

Investment Management 2017

Facilitator Forum

Overview and changes to the IMS
and facilitation practice

Agenda

- Context for the IMS review and update
- Findings from initial consultation and review
- Summary of changes
- Changes to current practice:
 - Preparation and evidence
 - Uncertainty and real options analysis
 - Problem Trajectory – unpacking cause & effect
 - Benefit – measures, baselines and targets
 - Response – Options shaping, KPI alignment, generating report
 - Solution – Cost and Timeframe, shaping solution
- Accreditation
- Questions

- The 2017 IMS update is the first major policy review of the IMS in five years.
- Substantial interest from departmental users to retain the framework's currency
- The update is needed to:
 - Address feedback and known limitations with existing processes
 - Raise practice and output quality to meet increasing expectations
 - Align the IMS with broader Government policies and priorities
 - Formally recognise the importance of dealing with uncertainty when developing investments, and emerging and increasingly important Government policy requirement.

Findings

Overarching comments were positive and indicated that IMS is generally working well and is seen as a key mechanism to aid investment decision-making and business case development

Why make changes?

“a flawed ILM (IMS) process can result in a deeply flawed business case (noting several tens if not hundreds of thousands of dollars could be expended on a poorly developed business case that is unlikely to be supported or if supported unlikely to delivery the intended benefits)”

- In principle IMS deals with the concept of managing uncertainty but from a government/DTF perspective this needs to be strengthened for major infrastructure investments with long lifecycles, high cost and high complexity. real options analysis.
- Detailed real options analysis is outside the scope of IMS workshops and belongs in business case development and shaping of project options. However IMS can/should be a trigger for real options analysis where significant uncertainty is identified.

Findings

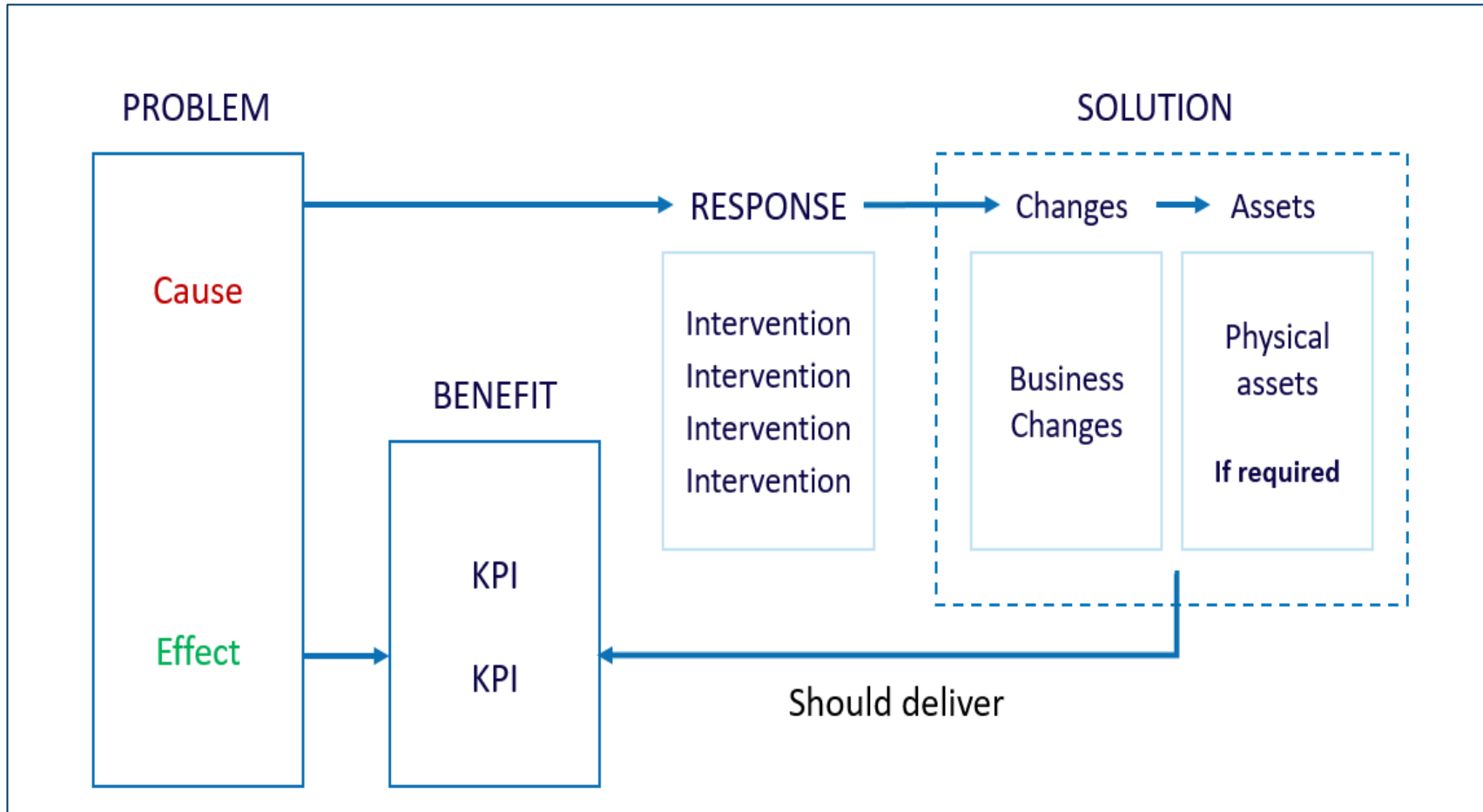
Improvement opportunities

- Provide more direct instruction/training for departments regarding the rigor, preparation and expectations and scheduling of IMS workshops and the role and expectations of participants.
- Reinforce relationship between the IMS documents and the business case and maintaining currency and alignment between these documents.
- Improve problem identification and precision. Too often the focus is on a symptom rather than root cause. Problems also fail to tell an evidence based story of the effect...that is a measurable end consequence. A stronger logic flow throughout the maps is required to align Problem and Benefit with the Response and Solution.
- Evidence supporting Benefit Definition is often weak and the relationship between Problem and Benefits and KPIs needs strengthening.
- Strategic Response workshop is under huge time pressures that can compromise the outcome. The focus should initially be on shaping genuine strategic options that demonstrate consideration of demand, productivity and supply levers. The alignment between interventions, grouping and KPIs is not sufficiently transparent.
- Solution workshop often fails to demonstrate real value – Investor doesn't turn up. Need to emphasise that this is an indicative solution and subject to amendment with further analysis.

What remains the same in IMS 2017

- Key principles of IMS:
 - Informed
 - Evidence based
 - Decisive
 - Focused
 - Immediate
 - Clear
 - Facilitated
- Logic flow across the ILM and the case for investment is robust, clear and easy to understand
- Primary purposes:
 - Investment filtering
 - Initial decision to proceed to full business case
 - Assist in business case development
 - Ongoing reference for in-flight projects
- 4 workshops of 2 hours duration
- Investor plus up to 7 others who are the best thinkers and know the most

Logic flow of an investment story is robust and transparent



What's different in IMS 2017

Major Changes

- Preparation is required before **each** workshop
- Uncertainty must be considered and where relevant recorded as part of the products from each workshop. Recommendation for Real Options Analysis is made in the Response and Solution workshops.
- Problems must be unpacked in a methodical and structured manner and a record circulated to the participants.
- Response workshop has been reshaped to support better, discrete options development, closer alignment between intervention and KPIs, and targeted assessment.
- Solution Definition workshop reports cost and timeframe for all options and confirms ranking prior to detailing the specific solution of the preferred option.

