MANAGING YOUR PROJECT: AN INTRODUCTION TO PROJECT MANAGEMENT

Professional Development Course Book

Presented by Mark Priadko

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Introduction

Learning objectives:

- Establish the logic and context for our project
- Practical experience in project planning
- Understand tools that can help plan and design our project
- Explore approaches to monitoring our projects
- Tools for project communication and business cases.

Self-evaluation

- My proficiency in managing projects is:

List of what I need to know to move up one point on this scale

- .....
- .....
- .....
- .....

Session overview

- The context for projects
- Project Lifecycle
- Project Initiation
- Project Planning
- Project Delivery
- Project Completion and Articulation

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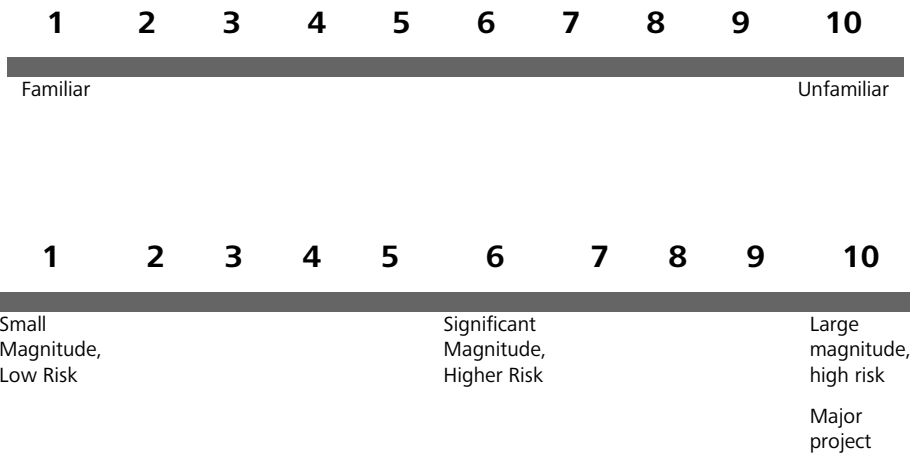
Understanding our project

Where is my work or project on the following scales?



Where do our projects come from?

I better understand how projects work and can apply tools needed for designing, planning, controlling and contributing to projects within my organisation and beyond.

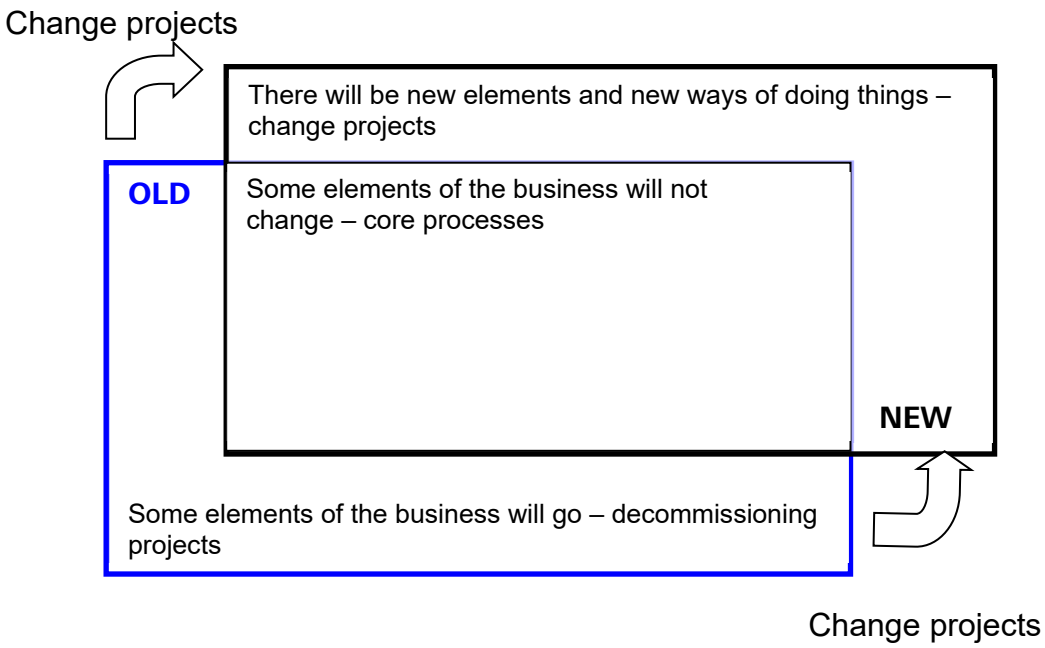
The Context for Projects

Projects typically emerge from strategic planning and business planning to improve or change the business. Strategic and business planning seek to identify what needs to change in a business. Two sources of change are:

1. Change forced on us by our external environment
2. Change we wish to make to improve or remedy problems.

The environment in which organisations exist is constantly changing. It follows that organisations also need to change. Strategic thinking and the planning process are a means to assess how a business will change to adapt or be ahead of its changing environment.

It is a common deficiency for planning to ignore the significant components of a business that will not change significantly and that need to continue 'as is' to maintain performance.



Be clear on:

- **What will continue** – core processes and services
- **What will go** – processes, products that need to be decommissioned
- **What is new** – change projects that will bring about new products and services or ways of doing things.

Changes to the status quo require special projects that will move us from the old to the new. Often, strategic thinking and planning will identify a number of key change projects that will be required to move a business from where it is now to where it needs to be in the future.

Distinguishing Projects from Processes

Discussion: How is project work different from operational (process) work?

Project	Process
Unique - have not been done like this before	Do the same thing repeatedly
Are time limited with a start date & end date. Projects come and go.	They are ongoing and at the core of the business
The project manager creates the documentation	Will have standard operating procedures and policies documented
Create something new or to implement a change	Create value or deliver outputs by repeatedly performing a task
Project objectives and plans can be changed by whoever gives the approval	Processes can only be changed with significant investment
Projects create change	Standardised processes are usually designed to resist change
Aim to amplify variation or change	Aim to reduce variation

What is a project?

According to the Project Management Institute, a project is "a temporary endeavour undertaken to create a unique product, service or result" and project management is "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements." Key terms in these definitions are "temporary" and "unique." Projects have defined deadlines with clear start and end points and are designed to be specific to the product or service in question.

Projects are how businesses go about making changes to the way they do business.

Project management has a definite emphasis on achieving the end result.

The unique and temporary nature of projects tends to make them inherently risky and requires significant levels of planning.

What is a process?

A **business process** or **business method** is a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers.

Processes are not meant to be temporary or unique. Processes are typically designed to be repeatable. Process management involves careful planning and continuous monitoring of the performance of a given process to ensure quality requirements are met. Change, improvement, and re-engineering are all important components of process management. Process management emphasises improving efficiency and quality.

Process management tends to focus on consistency, repeatability, reliability and continuous improvement to achieve efficiency.

Processes tend to be at the core of how an organisation operates.

Business process management activities can be arbitrarily grouped into categories such as design, modelling, execution, monitoring, and optimisation.

Where projects fit in our organisation

The diagram below considers our work from two perspectives:

1. The nature of the demands or requirements made of us or that we make on ourselves
2. The scale of work, its inherent riskiness and disruption to our business.

Demands or requirements

Organisations undertake different types of work sought from them by customers, by the public and by funders. This work is broken into three categories:

1. Repeated and predictable - work that we know we will have to do and that we will have to do often
2. Familiar and regular – work that we understand and that we do regularly (e.g. once a month or once a week)
3. Unusual, unique or mysterious work that we have not encountered before or that we do not usually do.

Magnitude, risk & disruption

We can also classify our work in terms of the size of its impact, the risk, and the disruption it causes to others. At the low end of that spectrum, there are transactions that occur very often and that will only impact the person involved (e.g. a person buying a coffee). At the other end of the spectrum, transactions or events occur that are large-scale in their dollar value, impact or risk. Examples include running an election or restructuring a business.

The table below brings these two elements together to show the different types of work we could be doing.

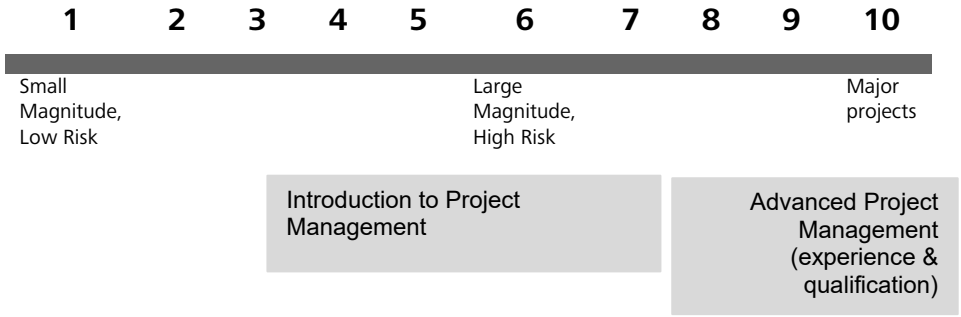
Demands or requirements	Smaller	Large	Very Large
Unusual, unique, mysterious	Special request for a service or product, unique customer or idea from leadership **Ideation, research and problem solving**	Disruption from competition Adapting to changing demographics Exploring a new IT system **Research projects and special projects (projects to change)**	Large-scale and complex projects (e.g. organisational restructuring, implementing a new IT system, major infrastructure **Major Project**
Familiar & regular	Serve customers, produce monthly reports **Specified Process**	Regular high-value transactions or events with a clear end-result (e.g. housebuilder, produce annual report, conference/event management) **Specified Project (projects to deliver)**	Very high-value projects or major events **Major Project**
Repeated and predictable	High volume of standard medium to low value transactions (e.g. retail store or library self-service, payroll processing) **Automated Process**		
	Scale, level of disruption and risk to business		

Each category of work requires different management responses. Three basic management responses arise:

- Process management to deliver goods and services
- Project management to deliver goods and services and to change the business
- Research and problem-solving to understand mysteries and deal with the unfamiliar.

The sophistication of project management will vary across the different projects in the diagram.

Problem-solving, smaller-scale and familiar projects will require some basic project management skills. However, these are not the same as the more advanced and sophisticated skills and approaches needed to manage major projects.



In summary, the key features of projects that we manage:

- They begin and end – their beginning and completion are important to define
- They usually involve unfamiliar work with specific and unique results
- They are usually designed to create change.

BEWARE: Project work is defined by its unfamiliarity and change. That is why project management involves extra effort to deal with these conditions.

We need to take these impacts on our work seriously, as well as the impacts they will have on others. Too many organisations, teams and individuals underestimate the difficulty and impact associated with projects. We will address this again in the section on Project Risk – What could possibly go wrong and the impact of the optimism bias.

What is the story of your project?

Please complete the details that you can on the project narrative template.

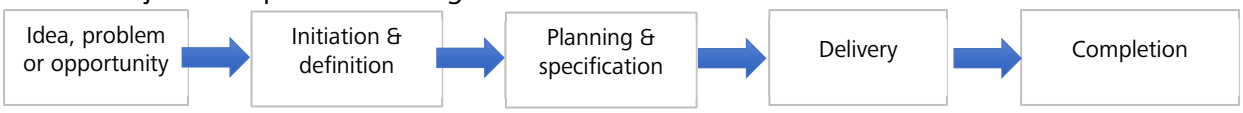
Where does my project/piece of work sit on the diagram shown earlier?

Template 1: Project Narrative Inputs

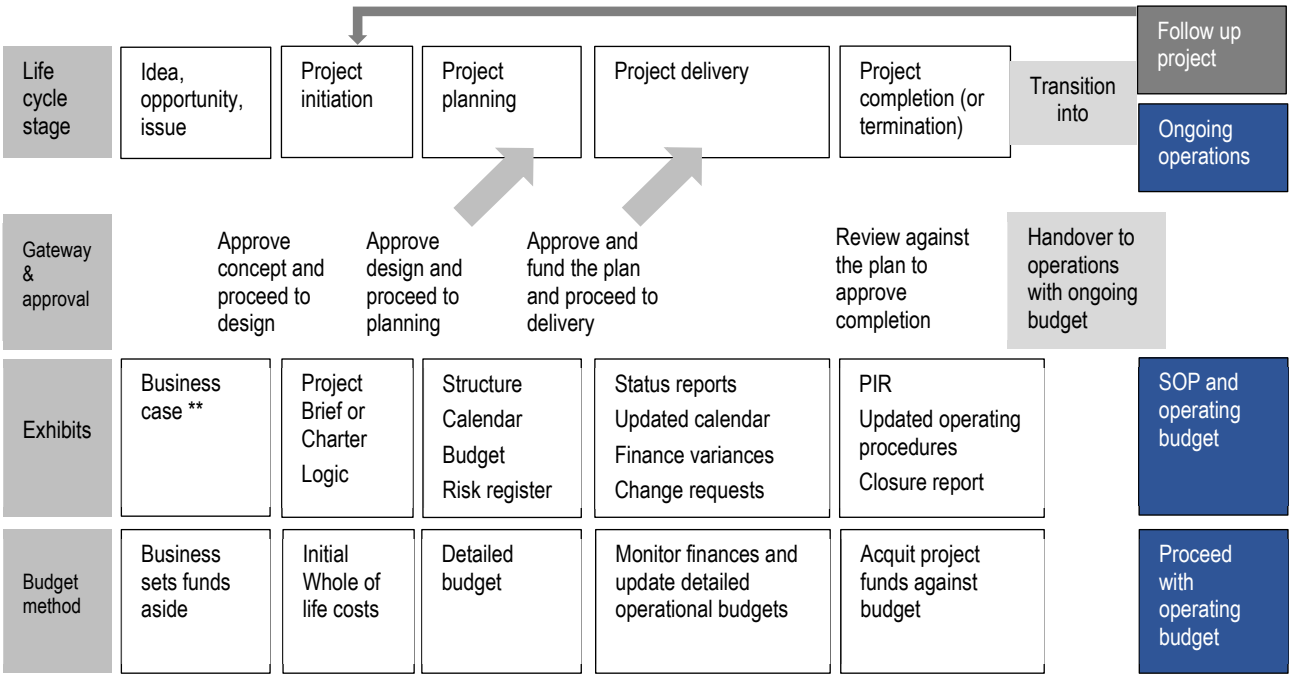
Project Lifecycle

We will work through a project lifecycle that has up to five stages:

1. Idea, Problem or Opportunity – Where many projects start
2. Project Initiation and Definition – Building the concept and justification
3. Project Planning & Specification – the development and maturing of a project
4. Project Delivery – the project in progress and the need for monitoring and reporting
5. Project Completion – being clear on the end.

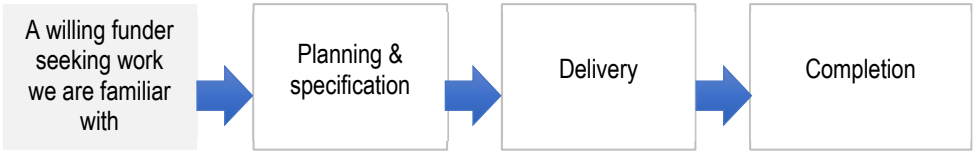


For projects emerging from unfamiliar circumstances or for large projects, all five stages are likely to occur.



** - A business case could include details from the initiation and planning stages of the lifecycle
PIR = Post Implementation Review
SOP = Standard Operating Procedures

A project can skip straight to planning and specification if it is one that the organisation is familiar with and that has a willing funder.



Major projects are likely to have multiple iterations in the design and justification stage and the planning and specification stage. Major projects can also be better considered as programs in which the work is broken down into multiple projects, each with a project manager.

Waterfall vs Agile

Two commonly recognised project management methodologies are waterfall methodologies and agile methodologies.

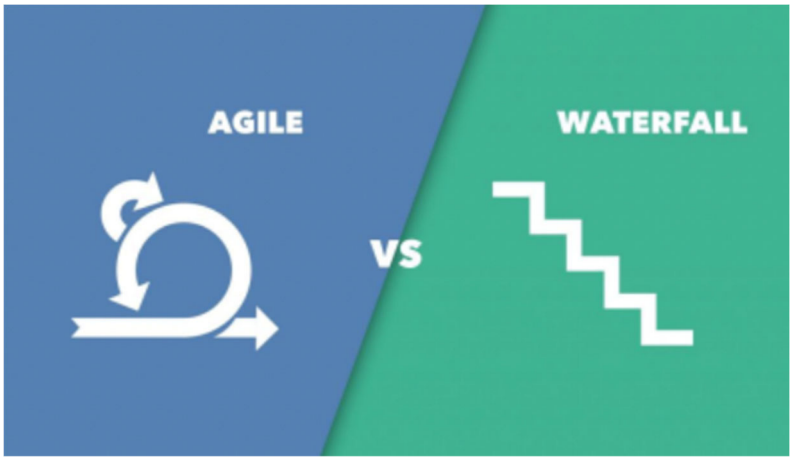
Waterfall - is originally based on manufacturing and construction industry projects, where:

- The end result is reasonably well understood at the beginning of the project
- The project lifecycle is done once
- There is heavy investment up front in design and planning to ensure project delivery can be straightforward
- The project flows in a set of sequenced deliverables

The agile method is seen to be used in software projects where the end result of the software being designed evolves over the life of the project with regular iterations of understanding user requirements, software configuration and testing that repeat until a satisfactory product is achieved.

Agile project management occurs in projects where:

- The end result of the project can evolve as the project occurs
- The project lifecycle occurs a number of times in what may be deemed 'sprints'



Each method has its pros and cons:

Agile has the advantages of being:

- More flexible
- Enabling greater stakeholder involvement with multiple iterations
- Bringing a stronger focus to short, sharp bursts of work.

Agile has the disadvantage of:

- Scope growing across the life of the project
- Costs being difficult to control
- The project takes on a life of its own and can get out of control without strong limiting parameters
- Not knowing when to stop.

Waterfall has the advantages of:

- Being able to design and control scope and time upfront
- Providing a clear sequence of events

Waterfall has the disadvantages of:

- Being less flexible
- Being heavily reliant on upfront planning and design
- Having to get the planning and design right up front and then live with the results.

The judgement about which to use or how to combine them revolves around the extent to which the end result is well understood and known, the tolerance of stakeholders to flexibility or inflexibility and the dynamic nature of the environment you are working in.

Agile is used when end results are not known upfront, when customers are flexible and the environment you are working in is dynamic.

Waterfall is used when end results are well known, customers are less flexible and the environment is more stable.

The waterfall method is better suited to projects with more concrete outcomes.

The agile method is better suited to projects with more abstract outcomes.

Analogy of holidays

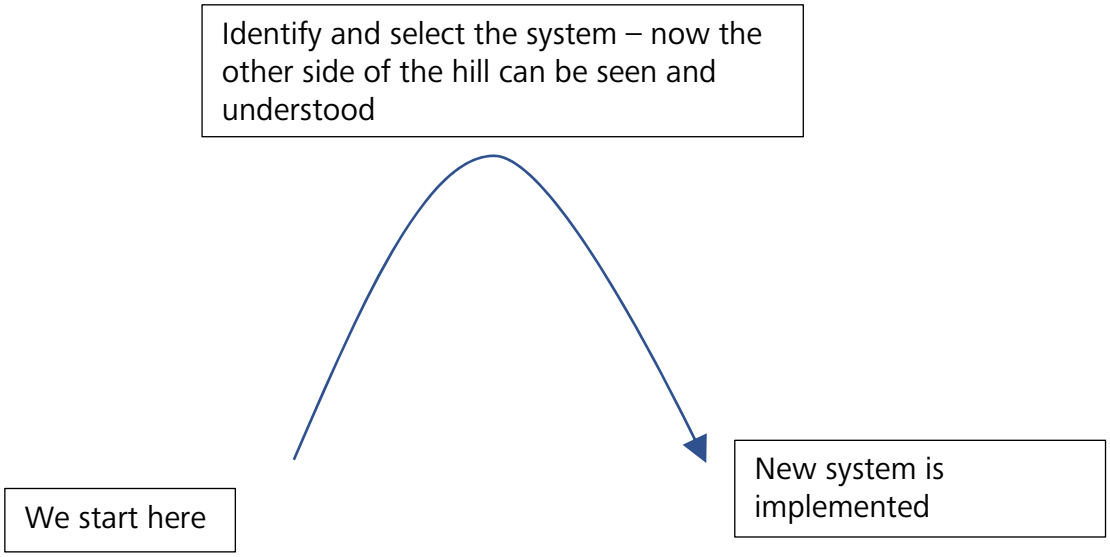
An agile holiday is one where you can set off without a fixed destination and have your holiday evolve. This can occur with a camping or caravan holiday, where you set off and see where the holiday takes you.

