# **Decision Making**

# **Purpose**

The purpose of this document is to provide guidance on decision making approaches and the development of effective Board papers in order to assist the Board in their decision making. The document begins with a discussion on decision making and then describes the key items a Board Paper should include and finally includes a sample Board Paper.

# Models for decision making

There are broadly two models for decision making – rational and intuitive.

- Rational decision making is traditionally defined as a comparison between two or more options using previously set criteria. Rational decision making is driven by information. For example, financial information.
  - When making rational decisions it is necessary to have objective criteria to evaluate a decision against. This is often financial criteria what will be the impact to expenses or income? However, there are also a number of non-financial methods.
  - If your organisation has defined key objectives for the year then a decision could be evaluated against these objectives. For example, an objective may be to increase participation in your sport. Therefore, it could be considered that all decisions put to the Board should state whether or not they impact participation levels.
  - Evaluating all decisions against the **same** criteria can be very useful to ensure a fair comparison and evaluation.
- 2. Intuitive decision making is based on the feeling a person or group have for the right decision. As such it tends to look at the broader context of the decision rather than the detailed information. Intuitive decision making is dependent on the experiences of the people making the decision and how well they work together. Intuitive decision making is valuable if there is a lot of uncertainty around the facts of the decision or long term factors that cannot readily be predicted.
  - When making intuitive decisions the most important things to consider are your assumptions. Assumptions are things that are taken for granted as being true, although at the time the assumption is made you do not have enough information to be sure. For example, in deciding to build a new sports facility an assumption may be that player numbers will continue to increase over the next 10 years as they have in previous 10 years. The best technique when making intuitive decisions is to write down all the assumptions you can think of and then discuss these with others involved in the decision to see whether they agree. Depending on the extent to which others agree with the assumption or how great the impact would be, if the assumption is not correct, it may be necessary to find further information in order to determine if indeed it is true.

Whichever decision making approach is taken for a particular Board paper, it is important to provide the Board with all the information required to evaluate the decision. If the decision is to be a rational decision using financial information then include the financial information required. If there is an

element of intuitive decision making then include the assumptions made and an evaluation of these assumptions.

# **Decision types**

There are three types of decisions. The type to be applied depends on the nature of the decision to be made, such as the impact of the decision on your organisation, the cost of an investment relating to the decision and the timeframe. The three types of decisions are:

- 1. **One-off decisions**. Once the decision has been made, the Board gives the mandate to proceed.
- 2. Stage-gate decisions. In this case the Board are taking a final decision, but have reserved the right to revisit this at specific points in time. This is typical when the decision involves a significant change to the organisation. It is called stage-gate because the stages are the intermediate steps and the gates are the specific points that the Board can either decide to continue or stop. In building a new sports complex you may plan to build an indoor facility, an outdoor facility and a cafe. Each of these could be implemented in stages. And at the end of each stage the Board could decide whether to proceed to the next stage.
- 3. Iterative decisions. In this case the final decision is made incrementally as more and more information becomes available. In building a new facility the initial decision may be taken to investigate options for buying or leasing, once options are available a decision to get a detailed cost on a particular option could be taken and then a final decision to proceed (or otherwise) depending on the outcome of the cost. This is a low risk approach that keeps the Board involved and active in the process, reducing the risk that a lot of effort is expended on a decision that is not approved by the Board.

Most decisions are one-off decisions, but it can be useful to consider the two alternative types described here to help manage risks and to keep the Board fully involved in the process. The Board Chair should provide guidance on the preferred approach. Giving the Board the option is important to ensure they are able to effectively exercise their governance duties.

# **Alternatives analysis**

Alternatives are different ways to achieve the objectives or outcomes of the decision. It can be very easy to consider only a single solution, when it may well be possible to achieve what is desired in a number of different ways. Likewise, considering alternatives also helps to ensure you have really considered what your objectives are.

Alternatives analysis is a comparison between the options. There are a number of different ways to perform this comparison. Two of the more usable methods are a Pros and Cons analysis and a Grid Analysis.

