

Digital Project Success

This series engages researchers from academia on issues influencing the performance of digital projects. These projects play a vital role in allowing Australia to seize the opportunities presented by new technologies.

The DTA works across the Australian Government to support the successful design and delivery of digital projects. Our work includes managing the assurance system which drives good decision-making and seeks to create the conditions each project needs to succeed.

This research series is part of the DTA's commitment to ensure the Australian Government achieves nothing less than excellence in digital project design and delivery.

A collaboration



The Digital Transformation Agency (DTA)

The Digital Transformation Agency (DTA) is the Australian Government's trusted advisor for its digital transformation agenda. The DTA's mandate is to provide strategic advice, coordination and assurance across the Australian Government's portfolio of digital projects.

John Grill Institute for Project Leadership, The University of Sydney

The John Grill Institute for Project Leadership conducts breakthrough research into project leadership, delivers world-leading executive education and works with industry, government and communities to shape future projects and their outcomes.

Disclaimer: This document was produced in June 2024 as a collaboration between the DTA and the University of Sydney based on contemporary events and research findings. The intent of this version is that it is used as guidance and facilitates broader dissemination and feedback.



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Dr Julien Pollack is an Associate Professor with the John Grill Institute for Project Leadership and the School of Project Management at the University of Sydney. He started as a project manager in IT, organisational change, and manufacturing projects, before moving into research.

He now explores multiple aspects of project management, with the broad aim of helping to transform the discipline into one that addresses the needs of complex and uncertain environments. This includes investigation of project teams and their productivity, project management methodology, and projects with ill-defined objectives and outcomes. His research in these areas is regularly published in the leading international project management journals and research conferences.

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Dr Natalie Smith is an Associate Professor of practice with the John Grill Institute for Project Leadership. Her expertise is in the governance of digital transformation. Natalie's PhD was on digital transformation governance, and she has since completed a research fellowship on trust in Artificial Intelligence (AI) in the Australian public sector. Her current research is on designing fit-for-purpose assurance for digital projects.

Natalie is also a non-executive director in not-for-profit Health and Community Service organisations and government. She is a member of the National AI Thinktank for Responsible AI. Previously, Natalie was a partner in Deloitte's Risk Advisory practice, providing project assurance and supporting organisations delivering digital transformations.

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Dr Wei-Ting Hong is a postdoctoral research associate at the John Grill Institute for Project Leadership, the University of Sydney. His research covers digital transformation in project delivery, Natural Language Processing (NLP), prompt engineering and public transport management.

He is particularly interested in how artificial intelligence (AI) can benefit project models, concentrating on the potential of NLP and Large Language Models (LLMs). His PhD was on leveraging the power of NLP to enhance rail safety and organisational learning behaviour. Wei-Ting is also a committee member of Railway Technical Society of Australasia (RTSA), a Technical Society of Engineering Australia (EA).

Contents

Background and Purpose	5
What are Delivery Confidence Assessment (DCA) ratings and how are they used?	6
Relevant DTA Policies	7
What are the focus areas and inputs to a DCA?	8
Transformation Vision	9
Governance and Leadership	11
Capability and engagement	13
Delivery Management	15
Solution	20
Other considerations in determining a DCA	24
Appendix: Research References Academic and Industry Papers	25
Further information	26

Background and Purpose

The DTA engages across the digital project lifecycle to support, advise and coordinate the government's digital and ICT-enabled investments via the six states of the Investment Oversight Framework (IOF). State 4 (Assurance) of the IOF aims to provide assurance to government that approved digital projects are on-track to deliver expected outcomes and benefits – including by ensuring projects plan for and implement fit-for-purpose assurance activities to support good decision-making throughout delivery.

The DTA engaged the John Grill Institute for Project Leadership at The University of Sydney to contribute to a research series aimed at eliciting best practice guidance to maximise the rate of digital project success.

As the first topic in this series, this paper and the guidance within supports independent assurers tasked with assurance activities that review and assign Delivery Confidence Assessment (DCA) ratings for digital projects.

The primary purpose of this document is to help improve the consistency and understanding of DCA ratings for digital projects. Specifically, this publication is intended to:

- address the unique challenges and issues faced by digital projects
- outline inputs and focus areas that assurance reviewers could use to determine DCA ratings
- provide general tolerance levels for each rating category
- uplift capability and understanding of DCA ratings for the people who use them, including Senior Responsible Owners (SROs) and steering committees.