A waterfall holiday is a pre-planned holiday with a set itinerary that follows a set route over a set time and returns you to a final destination. These holidays will require more effort in the planning and the dependency of events.

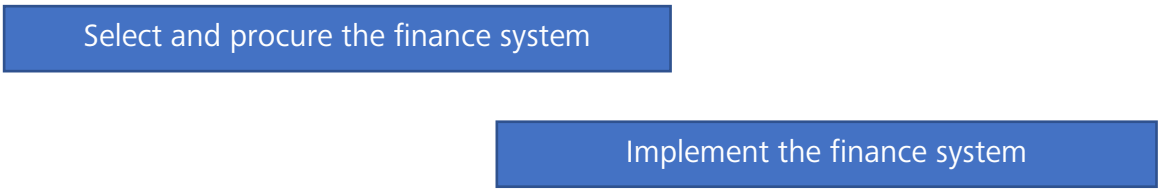
We will want to take each type of holiday at some stage in our lives. The agile holiday brings with it a sense of freedom and discovery. Planning will be ongoing as each next stage will depend on where the previous stage took you. The waterfall holiday may be relaxing because of its predictability. More effort has been put in up front and then we just go along for the ride knowing all the planning work has been done.

Beware the project 'on the other side of the hill'

It can be the case that a project is being undertaken where the end result is not known when you embark on the project. For example, the project to replace a finance system may not know at the beginning what the new system will be. In this circumstance, the time and cost to implement the new system (not yet known) cannot be determined at the beginning of the project. The implementation of the new system is 'on the other side of the hill'. It cannot be seen yet until the nature of the new system is determined and procured.



It is worth considering these types of initiatives as two projects. The first gets you to the top of the hill (e.g. selecting the new finance system) and the second is the implementation of the system. In these cases, by thinking of the initiative as two projects, you will follow the project lifecycle twice. The first project to select a new system can also have as an objective, the work needed for the design and planning of the second project – implementing the system.

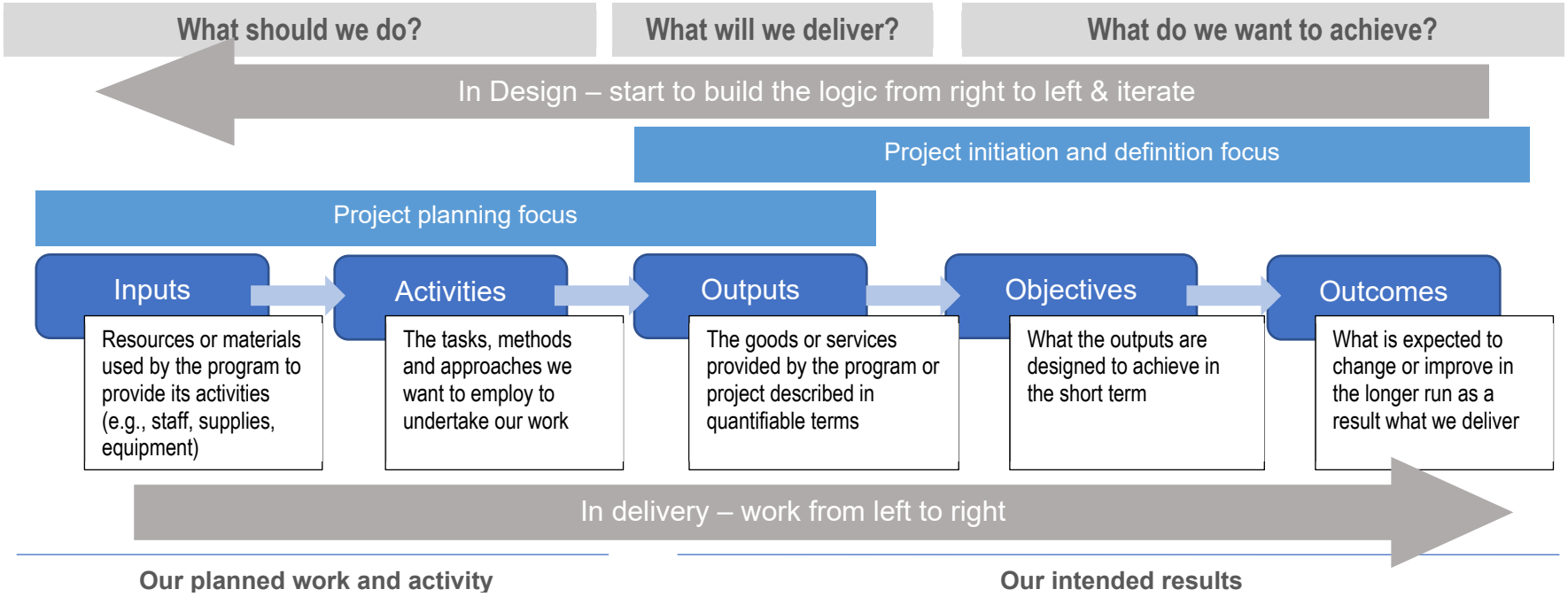


The overlap between the two projects is that project one includes, amongst its outputs, the design and planning of project two.

Project Initiation and Definition

A useful tool for defining and planning initiatives and for the evaluation of initiatives is a logic model.

> "*A logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program (or project), the activities you plan, and the changes or results you hope to achieve.*" Kellogg's Foundation.



A logic model can help create a shared understanding of, and focus on, the goals and methodology of a project and in relating inputs and activities to projected outcomes. The initiation and definition phase of a project is primarily focused on the relationship between outputs, objectives and outcomes (the three elements to the right of the model) – will the project deliver what is needed to achieve goals (objectives as more immediate goals and outcomes as longer-term goals).

The planning phase of a project examines in more detail the relationships between inputs, activities and outputs (the three elements to the left of the model).

Key Components of Program Logic

What the project does:

- Converts inputs (people, goods and services, technology, assets)
- Into outputs (products and services)

How the project does it:

- Activities
- Workstreams
- Phases
- Support functions - HR, Finance, and IT designed to support teams.

Who is involved?

- Employees – staff employed by the business to make it work
- Suppliers – goods or services purchased through a contract
- Beneficiaries – those who benefit from the goods and services produced
- Funders – those who pay to sustain the project
- Owners – those who contribute capital and then receive returns (dividends)
- Financier – lenders that expect interest and repayments.

Why?

- Purpose – visions, goals and aspirations of the project
- Objectives – a specific result that a person or system aims to achieve within a time frame.
- Outcomes – the consequences of our work – the longer run (ultimate) impact we are trying to achieve.

Project design is about working across the logic to clarify and align each of the elements. This will define a project's approach to delivering its outcome – it will define its strategy. Questions that can prompt our thinking include:

- Are the outcomes we are trying to achieve correct?
- Are there better ways to achieve the outcomes sought?
- Do we have alignment between inputs, outputs, objectives and outcomes?

The combination of answers to these questions starts to define the program logic of a project.

The purpose of using program logic as a tool is to help ensure:

- We are holistic in our approach to dealing with issues within our project.
- We understand the connections between the components of our program logic. A problem or intervention in one place will usually have links with other aspects of our business.
- We understand the range of options we have available in dealing with issues and opportunities (e.g. we can change inputs, outputs, activities, customers, delivery channels, etc.). These are the levers we have as leaders in charge of a project.
- It can help us think at both a 'micro' level (inside an element of the logic) and a 'macro' level (e.g. working across the logic).

Template 2: Program Logic
Handout 1: Road Safety Strategy

Why – outputs vs objectives vs. outcomes

Understanding the difference between objectives and outcomes can be a stumbling block in formulating project strategies. A common fault is to set objectives that are in fact outcomes, making success hard to measure and align with.

Outputs (deliverables) – What will be delivered. These should be tangible products or events (e.g. reports, training sessions, a campaign)

Objectives – What the project wants to achieve. It is the immediate reason for the outputs it produces. Achievement of these must be within the reach and control of the project.

Outcomes – These are the consequences we hope to achieve from the outputs we produce. These are the longer-term, larger-scale reasons for the outputs we produce. Achievement of these can be impacted by other factors that mean some aspects of the achievement of outcomes are out of its control, like the behaviour of customers or the weather.

For example, a financial reporting project may define the objective of a project as "improving decision making". However, this cannot be delivered or controlled by the project team. The project team can deliver better reports, better reporting processes or systems that can have, as a consequence, improved decision-making. It is up to the project stakeholders to use better reports, processes or systems to improve decision-making. The outcome of improved decision-making is something that the project can encourage but cannot deliver. The statement improving decision-making is a project outcome, not an objective.

An approach for a financial reporting project is to define:

- The **outputs** of the project are redesigned reports, redesigned processes, a new IT system, finance training manuals and financial reporting training sessions.
- The **objective** as improvements and training in financial reports, financial reporting processes and financial systems.
- The **outcome** sought from this project is improved financial decision-making.

In establishing the parameters of a project, it is critical to distinguish the objectives, outputs and outcomes of a project to determine what the project will deliver and what it is trying to achieve.

Project teams must be able to deliver against objectives and outputs. These must be set to be within the reach and control of the team. Leadership teams, sponsors and steering committees question, and monitor, that these objectives and outputs will deliver the outcomes sought.

Project Definition – Activity

Apply this logic to the definition of your own project. What might some of these elements be?

How will you know if your project has been successful?

How will you know when your project is completed?

Measuring performance

Using the program logic approach, measurement can occur across the model. There can be measures of:

- Input/activity (number of staff, number of enquiries),
- Outputs (number of goods produced, number of customers served, calls handled),
- The efficiency of processes and technology (call taken per staff member) objectives (satisfied paying customers) and
- Objectives (number of satisfied customers)
- Outcomes (profit, improved health).

Project Initiation: - Clarifying Scope

The scope defines the boundary of the project manager's responsibility and the objectives are what the project manager aims to achieve within that boundary.

Using the diagram below, what might be ways we can define the scope of a conference?

Factors that define the scope of the project

IN-SCOPE	OUT-OF-SCOPE
Size or scale Timing and duration Limited to locations, teams or regions Beneficiaries and people impacted	What the project won't do or deliver
Unresolved matters of scope:	

Beware of scope creep

Scope creep refers to changes, continuous or uncontrolled growth in a project's scope, at any point after the project begins. Scope creep can represent a failure to properly define and control the work.

Good scope	Bad Scope
Specified requirements using concrete nouns	Vague requirements overusing abstract nouns
Parametric limits (e.g. locations, number of users, number of rooms)	No documented limits or scale restrictions
Defined completion – the project will be completed when….	Not sure when we will be finished
Authority is defined – we have a sponsor to sign off	Not sure who is actually in charge - anyone can add in requirements
Scope is documented	Word of mouth and oral instructions
We define what is out of scope – capture what the project will not do	

Via Negativa

In Latin, 'via negativa' means the 'negative path'.

When we embark on new or unusual work, it can be difficult to define. The negative path is one way of increasing clarity in definition when usual approaches or paths do not work.

In project management, the negative path can be used to establish:

- What our project is not
- Goals it is not trying to achieve
- What it will not produce (and if not, who will)
- What is not in scope as much as what is in scope.

The importance of defining these aspects of the project by both what it is, and what it is not, enables reduced ambiguity in the definition and design of a project.

Beware defining scope by outcomes

Many projects are defined by the outcomes they are trying to achieve. The outcomes will usually be expansive and attractive to decision-makers in the project. However, defining a project only by outcomes can also make the project difficult to deliver and can create expectations about what the project will do.

Below is an example of three outcomes from a project in the health sector:

- Standardised care plans, common taxonomy and integrated clinical workflow functions
- Facilitation of a consistent approach to treatment and process across the hospital system
- Enhanced patient safety and improved patient outcomes

These are ambitious outcomes and a decision maker could form expectations for a project to deliver these. The project could reasonably be interpreted to be:

- A process re-engineering project
- An IT project
- A building project
- A training and education project.

Major Assumptions (via positiva – what we assume will be OK)

Another aspect of establishing clarity in the design of a project is to highlight the assumptions that are being made in the design. These assumptions can make links with related projects or work. Examples of assumptions:

- In running an event – the facility will be available and cleared the day before to allow us to set up
- In producing a report – the manager will be available to edit and return the first draft within two days, and the printer will be available when we require it
- In building a house - the bricks and roof tiles will be available when the tradesman is ready to start.

In project initiation and design - define outputs using concrete nouns and where possible quantify how many and detail quality

Concrete nouns and parametric limits to describe project outputs	Abstract nouns that could describe objectives and outcomes
House with four bedrooms and 160 square metres gross floor area	Improved lifestyle for the family and greater capacity to entertain friends
IT system with defined functionality and security protocols in four locations with 500 users	Improved efficiency in process and security of data
Produce a report with recommendations for the review of a specific function in the business	Improve the operations of a team or unit
Produce 16 training modules each with a manual, slide deck, assessments and marking guide	Improve the skills of staff and achieve qualifications for each participant
Conference with 20 presentations, 2 panel discussions for 500 attendees over two days	Share research amongst a network of professionals

Managing scope = managing expectations

Establishing what is in scope as well as what is not in scope is critical to managing expectations about the project, as well as managing the financial requirements of the project.

When we put forward a project concept (e.g. building a house, running a conference, producing an annual report), many people will reasonably interpret that in its entirety. When we imagine a house, our mental model will usually include a garden, a driveway, carpet, curtains, a pergola, air-conditioning, and painted interiors. However, when we negotiate with a builder the building of a house, their mental model of a house may only include the shell - the walls, the roof and the basics. To bring these different perspectives together, we need to be clear as to what each mental model includes and what it excludes. A house that is a shell is much cheaper than a house with a landscaped garden, carpets, air-conditioning and a pergola.

Another example – producing an annual report. Does producing an annual report include or exclude:

- The graphic design of the front cover
- Setting a webpage for the report
- Creating a press release to support the release of the report
- Printing copies for distribution to customers/shareholders etc.?

Activity

Using the table below, capture some thoughts to define the scope of your project.

IN-SCOPE	OUT-OF-SCOPE
Size or scale Timing and duration Limited to locations, teams or regions Beneficiaries and people impacted	What the project won't do or deliver
Unresolved matters of scope:	

What assumptions are you making about related events or tasks that need to be transparent?

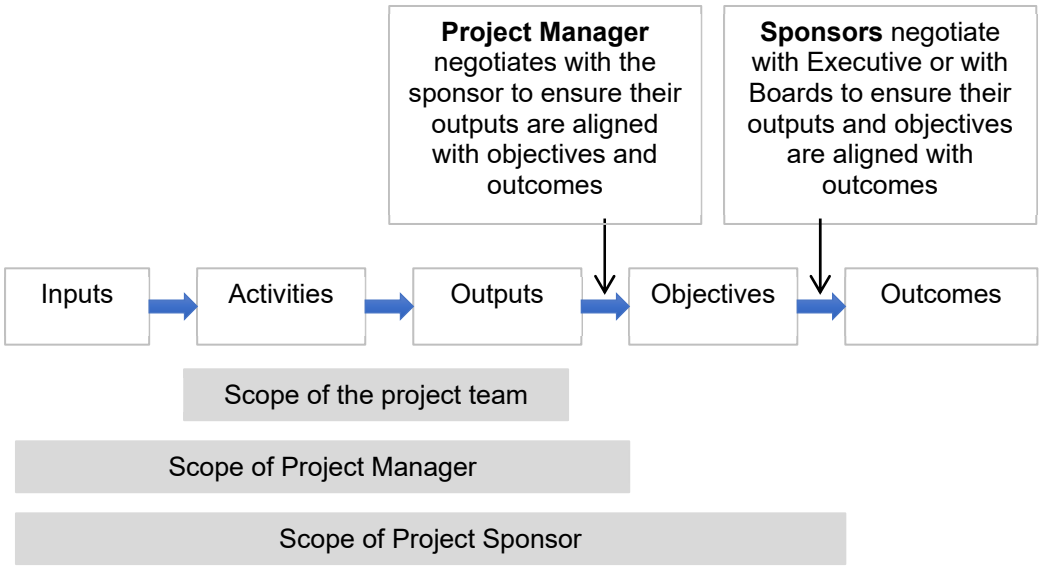
Reflection

What have I learned that I need to apply to my project?

Project Initiation: Governance- who & decision making

We can use the logic model to distinguish roles within a project.

- Project Management – executing the project by managing the key links between inputs, activities and outputs, ensuring the internal environment and relationships are right.
- Project Sponsorship – designing and changing the program logic to deliver the outcomes sought from the project by the business. Works with the project manager to track the delivery of outcomes.
- Executive Leadership – identifying the need for the project as part of strategic planning. Provide context for the project and establish outcomes sought from the project.



Project sponsor

The person with ultimate accountability for the project. They are responsible for ensuring the benefits and outcomes of the project.

They pay for the project and, as such, have the final say over the scope, timing and budget for the project. They have approval authority over the project.

The sponsor is called upon when the project goes off track. They approve the remedies that are required to put the project back on track or to vary the scope, timing, benefits or cost of the project. They can stop the project.

For larger projects, the sponsor may be the chair of the steering committee responsible for governing the project.

Sponsorship and Steering Committees

The project sponsor may seek the assistance of a sponsor or steering committee in the management of a project. This committee could include people with project experience and could include essential stakeholders.

The role of the Steering Committee

- The assistance to projects in an 'out-of-control' situation
- Review and approval of changes to the project Business Case
- Review and approval of changes to project staffing, schedule, deliverables, priorities, etc.
- High-level approval of interim deliverables
- Review of overall project quality requirements
- Management of the project risk
- Interface to other areas impacted by the project
- Resolution of inter-project boundary issues.

Stakeholders

- Critical: - these stakeholders have the authority to stop your project from achieving its objectives / outputs / outcomes – *showstoppers*
- Essential: - these stakeholders are impacted by your project and they can delay your project from achieving its objectives / outputs / outcomes. These are people who may need to change or whom you need cooperation or assistance from. For our project, they can be *delayers*
- Interested: - these stakeholders have an interest in the project and may be impacted by it in delivery or after completion – *passives.*

For your project – list your stakeholders and where they fit in the categories above.

Critical	Essential	Interested

Handout 2 – Conference Project Brief

Justification – Business case or project brief

Project justification is often required to get approval to undertake more detailed design and planning for our project. Project justification is often sought through the production of a business case for the project.

Following are a number of definitions of a business case:

> *"A structured proposal for business improvement that functions as a decision package for organizational decision-makers. A business case includes an analysis of business process performance and associated needs or problems, proposed alternative solutions, assumptions, constraints, and a risk-adjusted cost-benefit analysis." ICH*
>
> *A **business case** captures the reasoning for initiating a project or task. It is often presented in a well-structured written document, but may also sometimes come in the form of a short verbal argument or presentation.* Wikipedia

Commonwealth Department for Finance

> *"A business case is considered the key document to support investment decision-making. A business case sets out the problem or opportunity, considers options, analyses costs, benefits and risks, and ultimately supports an investment decision."*
>
> https://www.finance.gov.au/government/commonwealth-investment-framework/commonwealth-investments-toolkit/developing-business-case

Each of the definitions links business cases with decisions. They acknowledge that business cases are decision-making tools. Business cases are used to justify or influence decisions.

