



Chapter 6

Leading At Scale

Contents

- ❖ Always Be Deciding
 - Identify the Blinders
 - Identify the key trade-offs.
 - Decide, Then Iterate
- ❖ Always Be Leaving
 - Your mission: Build a “Self-Driving” Team
 - Dividing the problem space
- ❖ Always Be Scaling
 - The Cycle of Success
 - Important versus Urgent
 - Learn to Drop Balls
 - Protecting Your Energy
- ❖ Conclusion

Overview

This chapter talks about how to be effective on the path of engineering leadership.

- The role evolves; you are a “servant leader”, serving a large group.
- The scope of problems you are solving become larger and more abstract.
- You are gradually forced to become a “higher level”.
- Don't look into the technical or engineering details; pushed to go broad rather than deep.
- Effectiveness depends upon general technical intuition and the ability to galvanise engineers to move in good directions.
- Impact as a leader than as an individual contributor.

Are you really a good leader?

The Three Always of Leadership:

- Always Be Deciding
- Always Be Leaving
- Always Be Scaling

Always be Deciding

- As you move from managing a single team to managing a team of teams, your responsibilities shift away from solving individual technical problems to making high-level strategic decisions.
- Your job becomes about consistently evaluating trade-offs between competing priorities.
 - Speed
 - Quality
 - Innovation
 - Stability
 - Customization
 - standardization

Always be Deciding

The Parable of the Airplane is a metaphor illustrating how leaders must focus on keeping the organization “flying” smoothly rather than getting caught up in minor issues.

A pilot is flying an airplane when a passenger tells him that the in-flight movie isn’t working. The pilot has two choices:

- Fix the movie system, pausing focus on flying the plane.
- Continue flying safely, leaving the movie issue to the flight crew.

As a senior leader, your job is to “fly the plane”—to focus on mission-critical responsibilities like strategy, safety, and direction. If you get distracted by every small problem, the whole system is at risk.

Always be Deciding

There are three main steps to this process.

- To identify the blinders;
- To identify the trade-offs;
- To decide and iterate on a solution.

Always Be Deciding: Identify the Blinders

When teams work on a problem for a long time, they can develop “blinders”—unconscious assumptions and habits that limit fresh thinking. These blinders cause people to:

- Accept the status quo without question.
- Use phrases like *“This is how we’ve always done it.”*
- Rely on workarounds or rationalizations to justify outdated solutions.

This presents an opportunity for someone with fresh eyes, an outsider, or a new team member to:

- Recognize hidden assumptions.
- Ask basic but powerful questions.
- Propose alternative strategies that long-time insiders may not see.

Always Be Deciding: Identify the Key Trade-Offs

- When you face big problems, there's rarely one perfect solution.
- You have to choose the best option for now, even if it means giving up something to gain something else.

As a leader, your job is to:

- Spot the pros and cons of each option.
- Explain them clearly to your team.
- And help decide what's most important right now.
- Think of it like balancing time, money, and quality—you usually can't have all three at once.
- It's your job to call out the trade-offs, explain them to everyone, and then help decide how to balance them.

Always Be Deciding: Decide, Then Iterate

- Once you understand the tradeoffs, don't wait for a perfect solution.
- You can use this information to make the best decision for this particular month.
- Next month, need to reevaluate and rebalance the tradeoffs again; it's an iterative process.
- If you don't frame your process as continuous rebalancing of trade-offs, your teams are likely to fall into the trap of searching for the perfect solution, which can then lead to what some call "analysis paralysis".
- Analysis Paralysis- State of overthinking or over-analyzing a situation to the point where a decision or action is never taken. It's a common mental trap that can affect individuals, teams, or organizations.

Always Be Deciding: Decide, Then Iterate

- You need to make your teams comfortable with iteration. One way of doing this is to lower the stakes and calm nerves by explaining, “We’re going to try this decision and see how it goes.”
- Next month, we can undo the change or make a different decision.” This keeps folks flexible and in a state of learning from their choices.
- Make a decision, act, and be ready to adjust. Decision-making is a continuous, iterative process, not a one-time event.
- Good leaders call out the trade-offs, bring people together, and help choose the best option for the moment.

