measurement classifications should always add to 100% unless the agency does not care about the performance of the undefined percent. For example, if the agency wants the vendor to return 90% of its calls in five minutes, it must also define when it wants the
other 10% returned (keeping in mind the agency must be able to measure these percents if it intends to bind the vendor to them).

**Measurements must be robust**

The agency should also ensure there are no ways to circumvent the intent of the measure. When setting up a measure, the agency should brainstorm with appropriate internal personnel on how they would try to obtain high measurement results by manipulating the process if they were the vendor.

**Measurements should be tied to business objectives**

The agency must tie measurements to business objectives. Often, measurements can reflect what is easily measured, not what is most important to measure. For example, measuring availability by the "up time" of the mainframe or file server’s CPU (central processing unit) is meaningless when user terminals are down and the CPU is not. Users are not getting the service required. Meaningful business measurements are usually more difficult to appraise in an objective manner and will require considered planning and refinement.

**Determine which vendor personnel should have individual assessments**

An agency may want to evaluate overall service and the performance of key individuals to ensure the vendor as a whole and the vendor’s individual employees are performing to its expectations. However, the agency should limit individual assessments to those vendor personnel critical to service delivery to avoid wasting scarce time and resources on those personnel that will not have a significant impact. In either case, the evaluation should be output orientated.

**Determine possibility of unintended effects of measurements**

Each agency should keep in mind that certain performance indicators may have effects that it does not intend. For example, the help desk has set an objective to reduce the cost per call to $5.00. This is most easily done by stopping the service during low demand times, when the cost per call is the greatest. However, the low demand times are when the most critical problems occur and when resources are the most unavailable, thus may have the highest value per call.

### 5.3.2 Reporting

Help desk performance is reported weekly and summarised monthly by the vendor including:

- number of problems logged and resolved per day and per customer group (24 groups)
- number of problems logged for the week and previous seven weeks
- resolution rate for the week and previous seven weeks
- average daily cost per problem logged
- number of calls per vendor employee
- problems logged per hour per day

Data entry performance reporting occurs when there are sufficient resources available to conduct an assessment. Data is retained to enable audits of past performance.
Strengths

Reports include initiatives and issues for management

The help desk's weekly report prepared by the vendor not only includes statistics on performance measures and the Force's use of the service, but initiatives and plans being undertaken and issues to be brought to the attention of management.

Conducts user surveys

The vendor conducts a quarterly service quality survey of users to determine whether they are meeting the requirements of the user department's SLA, suggestions on how to improve and whether the SLA should be reviewed.

System of agency measures, not just vendor measures

The manager of the data entry bureau reports periodically, using sampling techniques, on the quality of the reports received from the field and the accuracy of data entry. This reporting enables the Force to determine where data integrity issues reside. In this case with the Force's personnel in the field, rather than the vendor's contractors.

Areas for Improvement

Trend analysis

A trend analysis for vendor performance and the Force's use of the help desk are conducted over narrow time periods - hours, days and up to eight weeks. While this has highlighted cost issues with providing after hours and Saturday services, longer trend analyses could provide meaningful information regarding performance and use trends. In addition, the error statistics reported by the data entry bureau are only compared with the last report. An analysis over time would provide much more meaningful data about performance over time.

Measuring performance before outsourcing

In both cases, performance measuring and benchmarking began after outsourcing, which meant that the Force had to learn about appropriate measures while the service was being provided, not before, when there was an opportunity to make meeting the performance level a contractual obligation and establishing "before and after" outsourcing comparative data.

Lessons

Need to be able to report, not just define measurements

An agency cannot evaluate what it is not reporting. Furthermore, the reporting mechanisms must be cost effective. If the agency cannot establish a proven method of reporting performance in relationship to the levels that it has specified, the agency will not be able to hold the vendor accountable. An agency is in the best position if it establishes reporting mechanisms before outsourcing, not during it. For these reasons, the agency should have robust measurements and reporting mechanisms before it goes to tender. Service level obligations are only as meaningful as the information reported.
Key reporting objectives

There are two key objectives with performance reporting: (1) to determine whether the vendor is performing satisfactorily, and (2) determine whether the agency is using resources wisely. Reports must reflect both.

Report on continuous improvement initiatives

The reports do not need to be limited to performance. With the current continuous improvement and quality initiative across all organisations in Australia, an agency should have the vendor report on their initiatives regarding the contracted services. Furthermore, by having an "issues to be brought to the attention of management" or similar section of the regular reporting cycle, complete with the vendor's recommendations, the agency can identify issues and improve on its part of the relationship.

5.3.3 Evaluating

Strengths

Review by external consultants

The Force hired consultants to conduct a review of the data entry operation's efficiency and timeliness from late 1993 to February 1994. The report was thorough, evaluated both the vendor's and the Force's performance, and recommended many useful suggestions including quality, reject and feedback systems, and quality control sampling which the Force is considering.

Post review improvement assessment

The review was followed by an internal assessment of the general business objectives of the bureau, the strategies by which attempts are being made to meet the objectives, performance indicators for achievement of those strategies (regardless if it is the vendor or the Force that is responsible for their achievement), whether and how they are being achieved, and recommendations for improvements.

Areas for Improvement

Positive incentives

There are no positive incentives provided by the Force for help desk personnel to exceed performance levels. Their rate is fixed per hour and there are no qualitative assessments of their performance through which intrinsic motivation could be fuelled.

Quality control

The Force has not determined an effective method for quality control regarding the data entry operators. An initial procedure in which the information entered into the system was compared to the original incoming report was abandoned because it was very time consuming. Another procedure whereby each operator assessed another operator's completed work during 30 minutes of each shift was abandoned for the same reason in addition it was disruptive to operations. Ad hoc reviews of the accuracy and consistency of specific database information are
performed when staff are available, however it is difficult to establish whether the error was in the source document, interpretation by the operator or an operator keying error.

**Lessons**

*Use of experts*  
If the agency is struggling with evaluating the vendor's performance (and its own efficient use of the vendor's services), external consultants may be able to provide an objective and insightful perspective.

*Evaluate achievement of objectives*  
The agency should not limit its evaluation to purely vendor operational performance. The agency should also evaluate whether the objectives it had wanted to achieve with outsourcing have occurred and whether the strategies by which it had anticipated achieving those objectives have been effective.

*Skills and motivation of performance reviewer*  
Evaluation of the help desk's performance is being performed by the personnel who made the outsourcing decision. This can be a benefit, in terms of prior knowledge of the service, and an issue, depending on the objectivity and agenda of the reviewer.

*Conduct post implementation review*  
A post-implementation review should be conducted of all outsourcing projects by a person knowledgeable but independent of the project. Events can become rushed towards the contract signing deadline and issues may be left inadequately resolved or unearthed. A post-implementation review can also help the agency consolidate what it has learned from the experience to benefit later initiatives.

**5.4 COST**

**5.4.1 Fee Structure**

**Strengths**

*Price not tied to demand fluctuations*  
Both services are provided at an hourly rate per contractor that is fixed for the initial term of the contract. This hourly rate is constant no matter how many personnel are required and fees are based on actual hours provided. There are no requirements for minimum use. This enables the Force to better match supply and demand without restrictions.

*Replacements not charged for one week*  
In the event of vendor personnel turnover at either the data entry bureau or the help desk, the replacement's first week is provided free of charge. This is important as both services require a great deal of training by the
force before the contractor is effective in their role and can provide motivation for the vendor to ensure continuity of staff.

Vendor’s actual activity approved before invoiced

Weekly time sheets for the help desk contracts are approved by the Force before the vendor can raise an invoice. This eliminates the need to have an outstanding liability in the event of disputation as corrective action can be taken before the invoice is sent.

Areas for Improvement

Un questioned internal procedures

The Force’s administration mandated that the contracting of personnel be performed by an independent agency, consequently this was not the result of an active decision process weighing the advantages and disadvantages. Whether or not it resulted in higher cost is debateable as the increase included the vendor’s profit margin and coordination costs, but the agency only needs to manage one contract, not many.

Used award rates to set prices

The data entry personnel rates vary between standard days, weekend and public holidays; between the three shifts; and between normal and overtime pay based on award rates. Award rates are not meaningful to setting prices when contracting with a non unionised commercial environment.

Lessons

Appropriateness of service use restrictions

If the agency requires flexibility or cannot predict demand fluctuations with a high degree of confidence over the life of the contract, it may be better off having no minimum and/or maximum usage requirements. Vendors typically allow limited fluctuations in demand, then charge a higher per unit cost if demand exceeds or falls below that limit.

Understand intent of agency policies

If outsourcing is done on an ad hoc basis, there will inevitably exist internal rules that the agency may perceive to restrict its ability to obtain the most cost effective arrangement. Ideally, this is because the policy maker understands the economics of transactions and that any transaction includes indirect and hidden costs. Nevertheless, the agency must attempt to understand why policies are in place and whether the intent is meaningful in the context of what it is attempting to do.

Ensure there is a return on the agency’s investment in the vendor

If the agency is required to invest time and effort into the vendor’s personnel, it should ensure there are provisions that enable it to get a return on its investment. Such provisions can include a non billable period that reflects the time required for the vendor’s new personnel to become effective service providers, reimbursement of the cost of the agency’s training efforts or a penalty if key personnel are replaced.
5.4.2 Comparison with Expectations

Strengths

Greater value for money than expected

The help desk cost was expected to approximate the cost of in-house provision and a subsequent review by CITD’s Finance Department has shown that it does. However performance has exceed expectations, thus the value derived is higher than expected.

Areas for Improvement

Knowledge of all costs

The cost analyses have not included the direct and indirect costs that the agency has incurred from the point at which the outsourcing feasibility process began through to the management of the ongoing service.

Lessons

Determine cost of internal resources when evaluating the cost/benefit

Cost is not just the purchase price, which is the most tangible, but also the cost of internal resources required to assess feasibility, prepare and conduct the tender, assistance required during the implementation period, and managing, training and assessing the service providers. These costs should all be part of assessing comparisons to expectations.

Use actual costs, before and after outsourcing

To be able to assess the impact of outsourcing on an agency’s costs, it must determine all the actual internal costs of the service - direct and indirect, fixed and variable - before and after outsourcing. The agency should be careful when using imputed cost allocations as these may not give the degree of accuracy required. The Force found that the imputation formula offered by the Department of Finance (which imputes all costs as a percent of gross wages) was lower than actual costs.

5.4.3 Management

Strengths

Currently collecting cost data for all services

Because the immediate need for personnel was the driving force for outsourcing the help desk, the Force did not perform a rigorous cost analysis of the help desk before it was outsourced. It is now collecting and analysing cost data for all the IT services under CITD control so better base information will be available for future sourcing decisions.

