Australian Government

Automated Assistance in Administrative Decision-Making

Better Practice Guide

Summary of Checklist Points

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Department of Finance and Administration

Australian Government Information Management Office

Australian Government

Office of the Privacy Commissioner

Copies of the *Automated Assistance in Administrative Decision-Making Better Practice Guide* can be obtained via email request to aaadm@finance.gov.au

Automated systems can play a significant and beneficial role in administrative decision-making. In the right areas and with appropriate management, these systems have the potential to improve the accuracy, consistency and transparency of administrative decision-making. The key feature of such systems is their capacity to build in and automate administrative decision-making *logic* into a computer system.

Practice advice on the management of automated systems has been developed following consultation with a number of Australian Government agencies. This advice is published in full as the *Automated Systems in Administrative Decision-Making Better Practice Guide*, and is accompanied by this *Summary of Checklist Points*.

The checklist points reflect the practice areas that require particular care with respect to the development and management of automated systems for administrative decision-making. These practice areas cover the requirements to:

1. **Assess the suitability of automated systems to deliver improved business outcomes for an agency**
2. **Establish appropriate project management and governance of automated systems projects**
3. **Ensure that the design of an automated system has regard to future requirements (such as maintenance and audit) and complies with privacy legislation**
4. **Ensure the continued accuracy of an automated system (including where there are changes to the underlying legislation, policy or procedure)**
5. **Ensure the transparency and accountability of the system and its accompanying processes**
6. **Implement and maintain automated systems appropriately.**

The checklist points have been designed to assist managers and project officers during the design and implementation of automated systems, and may also assist with ongoing assurance processes once an automated system is operational.

For further information and context on checklist points, please consult the *Automated Systems in Administrative Decision-Making Better Practice Guide*. Copies can be obtained via email request to aaadm@finance.gov.au.

1 Where are automated systems suitable?

Identifying business needs

- ☐ Have you identified the key business drivers for automating the administrative decision-making process?
- ☐ Have you clearly identified the business issues and problems that need to be resolved?
- ☐ Is the program area covered by the automated system likely to fund this investment into the future?

Service delivery options

- ☐ Have you considered deployment of the automated system through multiple service delivery channels (such as online, for self-assessment or via external agency systems)?
- ☐ Have you identified potential user groups for the automated system?
- ☐ Have you considered the impact of the automated system on your agency's channel management and service delivery strategies?
- ☐ Have you considered the access and equity issues that may arise, particularly if the automated system is to be deployed online or as a self-assessment tool?

Administrative law and automated systems

- ☐ Do the administrative decisions you propose to include in the automated system require the exercise of discretion or judgement by the assessing officer? If so, how does the system address the discretionary process?
- ☐ Have you designed the system so that the decision-maker is not fettered in the exercise of any discretion or judgement they may have?
- ☐ Has the automated system appropriately modelled parts of the administrative decision-making involving discretion and judgement?
- ☐ Have all decision points in the automated system that involve the exercise of discretion or judgement been clearly identified as requiring human input, in the form of either a consideration of the facts or a review of a decision already made?
- ☐ Are the business rules relating to discretion or judgement (and any research linked to such rules) contained in the automated system open to internal and external review?

2 Development and Governance

Automated systems projects

- ☐ Does the project planning process apply best practice IT project management methodologies?
- ☐ Does the project plan comprise a formal benefits' realisation or evaluation plan, including metrics and benchmarks for their achievement?
- ☐ Does the project plan consider stakeholder management, and have agency executives been given realistic expectations about the delivery of the project phases?
- ☐ Does the automated system project have appropriate formal governance arrangements?
- ☐ Is the scope of the automated system clear, and clearly reflected in project documentation?
- ☐ Have the relevant areas of legislation, policy or procedure been identified during the scoping phase?
- ☐ Have you considered the change management ramifications of the project?
- ☐ Have you developed a stakeholder and communications strategy to address the management of changed work practices for officers?
- ☐ Does the design team include officers with technical, legal, policy and service delivery experience?
- ☐ Does the project plan involve consultation and input from the appropriate business and/or program areas?
- ☐ Have the relevant program area/s and end users been consulted during the testing phase of the system?

Roles and responsibilities

- ☐ Do the project governance arrangements unambiguously assign policy ownership?
- ☐ Do the governance arrangements provide an appropriate role for the policy owner in the design, development, implementation and maintenance phases of the system?
- ☐ Do the project governance arrangements unambiguously assign project ownership?