Headings for an investment proposal and business case outline, as per Treasurer's Instruction 17, include:

- Executive Summary
- Strategic assessment of the service provision
- The service need, problem and case for change
- Project planning and substantiation of the preferred solution
- Project funding and budget impacts
- Agency sign-offs.

The link to this outline is:

https://www.treasury.sa.gov.au/__data/assets/pdf_file/0007/515293/ti17-guidelines-part-b.pdf

A business case will usually be structured in such a way as to highlight:

- Organisational outcomes or goals sought by the decision-maker
- Problems or opportunities that have emerged or evolved and that are backed by evidence
- Options for addressing the problems or capitalising on the opportunities
- A recommended option that is the genesis of the project you are seeking to get approved.

More details about project justification and business cases are provided in Appendix Five - PRAISE as a Narrative Structure.

Project Planning

Activity

By applying a mind-mapping technique, please identify the different activities required to organise a conference.

From this, we can identify elements, stages or phases of our project.

For our projects, project planning will include:

1. Project Development Strategy & WBS - Seeing our project as a sequence of events
2. Project Timing (Calendar) - Scheduling our project using a calendar
3. Project Budget - Estimating the resources required
4. Project Quality – choosing quality attributes for outputs
5. Project Risk – Asking "What could possibly go wrong"?

While we are planning for each, we will also recognise the interdependence between each of these aspects of our project.

For a given scope (established in project initiation), we can see that planning will involve choices that may take longer, or if done more quickly, may compromise quality or may increase risk. We can see that increasing quality will impact the budget or increasing risk preparedness may take longer or cost more. There will be iterations and trade-offs between each other as we plan for our project.

In planning, in addition to scope, we establish parameters for four other dimensions of our project.

Scope | Time (a schedule) | Cost (a budget) | Quality | Risk

These interact with each other – we can see examples with risk/time trade-offs, cost/risk trade-offs and quality/cost trade-offs.

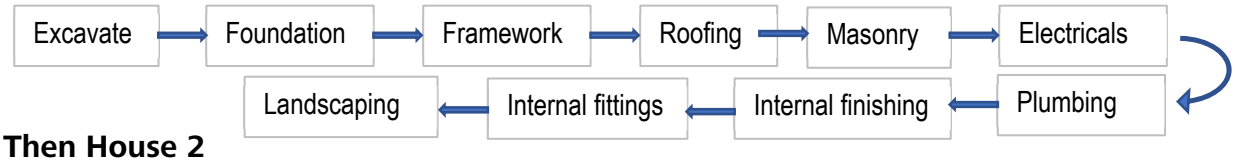
Project Development Strategy

There are different ways in which a project can be carried out.

Linear sequence strategy

Each stage of the project occurs sequentially, one after the other, until complete.

House 1



Then House 2

Benefits:

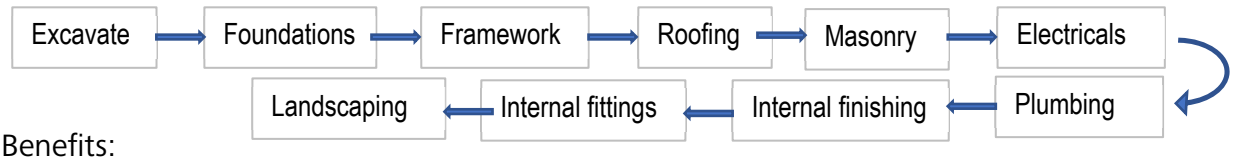
- Learning from house 1 can be factored into the building of house 2.
- Relationships established with contractors
- Safety – only one party on-site at a time.

Risks:

- Slower, with waiting times between stages
- Unpredictability in the availability of subcontractors.

Concurrent strategy

House 1 and House 2 at the same time



Benefits:

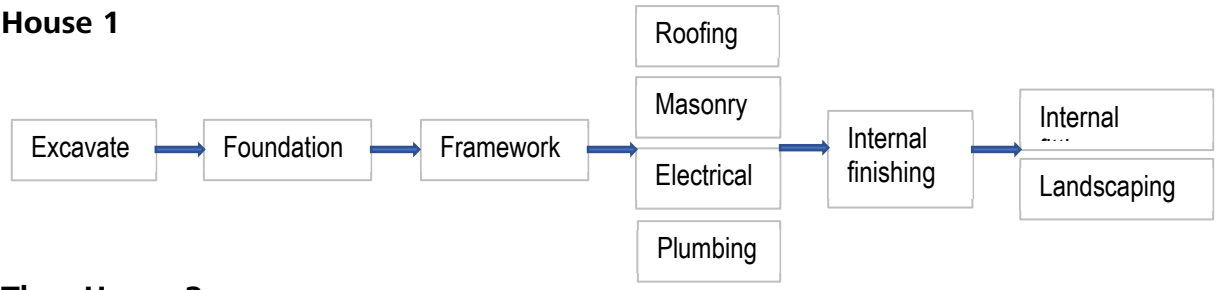
- Improved speed to market for both houses.

Risks

- Multiplication of error.

Concurrent sub-stage strategy

House 1



Then House 2

This concurrent sub-stage strategy could be combined with the concurrent strategy and have this done for both houses.

Benefits:

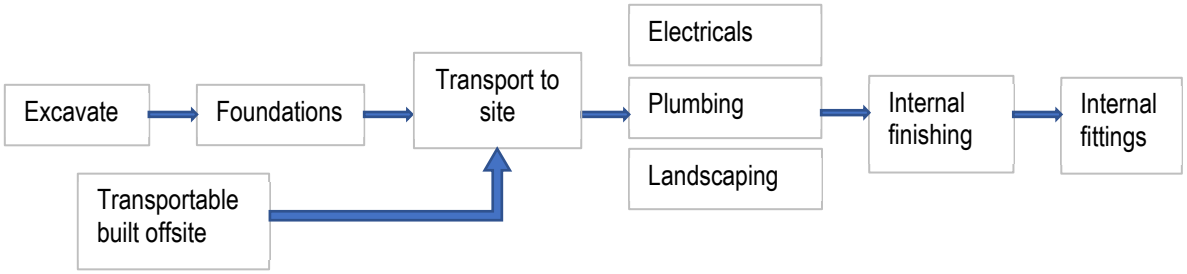
- Increased speed to market

Trade-offs

- Increased risks in building with multiple parties on-site
- Increased interdependence during the middle phase

Fast Track Strategy

House 1



Benefits:

- Increased speed to market

Trade-offs

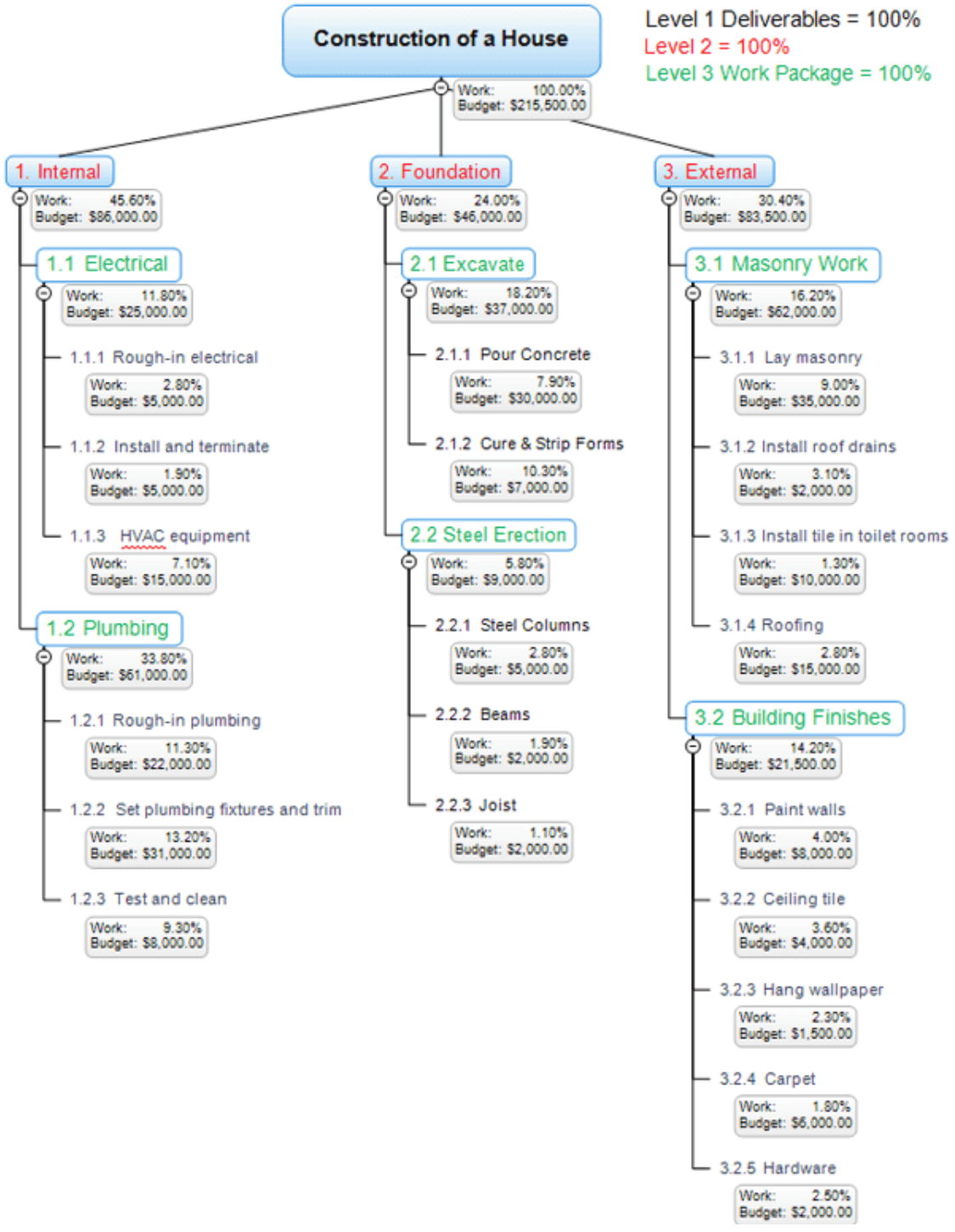
- Quality by limiting the building to a transportable

Work Breakdown Structure

A Work Breakdown Structure (WBS) is a framework of stages / processes / tasks required to undertake the work of the project to deliver its outputs. It usually contains a description of how to undertake each process / task.

A WBS will describe the output / deliverables expected from completing each stage / process / task. It will help inform role descriptions for staff working on the project and identification of the different skills and responsibilities of people on the project team.

An example of a work breakdown structure for the construction of a house is shown below.



Source: http://www.workbreakdownstructure.com/img-content/work-breakdown-structure-example.png

Project Timing: What does the calendar look like?

Another way of considering the sequence of events is to detail the calendar for the project.

Project planning - Timetabled approach																																									
				January				February				March					April				May				June					July				August				Sept			
			31	7	14	21	28	4	11	18	25	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	1	8	15	22
Stage 1																																									
	Workstream 1																																								
		Step 1																																							
		Step 2																																							
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	Project initiation																																								
	Project development																																								
	Milestone 1																																								
	Milestone 2																																								
	Deliverable																																								

Template 4: Planning Calendar Template

A Gantt Chart

A completed version of the planning calendar displayed above is known as a Gantt Chart. A Gantt Chart is a way of showing activities (tasks or events) displayed against time. On the left of the chart is a list of the activities and along the top is a suitable time scale. Each activity is represented by a bar; the position and length of the bar reflect the start date, duration and end date of the activity.

Activity - the Planning Calendar Template

Are you able to start detailing each of your project elements on the left-hand side of the planning calendar handout?

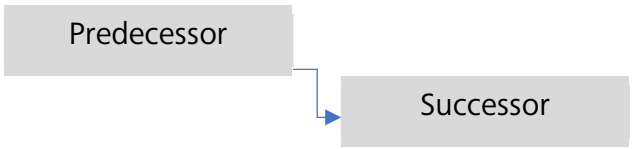
Are you able to estimate or schedule time for each element?

Do we need to assign responsibilities to different people for any of these elements?

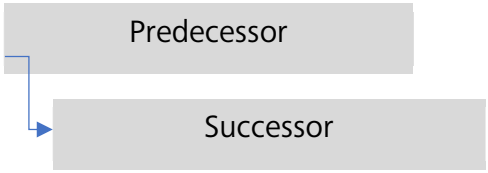
Project Planning – Dependencies & the Critical Path

Dependencies are the relationships among tasks that determine the order in which activities need to be performed. Planning for dependencies involves asking: What needs to happen before what? Dependencies are the relationships between the preceding tasks and the succeeding tasks. Tasks may have multiple preceding tasks and multiple succeeding tasks. The most common types of dependencies are:

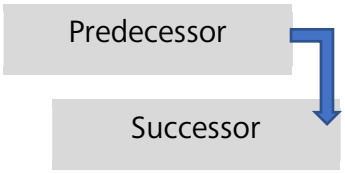
1. Finish to start – a Predecessor must finish before a Successor can start. For example: a slab must be laid before the frame can be built.



2. Start to start – a Predecessor must start before a Successor can start. For example: The writing of a document has to have started before editing can start.



3. Finish to finish – a Predecessor must finish before a Successor can finish. (i.e. tasks could be performed in conjunction, but they must finish in a particular order.) For example: We cannot complete an application until exam results are finalised.



A critical path is a sequence of interdependent activities or tasks that must be finished before the project can be finished. It is the path that shows the minimal time in which a project can be completed. If there is a delay in one activity of the path, the whole project will be delayed accordingly.

Thoughts on scheduling

- Scheduling involves casting our minds into the future and the unknown.
- It requires us to overcome a fear of failure because we will likely fail
- We need to be ready to iterate and repeat our planning as we learn and decide more about the future.
- Be aware of the difference between planning and solving. Don't try to solve everything now - plan to solve it.
- We can plan at levels of milestones and events before we get buried in detail
- Plan forward from the beginning and plan backward from the end
- Establish dependencies and relationships between milestones and events.
- Some planning will require choice and prioritisation.

Project Budget – What resources are required?

Activity - example

We are responsible for putting on a Road Safety conference in Adelaide every two years, with the first conference held in 10 months' time.

Road Safety is a key policy issue for the SA Government and the local Universities. As part of its strategy for ensuring South Australia is employing a world-class approach to road safety, the Government has committed to conducting a Road Safety Conference with speakers and representatives from around the world.

The conference will be held in ten months' time at the Adelaide Convention Centre. The Conference will run for two days – Monday and Tuesday.

As part of the conference, a social function will be held on the night of Sunday before the conference.

Our goal is to attract approximately 500 people to the conference from across Australia and from overseas.

At the conference, 30 booths will be made available for exhibitions for organisations involved in Road Safety.

We are hoping to have 20 speaker slots with 5 internationally recognised experts in Road Safety at the conference and 15 local and interstate experts. It is expected that around 6 speakers will be seeking fees or honoraria for their role in the conference.

The budget needs to cover all aspects associated with a conference, including venue hire and AV, promotion and printing, speakers and catering. Also, assume that as part of preparing for the conference, you will engage a firm that specialises in conference management to assist you in preparing for this event.

Question: How should we go about estimating the total conference cost, estimated costs per delegate (before and after sponsorship/grants) and the phasing (or cash flow) of revenues and expenses?

Approaches to Budgeting

Four different approaches to estimating and projecting:

1. Incremental
2. Zero-based
3. Activity-based
4. Rolling forward estimates

Incremental Budgeting

For **'business as usual' functions**, because the work being done is familiar and repeated, financial projections and budgets will employ what is known as incremental budgeting.

Incremental budgeting is the most traditional style of budgeting used. Incremental budgeting involves the rolling over of the previous year's budget into the current year after having made incremental adjustments to reflect changing activity levels, responsibilities or objectives. This has the effect of building in inefficiencies and can lead to allocation of spending to areas where money has been spent, rather than where it should be spent.

Zero-based estimating

For **projects**, the work being done is unfamiliar and uncertain. Financial projections and budgeting will employ what is known as zero-based estimating. Zero-based estimating is an approach in which all expenses are justified for each new period. The process of zero-based estimating starts from a "zero base," and every element of a project or every section in an organisation is assessed for its needs and costs. The downside of zero-based estimating is that it is more time-consuming and can be too cumbersome for large organisations.

Activity-based Estimating

For organisations where finances can be linked with activity, estimates can be based on parameters that indicate that activity. The method requires that activity can be observed and measured, and that reasonable estimates of cost per unit of activity can also be measured.

Activity-based estimating is used in the funding models for Health and Education.

Rolling forward estimates

A variation on incremental budgeting where estimates are established for multiple years (in government, these are referred to as the forward estimates). Estimates are established for multiple years (usually using an incremental method), and each year, a new year is added at the end of the forward estimates. That year can be referred to as a horizon year.

Each year in the budget process, participants put forward submissions or bids to add to their forward estimates, or savings can be sought from participants who act to subtract from their forward estimates. This method of forward projecting is used for the budgets of state governments and the federal government in Australia.

We will develop a zero-based budget in three steps:

1. Identify as many expenses and revenues as possible for the revised initiative, program or project
2. Document assumptions to make estimates of revenues and expenses transparent
3. Populate a table showing all revenues, expenses and budget impacts for the item.

Activity/transaction	Assumptions				Estimate cost
	Quantity	Unit Price	Growth	Timing	
		$			$

Group activities

Please make a first principles estimate for the catering budget for our conference. The detail required is to consider catering as consisting of:

- Tea and coffee on arrival
- Morning Tea
- Lunch
- Afternoon Tea.

Remember, our conference is for 500 attendees plus 20 speakers for two days.

Evaluating Financial Plans or Projections

Evaluating the correctness of a financial plan will need to wait to see whether the guesses we have made have proven correct. By then, we would have had to have committed to executing the plan to find out if we were right or wrong. If we were right, no harm was done. If we were wrong, we have potentially wasted money. Correctness is usually only evaluated with the benefit of hindsight. We need some indicators of quality before we make our decision, rather than after. The quality of a financial plan can be evaluated in advance of the plan being approved by assessing three aspects of our financial plan:

1. Rigour – the extent of activity and cost drivers and the extent of detail in the assumptions are an indicator of quality.
2. Substantiation – the extent to which assumptions can be checked or verified to reliable sources (e.g. wages to EB agreements).
3. Transparency – the observable trail from cost driver or revenue driver, through assumptions to the dollar estimates of revenue and expenses.

Key parameters for building a zero-based budget will include:

- A staff establishment – list of staff members and their classification
- Staff on-costs
- Links between activity, outputs and staff time

Specific goods and services requirements, like:

- Travel
- Accommodation
- Vehicle usage
- Staff-related costs like training and uniforms
- Insurance
- Technology-related costs – hardware, software, networks
- Asset-related expenses – repairs and maintenance, security
- Event-related expenses – catering, marketing, security.

The on-costs for each employee to be included in a budget could include:

Superannuation	12.00%
Payroll Tax	5.00%
Long Service Leave	4.00%
Maternity Leave	0.50%
Insurance (e.g. workers' comp)	0.20%
Leave Loading	0.30%
Total	**22.00%**

Resource planning

For a project that relies primarily on staff to undertake activities and deliver outputs, resource planning for staff can be done to estimate costs.

Resource planning is the process of assigning people to tasks or tasks to people and estimating the duration of the task assignment.

A resource plan will result in estimates of the number of FTEs needed at different times for a project and provide the FTE levels linked with the project's timetable. An example of a resource plan for an IT project is below.