Always Be Leaving

- A famous quote from Bharat Mediratta, a former Google engineering director: 'It's not just your job to solve an ambiguous problem but to get your organisation to solve it by itself, without your presence.'
- If you can do that, it frees you up to move to a new problem (or new organization), leaving a trail of self-sufficient success in your wake.
- To solve problems themselves, but to build a team that can solve them without the leader's constant presence. If you can leave and the team still succeeds, you've set them up for long-term independence freeing yourself to take on new challenges.
- The opposite of this is becoming - Single Point of Failure (SPOF), where progress stops if you're absent. This can happen if:
 - The team depends too heavily on your decisions or knowledge.
 - You can't take a real vacation without checking work.
- Litmus test: If you disappear tomorrow, will the work continue smoothly? If not, you need to delegate, train, and empower so your team can operate without you.
- Bus factor: the number of people that need to get hit by a bus before your project is completely doomed.

Always Be Leaving- Build a “Self-Driving” Team

- Bharat’s idea is that a great leader creates a team or organization that can tackle big, complex problems without relying on them personally.
- For this, the organization needs:
 - Strong leaders at all level, so decision-making doesn’t bottleneck.
 - Good processes, so work flows smoothly without chaos.
 - A healthy culture, so teamwork and problem-solving continue over time.
- It’s less about being the smartest technical person and more about structuring and empowering people to work well together.
- There are three main parts to constructing a self-sufficient group:
 - Dividing a problem space- Break a big challenge into smaller, manageable parts.
 - Delegating subproblems- Assign those parts to the right people or teams.
 - IteratingKeep improving the approach as you go.
- Bharat’s quote: being a successful leader means building an organization that is able to solve the difficult problem by itself.

Always Be Leaving: Dividing the Problem Space

- Big challenges are usually made up of smaller problems. If you're leading a team of teams, an obvious choice is to put a team in charge of each subproblem.
- The subproblems can change over time, and rigid team boundaries won't be able to notice or adapt to this, and the work can become irrelevant or less effective.
- Keep the structure flexible.
- Allow subteams so they can change size, individuals can switch between subteams, and the problems assigned to subteams can morph over time, and the scope of a team's work can evolve.
- This involves walking a fine line between “too rigid” and “too vague.”
 - Too rigid → Teams get stuck, can't adapt.
 - Too vague → People lose focus and direction.
- The goal is to give subteams a clear sense of problem, purpose, and steady accomplishment.
- People need the freedom to change direction and try new things in response to a changing environment.

Subdividing the “latency problem” of Google Search

- Google had a problem: Search was getting slower. They realized the slowdown came from two things.
- Google’s search latency problem was split into two parts:
 - Symptoms – The visible slowdown users experience.
 - Causes – The underlying reasons slowing the system down.
- They realized just fixing the symptoms (speeding up the code) wouldn’t work because new features kept making Search slower again.
- Solution:
 - Assign one set of teams to optimize speed (symptoms).
 - Assign another set of teams to prevent new slowdowns (causes).
 - Improve tools, metrics, and developer education to maintain speed over time.
 - Give teams ownership of the problem, not just pre-defined solutions.
 - Result: Long-term, sustainable control of latency.

Case Study: Addressing the latency of Web Search

- Even good changes come with hidden costs.
- The key is to understand the tradeoffs, make informed decisions, and keep adjusting over time — not chase a perfect, one-time solution.

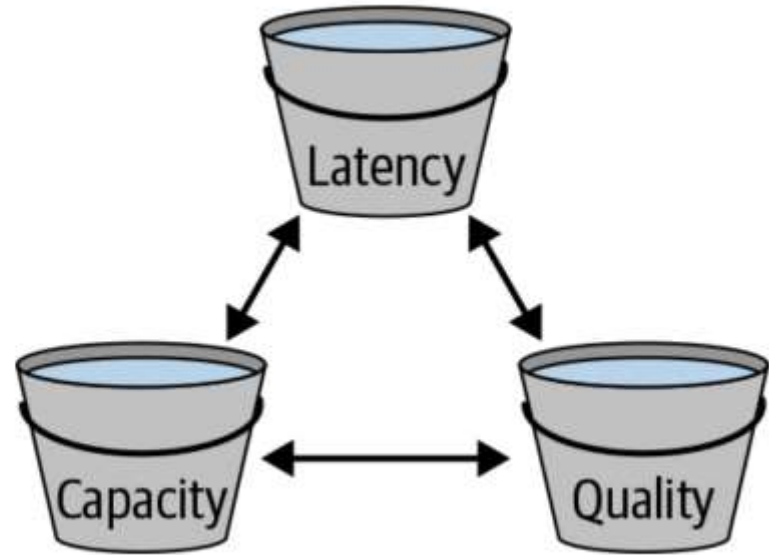


Figure 6-1. Trade-offs within Web Search; pick two!

