



CS 428

Peopleware: Part II (chapters 7-13)

WINTER 2023

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Meme of the day

```
# you may think that this function  
# is obsolete, and doesnt seem to do  
# anything. and you would be correct.  
# but when we remove this function  
# for some reason the whole program  
# crashes and we cant figure out why,  
# so here it will stay.
```

Ch 7: The Furniture Police

- ▶ “[Those making workplace decisions] are not themselves doing the kind of work that is likely to suffer from a poor environment.”
- ▶ Goals are focused on ease and flexibility of setting up the physical workspace, not on productivity of those who work there.
- ▶ Attitude: If everyone can’t have a window, then no one can.
- ▶ “Almost without exception, the work space given to intellect workers is noisy, interruptive, un-private, and sterile.”
- ▶ Why do you think this happens? What are your options?

Ch 8: “You never get anything done around here between 9 and 5”

- ▶ “...overtime is not so much a means to increase the *quantity* of work time as to improve its average *quality*.”
 - ▶ Fewer interruptions/disturbances outside of regular work hours or at home
- ▶ Individual differences (best outperform worse by 10:1)
- ▶ Productivity non-factors: language, years of experience, defects, salary
- ▶ **There is also a 10:1 difference in productivity among software organizations**
 - ▶ Cf. “Dead Sea Effect”
- ▶ Top performers’ space is quieter, more private, better protected from interruption, larger
- ▶ When are you most productive in development?

Ch 9: Saving Money on Space

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- ▶ Cost-saving trend towards less privacy, less dedicated space, more noise
- ▶ But cost of workspace is small fraction of cost of developer – false economy
- ▶ Claims of greater productivity & interaction for open space aren't supported
- ▶ Correlations between perceived noise level and defects in work
 - ▶ Zero-defect workers: 66% reported noise level ok
 - ▶ 1-or-more defects: 8% reported noise level ok
- ▶ Noise is generally proportional to workplace density
- ▶ Worker response is often to “hide out” where it's quieter
- ▶ What have you seen in your jobs and internships?

Intermezzo: Productivity Measurement

- ▶ So, why isn't this all obvious and followed?
 - ▶ Because of how few firms know how to or are willing to measure impact of environment on productivity
- ▶ But: "Given that there are 10:1 differences from one organization to another in productivity, you simply can't afford to remain ignorant of where you stand."
- ▶ What changes would you suggest to improve productivity?

Chapter 10: Brain Time vs Body Time

- ▶ During single-minded work time, people are ideally in “flow” state
 - ▶ Deep, nearly meditative involvement
 - ▶ Sense of euphoria
 - ▶ Unaware of passage of time
- ▶ It takes time to enter “flow” state, and interruptions force you to restart
 - ▶ Constant interruptions keep us in a state of “no-flow” and far less productive
- ▶ E-Factor: uninterrupted hours / body-present hours
 - ▶ Boss: “Can’t you do [your thinking] at home?”
- ▶ What are your experiences with “flow”?

Chapter 11: The Telephone

- ▶ Chapter is a touch dated – younger generation has learned to ignore phones
- ▶ But now: various messaging feeds and apps, social media, e-mail, etc., can all interrupt our flow
- ▶ To achieve and preserve flow, we have to be willing to shut off these distractions
- ▶ To what extent do you find that social media affect your own productivity?

Chapter 12: Bring back the door

- ▶ Like windows, doors are frequently a status symbol – and therefore, if everyone can't have no, nobody can have one
- ▶ Workers aren't inspired or made more productive because the (open) workplace has “fashionable” or “daring” or “amusing” design
- ▶ Piping music into an open workplace doesn't help either
- ▶ It's great to have “vital” space for spontaneous interaction w/others, but most IT production is solitary, flow-based intellectual work
- ▶ Have you ever had an office with a door?

Chapter 13: Taking Umbrella Steps

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- ▶ Christopher Alexander's *The Timeless Way of Building* and design pattern
 - ▶ Alexander on workspaces (pp. 82-83)
 - ▶ Cubicles are almost the direct opposite of what Alexander points out
- ▶ Tailored workspaces from a pattern
- ▶ Use of windows
- ▶ Indoor and outdoor space
- ▶ Public space
- ▶ “No two people have to have exactly the same work space.”
- ▶ What would be your ideal workspace for software development?