The primary audience for this guidance consists of:

- Departments and agencies (agencies) and Independent Assurance Providers (IAPs) engaged by agencies
- Senior Responsible Officials (SROs) within agencies who are accountable for digital projects
- Governance Boards and Steering Committees overseeing digital projects
- Central agencies of the government (such as the DTA) who rely on DCAs to form advice to government.

What are Delivery Confidence Assessment (DCA) ratings and how are they used?

Delivery Confidence Assessment (DCA) ratings result from independent assurance activities that agencies conduct to assess the confidence level of the project delivering successfully. Assurance activities are defined as independent and objective assessments and evaluations undertaken by people and entities separate to the delivery team and the Senior Responsible Officer (SRO). While not every assurance activity will produce a DCA rating, every DCA rating will have an associated assurance activity that informs the rating.

The [Assurance Framework for Digital and ICT Investments](#) requires that regular assurance activities are conducted to produce a DCA. These ratings are crucial to provide an indication of an investment's overall trajectory to deliver on intended outcomes and benefits. The DTA draws heavily on assurance information to inform and focus its oversight and engagement across the portfolio of in-flight digital and ICT investments. These ratings also form a key input to the DTA's advice and reporting to government.

Consistency in how DCAs are defined is critical to the effectiveness of key decisions by project governance forums and to the DTA's oversight and advice. Assurance activities that require the inclusion of a DCA rating in reports provided to the DTA must use the agreed ratings below, as seen in the Assurance Framework. They should also instil confidence the DCA rating being awarded is unbiased, rigorous and evidence based.

DCA Rating	Description
High	Successful delivery of the investment to time, cost, quality standards and benefits realisation appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery significantly.
Medium High	Successful delivery of the investment to time, cost, quality standards and benefits realisation appears probable however constant attention will be needed to ensure risks do not become major issues threatening delivery.
Medium	Successful delivery of the investment against budget, schedule, scope and benefits, appears feasible but significant issues already exist, requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun or loss/delay of benefits.
Medium Low	Successful delivery of the investment requires urgent action to address major risks or issues in a number of key areas. Changes to budget, schedule, scope or benefits may be necessary if the investment is to be delivered successfully.
Low	Successful delivery of the investment requires changes to budget, schedule, scope or benefits. There are major issues with investment definition, schedule, budget, quality and/or benefits delivery, which don't appear to be manageable or resolvable without such changes being made.

Relevant DTA Policies

The DTA owns whole-of-government digital policies that provide direction to agencies about how they should approach particular aspects of digital and ICT investment, design and delivery, including requirements, when the policy must be applied and exemptions for certain circumstances.

This guidance on DCA ratings also references relevant DTA whole-of-government policies throughout to inform assurance providers and other stakeholders of the policies that may be applicable to the investment under review.

The policies considered within this guidance are a selection of DTA-owned policies relevant to the identified focus areas and inputs to a DCA. The policies referenced are not intended to be an all-encompassing list of digital policies, but rather a select reference of applicable DTA-owned policies for digital and ICT investments.

For more information on digital policies and standards, the following links have been added to relevant sections of this document.

(In order of appearance):

[Benefits Management Policy for Digital and ICT-Enabled Investments](#)

[Assurance Framework for Digital & ICT Investments](#)

[Digital Experience Policy](#)

[Digital Sourcing Policy](#)

[Artificial Intelligence in government](#)

[Australian Government Architecture](#)

What are the focus areas and inputs to a DCA?

Our guidance on DCA ratings is based on the factors that have been found to be significant in the success and failure of digital projects.¹ These include:

- Transformation Vision
 - Purpose, Business Case and Benefits
- Governance and Leadership
 - Executive Support and Governance Effectiveness
- Capability and Engagement
 - Resource Management and Capability
 - Stakeholder Engagement
- Delivery Management
 - Schedule
 - Cost and Finance
 - Scope and Change Control
 - Risk Management
 - Commercial Management
- Solution
 - Technology
 - Solution Context
 - Deployment and Sustainability.

Assurance activities are typically a summative assessment at a point in time in a project lifecycle. A DCA is a predictive assessment based on the current state and trajectory of the project.

The topics and deliverables required to make an assessment can vary. It is recommended that assessors observe the project in action by attending stand-up meetings or board meetings and review live project documentation. For example, an assessor of an agile project may find it appropriate to assess a project through reference to observing agile artefacts and ceremonies rather than only consuming more traditional project documentation. The list of example documents that could be assessed during an assurance review to determine the delivery confidence of an investment include:

- business case – original and most recently approved version
- program/project overview including objectives, key policy assumptions, background material
- benefits management strategy
- assurance report that informed the DCA

- program/project budget documentation
- program/project timeline, showing critical path, dependencies and key milestones
- risk matrix and risk management approach
- resource plans
- implementation plans
- stakeholder impact assessment and communication plan
- list of other entities involved in the program/project
- governance model including papers and minutes from any steering or program / project management committees, Terms of Reference and documented roles and responsibilities
- issues log
- change control register
- evidence of feedback loops, contract and interdependency management
- organisation chart for relevant areas of the entity.