What's different in IMS 2017

Minor Changes

- Amendment to the '16 Questions' to incorporate consideration of uncertainty.
- Clearer specification of attendees and rationale for varying participants.
- Clearer expectations for department about preparation, participants, timing and number of workshops.
- Removal of “strategic” from Response and Interventions labels.
- Minor changes to templates to address uncertainty and improve usability.

Practice Change

Preparation & evidence is required prior to each workshop

Each workshop in the IMS suite has a specific focus and evidence is required to support the discussion in each workshop. Facilitators should advise department clients about the need for evidence and type of evidence required.

A core of approximately 60% of participants in the Problem Definition workshop will continue throughout all workshops. Other participants will be invited based on expertise and expected contribution at specific workshops.

Early engagement with the Investor is vital and ideally occurs at least 2-3 weeks prior to the first workshop

Practice Change

Consideration of uncertainty and real options analysis

There is an increased focus on improving the planning and delivery of infrastructure investments, and on using real options analysis to manage related uncertainty.

Uncertainty, its sources and its potential impact on benefit delivery, option selection and solution design is considered in all workshops and where relevant this is recorded in IMS documents.

The role of the IMS is to identify uncertainty and its impacts on an investment and, where those impacts are potentially significant, recommend further investigation, Real options analysis is outside the scope of the IMS.

DTF is updating its Investment Lifecycle Guidance to provide advice on incorporating real options analysis when developing business cases and procurement strategies for significant asset related investments

Risk and uncertainty

Risk is a variance (either positive or negative) from an expected outcome.

- Risks usually apply to the delivery of a project.
- They are inside the project team's control to minimise and mitigate to achieve the defined scope and expected benefits.
- The Response Definition and Solution Definition workshops identify the key risks related to achieving an investment's benefits, for further analysis in the business case.

Uncertainty is an event or change in conditions.

- Uncertainties usually relate to the problem or investment need.
- They are usually external factors outside the project team's control.
- They can result in a different future state to that anticipated or assumed in the business, and can impact the need for an investment and can require a change in response.
- These events include technological developments, major shifts in markets and economic conditions, the behaviour of other organisations, demographic and societal structures, or the natural environment. If such events occur they can have both positive and negative impacts on benefit delivery.

Real options analysis

Real options analysis

- Real options analysis is an investment evaluation and decision-making framework which introduces more flexibility to the management of infrastructure projects that are **significantly affected by uncertainty**.
- It assists Government make investments that are more adaptable over time and better able to meet the community's evolving needs
- May be recommended when primarily asset investments are **significant, high cost and complexity and have a medium – long lifecycle**

Practice change

DTF requires participants to consider uncertainty during each IMS workshop. Participants should consider how their investment may be impacted by uncertainty, and how the preferred response might change if assumptions don't hold or future conditions do not unfold as expected.

Requirement 1: If uncertainty is identified during any workshop, this should be captured within the workshop outputs, and must be considered, tested and addressed in the business case (if the proposal proceeds to that stage).

Requirement 2: If the uncertainty identified is significant, and the proposal is asset-related, DTF expects departments to undertake real options analysis to inform business case development.

If participants do not identify significant uncertainty during the four IMS workshops, and real options analysis is not considered warranted, the group must undertake a feedback loop at the end of the fourth workshop.

Requirement 3: At the end of the Solution Definition workshop, review the Decision-Maker's Checklist and test:

- Has the investment need been correctly defined – are we considering the right problem?
- Under what conditions would the preferred solution be a sub-optimal response?
- Under what conditions would an alternative investment strategy be preferred?
- Under what conditions would we regret this investment?

Timing of real options analysis

Real options analysis should be undertaken as early in the investment lifecycle as possible, either prior to or as part of the full business case.

- In some instances the first workshop may identify that the investment need is subject to uncertainty to such an extent that real options analysis could help define the problem and benefits. In other instances, there could be value in going through the first three workshops, and using the outputs to inform real options analysis.
- Real options analysis of an investment should document:
 - The investment need, including how demand might change in response to an event or altered conditions
 - The expected benefits, and how these might change given different future states
 - Response options, and including responses to alternative investment trajectories and future states
 - The preferred solution(s), including assessing under what conditions this solution would be sub-optimal, an alternative approach would be preferred, and/or the investment would be regretted.
 - Where real options analysis is undertaken, this should be used to inform the business case and would supersede the IMS outputs (or the IMS outputs should be updated).

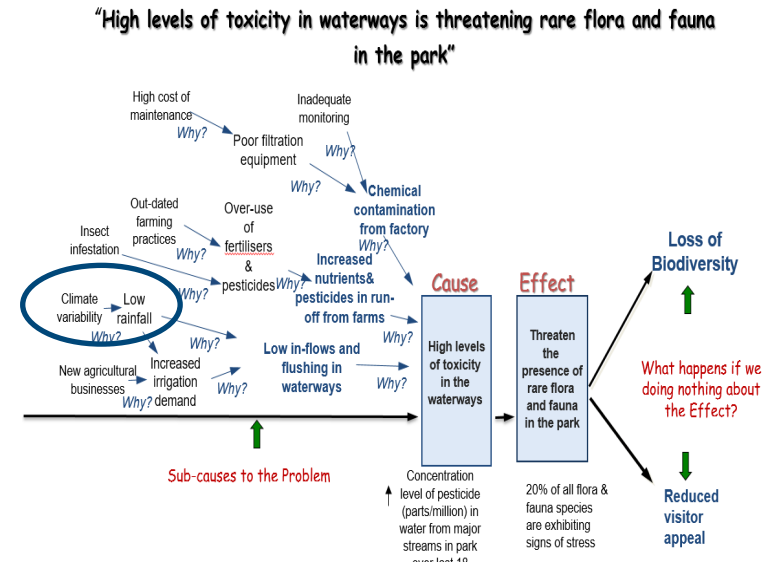
16 Questions Investment decision- makers' checklist

PROBLEM	BENEFITS	RESPONSE	SOLUTION
1. Is it clear what the problem is that needs to be addressed - both the <i>cause</i> and <i>effect</i> ?	5. Have the benefits that will result from fixing the problem been adequately defined?	9. Has a reasonable spread of <i>interventions</i> been identified and packaged into sensible response options?	13. Consistent with the preferred response option, has a reasonable <i>spread of project options</i> been analysed?
Yes Partial No	Yes Partial No	Yes Partial No	Yes Partial No
2. Is there <i>sufficient evidence</i> to confirm both the cause and effect of the problem?	6. Are the benefits of high value to the government?	10. Is there evidence to demonstrate that the response options are feasible and can respond to future uncertainty?	14. Is the recommended solution the <i>best value for money</i> action, and have opportunities for building flexibility to deal with uncertainty been considered?
Yes Partial No	Yes Partial No	Yes Partial No	Yes Partial No
3. Does the problem need to be addressed <i>now</i> and by this government?	7. Are the KPIs SMART and will they provide strong evidence that the benefits have been delivered?	11. Were the options <i>evaluated fairly</i> to reflect their ability to respond to the problem, deliver the benefits?	15. Is the solution <i>specified clearly and fully</i> and have opportunities for adding value been identified and costed? (all business changes and assets)
Yes Partial No	Yes Partial No	Yes Partial No	Yes Partial No
4. Does the defined problem capture its full extent/scope including sources of future uncertainty?	8. Have the sources of uncertainty and key dependencies critical to benefit delivery been considered?	12. Is the <i>preferred response option</i> the most effective way to address the problem and deliver the benefits?	16. Can the solution really be delivered (cost, risk, timeframes etc.)?
Yes Partial No	Yes Partial No	Yes Partial No	Yes Partial No

Considering uncertainty in IMS workshops

Problem definition

- Consider the organisation's operating environment and the expected future state where this **problem** exists.
- Where participants identify significant uncertainty about how the future may turn out, you should consider and record its potential impacts on investment success.
- This will typically be captured in the cause and effect analysis diagrams from the whiteboard.



