- In this section we gather the themes of Governance and Accountability together with the Project Issues and put them in the context of three elements we have identified as necessary for project success. At the same time, we provide outlines of the problems hindering departments from succeeding.
- We intend this section to provide reasons for project success and failure in the New Zealand public sector context.
- Over the last two decades there have been numerous studies done on success and failure of IT projects. Typical of these is research done by Standish Group International,¹⁵ which covers both public and private sector IT projects in the United States over the later 1990s.
- The studies identify relative size and time scale as major determinants of project success or failure (larger, longer projects are much more likely to fail), and also identify a series of "success factors". Their "top ten" success factors, and the relative weighting attached to each, are shown in Figure 7 below.

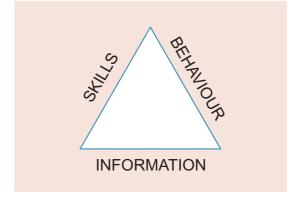
Figure 7
Project Success Factors and Weightings

Success factor	Weighting
User involvement	20 points
2. Executive support	15 points
3. Clear business objectives	15 points
4. Experienced project management	10 points
5. Small milestones	5 points
6. Firm basic requirements	5 points
7. Competent staff	5 points
8. Proper planning	5 points
9. Ownership	5 points
10. Effort	5 points

- We would expect Chief Executives and Project Managers to be aware of, and assess success factors such as these as part of their project planning and monitoring.
- Our own more limited research is not inconsistent with the Standish work but, as both our situation and our concerns are different, we have framed our conclusions differently. Our concern was with New Zealand (not the United States), the public sector (not all sectors), and with governance and oversight (rather than project management).
- The "success model" that is set out below reflects our attempt to bring coherence to the findings of our work in the New Zealand situation.

Success Model

- 308 Project success or failure is dependent on three groups of project inputs:
 - skills;
 - behaviour; and
 - information.



- These three elements are required at each level of the Project Organisation structure outlined in Figure 1 on page 22. The glue that holds these elements together across the three levels of structure is *Communication and Listening*.
- In our experience which was confirmed by the opinions of people we interviewed we believe these elements are inter-related. The strength or weakness of one element at any level in the project and governance hierarchy will have a positive or negative impact on the balance of the project.

- 311 The degree of impact will depend on:
 - the stage of the project and responsibility for control;
 - the risk profile at each stage of the project;
 - the skill level of the people in the team, particularly the Project Manager and Chief Executive;
 - the quality of the reporting mechanisms;
 - the quality of the business case, the specification, and the contract; and
 - the strength of relationships between the department and the supplier, and between the department and the central agencies.
- In paragraphs 314-333 we expand each element needed for success and contrast that with current problems that people in each role are experiencing or observing.

Summary of Current Problems

We have summarised in Figure 8 on pages 70-71 a collection of the key issues that have occurred in one or more of the projects that we reviewed in the course of this exercise. The bullet points in the summary identify issues that put the players at each level at risk. Whether the project is consequently at risk depends more on the impact of the number and combinations of these issues than any individual issue causing significant difficulties to the project.



Figure 8 Key Risks and Difficulties

Organisation Level	Key Risks and Difficulties
Select Committee	Has difficulty in performing an effective role in overseeing IT projects Not having a clearly defined role Receiving information late Not having enough time to review project issues.
Responsible Minister	 Has difficulty in performing an effective role in governing IT projects Receiving information late Not receiving reliable information (information is filtered according to different perspectives) Not enforcing CE's reporting accountabilities Uncertain legislative timetables Changing policies without full and comprehensive input from the Department, and without full understanding of the impacts.
Central Agencies	 Are struggling to provide effective scrutiny of IT projects Lacking IT knowledge to interpret project reporting Lacking time to monitor thoroughly Having too much staff movement to build up historical knowledge of projects Misunderstanding the "least cost" concept Not receiving reliable, accurate information. continued opposite

Organisation Level	Key Risks and Difficulties
Chief Executive	 Has difficulty managing projects well Lacks understanding of the appropriate role Not accepting ultimate responsibility – passing it to others Not providing a clear vision of the outcomes required.
Project Manager	 Has difficulty effectively managing projects Has insufficient experience for the role carried out Captured by suppliers who have different interests.
Contracts Manager	Lacks separation between Project and Contracts Management Inadequate legal support for effective IT contracts Inadequate guidelines for "best practice" IT contracts Pre-disposition to win-lose contractual relationships.
Supplier/IT Industry	 Is struggling to provide adequate IT support Not receiving clear direction or assertive management from the department Not being direct and comprehensive in their own advice to the department.