This guidance document provides more detail on the focus areas in the following sections.

¹ For simplicity, we use the term “digital projects” to refer to a digital and ICT-enabled investment which uses technology as the primary lever for achieving expected outcomes and benefits. This includes investments which are transforming the way people and businesses interact with the Australian Government and improving the efficiency and effectiveness of Australian Government operations, including through automation, using agile, hybrid or waterfall approaches.

Transformation Vision

Purpose, Business Case and Benefits

For a digital project to contribute to agency effectiveness and service delivery, the business purpose that the transformation project facilitates needs to be clearly articulated and supported.¹⁻⁴ Delivery confidence can be higher where there is a transformative vision that people rally around.^{10,11} The [Data and Digital Government Strategy](#) sets the vision for the Australian Government's use of data and digital technologies to 2030.

The purpose and vision for a transformation should be supported by a strong business case, with clear outcomes and scope that is aligned with the needs of the business area.¹⁶ Financial and non-financial benefits and disbenefits should be defined and actively monitored, and project scope should be aligned with achieving benefits and minimising impact.^{5,22,23}

Relevant DTA Policy Benefits Management Policy for Digital and ICT-Enabled Investments

The Benefits Management Policy defines how benefits must be managed across the Australian Government digital and ICT portfolio. The Policy supports agencies to deliver digital and ICT outcomes by detailing investment oversight requirements and providing guidance on benefits management.

[Policy Link >](#)

Purpose DCA Tolerances	
High	A clear and unambiguous purpose that is inspiring, consistent across stakeholder groups and meets stakeholder needs.
Medium High	A purpose that broadly represents stakeholder needs and interests.
Medium	A purpose has been developed, but with limited consultation or commitment from the business area it will impact.
Medium Low	A purpose that doesn't accurately or consistently represent business needs.
Low	A technology-centric purpose or misalignment on the purpose.

Business Case DCA Tolerances	
High	Business case shows robust consideration of options, clear rationale for the project, detailed and realistic estimates for cost and time, and measurable success criteria.
Medium High	Business case shows consideration of options, rationale for the project, estimates for cost and time, and measurable success criteria.
Medium	Business case shows limited consideration of options, rationale for the project, estimates for cost and time, and success criteria.
Medium Low	Business case largely makes an argument for one option, without fair consideration of alternatives.
Low	Limited or no business case.

Benefits and Impacts DCA Tolerances	
High	Benefits align to strategic direction, are measurable and evidence based, include financial and non-financial measures and, where appropriate, disbenefits. Business leaders are accountable. Benefits and disbenefits are integrated into the governance approach and are actively managed.
Medium High	Benefits show consideration of strategic direction, are measurable, and integrated into governance.
Medium	Benefits are identified, but not actively managed.
Medium Low	Benefits are acknowledged but insufficiently articulated or managed, or not measurable.
Low	No consideration of benefits, or multi-year project that is yet to demonstrate a credible path to realising claimed benefits.

Governance and Leadership

Executive Support and Governance Effectiveness

Effective governance and leadership are essential to effective digital projects. This includes strong business leadership and senior executive support.^{6,7} Consultation with the relevant minister is beneficial before approval and throughout delivery.⁸ It is important that senior executives, the SRO and steering committee have the adequate work capacity to govern the transformation, are aligned on the need for change,²⁻⁴ and have the general digital literacy^{2,9,10} and relevant experience to govern delivery.¹⁹ The senior executives should foster innovation, agility and adaptability to the inevitable change that comes with the uncertainty common in digital projects.^{10,12} The governance and leadership team need to foster effective and open communication, and have appropriate skills and emotional intelligence.¹⁷

Governance structures need to be appropriate to the size, pace and complexity of the transformation. The project should be business-led, not technology-led,^{2,3} with feedback-loops that allow for continuous review of benefits, impacts and governance in the face of discovery and learning during delivery.⁵ Governance processes should ensure project alignment to enterprise risk appetite⁵ and be supported by sufficiently detailed information to support governance decision-making. Delivery confidence can be higher where progress is visible or evident, and lower where there is a lack of detailed up-front planning or measured only by project expenditure.⁸

Governance roles need to be clearly defined. The SRO needs to have accountability for the business area impacted by the change, and have accountability for the project.^{1,13} The steering committee needs to be empowered to make decisions, with a clear separation between decision-making and stakeholder engagement forums.^{9,13} A culture of transparency and learning should be evident, for example, that the leadership team support regular assurance activity, proactively respond to lessons learned, reports reflect good and bad news, and benefits and disbenefits are monitored.