Benefit definition

- Consider whether the **realisation of any of the proposed benefits** may be materially affected by **uncertainty**.
- Where participants identify significant uncertainty about how the future may turn out, you should consider and record its potential impacts on investment success.

Uncertainty

Unforeseen changes in economic conditions (whether favourable or adverse) have the greatest potential to affect the nature and timing of benefit delivery, and the achievement of the targets. Most critical are the rate of growth of local emerging industries, and levels of overseas demand for agricultural commodities. A real options workshop will be undertaken as part of business case development to ensure that the investment is sufficiently flexible to respond to such changes.

Interdependencies

Benefit delivery assumes no material changes in State and Federal policies in respect of economic development and regional transport infrastructure. This Benefit Map also assumes that overall project delivery is on time (commencing 7/2018) and within budget, and that there are no material changes to scope.

Considering uncertainty in IMS workshops

Response definition

- A deliberate assessment of how effectively **each response option** deals with **uncertainty** is an important element of this workshop.
- Consider what circumstances would lead to the preferred response being ineffective or inappropriate, and where a different response would be preferable.

Solution definition

- A deliberate assessment of how effectively the **solution** deals with **uncertainty** is an important element of this workshop.
- Consider the operating environment and supply markets & what circumstances would lead to the recommended solution being ineffective or inappropriate, and where a different response would be preferable.

Option 5: Build capacity for future growth in demand

This option focuses on expanding capacity of Oldtown Port and building new infrastructure to manage forecast demand and growth. Port facilities will be modernised, road access improved considerably and a major upgrade to security capacity and operations across the expanded Port site and perimeter.

Interventions	%
1 Achieve better alignment between port capacity & forecast demand	20%
2 Modernise port facilities & services to meet current & projected user needs	50%
3 Improve landside access for port users & separate freight and commuter traffic	15%
4 Update site security zones, expand surveillance & streamline security operations	15%

Benefit score	Capital TEI	Time range	Ranking	Options workshop required?
90.0%	\$100-150 mil	12-48 mm	1	Yes

Risks and Uncertainty	
1	Appropriate zoning for port-expansion land not obtained (H)
2	Insufficient flexibility built into upgrades to warehousing and infrastructure to respond to volatility in future demand & industry shifts (H)
3	Increased incentives provided by competitor port in another State results in loss of import/export markets from (M)
4	Impacts of climate change on physical infrastructure results in frequent system failures and compromises capacity of the port (H)

Disbenefits	
1	Long-term growth of Newtown Port constrained (M)
2	Increased maintenance and asset liability for port enterprise (M)

Interdependencies	
1	State economic & transport policy
2	Continued growth in freight volumes as modelled

Overall assessment

Option 1 is the 'business as usual' approach with a modest amount of additional resources being applied to essential security and safety upgrades but no other improvements in services or capacity. This has low benefit delivery and fails to respond to immediate demand, security and economic growth imperatives. It largely defers a more substantive decision to further down the

Inter Dependencies	What external conditions are critical to the success of this investment?	Criticality
H: High	Alignment with State key transport and economic policies.	H
M: Medium	Continued growth in freight volumes	H
L: Low		

Policy Alignment	What is the primary policy to which this investment will contribute?
	Regional Economic Development Policy Value creation and Capture Framework

Managing Uncertainty	What are the main uncertainties in the external operating environment which may affect the investment's future benefit delivery?
	Impacts of climate change and shifts in international demand on local agricultural production Pace of growth in renewable energy and mineral sands sector Is a real options workshop required during business case development? Yes, a real options workshop will be required to identify opportunities for flexibility in the management of this project and ensuring that the procurement and delivery can be adaptable to the impacts of climate change and demand fluctuations for agriculture and renewable products

PROBLEM DEFINITION WORKSHOP

Problem Identification

More robust and evidence based identification and substantiation of the Problem is required.

Cause or what's broken must be understood and supported by evidence and contributors to that breakage more fully unpacked and documented

Effect must be evidence based and give insight into the measurable difference that doing something about the effect will make

The relationship between Cause and Effect must be substantiated

The output of the whiteboard discussion should be captured and circulated

Structured methods for unpacking the problem include root cause analysis, decision tree analysis and problem trajectory

Shaping good Problem statements

“from reviewing some 400 hundred business cases over 10 years (development, filtering and budget bids) I believe more than 80% are constructed from defining the solution first. This effectively makes the ILM process redundant and nothing more than ticking a box function”

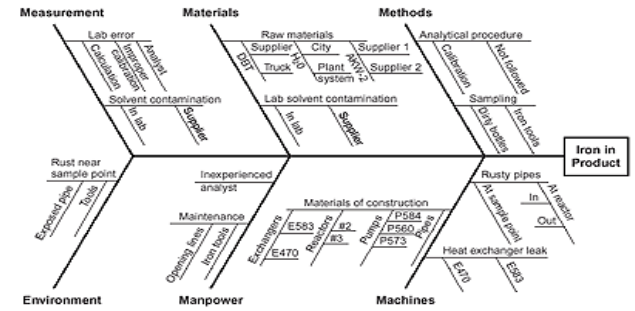
If asset failure is identified as the sole cause in a Problem statement it drives an asset-led response **too early**.

Good problem statements

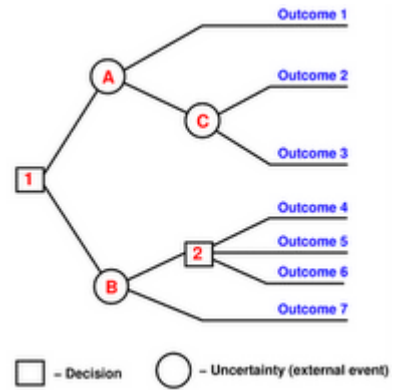
- Correctly constructed with the CAUSE and EFFECT
- Supported by evidence that the problem exists and that there is a correlation between the CAUSE and EFFECT
- the EFFECT is an end consequence that is measurable NOT an intermediate outcome which is less compelling
- Is compelling and is something that we care about

Tools for unpacking the problem

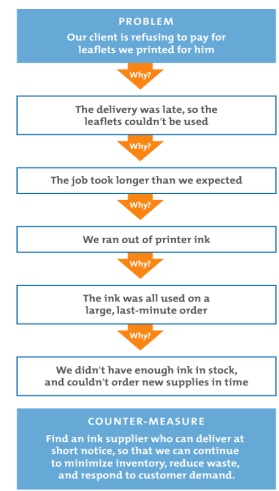
- Ishikawa Root Cause Analysis
- Decision-tree analysis
- 5 Whys
- Problem trajectory



Excerpted from Nancy R. Tague's , Second Edition, ASQ Quality Press, 2005, pages 247–249.