Resource plan template																							
				1-Jul-20	8-Jul-20	15-Jul-20	22-Jul-20	29-Jul-20	5-Aug-20	12-Aug-20	19-Aug-20	26-Aug-20	2-Sep-20	9-Sep-20	16-Sep-20	23-Sep-20	30-Sep-20	7-Oct-20	14-Oct-20	21-Oct-20	28-Oct-20	4-Nov-20	11-Nov-20	18-Nov-20
Phase	**Deliverable**	**Directorate**	**Role**	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12	Wk13	Wk14	Wk15	Wk16	Wk17	Wk18	Wk19	Wk20	Wk21
Options Analysis	Options assessment	PMO	Project Manager	0.8	0.8	0.8	0.8																	
Options Analysis	Options assessment	Client Services	User support	0.1	0.1	0.1	0.1																	
Options Analysis	Options assessment	Technology	Technical Analyst	0.4	0.4	0.4	0.4																	
Options Analysis	Technical analysis	PMO	Project Manager					0.2	0.2	0.2	0.2													
Options Analysis	Technical analysis	Client Services	User support					0.5	0.5	0.5	0.5													
Options Analysis	Technical analysis	Client Services	User support					0.1	0.1	0.1	0.1													
Options Analysis	Technical analysis	Client Services	Training					0.2	0.2	0.2	0.2													
Options Analysis	Technical analysis	Technology	Technical Analyst					0.4	0.4	0.4	0.4													
Options Analysis	Technical analysis	Technology	Software specialist					0.1	0.1	0.1	0.1													
Options Analysis	Technical analysis	Technology	Testing					0.1	0.1	0.1	0.1													
Configuration	Configure changes	PMO	Project Manager									0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Configuration	Configure changes	Technology	Technical Analyst									0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Configuration	Configure changes	Technology	Software specialist									0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Configuration	Configure changes	Technology	Testing									0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Configuration	Configure changes	Technology	Technical Analyst									0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Configuration	Configure changes	Client Services	User support									0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Configuration	Configure changes	Client Services	Training									0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Deployment	Technical deployment	PMO	Project Manager																					0.3
Deployment	Technical deployment	Technology	Technical Analyst																					0.4
Deployment	Technical deployment	Technology	Software specialist																					0.4
Deployment	Technical deployment	Technology	Software specialist																					0.1
Deployment	Technical deployment	Client Services	User support																					1
Deployment	Technical deployment	Client Services	Training																					1

The FTE estimates in the resource plan can be used to estimate the cost of the project and for the costs of phases of the project by adding assumptions about the cost per role and on-costs.

Activity

Having done some initial planning for our project, we can now ask – What could possibly go wrong?

List what could go wrong within the design and plan you have prepared.

Ask yourself – am I being optimistic about this project?

Initial thoughts – how do I address these uncertainties or my biases?

Allow for Contingencies

Project work is regularly dealing with uncertainty. Part of project planning will include elements of the risk management process:

- Identify risks
- Analyse risks
- Evaluate risk
- Treat risks.

A common financial treatment for risks is to make contingency allowances in a project budget as part of the cost estimating.

Ways of allowing for contingencies in our cost estimates include:

- An explicit contingency line within project budgets - this approach is applied as a standard in building projects where a budget is set aside for risks like not knowing what is under the ground. These are often initially estimated as a percentage of the project cost estimates before contingencies.
- Parameter contingencies where we include conservative estimates for contingencies (e.g. fuel prices) that make some allowance for increases. These contingencies can be linked to specific risks identified within the project.
- Insurance – a common way to financially manage uncertainty is to outsource it through an insurance policy
- Organisational contingencies – instead of allowing for contingencies against specific projects or programs, some organisations hold an organisational contingency that is available for units or teams to access should an unexpected event occur.

For our conference budget, we will be conservative in the approach to funding the project by estimating a low charge per attendee and have a higher reliance from the outset on grant income.

Handout 3: Conference Plan

Handout 4: Conference Budget

Project Risk – What could possibly go wrong?

Some things will go better than expected in our projects and some things will go worse than expected. It is the natural uncertainties of a project that require special consideration of risks.

Definition: Risk is the impact of uncertainty on our objectives.

In designing our project, we established its objectives - What our project is trying to achieve.

Risk is the chance that there will be a positive or negative deviation from the objectives we expect to achieve.

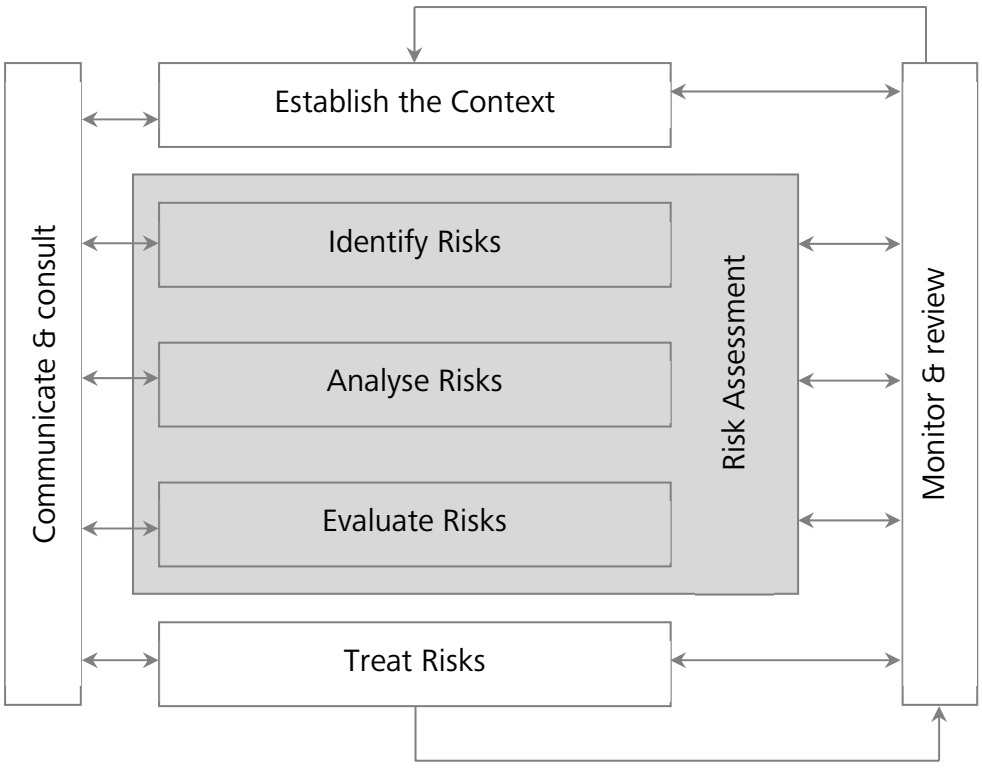
When we plan our projects, we try to account for some of these uncertainties. The act of planning is, in itself, a way of managing uncertainty. We try to account for 'known unknowns' and 'known knowns'. However, we will have blind spots and deficiencies in our thinking that we need to address before we charge off into delivering our project.

Risk Management is typically approached by applying procedures contained in the Risk Management Standard AS/NZS ISO 31000:2018. These procedures are designed to slow down our thinking by working through a methodical approach that asks us to:

- Understand the context in which we are managing risk
- Identify risks
- Analyse risks
- Evaluate risks
- Treat risks

The Australian Standards for Risk Management AS/NZS ISO 31000:2018 includes the following process.

Risk Management Process Overview



The main elements of the risk management process are:

Communicate and Consult

- Communicate and consult with external and internal stakeholders as appropriate at each stage of the risk management process and concerning the process as a whole.

Establish the Context

- Establish the external, internal and risk management context in which the rest of the process will take place. Criteria against which risk will be evaluated should be established and the structure of the analysis defined.

Identify Risks

- Identify where, when, why and how events could prevent, degrade, delay or enhance the achievement of the organisation's objectives.

Analyse Risks

- Identify and evaluate existing controls. Determine consequences and likelihood and hence the level of risk. This analysis should consider the range of potential consequences and how these could occur.

Evaluate Risks

- Compare estimated levels of risk against the pre-established criteria and consider the balance between potential benefits and adverse outcomes. This enables decisions to be made about the extent and nature of treatments required and about priorities.

Treat Risks

- Develop and implement specific cost-effective strategies and action plans for increasing potential benefits and reducing potential costs.

Monitor and Review

- It is necessary to monitor the effectiveness of all steps of the risk management process. This is important for continuous improvement.
- Risks and the effectiveness of treatment measures need to be monitored to ensure changing circumstances do not alter priorities.

Handout 5 – Risk register

Discussion

What will a project manager do during the delivery phase of a project?

BEWARE: If we follow risk management processes without understanding the underlying biases we are trying to overcome, it may not address these biases.

Risk management will try to address the biases and deficiencies we have when we plan. To do this, after we have done some initial design and planning, we should explicitly confront biases to review and update our design and planning.

Biases we want to overcome include:

Optimism bias – The tendency to overestimate the likelihood of favourable events, and to underestimate the likelihood of unfavourable events. The reason for this bias – our hopes and desires.

Confirmation bias - The tendency to overestimate / underestimate the likelihood of an event so that the prediction aligns with existing beliefs and commitments. The reason for this bias – existing beliefs and commitments.

Affect bias - The tendency to overestimate risk (and underestimate benefits) when personal feelings are negative, and to underestimate risk (and overestimate benefits) when personal feelings are positive. The reason for this bias – personal feelings.

Availability bias – The tendency to overestimate the likelihood of events that are widely publicised, dramatic, or personal; and to underestimate the likelihood of events that are not widely publicised, not dramatic, and not personal. The reason for this bias – is the ease of recall and difficulty in sourcing other evidence.

Anchor effect - The tendency to overestimate or underestimate the likelihood of an event because of either (a) an unreliable anchor or (b) an incorrect adjustment to it. The reason for this bias – is the ease of settling on the first numbers or dates given to us.

Naiveté – Many projects are defined by being unique and by the unusual circumstances surrounding them. In managing projects, we need to be aware of our own naiveté. There will be 'unknown unknowns', uncertainties, dangers and opportunities we have not thought of.

We need to go out of our way to address these by:

- Stop and slow down your thinking. It is 'fast thinking' that results in a number of these biases prevailing
- Open-mindedness - Consider a range of perspectives and a range of views.
- Humility – understand that what we know is only a very small % of all knowledge.
- Accept that luck and randomness can have a big role to play and be prepared to plan for uncertainty. Consider a pre-mortem – unpacking possible disaster as if it happened, before it happened.
- Beware of beliefs – We are born to believe. Through our lives, perceptions lead to beliefs and then beliefs lead to perceptions. Understanding how this impacts our lives can be quite powerful.

Project Delivery

Project delivery will occur once our plans and schedules are approved. We now follow our plans and carry out the project as we said we would.

In the delivery phase of the lifecycle, the management of our project includes:

1. Carrying out the tasks listed on the project plan
2. Monitoring progress against the plan
3. Exercise judgement about the status of the project
4. Reporting progress and issues
5. Adapting within our design and plan
6. Approval to change the design and plan

Carrying out the tasks listed on the project plan

For a project involving teams, this aspect of delivery will involve delegating and allocating tasks, clarifying roles, and ensuring everyone understands their responsibilities.

The project manager ensures that people, equipment, and materials are available when needed. They monitor resource use to avoid shortages or bottlenecks.

The ability to delegate aspects of the project depends on the quality of task description included in the schedule and the availability of resources approved in the budget.

Monitoring progress against the plan

During execution, the project manager keeps a close eye on progress against the project schedule and milestones. They use project management tools like updated Gantt charts, budget variance reports and regular meetings to gather updates and identify any deviations from the plan.

Monitoring will also include quality control to ensure that deliverables meet agreed standards, which is a key responsibility. The project manager implements quality assurance processes, conducts inspections, and addresses any issues that could affect quality.

Issues management

If progress is not going well, identify issues that have arisen

- Capture issues in an issues register
- Identify the impact of the issue on the project
- Put forward remedies for issues.

The quality of our design and planning will impact our ability to track our project. The creation of exhibits, such as a calendar and a budget, can be used to track our project.

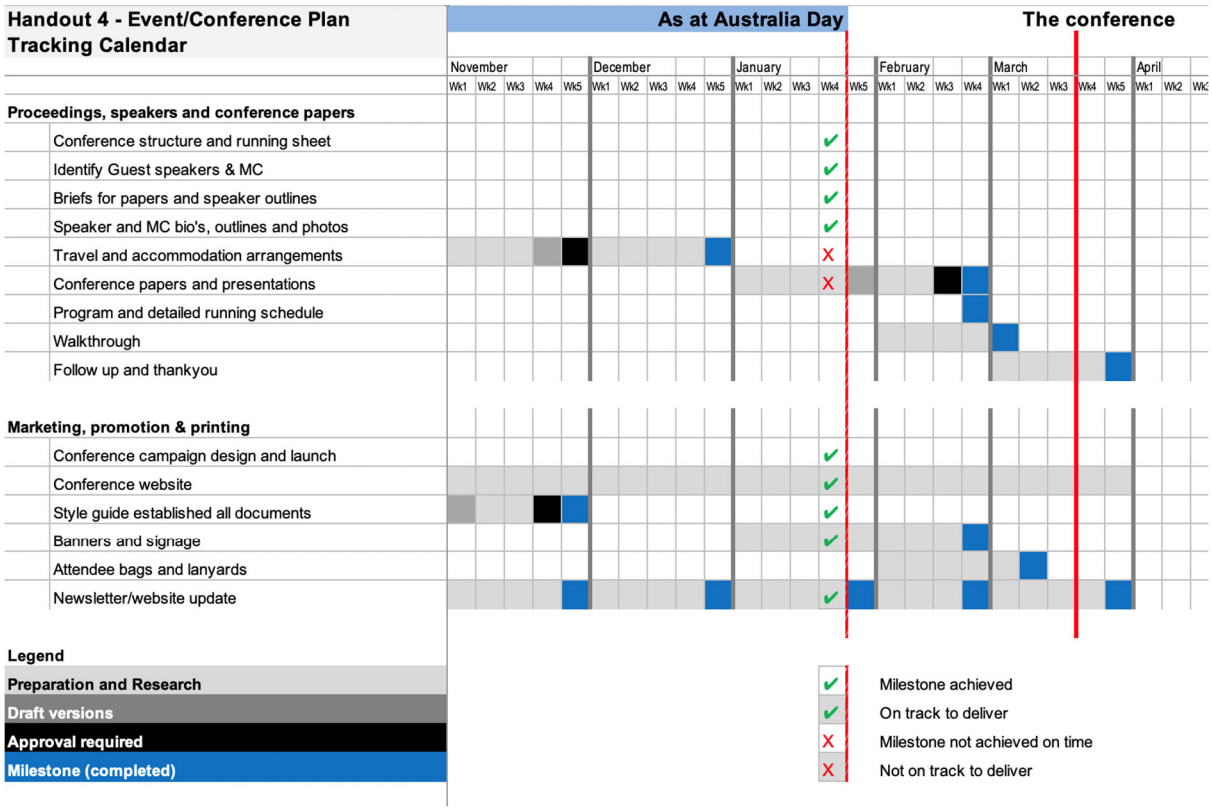
We will want to track and report:

- Progress against our plan (calendar)
- Project finances
- Project risks.

A simple project report can be prepared to update our project sponsor, executive or steering committee on the status of each.

Our calendar can be updated each week to reflect the milestones that have been achieved or to highlight the milestones that are at risk of being delayed.

An example is provided below for the early stages of a review or the preparation of an organisation's report or plan. The updated calendar serves as a tracking report that shows tasks that have been completed, tasks that are on track and tasks that are incomplete or not on track.



Activity:

In groups, discuss what you observe for our conference from the two handouts provided:

- ***Handout 6: Event/Conference calendar updated***
- ***Handout 7: Project finance report (detailed)***

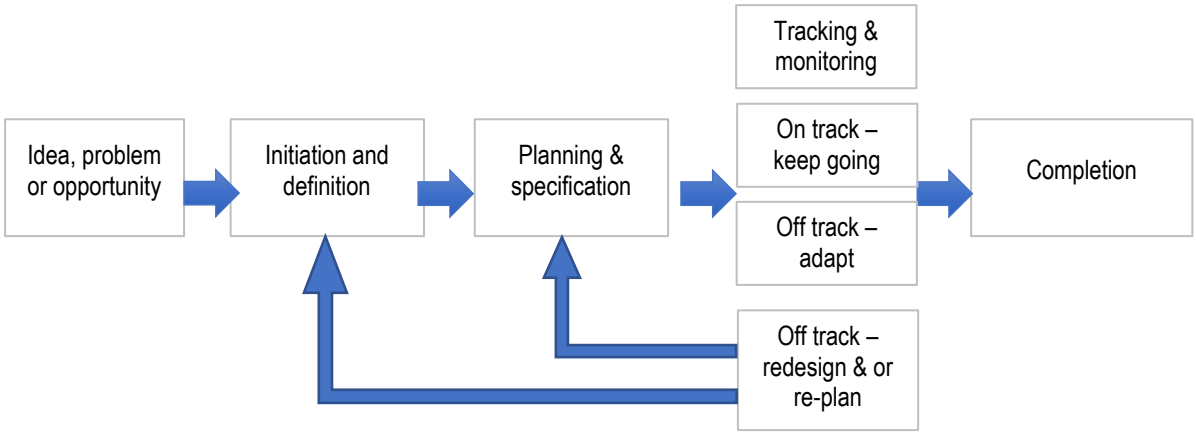
Exercise judgement about the status of the project

Our tracking is designed to help us categorise our project into one of three categories:

1. The project is on track and should continue to proceed as planned
2. The project is off track but can be adapted within resources to proceed as planned
3. The project is off track and needs to be redesigned and/or re-planned.

If our project is in the first category, it should proceed to completion as planned.

If our project is in the second or third category, we need to consider how to adapt aspects of the project to get to completion.



Reporting progress and issues

The project manager keeps stakeholders informed of progress, challenges, and changes. This will involve regular status reports, meetings, and updates to the project documentation for the sponsor and, if necessary, steering committees.

Handout 8 is a project status report for the Road Safety Conference. The report makes the project status explicit and provides details on aspects of the project that are not on track. The report is designed to be read in conjunction with the calendar. It also includes a financial update and a risk update.

A project status report could also include:

- The state of the project's original justification (Business Case) - i.e. is it still relevant
- What actions the team has taken in the past period
- What deliverables have been produced
- Any outstanding issues from the last report
- Any actions required to be undertaken by management
- How team members are feeling.

As with other aspects of our approach to project management, the level of sophistication in the project reporting should be commensurate with the scale of the project.

Handout 8 – Project Status Report

Activity – My day in Deni

My project is no longer on track – what options do I have for getting it back on track?

Adapting within our design and plan

Projects are unfamiliar, unusual and disruptive. They will hit obstacles and we will need to adapt. We have tried to predict some of these obstacles in our risk management but have not contemplated 'unknown unknowns'.

Adapting within our design and plan involves making changes within the approved parameters of our project by accommodating delays without compromising on the overall success factors.

This could include:

- Adapting without needing extra resources by utilising savings made to date or by bringing forward some resources to get on top of the project
- Adapting without needing extra time by using time saved to date or by bringing forward tasks
- Adapting by utilising time and/or money contingencies built into the original project plan. Note that for some projects, the use of financial contingencies will need to be made explicit and will require approval from the project sponsor.

Example - For our conference:

- We could consider compromising on the need for papers from all speakers
- We could consider having some backup speakers available should the travel schedules of our preferred speakers become unmanageable.

This review of our project is bringing into focus what is negotiable about what we plan to deliver and what is non-negotiable. While it would be ideal to be clear about this upfront, it is usually when we confront these realities that compromises become clearer.

