



2 × 2 MATRIX DECISION AIDS

Purpose

The purpose of a 2 × 2 matrix decision aid is to examine multiple perspectives on issues identified during a needs assessment. A number of perspectives can be compared in the 2 × 2 matrix format (for instance, risks vs. rewards, your view vs. the view of others, what you know vs. what you don't know, or urgency vs. importance). Therefore, we have combined these techniques on the basis of their shared similarity of using the 2 × 2 matrix to represent alternative perspectives.

Needs Assessment Applications

Needs (or gaps between current and desired results) are viewed from many perspectives within an organization, which can make the findings of an assessment challenging to prioritize and to turn into justifiable decisions. For example, when gaps between current and desired results are identified, the perspectives of individuals directly associated with the performance (for example, public service providers) will often differ from the perspectives of those who depend on the results (for example, general public, customers, and so on). Likewise, perspectives on the amount of potential risk that can be tolerated in relation to the potential benefits will also vary across individuals and groups—including the views of partners internal to your organization (such as managers from other units, technology specialists, and others) and those external to your organization (such as government agency staff members, development partners, community groups, and others).

Use 2 × 2 matrix decision aids to assist in identifying the priorities, selecting solutions or activities, facilitating group discussions, or verifying that you have examined the issues identified in the needs assessment from multiple viewpoints. Although examples of 2 × 2 matrix decisions aids are

used in this guide to illustrate the value of the technique, you can substitute these examples with other examples within the context of your assessment. The 2×2 matrix format allows you to compare and contrast a variety of perspectives in an easy-to-complete format.

Advantages and Disadvantages

Advantages

- A 2×2 matrix decision aid can ensure that multiple perspectives are considered when needs assessment findings are prioritized.
- The results of a 2×2 matrix decision aid can help you communicate with others when prioritizing needs, identifying appropriate solutions, or justifying decisions.
- You can use a 2×2 matrix decision aid to expand on needs assessment findings, including information on the preferences of differing groups regarding what should be done in response to identified needs.
- A 2×2 matrix decision aid allows for potential positive and negative consequences to be considered prior to decision making.
- Using this technique, you can compare and contrast the value of taking an action (or selecting a need as a high priority, or implementing a solution) to *not* taking an action (or not selecting a need as a high priority, or not implementing a solution). Too often the latter—decisions not to do something—are not considered for their potential consequences or payoffs.
- A 2×2 matrix decision aid ensures that multiple perspectives are included in decisions regarding all needs and potential solutions, thus avoiding a situation where needs assessment data are simply used to confirm preexisting perspectives about what should be done.

Disadvantages

- A 2×2 matrix decision aid can be more limited than other tools or techniques (for example, SWOT or brainstorming) for generating ideas about what to do next.
- A 2×2 matrix decision aid typically requires that all stakeholders value the perspectives and potential differences between groups within the organization.

- The analysis of this technique is only as useful as the quality of information available from the needs assessment.
- Identified comparative characteristics in each “cell” of the 2×2 matrix decision aid are only listed, and not prioritized or given differentiating weights.

Process Overview

1. Create either a list of the needs (or gaps in results) that were already identified in the needs assessment process or a list of the potential activities (or solutions) that you are considering as recommendations that are based on the needs identified during the assessment. It is best not to mix the two (needs and solutions). If you want to gain perspectives on both the prioritization of the needs and the prioritization of potential interventions, then conduct two separate applications of the 2×2 matrix decision aid.
2. Identify representatives from other groups with varying perspectives on the issue (for instance, agency managers, new employees, field employees, central or headquarters employees, donor institution representatives, government ministry officials, community members, or other development partners).

Example of Differing Perspective¹

1. Provide the representatives with the issues identified during the needs assessment (for instance, needs or potential activities), and ask them to prioritize these issues according to their perspective.
2. Prioritize the same list of issues from your perspective as well. If you are working with a team on the needs assessment, then this prioritization can be done as a team through a variety of group decision-making techniques.
3. With a priority list from each group, place the highest priority data elements into the 2×2 matrix decision aid. Consider including your priorities in comparison with the priorities of another group (see table 3B.4). Or compare the priorities from differing groups, leaving out your perspective (see table 3B.5).
4. Review the complete 2×2 matrix decision aid—along with recommendations of how to expand the needs assessment to address gaps between

Table 3B.4 Differing Perspectives Example A: Prioritizing Needs (Youth Employment)