Cross training between vendor and agency

In order to provide a 24 hour, 365 day help desk service on a cost effective basis, the Force has relocated the help desk into the mainframe operations area. The vendor’s personnel are training operations, which already is run round the clock to handle resolve queries when the help desk is not available. Operations are also training the help desk, so that they can assist operations during the help desk’s quiet periods.
Areas for Improvement

Management of service value, not just cost
A review of users' use of the service indicated that their desire for a 24-hour help desk is not cost efficient. Actual demand occurs primarily from 7am to 7pm on weekdays. A proposal has been put forth to limit the help desk to these hours, which will reduce cost by 40% per annum. This proposal did not incorporate a measurement of value delivered during low demand periods. The vendor's statistics show that the nature of problems that occur after 7pm and on Saturdays are critical and can make systems inoperable for entire police stations.

Addressing the most cost ineffective processes
The controllable costs for both services are in the domain of internal processes. For example, the data entry forms submitted from the field have been designed differently than the data entry screen which causes inefficiencies. Furthermore, there had been up to 50% of reports received that contained errors, were missing information or were illegible.

Determining the drivers of cost savings
Productivity costs are being tracked regularly including the cost per call. This cost has fallen from $35.00 to $11.85 during the first six months of outsourcing. However, how much of this can be attributed to increased demand versus actual efficiency gains has not been determined.

Lessons

Greater gains can be made by addressing strategic problems
The uneconomic, inefficient, and ineffective use of IT, whether the service is provided internally or otherwise, will inhibit an agency's ability to achieve its objectives. Management of costs is not only related to vendor charges, but also how the agency manages its efficient use the vendor's services.

Track all costs, not just budgeted ones
On an ongoing basis, the agency's operational and management resources required (be they budgeted or not) must be ascertained to determine if outsourcing is the most efficient mode of service provision.

5.5 AGENCY STRATEGIC CAPABILITIES

5.5.1 Technological

In both cases, the Force retained asset ownership of the technological resources required to deliver the services. However, the technology required for both of these services is integral to providing the services nor a significant source of contribution to the Force's core competence - it is the knowledge embedded in the vendor's personnel.
5.5.2 In-house Skills

Strengths
Agency directly supervises operations
The Force recognised it needed to retain skills in the data entry services to ensure the vendor’s personnel are performing appropriately, to direct their activity and to ensure these skills are not lost to the agency. For this reason, the bureau supervisors are Force employees rather than the vendor’s. As supervisors rather than peers, there is an added functional benefit of clear lines of authority.

Creation of a tender/contract group
Recognising the degree of internal resources and skills required to prepare and manage outsourcing arrangements, CITD has created a tender/contract group and will be creating a high level contract management position.

Areas for Improvement
Recognising resources required
The Force does not appear to recognise the importance of having a management function for directing and evaluating the Force’s efficient use of services and the vendor’s efficient provision. There has been two police members working at the bureau, although there has been no formal allocation of a police position. A similar situation existed with the help desk, in that the former internal help desk manager was required to spend months training the vendor’s personnel. The need for such active involvement was necessitated by the high degree of specialised knowledge required about the Force’s operations and procedures. These are not commodity services.

Addressing strategic issues
The help desk vendor did not have any knowledge of help desks, nor was it required to in the request for tender. Consequently, the vendor could contract people for the Force, but could not add value in solving the service’s strategic issues. These issues include a determination of whether the help desk should function as a reception/problem forwarder or a problem solver, the coordination of efforts with the district computer coordinators who are typically the first point of call for users, and the application of help desk best practice. The strategic issues remain unresolved.

Obtaining return on investment in vendor
The services of manager of the help desk, who was personally trained by the Force, are now being sold by the vendor as their leading help desk consultant. Since the contract is only for one year, the Force has not had the return on investment that training an internal employee may have offered and can lose a valuable skill to a higher paying customer.
Lessons

It is important for each agency to recognise that it will need certain skills to ensure the benefits of outsourcing are achieved and the risks minimised. A principal adjustment is required in the nature and degree of internal routines as managing external resources replaces managing internal resources. The use of outsourcing does not imply less effort in managing IT, only a different emphasis. The agency will need to concentrate more on direction, strategy and implementation paths than with routine service delivery and staff management. A failure to recognise this will inevitably mean that the potential benefits may not be realised.

5.5.3 Dependence on the Vendor

Strengths

The Force has written detailed manuals regarding data entry tasks and bureau standard operating procedures as a result of having to train the vendor's personnel. These include instructions and guidelines for the role, conduct of personnel, security procedures, culling and disposal of reports, data entry procedures, quality controls, and instructions for general day-to-day operations management.

Areas for Improvement

There is no clear fallback position for the help desk. The help desk contract has no option for renewal and ends in March 1995. The Force has transferred the knowledge required to provide the service to the vendor's personnel and relocated internal personnel that had such knowledge. Although the contract will be put to tender, the Force may be held to ransom as a private monopoly has been created for the vendor. The organisationally specific knowledge held by the vendor's contractors is unique to the Force and is imperative to efficient operation of the service. To replace this knowledge internally or with a new supplier will be very time consuming. There is no longer a level playing field for potential competitors as the transferred knowledge is high organisationally specific and costly to create.

Because of problems with completeness and errors in the crime reports submitted by the field for entry into the database, the data entry bureau has, by default, expanded its scope to include judgement for the sake of efficiency. Similar to the help desk, this knowledge becomes embedded within the vendor's personnel, not the Force's.
Lessons

Recognise potential of being held for “ransom”

The agency must not allow it to be in a “ransom” position through the creation of a private monopoly. This occurs when there are high levels of agency specificity in the service being outsourced. Separating the agency from the service can create a position of opportunism, or a “ransom”. For example, it does not pay for a hauling company to buy a truck factory as there is no “asset specificity” between a truck manufacturer and a hauling firm. There are many competitive bidders to sell trucks and if one company tried to “holdup” the hauling company it can quickly turn to another. Providing these services internally does not make the organisation more valuable and there exists a competitive market, thus there is no opportunity for a holdup.

Identify degree of agency specificity in the service

Each agency must assess the degree of organisationally specific knowledge that the service requires to operate effectively and whether transferring that knowledge will make the agency less valuable. If so, the agency will need to ensure a private monopoly is not created either by contractual means or ensuring a competitive market will exist at the end of the contract term by retaining key skills in-house, capturing the vendor’s knowledge so that it can be transported or helping other competitors to gain parity.
6 RECOMMENDATIONS

The recommendations combine the generalised lessons learnt by the agencies in the case studies and the research and practical experiences of the consultant who performed the case studies. The areas that require the most attention by agencies making and implementing sourcing decisions are:

- understanding and planning for the entire outsourcing decision making process,
- assessing candidates for outsourcing,
- knowing the variety of forms and approaches to outsourcing,
- preparing for, developing and project managing the tender, contract and service level agreement
- ongoing management of the arrangement.

Consequently, the recommendations have been focused in these areas. The overview below presents the major recommendations in summary form. The pervasive issues of the broad skills and project management required for a competent outsourcing process comprise section 5.2. Detailed discussions and practical considerations referred to in the overview are embellished in the remainder of this section, followed by recommendations for the Victorian Government and suggestions for further research.

6.1 OVERVIEW OF AGENCY RECOMMENDATIONS

**Update the IT Strategic Plan**

"...dissatisfaction with outsourcing results from a desperate quest for cost-cutting in the absence of strategic goal setting."

Gateway Information Services

Emphasising need for strategic planning is not new. If an organisation does not know where it wants to be and how IT is going to help it get there, it is harder to make good decisions.

One of the commonly advocated rationales for outsourcing is that IT is a commodity. However, to call IT resources commodities implies that buying them is equivalent to using them. It also implies that there are no major barriers to implementing technology. There are two basic points each agency must realise:

- The management process for IT is not a commodity. The value added component of IT value delivery resides in management decisions, policies, and communication.
- Technology itself may be a commodity, but the corporate IT platform is not. Again emphasising that the equipment may be a commodity, how it is put to use is not.

IT strategic planning involves a number of processes and deliverables. A well constructed plan will typically have the following:
Enterprise model: information representing the agency's strategy, processes, data and organisational components and their interrelationship.

Strategy analysis: the business direction universally endorsed by senior management assessing the strategic vision, isolating problems and opportunities that may impact the agency during the life of the IT strategic plan.

Current IT assessment: focused on the functional and technical effectiveness of the applications portfolio, data collection procedures, technology components and IT management practices.

Information architecture: describes each of the architectures needed to realise the strategic vision of the agency including applications, data, technology, management and their migration strategies.

IT master project plan: high level plan of the strategic (three to five year) and tactical (up to two year) IT project plans.

Related Sections: Strategic planning is outside the scope of this report. There are many sources of information on this topic.

Assess Sourcing Across the Entire IT Infrastructure

An organisation's IT infrastructure is made up of any number of technical areas (or technology platforms) and any number of services. Consequently, the outsourcing options are many:

- all IT technical areas and services
- a particular technical area and one or more of its services
- an IT service across one or more technical areas
- one service within one technical area

It is important to emphasise that insourcing, as well as outsourcing, is a sourcing decision. A variety of perspectives must be used to determine the best sourcing strategy and balance the benefits and risks either presents. These perspectives include, but are not limited to, deciding which IT infrastructure components:

- are integral to the agency's business core competences
- requires a high degree of organisational knowledge
- are well defined, well measured and well costed
- are facing internal sourcing problems such as skill shortage
- have a competitive market
- require a high degree of organisational knowledge to be effective

A structured methodology should be used to give a balanced view of the entire IT infrastructure and its components. A candidate matrix has been provided to help assess an agency's infrastructure in Section 5.3.2.

Related Sections: 5.3.1 Model of Outsourcing Process
5.3.2 Candidate Matrix
5.3.3 Strategic Sourcing Framework
Develop Outsourcing Strategy & Approach

The approach must balance risk, learning curve requirements and action deadlines.

There is no one approach to outsourcing. In practice the following approaches are employed, however often not as the result of a carefully crafted and recognised strategy.

**Big Bang**
A significant portion of the IT services and technical areas are outsourced to one or more vendors at one time. This has a lower coordination cost, but greater organisational impact.

**Piecemeal**
Each IT service and technical area is assessed independently over time. A variety of vendors are used to match the needs of each outsourcing event. This allows the best vendor and deal for each arrangement, but requires higher internal costs and has difficulties with synergy.

**Incremental**
A prime contractor is selected now with a "pathfinder" project and options for more later. The prime contractor can also select and manage all other vendors. This approach places importance on the learning curve, thus takes longer.

While determining the outsourcing strategy, gather the experiences from other organisations that have outsourced and from other forms of outsourcing the agency has performed. In addition, perform an initial investigation regarding potential vendors and the variety of outsourcing forms that they can see themselves offering. Vendors are usually eager to offer solutions the agency may not have thought about.

Furthermore, all the stakeholders, internal and external, should be identified and the impact outsourcing may have on them and their objectives. Examples of stakeholders include:

**Internal:**
- IT staff
- Users
- Management

**External:**
- Regulatory bodies
- Unions
- Other departments and agencies
- Customers
- Existing suppliers (IT and non IT)
- Taxpayers
The cost analysis should begin with the knowledge of all costs of internal and external provision - capital investment, ongoing expenses, and the commitment of time and resources. In doing so, the hidden costs frequently obscured by accounting systems and budgets of IT become apparent. Once a baseline model is developed, a more objective analysis of the cost and related service definition component of the vendors' proposals can occur.