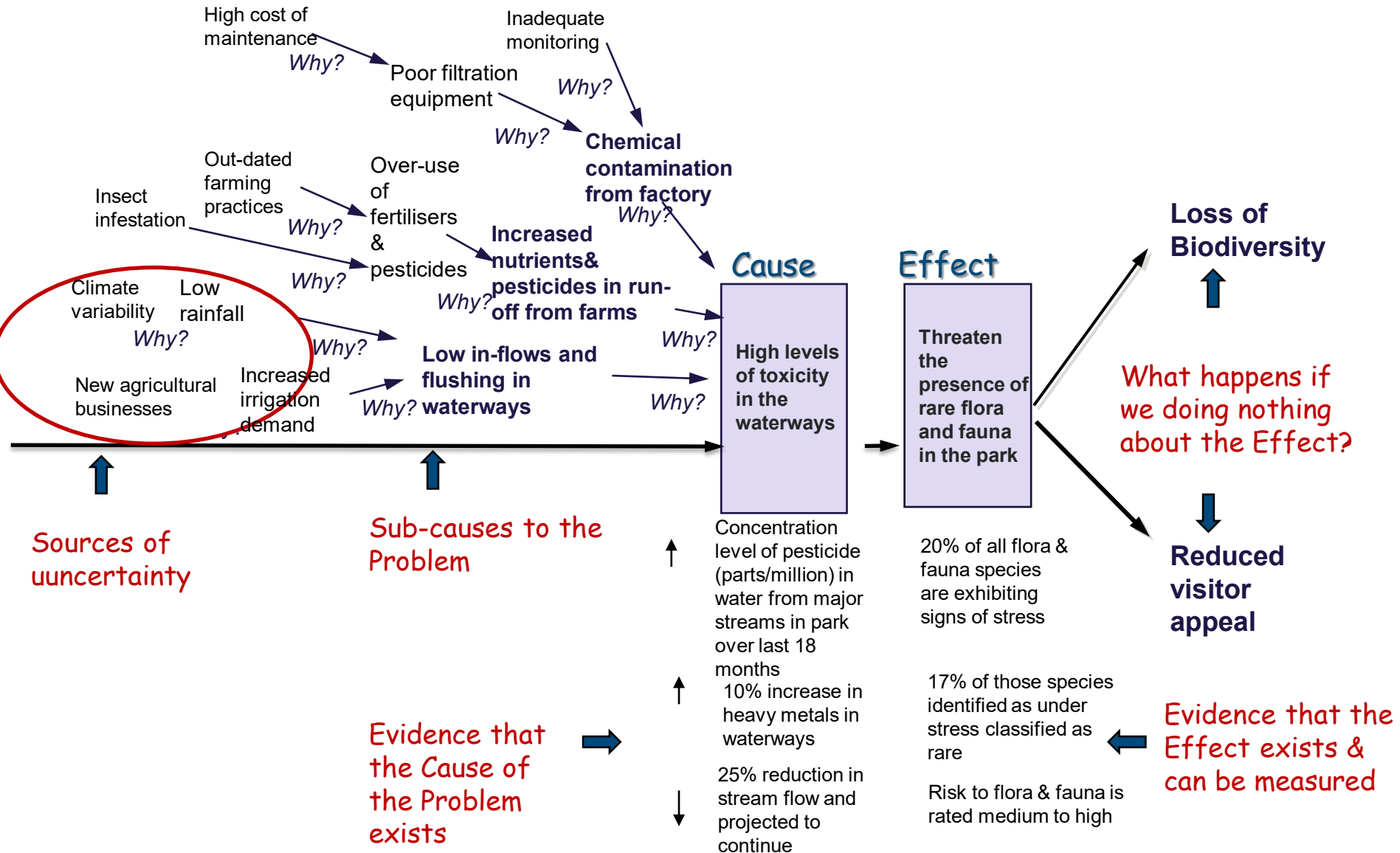


<http://www.toolkitforthinking.com/problem-solving/decision-tree>



https://www.mindtools.com/pages/article/newTMC_5W.htm

Problem trajectory– a structured approach

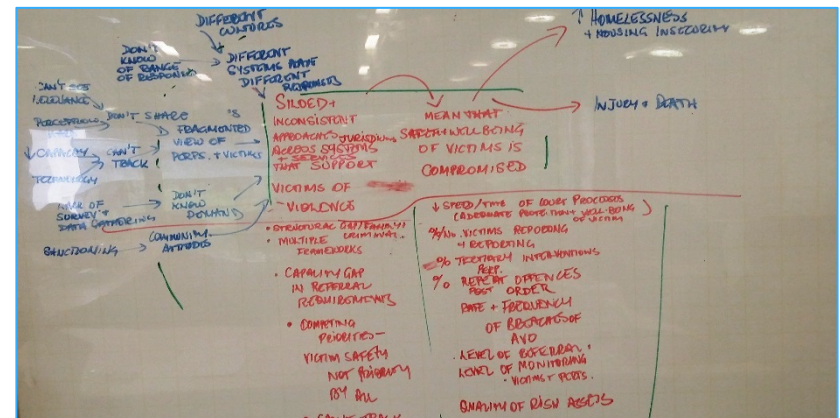


Unpacking the problems

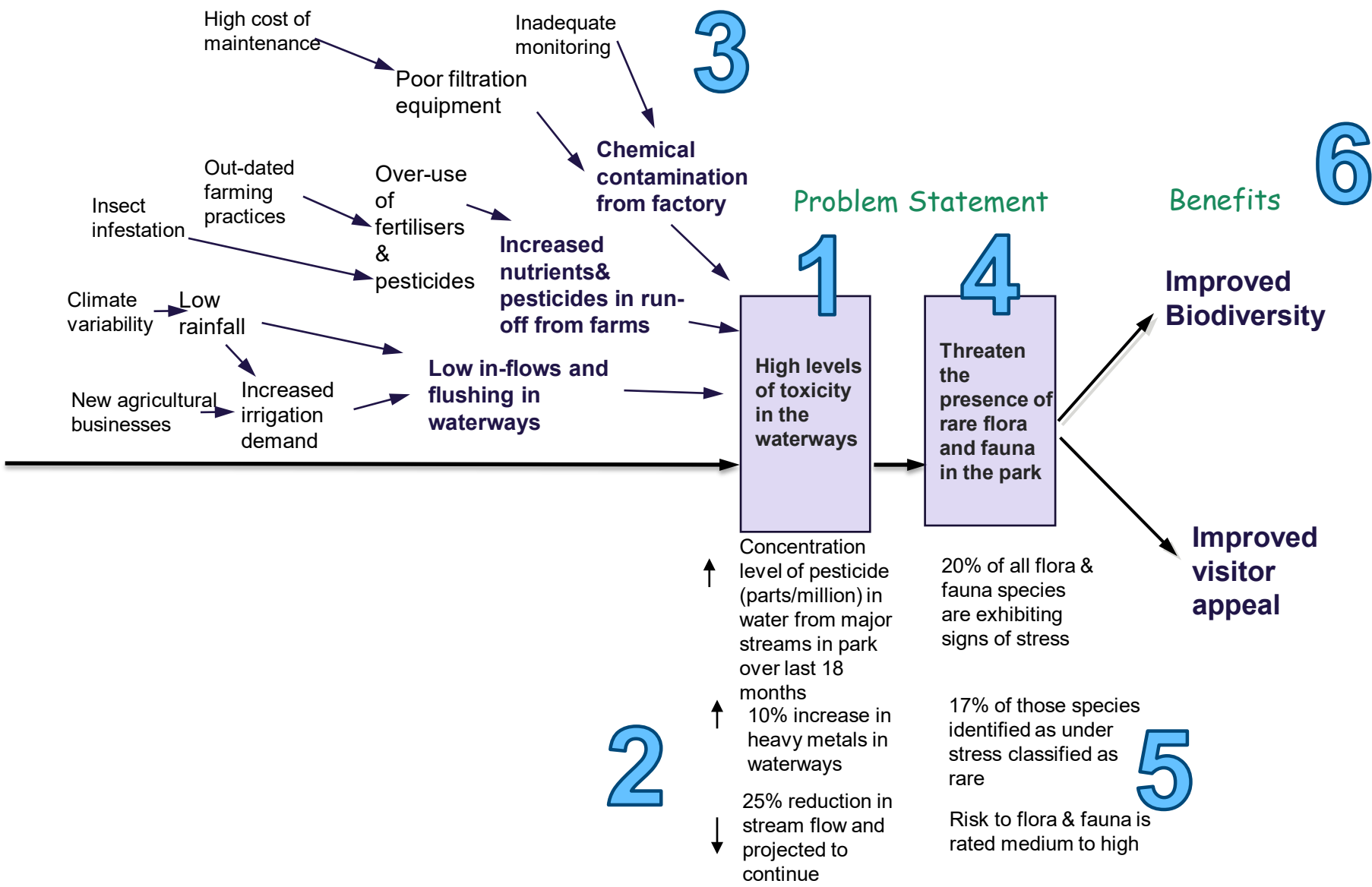
Key questions here are:

- What is the issue that we wish to unpack?
- What is the prime cause/s that has resulted in this issue occurring?
- How do we know? Look for evidence to inform the scale and scope of the Cause:
 - i. Trends and rates of change- who is affected, when, and where
 - ii. Temporal data – day of the week, different weeks or months (seasonal) or annual
 - iii. Spatial patterns- different effects in different places or settings
 - iv. Demographic data – who is affected, socio-economic factors