Relevant DTA Policy

Assurance Framework for Digital & ICT Investments

The Assurance Framework for Digital and ICT Investments supports agencies in planning and implementing fit for purpose assurance arrangements.

[Policy Link >](#)

Senior Executive Support DCA Tolerances	
High	Senior executives, the SRO and steering committee have the adequate capacity to govern the project and are highly experienced in the area. They proactively foster a culture that is open to learning and bad news.
Medium High	Senior executives, the SRO and steering committee have the capacity to govern the project and are experienced in the area. There is evidence of a culture that is open to learning and bad news.
Medium	Senior executives, the SRO and steering committee have some capacity and relevant capability. The culture shows limited openness to learning and bad news.
Medium Low	Senior executives, the SRO and steering committee are involved, but lack capacity and/or relevant capability. Events affecting project progress are not openly aired.
Low	No substantive senior executive involvement. Low SRO or steering committee engagement. Defensiveness or resistance to scrutiny.

Governance Effectiveness DCA Tolerances	
High	Steering committees are empowered to make decisions. Governance roles are clearly defined. Decisions are fast and informed. The SRO takes accountability for the project and impacted business areas. Clear ownership of business and delivery team issues.
Medium High	Steering committees are empowered to make decisions. Governance roles are defined. The SRO takes accountability for the project. Generally recognised ownership of business and delivery team issues.
Medium	Steering committee decision-making occurs but is not always timely. Governance roles are broadly defined. The SRO takes accountability for the project.
Medium Low	Steering committee decision-making is ineffective or not timely. Governance roles are ill- defined.
Low	Substantive issues related to role clarity. Duplication, re-prosecuting or lack of timeliness in decision-making. Lack of accountability or finger-pointing.

Capability and Engagement

Resource Management and Capability

Delivery confidence can be higher where the agency has adequate capacity and appropriate skills and expertise, including in areas such as architecture and systems integration^{1,2,6,7} and is investing in capability development.¹⁸ Other aspects that heighten confidence are evidence of clear roles and responsibilities,¹ particularly in projects involving collaboration and interdependencies that cross functional and organisational boundaries, and where there are processes for skills transfer, sharing knowledge and data.^{2,4,14} Effective cross-disciplinary teams can also enhance confidence, particularly in AI solution development. Delivery confidence is reduced where turnover is high, there are skills shortages, overuse of consultants or where capability development is limited, or where funding models are misaligned with the project lifecycle risking to resource continuity.⁸

DCA Tolerances	
High	In-house staff have direct experience in the managing the delivery of relevant technologies. Sufficient skilled staff are available and roles and responsibilities are appropriately and clearly defined. There are processes in place for skills transfer and knowledge management.
Medium High	There are some gaps in capability but training and skills transfer plans are in place. There is sufficient clarity in role responsibilities.
Medium	There are significant skills gaps and a lack of clarity in roles and responsibilities.
Medium Low	Lack of clarity in roles and responsibilities and skills shortages are impacting delivery of the project and elements of the solution that are outside the project's control.
Low	There are significant skills and capacity gaps that are impacting delivery. Resource turnover is high and there is an overuse of consultants and contractors.

Stakeholder Engagement

Government digital projects can involve a complex ecosystem of stakeholders with direct impact on transformation effectiveness. Successful delivery relies upon user, client and senior executive involvement in the formulation of project goals and scope and in project decision-making.^{6,7,14} Cross agency inter-dependencies can affect delivery confidence, separating delivery and the business across multiple agencies, confounding understanding of responsibility and ownership. Effective stakeholder engagement will reveal dependencies that are beyond project control but affect delivery confidence, such as licensing, regulations, policies, data sharing and interfaces with systems over jurisdiction boundaries. Lack of engagement with suppliers on the feasibility of objectives prior to contracting can reduce confidence on high ambition transformations involving unfamiliar technology.^{8,9}

Relevant DTA Policy Digital Experience Policy

The Digital Experience Policy (the Policy) sets agreed benchmarks for the performance of digital services and supports agencies to design and deliver better experiences by considering the broader digital service ecosystem. The Policy supports a whole-of-government focus on improving the experience for people and business interacting digitally with government information and services, setting a benchmark for good digital services and integrating data based on real-world use. Through a phased implementation, agencies will be required to meet four standards the: Service Standard, Inclusion Standard, Access Standard and Performance Standard.