Success Elements and Current Issues

Skills

- By "skills" we mean knowledge of the process, technology and culture; judgement and experience; a relevant track record.
- Depending on the role, there will be different skill levels required in each of the following areas:
 - the business of the department and its management;
 - the purpose of the project, its proposed benefits, and its risk profile;
 - project management;
 - contract management; and
 - technical components used.
- Individual skills are fundamental for each project.
- The retention of staff over a long period, to build a project culture and departmental knowledge of managing projects successfully, is also necessary to build up a skill base to alleviate dependence on individuals.
- All interviewees stressed the need to have skilled people, particularly the Project Manager, and for continuity of people in key project roles throughout the project.
- The comments in Figure 9 on pages 73-74 were derived from our experience and interviews.



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REASONS FOR PROJECT SUCCESS AND FAILURE

Organisation Level	Skills Requirement	Issues Raised
Select Committee	Ability to commission research on project status from varying sources and devise focused questions on IT projects.	MPs are voted into Parliament for many reasons, but not for their IT expertise. There are no effective mechanisms for learning from other projects.
Responsible Minister	Ability to read between the lines and assimilate conflicting advice from Departments and Central Agencies. Ability to force delivery of agreed reporting.	There is no authoritative advice available, so Ministers have to understand the key aspects of the project to place decisions in context.
Central Agencies	Understanding of project management concepts. Ability to interpret technical and project advice and reporting. Ability to understand the status of project risks and issues in order to question effectively in Steering Committees. Ability to request more appropriate reporting where it is inadequate. Ability to understand the operation of the department within the context of Government objectives.	Focus on "least cost" concept reflects lack of appreciation of the uncertainty surrounding projects and the use of formal project disciplines to manage it. Limited IT knowledge to be able to monitor and interpret project reporting, and communicate consequences and recommendations effectively. Should the Crown Law Office bring in skills for IT contracts? Risk of accountability transfer from CE to Central Agencies.
Chief Executive	Ability to interpret advice from varying sources. Leadership. Understanding of the different requirements between projects and operational business areas co-existing in the department. Ability to set up relationships with suppliers. Promulgating general standards for purchasing. Ensuring that significant projects conform to these standards.	Problem recognising they need to get good advice. Lack of understanding about their role in contract negotiations. Delegate inappropriately on contract establishment and risk management. Display an immature approach to vendor management.

Figure 9 Current Issues with Skills

Behaviour

- Project management professionals across all industries have developed disciplines to make order out of what is otherwise a chaotic mixture of activities and roles. They are usually grouped together as methodologies but are also known as project standards, policies and procedures.
- In the IT industry there are many methods and guidelines in existence. One such example is the Project Management Institute's *Book of Knowledge*. ¹⁶
- Effective use of a methodology requires considerable discipline by the Chief Executive and the Project Manager to enforce its use. The application of the methodology will be shaped by the culture of the organisation and will in turn enable the development of a project culture in the organisation.
- Organisations (either in the private or public sector) that develop a strong project culture supported by a project methodology firmly enforced are likely to deliver projects successfully.
- A project manager supported by his or her Chief Executive will enforce use of:
 - proven estimation and scheduling techniques, and mechanisms to size project scope to achievable chunks;
 - defined accountability for project outcomes;
 - procedures for managing and reporting project risk, issues, scope change, progress and variances;
 - consistent reporting and monitoring; and
 - predetermined measures for reviewing the project viability where it has problems.
- Current issues with behaviour that were raised with us are listed in Figure 10 on pages 76-77.



Figure 10 Current Issues with Behaviour

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Organisation Level	Issues Raised
Select Committee	The emergence of problems provides opposition MPs with an opportunity to attack or "blame" officials and the Government. It is legitimate for a select committee to hold officials and the Government to account, to ask questions, to seek assurances and to express concerns. However, the existence of problems in a complex project does not necessarily mean anyone is to blame. The attribution of fault (if it exists) is a difficult matter. It can be done fairly only after a careful and time-consuming examination of quantities of evidence. Natural justice requires such a process, but a select committee may not have the time, resources or skills to undertake it. Unrestrained "blaming" for political point-scoring is destructive to the chances of project success. It encourages management to become excessively risk averse, to conceal rather than confront problems, and to make disingenuous reports.
Responsible Minister	Lacks awareness of political impact of legislative changes on project scope. Appears helpless to intervene effectively because of the "separation of power" principle. Doesn't enforce conformance by CE of agreed reporting targets.
Central Agencies	Not enough time to monitor thoroughly enough to build up the background about the department and the project(s). Change requirements for development of business case and monitoring over the project life. Inconsistent policies on contingency arrangements and funding.