 - v. Internal and External performance data
 - vi. Studies, research, reports – local and comparable international data
- Why has this happened? What's caused that?...and then what has caused that?
- When this investigation reaches a natural conclusion focus on the effect of this issue

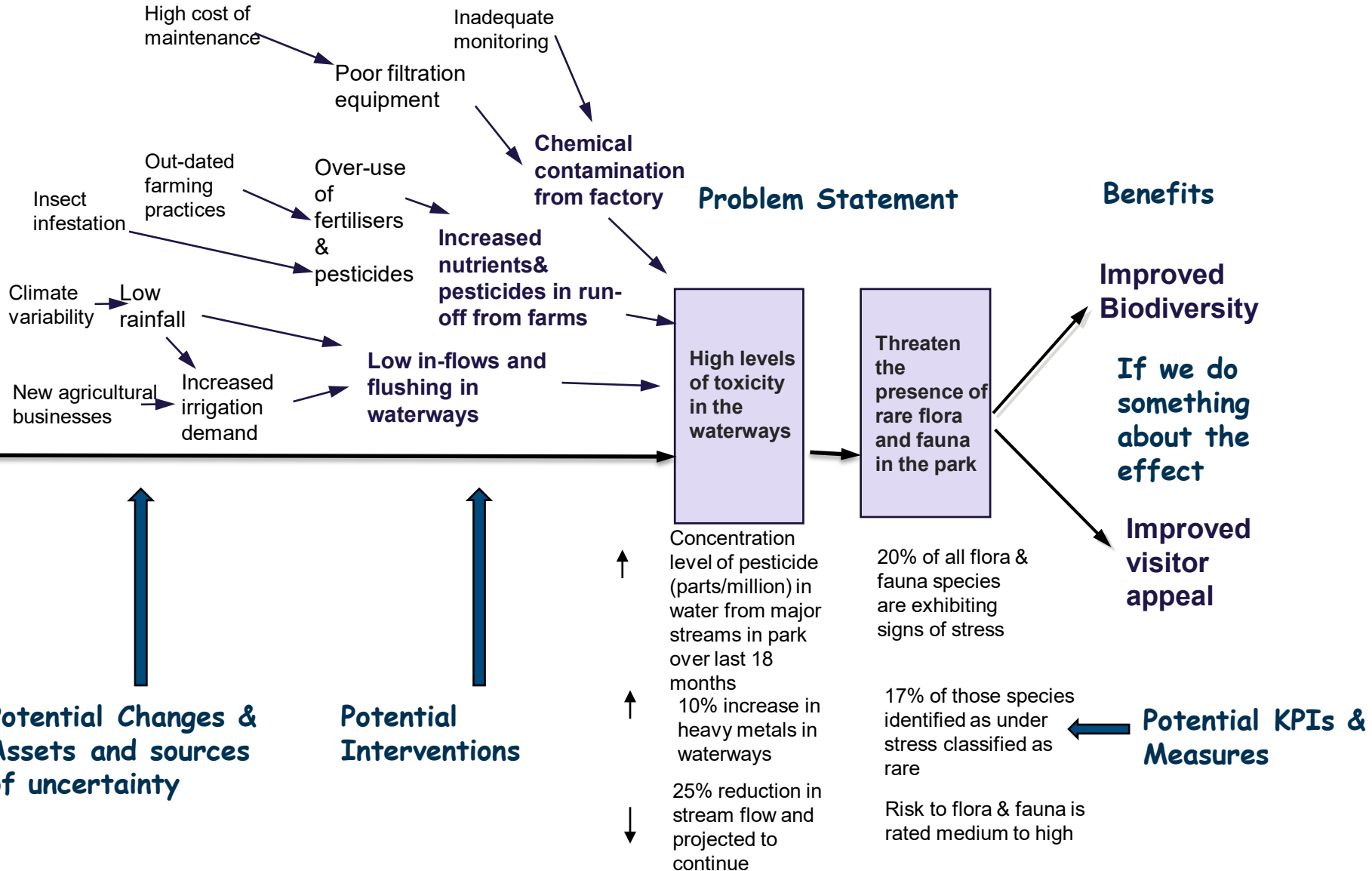
- What is the prime Effect that occur as a result of this Cause? There should be a one to one relationship.
- Focus on the direct and incremental relationships here to get real clarity around the problem. Look for evidence of these relationships.
- What evidence is there that demonstrates the scope and intensity of this effect or consequence?
- Exploring the causal elements/factors and then the effect and testing the evidence reveals the key relationships.