Related Sections: 5.3.4 Approaches to Outsourcing  
5.3.5 Fundamental Economic Issues (specificity, asset ownership and transaction costs)

Outline the contract and service level agreement (SLA) provisions before going to tender. Although these are typically written after the vendor has been selected, the earlier the contractual obligations that the agency and the vendor will enter into and the services that the vendor will provide are defined with a reasonable amount of accuracy, the more efficient and effective the entire process will be. A carefully crafted and forthright tender produces meaningful and accurate responses, minimises the time needed to clarify issues and improves the agency's negotiation power. It must be done anyway and it may not be in the agency's best interest to let the vendor drive the process.

Tender evaluations typically focus on the technical aspects of the vendors' proposals. Place equal importance on the intangible aspects as well as it is rarely the technical aspects cause problems later. Intangible aspects can include:

- the service as one of the supplier's core businesses, not a marginal activity
- unrestricted freedom to contact other customers
- evidence of appropriate investment and strategic commitment
- an in depth understanding of the market and the agency's industry
- cultural fit
- supplier attributes such as flexibility, willingness to problem solve and renegotiate, use of extra or incremental charges, etc.

Within the public sector, it is important to also evaluate the net economic impact of each vendor's proposal in terms of revenue and jobs for the state and Australia. If it is not favourable, let the vendors propose how they could make it favourable. They are often very flexible regarding where the service delivery facilities can reside.

Related Sections: 5.4.1 Contract and SLA Preparation Checklists  
5.4.2 Price versus Cost  
5.4.3 Selecting the Vendor
Prepare Final Agreement

The vendor's standard contract is theirs, not the agency's

Experts agree that the contract is key and the key to a good contract is fair and detailed terms. In fashioning an outsourcing arrangement, the customer and the vendor must define, with great accuracy, what it is that they are attempting to achieve with the customer's money and the vendor's services. The vendor's standard contract favours the vendor's position, not the agency's, and once signed considerably reduces the agency's negotiation strength.

Negotiation typically requires more time and resources than most organisations allocate. There will inevitably be issues with clauses in the contract (often the liability and personnel provisions), software license novation and agreeing meaningful and measurable performance levels. Legal advice must be obtained during contract negotiation of a standard comparable to the outsourcing vendor, which typically employs professional specialists.

Related Sections: 5.5.1 General Clauses and Provisions
5.5.2 Service Level Agreements

Ongoing Management

Outsourcing inevitably creates a partnership as the agency and the vendor acknowledge greater levels of interdependence. Astute companies rarely rely on the contract, rather success is determined by how the relationship is managed. The use of outsourcing does not imply less effort in managing IT, only a different emphasis. As a minimum, any outsourcing arrangement requires an identified personnel for problem escalation, reviews of vendor performance, day-to-day management and any number of technical support people to measure performance and validate billings.

Procedures must be developed regarding the conduct and objectives of a variety of vendor and internal meetings, who is to contact whom for what reasons, the internal processes that must be followed for problem solving and requesting new or changed services, internal cost allocation (if performed), how and when vendor performance will be measured and reported, to name a few.

The agency's work does not end when the contract is signed. Vendors typically require significant assistance in setting up the service and the agency will likely need to restructure its internal operations and work flows. Large outsourcing projects often require a few months after the contract is signed to bed down the service, performance measuring and procedures.

Related Sections: 5.6.1 Fundamental Management Differences
5.6.2 Types of Partnerships
6.2 PLANNING FOR THE PROCESS

6.2.1 Skills Needed

To ensure the greatest probability of success in terms of benefit realisation and risk minimisation, each agency will need people with the following skills to make the right decisions and implement the decision right. There are courses in some of these areas and many organisations and individuals that can provide the skills the agency requires.

**Strategic & Holistic Perspective**

The agency must have the skills to make the most appropriate sourcing decisions. These skills involve a balanced and long term perspective on the benefits and risks outsourcing presents and how to ensure the former are realised and the latter minimised in crafting the organisational outsourcing strategy, selecting the approach and outlining the processes to follow.

**Project Management**

The Project Manager must be able to:

- Manage expectations through formal specification and agreement of goals, objectives, scope, deliverables, resources required, budget, schedule, project structure, roles and responsibilities.
- Recognise and manage scope changes through formal change management procedures.
- Assess risks and identify strategies throughout the project's duration.
- Document and manage issues that arise on a day-to-day basis.
- Monitor activity and report to management regarding progress at regular intervals.
- Control the knowledge base (information repository).
- Bring the project to a successful conclusion based on completion of the activities and deliverables.

**Valuation**

The costs of the area under consideration for outsourcing may not be a true reflection of the value that providing the service may bring to the vendor. Such value can be in terms of gaining a valuable reference site, entry into a new market segment or specialist skills. In addition, the vendor may acquire assets of the agency including equipment, staff, procedural documentation and various other items. Often the payment for these assets reflects only the value allocated to physical assets, when in fact, there may also be a transfer of intangible assets such as intellectual property and proprietary expertise.

Ascertaining a fair market value for the tangible and intangible assets is a specialised skill and one that involves identifying and quantifying the "added value" of combinations of IT services and technical areas. Viewing outsourcing as a sale, even though the agency will be paying the vendor
for the outsourced services, will help to obtain the highest price for assets sold and lowest cost for services transferred.

**Tendering**

The accuracy and quality of the tender documents and process have a significant and direct impact on the efficiency and quality of the entire outsourcing process. The agency will require skills necessary to write the documents in such a way they provide the appropriate amount and nature of information to enable vendors make meaningful and complete offers.

The agency will need to use a structured methodology for assessing intangible characteristics of the vendors and their offers. It must also have skills in performing due diligence on vendors and incorporating promises and implied assumptions into the agency's legal documents. An independent tender evaluator can be beneficial if there are internal bids to ensure objectivity.

**Legal & Technical Knowledge**

The agency will need both legal and IT technical skills to develop a contract that best represents its interests and minimises its risk. One without the other can unnecessarily expose the agency as legal advisers often do not understand the operational impact of the arrangement and technical advisers often do not understand the legal ramifications.

**Negotiation**

It is often the case during contract negotiation that the vendor will be much more prepared and skilled than the agency. Efficient and effective negotiation requires the agency to understand the perspectives and commercial nature of the vendor, what and when the agency is willing and not willing to walk away from, what are standard and non standard general practices (irrespective if they are the vendor’s standard practices) and great attention to detail. Independent negotiators can be beneficial as they can take an objective and stronger stance on important issues on behalf of the agency, so that the relationship with the vendor does not suffer unnecessarily from the debate and resolution of contentious issues.

**Change Agent**

The agency must have the skills to structure the nature, timing and objectives of the communication and work flows between the agency and the vendor, and within the agency. This necessitates a good understanding of how the agency’s work processes currently occur, what needs to occur between it and the vendor, and changes in internal procedures that the outsourcing arrangement will require. Effective change agents understand the psychological dynamics regarding how individuals and organisations experience and adjust to change, are skilled in dealing with resistance to change, and subordinate their personal agendas (if necessary) so the agency can be effective in adapting to outsourcing.
6.2.2 Project Management

Any successful outsourcing project moves forward in a controlled manner from its beginning to its conclusion. For an outsourcing project to succeed, it requires planning and control. This is particularly necessary in the public sector as its processes can fall under scrutiny at any time due to the high degree of accountability placed on its use of taxpayer’s money.

Project structure, work performed and quality of deliverables must all be managed well if any outsourcing project is to:

- meet management priorities and business objectives,
- be on time and within budget, and
- be in accordance with quality management practices and standards.

A project is defined as a related group of activities, organised under the direction of a single project manager responsible for its success, which will achieve certain objectives. Project management defines the deliverables, processes, and techniques through which the project is defined and controlled. In this way, a clear definition is established of what to do, how to do it, and when to do it. Key components of project management include:

**Project Roles**

**Executive Sponsor**

Has ultimate authority and responsibility for the project, approves the scope and changes to the project plans, provides project funding and resources and approves project deliverables.

**Project Sponsor**

Makes the business decisions for the project, resolves issues, ensures the quality of the process and deliverables and participates in project meetings.

**Project Manager**

Controls the day-to-day aspects of the project, develops the project charter and project plans, tracks and resolves issues and tracks progress and budgets.

**Technical Specialists**

Technical specialists can include:

- business analysts or key business user who represent the business requirements of the project and manage business issues,
- IT specialists in the areas being outsourced (e.g., system and applications programmers, database and network administrators, lead operators, etc.) who define and manage the technological aspects of the project,
- representatives of the identified stakeholders who ensure their interests are represented and managed, and
- outsourcing specialists who offer expert understanding and experience regarding the outsourcing process and standard practices.

**Legal Counsel**

Assists in the development and review of the contractual documentation.

**Internal Audit**

Ensures compliance with internal and external rules and regulations.
Project Documentation

Project Charter
The project charter contains the definition of the scope of the project and defines what the project is committed to deliver. It includes the project budget, time lines, resources, controls and standards within which the project must be completed.

Project Plan
The project plan is a set of detailed plans used to produce the project deliverables. It refines the project charter by detailing the operational day-to-day management and control plans including detailed task schedules, resource schedules, quality procedures, a risk management plan, a knowledge coordination plan and budgets.

Work Breakdown Structure
The work breakdown structure is a decomposition of the work required to produce each deliverable. There are typically four levels, each of which produces one or more deliverables or a portion of a deliverable:

1. Phases - A phase is the highest level of the structure. Each phase (i.e., planning, analysis, tendering, contract development, implementation, etc) has its own specific set of goals and objectives.
2. Stages - A stage is the largest logical unit of work within a phase. It groups a broad category of related work and serves as the primary mechanism for planning, managing and tracking project activity.
3. Activities - An activity groups a logical block of work that is smaller and more manageable within a stage.
4. Tasks - A task is the lowest level of the structure and is typically assigned to an individual.

Project Status Reports
The objective of status reporting is to keep appropriate people informed of the progress against the plans. Status reports should be truthful and concise, reporting both successes and failures. Project status is communicated to members of the project team, management, the user community and other interested parties.

When the outsourcing project is concluded, a final report should include an evaluation of the project, draw conclusions concerning its conduct and history and evaluate the performance of the project team for reference in the planning and execution of future outsourcing projects.

These recommendations represent only a limited overview of good project management. There are many sources of reference on this topic and many organisations that provide specialist project management skills and methodologies.
6.3 FEASIBILITY

Before beginning to consider outsourcing as a feasible alternative to in-house provision, it is critical to recognise that there is no robust definition of outsourcing. A narrow mental model of what outsourcing is may limit an agency’s ability to evaluate feasibility. Outsourcing is the “how” IT services are provided, whereas the subcategory terms - facilities management, systems integration, and network management, etc., describe the service provided, the “what”.