Adapting by changing our design and plan

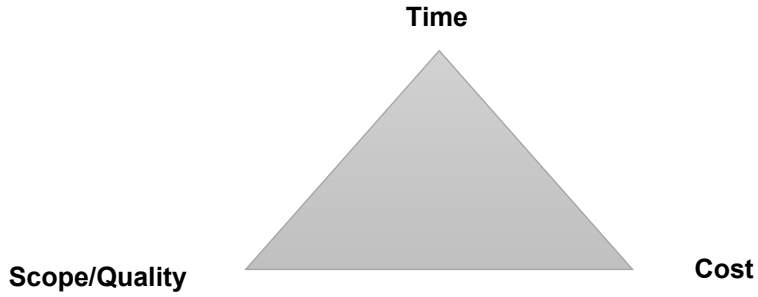
Some projects will only be able to get back on track by making fundamental changes to what was originally approved or expected. The starting point for this is to go back to the very starting point of our project and review our definition of project success.

Revisit design by reviewing project success

At the most basic level, adaptation may require that we change one of the core parameters of our project:

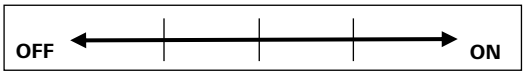
- Project timing
- Project cost/budget.
- Project deliverables and scope

We can consider the interrelationship of these three elements on a project triangle – three primary aspects of a project are time, quality or cost. When we adapt, our project will require any or all of these to be compromised relative to the original design.

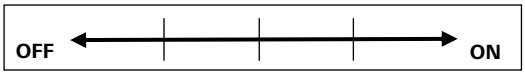


Many projects are designed with the view to having each being delivered. However, the reality of many projects is that there is a relative scale of the importance of each of these:

Deliver the project on time



Meet an agreed budget



Meet output/deliverable requirements

Having to adapt a project that is well off track will require some compromising of any or all of these requirements. While the ideal is that we operate to the far right on each of the above elements, the need to review them when our project is off-track will require that we consider the relative rating of each.

The output/deliverable requirements of a project can be broken into more detail to consider the scope of deliverables, the quality of deliverables and their impact.

Further indicators of success could include:

- A satisfied client
- Delivering the full scope of outputs
- Meeting quality requirements for our outputs (supported by indicators of quality)
- Satisfaction and development of project team members (input measure)

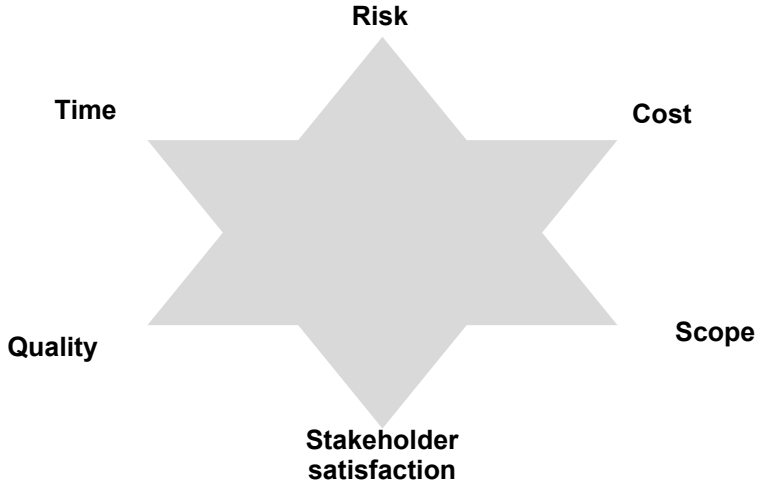
Examples of compromise could include:

- If scope and quality are paramount, we could compromise on timing and cost
- If budget is paramount, we could compromise on the scope and quality of outputs
- If timing is paramount, we could compromise on cost or the scope/quality of outputs.

Other ways of considering project trade-offs include.

Project Rectangle – consider four aspects of a project: time, quality, cost and scope.

Project Star – consider six aspects of a project



Change control

Changes to the project that impact its key parameters should be captured across the life of the project through a process of change control.

Many projects will have a formal process regarding the changes made to the approved parameters of the project. This can occur through change requests (that could come from within the team or from stakeholders), which are evaluated and brought to the project sponsor for approval.

Template 6: Project Change Request

Project Completion

The final stage in the lifecycle is the completion of the project.

Knowing when a project will be completed is an important part of designing the project. Is it completed when outputs are delivered or is it complete when staff are using the products or services properly?

Completion is important to ensure that elements of the work do not linger unnecessarily and to mark the need for a review of the project to ensure the organisation captures lessons learned along the way.

Ambiguity in completion can include:

- For IT projects, what level of support is required before the project to implement new software can be deemed complete?
- What level of clean-up is required for an event before the event is deemed to be complete?
- What follow-up is required after a conference before the conference is deemed complete?

Question

What does project completion look like for your project?

Post Implementation Review

The conduct of a Post-Implementation Review or PIR (for those who like acronyms) is a normal project management activity. It serves several purposes:

Measuring success

Your organisation would have invested your time and, in many projects, substantial investment in equipment to run the project. The team needs to determine how well the project met its objectives and outcomes (particularly the objectives, costs and any benefits that the team and sponsor identified at the beginning). If you planned and managed your project, you should have project design and planning exhibits that can be the basis for the review (the program logic, the business case, the budget, the calendar.

In general, the process would involve a series of interviews and, if appropriate, surveys of the people impacted by the project.

Learning

You and your team will have learned many things throughout your project. It is important that, before you all move back to other work or before running the next project/event, you should have a chance to stop and document the things that you picked up on the way. Typically, you would be interested in how well your estimates were made, what risks occurred, and what other factors you missed. By writing these down, you can give other teams about to undertake other projects a chance to avoid your mistakes and gain from your successes.

It marks the very end of the project

This is a personal factor. In many cases, the team will experience a feeling of anti-climax after the project has implemented the changes. This feeling is to be expected after the hard work that has been put into the project. The conduct of a Post-Implementation Review provides a good psychological end to the project.

Basic PIR Survey Questions

Did the project deliver what it said it would?

Was the quality of deliverables up to expectations?

Was the project on schedule?

Did the project meet its objectives?

Will the outcomes sought from the project occur or have they occurred?

Did the project come in on budget?

What were the causes of the variance to budget?

What uncertainties arose that we didn't plan for?

What uncertainties arose that we did not expect?

What were the most important lessons learned from this project?

Project closure report

A Project Closure Report is a document that formalises the completion of a project.

It confirms that the criteria for completion of the project have been met and requests sign-off from the Project Sponsor to close the project.

Acceptance of completion will remind us of the work we did in the early stages of the project lifecycle.

The closure report can include a checklist of deliverables, objectives and outcomes that we agreed on in the project initiation and project planning phases.

A Project Closure Report can include:

- A list of completion criteria (deliverables and objectives)
- Confirmation that each completion criterion has been met
- A list of outstanding activities, risks and issues
- A set of closure actions (to hand over project deliverables / documentation, terminate suppliers, release resources and undertake closure communication)
- A request for project closure approval.

The report can also include records of:

- Approved changes to the initial design and plan
- Records of explanations of variances against time, cost and quality
- Lessons learned.

A project closure report will reveal weaknesses across the lifecycle of the project. It can be the case that if the deliverables or objectives of the project are poorly defined earlier in the lifecycle, it may not be clear whether the project has been completed or not.

Consistent with the Steven Covey principle of 'Begin with the end in mind', an early outline of the checklist of objectives and deliverables that we would expect to see in a project closure report is worth developing in the initiation and planning stages of the project's lifecycle.

Project Articulation - Our Project Exhibits & Communication

Good communication is preceded by clarity!

The work we have done to date has been to achieve clarity in the parameters and timing of our project. Below is a list of the types of communication arising from the work to date.

Project design phase:

- A project brief – for smaller, more familiar projects that are funded or resourced
- A project logic – linking outputs, objectives and outcomes
- A business case for larger projects that need to attract funding by justifying change.

Project planning phase:

- A work breakdown structure
- A calendar
- A budget
- Risks articulated.

Project Delivery:

- Status reports – Where are we, versus where we wanted to be?
- Updated against calendar
- Decision-making required – changes in scope, timing, money.
- Financial reports
- Updated risk report.

Project completion:

- Project close-out report
- Post Implementation Review

Most of this communication is targeted at the project's critical stakeholders (decision makers) and the project team.

Communication Plan

An example of a communication plan for our conference is provided as handout 9.

Critical

These people must be involved in and approve all changes to the agreed project parameters, plans, and related agreements. Ideally, they should be actively involved in evaluating the impact of the change *before* it is approved. The primary communication mechanisms are involvement in initial planning and design sessions, reviewing, tracking and reporting information and approving change requests.

For our conference, the critical stakeholders will include the project sponsor and their leadership. In the Government, the relevant Minister will need to be considered a critical stakeholder.

Essential

These people should be informed of all changes to the agreed project parameters and plans with specific reference to the impacts these have on this group. Ideally, they should be consulted before changes in project design parameters and material changes to plans. The primary communication mechanisms include an active review of initial planning and design outputs and a review of some project tracking and reporting information.

For our conference, the essential stakeholders will include:

- The project team
- The venue providers
- Speakers and MC
- Attendees to the conference.

Interested

These people must be kept informed of all changes to the agreed project design passively. The primary communication mechanism is by giving them access to design and planning session outputs and review of tracking and reporting information - a page on an *Intranet* may be just the thing for non-essential 'internal' stakeholders.

For our conference, the interested stakeholders could include:

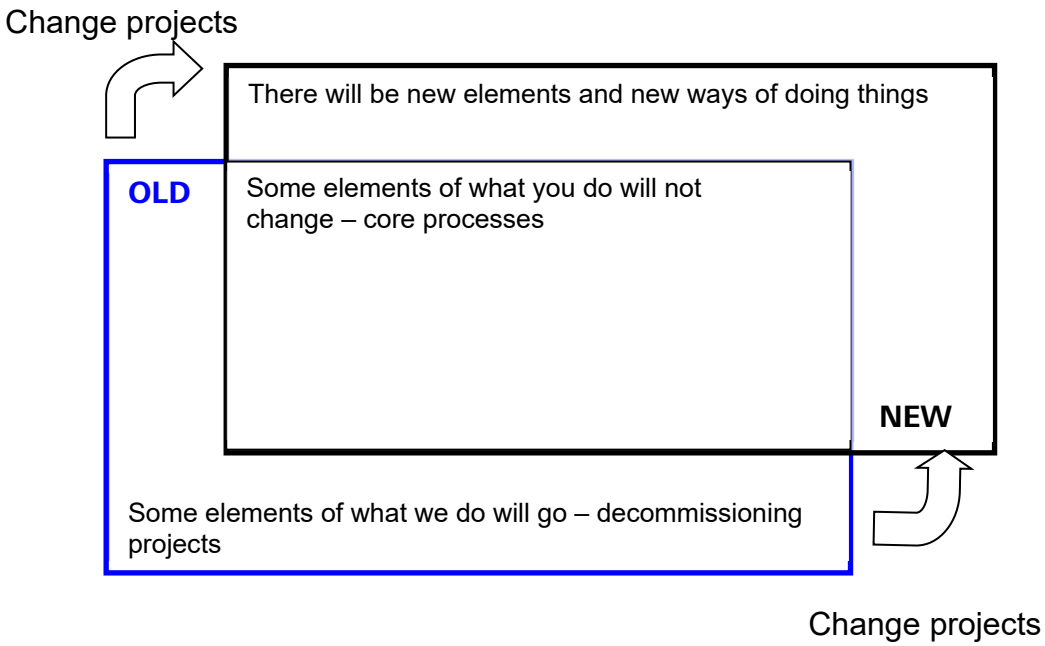
- Staff in the relevant agencies
- Associations (e.g. RAA), Academics (Universities)

Communication with Critical and Essential Stakeholders must be two-way and can be one-way with interested parties.

Handout 9: Conference Communication Plan

Communicating Change

In our communication, we need to pay special attention to how people will be disrupted or how they will need to change as a result of our project. Our communication planning should be designed to help people cope with disruption or change. The model introduced earlier can be helpful.



In our communication, be clear on:

- **What will continue** – core processes and services
- **What will go** – processes, products that need to be decommissioned
- **What is new** – change projects that will bring about new products and services or ways of doing things.

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Appendix One: Tasks, processes and projects

In discussing the nature of projects and the nature of processes in organisations, I have received feedback that projects consist of tasks or that projects consist of a series of processes. But others say that processes consist of tasks. I am keen to distinguish the definitions of projects, processes and tasks.

It is my view that projects and processes are fundamentally different ways of approaching work. Both consist of tasks – a discrete piece of work or activity. The fundamental difference is that with process work, the tasks are repeated and form routines, while with projects, a number of tasks may be one-off and unique to the project.

A household analogy may be helpful. In running a household with school-aged children, we attempt to establish routines (or processes) to ensure certain tasks happen every day. We want breakfast to be eaten, beds to be made, teeth to be brushed, lunch to be made and packed, school uniforms to be ready, etc. We establish sets of routines or processes that aim to ensure these tasks happen every day they need to be.

There is the 'getting ready in the morning' routine, the 'getting home from school' routine, and the 'getting ready for bed' routine. Each consists of a series of tasks (e.g. eating breakfast, brushing teeth, getting dressed, making lunch).

These are the processes or routines of family life and we do them so that gradually they become habits, second nature and do not require a lot of thought but make sure that the basics of life are taken care of.

We also have family projects, those things we do that are unique or unusual that also consist of a series of tasks. A holiday could be considered a form of family project. It requires special planning and will consist of a series of tasks that are not as routine – packing, getting passports, arranging vaccinations, finding help to look after pets, etc.

The balance between processes (or routines) and projects is important. In family life, too many projects can result in instability that may compromise some of the basics in life, like hygiene, diet and exercise. Alternatively, too much emphasis on routine can dull life and reduce creativity and enjoyment. There will be a constant tension between routine and differences that we will be working through and that may be unique to each family.

The same will apply to organisations. The balance between routine work and project work will be a constant source of tension inside organisations.

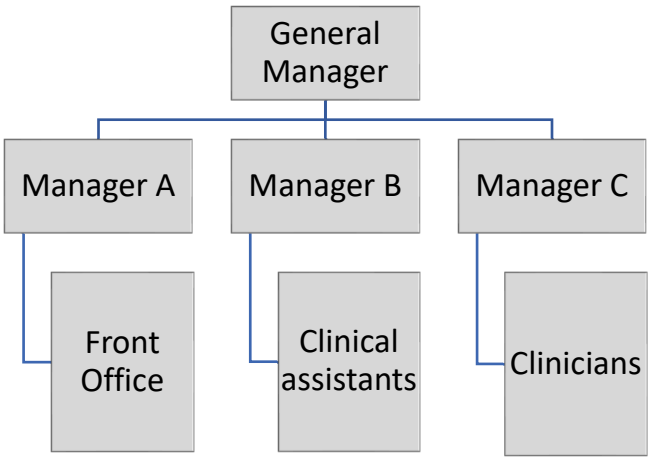
The need for processes is to ensure efficiency and to ensure that customer requirements and standards are consistently met. The need for projects may be internally triggered by the needs of staff and management to improve their work. Projects can also be externally triggered by competitive forces or by funding cuts that demand a change in the way we go about our business.

Appendix Two: Managing Processes, Projects and Organisation Structure

Managing projects in our organisations can have implications for how we work in our teams. Many organisations are structured to manage the predominant type of work required to be done by the organisation. This could mean teams are structured by function or by expertise.

I can think of an example – my ophthalmologist. I have had problems with my eyes that have required me to visit an ophthalmologist regularly. The business appears to be structured into three teams, shown in the diagram below:

1. Front Office
2. Clinical Assistants
3. Clinicians.



Suppose our organisations have regular business processes as their focus. In that case, these processes will have been operating across teams in such a way that the teams are familiar with what their contributions are to how the processes work and familiar with how they interact with other teams. Business processes are repeated and standard and serve to function like operational habits. While processes require interactions across teams, the repeated nature of processes means that our interaction with other teams is a matter of habit. The standardisation and error minimisation involved in processes often mean that these interactions are straightforward.

Using the example of the ophthalmologist, the basic business process consists of the following steps:

Step 1: The client is received at the front office to check in and check records are updated.

Step 2: The client and their records are handed over to the clinical assistant team

Step 3: The clinical assistant team performs necessary assessments and scans

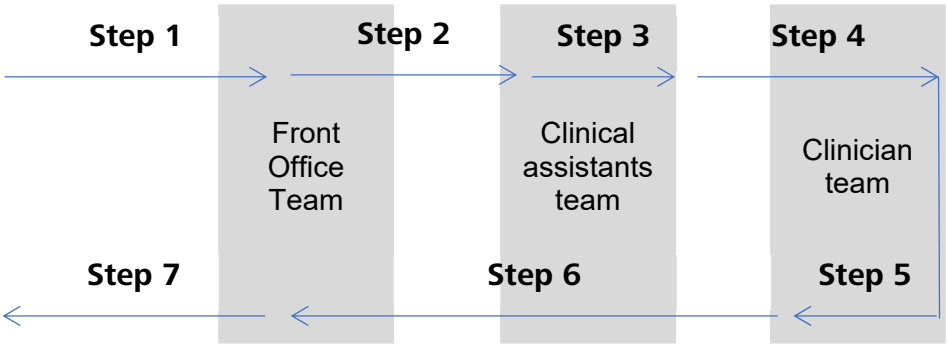
Step 4: The client and their records are handed over to the clinician team

Step 5: The clinician consults with the client

Step 6: The client and their records are handed over to the front office team.

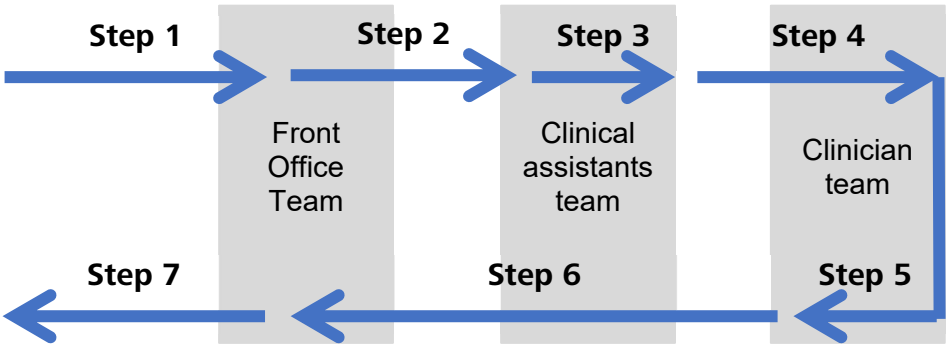
Step 7: The client makes payment and schedules future appointments before leaving.

On our organisation chart, these seven steps look like this -



When managing processes, we can be structured into our teams and the routine of our business processes can link us up with other teams. The habitual nature of the process is such that our relationship with other teams becomes a matter of habit and does not require additional effort to maintain. The processes become a form of organisational fabric that holds the teams together naturally. The repeated nature of the processes serves to strengthen the fabric. They 'tighten' up our organisation.

