CAPABILITY MAPPING

IDENTIFYING AND ADDRESSING INTERNAL LIMITATIONS

by STEVE PEREIRA and ANDREW DAVIS

In the pursuit of delivering more value with fewer resources, organizations must understand and optimize the capabilities of their teams and systems. Capability mapping is a powerful tool that complements the techniques described in the book *Flow Engineering: From Value Stream Mapping to Effective Action* by Steve Pereira and Andrew Davis.

This document will guide business and technology leaders through the process of creating and utilizing a capability map to identify and address internal limitations that hinder team performance and autonomy.

> This mapping exercise is meant to be performed in conjunction with the five key maps of Flow Engineering. You will need to have completed the Value Stream and Dependency Maps as outlined in Chapters 6 & 7 in the book before attempting to complete this map. This allows you to focus on the capabilities most closely connected to your constraint.

UNDERSTANDING CAPABILITY MAPPING

A capability map is a visual representation of key capabilities associated with a flow constraint, taking into account available resources, support, ownership, and cognitive load. By creating a capability map, teams can identify ownership gaps, missing backup roles, and areas where additional investment is required to address constraints and foster higher performance. The capability mapping process reveals how a team's performance is affected by internal factors, such as a lack of skills, support, or resources. It also helps teams evaluate which dependencies they are capable of internalizing, reducing reliance on external groups.

INSTRUCTIONS

The capability mapping process follows the same four-step approach as the Outcome Mapping process described in Chapter 5 of *Flow Engineering*. Ideally, the same team involved in prior mapping exercises should participate in capability mapping to ensure shared context and understanding. Allocate 2–3 hours for this exercise.

STEP 1: Initial Discovery

- Focus on the bottlenecks identified through value stream mapping and external dependencies identified during dependency mapping.
- List the main capabilities the team believes would help overcome process constraints.
- Assess whether the team has the capability to bring external dependencies in-house.
- Make a copy of your value stream map (see Chapter 6 in *Flow Engineering*) and list relevant capabilities above or below the constraints to show them in context.
- Vote to rank the capabilities in terms of level of concern and isolate the top five for deeper analysis.

