OPTIMIZE YOUR TASK MANAGEMENT: Time-Saving Opportunities = 2 hrs 27 mins/day

Research & Analysis

#1 – Making wrong prioritization decisions that result in missed deadlines = 45 mins/day

- According to research on 0.5M tasks entered into an online to-do list app, when we change (i.e., miss) a deadline, it takes us an additional 15.8 days to complete the task on average[2]
- During that time of just over three weeks, we assume that we split out time evenly among our 74 active to-dos[11], such that we spend 1.4% of the extra 15.8 days on our missed deadline task, meaning that every missed deadline costs us about 2 hours
- We miss 21% of deadlines because they are "unrealistic" – suggesting that a wrong prioritization decision was made. In reality, wrong prioritization decisions likely account for many of the other missed deadlines as well.[1]
- We change deadlines (i.e., a proxy for missing a deadline) on over half of all entered tasks[2]
- To be more conservative, we assume that had we gotten the work done on time, we would have spent 25% of the post-deadline time before the deadline, so 25% of the time calculated is not actually incremental time
- When we multiply the 2 hours spread over the 15.8 days (7.6 mins/day) times the number of tasks we miss deadlines due to prioritization decisions [74 x 51% (missed deadlines) x 21% (due to prioritization decision)] and the percent of time we wouldn't have spent before the deadline (75%), we find that we lose 45.1 mins/day

#2 – Deciding what to do every task-switch vs. daily = 43 mins/day

- A 2.5-year study of radiologists who process x-rays that come into their queue found that when radiologists were given the freedom to choose the order in which they process the x-rays (rather than adhering to company policy of first-in-first-out), they took an average of 13% longer to do the same amount of work[3]
- For the typical knowledge worker, this time would likely be even longer because the radiologists only had to decide between an average of 5.6 images in their queue at a time (versus our 74 active to-dos) and they had a clear way to make a decision (first-in-first-out), which, even with the freedom, they followed 58% of the time
- The additional 13% of time for the average worker amounts to 73.3 mins/day
- If instead of deciding what to do next during every task switch, we decide what to do throughout the full day at the beginning of the day or the end of the previous day during a 30-minute planning session (which is probably more than needed), we could save 43.3 mins/day

#3 – Making wrong prioritization decisions that result in idle time = 5 mins/day

- We experience an average of 13.8 minutes of "others-caused" idle time per day[4]

- We assume that one-third of this time is the result of a poor prioritization decision on our part that resulted in us not having a consistent stream of work (e.g., we didn't account for the capacity of our supervisors),[5] even though we report it as "others-caused"
- One-third of 13.8 minutes results in potential savings of 4.6 mins/day

#4 – Not using a to-do list = 27 mins/day

- Using our memory to decide what to do next instead of a list is analogous to medical professionals performing procedures from memory rather than using a checklist (popularized by Atul Gawande's *Checklist Manifesto*). The landmark study that demonstrated the efficacy of the World Health Organization Safe Surgery Checklist demonstrated improvements in outcomes by 30%[6]. Applying this analog, we would assume that not using any to-do list would result in poor prioritization decisions 30% more frequently.
- As previously demonstrated, we lose 50 minutes to poor prioritization decisions when we have a to-do list. Not having a to-do list will add 30% to this time-loss, resulting in an additional 14.9 mins/day lost.
- In addition to times where we "know" what we have to do in our heads, but don't make proper prioritization decisions due to lack of a list, we also forget 70% of what we hear within 12 hours if we don't rehearse it[7].
- Since we add 10 tasks/day to our to-do list, this means that by the next day we'll have forgotten 7 of the 10 tasks we have to do.
- We will not remember some of these 7 until prompted by another person and some we'll remember that we were supposed to do something, but not remember what. In the latter case, we will engage in a retrieval process (e.g., looking through notes, emails, messaging a coworker). We assume we remember we engage in retrieval the majority of the time (5 out of 7 tasks).
- When it comes to retrieval time, we know that almost 60% of office workers spend over an hour searching for documents[8], so a conservative estimate would be a retrieval time of 2.5 minutes/forgotten task, resulting in 14.6 mins/day.
- Combining the time loss to additional wrong prioritization decisions and retrieving forgotten tasks and subtracting the time we save from not entering tasks into a list, we see a loss of 26.9 mins/day for not having a to-do list
- Note: This is a conservative calculation because it doesn't account for the time cost of the ~2 tasks/day that we completely forget about until someone else reminds us, and it doesn't account for the retrieval cost associated with tasks we were assigned on previous days, but did not complete yet (e.g., we have to remember Monday's uncompleted tasks on Wednesday)