# **Pros and Cons and PMI Analysis**

**Pros and Cons analysis** requires you to make two columns against each of the options, a Pros column and a Cons column. You may find that the Pros of one of the options become the Cons of the other option. Once you have completed the table, you should read back over the results. At this

stage it can be helpful to rank the pros and cons in order of importance. An alternative may not have as many pros, but they may be very important.

An extension of a pros and cons analysis is called 'Plus Minus and Interesting' or PMI for short. Using this technique you simply add an additional column called Interesting to the chart. In here you capture subjective aspects of the option that can then be considered in the overall evaluation.

An example of a PMI chart for deciding on a new sport facility:

Option	Plus	Minus	Interesting
Lease	Less capital outlay	Less flexibility	
		Risk that the lease cost will increase	
		Fewer options	
Buy existing	Low risk of costs changing	Not custom built to our needs	Are there suitable properties available?
	Investment of reserves		
Build	Investment of reserves	Risk of capital cost increasing	Could get a liquor license to increase revenue and use
	Cafeteria will increase use by community		
	Custom design		

PMI was developed by Edward de Bono. For further detail reference de Bono's book, Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas (1993).

### **Grid Analysis**

A **Grid Analysis** is similar. In this case you make a column for each of the options and consider criteria you could use to evaluate the option. Take for example a decision to either build a new facility or lease an existing facility. The criteria could include annual cost of the facility, stability of the cost, additional use for the facility and so forth. Once the criteria are decided you can then rate each of the alternatives against the criteria. It is best to use a range of numbers from 0-3 where 0 means the alternative does not meet the criteria at all and 3 is a perfect fit.

A more sophisticated extension to a Grid Analysis uses a standard criteria that your organisation develops to consider all decisions. An example of these criteria would be your strategic objectives, this is used in the example below.

A Balanced Scorecard is a performance management approach that defines measures and performance evaluation criteria. These measures can be a very powerful tool to use for evaluating any decisions in your organisation. There is a lot of writing on Balanced Scorecards, a useful starting point is available <a href="here">here</a>

Example of a Grid Analysis using Strategic Objectives as the evaluation criteria

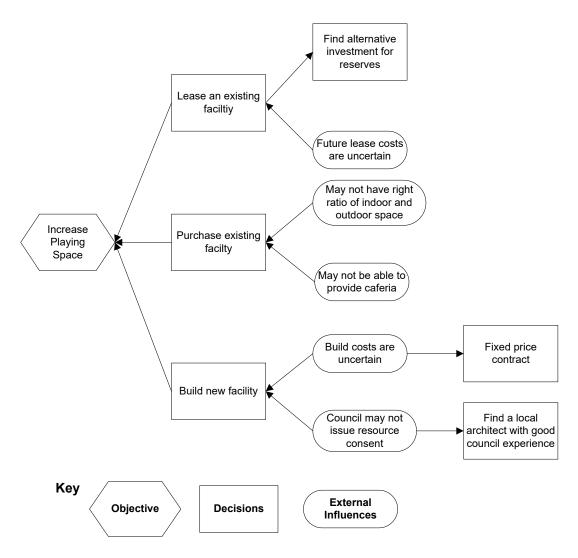
	Lease	Buy Existing	Build	
Increasing player	2	2	3	
participation	May need to	May need to	Custom build	
	compromise on space	compromise on space		
Increasing involvement	2	1	3	
from the wider	Cafeteria is available,	Options for extension	Can custom build as	
community in Our	but further options	will be compromised	required	
Sport	may be limited			
Investing the reserves	0	2	2	
in Our Sport to support	None	Good, but possibly	Can invest as required,	
long-term growth.		limited	but risk of over	
			investment	
Totals	4	5	8	

### **Decision Trees and Influence Diagrams**

Decision Trees and Influence Diagrams (and others) are tools for evaluating decisions considering different options and the things that can influence or affect those options.