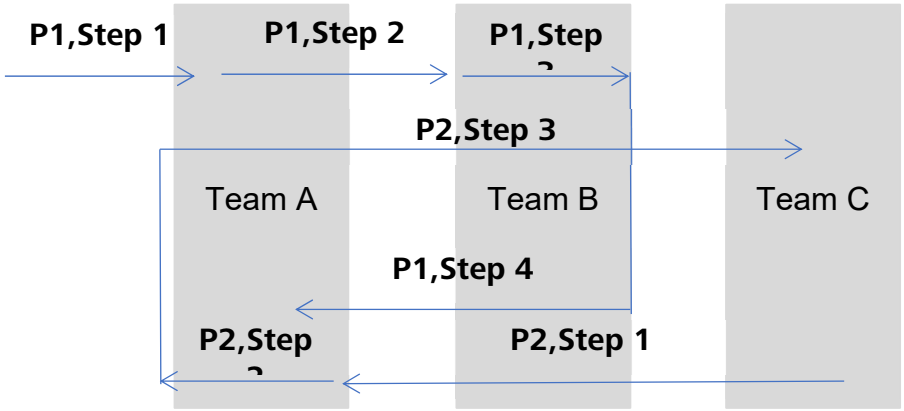
The repeated nature of these steps means the business processes can be considered as working across our structure, with stronger bold lines indicative of the reinforced nature of the work.



With mature processes, the linkages across teams are natural and self-reinforcing. The handover of work between teams becomes natural and automated. Each is performing their role, and the habitual nature of the process makes the interactions look seamless and natural.

Managing projects may also require a combination of functions, skills or expertise requiring participation across teams. But projects are typically doing unusual or unfamiliar work and so our interaction with other teams will require additional effort. Working with other teams on projects, while also working with our usual processes, can prove challenging. Our process work is habitual and familiar and will be what we gravitate towards. Our project work can be challenging and can become a source of tension in managing our own time and in managing our relationships and obligations with other teams. For project work, the fabric holding teams together is thinner and less reinforced by repetition.

It could look something like:

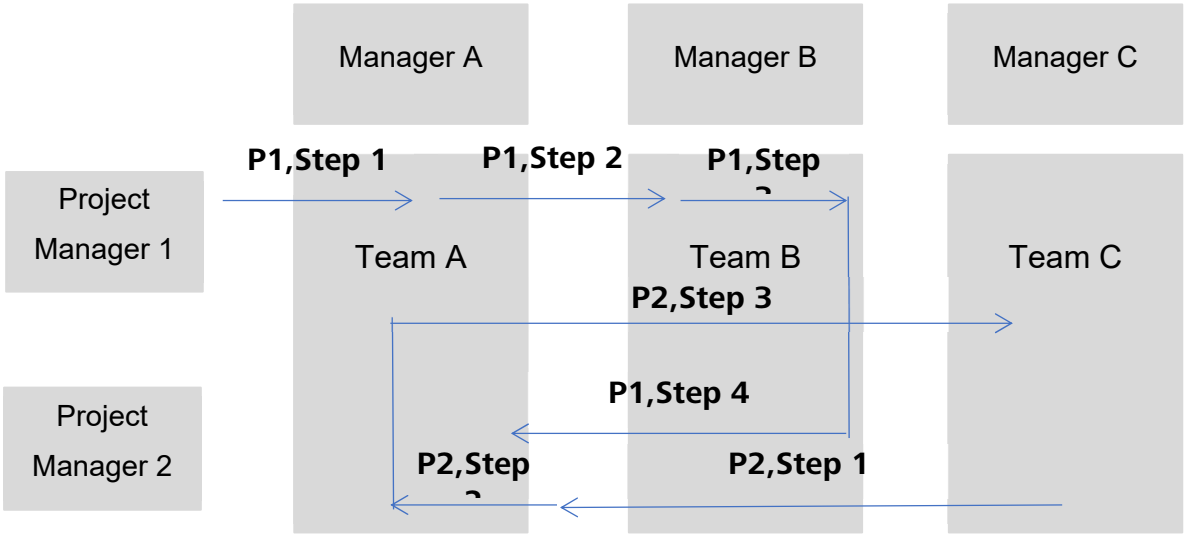


P1 is project 1

P2 is project 2

For projects, the linkages across teams are less natural and because of the unique nature of projects, they are not self-reinforcing.

To address this tension and the fact that projects trigger fewer routine links between teams, organisations often establish matrix organisation structures.



Members of teams A, B and C have standard reporting lines to their manager but they can also have project reporting arrangements with project manager 1 or project manager 2. In a matrix structure, reporting arrangements work vertically and horizontally.

As a staff member, our work will differ in a business that has a combination of project work and process work. At any time, we could have multiple obligations to our line manager and to project managers. Our adaptability and flexibility will be tested and will require negotiation and time management skills. Negotiation skills are required to work through the relative priorities of our work and to clarify expectations for the new and unfamiliar work that occurs in projects. Time management skills are required to ensure we set aside the time necessary to perform the tasks required of us by our line managers and by our project managers.

It is also important to understand the relationship between your work and that of others in a project. There may be dependencies between your task and that of others in the project. If your task is a predecessor to other tasks, they will not be able to start until you are finished.

The combination of process work and project work into teams adds to the sophistication and possibly to the complexity of managing organisations. To this end, management thinkers like Peter Drucker have suggested that for organisations managing larger projects, project work be separated from process work to enable staff and managers to be focused on specific pieces of work.

Appendix Three: RASCI model

Another model used for stakeholder definition is the RASCI model.

RASCI is an acronym made up of:

- **Responsible**: People or stakeholders who do the work. They must complete the task or objective or make the decision. Several people can be jointly *Responsible*.
- **Accountable**: Person or stakeholder who is the "owner" of the work. They must sign off or approve when the task, objective or decision is complete. This person must make sure that responsibilities are assigned in the matrix for all related activities. Success requires that there is only one person *Accountable*, which means that "the buck stops there."
- **Supportive**: persons or stakeholders that may provide help by providing resources to the Responsible person(s). They actively work with the Responsible person to carry the project to completion. Both Supportive and Responsible members have the same goals
- **Consulted**: People or stakeholders who need to give input before the work can be done and signed off on. These people are "in the loop" and active participants.
- **Informed**: People or stakeholders who need to be kept "in the picture." They need updates on progress or decisions, but they do not need to be formally consulted, nor do they contribute directly to the task or decision.

The model is used to produce a RASCI matrix for different tasks.

Task / Role	Role 1	Role 2	Role 3	Role 4	Role 5	Role 6
Task 1	R		C			S
Task 2	R		A	S	C	
Task 3	R	R	I	A		I
Task 4		S	C		R	
Task 5	A	C		I		
Task 6		I	C	C	S	R

Appendix Four: Risk Management Terminology

Risk is often characterised by reference to potential events and consequences.

Risk is expressed in terms of consequences and the likelihood (*the chance of something happening*) of occurrence.

Event

An occurrence or change in a particular set of circumstances

An event can be scheduled (an open day, dinner or prescribed burn) or unscheduled (an incident or accident). An event can include changes in the external environment that are relevant to achieving your objectives.

An event can consist of something not happening (e.g. the power does not come on).

Consequence

The outcome of an event affecting objectives

Consequences are categorised with respect to their severity and the project objectives.

Likelihood

The chance of something happening

Risk identification

The process of finding, recognising and describing risks

Risk identification involves the identification of the risk sources, events, their causes and consequences.

Risk analysis

The process to comprehend the nature of risk and then determine the level of risk

Risk analysis is necessary to categorise risks in terms of their likelihood and consequence and necessarily includes estimation of the consequences and likelihood.

Risk evaluation

The process of comparing the results of risk analysis with risk criteria to determine whether the risk and its magnitude are acceptable or tolerable.

Risk treatment

The process of modifying risk

The intervention process will act to reduce (mitigate) exposure to the identified risk resulting in a lower *residual risk*.

Control

The measure that is modifying risk

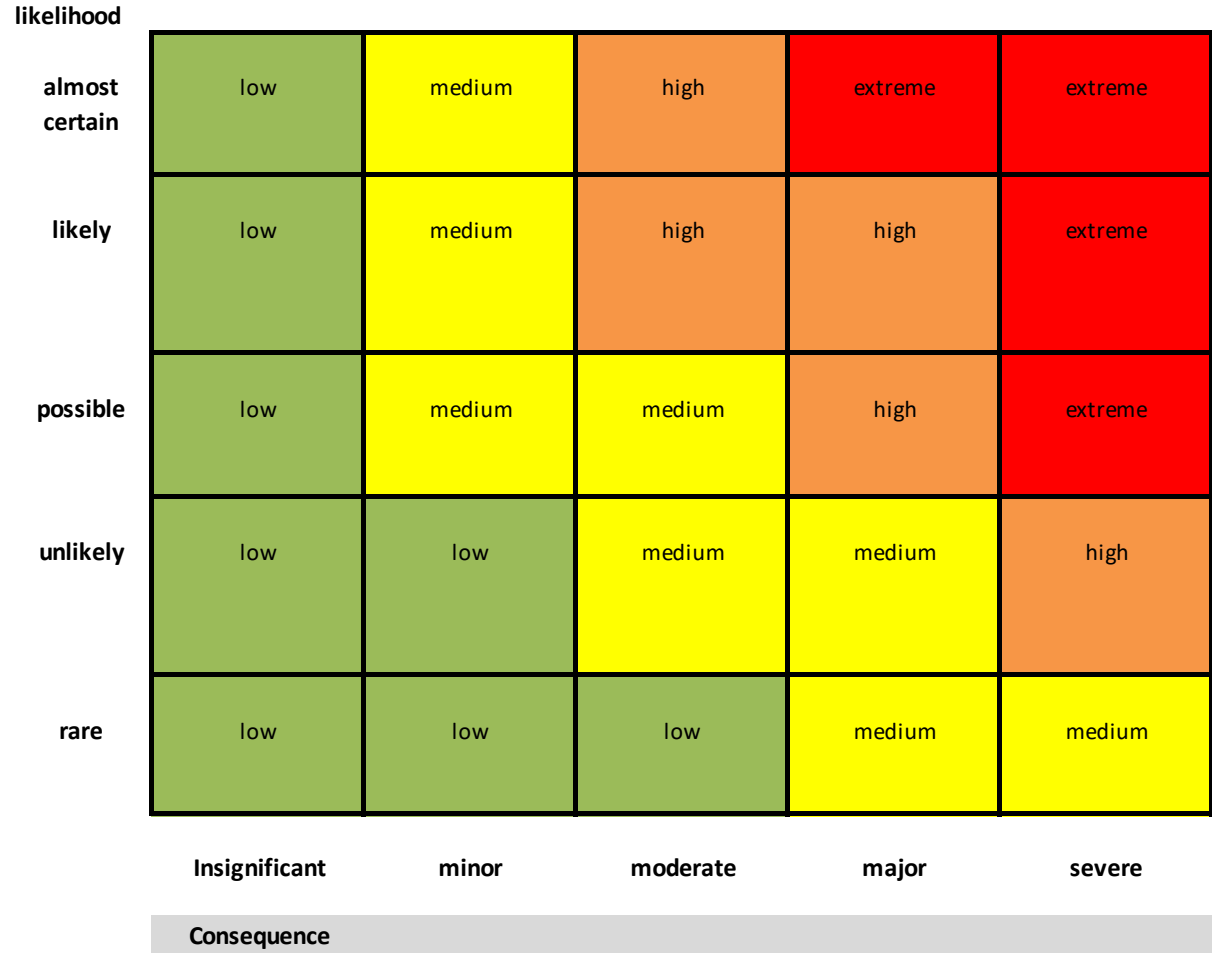
Includes processes, policies, devices or practices that modify risk.

Project Risk Register

A register of information about the identified risks and risk treatments

Risk Matrix

A representation of the relationships between likelihood, consequence and risk rating



Risk profile

A format for presenting risks for a particular area of business or project.

A risk profile is a presentation format that displays each risk rated by its *inherent risk rating* overlaid on the risk matrix. A second risk profile displays the same risks with the *residual risk rating* to make it clear how the treatments have or have not impacted the *initial risk rating*.

Inherent Risk Rating

The risk rating for the specific identified risks before taking into account any treatments or controls

The rating is calculated using the *consequences* and *likelihood* tables together with the *risk matrix* to come up with the rating. The resulting *inherent risk rating* will determine what level of treatment may be required.

Residual Risk Rating

The risk rating that remains following the application of the risk treatment

Optimism biases & managing project risk

Optimism is valuable and is possibly why we are embarking on a project in the first place.

"A significant positive relation emerges between optimism and coping strategies focused on social support and emphasis on positive aspects of stressful situations. Through the employment of specific coping strategies, optimism exerts an indirect influence also on the quality of life. There is evidence that optimistic people present a higher quality of life compared to those with low levels of optimism or even pessimists."
Source: "Optimism and Its Impact on Mental and Physical Well-Being" Authors Conversano, Rotondo, Lensi, Della Vista, Arpone, Reda, published in *Clinical Practice and Epidemiology in Mental Health, May 2010.*

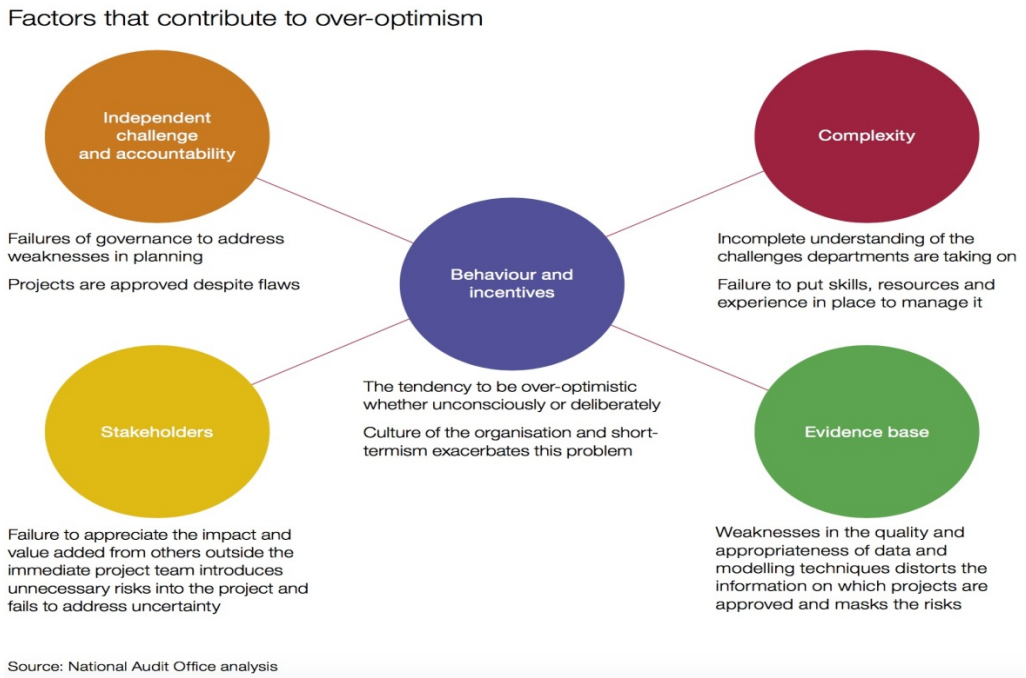
Beware - over-optimism can be detrimental to project management.

"Optimism bias (also known as unrealistic or comparative optimism) is a cognitive bias that causes a person to believe that they are at a lesser risk of experiencing a negative event compared to others. Optimism bias is quite common and transcends gender, race, nationality and age.[1]

Four factors exist that cause a person to be optimistically biased: Their desired end state; their cognitive mechanisms; the information they have about themselves versus others; and overall mood." Source: Wikipedia

The optimism bias is a major element in project failure. The National Audit Office in the United Kingdom has produced a report on the impact of over-optimism on project delivery. That report can be found at: https://www.nao.org.uk/wp-content/uploads/2013/12/10320-001-Over-optimism-in-government-projects.pdf

The report presents the following diagram, supported by case study examples, to demonstrate the factors that contributed to over-optimism in Government projects.



"Executives make decisions based on delusional optimism rather than on a rational weighting of gains, losses, and probabilities. They overestimate benefits and underestimate costs... as a result, they pursue initiatives that are unlikely to come in on budget or on time or to deliver the expected returns — or even to be completed. Kahneman, Daniel and Tversky, Amos (1977) *Intuitive prediction: Biases and corrective procedures*, Cybernetics Technology Office

In his book, *Thinking Fast and Slow*, Daniel Kahneman details his own experience of optimism bias and the importance of the outside view. He brought together a team to develop a curriculum to teach judgment and decision-making in schools. The team assembled and started planning how they would do it and how long it would take. After having worked successfully for a while, Kahneman decided to ask the group how long they thought it would take to complete their project. The consensus was around 2 years. He then consulted with someone with deep experience in such a project – his name was Seymour. His response had two pieces of information. First, only 40% of teams complete such projects and those that do take at least seven years.

The group then justified that it was above average and that it would complete the job and it would not take 7 years. The group continued with energy. They completed their task – it took eight years.

The group relied on an inside view and discounted an outside view.

The group suffered from the planning fallacy – estimates get made on a best-case scenario.

Our society also has a bias towards optimism. Entrepreneurialism demands optimism. Why would you start a business when the statistics say that 80% of businesses fail within the first five years? Most will respond – I am not average. This is consistent with studies that show that 90% of drivers think they are better than average.

"An unbiased appreciation of uncertainty is a cornerstone of rationality – but it is not what people and organisations want."

Optimism may be very useful in creating resilience, but too much of it can be very damaging for decision-making in complex circumstances.

Assessing risk for our project can be done at four levels:

1. Project Risk - The first is about the overall project and how it is designed and constructed and the levels of experience and buy-in from teams and critical stakeholders.
2. Plan & Scheduling Risk - The second is about the assumptions we have made in our design and planning.
3. External Risks – the third is by considering external factors and events, outside of our control, that could occur, impacting our project
4. Treatments – what are treatments (avoid risk, reduce risk, transfer risk, accept & manage risk) in place to help us manage these risks?

Appendix Five: PRAISE as a Business Case Structure

PRAISE - Business Case Elements

A summary of the elements of a business case includes:

Purpose

- Strategic and organisational impact – the impact of the project, issue or asset on the objectives of the organisation
- Relevant policy or legislation – any federal or state legislation or policy relevant to the initiative
- Recognised standards of excellence – Are there standards or requirements that need to be upheld relevant to this initiative?

Recent History

- Historical context behind the initiative – where has it emerged from?
- Trends that have led to the need for this project being contemplated (trends in activity and workload, trends in technology, social and demographic trends)
- Recent events that highlight an issue or opportunity
- The age of existing assets, technology or outdated approaches may be relevant.

Analysis

- Analysis of the current or default state – what will happen without change
- Analysis of opportunities that have arisen that warrant change
- Evidence of activity, utilisation, and workloads that highlight the need for change.

Insights

Conclusions, key findings and root causes of problems and the need for change.

Analysis and Insight can have second elements
Analysis (part 2)
Analysis of options
Cost-benefit analysis
Insights (part 2)
Selecting a preferred option

Strategy

- Project Development Strategy
- Stakeholder lists and the quality expectations of stakeholders
- Resource requirements – budget and skill requirements
- Assumptions and constraints being made
- Risk assessments.

Execution

- Project execution plan
- Calendar of events and stages
- Work Breakdown structure
- Change management plan

A narrative is an account of events that can be written or told.

A narrative is the telling and recounting of a story.

Narrative vs story

> *"Narrative is the choice of which events to relate and in what order to relate them – so it is a representation or specific manifestation of the story, rather than the story itself."*
>
> Source: Beemgee website - http://beemgee.com/blog/story-vs-narrative/

> *"The concept of narrative deals more with **how** the events are told. The narrative is the ordering of events into a consumable format.*
>
> *…… narrative is the method and means by which you construct the events of a story into a plot. It concerns itself with the sequence of the events, the medium on which they are told and the way these events are put together into one coherent unit*."
>
> Source: Aram Zucker-Scharff 8/9/2011. Website - http://hacktext.com/2011/09/story-vs-narrative-vs-plot-1205/

Narrative is the way the author or speaker chooses to structure events — the architecture of the story is comparable to the design of a building. Ultimately, a narrative is a way of organising the information of a story, strategy or proposal that helps it engage a reader or listener and help them make sense of the story, strategy or proposal. While a story is a sequence of events, the narrative recounts those events in its own way to emphasise some aspects of the story to enhance its impact on readers.