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Organisation	Issues Raised
Chief Executive	Sometimes too close to the project, sometimes too removed. Not enforcing a business focus. Varying examples of the understanding and development of project culture for the department based on project standards, policies. Using the tender process too much, focusing solely on price for each project or project phase rather than seeing the value of a longer-term relationship with supplier. Contract negotiation left to lawyers rather than being set up by the CE and then supported by lawyers. Over-reliance on penalty clauses, and on the contract as protection against risk. Denial of actual project health; discounting the severity of problems.
Project Manager	Over-reliance on the supplier. Focuses on technical issues to the detriment of the business requirements. Accepts constant change without rigorous questioning.
Supplier/IT Industry	Being kept at arm's length during the tender process. Limited information being provided and not enough time to clarify issues with the RFP. This leads to bad surprises after selection and perhaps leads to selection of the wrong supplier.

- A project culture and clear governance will help to eliminate behaviours that contribute to project failure, so that:
 - problems are reported factually, honestly and promptly;
 - the parties have a realistic understanding of the purpose of the contract as a basis for the relationship;
 - focus is put on the business requirements over the technical aspects;
 - the project is structured to avoid supplier or consultant capture;
 - the environment is constructive and productive;
 - change is tightly managed; and
 - everyone has a good understanding of business requirements and the technical implications in the Analysis phase.
- The behaviour of MPs in Select Committees is very important when a project is at risk but is salvageable. The actions (or lack of action) of people in every role can compound to make a vicious spiral leading to failure. MPs may contribute to the vicious spiral leading to failure when they use project problems as an opportunity for political gain. These actions will force the Project Manager to be diverted to minimising political flak rather than focusing on saving the project.
- MPs displaying constructive behaviour are more likely to encourage the Responsible Minister and/or Chief Executive to review the project status and seek help.
- We believe positive behaviours are displayed by people in roles throughout the whole hierarchy from Ministers to Project Managers where they have the skill or judgement, information and project disciplines in place to support decision making within a structured project culture.



Department of Social Welfare, from interview with Dame Margaret Bazley and Neil Miranda, 17 August 1999

DSW has put IT policies and standards in place and together with its IT Strategy has never deviated from that without good reason. Examples of its strict but effective IT policies and standards are:

- Enforce the policies and standards for all staff and consultants. Users are not used to specify complex systems, but are used to define scope, which is a prerequisite for all projects.
- Put an IT Strategy in place and don't deviate from it without good reason. This includes a common infrastructure. "There have been times when we have had to be bloody minded to keep to the strategy as everyone is an 'expert' yet few know what they are doing", Margaret Bazley said.
- Have a structured approval and monitoring process to be followed by every GM. This covers resourcing of project and IT Management roles, Steering Committee monitoring, independent quality assurance and reporting of findings, development of business cases and review against the ISSP by the CFO and DSW IT Director before sign-off, and project ownership. DSW applies more rigid and ruthless management for IT than for any other area of the business.
- Government funding is managed by the Director-General, IT Director and GM of the operating department. As both roles report to the DG, accountability for the project is clear. Each project is monitored by the ISSP Steering Committee, which also makes sure that the benefits signed up for in the Business Case are delivered. The GM requests a capital release for each phase. The budget is approved by the DG only on recommendation from both the IT Director and CFO collectively. Approval is also based on meeting the technology standards which avoids vendor capture. The IT Director has to have approval from each GM for Infrastructure projects.
- DSW always negotiates its own contracts it does not hire lawyers to do it, and it has a reputation for the most stringent contracts. DSW ensures that key people are named in the contract and ensures they are committed, with strong penalties. As continuity and knowledge is vital, key people cannot be swapped out without DSW approval. Their contracts have mechanisms to enable DSW to move in fast and remedy problems.
- DSW works closely with the Treasury, and reports quarterly. They have also done formal briefings to Maurice Williamson for Cabinet Committee or Ministers where required. They have never briefed a Select Committee, just answered questions.