Delegating subproblems to leaders

- If you agree that your mission is to build a self-driving organization, the main mechanism of teaching is through delegation.
- You give them an assignment, let them fail, and then try again and try again.
- Silicon Valley has well-known mantras about “failing fast and iterating.” That philosophy doesn’t just apply to engineering design, but to human learning, as well.
- As a leader, your plate is constantly filling up with important tasks that need to be done. Most of these tasks are things that are fairly easy for you to do.
- Delegation is tough because it feels quicker to do things yourself. But if you want your team to run on its own, you must hand off tasks — even if it means others take longer or make mistakes at first.
- Each time they try, they learn and grow into capable leaders. If you do everything yourself, you block their growth and make yourself a bottleneck.
- Focus on work only you can do: protecting your team from office politics, encouraging them, ensuring a respectful culture, and keeping higher management informed.
- Your main job is to see the big picture (“the forest”), set the overall strategy, and guide the direction, while letting your team handle the smaller tasks (“the trees”). This way, the organisation can thrive without your constant involvement.

Adjusting and Iterating

Once your team is **self-sustaining** and no longer depends on you, you've freed yourself—this is the essence of “**Always Be Leaving.**” You can now:

- Take on new or related challenges,
- Move to another area, giving space for your trained leaders to grow,
- Avoid personal burnout.

Your role is mainly to **keep the team healthy with a light touch**, stepping in only when necessary. Like the parable in *Debugging Teams*, great leaders make **small, thoughtful adjustments** rather than constant interference. After building a self-running team, focus on gentle guidance and giving space for others to lead.

Adjusting and Iterating

- There's a story about a master of all things mechanical who was a retired expert. He fixed a broken machine by marking one small spot with chalk, knowing exactly where the loose wire was. He charged \$10,000—not for the chalk, but for the knowledge of where to act.
- A good leader spends most of the time watching and listening, not micromanaging. Then, at the right time, they make a tiny but precise correction that keeps the team moving in the right direction.
- Good management means spending most of your time (95%) observing and listening to your team, your leaders, and your “customers” (often coworkers, not just end-users). Then, use the other 5% to make small, precise adjustments that keep the team moving in the right direction.
- Goal is to guide thoughtfully and minimally, not to micromanage. If you over-control, you risk becoming a single point of failure (SPOF) again.
- “Always Be Leaving” is about macromanagement—step back, listen deeply, and make only the necessary small adjustments to keep the team healthy and independent.

Take Care in Anchoring a Team's Identity

- Teams should define themselves by the problem they solve, not the tool they manage.
- Products or tools are temporary and can be replaced.
- Problems, if chosen well, are long-lasting.
- If a team ties its identity to a product, it may resist change and defend outdated solutions.
- If a team ties its identity to the problem, it stays flexible and can adopt better solutions over time.

Always Be Scaling

- Most leadership advice says scaling means expanding your influence and team size. But real scaling also has a personal side.
- A leader's time, focus, and energy are limited.
- If you grow your team's responsibilities without protecting your own well-being, the growth will eventually collapse.
- True scaling means not just building a self-driving team but also learning how to scale yourself—managing your time and energy to grow sustainably.

The Cycle of Success

- **Analysis:** First, you study the problem, spot blind spots, weigh pros and cons, and get everyone to agree on how to move forward.
- **Struggle:** Then you start working, even if things feel unclear. Expect mistakes, retries, and chaos while you guide the team and shape a plan.
- **Traction:** Finally, the team gets the hang of it. Decisions improve, progress speeds up, morale goes up, and the team starts running smoothly on its own.
- **Reward:** When you succeed, the reward isn't just recognition; it's being trusted with more responsibility and another tough problem to solve, often as challenging as the first.

