Career Toolbox

The Decision Paper: A Tool to Facilitate Decision-Making

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Introduction

Karen, a project manager on an important construction project, was facing a dilemma. Two months earlier, she had informed her managers of a pending financial crisis in the program office that was funding her project, but she had received no response or guidance to date on how to proceed. She knew she was nearing a critical decision point in the project, beyond which failure to make a decision could jeopardize her ability to meet project budget and schedule constraints. She wondered why she hadn't received an answer from her managers, and she was desperately trying to find a way to expedite their decision process to avert disaster on her project.

Karen's situation is all too familiar to project managers and staff members: it's often difficult to get important decisions from management in a timely fashion. What could Karen do? Luckily, one of her colleagues introduced her to the concept of decision papers.

A decision paper is a methodology for presenting complex issues to a decision-making group in a crisp, easily-digested format. It is a tool that helps articulate the salient issues relevant to a particular problem and facilitates the decision-making process. It is especially helpful in cases like Karen's, where the timeliness of the decision is very important.

Format

Decision papers have several critical elements that define a recommended format, although the approach within each element can vary. In all instances, the decision paper must contain concise, crisp statements, and the overall length should be limited to one or two pages. Usually pressed for time and driven by hectic schedules, most managers can't or simply won't read a document longer than that. That doesn't mean you should use a small font to squeeze as much content as possible onto one page. The decision paper's graphic layout, as well as content, is important to get your message across. No matter how carefully you prepare your decision paper, if it's difficult to read due to small font size or cramped layout, the decision-makers won't read it. It is best to use a minimum of 12-point type and organize the information into bullets or columns with adequate white space for reading ease.

The decision paper begins with an **Issue or Problem Statement**. For optimum effect, this section should begin with the words, "The decision to be made is....", followed by a short statement of the issue to be resolved. To demonstrate, suppose you were trying to decide whether to buy your own ski equipment. The Problem Statement might simply

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read, "The decision to be made is whether or not to buy my own ski equipment." It may sound trite, but in making this statement you have actually clarified and focused the issue that needs to be addressed. You know, for instance, that the issue of actually going skiing is already settled. For more complex problems, just writing down what the issue is can be quite challenging. When the issue is accurately stated in such complex cases, it often constitutes a giant step in working toward a decision.

The next critical element of the decision paper is the presentation of relevant **Background** material. This section gives a synopsis of history and facts that clarify the context surrounding the issue. It prevents decision-making in a vacuum by ensuring that decision-makers understand the genesis and evolution of the issues to be discussed and decided. The actual presentation of material is flexible, but the goal in all instances is the same: summarize the necessary background material in one or two brief, coherent paragraphs.

To continue with the example of the ski equipment, it might be important to note how experienced of a skier you are, how often you ski each season, with whom you ski, what kind of budget you have to support your hobby, whether you currently own equipment, and why you are considering the purchase of equipment at this time. This establishes evaluation criteria and supporting data that will influence your deliberations in the decision-making process.

Presentation of **Options or Alternatives** is another important element of the decision paper. Some issues presented for decision will require relatively simple, yes/no options. Others will be more complex, with choices at opposite ends of a spectrum of options, and several in between. In any case, this section presents a list of feasible alternatives that provides a framework for discussion, a starting point for debate and deliberation. Alternatives are best stated as actions to be taken. This transforms a decision to support a particular option into an automatic action item for implementation. It is also very useful to include a no-action, or default, alternative. This option is a key feature that forces decision-makers to acknowledge that making no decision at all is a decision itself. In the ski equipment example, the list of options might look something like this:

Option 1: Purchase new equipment
Option 2: Purchase used equipment
Option 3: Purchase a combination of new and used equipment
Option 4: Rent equipment for each ski trip

In this example, Option 4 is the default option, since this is the action that will be required if no decision is made.