One way to consider the difference between narrative and story is to look at different perspectives from which a story can be told. While it is one story, it can be retold from the perspective of a person involved in the story (first person), from an outsider's perspective (third person) or a neutral perspective.

Sometimes in movies or books, a story will be told from different time perspectives – starting at the end and working back to the beginning to reveal the chain of events that lead to the ending and how the characters get to the end. The story is the factual sequence of events. The narrative is the method by which the author or narrator chooses to tell the story and how they want their audience to perceive it.

Introducing PRAISE

I have developed a narrative structure, PRAISE, to help policymakers and technical leaders retell the story behind their projects when there is a need to justify and convince decision-makers.

PRAISE is shorthand for a narrative structure with six components:

1. Purpose
2. Recent History
3. Analysis
4. Insight
5. Strategies (packaged solution)
6. Execution Plan (next steps)

The centrepiece of this narrative structure is that a change is needed and the reasons to support the change have been researched and understood. The narrative structure is designed to address the following questions:

1. Why is this subject matter relevant and important?
2. Why is there a need to change?
3. Why has the recommended change/project been selected?
4. How can we go about making the change?

In his book, *The Organised Mind*, Daniel Levitin details the human mind as having a four-circuit attentional system – one of which is the attentional filter. It is the attentional filter that has us immediately focus on importance and change. The attentional filter is the millions of neurons that are constantly monitoring our environment to select the most important things for us to focus on (and not to focus on). These neurons are collectively the attentional filter. They work largely in the background outside of our conscious awareness. Two principles used by this filter are change and importance – the brain is a great change detector.

The PRAISE narrative structure is designed to support decision-making by guiding the reader towards insights that reveal the need for, and the reasons for, change in an organisation. **Projects are a means to deliver change**. Change can include:

- New investments
- Changing a business or service delivery model
- Decommissioning a site or service
- Adding products or markets or eliminating products or markets.

The structure and model that follows have been influenced by the following sources:

1. A counselling method (Reality Therapy) designed to help people realise the need to change and to reach meaningful decisions that translate into practical action
2. Marketing - A system used for developing advertising campaigns designed to influence others and
3. Thinking Fast and Thinking Slow (as articulated by Daniel Kahneman) - our use of two thinking systems in our decision-making.

The counselling methodology is attributed to Dr William Glasser (author of *Choice Theory*). It is a method that is based on the principle that a person will act with conviction when they make their own well-informed decision. A good decision is related to a purpose they

believe to be important, an analysis of what is happening now, their own evaluation of whether that is working, some ideas about what can be done and a commitment to specific action.

The system used for marketing campaigns can be found in Phil Dusenberry's book, *One Great Insight is Worth a Thousand Good Ideas*. In his book, Dusenberry details his system – RAISE – Research, Analysis, Insight, Strategy, and Execution used for managing a brand and developing an advertising campaign. There are obvious links between this method and PRAISE.

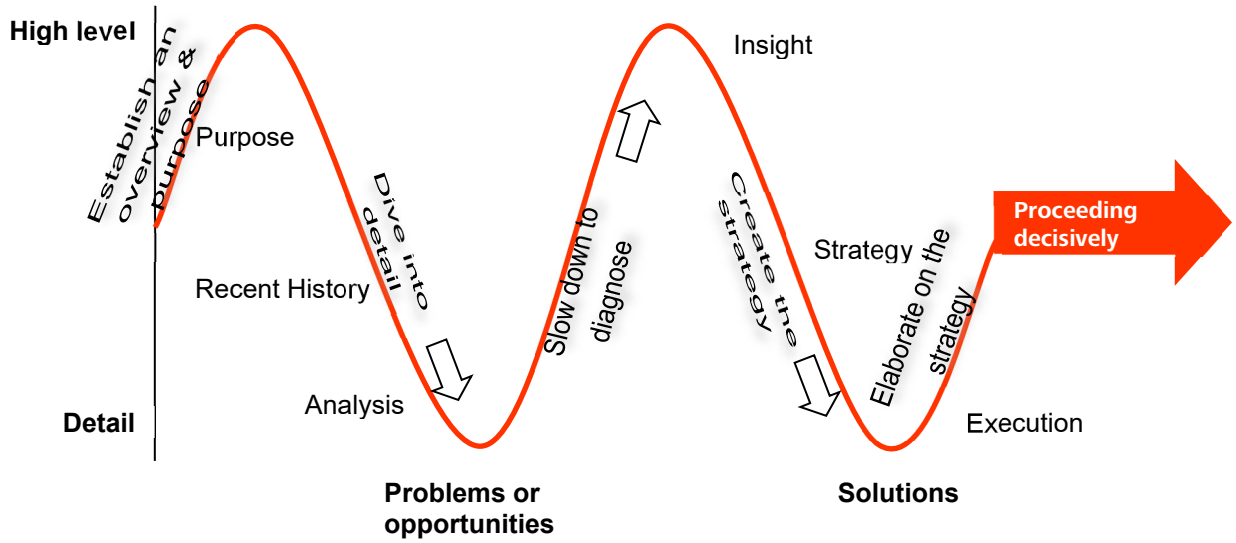
The two thinking systems popularised by Daniel Kahneman are:

1. System 1 operates automatically and quickly, with little or no effort and no sense of voluntary control.
2. System 2 allocates attention to the effortful mental activities that demand it, including complex computations. The operations of system 2 are often associated with the subjective experience of agency, choice and concentration.

The PRAISE narrative structure is designed for readers to be able to follow a flow or logic that makes high-quality decisions easier based on the substance of the evidence that we have brought together. The structure is also designed to address our questions:

1. Why is this subject matter relevant and important?
2. Why is there a need to change?
3. Why has the recommended change been selected?
4. How can we go about making the change?

The structure combines the fast/high-level thinking with the slow, more detailed thinking about how the situation has come to be (past and present), and how we propose to resolve it. The PRAISE narrative structure can be presented as guiding our readers' thinking process in the following diagram:

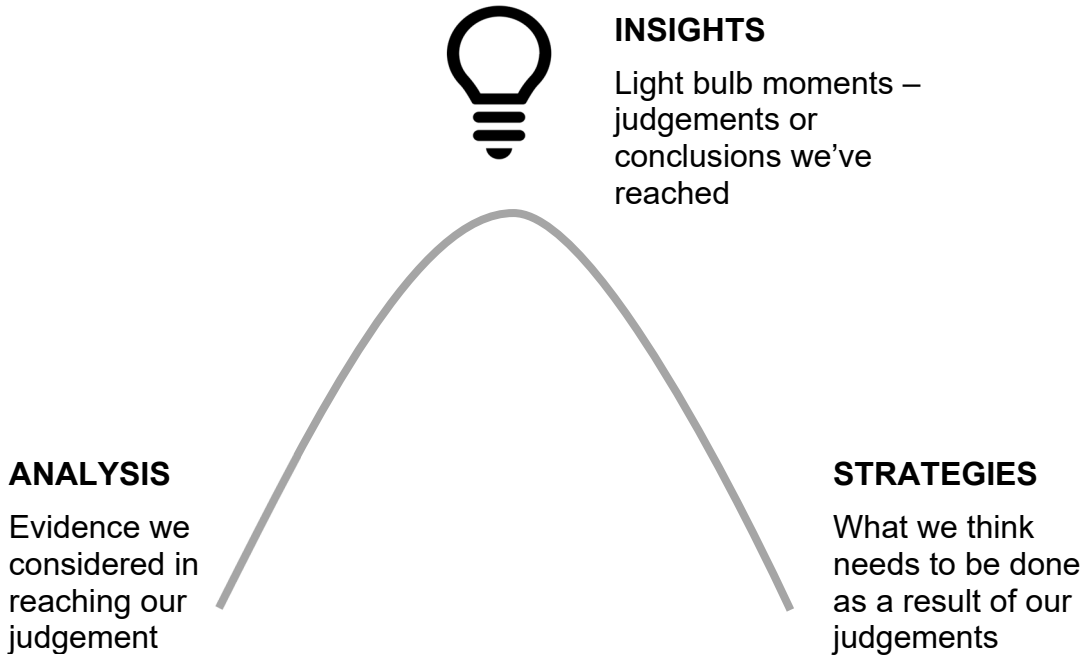


Details of each element of PRAISE follow, along with a summary of how they have been applied in a case study. The case study is from a Review of the Office of Case Management. The relevant section of the executive summary of that review report is detailed in each section. The full version of the Case Study is available on request from Mark.

Insight is at the heart of our reports, proposals or business cases

We lead with our insights. These are what our leader relies on to help them make decisions about their organisation - Insights from experts who have deep knowledge and experience.

Insight is the understanding of a specific cause and effect in a specific context.



How we structure our document around the insight section will depend on answers to the last two of our three why questions.

- Why is change needed?
- Why should we choose the recommended change?

If the reader has not yet accepted the need for change (the second why), this need, along with underlying reasons and causes, is presented in the insight section. Our analysis will need to lead the reader to this conclusion.

If the reader has accepted the need for change, it is the third why question (why should we choose a recommended change) that will be presented in the insight section of the document. The preceding sections of such a document will include a background that recaps and reminds the reader of the need to change and an analysis of options.

The PRAISE narrative structure is designed to guide readers to these insights, with the first three sections creating relevance and presenting information that identifies a need to change. The final two sections are designed to guide the reader towards resolution.

The narrative structure tries to present the reader with:

- Tension (we have a goal or a quest that is not being achieved due to obstacles or problems);
- A breakthrough (our insights, we understand what needs to change to resolve the tension); and
- Resolution (solutions and execution plans).

Purpose

We answer the first Why – Why is this subject matter relevant and important?

This section of the paper should provide the reader with a "Sense of Purpose" or aspiration regarding our project. This can be best stated in terms of outcomes that the project aims to deliver that matter to the reader. In effect, we are putting these outcomes and aspirations "at stake". The Purpose section will attempt to link our project with the stated goals and outcomes of the decision-makers and their constituency.

In storytelling terms, this is a quest or goal that matters to the reader. This is an important means by which to involve them in this story. It will impact their goals. We are using the goals and outcomes to engage with our readers and decision-makers.

The purpose section will also operate as a frame of reference for the document and is the section where we position our project into "the bigger picture" to give it context and highlight its systematic importance.

We can also use the Purpose section to outline what success and excellence look like for our project.

This section could be titled as:

- *Strategic Context*
- *Strategic Drivers*
- *Future State*
- *Our Reason for Being*
- *Goals and Objectives*
- *"The Why"*

Our intent – is to engage, inspire and link to the aspirations of the reader(s)

Business Case elements

- Strategic and organisational impact – the impact of the project, issue or asset on the objectives of the organisation
- Relevant policy or legislation – any federal or state legislation or policy relevant to the initiative
- Recognised standards of excellence – Are there standards or requirements that need to be upheld, relevant to this initiative

Purpose Example 1 - Office for Case Management summary

"The Government has made clear public statements demonstrating its commitment to better protect the most vulnerable members of our community and break the cycle of disadvantage. Legislation has created the Office for Case Management (the Office) that plays an independent and leadership role in meeting the Government's policy commitment.

The services delivered by the Office are of high public value. We value that each member of our society will be protected and supported when confronted with difficulties and dealing with disadvantages that could occur to any of us at any time and at no fault of our own. The importance and value of the Office is reinforced by stakeholders who, in addition to the case management services provided, value the independence of the Office and the advocacy it offers on behalf of vulnerable persons."

Purpose Example 2 – A Basic Case for Infrastructure

The Office for Case Management exists to meet legislative requirements to process cases on behalf of the Government. The processing of these cases is important to maintaining public faith in this public system (e.g. health, housing, legal). Containing waiting lists is critical to achieving good public outcomes and Government policy outcomes.

The Government has made strong policy commitments to ensuring excellence in the management of cases and to maintaining public faith in the system. There are accepted Australian benchmarks for the size of the waiting lists being managed by the Office. There are well-documented standards of excellence in managing cases, and there are well-documented standards guiding the use and age of case management infrastructure.

Recent History

Give the reader some historical background as to how the situation that we are trying to address has arisen. When did we start drifting away from the aspirations established in the previous sector? When did we become aware that there was a gap between our goals and reality?

This will help the reader understand why an issue has evolved, necessitating a change in approach and requiring a new project.

This section provides some time-based details behind the subject matter. If the subject matter is an organisation, this section will present details of the organisation's history – when it started, how it has changed, and specific events that are relevant to the business case for this project. If it is a business case for new infrastructure, there will be history to provide context for the age of the infrastructure, the activity and service it supports and its utilisation.

It is important that the recent history is provided with a sequence of events in chronological order.

May also be titled:

- *Background*
- *Historical Context*
- *How we got here*

Our intent is to build tension with credible evidence

Business Case elements

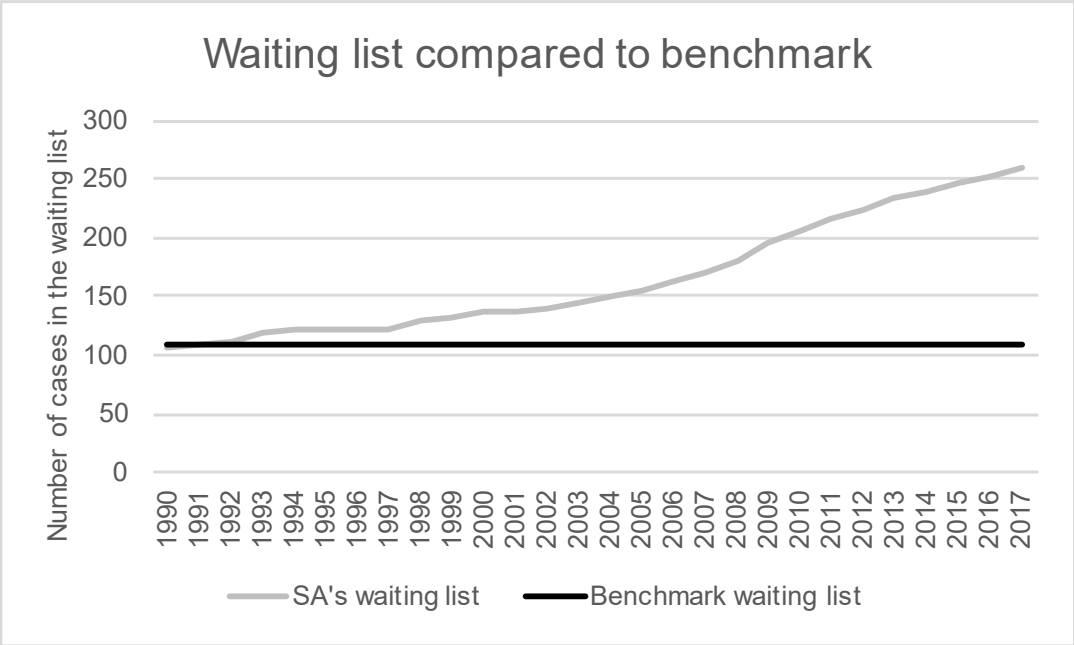
- Historical context behind the initiative – where it has emerged from.
- Trends that have led to the need for this project being contemplated (trends in activity and workload, trends in technology, social and demographic trends)
- Recent events that highlight an issue or opportunity
- The age of existing assets, technology or outdated approaches may be relevant.

Recent History Example 1 - Office for Case Management summary

"The Office was created in 1983 with 6 FTEs and grew to 9.5 FTEs in 1995 following a restructure. A successful budget bid in 2006 increased the staffing to 10.5 FTEs. The funding model for the Office allows for inflation growth but does not allow for changes in activity. In the last four years, demands for all services: case management (14% per annum), investigations (21 % per annum), enquiries (10% per annum) and outreach have grown rapidly."

Recent History Example 2 – A Basic Case for Infrastructure

There has been significant growth in the number of cases being processed by the office, evidenced by trends in case numbers. In the last ten years, there have been policy changes that have served to further increase the number of cases. Several measures have been put into place to improve the way cases are processed through the system and they have made the growth lower than it would otherwise have been. However, the growth in the number of cases is greater than the growth in processing cases. There has been trend growth in the backlog of cases as shown in the graph below.



Infrastructure is a critical ingredient in the processing of cases. The infrastructure capacity necessary to support the processing of cases was created over 25 years ago. There has been no material growth in this infrastructure capacity over that time.

Analysis

This section of the document presents facts and data to show the extent of current issues or opportunities that are the drivers for change. The analysis section can detail, with evidence, the issues and opportunities that exist.

The analysis builds the case for justifying change or for further investment. It should alert the reader to the gap between their aspiration and reality or alert them to the nature of what might be needed to take advantage of an opportunity.

Types of analysis that can be included are:

- Financial analysis – current (and projected) costs
- Analysis of activity and workload
- Analysis of performance and conditions
- Variance analysis
- Benchmarking analysis
- Risk analysis (identify key risks associated with the subject matter)
- Customer usage and feedback
- Staff issues and feedback
- Utilisation (activity vs capacity)

This section could also put forward some projections to show what the status quo scenario is for our topic.

Beware of too much detail in this section. Keep data to a summary level with more detailed data being provided in Appendices.

Can also be titled:

- *The Current State*
- *Where are we now?*
- *Issues*
- *Discussion*

Our intent – provide credible and appropriate detail that reveals a need for change and the reasons behind the current situation.

Business Case elements

- Analysis of the current or default state – what will happen without change
- Analysis of opportunities that have arisen that warrant change
- Evidence of activity, utilisation, and workloads that highlight the need for change

Analysis Example 1 - Office for Case Management summary

"Analysis has been performed of the workload and the way work is done in the Office and has concluded that workloads are growing rapidly and that the Office has taken steps to improve its efficiency and effectiveness. Benchmarking analysis has shown that when compared to interstate offices, workloads in South Australia are excessive. Other legislative requirements of the Office have been set aside to enable it to deal with the demands of increasing caseloads."

Analysis Example 2 – A Basic Case for Infrastructure

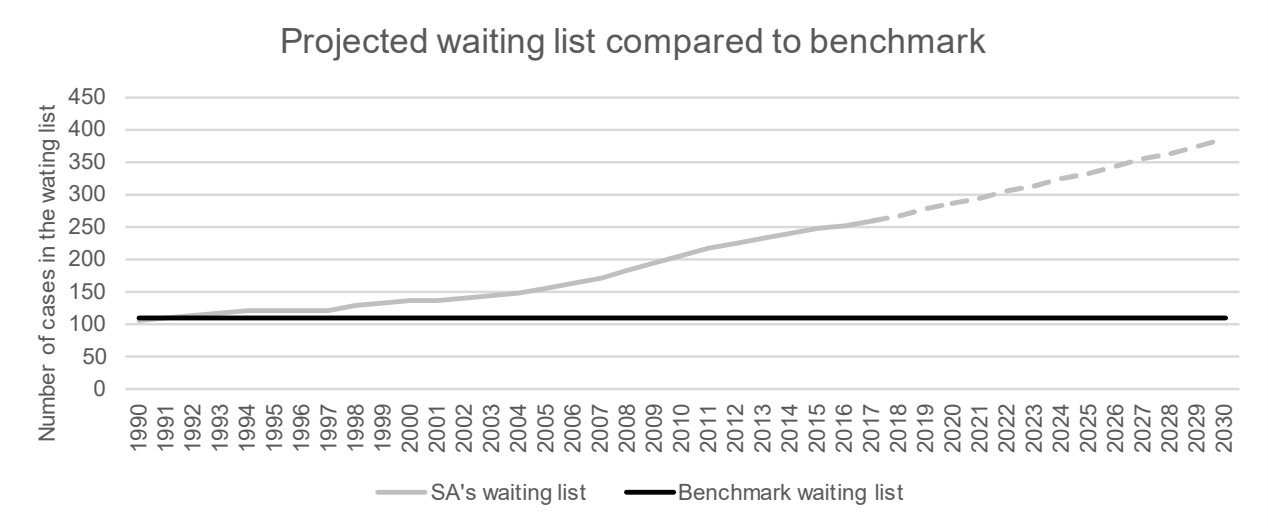
Projections for case management growth will see South Australia performing well below benchmark, with the growth in cases continuing to exceed the processing of cases. There will be a major growth in waiting lists that will materially impact the effectiveness of the system and public faith in it.