6.3.1 Cradle to Grave Model of the Outsourcing Process

The outsourcing decision making processes from influences on the sourcing decision to realising the benefits over time are depicted in the model below (figure 8). It is important to recognise the entire process in order to manage the entire process.

- Influence Factors
  - Environment
  - Organisational characteristics
  - IT infrastructure and management

- Sourcing Decision Process
  - Strategic issues
  - Immediate needs
  - Cost/benefit analysis
  - Power & politics
  - Candidate analysis

- Outsource
- Insourcing

- Implementation Factors
  - Tendering
  - Contract negotiation
  - Internal restructuring
  - Transition management

- Benefit Realisation
  - Relationship management
  - Contract renegotiation
  - Sourcing reassessment
  - Service measurement

The remainder of this section discusses the influence factors as these are often subtle and not explicitly recognised. Certain elements of the other decision making components have been expanded within this recommendation section and the subsection references have been noted.

Influence Factors

There are a number of influences that can be explicit or not in an agency’s sourcing decisions. When these are identified and incorporated into the outsourcing strategy, the resultant comprehensive business driven objectives supporting the strategy provide broad and far reaching guidelines for decision making.

Environmental There are a number of macro and micro environmental factors affecting any organisational decision. Macro level factors include socio-cultural norms and values, economic trends, technological progress, etc. Micro
level factors are those specific to the industry and its markets. These include changes in industry regulation, market maturity, level of competition, value chain dynamics, and so on.

Some environmental trends affecting sourcing decisions are:
- Allowable outages periods shortening (just in time anything) - increasing the need for guaranteed service levels.
- Increasing technology advancements and shorter life cycles - intensifying the need for technological expertise.
- Frequent organisational change - the flexibility of the IT base often determines the flexibility of the organisation.
- Historically, IT budgets have grown 15% per year - faster than the rate of business growth.
- Outsourcing policies by federal and state governments - the varying degrees to which these policies are being pursued affects each agency’s sourcing decisions.

Organisational

Organisational characteristics can be categorised into behaviour (culture, reward systems, political systems, etc.), systems (operations, technology, marketing, etc.), and decision making processes (structure, communication, power, leadership, etc.).

Some organisational characteristics affecting sourcing decisions are:
- Internal approval and tender procedure and time requirements
- Degree of decentralised decision making
- Support or lack of it regarding the concept of outsourcing
- Number and variety of stakeholders in the agency’s activities

IT Infrastructure & Management

The nature of the IT infrastructure often has the most focused and detailed analysis regarding outsourcing. An infrastructure can be broken into any number of components, each of which will have varying degrees of strategic importance and decentralised structure. How IT is being managed also has a significant impact on sourcing decisions.

Some IT characteristics affecting sourcing decisions are:
- Degree of decentralisation of the infrastructure
- Length and rigour of IT strategic and tactical planning
- Use of service key performance indicators and measurements
- Use of benchmarking and detailed cost analyses
- Degree of executive management involvement in IT planning and management
Sourcing Decision Factors

These factors include balancing strategic needs with short term needs, the sourcing cost benefit analysis, organisational power and politics, and assessing outsourcing candidates. The need for strategic planning was discussed in section 5.1, assessing outsourcing candidates is provided in the next section (5.3.2) followed by a strategic sourcing model (5.3.3.), outsourcing approaches (5.3.4) and fundamental economic issues to consider (5.3.5).

Implementation Factors

Most of the existing outsourcing literature focuses on the implementation of outsourcing decisions, however it is worthwhile summarising key considerations as part of this report. Tender considerations are discussed in section 5.4 including vendor selection and a model for comparing market prices to internal costs, contractual and service level issues in section 5.5.

Benefit Realisation

Achieving the benefits of outsourcing and minimising the risks over time is as important as making the right sourcing decision. How to manage an outsourcing arrangement over time is discussed in section 5.7 including fundamental differences between internal and market provision (5.7.1), assessing vendor performance (5.7.2), managing cost and value (5.7.3) and managing agency capabilities (5.7.4).

Whichever way services are provided, internally or through the market, the choice ought not be regarded as fixed. Both organisation and markets change over time in ways that may render an initial decision inappropriate. The degree of uncertainty may be diminished, market growth may support competitive supply relations, and information disparities between the parties may diminish. Thus, any organisation should periodically assess outsourcing as an alternative to in-house IT service.

6.3.2 Outsourcing Candidate Matrix

It is useful for agencies to breakout their IT infrastructure into a matrix of services and technology and plot the areas that are outsourcing candidates. Any component of the IT services or IT technical areas or any combination can potentially be outsourced. The agency must find the right combination to achieve the greatest benefits at the least risk.

A matrix has been provided on the following page (figure 9) that can be useful when breaking out the infrastructure into its technical and service components. This matrix can be used to map any number of issues relevant to considering outsourcing including which components or combination of components:

- are integral to the agency's business core competences
- are well defined, well measured and well costed
- are facing internal sourcing problems such as skill shortage
• have a competitive market
• require a high degree of organisational knowledge to be effective

Often, outsourcing decisions combine and convolute these perspectives. Map each perspective in the matrix independently, so that there is a clear picture of the infrastructure according to each one. Then combine into an overall matrix to determine the strength of the sourcing alternatives.

Example of Outsourcing Candidate Matrix

<table>
<thead>
<tr>
<th>IT Service</th>
<th>IT Technical Area</th>
<th>Unique Technology</th>
<th>PCs</th>
<th>LANs</th>
<th>Mid-range</th>
<th>Main-frame</th>
<th>Communications</th>
<th>Appl’n Software</th>
<th>Entire Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
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<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Integration</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
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<td></td>
</tr>
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<td>Help Desk</td>
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</tr>
<tr>
<td>Education</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Disaster Recovery</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>Entire Technical Area</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cullen (1994)  

The VWA used this type of thought process when it determined which of its IT services and technology had the most synergy, thus the most value for a vendor to take over as a commercial concern. The Force did not use this thought process as its strategic plan was in development, thus it did not know what form its infrastructure will take.

6.3.3 Strategic Sourcing Model

"You don’t own a power plant for your electricity... why own a data centre for your information systems?"

advertising caption, Martin Marietta Information Systems Group

The prevailing view is that a company can let go of commodity-like tactical IT functions to save money and maximise resources by letting someone else pull wires, provide processing, and manage equipment. Many say vendors should not get their hands on mission critical or strategic areas, it is too risky and no one knows the business as the company does. Others call that nonsense, companies can outsource anything they want as long as they are careful. The spiral argument results from generalisations that are inappropriate on either side.

It is vital to understand that outsourcing is a strategy, not an economy. Outsourcing any part of an agency’s infrastructure fundamentally implies an in depth understanding of the core
competencies on which the agency intends to build its future. Outsourcing segments of the IT infrastructure implies an in depth understanding of what IT means to the agency and how it intends to use IT to build its future.

Making outsourcing decisions based on cost gives insufficient regard for strategic or technological issues. The model below (figure 10) has been developed as a conceptual framework to help agency's better account for strategic and technological factors in their sourcing decision. To achieve this end, the model provides a framework for examining:

- technology's role in providing a competitive advantage to the organisation, now and in the future
- maturity of the technology
- competitors' technology positions.

Also incorporated was Forrester Research's recommendation that companies must shift to a new "four-way" MIS management model to re-engineer successfully in today's environment. Their model stratifies the ideal IT organisation as follows:

1. a centralised MIS function that handles corporate standards,
2. business units that deal with front-end support and applications development,
3. "early" outsourcing performed to focus on skills transfer, and
4. "late" outsourcing performed to maintain operational systems.

By examining the various dimensions of the technology involved in the sourcing decision, agencies can avoid the pitfalls of the classical "make versus buy" exercise where cost is the primary variable. This is not to say cost unimportant, but it should not be the driving consideration. The thoughtful use of the strategic sourcing model, in conjunction with a rigorous cost analysis, can help agencies make sourcing decisions that will move them toward world-class stature.

**Strategic Sourcing Model**

<table>
<thead>
<tr>
<th>Maturity of technology across all industries</th>
<th>Agency's relative position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging</td>
<td>Weak</td>
</tr>
<tr>
<td>Growth</td>
<td>Weak</td>
</tr>
<tr>
<td>Mature</td>
<td>Weak</td>
</tr>
</tbody>
</table>

- Low today (base technology)
- High today (key technology)
- High in future (pacing technology)

**Significance of technology**

Manufacturing model adapted from Welch and Nayak

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12 *Computerworld*, June 25 1993, p. 70.
## Model Dimension

**Maturity of the technology or service**
To determine the corresponding ordinate range for positioning within the model, the agency must evaluate the maturity of the technology, not just in their own "industry", but across the globe. If the technology is under-developed in the agency’s industry, other industries should be scanned to determine maturity in the global sense, thus avoiding reinventing the proverbial wheel.

**Significance of the technology**
When sourcing decisions are examined, the agency must determine whether the technology is important to its objectives, both in the short and long term. This examination includes both obtaining and then being able to sustain a competitive advantage. Examples of technology are likely to high degree of importance in providing competitive advantage include fully integrated EDI, document imaging, and CAD/CAM/MRP systems.

**Agency’s relative position**
In the context of a sourcing decision, knowing the organisation’s technological position is critical. This analysis involves a structured benchmarking approach to determine the agency’s relative position in terms of cost, efficiency, and effectiveness.

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If the technology is mature and not important today or in the future, the agency may not be applying its resources for the greatest potential effect. Mature technologies, regardless of any other factor, are readily available. Even if the agency has already developed internal capabilities, there will inevitably be suppliers who have further traversed the experience curve. Retaining marginal IS activities may result in a disadvantage, as resources could be better leveraged and investment dollars can be better applied elsewhere. “Back room” functions, undifferentiated commodity-like activities, are in the mature category. Examples include payroll processing, data centre operations, and PC support. The technology is well understood and the application requirements are well defined, making late outsourcing low risk and manageable.

If an agency can use its existing infrastructure as the enabling element for a strategic business innovation, it already has a source of sustained competitive advantage. For technologies that provide significant advantage, but are not mature therefore not readily available, the preferred decision is to insource. However, this is contrary to many government outsourcing policies. The basic aim of government outsourcing initiatives are to achieve world scale competitiveness for the domestic IT industry, thus increasing Australian exports. Keeping leading edge skills in-house will not help the market gain the skills it may require to achieve "world class" exportable skills and technology.

If the agency is technologically weak and the technology is providing advantages today, the decision to outsource is only marginal. The agency must choose between investing to develop its own capability or outsourcing to obtain immediate leverage.
Many suggest that firms should seek alliances to build core competencies that they do not have. In many instances it is possible to acquire expertise and leading edge technology needed by the agency through early outsourcing. However, knowledge acquisition arrangements tend to require more care in the pricing mechanism and contract length. The agency may obtain less utility from the relationship over time, and the vendor more in terms of gross profit.