#5 – Writing our to-do list rather than typing it = 15 mins/day

- The average typing speed (41 wpm)[9] is almost 4 times the average handwriting speed (13 wpm)[10]
- We have an average of 74 active to-dos[11] and we complete about 69% of them per week[12], which means that we add about 10 tasks per day to our list.

- Most tasks are around 10 words, including description, due dates, project, and any other modifiers.
- As a result, those who write their new to-dos down rather than typing them lose 5.5 minutes per day
- Another challenge with using a handwritten list is that you frequently have to rewrite the list (e.g., to remove completed tasks and reorganize).
- We assume conservatively that handwritten list-keepers re-write their lists once a week and copy over 80% of the tasks in the process. Rewriting this portion of the list at this frequency will cost us 9 minutes per day on average, for combined time-savings opportunity of 14.6 mins/day

#6 – Not categorizing and sorting our list by priority slows decision-making = 7 mins/day

- We switch tasks about every 10.5 minutes during the work day[13], resulting in 54 decisions per day about what to do next during the average 9.4-hour workday[14]
- According to Hick's Law, our decision-making time is directly proportional to the logarithm (base 2) of the number of choices we face. This means it should take us about 50% longer to decide what to do next when we have all tasks on the list without any categorization than if we break them into 4 different prioritization categories.
- It takes us a little over half a minute to decide what to do next[15], meaning we will spend 9.3 more minutes deciding what to do next when we have no categorization compared to when we categorize tasks into 4 priority levels
- We need to factor in the added time to decide what prioritization level a task should be. Starting with our calculation that it takes 15 seconds to enter a task by typing, we calculate that adding a decision about prioritization level when adding a task will add an additional 2.5 minutes per day
- The net savings is 9.3 min/day minus 2.5 min/day or 6.7 min/day

#7 – Not marking tasks as complete after completing them = 6 mins/day

- We have 74 active to-dos[11] and we complete 69% of them each week[12], meaning we should be marking about 10 tasks as complete each day
- When we don't, we make slower decisions because we have more choices still on our list (see the reference to Hick's Law on #6), and we end up making invalid choices: we choose a task from our list that we have already completed.
- If we wait to mark all tasks as complete until the end of the week, we will add an average of 2.9 mins/day for increased decision-making time and 2.7 mins/day for time wasted on invalid decisions for a total of 5.6 mins/day wasted

Want to put this time back in your life?

START THE COURSE

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[3] Nobel, Carmen. "Why Productivity Suffers When Employees Are Allowed to Schedule Their Own Tasks." *Harvard Business School: Working Knowledge* (Apr 2017).

[4] Blanding, Michael. "American Idle: Workers Spend Too Much Time Waiting for Something to Do." *Harvard Business School: Working Knowledge* (Jan 2018).

[5] This is assumption is based on common reasons given for others-caused idle time in which several reasons are given for idle time: poor allocation work, overstaffing, equipment failure). For lack of better data, we assumed an even split between these 3 reasons.

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[7] Murre, J. J. and Dros, J. "Replication and Analysis of Ebbinghaus' Forgetting Curve." *PLoS One.* (Jul 2015) 10(7): e0120644.

[8] Figueiredo, D. "Are you wasting your employees' time at work?" *Developing People Globaly.* (Mar 2016).

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[14] "The "40-Hour" Workweek Is Actually Longer -- by Seven Hours," *Gallup* (Aug 2014).

[15] Ibanez, M., Huckman, R., Clark, J., and Staats, B. "Discretionary Task Ordering: Queue Management in Radiological Services." Harvard Business School: Working Paper 16-051. (2015).