The **Discussion** section is the heart of the decision paper. It presents the pros and cons of each option and provides information on impacts, costs, and resources required, both tangible and intangible. There are several ways to present this information. Pros and

cons can be listed simply in two columns for side-by-side comparison. If necessary, a more elaborate decision matrix can be constructed, or the benefits and drawbacks can be articulated in a prose discussion format. The selection of the optimum method is a judgment call that depends on the nature and complexity of the decision to be made, the composition and level of the decision-making group, and their need for background information. For a clear-cut presentation on limited alternatives that do not overlap and have distinct costs and benefits, organizing pros and cons into two columns works well. The discussion section may be better presented in a prose style in situations where options lie on a continuum, potential options overlap, distinctions between options are more blurred, or pros and cons are less tangible. This allows you to focus on the impacts and values to be weighed rather than the options themselves. No matter what the format, the discussion should address the criteria that will affect your decision. For example, if you have limited financial resources and options, you must certainly address cost issues in your discussion of options. One possible elaboration of the pros and cons for the ski equipment purchase decision is shown below:

Pros	**Cons**
Option 1: Purchase new New equipment is in better condition, more technically advanced, and more reliable.	This option requires the greatest initial cash outlay.
Option 2: Purchase used I can save a lot of money by buying used equipment.	It is difficult to determine the quality and past use of used equipment.
Option 3: Purchase new and used I can buy top-of-the-line equipment for the most important items with the money saved by buying other items used.	If carefully done, no perceived drawbacks.
Option 4: Rent I won't have to make a large initial investment for something that I won't use that often.	Quality, reliability, and life cycle cost of rented equipment are all questionable.

In the **Recommendation** section, the preparer of the decision paper declares support for one of the alternatives presented based on an overall assessment of the facts and arguments presented in the decision paper Discussion section. If the options have been properly stated, the selected option will read as an action item for implementation, which will facilitate implementation. For the ski equipment example, the following statement might be appropriate:

"Based on a trade-off analysis of costs and the number of ski trips planned per year, I recommend *Option 3: Purchase a combination of new and used ski equipment.*"

The **Coordination/Endorsement** section includes signatures of intermediate decision-makers or stakeholders indicating their decision (which may or may not concur with the recommendation). Additional endorsements might include stakeholders who must respond to, support, or communicate the decision made, in addition to the decision-makers themselves. For instance, if you have a family member such as a spouse with a financial stake in the large investment you could potentially make in ski equipment, that person should endorse the decision, since she or he will have to live with the decision to some extent.

Finally, a **Record of Decision** specifically states the option chosen and provides a space for the final decision maker to sign off on the decision. This validates the process, provides a written record of the decision, and makes the decision "official". The importance of obtaining approval from the proper level of management cannot be overemphasized. In most organizations, decisions that "trickle down" from upper management are often poorly or haphazardly communicated to affected parties, leading to a lack of commitment or support for the decision. A decision paper signed by the parties who have authority to render a decision is a very powerful tool.

Applications

Once the basic decision paper format is mastered, the technique can be used to facilitate decision-making with a wide variety of issues. Some suggested areas in which decision papers can be useful in the engineering workplace include:

- evaluation of purchases: equipment, property, facilities, services, etc.
- selection of investment or marketing options, including market niches to potentially expand into or vacate
- staffing/hiring decisions
- comparative merits and drawbacks of competing technical solutions to engineering problems

Conclusions

The decision paper is a versatile tool with a broad range of application in the engineering workplace. Some of the advantages are:

- Decisions are considered in a more deliberate fashion and are based on facts.
- Decision makers respond more quickly.
- The process provides a written record of the decision.
- The technique is flexible enough to be applied to a wide variety of situations.

One of the most valuable benefits of decision papers is that the issues are clarified and logically presented so that they can be discussed in an open forum, which allows for consensus-building and buy-in. Moreover, managers place high value on their staff's ability to sort out complex issues and present them in a digestible format that leads to efficient and timely decision-making. If you want to impress your boss the next time a difficult issue arises, try this technique.

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