To determine the strategic sourcing alternatives of the agency’s IT infrastructure, the application of the candidate matrix, described earlier in section 5.3.2, may be useful. An example of how this can be applied is provided below (figure 11).

Example of Outsourcing Candidate Matrix using the Strategic Sourcing Model

<table>
<thead>
<tr>
<th>IT Service</th>
<th>Unique Technology</th>
<th>PCs</th>
<th>LANs</th>
<th>Mid-range</th>
<th>Mainframe</th>
<th>Communications</th>
<th>Appl’n Software</th>
<th>Entire Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>EO</td>
<td>MO</td>
<td>EO</td>
<td>MO</td>
<td>LO</td>
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<td>MO</td>
<td>?</td>
</tr>
<tr>
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<td>I</td>
<td>MO</td>
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<td>I</td>
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<td>Integration</td>
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<td>MO</td>
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<td>MO</td>
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<td>Disaster Recovery</td>
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<td>I</td>
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<td>LO</td>
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<td>LO</td>
</tr>
<tr>
<td>Entire Technical Area</td>
<td>EO</td>
<td>MO</td>
<td>?</td>
<td>?</td>
<td>LO</td>
<td>LO</td>
<td>MO</td>
<td>?</td>
</tr>
</tbody>
</table>

6.3.4 Approaches to Outsourcing

There is no one approach to outsourcing. In practice, the approaches provided on the following page are employed (figure 12), but often not as the result of a carefully crafted strategy. The approach selected must balance risk, the agency’s learning curve requirements and action deadlines. Riskier activities should be few and focused to avoid exposure, and to facilitate clear evaluation of their effectiveness. High risk activities include:14

• if it is one of the largest undertakings by the organisation,
• if the vendor is inexperienced with a project of comparable size and/or is unfamiliar with the industry,
• if the services to be outsourced are highly integrated within the organisation or its value chain,
• if leading edge technology is involved, the software being used is yet to prove itself in the industry, or significant modifications are necessary to meet the organisation’s specific requirements

<table>
<thead>
<tr>
<th>Approach</th>
<th>Description</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| Big Bang   | A significant portion of the IT services and technical areas are outsourced to one or more vendors at one time. | - Large vendors will be more interested due to the volume and variety of services, hence greater revenue.  
- Single point of contact for all outsourced services resulting in low coordination costs. | - Greater organisational impact and risk of disruption to business activities  
- Vendor may not have requisite skills in certain applications or technology. |
| Piecemeal | Each IT service and technical area is assessed independently over time. A variety of vendors are used to match the needs of each outsourcing event. | - Outsourcing can begin immediately.  
- Best vendor and cost structure can be obtained for each service.  
- Can stagger the risk of disruption over time.  
- Organisation may be able to incorporate lessons into future relationships, if knowledge is shared. | - Overall costs over time will be higher because of coordination requirements, duplication of effort (tender, negotiation, management, etc.), and loss of economies of scale compared to using one vendor.  
- May require a full-time relationship manager at the organisation.  
- Synergies and co-ordination between IT services provided by a number of vendors are difficult. |
| Incremental | A Prime Contractor is selected now with a "pathfinder project and options for more outsourcing later. The prime contractor can also select and manage all other vendors. | - Maintain interest from large vendors due to potential revenue stream.  
- Organisation has time to learn about outsourcing and improve each outsourcing decision and arrangement.  
- Immediate needs can be met through pathfinding project  
- Vendor has incentive to "prove" themselves for a larger opportunity. | - Longer time frame required.  
- Early contractual arrangements must be carefully prepared to include the lessons learnt. |

Cullen (1994)

The approach selected does not need to be a pure form, hybrids can be useful as well. The important issue is that the advantages and disadvantages of each are recognised and managed. The VWA used a big bang approach appropriate to its strategic realignment divesture of the transaction process service for the authorised insurers. The Force used a piecemeal approach, primarily as its outsourcing was driven by immediate needs rather than a strategic plan.
6.3.5 Fundamental Economic Issues to Consider

Organisational Specificity of the Service

Insourcing is considered by economists to be a form of vertical integration. The theory of vertical integration basically asserts that it is desirable only when the parts taken as a whole is worth more than the parts existing individually. This occurs when there are high levels of organisational specificity in the parts. Separating them could create a position of opportunism, or a "ransom". For example, it does not pay for a hauling company to buy a truck factory as there is no "asset specificity" between the truck manufacturer and the hauling firm. There are many competitive bidders to sell trucks and if one tried to "ransom" the hauling company it can quickly turn to another.

Specificity is a form of market imperfection that calls for controlled sourcing solutions rather than relying on efficient markets. It comes in three forms:\footnote{Stuckey, J. and D. White (1993), "When and When Not to Vertically Integrate", Sloan Management Review, Spring 1993, pp. 71-83.}
1. Site specificity - where the location of the organisation limits the range of available suppliers.
2. Technical specificity - where one or both parties must invest in equipment that can be used on by the parties in conjunction with each other and has low value in alternative uses.
3. Human specificity - where employees involved in service delivery must develop in depth skills that are specific to the organisation.

Economists emphasise that if there are no specialised assets and easily measured quality measurement costs, organisations should not even contemplate internal provision. Providing these services internally does not make the agency more valuable and there is a competitive market, thus no opportunity for ransom.

In the case of the Victoria Police, there is a great deal of specificity in the knowledge held by the help desk. The Force transferred its knowledge without a mechanism to capture it back. The open market does not have the skills the vendor personnel now have and neither do the Force, leaving the vendor with an ideal ransom position. The data entry bureau is not in the same position as the Force has its employees as the direct supervisors and managers who train the vendor’s employees and manage day-to-day operations. In this manner, they are retaining knowledge within the Force.

Asset Ownership

Another economic theory worth discussing concerning internal verses external provision is asset ownership. The value of this approach to decision making is that it forces agencies to look at the investment return potential in deciding the location of ownership. This theory
contends an asset should be owned by the party who can more efficiently invest in the asset. Whichever party will benefit from maximising total productivity and increasing the value of the asset, the ownership should reside with that party. In many cases, this will lean to the vendor. The agency may not use enough of an internal asset to achieve all potential economics of scale and scope.\footnote{Economies of scale exist when cost per unit falls as more production occurs. Economies of scope exist where different types of products or services are produced from the same asset.}

In the case of the Victorian WorkCover Authority, knowing that internal provision of the insurer’s transaction processing system (ACCTion) would eventually be discontinued, they selected a vendor that saw the system as a market worth buying entry into and making investments in.

**Transaction Costs**

A transaction is defined as an act of conducting business. Every organisation uses thousands of inputs and processes, and for each there is a potential to “manufacture” them internally or acquire them from the market. If a firm chooses internal governance, it will transact with another part of the firm. If it decides to buy, it will contract with another organisation. In either case, it is important to understand the principles behind the structure chosen and behind the economics of the transaction.

Internal and external provision of services are basically equal alternatives depending on the efficiency of each mode and the cost of managing the relationship, through pricing mechanisms or internal controls.

Market incentives for efficiency and low cost production are the most powerful incentives available. When a competitive open market exists, this usually offers the most powerful method of controlling costs, thus lowering price; and increasing quality, thus providing more value - both to fuel demand. Furthermore, the customer and the provider both have an incentive to make the transaction as efficient as possible, since this will increase the amount to be divided between the parties.

In all transactions there are obvious and less obvious costs, the former often being the purchase price and the later being the cost of internal resources. If an organisation is to produce a service internally, it must back up its decision with investments its sustainability, personnel and supporting organisational infrastructure. Even less obvious are the costs of keeping current with technology and processes as well as the potential non responsiveness of internal groups that know they have a guaranteed market. Finally there are the costs of corporate management and facilities, support costs of constantly managing the activities.

That the knowledge of IT costs has been handled poorly can be attributed to the emphasis on treating IT as overhead - managed through budgets and cost recovery. Many studies indicate this is a naive way of dealing with a complex economical good. Total cost knowledge is
further confounded by accounting and budgeting traditions can result in IT costs dispersal. For example, data centre space costs are often found in the corporate facilities budget; data communications may be commingled with voice communications costs; personal computer and local area network capital and support appear in departmental budgets; a user help desk may appear in the administrative budget; supplies such as paper, print cartridges, and diskettes can appear anywhere; and training surfaces in the human resources budget.

Such dispersement has resulted in only 20% of corporate and government computer users knowing what their IT assets are, and of those, only half know the assets’ value according to 1992 research by IDC. A Computerworld survey of 191 IS managers and executives found that 16% of organisations did not have an inventory of all IT assets. The same survey found that off-budget spending represented 10% to 29% of total IT spending for one quarter of the respondents, and a tenth attributed off-budget spending to over 30% of the total.

The less obvious costs are hard to identify thus often not included in the outsourcing cost/benefit analysis. A true cost analysis includes a rigorous examination of these assumptions regarding the current cost of the IT services, with particular emphasis obtaining often hidden and dispersed costs.

6.4 TENDERING

6.4.1 Tendering Processes

The tendering process must be objective and rigorously controlled so the agency’s processes are efficient and not called into question by management or other agencies. There are many “tricks” the tendering process is used for to achieve hidden agendas. For example, it is not uncommon that personnel responsible for the service being tendered write the request for proposal/tender, evaluate the responses and tender themselves. In this case, they may wait to submit their tender until they have reviewed the other tenders, hold back information in the tender requests to enhance their tender, and manipulate their costs.

Irrespective of the reasons behind going to tender, outline the contract and service level agreement (SLA) provisions before approaching the market. Because the outsourcing process is considered a sequence of events with the tender preceding the development of the contract, these are generally written after the vendor has been selected. However, the earlier the contractual obligations that the parties will enter into and the services and service levels that the vendor will provide are defined with a reasonable amount of accuracy, the more competent the whole process will be. Accepting a bid for an ill defined product is intuitively unsound.

18 Computerworld, July 26 1993, p. 66.
19 In one agency case, internal cost was measured as function of square feet of space taken for the service. To ensure a low cost tender, the internal function moved to smaller rooms and consolidated space until their costs were very low as represented by that measurement. The internal function won the tender.
The definition and specification is required to be performed at some point in the process. Leaving it until later often means that the vendor has a greater opportunity to drive the process which may not be in the agency's best interest. In addition, a comprehensive, precise and frank tender produces meaningful and exact replies from potential suppliers that can be more objectively compared, reduces the time and effort needed to refine issues, and strengthens the agency's negotiation power as the facts are made explicit as part of the offer and acceptance process, not after.

Below and on the following page are two checklists for the preparation of the tender documents - one for contractual obligations and the other for service level agreements.