[Policy Link >](#)

DCA Tolerances	
High	Substantial early and sustained engagement with people who are influential, impacted or involved in the project, allowing for a nuanced understanding of needs and interdependencies.
Medium High	Substantial early engagement and limited ongoing engagement, allowing for a good understanding of needs and interdependencies.
Medium	Early engagement with some stakeholders but limited ongoing engagement.
Medium Low	Key stakeholder groups are not engaged. Assumptions not tested with the people themselves.
Low	No engagement. Little basis for assumptions.

Delivery Management

This criterion considers whether project process and management systems are established and followed, with reference to those processes most significant in digital projects.

Schedule

As with all projects, the adequacy of schedule management processes⁷ including identification of variance against baseline, establishing trends for the major elements of projects,¹ identification and management of the critical path¹⁵ and project manager ownership of the schedule¹ all affect delivery confidence.

For digital projects, pressure to start delivery quickly instead of developing a robust business case⁸ has been found to reduce confidence, potentially resulting in the schedule not representing the full complexity of the task¹⁵ and not accounting for essential interdependencies.² This can lead to unrealistic expectations of digital project pace.⁸ Due to the uncertainties involved in many digital projects, contingency should also be included in schedules to allow for learning during delivery.⁸

DCA Tolerances	
High	The project schedule covers the entire scope for the solution, is used to inform management action and is actively updated. Progress assessed on estimate to complete. There is sufficient contingency for the risk of the project.
Medium High	A schedule measurement baseline exists with a critical path. This provides the basis for management of change.
Medium	The schedule appears accurate but is not actively updated. Measurement against baseline is not consistent or regular.
Medium Low	The schedule appears mostly complete but is not being used to inform management action.
Low	The schedule does not cover the complete scope. The critical path is not being managed. The schedule is not being used to support management action. Progress assessed on time spent. No contingency.

Cost and Finance

Delivery confidence can be higher where there is evidence of regular monitoring of cost, value and revenue, with any variation attributed to specific causes and with appropriate delegations.¹ The DCA should consider whether the baseline cost estimate is realistic, or whether there is evidence of optimism bias, or underestimation of budgets and overestimation of benefits to facilitate initiation.¹⁵

Funding continuity can also affect delivery confidence. Factors to consider include the budget allocation for development after go-live, and to support the training and organisational change management activities needed to realise benefits. Budgets also need to cater for recurrent costs post implementation, for example, accounting for ongoing Op-Ex to support cloud-based digital solutions.⁸

DCA Tolerances	
High	Cost, value and revenue are realistically estimated, forecast and monitored continuously. The project is at, or ahead of, budget.
Medium High	Cost, value and revenue are forecast and monitored regularly. The project is at, or ahead of, budget.
Medium	The project is at, or ahead of, budget. Cost is monitored regularly.
Medium Low	The project is behind budget. Cost is monitored regularly.
Low	Cost is not actively monitored. The project is over budget or there is no certainty of current status.

Scope and Change Control

The abstract nature of digital solutions can make scope management more difficult than for projects with tangible outputs. Robust scope management and change control processes are needed that drive management action.¹ Scope definition should include data management and conversion, integration and interfacing, reporting, change management,¹⁶ as appropriate. During scoping, projects should engage in rigorous up-front analysis about overarching design, consideration of options, critical interdependencies and business problem identification. This is of particular importance when using agile in larger projects where these concerns can be overlooked.^{8,19}

Processes need to account for changes in business requirements due to shifting business needs or discovery of misconceptions,⁸ reflecting budget cuts in scope changes,¹⁵ and highlighting reductions in scope to meet time or cost constraints. Projects that push scope into subsequent tranches, even through official change processes, can impact upon delivery confidence.

DCA Tolerances	
High	A clear scope with measurable acceptance criteria, aligned to business need, refined through recent consultation with users, suppliers, project team and senior management, including benefits realisation activities. Change is minimal and well controlled.
Medium High	A clear scope with acceptance criteria aligned to business need, developed through consultation with users, suppliers, project team and senior management, including benefits realisation activities. Change control may be slow to reflect implications of change across project.
Medium	A scope referencing business need, developed with some consultation with users, suppliers, project team and senior management. Change control processes exist but is incomplete or needs improvement. Movement of scope between tranches is reflected in adjusted budget and schedule.
Medium Low	A scope that lacks sufficient definition or clarity on acceptance criteria. Informal or undocumented change control.
Low	Absence of scope definition or acceptance criteria. Change is not being controlled or substantial scope is being moved to subsequent tranches.