Traditional Decision Trees can be very helpful when you have a single criterion upon which to evaluate alternatives and the important issue is to identify the factors that will influence that criterion. In a traditional profit driven business this can be useful as the ultimate evaluation criteria is profit. Click here for a useful Wikipedia article on decision trees (http://en.wikipedia.org/wiki/Decision\_tree).

Influence Diagrams are a modified form of a decision tree. When you build an Influence Tree, having identified the objective you are trying to achieve and then the options (or decisions that you can make) to achieve it, you then identify the things that will influence the decision. These things can then lead to further decisions that need to be made. An example of an Influence Diagram appears below:



Influence Diagrams are very useful as they allow you to consider both the external factors that may affect a decision and then what you can do to affect those external factors.

### Six Thinking Hats

Six Thinking Hats is a method used to consider a particular problem, decision or alternative from a number of perspectives. Each hat represents a different perspective. The six hats are:

Information: (White) – consider only the facts or pure information only.

Emotions (Red) – signifies intuition and feelings. You think about how the decision makes you feel, what you like and dislike and so forth.

Bad points (Black) – consider only the negative aspects, risks or dangers. This hat can be considered the devil's advocate. The outcome of this discussion is useful for your risk analysis.

Good points (Yellow) – signifies the positive and optimistic view. What are all the benefits of a particular decision or option?

Creativity (Green) – provides an opportunity to explore alternatives, new ideas and different ways to thinking about something.

Thinking (Blue) – the blue hat is not so much a perspective but just the control mechanism to manage the thought process. Assume the blue hat when you need to stop the discussion and change the perspective.

As a group you all assume the same 'hat' and discuss the decision from that perspective. Once you have exhausted a perspective you then assume the next hat. It is important to consider the decision from all perspectives.

The discussion using this technique can be captured in a PMI grid, or as free form notes.

<u>Click here for further information on Six Thinking Hats</u> (http://www.debonogroup.com/six\_thinking\_hats.php).

### **Summary**

The most important aspect of performing any alternatives analysis or decision making activity is the process of evaluating the options, rather than the specific outcome.

It is critical that all the key people in the organisation should work together to consider the alternatives in an open, group environment. Methods such as "Six Thinking Hats" help to break down hierarchical barriers and increase the involvement of quiet individuals in a group discussion.

Once the alternatives analysis is completed, the outcome should be summarised in the Board Paper. If the analysis is useful this could be included as an appendix.

### Risk evaluation

A risk is something that might happen. There are two types of risks to consider:

- 1. The risks that the proposal will not succeed as intended.
- 2. The risks to the organisation if the proposal is not accepted.

When you consider risks you should rate your risks considering the following factors:

- The likelihood that the risk will actually happen (remembering that a risk is that something might happen). A useful way to do this is by using words such as very likely, unlikely, highly unlikely OR high, medium, low OR using percentages 25%, 50%, 75% and so on. Words are useful because they can be easier to understand, however, everyone may have a different definition so it is helpful to describe what is meant by these words.
- How significant will the impact be if the risk occurs? Again, this can be described using
  words such as critical, very strong, weak OR high, medium, low OR using numbers (1-5).
   Words can be useful if you are considering a decision in isolation, but if you have different
  alternatives or a number of different decisions then numbers can be useful because they
  help the Board to make a fair comparison.

For example, in deciding to build a new facility a risk may be that the resource consent does not get granted. The likelihood of this occurring may be low, but the impact if it does occur may be very strong resulting in significant changes to the plans.

Once a risk is evaluated, a plan should be defined to manage the risk. Risk management can take three different approaches:

- 1. Reducing the likelihood that the risk will occur. For example, in considering the risk of the resource content not being granted, contracting an expert in the area may help to reduce the likelihood of this risk.
- 2. Deflecting the risk so others take on the burden of the risk. This is not always possible, but where possible this can be achieved through insurance, contracting others to take on the risk and so forth. This is common in building work.
- 3. Reduce the impact if the risk does occur. These can be considered contingency plans.

The process of identifying and analysing risks can be very helpful in gaining different insights into a particular decision; as such including a number of others in this process is valuable.