Sequence for developing the problem trajectory



Unpacking the problem helps to inform all elements of the ILM



BENEFIT DEFINITION WORKSHOP

Outcomes focused KPIs must have a clear relationship with the evidence that supports the Effect part of the problem statement.

KPIs must be measurable and lead to an action. We should need to do something differently to deliver this outcome.

Evidence around current or forecast state must be available for discussion at this workshop. This is the baseline.

Initial view of Target state should also be determined at least for the most important KPIs. This combination ensures that the KPI, measure and its target is SMART (Specific, Measurable, Attainable, Relevant, and Time-Bound)

Uncertainty around benefit delivery should be recorded in the Benefit Management Plan

Benefits and KPIs communicate the measurable value of this investment to people, government, business, wider community. They must be outcomes that are of real interest to these groups.

KPI input sheet

BENEFIT NAME:

Candidate KPI	Candidate measures	Evaluate (H/M/L)			Baseline value	Target value	Comment
		Meaningful	Attributable	Measurable			

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Response options analysis

Focus on shaping genuine options and then assessing them against criteria of benefit delivery, risk and uncertainties, disbenefits, critical interdependencies. This is the initial view of 'value/public good' that will be delivered by this investment. The estimation of cost and time in the Solution workshop will determine 'value for money'.

No more than 3-4 options **in addition** to the 'do nothing/stop investing' option.

Build stronger and explicit alignment between interventions and KPIs.

Strengthen consideration of demand, productivity and supply in options shaping.

Better manage time constraints of this workshop and allowing cost and time estimates to be developed outside the workshop builds more reality into time and cost discussion.

Shaping a new investment provides an opportunity to challenge the way government has solved problems in the past. Whilst tried and tested approaches may indeed be the best way to proceed, it is vital that decision-makers explore other responses which may be more effective, adaptable, or enduring.

Some ways to challenge thinking

Review the Cause and Effect diagrams for each Problem and list the sub-causes in the first arch of each Problem. Use these to stimulate thinking and generate interventions. Facilitators should provide a list of candidate interventions drawn from previous workshops to help 'kick-off' the conversation.

Start the conversation with a focus on the high level options. These usually follow along a continuum from least complex to most complex. The focus of these ideally explore demand, productivity and supply questions.

Fundamental questions:

What is our

- Minimum, least complex option?
- Most complex, sophisticated option?
- Do they fit along a continuum?

Can we
Change the Demand?
Stop, slow,
prevent

Improve Productivity?
Do better with
what we have
Change Supply?
Fix or Treat the
Problem

Are there tools we can use
Legislation & Regulation?

Behaviour change?

Organisation change?

Invest directly in structural
and supply options ?

Create option range & describe the focus of each option

Identify potential interventions for each Option

Start with Option 1 - Do Nothing/Business as Usual option. The intervention here will be something like “Continue to...” and is usually weighted at 100%. You will not need to draw a full table for this option, just identify the disbenefits later in the workshop.

Then move on to Option 2 – review the initial intervention list that was circulated with the pre-workshop preparation.

Ask whether any of these interventions are important to this particular response.

Next consider what other interventions should be included. These could be new and may be developed for the first time in the workshop.

When describing each intervention make a note of a couple of bullet points that might provide a better idea of the attributes of the intervention.

Test these interventions to see whether you have considered demand, productivity and supply.

Allocate percentage weighting to each intervention out of 100%

Option 2 <title>							RANK
	Benefit 1 title and %		Benefit 2 title and %		Benefit 2 title and %		
Interventions	KPI 1 %	KPI 2 %	KPI 1 %	KPI 2 %	KPI 1 %	KPI 12%	
Intervention	%						
Intervention	%						
Intervention	%						
Intervention	%						
Benefit score							Total Benefit
Risks and Uncertainty							
Disbenefits							
Interdependencies							
Option 3 <title>							RANK
	Benefit 1 title and %		Benefit 2 title and %		Benefit 2 title and %		
Interventions	KPI 1 %	KPI 2 %	KPI 1 %	KPI 2 %	KPI 1 %	KPI 12%	
Intervention	%						
Intervention	%						
Intervention	%						
Intervention	%						
Benefit score							Total Benefit
Risks and Uncertainty							
Disbenefits							
Interdependencies							

Determine Interventions and KPI alignment

Assess each intervention in terms of its delivery of KPIs

Score: 0 = Marginal. This intervention contributes only marginally to the KPI, or not at all

1 = Partial. (Orange) This intervention makes a meaningful contribution to the KPI

2 = Full. (Blue) This intervention makes a substantial contribution to the KPI and is the overarching mechanism that will deliver the KPI.

Each KPI can only receive a maximum of 2 and have no more than 2 interventions that contributes to the KPI

Calculate the weighted KPI score and then total all scores to arrive at a weighted benefit score.

OPTION 3											
Title: Reconfigure existing site and make more use of third party sites and services (multi-site model)											
Description: Introduces alternative modes of service delivery, at other sites and/or through partnership arrangements to address the demand and functionality pressures at Noojee and improve justice outcomes. In conjunction the existing site is remodelled and the											
		Benefit 1		Benefit 2		Benefit 3		Benefit 4		Weighted Benefit Score	
		25%	15%	20%	15%	15%	10%	0%	0%		
Interventions		%	KPI 1 More timely resolution	KPI 2 Reduction in costs	KPI 1 Reduction in re-offending	KPI 2 Increased program completion	KPI 2 Increased program completion	KPI 2 Reduce security risks	KPI 1	KPI 2	
Expand capability to provide more diverse responses in criminal and civil matters		20%	0	1	2	2	0	0	0	0	
Enhance in-court technology to support more remote-witnessing and digital evidence presentation		25%	1	1	0	0	2	0	0	0	
Provide additional space and reconfigure existing facilities to support a wider range of justice services		40%	1	0	0	0	0	0	0	0	
Improve physical separation between parties and court activities		15%	0	0	0	0	0	1	0	0	
KPI Score		100%	25.0%	15.0%	20.0%	15.0%	15.0%	5.0%	0.0%	0.0%	
Benefit Total			40.0%		35.0%		20.0%		0.0%		95.0%

Evaluate options

Criteria

Risk and uncertainty

Dis-benefits

Interdependencies

Real options

Assess options

Identify the primary 2-3 risks that the benefits will be not be delivered and assess based on consequence' and 'likelihood' high, medium or low (H,M,L)

Identify if there are any other potential shifts in the organisation's current or future operating environment -demographic, economic, environmental, social, political, industry or technological factors, which, if they occurred would fundamentally change the investment's benefit delivery

Identify 1-2 disadvantages that will result, as a direct result of the successful delivery of the investment. Assess their criticality H,M,L

Identify whether any of the interventions have any interdependencies. These should be ranked with a H, M,L impact

Determine whether Real options analysis should be considered if the investment proceeds to full business case Yes/No/Maybe

May be recommended when primarily asset investments are significant, high cost and complexity and have a medium – long lifecycle

Determine initial rankings

Identify the preferred response

Rank options 1,2,3....