Risk Management

Risk management practices are reflected throughout the other categories, however delivery confidence can be improved with evidence of proactive risk management, clear and appropriate ownership of risk and active management of issues. Confidence is impacted where risk management is treated exclusively as a compliance exercise, where risk controls do not materially reduce risk or where there is blame and confusion result from risks being triggered.

DCA Tolerances	
High	Risks are actively discussed and managed in governance forums and aligned with the risk register. Ownership of risk and related activity is clear. Controls are effective.
Medium High	There is a sufficient understanding and reporting of the material risks impacting the project.
Medium	Risk management is a compliance activity. There is limited understanding and awareness of the key risks impacting the project.
Medium Low	There are significant risks and issues that are not adequately controlled or reported.
Low	There is minimal understanding of the key risks, there are significant issues impacting project delivery and finger pointing on who is responsible.

Commercial Management

Factors that improve delivery confidence in commercial management include flexibility in the contract to allow for learning and change in delivery, clarity in the roles and responsibilities and appropriate risk/reward sharing.^{1,8,19} Contracts should include clearly defined management processes, incentives and deliverables,¹ and should be designed to avoid counterproductive terms and conditions, such as over reliance on individual day rate contractors.¹⁵

Other factors to consider when assessing delivery confidence include the supplier performance,⁸ supplier capacity and capability,¹⁹ and the degree of integration of suppliers in the delivery organisation.¹ Early engagement with commercial partners can also improve delivery confidence,¹⁹ developing stronger working relationships and a more realistic understanding of objective feasibility.

Relevant DTA Policy Digital Sourcing Policy

Digital sourcing policies exist to provide agencies with a modern approach to structuring contracts that reduces risk, drives competitive outcomes, increases flexibility and fairness, and encourages competition.

[Policy Link >](#)

DCA Tolerances	
High	Procurement decisions are made on detailed analysis of reliable and complete data. The contract has clearly defined deliverables, management processes and anticipates change. There is a productive relationship between the agency and contractors.
Medium High	Procurement decisions are made on analysis of data. The contract has defined deliverables, management processes and anticipates change. There is an established relationship between the agency and contractors.
Medium	Procurement decisions are made on data. The contract identifies deliverables but does not accommodate change. There is a working relationship between the agency and contractors.
Medium Low	Procurement decisions are made on incomplete data with poorly formulated criteria. The contract may lead to some counterproductive behaviour. There is a degrading relationship with the contractor.
Low	Procurement decisions are made on flawed or incomplete data without explicit criteria. The contract does not provide an effective basis for contractor management or delivery. There is an adversarial relationship with the contractor.

Solution

Technology

Often digital projects involve innovating with technologies that are unfamiliar or untested, which can affect delivery confidence.⁸ Strategies to elevate confidence include iterative deployment strategies that build capability and confidence.

Other areas for attention include interfaces with legacy systems, including the ways new systems interact with, or replace, aging legacy systems, while maintaining essential services.⁸ Aging legacy systems can affect the system stability upon which the transformation may be reliant.¹⁹ Legacy system dependencies need thorough analysis.⁸ Assumptions about legacy data coherence and consistency can be particularly problematic, especially for projects involving transfer to cloud services.^{8,19}

More generally, the solution needs to conform to the technical architecture⁵ of the business area.

For commercial off the shelf software, the degree of fit with business requirements and degree of change that will be required to software or service⁵ can reduce delivery confidence.

For AI-based transformation, detailed understanding of how AI will be used within the business environment is essential,¹⁹ as is consideration of human rights, privacy and ethics implications, particularly for AI.¹⁶ Consideration should be given for AI solution reliability and safety, and the transparency, explainability and contestability of decisions made using AI solutions.²⁴ For reference, the Australian Government has developed [Australia's AI Ethics Principles](#) which are foundational to Australia's safe and responsible adoption of AI. The Policy for the responsible use of AI in government builds on this foundation and aims to ensure that government plays a leadership role in embracing AI for the benefit of Australians.

DCA Tolerances	
High	In-house expertise in the technology. Ability to challenge supplier expertise.
Medium High	Significant in-house familiarity with the technology.
Medium	Some in-house familiarity with the technology.
Medium Low	Low in-house experience with the technology. Largely reliant on supplier capability.
Low	No in-house familiarity with the technology. Complete reliance on contractor expertise.