<table>
<thead>
<tr>
<th>Checklist for Preparation of the Tender Documents - Contractual Obligations</th>
<th>Have these been defined?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The <strong>goals</strong> being sought by outsourcing.</td>
<td></td>
</tr>
<tr>
<td>2. The meaning of <strong>words</strong> and <strong>phrases</strong> used in the organisation.</td>
<td></td>
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<tr>
<td>3. The initial <strong>term</strong> of the contract and renewal terms.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Definition</strong> of hardware, software in which the services are currently, and to be, performed.</td>
<td></td>
</tr>
<tr>
<td>5. <strong>Sale and/or transfer of assets and people</strong></td>
<td></td>
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<tr>
<td>6. Clear <strong>division of responsibilities</strong></td>
<td></td>
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<tr>
<td>7. Necessary <strong>consents</strong> from software licensors, equipment lessors, insurers; etc.</td>
<td></td>
</tr>
<tr>
<td>8. How and with whom are <strong>changes</strong> to the contract are to occur.</td>
<td></td>
</tr>
<tr>
<td>9. How and with whom <strong>disputes</strong> are to be settled.</td>
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<tr>
<td>10. How <strong>payments</strong> are to occur and <strong>required documentation</strong>.</td>
<td></td>
</tr>
<tr>
<td>11. <strong>Audit</strong> rights and assistance required.</td>
<td></td>
</tr>
<tr>
<td>12. A <strong>technology refreshment</strong> clause to prevent obsolete technology.</td>
<td></td>
</tr>
<tr>
<td>13. Minimum <strong>expertise guarantees</strong>.</td>
<td></td>
</tr>
<tr>
<td>14. <strong>Exit</strong> provisions - circumstances in which each party can end the contract, who will owe what to who and notice required.</td>
<td></td>
</tr>
<tr>
<td>15. Obligation of the vendor to assist the <strong>exit transition</strong> to a new supplier or in-house provision.</td>
<td></td>
</tr>
<tr>
<td>17. <strong>Intellectual property rights</strong></td>
<td></td>
</tr>
<tr>
<td>18. Non-disclosure of <strong>confidential information</strong> and required use of confidentiality agreements.</td>
<td></td>
</tr>
<tr>
<td>19. <strong>Liability</strong> conditions and caps.</td>
<td></td>
</tr>
</tbody>
</table>
## Checklist for Preparation of the Tender Documents - Service Level Agreement (for each service to be outsourced)

<table>
<thead>
<tr>
<th></th>
<th>Description and business priority</th>
<th>Have these been defined?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Resources and capacity required:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Personnel</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Periods:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Peak</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Non Peak</td>
<td></td>
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<tr>
<td>3.</td>
<td>Critical:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Delivery dates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Support hours</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Availability and response times</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Measurement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. During peak times</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. During non peak times</td>
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<tr>
<td>5.</td>
<td>Backup:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. level (incremental or total)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. timing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. storage location (on and off site)</td>
<td></td>
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<tr>
<td>6.</td>
<td>Security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. physical</td>
<td></td>
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<tr>
<td></td>
<td>b. on-line access</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Disaster Recovery:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. services covered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. guaranteed emergency recovery time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. planning and testing</td>
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</tr>
<tr>
<td>8.</td>
<td>Problem escalation procedures</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Nature and volume of:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Data processed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Reports produced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Other output produced</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Forecasted demand for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. service utilisation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. growth/decline scenarios</td>
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</tr>
<tr>
<td>11.</td>
<td>Price scales regarding:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. planned, growing, and declining usage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. what is covered/not covered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. penalties for non performance</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Nature and timing of:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. operational reports and meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. service performance reports and meetings</td>
<td></td>
</tr>
</tbody>
</table>
6.4.2 Price versus Cost

Cost savings as a basis for outsourcing is often warned against because it is often not delivered. A true cost analysis includes a rigorous examination of the assumptions regarding the current cost of the IT services, with particular emphasis on obtaining often hidden and dispersed costs as discussed in section 5.3.5. Because of “creative” internal accounting and budgeting mechanisms, agency’s are often not in a position to evaluate the pricing mechanisms employed in a market tender.

Costs are difficult to gather and measure and the value often intangible and unquantifiable. As such, management must make outsourcing decisions for which they have no reliable underlying framework or benchmarks. Following is a model (figure 13) to assist agencies in evaluating the appropriate internal costs against the vendor’s price. In using this model, the agency is better placed to objectively assess the vendor’s offering on comparable and complete terms.

What Costs to Compare - One Model for the Cost/Benefit Analysis

<table>
<thead>
<tr>
<th>Agency Internal Cost Structure</th>
<th>Vendor’s Price Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Retained costs and overheads regardless of sourcing</td>
<td>• Profit margin</td>
</tr>
<tr>
<td>• Cost of existing IT service inefficiencies.</td>
<td>• Cost of providing agreed services</td>
</tr>
<tr>
<td>• Outsourcing transition and monitoring costs</td>
<td></td>
</tr>
<tr>
<td>• Real overhead savings</td>
<td></td>
</tr>
<tr>
<td>• Direct costs of “best in world” IT service provision</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Ernst & Young (1993)20

![Figure 13](image)

**Dimension**

**Retained costs**

Not all IT costs can be transferred to an outsourcing vendor or eliminated when an internal service is closed. Thus they are sunk costs which the agency will continue to incur regardless of whether or not the service is outsourced. These costs should be identified and removed from the comparison. Examples include:

- equipment leases that are not transferable, either economically because the lease payments are more than the current value, or restrictive lease provisions,
- redundant resources including equipment, software, contracted services,
- existing facilities which house the service, and
- corporate overheads and organisational administration.

Cost of existing inefficiencies

Use the assumption that the vendor already operates efficiently. Assess the agency’s current costs compared to the cost of an efficient similar service (through benchmarking). The difference represents savings the agency can achieve from either outsourcing or improving its services.

While the savings are critical to a cost/benefit analysis, it should not be incorporated into the assessment of the vendor’s price. Doing so “gives” the savings to the vendor, who have not earned them, and increases their available gross margin.

Costs of transition

Making the transition to market provision can be difficult and expensive. Transition costs would not be necessary without outsourcing, thus must be added into the cost comparison. Such costs include:

- **information gathering** - assessing feasibility and impact, determining specifications, evaluating proposals.
- **valuing equipment** - if the vendor will not buy the equipment at the recorded book value, a fair market value (FMV) must be ascertained. If the vendor pays more than FMV, the difference may be taxable as revenue. If the vendor pays less than FMV, the user will repay them vendor through increased service rates.
- **specialist services** - outsourcing vendors negotiate several contracts per year and employ professional in the area. Prudent organisation will employ like professionals in forming the contract. Fees depend on the complexity of the situation and the size of the arrangement, rather than its monetary value.
- **personnel costs** - redundancy and leave payouts, outplacement fees, potential union litigation are the primary costs associated with the transition.
- **facilities refitting** - the data centre will likely need to be refitted for another purpose. The raised floor, temperature controlling devices, security, etc will no longer be required.
- **asset transfer monitoring** - the actual relocation process must be monitored to ensure the vendor acquires only those assets to which they are entitled.

Monitoring costs

There will be skills required by the agency that differ from the traditional IT skills to define business requirements, negotiate and control contractual arrangements, measure performance and resolve problems. Training of current personnel or acquiring the needed skills will be required. Miscellaneous expenses will occur covering billing validation and adjustments, reporting, and clerical costs. In addition, auditing the supplier may be desirable to ensure there are proper internal controls, billing practises, and compliance with clauses such as a technology refreshment or price indexing.

Real overhead savings

Those costs that will truly be transferred to the vendor. Such costs may include equipment and software maintenance, IT personnel training and management, electricity and facilities and so on.
The organisation should compare the vendor’s price to the cost of efficiently provided services. In this manner, value for money can be truly ascertained.

One factor rarely taken into account is the overtime of salaried IT staff who do not receive overtime pay. The assumption that in-house IT staff only work the hours that they are paid may not be valid. Salary is basically a sunk cost and overtime represents added service without cost for salaried employees. Vendors charge per unit of service, thus may cost more than internal provision if the agency’s salaried staff work overtime.

Make sure that the payment terms reflect a fair exchange of money for services rendered. If the agency is paying in advance, it should receive a lower price than if it was paying in arrears of approximating current rates of interest (the agency’s opportunity cost). If interest is payable for late payments, the vendor should pay interest on performance penalties if the agency has already paid for the minimum service level provision which had not been delivered.

6.4.3 Selecting the Vendor

"Your outsourcing contractor is not your friend...business is business...and the contractor is in it to make money."

Louis Fried

To ensure a higher probability of success, it is recommended that before choosing a supplier ensure that:

- The service is one of the supplier’s core businesses, not a marginal activity.
- There is unrestricted freedom to contact other customers.
- There is evidence of substantial investment in the resources and infrastructure necessary to support the service, not unlike the Olympic Committee when it evaluates potential game sites.
- The supplier has people with the appropriate skill set. IT staff can change quickly and this should be checked regularly throughout the contract period.
- The supplier has skills in managing the technology and the willingness to upgrade.
- The supplier has an in depth understanding of the outsourcing market and has a strategy in which it intends to compete. This strategy is important to ensuring a fit between how the supplier intends to position itself and what the organisation wants to achieve.
- There is a good cultural fit including a mutual understanding of each other’s business language, and management attitudes and behaviour.
- There is an established manner in how the supplier proposes to interact with the organisation’s staff. Both parties will need to train the other, giving rise to the need for help desks on either end to deal with day-to-day problems.
- References provide the agency with information it needs to know including the vendor’s flexibility, willingness to problem solve and renegotiate, use of hidden charges, etc.

These supplier characteristics must be continuously reassessed. If conditions change,
motivation may change in undesirable ways. For example, if the vendor is experiencing financial difficulty (in the extreme bankruptcy), there are greater incentives to "cheat" for short term survival rather than the longer term concern for a good reputation, which will be worthless if the vendor shuts down.

Unmistakably, an evaluation of the quality of the service being sought is extremely important. Leading agency's have become skilled at quantifying the cost of poor quality - manifested as systems development rework, high application maintenance, user dissatisfaction, and systems unavailability, to name a few. To determine a potential supplier's quality, the agency should evaluate the supplier's processes, not just the outcome of those processes. Quality accreditation according to international (ISO) and Australian (AS) standards is an increasingly popular way of obtaining some degree of assurance that quality management systems exist. Where data processing occurs at a third-party, an independent auditor's report is also desirable to provide assurance over the design and effectiveness of internal controls. Furthermore the existence of a customer user group indicates the vendor is not threatened by customers discussing their needs with each other and welcomes participation from them.

With the market growth predictions and high potential profits, there has been an aggressive market entry by a variety of outsourcing vendors. Gross profits are generous in the industry, reaching 25% - 30%. The average contract is 8.8 years according to Gateway. Such high, steady returns are difficult to achieve in any industry, making outsourcing an attractive market to enter. As an industry analyst put it, "The current year among leading outsourcers will be marked by fierce competition, an intensive scramble for differentiation, jockeying in the ranks, and staggering deals."

Major industry vendors are essentially of five types as noted on the following page.

Evolved bureaus and development shops

These suppliers evolved from providing bureau, time sharing or systems development services. Some of these have been in the industry more than 25 years and have grown into large multi-national outsourcing contractors. The leader in world-wide revenue is EDS, a US$6 billion a year operation holding nearly half of the major long term contracts.