Ask which options should proceed to be analysed further as part of a business case. It is usual to have 2 or 3 options as well as the Do Nothing that require further investigation

Indicate that further analysis of cost and time will be conducted after the workshop and prior to the Solution Definition workshop where the preferred response will either be validated or replaced with another. This will be used to generate a recommended solution.

Finalise the workshop

Review the options and confirm that the range and assessment is meaningful and genuine

Outline feedback process and timeframe.

After the workshop complete the worksheets in the ROAR workbook

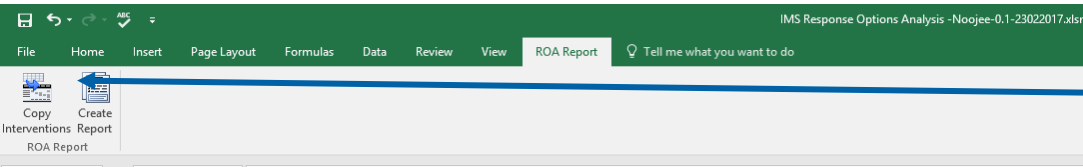
Ensure that before the next workshop

- the cost and timeframe data is completed well in advance of the Solution Definition workshop
- the Response Options Analysis Report, and worksheet has been updated.

The ranking of responses and confirmation of the preferred response will be tested and confirmed at the Solution Definition workshop

Complete the Response Options Analysis Report

Select copy interventions button to populate worksheet 2



	A	B	C	D	E	F	G	H	I
28		Divert more cases to other courts in the region	10%	1	0	0	0	0	0
29		Better utilise information technologies to support off-site hearings and witness evidence presentation	40%	0	0	0	0	1	1
30		<Intervention 4>		0	0	0	0	0	0
31		KPI Score	100%	50%	0%	0%	0%	50%	50%
32		Benefit Total		15.0%	0.0%			10.0%	
33									
34		OPTION 3							
35									
36	Title:	Reconfigure existing site to increase safety and capacity and deliver additional justice services using technology							
37	Description:	This option introduces alternative modes of justice services to address the demand and functionality pressures at							
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	A	B	C	D	E	F	G	H	I	J
1		Provide additional space to increase capacity and ensure safety						50%		
2		Reduce volume and frequency of rehearings & rescheduling & improve court notifications						20%		
3		Expand court capacity at other courts in the region							40%	
4		Upgrade capacity at Noojee to support therapeutic and alternative dispute resolution services							20%	
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Delivering customer-focused, efficient

Upgrade and expansion of Oldtown Port

Response Options Analysis

Option 1: Business as usual / Do nothing

This option involves no change to existing practice with upgrades to existing facilities.

Interventions

- | | |
|---|--|
| 1 | Undertake essential maintenance and security upgrades to existing facilities |
|---|--|

Benefit score	Capital TEI	Time range
10.0%	\$2-3 mil	0-12 mm

Risks and Uncertainty

- | | |
|---|--|
| 1 | Serious road accident involving fatalities (H) |
| 2 | Breach of maritime regulations & loss of port services |
| 3 | Local economic growth, & its diversity, constrained |
| 4 | Serious loss or damage to cargo or other assets |

Disbenefits

- | | |
|---|---|
| 1 | Delays and costs to local importers and exporters |
|---|---|

Interdependencies

None

Option 2: Close port and divert activities to Newtown

This option focuses on closing the Oldtown Port and diverting activities to Newtown Port. Additional capacity both at Newtown Port and along the coast to increase increased throughput and traffic. While the Oldtown Port site and infrastructure will still require some maintenance

Interventions

- | | |
|---|---|
| 1 | Undertake additional investment at Newtown Port |
|---|---|

Interventions

		%
3	Undertake essential maintenance and security upgrades only of existing facilities	15%

Benefit score	Capital TEI
70.0%	\$500-600 mil

Risks and Uncertainty

- | | |
|---|---|
| 1 | Decommissioning & safety issues |
| 2 | Efficiency savings for local businesses |
| 3 | Diversity of local economic activities, & its adverse social impact |
| 4 | Scope of change and impact on local businesses |

Disbenefits

- | | |
|---|---|
| 1 | Higher local unemployment |
| 2 | Government incurs costs to maintain port services |

Interdependencies

- | | |
|---|---|
| 1 | Sufficient capacity at Newtown Port |
| 2 | Willingness of port users to move to Newtown Port |

Option 3: Focus on trucking and other industries to Newtown

This option focuses on changing the port's focus to trucking and other industries associated with new industrial developments. It involves upgrading and expanding current capacity at Oldtown Port, as well as some additional capacity to be built at Newtown Port.

Interventions

- | | |
|---|--|
| 1 | Update site security zones and operations |
| 2 | Implement targeted trucking points between freight zones |
| 3 | Undertake limited mooring upgrades at Oldtown Port |

EASTERN PORT AUTHORITY

Interdependencies

- | | |
|---|---|
| 1 | State economic & transport policy |
| 2 | Continued growth in freight volumes as modelled |

Overall assessment

Option 1 is the 'business as usual' approach with a modest amount of additional resources applied to essential security and safety upgrades but no other improvements in service capacity. This has low benefit delivery and fails to respond to immediate demand, security and economic growth imperatives. It largely defers a more substantive decision to further develop the port. Option 2 represents a substantial change in the port provision in the region by closing all services in one location. This option has relatively high benefit delivery but would be difficult to implement and has uncertain wider economic impacts. Option 3 focuses on creating 'specialised' ports for the region which has strong benefit delivery but may limit longer term flexibility and economic diversity in the region and for the ports' longer term operating resilience. Option 4 is a relatively short-term tactical response which is relatively cheap and speedily implement. In common with Option 1, it effectively defers a more long-term decision on port development whilst eroding its asset base and competitiveness. This option has lower benefit delivery than Options 2 and 3. Option 5 focuses on upgrading and expanding current capacity to meet expected demand without a fundamental change in the overall port provision in the east. This option provides strong benefit delivery and represents good value for money with a manageable risk profile.

Recommendation

Option 5 is the preferred option - it has strong benefit delivery and the risk profile can be managed. It is recommended that this option be developed through a full business case. Oldtown Port, however, operating in an environment of some uncertainty particularly in respect of the climate change on agricultural production in the region. As a result, it is recommended that a business case analysis workshop occurs during the business case development. Options 2 and 3 are not viable without merit and more detailed analysis of these options should be undertaken. Either Option 2 or 3 could become viable if key assumptions and estimations for Option 5 cannot be validated during business case development.

SOLUTION DEFINITION WORKSHOP

Shaping & recommending an indicative solution

- Focus on reviewing options in the light of cost and timeframe data. This provides a more informed view of cost and value for this investment.
- Describe & assess a new option if one emerges.
- Rank options and select the recommended option.
- Detail the 'best likely' solution and test that it is likely to be delivered within time and budget constraints
- Ensure that the solution can be applied flexibly to manage and respond to uncertainty and adapt to changing conditions and demand
- Review the problem definition to confirm that the right investment need has been identified, and that the preferred solution is likely to support this need given a range of alternative future scenarios.
- Consider the whether there are any conditions in which the preferred solution may be sub-optimal, you would prefer a different approach, or would regret the selected solution.

Shaping a new investment provides an opportunity to challenge the way government has solved problems in the past. Whilst tried and tested approaches may indeed be the best way to proceed, it is vital that decision-makers explore other responses which may be more effective, adaptable, or enduring.