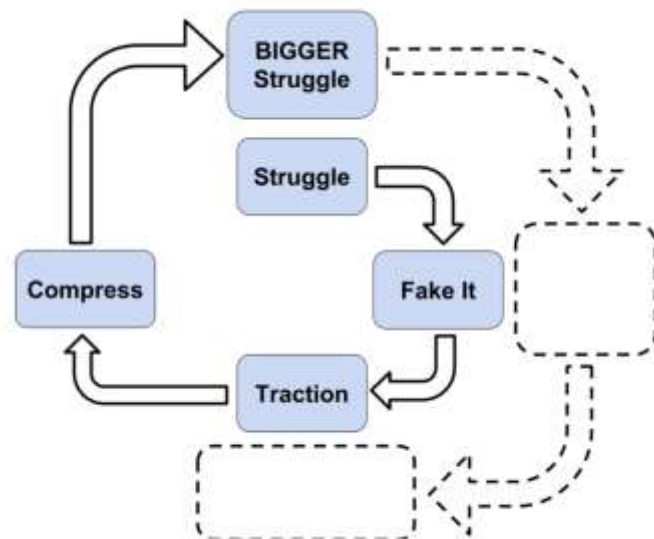


Figure 6-2. The spiral of success

Important versus Urgent

- As you rise in leadership, your work becomes less planned and more reactive. Instead of focusing calmly on strategy, you're constantly dealing with escalations and urgent issues.
- Emails, chats, and meetings can feel overwhelming—like a nonstop attack on your time. If you're not careful, you'll spend all your energy firefighting, jumping from one urgent task to the next, without ever focusing on the important long-term work.
- To focus on important work instead of being trapped by urgent tasks, leaders can:
- Delegate: Pass urgent but less critical issues to other leaders. It develops their skills and frees you to handle work only you can do.
- Schedule dedicated time: Block out quiet hours for non-urgent but high-value tasks like strategy, leadership development, and collaboration planning.

Important versus Urgent

- Find a tracking system that works. To stay organized, we need a good system to track and prioritize tasks.
- You can use software tools (like to-do apps), paper methods (like Bullet Journals), or frameworks (like Getting Things Done, which helps keep your inbox and tasks under control).
- Not every method will suit you, so try different ones and stick with what works best. Just don't rely on random sticky notes on your screen.
- Find a tracking system that fits your style—it's essential for staying on top of work.

Learn to Drop Balls

- As an engineer, you're trained to finish everything you start, close every bug, clear every email, check every box.
- But as a leader, that mindset doesn't work anymore. Too many tasks come at you at once, and it's impossible to catch them all. If you try, you'll burn out.
- The key is to learn to drop balls—accept that you can't do everything. Focus on the most important work, let go of the rest, and don't feel guilty about it.

Protecting Your Energy

- Leadership isn't just about managing time and attention, you also need to manage your energy.
- The work can be draining, but over time your stamina grows, much like training for a marathon.
- Good leaders don't just push through exhaustion; they learn to notice their energy levels and take deliberate steps to recharge at the right moments so they can stay positive and effective.
- Here are some great examples of mindful energy management. To recharge your energy, you must truly disconnect from work:
 - *Take real vacations* – A weekend isn't enough. It takes 3+ days to forget work and at least a week to feel refreshed. But it only works if you completely avoid work emails/chats.
 - *Make disconnection easy* – Leave your work laptop at the office and disable work apps on your phone so you can't "accidentally" check them.
 - *Take real weekends too* – Even short breaks help if you fully sign out on Friday and only reconnect on Monday.
 - *Take short breaks* – Your brain works in 90-minute cycles. Get up, walk around, or step outside for 10 minutes to reset and lower stress.
 - *Take mental health days* – Sometimes you'll just wake up in a bad mood for no reason. As a leader, that negativity spreads and harms decisions. On such days, it's better to go home and rest than cause damage.
- In the end, managing your energy is just as important as managing your time.
- If you learn to master these things, you'll be ready to tackle the broader cycle of scaling responsibility and building a self-sufficient team.

Conclusion

- As leaders grow, they naturally take on more responsibility.
- Without the right techniques, like making decisions quickly, delegating, and managing workload, their risk of being overwhelmed.
- Effective leadership isn't about perfection, doing everything alone, or working harder.

Great leaders focus on three habits: always be deciding, always be leaving, and always be scaling.

Summary

- Always Be Deciding – Big problems don't have perfect answers. Your role is to choose the best trade-offs for now and adjust as you learn.
- Always Be Leaving – Build a team that can solve problems on its own, so it doesn't depend on you.
- Always Be Scaling – As success brings more work, manage growth wisely to protect your limited time, focus, and energy.
- Effective leaders decide, empower teams to run without them, and scale sustainably.

THANK YOU...!!