Solution Context

Because digital solutions are highly interconnected, delivery confidence can be impacted by organisational, procedural, policy, regulatory and human system interdependencies.⁶ Delivery confidence can be improved when there is evidence of strong alignment with technical architecture, policy and standards, and active management of interdependencies beyond the project's control. Delivery confidence can be reduced where important factors are outside the project's control, particularly where policy or legislative reform is required, or where delivery and operational responsibilities are in separate agencies.⁵

Relevant DTA Policies

Artificial Intelligence in government

The Policy for the responsible use of AI in government positions the Australian Government to be an exemplar of safe, responsible use of AI. It aims to create a coordinated approach to government's use of AI and has been designed to complement and strengthen – not duplicate – existing frameworks in use by the APS. The policy is designed to evolve over time as the technology changes, leading practices develop, and the broader regulatory environment matures.

[Policy Link >](#)

Australian Government Architecture

The Australian Government Architecture (AGA) facilitates capability-based information and guidance (policy, standards and designs) to promote opportunities for re-use and make it easier to understand how the directions and decisions of government for digital fit together.

In this way, the AGA can be used as a decision-making construct that supports more informed digital investments.

[Policy Link >](#)

Project Interdependencies DCA Tolerances	
High	Project is largely a closed system with tight boundaries and no critical dependencies outside the project's control.
Medium High	Project is largely isolated from external influence but has minor well-managed interdependencies outside project control.
Medium	Project is subject to some external influence, but interdependencies are being actively managed.
Medium Low	Project is affected by external influence and is aware of interdependencies.
Low	Projects spans multiple departments or agencies, with unclear or complex interdependencies.

Legacy Dependencies DCA Tolerances	
High	No legacy dependencies, or dependencies are fully understood and the transformation is near complete.
Medium High	Minimal legacy dependencies that are generally understood.
Medium	Some legacy dependencies with some testing of assumptions about implications.
Medium Low	Significant legacy dependencies, with minimal testing of assumptions about implications.
Low	Major legacy dependencies with uncertain implications for the project.

Deployment and Sustainability

Delivery confidence can be impacted by the deployment strategy. High levels of hyper care, iterative deployment to refine the solution and effort to build capability can improve confidence and minimise risk.^{2,5-8,14,17,19}

Large scale, big-bang or fast-paced deployment can lower confidence due to unrealistic estimates of time, cost and benefits,^{8,19} reducing opportunity to develop a solution that suits different business area needs.

Transition to BAU DCA Tolerances	
High	Transition to BAU co-created with business, scoped, budgeted and scheduled.
Medium High	Consultation with business on BAU and accounted for in business case.
Medium	Consultation with business on BAU and partially accounted for in business case.
Medium Low	Some consideration of transition to BAU, but not sufficiently accounted for in planning. No consultation with business on BAU.
Low	Transition to BAU considered out of scope.

Other Considerations in Determining a DCA

This guide is not intended to be used in a prescriptive or formulaic way. Rather, it provides support to an independent assurer by providing the evidence on what has been found to contribute to digital project success and failure. Similarly, there is no prescribed template. Rather, agencies are encouraged to incorporate these assessments into their own governance processes in managing assurance activities and their outcomes.

When providing a DCA, assurance providers are encouraged to briefly comment on what has informed their confidence assessment. This guide can be used as a framework to structure this commentary.

Not all criteria can be considered equal at all stages of a project. For example, a lack of purpose for a project in terms of the business value and benefits might warrant an overall DCA red rating, despite other factors being green. A lack of awareness or control over inter-agency system dependencies on a multi-agency project with a tight delivery schedule might warrant a rating of low confidence despite strength in other areas. Similarly, low supplier capability or capacity could warrant a low DCA if coupled with low in-house capability.

It is also anticipated that delivery confidence will change throughout the project. For example, when working with any but very familiar technologies, it could be difficult to justify high confidence against schedule and cost until the later stages of a project, especially given the frequency of over-time and over-budget projects. The relevance of some elements will also vary based on whether the delivery team are using an agile, hybrid or waterfall approach to delivery. For example, while agile approaches may tend to de-emphasise up-front planning, this can be problematic in large projects with many interdependencies. Digital projects are both highly context dependant and vary significantly based on the degree of digital transformation they entail.

Finally, it is possible that the project status reporting indicates a DCA rating that is different to the DCA delivered by the assurance activity. This could happen when the assurance report reveals a mismatch between project documentation informing assurance and the active risks and issues that are manifesting in the project.