3 Automated systems design

Important factors in design

- ☐ Have you considered service oriented architectures and business rules modularity to allow for ease of update and maintenance of the system?
- ☐ Does the automated system's audit trail clearly set out decision points involving discretion or judgement?
- ☐ Can the decision-maker's reasoning or deliberations (which are collected by the automated system where discretion or judgement is involved) be incorporated into a statement of reasons or other notification, where required?
- ☐ Will the design of the audit trail assist with efficiently monitoring recommendations, decisions and processes?
- ☐ Does the audit trail feature in the agency's design for automated systems?
- ☐ Will the audit trail's design meet the agency's business requirements, internal controls, transparency and accountability criteria, and audit requirements?
- ☐ Have you designed the audit trail to include clearly identifiable links to authorised delegations (at every stage of the process)?
- ☐ Will the audit trail's design provide for archiving and continuity of access?
- ☐ Have you considered how change control processes will be reflected in the audit trail:
  - to record modifications to the system's operation or performance?
  - to reflect changes to the legislation that underpins the operation of the system?

Integration with other IT systems

- ☐ Where an automated system interfaces with other agency IT systems, have you clearly identified the business processes that occur between systems?
- ☐ Does the design of the automated system allow for ease of update and interoperability with other agency IT systems?
- ☐ Have you consulted with the appropriate architecture, data and information management professionals within your agency environment?
- ☐ Where required, is the data mapping of terms and definitions relevant to the decision-making process interoperable with other agency IT systems?
- ☐ Will the automated system be required to process backdated administrative decisions?
- ☐ Does the design of the automated system allow for maintenance and execution of different versions of the business rules if required?
- ☐ If the underlying business rules of the automated system change, will the system be required to process changes to multiple decisions or records held within the system?
- ☐ Does the technical design of the automated system allow for the timely and efficient processing of changes to multiple decisions or records if required?

The automated system interface

- ☐ Do the governance arrangements provide for business rules to be reviewed (for example, by the policy owner) to ensure they do not fetter the information gathering function?
- ☐ Does the automated system provide a commentary function, clarifying ambiguity or highlighting problem areas in administrative decision-making?
- ☐ Do the governance arrangements and quality assurance processes support the rapid approval and update of commentary and user-support materials within the automated system?
- ☐ Is there a process in place to diagnose quality assurance problems, and to document how quality issues were resolved during the design process?

Automated systems and privacy

- ☐ Is the automated system designed to collect only the minimum amount of personal information necessary to meet a clearly defined and articulated purpose?
- ☐ Can the collection of personal information (that could identify an individual) be avoided or minimised, while still delivering a useful self-assessment tool?
- ☐ Do self-assessment tools make it clear whether information collection is mandatory or optional?
- ☐ Do self-assessment tools make clear whether information is being stored and/or retained for further use?
- ☐ Is the IPP2 Notice within your automated system 'fit for purpose'?
- ☐ Are there business processes to ensure that any release of information (outside of the purpose of collection, and for which an IPP2 notice has been given) has been properly considered against the Privacy Act?
- ☐ Are data-matching programs associated with use of the automated system properly authorised?
- ☐ Is there legal authority to use existing data (previously collected for another purpose) for a new or secondary purpose?
- ☐ Does the automated system design enable notes of disclosure decisions (and reasons) to be appended to the record?
- ☐ Are appropriate security procedures in place to ensure the security of personal information?
- ☐ Have appropriate strategies been employed to manage the risk that outdated or unreliable data is used to make an automated decision?
- ☐ Does the automated system enable individuals to have access to the personal information collected (for example, via the generation of a personal information report where requested by an individual)?
- ☐ Do the business processes associated with use of the automated system have clear information access and complaint pathways?

4 Ensuring Accuracy

Modelling the business rules

- ☐ Do all members of the system design team share an understanding of the primacy of the law and is this understanding reinforced at all levels and stages of the automated system project?
- ☐ Are the business rules authorised by the law and verified as such by the policy owner?
- ☐ Where the automated system makes decisions, is this authorised by the relevant law, policy or procedure?
- ☐ Do the business rules mimic the structure and detail of the source legislation, policy or procedures?
- ☐ Have the business rules been referenced or linked to the source material (i.e. the specific part of the legislation, policy or procedures)?
- ☐ Where the automated system makes a decision, is this authorised by the relevant legislation?
- ☐ Have decisions about business rule definition relating to administrative decision-making discretion been adequately recorded?
- ☐ Have the business rules been reviewed (for example, by the policy owner) to ensure they accurately and comprehensively represent the relevant law, policy or procedure?
- ☐ Does the business rule review process examine discretion points to ensure they are not narrowly modelled or fettered?
- ☐ Do the project governance arrangements provide for settling anomalies and inconsistencies in legislation, policy or procedure?
- ☐ Have all areas of legislative or policy complexity and ambiguity been appropriately resolved?
- ☐ Has the automated system appropriately modelled parts of the administrative decision-making process involving the exercise of discretion and judgement?
- ☐ Does the automated system mandate the collation of the decision-maker's deliberations or reasoning on matters of discretion or judgement?
- ☐ Does the automated system provide links to relevant research and decision-support materials for each question or decision point contained in the system?