Information

- Formal reporting is built into every layer of the project and governance hierarchy, the particular requirements for each level vary according to the project. We believe the characteristics of good reporting are that it is:
 - timely;
 - relevant;
 - factual;
 - concise;
 - consistently formatted; and
 - grounded in the business case.
- Good reporting will show actual progress, benchmarked against agreed performance measures.
- Information is provided, or obtained, from the following sources:
 - formal written or oral project reporting;
 - independent quality assurance reporting or advice;
 - supplier advice; and
 - central agency monitoring and reporting.
- We received many comments about the type of information provided and issues with it. The comments appear in Figure 11 on pages 81-84.



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REASONS FOR PROJECT SUCCESS AND FAILURE

Figure 11 Current Issues with Information

Organisation Level	Information Sources	Issues Raised
Select Committee	Estimates examinations. Financial reviews. Anonymous information. Background material from research used to ask searching questions.	Has a genuine political need to know what is going on. Estimates rarely show a project as a separate item. Projects are not reported against baselines. Not getting information required: "too little, too late"; information not provided on projects in trouble. Not enough time is spent on reviewing projects – spends only 3 hours twice a year on departmental reporting for each department. No effective mechanisms for learning from other projects. Lessons learned are not shared among departments.
Responsible Minister	Business case from department. Advice from Central Agencies on business case viability. Advice from external advisors. Routine monitoring reports from Central Agencies.	Reporting cycle is not met, and no real way of ensuring it's met without strong Ministerial direction. Reporting can be waffly, or written with "heavy spin". continued on next page.

Organisation Level	Information Sources	Issues Raised
Responsible Minister continued	Monthly exception report on current projects being monitored to Minister (IT) from SSC. Periodic reporting from CE, which includes IT project progress.	Information reporting cycle is 3 to 6 monthly, interval is too long and out of step with monthly business cycle – information provided is "too little, too late". Information is filtered, either on purpose or through the lack of IT expertise of officials.
Central Agencies	Steering Committee reports. Copies of project quality assurance reports. Independent advice.	Tension for the Treasury between monitoring project risk for Responsible Minister and avoiding direct management of project. For monitoring to be effective it is necessary for departments to report projects regularly and consistently. Insufficient budget and time to monitor progress. The "least cost" concept has been misrepresented, the original meaning was "value for money". Information reported to officials can be filtered; QA reports should be provided unfiltered. How can independent QA advisors remain "independent" and not become "advisers"? "independent" and not become "advisers"?

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Organisation Level	Information Sources	Issues Raised
Chief Executive	Internal project reporting. Quality assurance reports. Relationship with and advice from supplier's Chief Executive. Occasionally, independent IT adviser.	Quality assurance reports are useful when they are unfiltered. There can be confusion about the difference between supplier suggestions as constructive for the department and being captured by the supplier. Independent advice is necessary. How can independent quality assurance advisers remain "independent" and not become "advisers"? Varying clarity of business requirements, project outcomes and project specifications.
Project Manager	Regular project reports. Quality assurance reports.	Lack of skill in preparing reports or setting expectations of supplier reporting. Reporting can be sanitised, issues buried, long and/or vague, confusing reporting of problems. When projects are in trouble, an unskilled project manager will invariably use language that is positive, and promise that issues will be solved, but no dates given continued on next page.

	Issues Raised	The same comments occur in reports in successive months, not the action actually taken. Recommendations from quality assurance reports not actioned either at all or in a timely manner. The independence of a long quality assurance relationship is at risk. Quality assurance reporting may obscure problems where implementation of earlier recommendations have proved incorrect.	Suppliers are showing frustration over the process, would like to advise the Government better. CE's reliance on penalty clauses unbalances the relationship.
A STATE OF THE STA	Information Sources		Requests for information and requests for proposals. Steering Committee papers. Project reporting.
	Organisation Level	Project Manager continued	Supplier/IT Industry

CYPFA project monthly reporting regime, from interview with Treasury Vote Analyst, Jason Minkhorst, 19 July 1999

Characteristics of effective monthly project reporting:

- Summary report from Project Director (approximately 6 pages) clearly showing progress against plan, management of risks identified at the beginning of the project, and a number of easily understood measurements.
- Supplier's Project Director report (unfiltered) providing a useful comparison of the supplier's view of the project status, progress and issues.
- External quality assurance consultant's report consultant reviewed all parts of the project (technical, project management, budget, performance).
- These reports go to the Project Board monthly.
- Funding is released monthly by the Project Board, providing checks and balances.

