

WHAT IS DECISION MAPPING?

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Simply put, decision mapping is **laying out visually the thinking involved in a decision**.

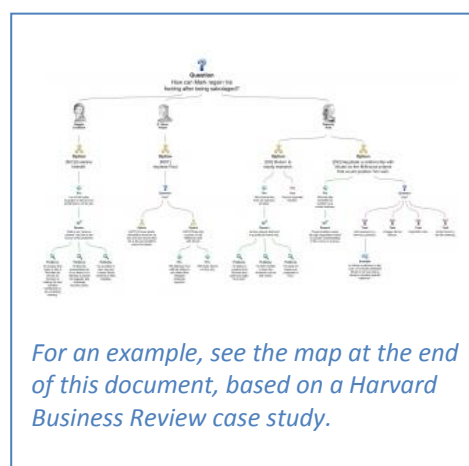
Making a decision is essentially trying to choose the best thing to do from a range of options. Each of those options may have various advantages and disadvantages, and these in turn may be backed up by arguments and evidence, or subject to dispute. Decision mapping displays this complex structure in an easy-to-follow diagram.

Benjamin Franklin famously recommended that, to make a difficult decision, we should list the Pros and Cons of a course of action on a sheet of paper, and “cancel out” those of equal weight.¹ Decision mapping is really just Franklin’s method extended to handle more complex deliberative decision problems and taking advantage of contemporary computer tools.

There are three main aspects to it. First, there is **making explicit** the various decision ingredients – the questions, options and sub-options, pros and cons, arguments and evidence – and their relationships, in a systematic, disciplined way.

Second, there is **producing the map**, i.e. laying all this out in visual form. Following a set of diagramming conventions, and using purpose-built software, we produce a map showing what we’ve got and how it all hangs together. The map can be displayed on screen or printed out, sometimes in the form of a large chart or poster.

Third, there is using the map to actually **make the decision** – i.e. to settle on one option as the best choice. This involves evaluating many individual components (weight of pros and cons, strength of arguments, etc.) as well making overall assessments of the quality of the options in light of everything captured in the map.



For an example, see the map at the end of this document, based on a Harvard Business Review case study.

But why would I do this?

Fundamentally, decision mapping helps us **make better decisions**. It helps improve “hit rate,” i.e. the proportion of decisions we get basically right. It does this by improving the thinking leading up to the decision.

The *process* of decision mapping, properly followed, makes the thinking **more clear, rigorous and complete**. Following the decision mapping guidelines, we can articulate and organise our thinking more effectively than if we follow our habitual, ad hoc processes. Then, when it comes time to make a choice, our judgement is better grounded.

The *map itself* helps us **get our minds around the decision**. The reality is that decisions, especially important ones, are often quite complicated. By default we try to hold and process that complexity in our heads. The

¹ See Mapping out the Options: How Technology Helps with Decision Making. eWeek.com, Feb 2009, <http://tinyurl.com/ku769f>



trouble is that our cognitive capacities are limited in crucial ways, and can be quickly overwhelmed. Relevant considerations get ignored, and cognitive biases kick in. A decision map helps address this problem by storing the thinking outside the head in an easily-surveyable form. In effect, working with decision maps is like adding more RAM to a computer; it allowing us to devote more of our central cognitive resources to the really hard task of evaluating the considerations and choosing the right option.

Any other reasons?

Well, yes... for one thing, it can **reduce the stress** associated with decision making. It helps dispel some of the anxiety which inevitably arises while making an important decision. When we can quite literally see that the thinking has been done properly, we can be more confident that our choice is going to be well made and will turn out well. If things nevertheless turn out badly, we'll have fewer regrets about our choice, and know we'll be able defend ourselves against critics.

Decision mapping also **creates a clear record** of the core thinking behind a decision. This is useful if we need to make more decisions of a similar nature, or if at some point we need to look back and review the thinking behind a particular course of action. This can be especially handy if fate conspires against us and our well-made decision goes wrong. When the Inquisition comes knocking, we can show our map.

Decision mapping can help us **communicate the thinking** behind a decision. We can show the map itself, so others can then quickly see what options and arguments were considered. Alternatively the map can be the roadmap for some other form of communication such as a document or a PowerPoint presentation.

Better communication is important when a team is trying to work together on a decision. An emerging decision map helps **keep everyone "on the same page,"** with a shared understanding of the issues and considerations in play. Contributions can then be more productive, and everyone on the team ends up with a stronger sense of ownership of the eventual decision and the outcome.

What sorts of decisions is it good for?

At a theoretical level, decision mapping is designed for **deliberative decisions**. These are the decisions we make by weighing up the arguments bearing one way or another on our various options.

Deliberative decisions contrast with *intuitive* (or "blink"²) decisions, which involve little if any conscious consideration of options and their merits – for example, choosing to swerve when a cyclist suddenly enters our lane. They also contrast with *technical* decisions. This broad category encompasses all decisions made via some kind of formal or technical decision procedure, usually quantitative in nature. Multi-criteria decision analysis³ and its numerous kith and kin are the central examples.

