

Managerial Skills for Computer Scientists

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Summary

Becoming the Boss

In her article *Becoming the Boss* (Hill, 2018), the author describes the struggles first-time managers face. Succeeding as a manager requires a different skill set than succeeding as an individual. New managers first need to understand the nature of their new role, which usually happens in a “learning by doing” or even “try and fail” process. New managers are often thrown into their first management position without support from their superiors – even though they used to be former first-time managers, too, and know the struggles a first-time manager is facing.

Authority does not come with the position, but must be earned. Especially talented subordinates do not just follow orders blindly, but question their new boss and scrutinize him for hidden motives. A manager focusing on technical problems could become a micromanager and a “control freak”. Showing off technical skills can even undermine a manager’s credibility. The manager’s role is not about solving technical problems, but about managing interdependencies.

Managing a team is not the same as managing a bunch of individuals: Every decision concerning a team member affects the team as a whole. Granting privileges on a single team member can have a negative impact on the team as a whole, for every other team member feels worse off without those privileges. A manager should focus instead on shaping team culture, which can unleash the team’s problem-solving prowess.

A common misconception is that the boss is supposed to have all the answers. New managers often tend to avoid questions, because they are afraid to look “dumb” in front of their superiors or subordinates. Asking questions can help to clarify open points, and ensures that both parties involved talk about the same thing. Once clarity about an issue is established, nobody can try to sneak out under the pretense that he or she understood it differently. A new manager’s success is not only important for a single team, but for the organization as a whole.

Source

Hill, L. A. (2007, January). *Becoming the Boss*. *Harvard Business Review*, January 2007 Issue

The Eisenhower Matrix

- A manager needs to deal with urgent and important tasks on his own immediately.
- Tasks that are neither urgent nor important he must discard.
- Important tasks without urgency tend to become urgent as time goes, and therefore require a plan for dealing with them.
- Unimportant but urgent tasks must be delegated to an appropriate subordinate.

Successful managers can handle the tasks of the *task list* and *delegate* quadrant accordingly. (Schaub, 2019).

	urgency	
+		-
i		
m		
p	me now	task list
o		
r		
t		
a		
n		
c	delegate	trash
e		
-		

The Pyramids

An organisation can be seen as a pyramid, in which the hierarchy levels (C-level executives, middle management and employees) are separated by horizontal borders, or *hierarchical barriers*, because one not simply moves from one layer to the next one. Lines from the pyramid's tip to its base form the functional borders between departments (HR, Finance, Engineering, etc.), or *functional barriers*, if those departments not interoperate smoothly (*isolated islands*). The hierarchical and functional barriers combined result in a organisation with inhibited exchange both horizontally and vertically, which are referred to as *isolated knowledge islands*. (Schaub, 2019)

The Three Ways

Three fundamental approaches for earning respect and authority from subordinates can be distinguished as follows:

1. *Being the Boss: Command, Control, Correct*
 - The most experienced subordinates will perform worse, slow down and develop a tendency to find obstacles everywhere.
 - Some subordinates will just deliver the utmost necessary.
 - And some will sacrifice quality for fast results.
2. *Being a Friend*
 - A friend is not person of authority, but a peer.
 - Friends might take advantage of their position, which could lead to imbalances within the team.
3. *Hard Workd & Earn Trust*
 - By showing to your team that you work hard, you put yourself in their shoes and on their level.
 - Your team sees that you do not just delegate, but also understand what is going on, and therefore will trust you more.

Source

Schaub, R. (2019, March). Live Talk at HSLU.

Questions & Answers

1. How can you tell when you are facing ordinary adjustment problems and when it is your actual wrong-doing?
 - Because everybody makes errors, they are a bad measurement for wrong-doing.
 - One must take decisions, avoiding them is worse than making errors.
 - Tracking parameters and improving on those is a good strategy.
2. Aren't these adjustment problems a necessity to prepare you as a manager for worse situations?
 - Only a few companies help first-time managers early on; and starting the process too early might actually be contraproductive, for a manager must be able to figure out things on his own.
 - However, the knowledge about the "traumatic" first years is not widely spread.
3. What are some of these problems that almost always occur when transitioning to a first manager position?
 - It is hard to step out of one's engineering role and mindset.
 - Building trust in subordinates is hard, especially if you can perform some jobs better than them at the beginning.
 - Developing management skills (planning, negotiating, leading) takes time and effort.
4. Will becoming a manager stay equally hard when many companies are transitioning from hierarchical to more flat organizations themselves?
 - Organizations are always measured by their success, and so are managers, no matter how the organization is structured.
 - Changing into a management position, be it a team leader in an hierarchical organization, or a *Product Owner* or *Scrum Master* in an agile start-up, is always difficult and requires a new set of skills.
5. Aren't there also situations where neglecting all forms of authority in order to build better relationships with subordinates become a problem in itself?
 - Leading a former friend is difficult. A friend is on the same level, not so a boss.
 - Mutual respect is needed.