An example of the outcome of a risk evaluation is in the table below:

Risk	Likelihood	Severity	Management Plan
Council may not	Low	Significant	Will seek a local architect familiar with development in the area
approve resource			and Our City Council procedures.
consent			A redesign will be required of the facility would be required
			potentially affecting the number of teams we can support.
Costs are estimate	Medium	Moderate	Quotes will be requested from 3 contractors. If the quote varies
only. There is a risk			by more than 5% from the estimate, we will seek Board re-
that these may			approval
increase once we			Contracts will be fixed price quotes to reduce the risk of price
have firm quotes			increases to Sport during the construction.

The Sport New Zealand website has further discussion of organisational risk here: Risk Management Toolkit

And event risk here:

Risk Management of events

# Why write a Board paper?

paper.

Board papers are critical part of the governance process and are used to describe the business items for a board meeting.

Board papers are produced for three purposes:

- 1. Information only. Financial results would be an example of an information only Board Paper.
- 2. **Discussion.** A discussion board paper is provided to introduce a point of discussion for the board, including sufficient facts to support the discussion.
- 3. **Decisions.** A decision paper is designed to ask the Board to make a decision.

This document focuses on decision papers, but some of the same principles can be applied to other types of board papers.

# What should be included in a Board Paper

There are a number of ways to format and structure a Board paper and your organisation may already have a template. There are however, common elements that should be included in all papers:

- 1. **Board resolution.** The resolution you are asking the board to pass (this is the decision you would like them to make). Officially this is a draft only, but should be written in a way that it can be accepted as it is by the Board. An example is: "The Board of Sports Organisation resolves to approve the construction of a new sporting facility at 123 The Place, New Town for the purposes of playing sport at an estimated cost of \$500,000."
- 2. **Executive summary.** The executive summary should specify the purpose of the Board paper information only, discussion or seeking a decision and specify the recommendation. The executive summary should be no more than a single paragraph of 4 5 lines.
- 3. **Recommendation.** As the writer of a Board Paper, it is important you provide a very clear and concise recommendation to the Board. The recommendation should include:
  - The recommendation you are making to the Board, essentially that they pass the resolution (make the decision)
  - The reason why the Board should accept the recommendation
  - Summary of alternatives (where relevant), and therefore why the recommendation is the best option.
- 4. Background. The background section should provide enough information to enable a Board member to understand the resolution and to form an opinion on the correct outcome. Board members do not normally work in the organisation on a day-to-day basis and therefore their knowledge of the detailed operation needs to be considered. The background should also indicate if there are previous Board Papers on similar subjects that Board members can refer to.
  If there is more background information than can fit within approximately one page, the information should be summarised in this section and provided as appendices to the Board

- 5. **Issues and Risks.** Issues are any general factors that will affect the proposal that the Board should be aware of in making their decision. For example, in deciding to build a new facility an issue may be that the City Council has not approved the car parking area as planned. Risks, unlike issues are factors that MAY occur and MAY have an impact on the intended outcome. Risks if they do occur may have a significant impact and therefore considerable thought should be put into identifying the possible risks and how best to manage these. Click here for further detail on risks.
- 6. Consultation. The consultation section should include details of who has been involved in developing the Board paper. This will include other people from within your organisation and may include external people used as advisers. The consultation section should provide the Board with assurance that all key stakeholders have been involved in the development of the Board paper.

Other elements that could be included, depending on the decision required are:

- 1. **Financial summary.** A financial summary is required if the decision will have any financial impact on the organisation.
  - Ideally, your organisation will have a standard way to summarise financial information. The most common is a profit and loss statement. This is useful if the decision is likely to impact the income you receive or your expenses. For example, changing membership fees, taking part in a new competition, or securing a new sponsor.
  - If the decision requires a significant capital investment then it may be necessary to identify both profit and loss impact and the cash flow impact (the actual money you spend). There are a number of methods for identifying the cash flow impact based on considering the length of time until the money invested is returned to the organisation. These include cost benefit analysis, net present value and internal rate of return. The following link provides more information and guidance on these terms.
  - http://www.mindtools.com/pages/main/newMN\_TED.htm#financial
- 2. Alternatives analysis. A key aspect of decision making is considering alternatives or other options. Most decisions are not just a case of yes or no. A good alternatives analysis should demonstrate that there are different ways to achieve the same or similar outcome. For example, if the decision is to seek approval to build a new facility for the organisation, then the alternatives could include an option to lease or purchase an existing facility, instead of building. Click here for further details on consideration of alternatives.