Investment Concept Brief

Risks, Disbenefit, Interdependencies

Assessed as High, Medium, Low for level of Risk, Criticality, Impact .

Policy alignment Nominate the primary policy of government or organisation to which this investment is responding. Also consider whether there are other policy levers such as value capture and creation, climate change policy that should be highlighted here.

Managing Uncertainty Record whether there are any circumstances or future scenarios in which the preferred solution would be less successful in delivering the planned benefits or would lead to investment regret; and whether the preferred solution enables Government to respond flexibly to changing circumstances, minimising Government's obligations under unfavourable conditions or enabling opportunities for benefit enhancement to be leveraged.

Will a real options analysis be needed, if this investment proceeds to full business case?

If it has been recommended for the related response option, it is almost inevitable that this recommendation will roll-forward into the ICB.

ATTORNEY GENERAL'S DEPARTMENT - Fictional

Improving efficiency and accessibility of justice services in Noojee:

Redevelopment of Noojee court and services

INVESTMENT CONCEPT BRIEF

Context	<p>What is the compelling reason this investment should be considered further? Current and forecast demand for court services in the Noojee region together with out-dated buildings and operational limitations are creating major delays in the number of civil and criminal cases being heard. The range of alternative and therapeutic services of justice services available is severely restricted and the inability to separate court users is seeing a significant rise in the frequency and severity of safety incidents.</p>	
Cost	<p>What are the likely capital costs? Design, project management and other fees Land Building and refurbishment works including IT Investment Total</p> <p>What are the likely net incremental operating costs (pa), if significant? Judiciary and staff costs</p>	<p>Cost (range) \$5mil-7 mil \$6mil-10 mil \$41-61 mil \$52 – 78 mil 3mil-5mil</p>
Time	<p>What are the expected timeframes for the investment's deliverables? Acquire land and construct new facilities to provide more court rooms and refurbish existing Development and implementation of information and communications systems Time between offence and court hearing date is an average of less than 6 months 17% of all civil cases diverted to successful mediation</p>	<p>Time from funding 30mm-36 mm 30mm-36mm 40mm-48 mm 40mm - 48 mm</p>
Risks	<p>What are the primary risks to benefit delivery? H: High Suitable site is not available M: Medium A disbursed court will undermine effectiveness L: Low Difficulty securing appropriately qualified dispute resolution staff in region Integration of technology with other systems in the justice network</p>	<p>Risk M M H H</p>
Dis-benefits	<p>What disadvantages will result as a direct consequence of the investment? H: High Substantial disruption during construction will further impact capacity M: Medium Increased maintenance and asset liability associated with expanded infrastructure L: Low</p>	<p>Criticality M L</p>
Inter dependencies	<p>What are the critical interdependencies which may affect benefit delivery? H: High Current policy settings regarding jurisdictional boundaries, court procedures and offences remain constant M: Medium L: Low</p>	<p>Impact H</p>
Policy	<p>What is the primary policy to which this investment will contribute? Are there other policy levers that may be applied to this investment? Alignment Strategic Priorities: to address public safety and crime; Fair, equitable and accessible justice policy</p>	
Managing Uncertainty	<p>What are the main uncertainties in the external operating environment which may affect the investment's future benefit delivery? Unpredictable increase in the extent and level of methamphetamine use in the region may have an impact on case numbers and ability to meet court performance and therapeutic justice targets. Is a real options workshop required during business case development? No</p>	

Investor	Name	Position	Signature	Date
	Marc Nikolovski	Director of Courts		

Shape the Solution

Best likely solution

Ask the solution architect to explain changes and assets and what other solutions were considered

If the solution has not been defined then focus on each intervention and ask “What could we do here?”

Test the logic flow back to delivery of KPIs and resolution of Problems

Understand the solution

Test whether the investment is cost-effective

Test whether the solution is innovative and smart

Test whether the solution is flexible enough to respond to identified uncertainty

Establish cost range for individual changes and assets or in some instances bundles of changes and asset that make sense

Confirm the circumstances (change in condition or an event) where the preferred response may be inadequate or inappropriate, and the triggers requiring a change in solution

Is the solution still a smart way to proceed?

Key Questions

▪ Does the logic flow?

- Do these changes and assets, if required, align with our interventions?
- Will they deliver the benefits and KPIs?
- Will the solution address the problems outlined in the ILM?

▪ Is the investment cost-effective?

- Can this investment be used to provide capabilities or assets that others might use in the future?
- Are there capabilities or assets in existence that might be used as part of the solution?
- Does it align with the organisation's policies, strategies and architectures?

▪ Is the solution innovative and smart?

- Is it innovative in the way it seeks to solve the business need?
 - Does the proposed solution take advantage of new thinking and technologies?
 - Is it sound and feasible from an implementation perspective?
 - Are there any circumstances in which you would seek an alternative, and materially different, course of action? – If 'yes', the ICB should note that a real options workshop may be required.
- ## ▪ Will the solution be flexible enough to respond to identified uncertainty?
- Have opportunities for building flexibility into the investment to mitigate future uncertainty been considered? If 'no', the ICB may need to note that a real options workshop may be required.

Conclude the workshop

- If participants do not identify significant uncertainty and real options analysis is not considered warranted, the group must undertake a feedback loop at the end of the Solution Definition workshop.
- Review the Decision-Maker's Checklist and test:
 - Has the investment need been correctly defined – are we considering the right problem?
 - Under what conditions would the preferred solution be a sub-optimal response?
 - Under what conditions would an alternative investment strategy be preferred?
 - Under what conditions would we regret this investment?



IMS Quality Assurance Facilitation Services

Provided By Eldar Salkovic

Innox Solutions

What IMS services we provide

- Rigorous reviews of the quality of IMS materials received for accreditation and re-accreditation, in accordance with DTF specified criteria and quality standards;
- Giving written and verbal feedback on each submission to the applicants, ensuring that the candidates are able to increase their understanding of the IMS and improve the quality of their work; and
- Provision of external IMS material review services.

Ensuring the development of high quality ILMs...

Story telling

Ensure the use of plain English throughout the investment story

Problem

Keep the problem statements focused whilst ensuring that they have been pitched at the right level. Deploy appropriate enquiring techniques such as problem trajectory, root cause analysis and 5 why's.

Try and avoid using asset and compliance failures or high risk as causes. In most cases they will diminish the investment story and lock you into a solution prematurely. Instead aim to focus on service failures.

Benefit

Ensure benefits and KPI's have a reasonable and logical connection to the problem statements.

Intervention

Ensure interventions are focused enough as to give the reader an indication of what specific strategic levers are being deployed to address the problem and deliver the benefits.

Avoid pitching them too high, have them solution focused or too few in numbers

Online Facilitator Forum

- Facilitators discuss their experiences and learning's on conducting successful IMS workshops.

Future release of a designated Facilitator Blog

- A dedicated blog that aims to identify best-practice approaches to exploring root causes to problems, defining benefits and associated KPI's, as well as a wide range of valuable information relating to IMS.

Contact Information

Eldar Salkovic

Innox Solutions

m: 0406 944 957

e: eldar@innoxsolutions.com

w: www.innoxsolutions.com

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