In practice, **most important decisions are made deliberately**. To take a dramatic case, transcripts of conversations among President Kennedy and his team during the Cuban Missile Crisis show that they were exploring options and trading arguments – in short, deliberating. At a more personal level, consider what you would do in deciding whether or when to have a serious surgical operation.

² See Malcolm Gladwell's famous book *Blink: The Power of Thinking without Thinking*. Back Bay Books, 2007

³ See http://en.wikipedia.org/wiki/Multi-criteria_decision_analysis



So decision mapping, as just an enhanced form of deliberative decision making, will be suitable for a wide range of major decisions.

Such as?...

Many **business decisions** are made deliberately, and a great deal can turn on making these decisions well. This makes decision mapping particularly relevant to business. For example, Board decisions typically involve weighing up the case presented by Management for a particular course of action in the light of various potential objections and alternatives. Decision mapping can help improve Board deliberations.⁴

Every month the Harvard Business Review provides a case study describing a realistic business scenario in which a senior figure is called to make some kind of hard call. Decision mapping, it turns out, fits these case studies very well.⁵

This is not to say that decision mapping is the “one true way” for making business decisions. Intuitive and technical decision methods certainly have their place. Different decision techniques are appropriate for different types of decisions; the ideal is to be expert in each, and to choose the right tool for the job.

Isn't this just mind-mapping?

There is certainly a family resemblance between decision mapping and other mapping techniques such as mind mapping and concept mapping. All involve displaying complex structures of information using “node and line” diagrams. However decision mapping is **tailored specifically for decision making**, and so has its own unique set of rules, visual conventions and procedures. Also decision mapping tends to be **more rigorous** and demanding than its more well-known cousins.

Decision mapping is closely related to the **Minto Pyramid Principle**,⁶ a set of concepts and techniques widely used in management consulting to clarify and discipline thinking. The similarity or overlap is inevitable since both reflect fundamental principles of good thinking and use simple diagrams. However while decision mapping is focused solely on decisions, the Pyramid Principle emphasizes preparation of thoughts for written presentation.

Who else is using it?

In one sense, the answer is – everyone. All of us are on occasion involved in making weighty decisions by articulating the options and the pros and cons and associated arguments. We may lay these out in a document or PowerPoint presentation, work through them around the meeting table, or just try to hold them in our mind's eye. This is decision mapping, but usually done in a relatively haphazard manner and using an inferior mode of presentation.

Decision mapping in the full sense described here makes what we all naturally do more systematic and visual. It is a new development and is only just starting to spread. Austhink has been using decision mapping to facilitate decision processes in a number of large companies, government departments and non-profit

⁴ See our white paper, *Enhancing Board Deliberations with Decision Mapping*, available from our website.

⁵ See <http://timvangelder.com/2009/04/07/decision-mapping-can-make-the-right-choice-obvious/>

⁶ Minto, B. (2007). *The Minto Pyramid Principle*. London: Minto International Inc.

organisations. And since the release of the bCisive software, decision mapping is starting to be picked up around the world, with users applying decision mapping to diverse issues in their organisations or their personal lives.

bCisive? What's that?

bCisive⁷ (“be decisive”) is **software designed to support decision mapping**. It also supports related activities such as argument mapping and hypothesis mapping.

In theory, decision mapping does not require any particular technological aids. A decision map could be drawn using a whiteboard, Microsoft Visio, or even in the sawdust on the workshop floor. However, as with carpentry, so with decision. Difficult tasks are made easier, and the results are usually much better, when you **use the right tool for the job**. Currently bCisive is the only (and hence the leading) software solution for deliberative decision making.

How do we get started with decision mapping?

The easiest way to get up and running with decision mapping is to have an expert facilitate a workshop focused on an important decision facing your team or organisation.

Austhink Consulting can provide such facilitation. It can also provide consulting and training services to help any organisation succeed with systematic adoption.

ABOUT US



Dr. Tim van Gelder is a cognitive scientist and a Principal with Austhink Consulting. He has been researching how mapping techniques can improve thinking for over a decade, and was responsible for development of the leading decision mapping tool, bCisive. He is currently writing a book on decision mapping, *Draw the Right Conclusion!*. He can be contacted at tv@austhink.com or the number below.

Austhink Consulting is a Melbourne-based consulting firm providing facilitation, consulting and training services in critical thinking. Austhink have been pioneers in the development of decision mapping and related mapping techniques. Austhink clients tend to be large organisations in the corporate, government and professional worlds, including major intelligence agencies, law firms, banks and government departments.

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⁷ Available from <http://bcisive.austhink.com>

Map based on “When your colleague is a saboteur,” by Bronwyn Fryer, a case study in *Harvard Business Review*, November 2008. “Mark Landstad, relatively new to CliffBank’s investment banking division, has a veteran teammate, Nicole Collins, who appears to be a reliable ally. However, when Mark needs her help in locating vital information for his part of a presentation they will be doing together, she feigns ignorance. During the meeting, Nicole produces the data out of the blue and wows the attendees with her analysis. Knocked off balance by the sabotage, Mark clumsily seeks advice from his boss, who is a brick wall when it comes to interpersonal dynamics. How should Mark deal with his backstabbing colleague?