There has been an analysis of the current case management process that can improve processing times slightly but will not address the growth in waiting lists.

There has been an analysis of the utilisation of existing infrastructure assets. It is difficult to increase the utilisation of existing infrastructure, given the constraints on its use. These constraints occur due to the age of the infrastructure and due to the need to ensure basic quality standards in the processing of cases.

Alternate methods (e.g. 24-hour use of infrastructure and 24-hour processing of cases) have been considered but are not feasible.

Projected growth in the waiting list compared to the benchmark is presented in the graph below.



Insight

Insight is the act or result of understanding the inner nature of things.

This section should reveal why there is a need for change based on the understanding revealed in the previous sections of the narrative.

This section of the document brings together the materials presented in the previous three chapters (Purpose, Recent History and Analysis) by summarising the main conclusions for the reader. It does this to serve as a "bridge" between the current and historical view of the subject and the future recommended view of the subject.

The need for change or further effort should now be evident to the reader from the gaps between the aspirations and goals put forward in the *Purpose* section and the realities of the *Recent History* and the *Analysis* sections. This section should also point out the root cause(s) of the difficulties or shortcomings being experienced.

There can be cases where the conclusion from previous sections is that no change is required. This is made clear in the insight section.

Types of insights:

- A truth confirmed and restated – old information confirmed, truism
- Revelation – A discovery of why things are like they are - acceptance
- A realisation of the need to change
- The realisation of an opportunity
- A diagnosis
- The result of the evaluation of options or evidence - judgement
- An 'Ah ha' moment – When several thoughts thread together and make sense.

Can also be titled:

- *Findings*
- *Assessment/Evaluation of….*
- *Root Causes*
- *Diagnosis*

Our intent is to provide the reader/decision-maker with a breakthrough(s) that lead naturally towards the solution section, establishing strong links between what is wrong and what will be proposed as a strategy or solution.

Insight Example 1 - Office for Case Management summary

"The functions of the Office specified in the legislation are not being performed to the extent required, with flow-on impacts associated with failures to exercise a duty of care and failures to comply with legislative requirements. This is a risky situation for the Office and the Government. The stresses within the system present real and present risks of public failures to meet legal obligations and exercise duties of care that are likely to trigger litigation.

The root causes are the growth in demand, which is outside the control of the government, and a deficient funding model that is within the control of the government. A funding model and budget process that ignores growth in caseloads and that requires the Office to repeatedly bid and negotiate additional funds is at odds with the independence of the role, with the legally binding nature of the cases being managed and appears to ignore the duty of care implications of resource shortfalls."

Insight Example 2 – A Basic Case for Infrastructure

To meet waiting list targets, there needs to be an increase in the number of cases processed. Changes of policy and changes of practice have been implemented but have not addressed backlogs. Alternate ways of increasing case processing have been explored but will not address backlogs.

Increased infrastructure capacity and a commensurate increase in staff to process cases are required to achieve the goal of reducing the backlog and maintaining public faith in the system.

Strategy

This section of the business case directs the reader to consider solutions to address the conclusions and root causes presented in the previous section. It introduces our project as a solution, as a means to achieving change. Our projects could be one of several options.

This may require some options to be put forward and compared with a recommended option emerging from the section. Such an approach will require options to be described and the basis for comparison to be made clear.

The Strategy section can include estimated costs for each option and the preferred option. This section of the document could include an evaluation of these treatment options to reach a preferred solution. It could use quantitative evaluation techniques like cost-benefit ratios, net present values or qualitative evaluation techniques against business drivers. The criteria used to compare options should be linked with business drivers presented in the *Purpose* section.

In this way, we address the third 'why' question - ***Why has the recommended change been selected?***

Can also be titled:

- *What needs to be done?*
- *Measures required*
- *Plans to address Gaps*
- *Proposed approach*

Our intent – provide the decision maker with the changes and approaches necessary to resolve the tensions presented earlier in the report.

Business Case Elements

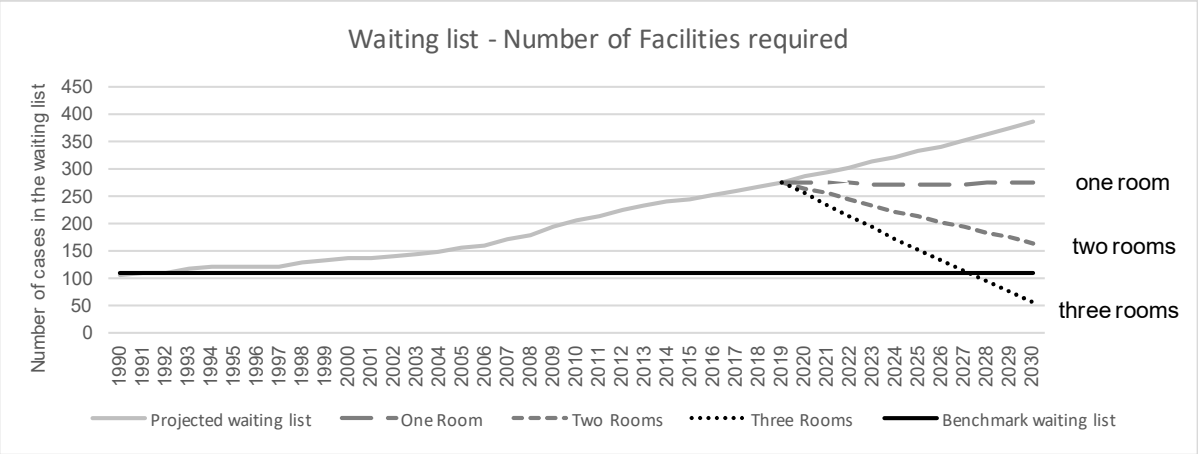
- Project Development Strategy
- Stakeholder lists and the Quality expectations of stakeholders
- Resource requirements – Budget and skill requirements
- Assumptions and constraints being made
- Risk assessment

Strategy Example 1 - Office for Case Management summary

"Addressing these shortcomings requires a revised approach to the structure, resource base and funding model of the Office. A revised structure for the Office consisting of 18.5 FTEs is recommended along with a supporting resource plan. This structure and resource plan have been recommended based on a reasonable caseload and based on the reinstatement of positions required for education and community programs that were part of the original structure of the Office. It is recommended that the funding model for the Office be changed so that the Office receives a level of funding linked to demand for its services as a case manager without compromising its duty of care or compromising the standard of its services."

Strategy Example 2 – A Basic Case for Infrastructure

Modelling has been done of the growth in cases and the growth in the number of facilities (e.g. operating theatres, beds, rooms, offices) required. This modelling has estimated that to increase the number of cases processed to eliminate the waiting list gap from the benchmark, three additional facilities are required, along with extra staff to operate and process cases in these facilities.



There are options for increasing the processing capacity

- Build the capacity (new building)
- Renovate existing assets to create capacity
- Rent or lease capacity.

Each of these options has been evaluated based on cost, timeliness, feasibility and risk. The recommended option is for a new building, near existing infrastructure, with three new rooms.

Execution

The *Execution* section of the document provides the reader with details of what they can expect to happen should they approve the business case.

The *Execution* section contains more detail on the recommended strategy/solutions put forward in the previous section and demonstrates that the recommended approach has been thought through in some detail.

It would not be unreasonable for the *Execution* section to have an instructional tone where the reader is being instructed to follow a sequence of steps to implement the recommended solution(s).

This section could also include:

- A timetable or summary Gantt chart
- A project budget
- Project Governance arrangements

Can also be titled

- *Next Steps*
- *Where to from here?*
- *Details for the Preferred Option*
- *Implementation/Action Plan*

Our intent – provide the decision maker with an instruction-based guide on how to proceed showing the solution we propose has been thought through.

Business Case elements

- Project execution plan
- Calendar of events and stages
- Work breakdown structure
- Change management plan

Execution Example 1 - Office for Case Management summary

The following details the recommended steps required to implement the solutions:

Immediate

1. Submit a budget bid for the amounts shown in Figure 14 to the Treasurer
2. Immediately revise case manager job and person specs to broaden qualifications and add decision-making skills to the personal skills requirement
3. Recruit additional case managers to address caseload excesses.
4. Develop a job and person specification for the Business Manager position.

Within 6 months

1. Recruit a Business Manager
2. Seek agreement on a revised approach to funding the office (as detailed above) with the Treasurer
3. Seek to have the remuneration of the CEO considered by the Remuneration Tribunal
4. Review the classifications of:
    a. The Lead Case Manager
    b. The Office Administration staff
5. Develop job and person specifications for the position of Liaison Officer to the Authority
6. Develop an accommodation plan.

Within 12 months

1. Implement accommodation changes
2. Recruit the Liaison Officer to the Authority, Education Officers and an admin officer

Execution Example 2 – A Basic Case for Infrastructure

A major infrastructure project is proposed with the outcomes detailed in the previous section. To ensure continuity of service, it is proposed that a separate project team be established within the agency to undertake these works.

The immediate work of the project team will be to:

- Procure more detailed designs and costings
- Navigate a range of government approval processes (Cabinet, Parliamentary Works)
- Seek specific planning approval for this initiative.

The purpose of these steps is to have this project able to go to market to establish a construction contract and detailed construction plans for the new facilities.

Appendix Six: Office for Case Management Executive Summary

The State Government has made clear public statements demonstrating its commitment to better protect the most vulnerable members of our community and break the cycle of disadvantage. Legislation has created the Office for Case Management (the Office) that plays an independent and leadership role in meeting the Government's policy commitment.

The services delivered by the Office are of high public value. We value that each member of our society will be protected and supported when confronted with difficulties and dealing with disadvantages that could occur to any of us at any time and at no fault of our own. The importance and value of the Office is reinforced by stakeholders who, in addition to the case management services provided, value the independence of the Office and the advocacy it offers on behalf of vulnerable persons.

The Office was created in 1983 with 6 FTEs and grew to 9.5 FTEs in 1995 following a restructure. A successful budget bid in 2006 increased the staffing to 10.5 FTEs. The funding model for the Office allows for inflation growth but does not allow for changes in activity. In the last four years, demands for all services: case management (14% per annum), investigations (21 % per annum), enquiries (10% per annum) and outreach have grown rapidly.

Analysis has been performed of the workload and the way work is done in the Office and has concluded that workloads are growing rapidly and that the Office has taken steps to improve its efficiency and effectiveness. Benchmarking analysis has shown that when compared to interstate offices, workloads in South Australia are excessive. Other legislative requirements of the Office have been set aside to enable it to deal with the demands of increasing caseloads.

The functions of the Office specified in the legislation are not being performed to the extent required, with flow-on impacts associated with failures to exercise a duty of care and failures to comply with legislative requirements. This is a risky situation for the Office and the Government. The stresses within the system present real and present risks of public failures to meet legal obligations and exercise duties of care that are likely to trigger litigation.

The root causes are the growth in demand, which is outside the control of the government, and a deficient funding model that is within the control of the government. A funding model and budget process that ignores growth in caseloads and that requires the Office to repeatedly bid and negotiate additional funds is at odds with the independence of the role, with the legally binding nature of the cases being managed and appears to ignore the duty of care implications of resource shortfalls.

Addressing these shortcomings requires a revised approach to the structure, resource base and funding model of the Office. A revised structure for the Office consisting of 18.5 FTEs is recommended along with a supporting resource plan. This structure and resource plan have been recommended based on a reasonable caseload and based on the reinstatement of positions required for education and community programs that were part of the original structure of the Office. It is recommended that the funding model for the Office be changed so that the Office receives a level of funding linked to demand for its services as a case

manager without compromising its duty of care or compromising the standard of its services.

Appendix Seven: A Basic Case for Infrastructure

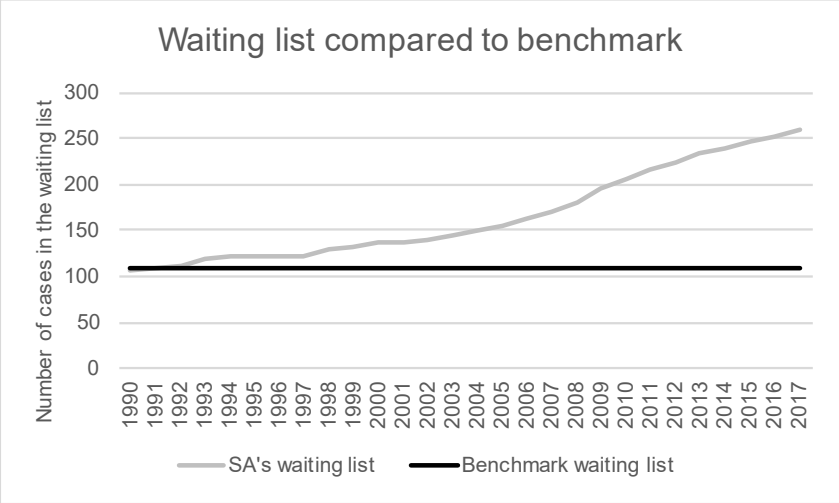
Purpose

The Office for Case Management exists to meet legislative requirements to process cases on behalf of the Government. The processing of these cases is important to maintaining public faith in this public system (e.g. health, housing, legal). Containing waiting lists is critical to achieving good public outcomes and Government policy outcomes.

The Government has made strong policy commitments to ensuring excellence in the management of cases and to maintaining public faith in the system. There are accepted Australian benchmarks for the size of the waiting lists being managed by the Office. There are well-documented standards of excellence in managing cases, and there are well-documented standards guiding the use and age of case management infrastructure.

Recent History

There has been significant growth in the number of cases being processed by the office, evidenced by trends in case numbers. In the last ten years, there have been policy changes that have served to further increase the number of cases. Several measures have been put into place to improve the way cases are processed through the system and they have made the growth lower than it would otherwise have been. However, the growth in the number of cases is greater than the growth in processing cases. There is trend growth in the backlog of cases. There has been trend growth in the backlog of cases as shown in the graph below.



Infrastructure is a critical ingredient in the processing of cases. The infrastructure capacity necessary to support the processing of cases was created over 25 years ago. There has been no material growth in this infrastructure capacity over that time.

Analysis

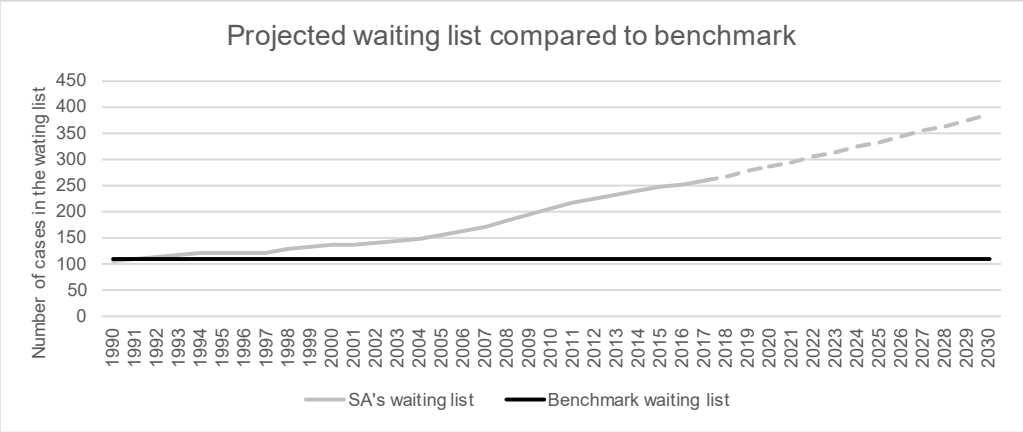
Projections for case management growth will see South Australia performing well below benchmark with the growth in cases continuing to exceed the processing of cases. There will be a major growth in waiting lists that will materially impact the effectiveness of the system and public faith in it.

There has been an analysis of the current case management process that can improve processing times slightly but will not address the growth in waiting lists.

There has been an analysis of the utilisation of existing infrastructure assets. It is difficult to increase the utilisation of existing infrastructure given the constraints on its use. These constraints occur due to the age of the infrastructure and due to the need to ensure basic quality standards in the processing of cases.

Alternate methods (e.g. 24-hour use of infrastructure and 24-hour processing of cases) have been considered but are not feasible.

Projected growth in the waiting list compared to the benchmark is presented in the graph below.



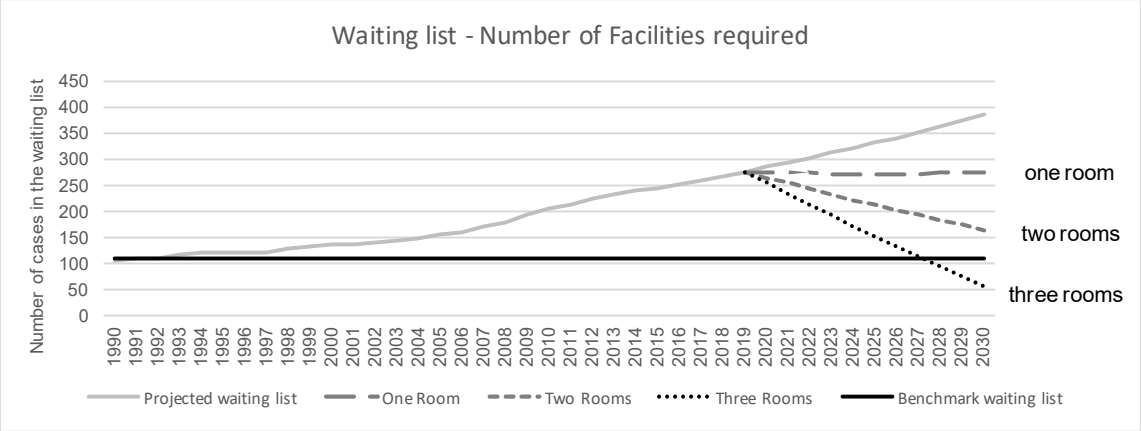
Insights

To meet waiting list targets, there needs to be an increase in the number of cases processed. Changes of policy and changes of practice have been implemented but have not addressed backlogs. Alternate ways of increasing case processing have been explored but will not address backlogs.

Increased infrastructure capacity and a commensurate increase in staff to process cases are required to achieve the goal of reducing the backlog and maintaining public faith in the system.

Solution (Identifying our project)

Modelling has been done of the growth in cases and the growth in the number of facilities (e.g. operating theatres, beds, rooms, offices) required. This modelling has estimated that to increase the number of cases processed to eliminate the waiting list gap from the benchmark, three additional facilities are required, along with extra staff to operate and process cases in these facilities.



There are options for increasing the processing capacity

- Build the capacity (new building)
- Renovate existing assets to create capacity
- Rent or lease capacity.

Each of these options has been evaluated based on cost, timeliness, feasibility and risk. The recommended option is for a new building, near existing infrastructure, with three new rooms.

Execution (proceeding with our project)

A major infrastructure project is proposed with the outcomes detailed in the previous section. To ensure continuity of service, it is proposed that a separate project team be established within the agency to undertake these works.

The immediate work of the project team will be to:

- Procure more detailed designs and costings
- Navigate a range of government approval processes (Cabinet, Parliamentary Works)
- Seek specific planning approval for this initiative.

The purpose of these steps is to have this project able to go to market to establish a construction contract and detailed construction plans for the new facilities.