Technical issues affecting accuracy

- ☐ Where automated systems interface with other agency IT systems, have you ensured that the accuracy of the legislative or policy rules within the automated system are not compromised (for technical efficiencies or otherwise)?
- ☐ Where automated systems interface with other agency IT systems, what measures have been taken to ensure systems interoperability and ease of update for the total solution?
- ☐ What measures have you taken to protect the integrity and quality of data held within the automated system?

Verification with stakeholders

- ☐ Do the project governance arrangements provide for and link with a verification strategy and quality assurance process?
- ☐ Does the agency have appropriate verification processes, including visual verification of the underlying business rules as well as 'known outcome' scenario testing?
- ☐ Does the policy owner lead the 'known outcome' scenario-based testing process?
- ☐ Are the underlying business rules contained within the automated system accessible and readily understood by non-IT professionals?
- ☐ Does the verification strategy include a 'gap analysis' to assess whether the system design is appropriate to user needs, and is being used as designed and intended?
- ☐ Does the verification strategy incorporate a review of user training to ensure the policy intention is communicated effectively and rapidly, and applied consistently?
- ☐ Does the verification strategy allow for external scrutiny by, and seek input from, external stakeholders?

5 Ensuring Transparency and Accountability

Transparent rules

- ☐ Are the business rules incorporated within the automated system publicly available?
- ☐ Are appropriate strategies in place to ensure that the business rules contained in the automated systems are verified?
- ☐ Are the business rules contained within the system in a form that can be readily understood by non-IT professionals?
- ☐ Does the automated system have the capacity to automatically generate a comprehensive audit trail of the administrative decision-making path?
- ☐ Are all the key decision points identifiable in the audit trail?
- ☐ Are all the key decision points within the automated system's logic linked to the relevant legislation, policy or procedure?
- ☐ Are all decisions recorded and accessible by the system's user, a reviewer or an auditor?
- ☐ Can the audit trail generated by the automated system be easily integrated into a notification of the decision (including a statement of reasons or other notification) where required?
- ☐ Is the audit trail secure from tampering (to provide protection and data integrity)?
- ☐ Does the audit trail include a comprehensive and printable modification history including:
  - who created the document (with time and date recorded)?
  - who has modified the document (with time and date)?
  - a record of what was modified?
  - for privacy and commercial-in-confidence matters, who has viewed the document (with time and date)?
  - who made the final decision (with time and date)?

Audit issues

- ☐ Does the audit trail start by identifying the authority or delegated authority identified in legislation?
- ☐ Does the audit trail show who an authorised decision-maker is?
- ☐ Does the audit trail enable the recording of human intervention in automated processes, for example, recording who is authorised to exercise intervention?
- ☐ Does the automated system have the capacity to automatically generate a comprehensive audit trail of the administrative decision-making path?
- ☐ Are all the key decision points identifiable in the audit trail?

6 Implementation and Maintenance

Implementation

- ☐ Have poorly designed and/or redundant business processes been re-engineered and/or retired?
- ☐ Have you identified new business processes brought about by the automated system, such as mapping new business interactions, roles and responsibilities?
- ☐ Has adequate consultation and stakeholder management been undertaken to address the change to new business processes?
- ☐ Have you identified the likely impacts that implementation of the automated system will have on the usefulness and currency of older information technology infrastructure and systems?
- ☐ Have you established a monitoring and review cycle for the automated system, including agreement on the information and data to be collected?
- ☐ Have you considered collecting data that might be useful for policy and/or program refinement? If so, have you consulted the policy areas of the agency in relation to this issue?
- ☐ Have you established appropriate user/client feedback mechanisms?
- ☐ Have you clarified who has responsibility for the incorporation of learnings, monitoring and review?

User training

- ☐ Does the project plan include a training program for users of the system?
- ☐ Have you established which of the following components the training program will include: business rules, legislation, use of the system, the wider business context and broader administrative decision-making skills?
- ☐ Have officers in new or changed roles been appropriately trained for their new roles?
- ☐ Has an ongoing training program for the users of a system been developed, including ongoing training updates for system enhancements?

Maintenance

- ☐ Has adequate funding been secured for ongoing maintenance and upgrades to the system?
- ☐ Have clear business owner/s been identified as responsible for the ongoing maintenance and/or change requirements of the system?
- ☐ Do the project and quality assurance processes support the rapid approval and update of commentary within the system?
- ☐ What testing processes have been undertaken prior to and following implementation of the system?
- ☐ What testing processes are in place to verify modifications to the system or its business rules?
- ☐ What strategies are in place to ensure that the automated system's design and modifications history is documented?
- ☐ What business continuity arrangements are in place?
- ☐ Do business continuity management arrangements address the event of system unavailability or malfunctioning?
- ☐ Are officers able to make manual decisions if necessary?