Extracted from:

Become an Effective Software Engineering Manager

How to Be the Leader Your Development Team Needs

This PDF file contains pages extracted from *Become an Effective Software Engineering Manager*, published by the Pragmatic Bookshelf. For more information or to purchase a paperback or PDF copy, please visit http://www.pragprog.com.

Note: This extract contains some colored text (particularly in code listing). This is available only in online versions of the books. The printed versions are black and white. Pagination might vary between the online and printed versions; the content is otherwise identical.

Copyright © 2020 The Pragmatic Programmers, LLC.

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

The Pragmatic Bookshelf

Raleigh, North Carolina

The Pragmatic Programmers

Become an Effective Software Engineering Manager

How to Be the Leader Your Development Team Needs

> James Stanier edited by Adaobi Obi Tulton

Become an Effective Software Engineering Manager

How to Be the Leader Your Development Team Needs

James Stanier

The Pragmatic Bookshelf

Raleigh, North Carolina



Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and The Pragmatic Programmers, LLC was aware of a trademark claim, the designations have been printed in initial capital letters or in all capitals. The Pragmatic Starter Kit, The Pragmatic Programmer, Pragmatic Programming, Pragmatic Bookshelf, PragProg and the linking *g* device are trademarks of The Pragmatic Programmers, LLC.

Every precaution was taken in the preparation of this book. However, the publisher assumes no responsibility for errors or omissions, or for damages that may result from the use of information (including program listings) contained herein.

For our complete catalog of hands-on, practical, and Pragmatic content for software developers, please visit https://pragprog.com.

The team that produced this book includes:

Publisher: Andy Hunt VP of Operations: Janet Furlow Executive Editor: Dave Rankin Development Editor: Adaobi Obi Tulton Copy Editor: L. Sakhi MacMillan Indexing: Potomac Indexing, LLC Layout: Gilson Graphics

For sales, volume licensing, and support, please contact support@pragprog.com.

For international rights, please contact rights@pragprog.com.

Copyright © 2020 The Pragmatic Programmers, LLC.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

ISBN-13: 978-1-68050-724-9 Encoded using the finest acid-free high-entropy binary digits. Book version: P2.0—March 2021

Writing Great Job Descriptions

Nobody's going to know about your role unless you write a job description, since it turns out that having your role get noticed is surprisingly hard:

- Technology talent is always in high demand, so it's likely that you're going to be competing with potentially hundreds of other companies for job seekers.
- You may only have tens of seconds to pique the interest of a potential candidate when they read your job description. Even if you feel that the company that you work at is the best place you've ever worked, it's likely they don't know much about you.
- It's easy to write a job description that repels the reader rather than attracts them, even if your intention was the opposite.

This section will help you write great job descriptions that will give you the best chance at attracting as many applications as possible. We'll show you:

- A reusable template that will help you write fantastic job descriptions.
- How to write in a *style* that is gender-neutral and appealing to the reader.

Once you've been through this section, you'll already be able to write better job descriptions than many companies out there. That's not a bad outcome, is it?

A Job Description Template

OK, so let's look at the rough template for job descriptions, and then we'll hone in on each section and consider how you can write them. Each job description should take the potential applicant on a journey where they'll learn:

- What your *company* is doing and why it's interesting and important.
- What the *role* is within the company that they could be doing, and what kind of work that entails.
- What you're looking for in *them* in terms of their background, skills, experience, and interpersonal traits.
- The *benefits* of working at the company, from the salary, healthcare, insurance, and whatever other perks there are to the job.
- How to *apply* with clear, unambiguous instructions.

If you're thinking that's a lot to cover in something that will probably take only several minutes to read, then you're right! Crafting an excellent job description takes real skill.

Describing Your Company

The first part of the job description should describe your company. It may be the case that your recruitment team already has a description that you can use, but you should check to see whether it could be made better. The question that this part is trying to answer is why the company exists and what its purpose is. It should grab the interest of the reader and make them think "Wow! I'd love to contribute toward that!"

