

# How to Learn Reliability Engineering

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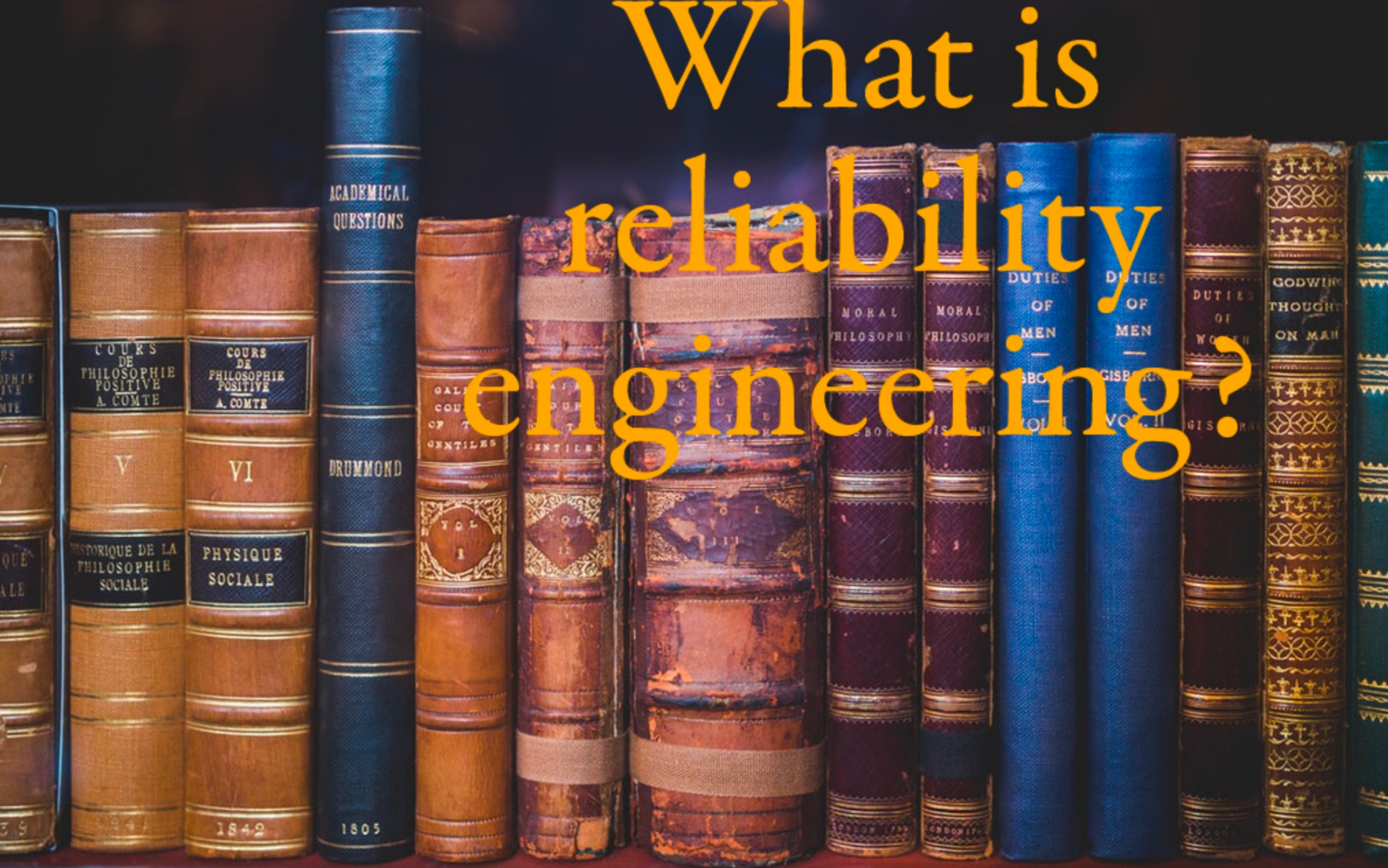




Why focus on  
reliability?



# What is reliability engineering?





How do  
you start?



If you just became a  
reliability engineer

today - what would  
you google?



# 1st Day



Questions

Approach

Resources



# Ask Questions



It's your first day - you need to start asking questions. A lot of them.

task(s)  
criteria  
timeline

who needs the results

why do they need the results

what do we know

what do we not know



# What Approach to Take



What do you need to know,  
right now?

a study

some research

verifying a requirement

stablizing a process

solving a failure mechanism

influencing a design or process

# Resources & Constraints



What is available or not?