Major IT and communication hardware vendors

These suppliers are moving increasingly into services provision as the value added opportunities from hardware sales decline. The largest is IBM. For them, outsourcing is an attempt to expand their product range, in lieu of the falling margins on hardware sales resulting from recent price wars.

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21 The US Statement of Auditing Standards, SAS 70, is the most known guidance specifying the scope and procedures of such reviews.
22 Fortune, September 23 1991, p. 64.
23 ABA Banking Journal, May 1992, pp. 84 - 86.
Offshoots of in-house IT departments

These suppliers are attempting to become full service providers in the market, such as BHP-IT (Australia), or simply IT shops selling excess capacity. The public sector in Australia is witnessing a strong increase in these providers as government agencies are becoming commercialised and/or privatised resulting in the creation of IT service profit centres such as MITS, the Melbourne Water offshoot.

Professional services consultants

These suppliers are IT service branches of international consultants such as Andersen Consulting and DMR, who are leveraging their existing market profile as wide ranging IT service providers.

Niche players

These suppliers specialise in certain industries, technology, software, etc., that are attempting to leverage their specialist capabilities.

6.5 WRITING THE CONTRACT AND SUPPORTING SCHEDULES

6.5.1 General Clauses and Provision

The main benefit of a contract is not to anticipate a breach, but rather the process it forces the parties to undergo in defining responsibility and expectations. It is not possible to prepare a standard contract for outsourcing. Each outsourcing arrangement has its own set of issues and its own dynamics. In fashioning an outsourcing arrangement, the agency and the vendor must define with great accuracy, what it is that they are attempting to achieve with the agency’s money and the vendor’s services. Great care should be taken to ensure that the parties, not a judge, decide what is required and what will satisfy those requirements.

From the agency’s perspective, the critical items to include in the contract include those noted below. Many of these were included in the tender checklist in section 5.4.1, but have been expanded here.

Specifications

- All assumptions or the part of both parties. This includes making any reliant upon implied warranties explicit - future migration, staff transfer duration, training, etc.
- Definition of hardware, operating system, software, and applications which will be transferred (if applicable) and in which processing and/or development will be carried out.
- List of assets sold or transferred including physical assets, intellectual property and personnel.
- Service standards including system administration, development, maintenance, disaster recovery and backup.
- Nature and volume of data and the nature and content of reports required.
- Clear division of responsibilities - including communication between the firm, vendor, and subcontractors (if

26 The standard vendor contracts favour the vendor’s position, and once signed, considerably reduces the agency’s negotiation strength.
used); obtaining consents from software licensors, equipment lessors, insurers; etc.

- Clear boundaries between different suppliers used to provide different services and what each may be expected to deliver to the other(s).

- Clear and measurable service levels and the penalties for non delivery. Care should be taken in determining flexible performance baseline measures as they are constantly changing.  

- Flexible price scales - for usage, cost escalation, and cost declination. Include how they are calculated, what they cover and don’t cover, and the timing of payments.

- Critical service delivery dates.

- How and with whom are changes to the contract specifications to occur.

- How and with whom disputes are to be settled and whether the supplier can “switch off” because of late or partial payments.

**Provisions and clauses**

- A technology refreshment clause - obligating the vendor to keep the user’s technology competitive in its market niche to guard against being locked into obsolete technology.

- Personnel provisions - minimum expertise guarantees which provides the customer with some control over the IT workforce quality.

- An exit provision - the circumstances in which each party can end the relationship, who will owe what to whom, and how much notice is required. Such circumstances can include contract breaches, voluntary termination, business restructuring (growth and reduction) and force majeure. It should also include the obligation of the vendor in assisting the transition to a new supplier or in-house provision.

- Provision for extension of the contract.

- Intellectual property rights - ownership and exclusivity of software provided by the vendor, the customer, or suppliers to either.

- Non-disclosure and non-compete clauses.

- Liability and indemnity conditions and caps.

- Personnel transfer provisions including pay, working conditions and transfer of leave and superannuation entitlements.

A note of caution should be given to the use of provisions. There are many that the courts will not enforce. For example, pre-specified damages in the event of breach are rarely held up. Courts award actual damages, not punitive ones. As such, once a breach as occurred, an opportunistic breacher has the incentive to allege the clause as punitive and litigation may ensue. The most an agency can expect for successful litigation over a contract is payment of actual damages incurred, rather than specific performance. For operations purposes, outsourcing performance will be worth more than damages.

Fixed price contracts give the vendor incentive to increase the margin by decreasing service. A cost-plus arrangement, where the agency pays a usage fee, provides greater flexibility to add or delete services based on demand. Rigid contracts have fewer risks because all the costs and responsibilities have been specifically detailed in the contract. But it is an expensive exercise and one that may be found worthless with rapid technology or demand changes. Less rigid contracts required teamwork and cooperation. In these cases, the cultures and

27 For example, a facilities management contract signed seven years ago may have specified availability to be 95%, now 99.5% is the minimum.
organisational goals should be compatible. For example, if the agency is a low cost provider the vendor should be a low cost provider; if the agency is differentiated on quality, so should be the vendor. In doing so the relationship will have a higher probability contributing to business success.

Agency personnel are liable for discipline under their respective Acts of Parliament. This includes misuse of equipment, disclosure of information and other ethical behavioural codes. Vendor personnel are not liable under these Acts and their conditions of termination must be define in the contract.

6.5.2 Service Level Agreements

Equally important as the contract is the Service Level Agreement (SLA), which is a separate document referred to by the contract or attached as a schedule. While the contract sets out the responsibilities of each party, the SLA determines what will be delivered, how “good” service will be measured, and the charges and penalties. Broadly, an SLA should cover the following topics:

- duration of agreement
- description of service(s)
- priority
- critical periods and delivery dates
- peak periods
- availability, response, accuracy, backup and security requirements
- scheduled unavailability
- nature and volume of data
- nature and content of reports
- clear and measurable service levels
- forecasted utilisation and growth/decline
- vendor support hours
- problem escalation procedures
- penalties for failure
- price scales - for usage escalation and declination including how calculated, what is covered and not covered
- timing of payments
- nature and timing of service performance reports (ideally to be sent with vendor invoices)
- arrangements for vendor performance reviews

There are two primary rules to follow when setting service levels:
1. People manage by what they are measured by.
2. You can’t manage what you can’t measure.

Organisations have a hard time devising measurement programs. There are never just one or two right measures, there is a set - and that set will be different for every situation and will change as the situation changes. Furthermore, measurements provide more value of they are part of a system where the measurement is not the goal in and of itself, rather to guide the agency’s effective and efficient use of the vendor’s services.

Outsourcing forces organisations to define service and develop appropriate measures of service delivery, if only as a means to ensure contractual compliance. As such, it is not outsourcing, prima facie, that may result in better service, but the definition and measurement process. This process is available to internal shops, but is not used by most of them, leaving the outsourcing provider with a competitive advantage.
6.6 MANAGING ON AN ONGOING BASIS

6.6.1 Fundamental Differences between Internal and Market Provision

There are vastly different ways in which internal provision and market provision operate and the organisation must evaluate its management goals and capabilities with this in mind. Outsourcing, or market governance is a fundamental departure from the internal governance norm. Such a shift is a profound transformation in the strategic and operational mechanisms necessary for an organisation to position itself in achieving its mission. A principal adjustment is required in the nature and degree of internal routines as managing external resources replaces managing internal resources. It is imperative that organisations considering outsourcing know the fundamental differences between the two modes and how they are managed.

The great advantage a bureaucratic hierarchy has over the market is that it can tolerate much more ambiguity. It can operate with only partially committed employees working under extreme conditions of ambiguity through the use of legitimate authority to direct behaviour. The internal organisation also promotes convergent expectations, serving to minimise uncertainties generated when interdependent parties make independent decisions. In a bureaucratic hierarchy, the fundamental mechanism of control is the specification and monitoring of rules - about how to act, how much output to produce, or the expected levels of quality. A bureaucratic hierarchy rests critically on the use of legitimate authority. Substantial managerial resources must be spent monitoring costs and efficiencies, to an extent not necessary through the market.

IT outsourcing inevitable creates a strategic partnership as the agency and its vendors acknowledge greater levels of interdependence. The successful partnership cannot be guaranteed by contracts alone. By virtue of its radical shift in governance locus, new mechanisms are required for mutual understanding and trust, potential goal divergence and opportunism, redistribution of authority and decision making, and criteria for performance appraisal. As agencies outsource more of the management tasks, asset ownership and responsibility for delivering a complete service, vendors are less likely to allow customers to control their work force as it can affect their efficiency and ability to meet service performance levels.

In most cases, one party to a transaction will have more information than the other. The possibility for mutual misunderstandings and unfounded expectations are boundless as all uncertainties cannot be specified in the contract. As such, it is important to provide incentives for both parties to converge their knowledge. To make outsourcing work for complex and critical IT services, contracts should be structured so that vendors have incentive to help solve business problems as well as technical problems. The partners must have a genuine shared interest in the common undertaking, otherwise the partner with the greater power may disadvantage the other.
The use of outsourcing does not imply less effort in managing IT, only a different emphasis. For example, the top MIS manager will need to concentrate more on direction, strategy and implementation paths than with routine service delivery and staff management. Procedures must be developed regarding the conduct and objectives of a variety of vendor and internal meetings, who is to contact who for what reasons, the internal processes that must be followed for problem solving and requesting new or changed services, internal cost allocation (if performed), how and when vendor performance will be measured and reported, to name a few.

A failure to recognise this will inevitably mean that the potential benefits may not be realised. Clearly, the uneconomic, inefficient, and ineffective use of IT, whether the service is provided internally or otherwise, will inhibit an agency’s ability to achieve its objectives.

6.6.2 Types of Partnerships

“Ultimately, outsourcing...points to a new form of corporate interdependence with implications that extend far beyond the computer room.”

Kirkpatrick (1991)

A distinction must be made between a “transactional” and a “partnership” style of relationship. The former is an arm’s length relationship which rules are clearly specified and the penalty for commitment failure by either party can be resolved through litigation. The latter is a series of transactions without a definite ending point for which a range of mechanisms are required to accomplish strategic and tactical operational performance.

The partnership concept revolves on the idea that performance can be significantly enhanced through cooperative, mutually dependent action. To mitigate the natural motivation for self interests, there must exist a belief that the relationship is long term. There are six determinants for a successful partnership:28

1. mutual benefits
2. commitment
3. trust
4. shared knowledge
5. mutual dependence on distinctive competencies and resources
6. process, information and personal linkages

6.7 FOR THE VICTORIAN GOVERNMENT

It became clear during the case studies that there is a need for an education program in the public sector regarding outsourcing, a centralised source of reference, and the formation of an outsourcing users’ group.

6.7.1 Provide Education

Agencies embark on outsourcing arrangements without a comprehensive understanding of the advantages and disadvantages, decision making frameworks, the process and approaches. Their lack of comprehensive knowledge about the process, alternatives and requirements leaves the vendors driving the process by default. A well constructed and objective education program will help better decision making.

