

'Records by Design' – Identifying recordkeeping requirements for business systems

The ACT Government's Guiding Best Practice Design and Delivery, commonly referred to as the Design Practice, is a toolkit to assist staff across the ACT Government build human centred products and services. The process mandates the use of upfront analyses to ensure that security and privacy considerations are designed into business processes and the systems that support them. A similar approach needs to be taken to ensure that business systems are built to create and properly manage authoritative records of the activities they enable.

The Territory Records Office refers to this as a 'Records by Design' approach. Undertaking such a recordkeeping analysis as part of the design process can help to ensure that the business can account for its actions, meet oversight and transparency obligations such as under the Freedom of Information Act 2016, and meet responsibilities under the Territory Records Act 2002.

One of the tools used in the ACT Government Design Practice is a Journey Map, that describes the steps taken in a business process by customers and staff, including actions taken, information presented, and 'pain points' encountered throughout the process. These are read in conjunction with a similar 'data journey' map that describes the process steps and how resulting data is gathered and shared between information systems.

A records journey for a process should be a hybrid of the user and data centric journeys. It will describe the interactions and inputs of customers and staff throughout the process and any information gathered. It will also allow us to identify legislation and other requirements governing the business process information, and points that authorisations and sub processes such as the establishment of identity should occur. Like the User and Data Journey maps, a Records Journey map should form part of the specification of design requirements for the business system under development.

The international standard, *Work process analysis for records*, describes a methodology for the analysis of existing business processes to best capture records of those activities. It is intended to be employed to gather information about the transactions, processes and functions of an entity to identify the fundamental requirements for records creation, capture and control. This Advice is intended to show how the sequential analysis methodology set out in the Standard can be applied alongside the Design Practice journey mapping guidance to support Records by Design approaches. For a broader overview of the Standard on Work Process Analysis for Records see the advice [Strategy - Overview of Records by Design](#).

Design and analysis considerations

This advice highlights steps that should be undertaken to assess recordkeeping requirements at the business process level. Work done using the following processes should be flexible enough to contribute to better recordkeeping practices for existing business systems and processes, as well as being translatable to IT systems design and other approaches to structuring information.

As a whole, the information gathering processes described here may paint a complex picture of the analysis process. Business process analysis should be scaled appropriately depending on the needs of a business area or agency.

Mapping business processes

Records by Design processes should look to combine elements of the broader Design Practice methodology and the work process analysis methods set out in the Standard. The process should include:

Understand the context

All journey mapping processes should take account of the context the business process is occurring in. This phase of analysis may take the form of workshops and/or interviews with staff, managers, and other organisational stakeholders to obtain an overall sense of the business process, and any issues that may be faced conducting the process.

All work process analysis should contain a review of the context within which the agency conducts its business, i.e. a review of the regulatory environment, and of the context in which the work processes take place. This analysis may gather:

- laws and regulations governing the entity, and general business environment
- mandatory standards, both entity specific and whole of government
- voluntary codes of best practice
- codes of conduct and ethics
- identifiable expectations of the community
- domain or entity policy directives
- entity rules and procedures.

The analysis process can be scaled, depending on the size and complexity of business processes. Highly complex processes may utilise external consultants, so familiarity with analysis may help scope the consulting brief in order to achieve the most useful reporting outcome.

Understand the process

Sequential analysis is an excellent framework for gathering the inputs required to ensure that business systems fulfil their recordkeeping requirements. Sequential analysis maps a business process in a linear and/or chronological sequence which reveals any dependent relationships between transactions. The aim of mapping a process is to determine the sequence of steps, i.e. what has to be accomplished at each step before the next transaction can occur.

Mapping should be carried out at an appropriate level of detail. Some processes may require modelling in flow charts, or a dedicated business process notation, but many simpler processes may be able to be described in a concise list of steps.

The principal elements in a sequential analysis process are as follows:

- a) identify the sequence of transactions which constitute a process, including any variations to the process.
- b) identify the links to other dependent processes and systems.

c) identify any rules and regulations, organisational or community expectations, and potential risks that define the business environment.

d) document the findings, and make recommendations to improve any recordkeeping gaps.

These processes are likely to have been identified or defined in User, Staff or Data journey mapping processes. To achieve Records by Design outcomes it will be important to bring a records lens to the discussions, which may involve asking questions during process mapping such as:

- What initiates the sequence and how is it recorded?
- Where do the information and other resources come from?
- How and where are the decisions and transactions recorded, as the sequence unfolds?
- Who is accountable for dealing with breakdowns in the process or complaints about the performance?
- What information or records are generated, stored or transferred to other processes if there are variations in the sequence of transactions?
- Which transactions are included to comply with the regulatory requirements?
- Which transactions are needed to get and record authorization and completion?
- What are the transactions for monitoring progress and outcomes?
- What records or other information sources are accessed to undertake this process and how are they modified by the process?
- Does this process modify records or information/data? If so, what is the nature of the modification?
- What other use is made of the records or information generated by this process?