# **Developing a Board Paper**

When developing a Board paper it is important to recall the purpose of the Board. The Board's governance role with respect to decision making is to ensure that the decisions are supportive of the strategy of the organisation, adhere to the policies of the organisation and meet the needs of the members or shareholders of the organisation. The Board do not normally work in the organisation on a day-to-day basis and therefore may not be aware of all the factors affecting a particular decision. As such it is important to:

- 1. Include managers and other key people in your organisation in the development of the Board paper. This will ensure you have identified the widest scope of the decision and can confidently present all the required information to the Board.
- Consider informal discussions with some of the Board members while developing the Board paper. This will help to ensure you capture the information the Board will require and give those spoken to an opportunity BEFORE the Board meeting to consider their views. If the decision is going to be complex for the Board, discussions prior to the Board meeting can be invaluable.

Depending on the Board process, it may be necessary to provide a presentation to the Board as well as the written Board paper. If this is the case the Board paper needs to stand alone as a document with all the information necessary for the Board to make a decision. The presentation is only to provide an opportunity to present a summary of the information and respond to questions. You should not include any new factual information in the presentation, as some Board members may not be able to attend the presentation and the Board paper is an official document of record for the organisation.

When you have completed your Board Paper ask yourself the following questions:

- 1. Is this targeted at the right level for the audience?
- 2. Does it contain all the relevant information for the Board to make a decision?
- 3. Is it clear and concise?
- 4. Does it ask for a specific decision to be made?

# **Sample Board Paper**

Below is a sample Board Paper that will assist you in structuring your own Board Papers. This can be adapted depending on your Board's requirements.

#### **Draft resolution**

The Board of Sports Organisation resolves to approve the construction of a new sporting facility at 123 The Place, New Town for the purposes of playing Our Sport at an estimated cost of \$500,000.

### **Executive Summary**

This paper seeks a decision from the Board to approve the construction of a new sporting facility at 123 The Place, New Town. The cost of the new facility is estimated at \$500,000. The new facility will enable Sports Organisation to increase the number of teams playing by approximately 200 per season and provide additional revenue from a cafeteria of \$20,000 per annum.

#### Recommendation

It is recommended that the Board approve this resolution. The construction of the new facility has been estimated to cost \$500,000 based on two quotes received from local building companies.

The recommendation provides for:

- Additional court space to support an additional 200 teams during the regular season. This
  will improve participation from our community and provide \$56,000 in team registration
  fees.
- The addition of a cafeteria will increase the number of parents who will stay to watch their children play Our Sport, increase the desirability of the facility for social teams and provide an estimated \$5,000 profit per annum.
- There is an opportunity to provide off-season and other social competitions with the new indoor facility. We have not estimated what this is likely to be.

Therefore, the construction of the new facility will support three key strategic objectives:

- 1. Increasing player participation
- 2. Increasing involvement from the wider community in Our Sport
- 3. Investing the reserves in Our Sport to support long-term growth.

Other alternatives considered were leasing an existing facility or purchasing an existing facility. Leasing an existing facility did not support the objective to invest reserves as the main lease costs would be a year-by-year expense which would not provide any return. The available premises for purchase did not include an existing cafeteria facility and the cost to construct the addition of a new cafeteria to the existing building was greater than building a new facility. Without a cafeteria we do not meet our objective to increase involvement in Our Sport from the wider community.

### Background

Sports Organisation has reached the playing capacity of the existing facilities.