The available slate of seminars and short courses often are led by individuals with other agendas than to depart complete and objective information. These include vendors, whose agendas are obvious; representatives of organisations who have outsourced, whose level of disclosure is limited by their organisation’s objectives in allowing them to speak publicly; government representatives, of which both major parties’ policies support outsourcing; and a vast array of consultants whose expertise and objectivity can vary greatly.

6.7.2 Provide Central Source of Reference

Agencies are not often aware of relevant and current legislation, government stakeholders and outsourcing guidelines for best practice that they will need to consider and/or comply with, tending to find these out in a less than complete and methodical manner. The Victorian government can help by publishing a reference list with a brief summary of relevant considerations for each appropriate to outsourcing decisions.

6.7.3 Initiate Outsourcing User Group

Establishing an official network of agencies that have outsourced and providing a regular forum for information sharing will enable sector-wide learning, not only for the members but also agencies that are considering outsourcing. Sharing their collective knowledge, within the constraints of confidentiality imposed by the contract, will increase the public sector’s ability to formulate competent and advantageous outsourcing arrangements.
6.8 SUGGESTIONS FOR FURTHER RESEARCH

6.8.1 Need for Longitudinal Studies

"...the lack of real world outsourcing analyses inevitably means that motivations to
outsource may be misguided and based on false expectations."

(Northfield, 1993)

There has not been a systematic longitudinal study of IT outsourcing and its impact on the
organisation, primarily as the current phenomenon is fairly recent. Existing evidence
regarding outsourcing is primarily anecdotal and is not a rigorous and objective source of
information.

It is not known if an immediate reduction in costs continues well after the vendor is firmly
entrenched in managing the facilities - a number of examples exist where it did not. There is a
major gulf between cost as a motivation to outsource and cost as a resultant effect. The
determinants of this gulf, however, have not been rigorously examined. It is likely due to a
combination of organisations not knowing what all of their costs were before outsourcing, lack
of a comprehensive projection of their demand and making appropriate contractual provisions
for demand fluctuations, not having an adequate management process regarding their efficient
use of the vendor's services, and not having a practical understanding of the contract's pricing
structure.

Improved service delivery is the major effect of outsourcing, regardless of the motivation.
This is not an inherent characteristic of outsourcing, rather because service definition and
measurement mechanisms are more prevalent in outsourcing arrangements. The long term
effect should be studied to ascertain what impact better IT service has had on organisations - if
it resulted in an inclination to outsource more, if they have better leveraged IT, the degree of
that the vendor becomes integral to the organisation, and so on.

Market provision can drastically change traditional bureaucratic management techniques and
introduces forms of opportunism. How organisations have made the transition, its impact, and
how it dealt with opportunism over a number of years has not been studied in the context of
outsourcing.

As such, a systematic longitudinal study of IT outsourcing would provide much needed
information on the long term effects of outsourcing, which will help agencies conduct less
short sighted outsourcing and more educated behaviour.

6.8.2 IT Outsourcing and the Effect on Competitiveness

Richard Bettis (1992) has put forward the argument that the improper use of outsourcing in
the manufacturing sector played a pivotal role in the industrial decline of many Western
firms.\textsuperscript{29} Manufacturing outsourcing that began with parts, then subassembly, finally entire products, has enabled Japan to become an economic superpower within twenty years.

Managers often view outsourcing as a defensive operational measure and approach it in an incremental manner. A whole series of incremental outsourcing decisions, taken individually, may make economic sense, but collectively they may also represent the surrender of the business' core technological capability. Bettis' research found that what appears to be missing in the decision to outsource is an understanding of the relationship between narrowly based sourcing decisions and broad-based competitive decline, both within firms and in entire industries. He has put forth the model below (figure 14) to describe the "spiral of decline" that occurred within the US manufacturing sector.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{SPIRAL.png}
\caption{The Spiral of Decline}
\end{figure}

At the firm level, outsourcing often starts from pressure on "under performing" business units to improve cost or profit performance. In response, business units seek firstly to reduce costs. Increasing revenues is not considered as aggressively because this inevitably involves up-front

\textsuperscript{29} Bettis, Richard et. al. (1992), "Outsourcing and Industrial Decline", \textit{Academy of Management Executive}, February 1992, pp. 7 - 22.
expenditures. Comparing outsourcing versus further capital expenditures is likely to highlight the riskiness of further expenditure on assets operating at unsatisfactory levels. Once a significant sourcing relationship has been established, firms become less able or willing over time to the outsourced function back in house. This is due to a high level of early satisfaction with the supplier, which increases internal incentives to expand the sourcing relationship.

The option of outsourcing becomes even easier as the buyer’s expectations on delivery and quality are often exceeded. Thoughts of using outsourcing only as a temporary measure soon disappears. In addition, if cost and performance initially improve, as it often does, then the initial wisdom of outsourcing is strongly reinforced. Outsourcing may be imitated by sister divisions who hear about the “financial turnaround” or induced by transferred executives who attempt to repeat their success. Furthermore, the expansion of the ratio of overhead costs allocated to remaining users may cause them to then be under performing by traditional accounting measures.

Simultaneously, the supplier is likely to experience an expansion of investment to achieve economies of scale and scope. Investment momentum has thus shifted to the supplier. Bettis then notes the diffusion effect across the industry as competitive gains made by the firm initiate imitative behaviour by other companies. And a spiral of disinvestment begins.

Although Bettis described this spiral of decline about the US manufacturing industry, the description is almost identical to IT outsourcing patterns. Diffusion is imitatively driven, service delivery far exceeds expectations, experience with other forms of outsourcing has a significant relationship to performing IT outsourcing.

The issue is whether firms that outsource will lose their capacity to compete as technology changes the structure of entire industries. We are currently considered to be in the information age. Experts argue that a business strategy that does not rely significantly on IT will not be effective. Decisions made today concerning IT will affect business options far into the future. Over the next decade we will see new and unanticipated businesses; challenges to technical, organisational, political, social paradigms; opportunity, stress, and uncertainty. Information technology will be a constant cause or be correlated to much of these.

With the current phenomenon of IT outsourcing and the pattern it is following being so similar to manufacturing outsourcing, a study investigating the potential of firms to lose their competitiveness over time is well worth pursuing. Particularly as competition today has become as much a race to learn (accumulate skills and competences) as it is a battle for market share. The ability of an organisation to initiate or quickly respond to inevitable changes in the market and technology is built on such skills and competences. Outsourcing often amounts to renting competences. which are thus not codified into the organisation.

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30 For example, airlines and electronic reservation systems; retailing and EDI; and manufacturing and CAD/CAM/MRP.
6.8.3 Effect of an Oligopolistic Outsourcing Market on the Economy

Research conducted by CIRCIT (Centre for International Research in Communications and Information Technology) highlight the macro economic issues rarely, if at all, considered in the outsourcing decision. An analysis of the outsourcing market and the trends affecting the industry lead to some concern about the operation of effective and open competition now and in the future.

In the developing outsourcing market in Europe, there is some evidence of industry consolidation. Analysts suggest that there is likely to be a vendor shake out into a two-tier industry structure leaving a few large, global, full service players and many small niche players. If the handful of leading multi-national providers increase their domination of the market, passing savings on to customers may be compromised.

Investigations by the General Accounting Office and the Justice Department in the US into the impact of facilities management on competition in the software and hardware industries indicate that the growth of this niche could lead to a less competitive computer industry. If a few major companies controlled most corporate data centres, they could channel the purchased of computer resources to themselves and allied companies and industry competition would be seriously eroded. Systems integration deals may reduce the number of alternative solutions, and stifle the process of competitive innovation. Any small software company that does not sell its product through an industry major will find prohibitive market entry barriers.

This concern is well founded based on opportunism and small numbers exchange. The reason to go to the market is to gain the efficiency of a competitive market. The customer has many options and the vendor stands to lose future customers by behaving opportunistically. Opportunistic inclinations pose little risk as long a competitive (large numbers) exchange exists. However, with the contraction of the outsourcing market to big players, many transactions that, at the outset, involved a large number of qualified bidders can change over the life of the contract so that a small numbers condition is in effect at the time of contract renewal. After a bid is successful, a bilateral monopoly position between the client and the vendor could exist. What was a competitive position before outsourcing, now becomes a non competitive position unless the market remains open.

The dynamics of the outsourcing market clearly demonstrate that it would be worthwhile to study the competitive structure of the industry, with the intent to predict the potential for a monopolistic or oligopolistic structure and the ascertain possible effects.

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APPENDIX A - SELECTED GLOSSARY

Administrative
Innovation
A significant change in organisational routines. Outsourcing is considered such an innovation in transferring governance and/or asset ownership from internal to external parties.

Benchmarking
The process of determining the measurable criteria used to gauge the efficiency and effectiveness of IT, and then assessing that criterion at a point in time or continuously.

Chargeout
policy
Cost allocation scheme whereby users pay for the delivery of a defined internal service. The internal equivalent to the market concept of pricing.

Diffusion
Process of dissemination or propagation of a concept, innovation, technology, or technique.

Facilities
Management
Day-to-day management of computing operations or communication networks.

Gainsharing
Where business benefits achieved by the outsourcing vendor for the customer are shared by the vendor.

Information
Technology (IT)
Generally accepted umbrella term for computer hardware and equipment, software and applications, and services.

Insourcing
Internal provision and ownership of IT services and/or assets.

Institutional
Isomorphism
The reduction of uncertainty by imitating the behaviour of other organisations in attempts to duplicate the imperfectly observed success.

IT Architecture
The technical blueprint for evolving the corporate IT infrastructure. The three main elements are:

1) Processing systems - technical standards for hardware, operating systems, and application software.

2) Telecommunications

3) Data - organisational data definitions for cross-referencing and retrieval.
IT Infrastructure  Akin to a city's public infrastructure (roads, utilities, regulations, etc.), the IT infrastructure is the shared processing systems, telecommunications, and data storage/retrieval systems providing the core IT services to the businesses (see also IT architecture).

IT Platform  Shared information services delivery system for the range of IT based services.

IT Stakeholders  Individuals or groups of individuals affected by the IT platform. Depending on the business systems in place, the stakeholders may be both internal and external to the organisation.

Opportunism  Where one party has the opportunity to take advantage of a circumstance to the detriment of another party.

Outsourcing  Practise of contracting with an external organisation to significantly contribute physical or human resources associated with the entire or specific components of the IT infrastructure.

Service Bureau  Third party provider of data processing capacity.

Service Level Agreement (SLA)  A formal mechanism through which the providers and users of IT agree on the definition of what IT service is desired and the minimum standards of such service.

Systems Integration  Activity of synthesising products and services from a number of suppliers, and may include managing transitions to new systems.

Transitional Outsourcing  Temporary form of outsourcing as an organisation makes the transition between IT platforms or re-engines its IT architecture.

Turnback Arrangement  The plan for alternative supply of the service outsourced, either internally or by a new supplier, in the event that the contract is terminated or not renewed and the service need remains.