	High priorities of city youth	Low priorities of city youth
High priorities of city employment agency	<ul style="list-style-type: none"> • Low youth employment rate • Few internship opportunities with local businesses 	<ul style="list-style-type: none"> • Low employment rate for aging populations
Low priorities of city employment agency	<ul style="list-style-type: none"> • Few youth recreation centers open in evenings • Moderately high education fees for youth training courses 	<ul style="list-style-type: none"> • Decreasing retention rate of city employment agency employees

Table 3B.5 Differing Perspectives Example B: Comparing Potential Solutions (Organizational Performance)

	High priorities for new employees	Low priorities for new employees
High priorities for managers	<ul style="list-style-type: none"> • Performance specific training • Redesigned new employee orientation 	<ul style="list-style-type: none"> • New hiring standards • Renewed emphasis on standardized interviewing procedures
Low priorities for managers	<ul style="list-style-type: none"> • Improved mentoring program • Quarterly performance feedback system 	<ul style="list-style-type: none"> • Motivational workshops

what is known and what is unknown from each perspective—with your needs assessment partners.

Example of Risk vs. Rewards

1. Provide the representatives with the issues identified during the needs assessment (for instance, needs or potential activities), and ask them to identify the associated risks and rewards for each issue. For example,
 - What are the associated risks and rewards of addressing or not addressing the identified need?

- What are the associated risks and rewards of implementing or not implementing this activity?
2. Note that the analysis combines perspectives to examine the risks and rewards of taking or not taking action. Work with assessment partners to come to an agreement about the risks and rewards included in each 2 × 2 matrix.
 3. Create a 2 × 2 matrix to illustrate the associated risks and rewards for each issue (see tables 3B.6 and 3B.7).
 4. Review the complete 2 × 2 matrix with your needs assessment partners, along with recommendations of how to expand the needs assessment to address gaps between what is known and what is unknown.

Table 3B.6 Rewards vs. Risks Example C: Addressing Needs (Project Completion Delays)

	Address need (takes too long to complete projects)	Do not address need (takes too long to complete projects)
Rewards	<ul style="list-style-type: none"> • Reduces the time to complete projects • Makes project completion as important as project initiation 	<ul style="list-style-type: none"> • Maintains focus on project initiation
Risks	<ul style="list-style-type: none"> • Distracts managers from other strategic priorities • Increases the cost of projects 	<ul style="list-style-type: none"> • More projects are at risk of failure to meet goals • Country needs change before a project can be completed

Table 3B.7 Rewards vs. Risks Example D: Implementing Solutions (Employee Mentoring)

	Implement mentoring program	Do not implement mentoring program
Rewards	<ul style="list-style-type: none"> • Knowledge sharing • Better engagement of new staff members 	<ul style="list-style-type: none"> • Saves time and money • Do not have to place additional burdens on managers
Risks	<ul style="list-style-type: none"> • Encourages sharing of bad habits • Requires time of managers 	<ul style="list-style-type: none"> • New staff members are not able to perform roles as soon • Knowledge of staff members continues to leave when they leave

Tips for Success

- Before getting started, discuss with participants the specific goals you are hoping to accomplish by using the 2×2 matrix decision aid.
- Work with group members to include factors in all four quadrants of the matrix. Leaving quadrants of the matrix empty will limit your ability to make quality decisions.
- Focus each 2×2 matrix on just one need or potential solution. It can be tempting to save time by combining needs or solutions, but doing so typically leads to general discussions rather than to a focused decision.
- Strive to include at least three items in each of the four cells of the 2×2 matrix.
- Remember that a decision not to take action (or not to address a need, or not to implement a solution) is a decision that carries potential risks and rewards, just as does a decision to take action.
- The book by Alex Lowy and Phil Hood (2004) contains more than 50 examples of 2×2 decision aids that can be used to improve performance.

Note

1. The differing perspectives example is loosely based on the Johari Window activity used by psychologists.

References and Resources

- Beach, E. K. 1982. "Johari's Window as a Framework for Needs Assessment." *Journal of Continuing Education in Nursing* 13 (1): 28–32.
- Lowy, Alex, and Phil Hood. 2004. *The Power of the 2×2 Matrix: Using 2×2 Thinking to Solve Business Problems and Make Better Decisions*. San Francisco: Jossey-Bass.
- Witkin, Belle Ruth, and James W. Altschuld. 1995. *Planning and Conducting Needs Assessments: A Practical Guide*. Thousand Oaks, CA: Sage Publications.

Website

"Risks versus Rewards Worksheet" is available at <http://www.lifehack.org/articles/lifehack/risks-versus-rewards-worksheet.html>.