Consequently, while this document may provide a guide, any DCA rating must rest on the expertise and discretionary judgment of the independent assurance provider.

Appendix

Research References

Digital Transformation Agency (DTA)

[Assurance Framework for Digital and ICT-enabled Investments](#)
2023

[Digital and ICT Oversight Framework](#)
2024

Department of Finance

[Guidance on the Assurance Reviews Process \(RMG 106\)](#)
2023

[Gateway Reviews Process](#)
2023

Academic and Industry Papers

1. APM (2016). Measures for Assuring Projects. Association for Project Management.
2. Jewer, J., & Van Der Meulen, N. (2022). Governance of Digital Transformation: A Review of the Literature. Paper presented at the Hawaii International Conference on System Sciences.
3. López Muñoz, J., & Escribá Esteve, A. (2022). Executives' role in digital transformation. *International Journal of Information Systems and Project Management*, 10(3), 84-103.
4. Vial, G., Cameron, A., Giannelia, T., & Jiang, J. (2023). Managing artificial intelligence projects: Key insights from an AI consulting firm. *Information Systems Journal*, 33(3), 669-691.
5. Rees, D. (2023). Review of the Modernising Business Registers Program. Retrieved from Canberra, Australia. [Link >](#)
6. Iriarte, C., & Bayona, S. (2020). IT projects success factors: a literature review. *International Journal of Information Systems and Project Management*, 8(2), 49-78.
7. Ayat, M., Imran, M, Ullah, A., Kang, C. (2020). Current trend analysis and prioritization of success factors: a systematic literature review of ICT Projects. *International Journal of Managing Projects in Business*. DOI 10.1108/IJMPB-02-2020-0075.
8. NAO, (2021). The challenges in implementing digital change. National Audit Office. www.nao.org.uk
9. Filatotchev, I., Lanzolla, G., & Syrigos, E. (2022). The corporate governance of digital transformation: The CEO's digital orientation and board impact. Paper presented at the Academy of Management Proceedings.
10. Kane, G., Phillips, A., Copulsky, J., & Andrus, G. (2019a). How Digital Leadership Is (n't) Different. *MIT Sloan Management Review*, 60(3), 34-39.
11. Kane, G., Phillips, A., Copulsky, J., & Andrus, G. (2019b). The technology fallacy: people are the real key to digital transformation (Vol. 62): Tantor Media.
12. Warner, K., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326-349.
13. Garland, R., & Morey, A. (2022). Project, Programme and Portfolio Governance: The Stationery Office.
14. Stouten, J., Rousseau, D., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals*, 12(2), 752-788.
15. Cook, D. & Maylor, H. (2023). Delivering the Major Programme Dividend. Deloitte. [Link >](#)
16. Vial, G., Cameron, A., Giannelia, T., & Jiang, J. (2023). Managing artificial intelligence projects: Key insights from an AI consulting firm. *Information Systems Journal*, 33(3), 669-691.
17. Volberda, H. W., Khanagha, S., Baden-Fuller, C., Mihalache, O. R., & Birkinshaw, J. (2021). Strategizing in a digital world: Overcoming cognitive barriers, reconfiguring routines and introducing new organizational forms. *Long Range Planning*, 54(5), 102110.
18. Davenport, T., Westerman, G. (2018). Why So Many High-Profile Digital Transformations Fail. *Harvard Business Review*, 2018.
19. NAO, (2024). Digital transformation in government: A guide for senior leaders and audit and risk committees. National Audit Office.
20. IPA, Project Assurance Reviews Delivery Confidence Guide for Review Teams. Infrastructure and Projects Authority. [Link >](#)
21. New Zealand Government, (2019). All-of-government Payroll Programme: Assessing delivery confidence for payroll projects. [Link >](#)
22. DTA, (2024). Benefits Management guides and tools. Digital Transformation Agency. [Link >](#)
23. DTA, (2023). Benefits Management Policy For Digital & ICT-Enabled Investments. Digital Transformation Agency. [Link >](#)
24. Australian Government et al. (2024) National framework for the assurance of artificial intelligence in government, Australian Government, accessed 30 June 2024. [Link >](#)

Further Information



The Digital Transformation Agency (DTA)

The Digital Transformation Agency (DTA) is the Australian Government's advisor for its digital transformation agenda. The DTA's mandate is to provide strategic advice, coordination and assurance across the Australian Government's portfolio of digital projects.

For further information and the latest versions of the DTA's guidance documents and templates please visit our website or contact us at:

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