During the past 10 years the participation in Our Sport in the area has been increasing each year on average by 3%. This increase parallels the city council information on general population growth

within our catchment. The city council has projected the population growth will likely increase at a similar or greater rate during the next 10 years.

As per our strategic plan, we have a number of initiatives in place to increase player participation to ensure that the growth of Our Sport in our area mirrors the population growth. These include the Kids at School programme that has increased the number of schools that have Our Sport on the curriculum by 20% and the Let's Get Active winter programme.

Our strategic plan also seeks to increase involvement from the wider community in Our Sport and to seek options for investing our reserves.

Over the past 12 months we have been considering a number of options for increasing the facilities we provide for playing Our Sport in our area. These options were provided to the Board on the following dates:

23 February 2011: Information only on the current facility capacity.

24 March 2011: Decision to develop options to increase current capacity.

20 October 2011: Discussion paper outlining the different options.

Following the Board discussion on 20 October 2011 a resolution was passed to progress with pricing for building a new facility. At this time there were two sites being considered, 123 The Place and 27 The Avenue. Due to rezoning by Our City Council, 27 The Avenue is not considered an option, therefore we proceeded with building estimates at 123 The Place.

### Risks and Issues

We have identified the following risks:

Risk	Likelihood	Severity	Management Plan
Council may not	Low	Significant	Will seek a local architect familiar with development in the area
approve resource			and Our City Council procedures.
consent			A redesign will be required of the facility would be required
			potentially affecting the number of teams we can support.
Costs are estimate	Medium	Moderate	Quotes will be requested from 3 contractors. If the quote varies
only. There is a risk			by more than 5% from the estimate, we will seek Board re-
that these may			approval
increase once we			Contracts will be fixed price quotes to reduce the risk of price
have firm quotes			increases to Sport during the construction.

We have identified the following issues:

- 1. We have not secured a naming rights sponsor for the new facility. This sponsorship will support the ongoing costs of insurance, rates and maintenance of the facility.
- 2. There is an option to use the cafeteria as a bar serving alcohol. We believe this is a policy decision for the Board and will be presented in a future Board paper.

#### Consultation

The Facilities Manager has managed the process to date, including meeting with Our City Council and local construction firms. He has been the main contributor to this paper.

The Administration Assistant and the Community Sport Manager have been heavily consulted.

# **Financial Summary**

### Capital investment (cash flow)

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Total
Architecture	10,000	1,000	1,000	1,000	1,000	1,000	15,000
and engineering							
Construction		24,000		228,000		228,000	480,000
Council fees	5,000						5,000
TOTAL	15,000	25,000	1,000	229,000	1,000	229,000	500,000

### **Profit and loss impact**

The following is an estimate of the year-on-year profit and loss impact

	Item	Cost	Total
Income	Team fees	56,000	
	Cafeteria	20,000	
			76,000
Expenses	Rates	2,500	
	Insurance	2,000	
	Maintenance	5,000	
	Cafeteria supplies	15,000	
	General expenses	2,500	
	Depreciation	25,000	52,000
Total			24,000

### **Alternatives Analysis**

The following alternatives were considered:

- 1. Lease an existing facility. Leasing an existing facility was estimated at \$30,000 per annum. This is similar to the expenses for a construction option. Leasing would not have realised one of our strategic objectives which is to invest reserves for the long-term benefit of Our Sport. Leasing increases the risks of long-term cost management challenges if the leaser increases lease costs as you are generally locked in for no more than 5 years. The main benefit of the lease option was a much lower initial capital investment.
- 2. **Purchase an existing facility.** Purchasing an existing facility was a good option as it reduces the risks associated with a new construction. The only viable premise did not have a cafeteria and there was not an opportunity to construct one without comprising playing space. This option would not have supported a strategic objective to increase involvement by the wider community.
- 3. **Construct a new facility.** The construction option has the closest fit to our strategic objectives. The only negatives identified for construction are the risks that the costs are higher than estimated.

A detailed list of pros and cons for each of the alternatives is available in Appendix A.