Many of these questions will arise, and be answered, as part of other mapping processes. Bringing a Records by Design lens to journey mapping can help to ensure that key recordkeeping considerations are not overlooked when design teams are focussed on other perspectives.

Analysing business processes

The analysis should identify and document:

a) the basic or routine pattern of transactions in the process,

b) the critical transactions which are required to be completed before the subsequent transaction can occur.

c) the records creation processes throughout the timeline

Each constituent transaction in the overall process can be described as a separate step, but by recognising points where constituent steps, authorisations and other dependencies converge, we can identify opportunities to make a complete, but concise 'snapshot' of information at critical points in a business process. This mapping process is crucial for understanding where records need to be captured and retained, and should feed into systems design specifications.

Understanding stakeholder needs

Mapping business processes with an understanding of the business context should provide a picture of the ongoing information needs of stakeholders in a business process. Information captured will allow an agency to:

- efficiently conduct current and future business

- support accountability processes, such as financial reporting, appeals of stakeholders, and external reviews of conducted business
- define expectation and requirements for security and privacy of information.

Stakeholders should be considered broadly, and might include people not directly involved in the business process. They might include children or other dependents of customers, people with business or financial interests related to the process, auditors or appeal bodies, or the community at large.

Understand broader societal expectations

Many business activities of the ACT Government are of enduring interest to stakeholders, and broader society. There may be an expectation by individuals and the community that certain records are kept for a long time, or retained permanently. Clear examples are individual records establishing identity, and property rights. Other records may document significant decisions and events in the history of the ACT Government.

Significant records may document an activity, event or decision that:

- sets a precedent
- had considerable economic, environmental or social impact
- led to a change in government policy
- implemented an innovative or important project or program
- aroused wide scale controversy, public interest or external scrutiny
- represents a unique and notable event in the Territory's history.

Assess risk

All process analysis should include an assessment of business risks inherent in the retained information. Many of the above processes will help build a picture of potential risks, such as business continuity, privacy breaches, or other integrity issues. With this knowledge of transactional processes and business context, a risk based approach to describing and defining retention requirements should be possible.

A key aspect of recordkeeping risk analysis is understanding the risks to the organisation if authoritative records are not available at a particular point in time. For each point in a business process, a recordkeeping analysis should ask questions about:

- Who might expect to see evidence of how this business process was conducted or decision made?
- How long will that interest remain?
- For how long after a decision are affected parties able to appeal or otherwise review the process?
- For how long may Ministers, auditors, courts or Ombudsmen expect to be able to review these actions?
- How long do the government's or citizens rights and entitlements in relation to these transactions endure?
- Will a decision or action have a lifetime impact on a stakeholder or their children?
- Will the community expect to be able to understand this process in 20, 50, 100 years?

Questions such as these can help to identify how long evidence of actions decision making in relation to the process may be needed by government, the community or other stakeholders, and what the risks to the government and individuals are if reliable records are not created and retained.

Additional process dependencies

During the mapping of business processes, it is often possible to identify and document the dependencies of the work process, which include the inputs from other processes, whether information or other resources, such as:

- information about the delegations of authority
- formalised procedures which identify points of records creation, capture and completion
- identification of metadata elements
- auditing or monitoring processes which require recorded evidence.

Considerations such as these can also impact on the completeness and integrity of records produced by the system, and the business's ability to rely on them as evidence that processes have been correctly administered. This may impact on considerations of the amount of audit information and other metadata needs to be retained as part of key transaction information, or how the system will demonstrate that correct delegations and other marks of authority are in place.

Concluding the process

Capture of a unique record of each transaction in a business process may result in large costs to capture and retain highly granular information. Beyond storage requirements, granular information can be difficult to search, sentence or appraise throughout its lifecycle. By understanding business needs and context, business systems and recordkeeping processes should aggregate required information appropriately, and retain it for long enough to meet administrative, legislative, or societal needs.

Records meeting administrative needs may contain information, concise summaries of transactions, authorisations, and the outcome of any dependant processes, with relatively short retentions. Beyond immediate needs, these records are the raw information required for reporting and regular auditing, so baseline retention and disposal should support all required business uses.

Records supporting accountability may consist of analysis of specific outputs from business processes in the form of queries and reports, with longer retentions accordingly. At this level, there may be statutory requirements for retention, or other directives to retain evidence of accountability processes. Records documenting the interaction of individuals or organisations with the ACT Government may be required for longer term accountability purposes, particularly where there is a duty of care.

Records of enduring interest /archival value may be required to be retained far beyond the life of the business system they were created in. Planning for long term retention of information should be a consideration at the design phase of a system. Often, the prospect of being able to export information from a system at end of life remains an untested feature until it is needed. It can be good practice to design for export of archival records on an ongoing scheduled basis.

References

ISO/TR 26122:2012 - Work process analysis for records



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