# The Sung Diagram: Revitalizing the Eisenhower Matrix

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**Abstract.** The Eisenhower Decision Matrix, credited to the task management system of US President Dwight Eisenhower, is a graphical diagram used in strategy and planning for tasks. This matrix, however, only provides four types of priorities. We identify a collection of scenarios in which the traditional matrix provides misleading suggestions and propose an extension to the matrix that addresses the misleading suggestions illustrated with examples and implementation in a web application.

**Keywords:** Eisenhower matrix · prioritization.

## 1 Introduction

I have two kinds of problems, the urgent and the important. The urgent are not important, and the important are never urgent.

– Dwight D. Eisenhower [5]

The Eisenhower matrix is a graphical diagram used in strategy and planning. The diagram contains four quadrants: important / urgent, important / non-urgent, non-important / urgent, and non-important / non-urgent; see Fig. 1a. The user of the matrix places their tasks into one of the four quadrants. In practice, the diagram is a useful tool to avoid the trap of spending time on urgent but unimportant tasks and not enough time on important and not urgent tasks.

Indeed, Covey [4] suggested marking the urgent/important tasks the highest priority, making time for the important/not urgent tasks and delegating urgent/important tasks. But, we believe that the simple matrix is missing a key detail: **the fit.** For example, consider the important/urgent task in which Christine is packing for a move in two days. The Eisenhower matrix would suggest that she start packing for the move. But, if Christine has the resources to hire a moving company, it does not require Christine's time and therefore should be delegated. We propose an extension of the Eisenhower matrix, called the *Sung Diagram*<sup>3</sup> that incorporates the fit for the agent that will perform the task.

<sup>&</sup>lt;sup>3</sup> The diagram is named in honor of the coauthor who's upcoming move inspired the extension of the diagram.

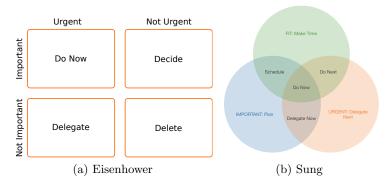


Fig. 1: Comparison of the Eisenhower decision matrix and the Sung Diagram.

## 2 Methods

We extend the Eisenhower Matrix to The Sung Diagram by adding *fit*. That is, if the agent (e.g., person, company, or group) is required for the task. By adding a third binary variable, a Venn diagram is a suitable representation; see Fig. 1.

First Dimension: Importance Important means "of great significance or value; likely to have a profound effect on success" [9]. How one defines importance, therefore, potentially affects success. Tasks can be important for various reasons: societal (e.g., curing cancer), individual (e.g., exercising regularly), organizational (e.g., marketing product), etc. Importance is about the *impact* of accomplishing the task; bringing intrinsic benefit to someone or some group.

Second Dimension: Urgency Urgency is defined as promptly requiring attention [11,13]. Often, task order is based on the urgency. In both the Eisenhower Matrix and the Sung Diagram, however, task order is not dictated by urgency alone. In the Sung Diagram, we require that no urgent task has a blocker; that is, any urgent task can begin immediately.

Forgotten Third Dimension: Fitness From the moving example, recall that packing is urgent and important yet she has the resources to hire help, which implies she does not need to do the packing. The example highlights the missing element of the Eisenhower Matrix: the fitness for the agent to complete the task. The decision for fitness has two components: (1) Capability: is the agent the most capable to accomplish this task? Certain tasks require training (e.g., home electrical work) or practice (e.g., a piano recital). In fact, evidence shows that aligning tasks with strengths or capabilities increases productivity and satisfaction [8, 12]. In addition, the agent must not have the ability to delegate to someone else who is more trained or practiced. (2) Ipseity: does completing this task contribute to the agent's ipseity (sense of self)? The agent has values, be it explicitly stated in a mission statement or informally as goals. We ask the agent to assess: Does this task contribute to a "Big Hairy Audacious Goal" [3]?

#### 2.1 Outcomes

After deciding whether or not the task is important, urgent, and fit, the task is assigned one of the eight regions (or *outcomes*); see Fig. 1b. The rules for the outcome have simple overarching principles: (1) *Delegation:* If the task is not fit, then the agent should delegate the task. (2) *Re-evaluation:* Tasks that are urgent must be re-evaluated for their importance and fitness. Tasks that are fit but not important should be critically evaluated.

**Delegate Now.** Tasks that are urgent and important, but not fit, must be delegated now. Before delegating, the agent must first ensure that the task is fit for the delegate. For example, suppose a person is notified that their renal unit has recently been sold, and that they have 14 days to move out. They walk into Joe the real estate agent's office, but Joe specializes in house commercial sales, not in rentals. He immediately calls his colleague who does specialize in rentals in order to make a referral for the person.

**Do Now.** Tasks that are urgent, important, and fit must be done now, by the agent. Consistent application of the Sung Diagram will limit the number of tasks that appear in this region at the same time. For example, a pre-med college student who has an exam tomorrow in their microbiology class will have to study. Studying is urgent, important, and fit (as no one can do it for them).

**Delegate Next.** Tasks that are urgent, but not important nor fit, must be delegated next. First, you need to assess: do you know the right person to accomplish this task? If not, this task should be deleted. For example, if you are a researcher and asked to review a research paper in a field only tangentially related to your own, this task is neither important nor fit for you, but is usually urgent. You can decline to review the paper, or you can assign this to your graduate student as a learning experience to prepare for being an independent scholar.

**Do Next.** Tasks that are urgent and fit, but not important, must be done next, by the agent. An effort should be made to get all of the tasks in both the 'Do Now' and 'Do Next' regions as soon as possible. For example, the pre-med student may want to respond to phone notifications. The task is urgent and fit. However, we include a caveat: these tasks are not important, so the fitness much be re-evaluated first. If re-evaluation finds that they are not fit (such as the phone notifications [1, 10]), then these tasks should be deleted.

**Schedule.** Tasks that are important and fit, but not urgent, must be scheduled. Tasks in this region are discussed exhaustively by Covey [4]. For example, if your life goal is to write a novel, but your job is a computer programmer at a start-up company, you must block-off time to work on the novel.

**Plan.** For tasks that are important, but not fit nor urgent, you must create a plan for how they should be accomplished. The first step of this planning is to decide who is the best person to accomplish this task? If the task is an easy one to accomplish and your current set of 'Do Now' and 'Do Next' tasks are short, you can be the one to do this. However, most of the tasks in the 'Plan' region can be delegated. For example, if you often travel to meet donors for your institution and have an assistant that knows your travel preferences and calendar, then booking your trips takes a few minutes for them to plan.

#### 4 Bratterud et al.

**Delete.** Tasks that are not urgent, important, nor fit should be deleted. The hours in the day are limited, and some things must be let go. For example, suppose a friend recommends that you ride on a roller coaster at a local amusement park, but you are afraid of heights.

## 2.2 Interactive Diagram

We created an application<sup>4</sup> implementing the Sung Diagram. To use the application, enter the task name, select appropriate check boxes (important/urgent/fit), and click "Submit". The task name will be added to a visualization. The application was written in JavaScript and using the React framework [14]. React was chosen as it is an industry standard tool for front end web development and it supports continued feature development. The application was initialized with Create React App [6], which removes boilerplate setup in a React application. The visualization is implemented using libraries Venn.js [7] and D3.js [2]. The libraries enable the rendering and layout of area proportional Venn diagrams.

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<sup>&</sup>lt;sup>4</sup> The app is hosted at https://sungdiagram.herokuapp.com/. The code is available at https://github.com/TostySSB/sungdiagram and is released under the MIT license.