Here are some examples that show the kind of company description you're after:

- At Novacorp, we make the world's most popular payroll software: it's beautiful, simple, and a joy to use. We're on a mission to revolutionize pay and benefits around the world. We are used by thousands of companies around the world and we ensure that pay and tax don't have to be taxing. We make the lives of HR and hundreds of thousands of employees a breeze.
- ACMEsoft is reducing the world's carbon emissions, one journey at a time. We want to save the planet and save car owners money while we're at it. Our software, installed in tens of thousands of vehicles worldwide, ensures that engines perform economically and safely.
- Dyncompsys is making every home a smart home. Our speakers, thermostats, screens, and cameras are making people happier, safer, and more energy efficient around the world. We want everyone to live richer lives.

Each of these company descriptions is nontechnical, understandable by pretty much anybody, and outlines a vision that hooks the applicant and allows them to immediately buy into it. If you're looking for more inspiration here, then have a look at the job descriptions for technology companies that you know. How are they writing about themselves in the opening paragraph? How can you pitch your company in the same way that immediately grabs the attention of the reader and makes them want to work with you?

Describing the Role

Assuming that you've got the reader hooked, it's time to describe the role. The most important thing to know is this—you want to sell the opportunity in terms of:

- Why it is important to the whole company.
- What it entails, using examples where possible.

• What it's like working for the company in general.

This means that you're not going to write a bullet point list of generic things that you want the candidates to perform. At an abstract level, the job of an engineer at most companies is fairly similar: they need to take requirements and produce software. So you'll need to go deeper than that. What does it really *mean* to do this role? For example, consider the following for a hypothetical role at Dyncompsys, mentioned earlier.

Example: Role Description

We're hiring a senior engineer to work on our Android mobile application. This app is the way that tens of thousands of people around the world control their smart home devices. From picking which music to listen to, to checking on their sleeping baby upstairs, your code will be making a meaningful difference to people's lives.

You'll be working in a cross-functional team that is located in our NYC office, but we have a flexible working policy for splitting your time at home too. Ideally you'll have worked on Android applications before, but if you're well-versed in Java and have a curious mind, you'll pick things up, no problem. We believe that nobody starts any role an as expert. We want to find motivated individuals who want to do their best work rather than finding someone who has done this before.

As the mobile application is the interface for people's smart homes, we want it to be an intuitive, beautiful experience. Here are some example projects that you may work on:

- Building the controls for new smart home gadgets that we create. (We just shipped a range of smart light bulbs that change color, and they're really fun to use.)
- Creating automation recipes for our users to make their lives easier. We recently created a feature to allow users to script their daily needs, including automatically turning on lights at night when they're away from home.
- Allowing experiences to be shared with loved ones. Are you checking in on the dog only to see that she's sleeping on the sofa? Let your family share the moment, instantly, in your video scrapbook.

You'll have plenty of opportunity to add your own input into our software. Engineers spend 25% of their time on their own ideas.

As you can see in the example, you'll want to write this section so that it offers plenty of food for thought for the candidate. It should describe the kind of work that they'll be doing and why it's important rather than being a wish list of technical skills. A candidate will likely not apply because you just so happen to use the exact same framework that they're using in their current job. They want to get behind the purpose of the company and the products and see how they can make a difference in the world with their skills.

Who You're Looking For

Next up, it's good to describe the type of person that you're after. Again, you're not after a bullet-point laundry list here. What sort of people do you want to hire? What are their characteristics and how do they fit into the team? Let's use another example.

Example: Who We're Looking For

Generally speaking, we're after individuals that are curious about the possibility of technology, are eager to learn, and are diligent and kind. Our teams work well because we place trust in them to succeed. We trust you to do well, and you will do so together with us.

As we're looking for a senior engineer, we expect you to help elevate the skills of the team through technical mentorship. We'd love you to show us how we can improve what we do. We also have a great graduate program that will allow you to mentor the future of our industry.

You'll probably have at least five years' experience working in the industry, but we care less about how long you've been active and more about what you've been doing. We'd love to hear about what you've worked on, how it was built, and why it was a success.