budget

people & skills available

samples

vendor knowledge

books, procedure, standards

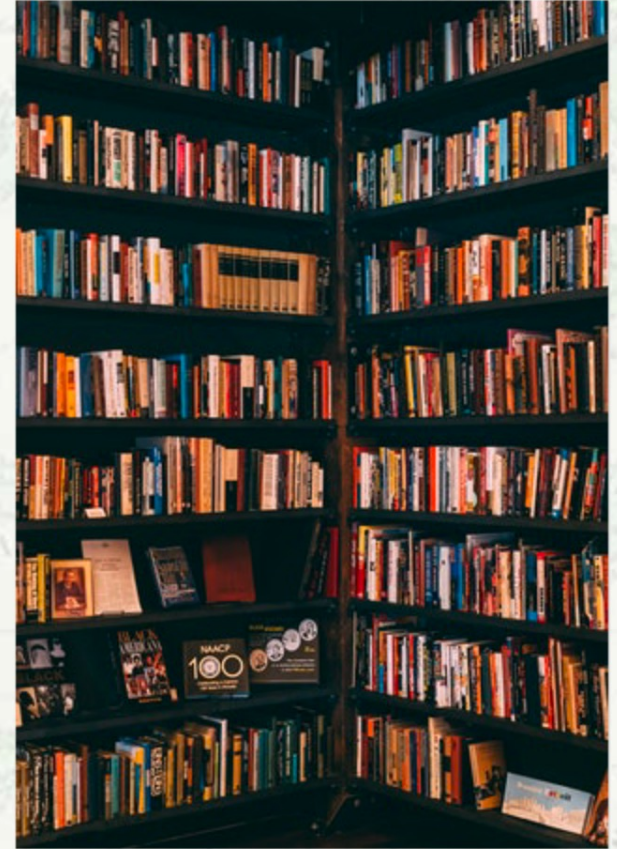
who did this before



What did you do

*your first day?*

# First Week



Decisions

Connections

Value



# What Decisions



How and who will use the results of our work?

What is necessary to inform someone's decision? and what is that decision?

What decisions do you have authority to make?

What decisions do you need approval and under what criteria?

# Connections



How does what you do  
connect to others?

Who knows something about this issue?

Who should or wants to know?

Who needs to know?

What is known or been done

What is unknown and needs to be known



# Add Value



If this task goes well, so what?

If this task fails, what happens?

Add to the team's ability to solve problems, do not create problems

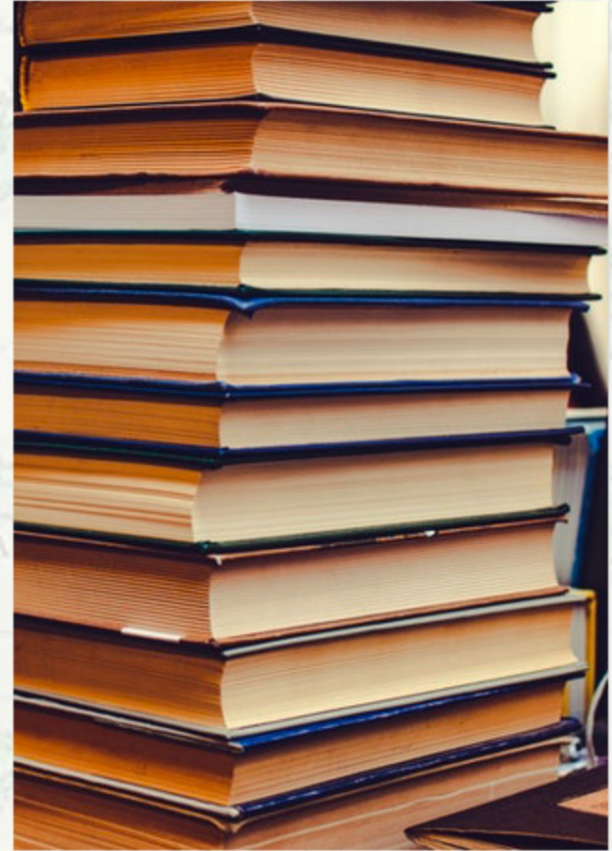
In a world of scarcity,  
be useful.

How would you  
advise

someone just  
starting?



# 1 Year



Feedback

Strategy

Culture

# Seek Feedback



You have done some stuff - how did it go?

what went well - why?

what went not so well - why?

This is for your own performance and for the team/organization's performance, too

Be deliberate about learning



# Draft a Strategy



Understand the senior teams vision

Assess current situation

Layout short and long term plan

Focus on the culture

both for yourself and your organization

# Build a Reliability Culture



Both for yourself

- professional development
- networking

and your organization

- guidelines & references
- objectives & approaches

Again, focus on decision making and adding value

Make it easy for everyone to make decisions considering reliability



What tools did you

first learn?

# Ongoing



Decisions

Leadership

Value

# Focus on Decisions



It's all about influencing  
decisions

Always - connect tasks and activities to  
decisions in a useful manner

Else - don't do it

Enable others to make reliability conscious  
and informed decisions



# Reliability Leadership



You have to take charge of the topic. Show the way.

We are one of the few positions that works:

across the entire product life-cycle

across the entire organization

with all suppliers and customers

With your span you can connect and lead

# Reliability Value



Estimate the value of proposed actions  
Calculate the achieved value or actions

What you do makes a difference

What is more  
important

answers or  
questions?



# In Summary

Ongoing  
Guiding Culture



Day 1  
Panic



Week 1  
Daunted



Year 1  
Vision



# More Information

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