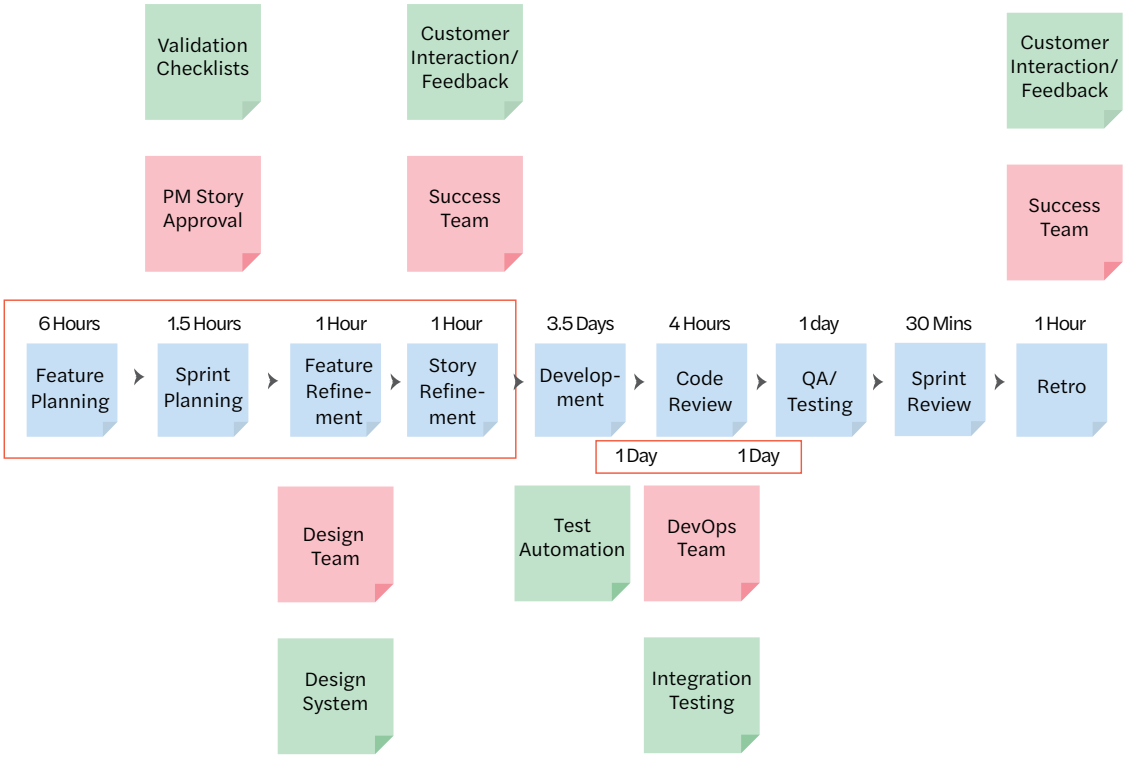


Figure 1: Value Stream Map with Capabilities and Dependencies Listed. Capabilities in Green; Dependencies in Pink

STEP 2: Mapping Exercise

- List the key capabilities of concern vertically on the Capability Map, with one row for each capability.
- The Capability Map has six columns to assess different aspects of each capability:
  - **Capability**: List the capability of concern.
  - **Owner**: Identify the person or role primarily responsible for this capability.
  - **Backup**: Identify who can support this capability if the owner is unavailable.
  - **Skill**: Have the team self-rate (via voting or private message) 0-5 on their skill level in this area.
  - **Resources**: Rate the team from 0-5 on the adequacy of resources to support this need. This can include training, documentation, self-service, etc.
  - **Score**: To summarize the perceived strength of that capability, add 2 points if an owner is defined and 4 points if a backup is defined.
- Identify areas of weakness or vulnerability in these key capabilities, such as one person owning a large portion of capabilities, lack of backup owners, or low overall scores.

Figure 2: Capabilities and Dependencies Scored

STEP 3: Follow Up

- Address the identified gaps and weaknesses through training, hiring, or allocating additional resources.
- Distribute responsibilities to avoid overreliance on individual team members.
- Encourage cross-training and a collaborative, information-sharing culture to ensure backup capabilities.

USING A CAPABILITY MAP

The gaps identified through capability mapping have a direct impact on a team's throughput. By addressing skill or resource gaps in key capabilities, teams can justify training, hiring, or other additional resources to improve productivity.

Capability mapping can also reveal opportunities for teams to internalize outside dependencies by:

- Avoiding limitations through adaptations
- Reorganizing existing resources
- Increasing resources like training, people, or IT resources
- Limiting outsourcing to handle most work within the team
- Helping increase the capacity of external dependencies
- Relying on external teams to help build internal capacity

In some cases, the capability map may reveal areas where seeking assistance from outside experts, teams, or organizations is the most effective and efficient approach. External dependencies can be beneficial when the work is needed across many groups, is error-prone, is time-consuming, requires redundancy, or is complex enough to require special expertise.

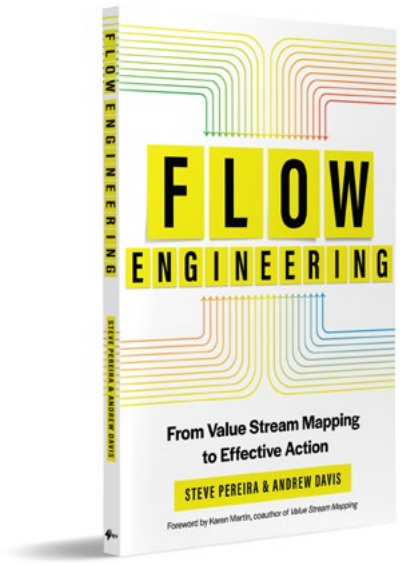
CONSIDERING THE COSTS OF INCREASED CAPABILITIES

When deciding to increase capabilities, it is essential to weigh the costs and benefits. The five key maps in Flow Engineering provide a formal way to estimate the expected benefit of process improvements. By estimating the financial impact of increased throughput, responsiveness, and reliability, teams can compare the costs of increasing capabilities against the potential benefits.

Improvements like training and building automation incur an up-front cost but little or no long-term cost, often resulting in greater net benefits compared to hiring additional staff or incurring ongoing costs. However, all improvements need to be considered in balance, as there are costs and tradeoffs to everything.

CONCLUSION

Capability mapping is a valuable tool for business and technology leaders looking to identify and address internal limitations that hinder team performance and autonomy. By following the four-step process and considering the costs and benefits of increased capabilities, organizations can make informed decisions to optimize their teams' capacity and deliver more value with fewer resources.



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