We believe in radical candor and healthy debate. We like strong opinions loosely held. Great ideas can come from anybody, no matter where they are in the company. You should be comfortable working with remote employees, which means using video calls and frequent written communication.

Again, we're after broad traits rather than specific skills. The focus is on the potential of what they can do when they're at the company—which is inviting—rather than listing specific skills, which is a barrier to entry. We'll see shortly that the way in which these sections are written can prevent candidates from applying, so keep the style loose, highlight the potential experiences that the candidate can have, and continue to reel them in.

Salary and Benefits

The important part! Don't disappoint. Where possible, you should always list the salary range that you'll expect to pay the candidate here. Don't let it be a surprise until right at the end of the interview process. If the company is afraid of putting their salaries out in the open, then why is that? Are they worried that they don't pay enough for the positions? Try and find out if you can put the salary on the job advert if the company hasn't already. It makes a difference. Also, remind the candidate of all of the other benefits of working at the company. Is there a retirement contribution? What about healthcare? Are there other benefits of working in the office worth mentioning?

Example: Salary and Benefits

We pay senior engineers anywhere between \$150,000 and \$250,000, depending on their experience and impact. We also offer excellent health insurance and dental coverage, a retirement plan with a substantial matching contribution, Friday afternoons off in the summer, and much more. Our office has a beautiful view over the river, and we still enjoy having our lunch together while watching the boats go by.

Try not to fill this section with periphery perks. There was a period of time where this section of job descriptions would contain little about actual compensation, but lots about table tennis, foosball, free drinks, and snacks. Those things are nice, but they're not that important compared to the financial reward and meaningful work.

How to Apply

Finish the job description with information about how you'd like the candidate to apply. Be specific about what you expect. Are you after a cover letter? Say so. Are you expecting them to provide details about previous work that they've done? Mention it. Don't let the candidate guess: make applying as straightforward as possible.

Example: How to Apply

Send your resume along with a short written application to careers@dyncompsys.com. Show us why you'd like to work here and what the company would be like if you were in it. If you've worked on any similar projects before, then we would love to hear about them. Also, if you got the job, what would you most be interested in working on first? Don't feel the need to write an essay. A handful of paragraphs combined with your resume is just fine. We are open to this role being part time and welcome candidates from diverse backgrounds.

Hopefully by reading through the preceding example you have a good idea of how to put together a job description that will really speak to candidates. You do this through writing in a light and inviting style that makes the reader want to find out more rather than putting up barriers to entry for them to climb over.

Style, Tone, and Gender-Neutrality

Evidence shows that job descriptions can be composed in such a way that it has the effect of excluding candidates at a subconscious level. This effect is especially prominent in female applicants. To prevent this, you should:

- *Not write a long list of skill requirements.* A 2014 study [San13] at Hewlett-Packard showed that given a list of expected competencies for a role, men will on average typically apply when they meet 60% of the requirements, whereas women on average will only apply if they meet all of them.
- *Not use gender-biased language.* Choice of words and phrasing is incredibly important. *Research has shown [GFK11]* that there are masculineand feminine-themed words, and we can implicitly encode gender bias into our job adverts without realizing. You can use an online tool¹ based on the research paper to check yours.
- *Focus on the work, not the time spent doing it.* Since candidates can be working parents or caregivers, flexibility is very important. If you have a flexible working policy, then mention it. If the role can be part time, mention it. Ensure that you describe the role in terms of what they'll be achieving rather than listing the time constraints under which they'll do it.
- *Champion diversity.* If you have a commitment to diversity (you should), which we will explore further in *The Modern Workplace*, then say so. A diverse workforce is a better workforce.

^{1.} http://gender-decoder.katmatfield.com

Your Turn: Writing a Job Description

That's the learning over. It's now time for you to do it yourself. Then we'll move on to look at how to structure the interview process that kicks off when candidates have applied.

- Using what we've covered in this section, write a job description for your team.
- Run the job description through the online tool above that detects gendered language. How did it fare?
- Read the existing job descriptions on your company website. What do you think of them? Would you change them?
- Are you happy with the way that your company describes itself? If you think it could be improved, who can you talk to at the company to see if they're open to making it better?