02. Business layer (2023-2024-S015-S023)

In today's busy world of working from home, dominated by flexibility, personal time may seem like a distant memory. The boundaries between work life and personal life are disappearing, and the constant need to be **available** can gradually consume our well-being.

📊 Business scenario

Within a fast-moving corporate reality where every second counts, Emily found herself caught up in a micro-management net. She was always productive and always strived to meet deadlines and exceed expectations. Although she often took short coffee breaks to take a break from her desk, she was unaware that the virtual eye of her supervisor was constantly watching her.

One day, when Emily risked a quick coffee break away from her home office, the notifications and messages were still following her. Her supervisor's watchful eye caught a period of inactivity, and her work status changed to **away.** Upon returning back home, a stream of urgent emails and missed calls from her supervisor awaited her.

A similar case occurred to Alexander, another gifted individual. He, too, was a master of productivity, meeting deadlines and devoting a lot of time to work. On one hectic day, filled with emails and online meetings, a bell rang demanding his attention, and Alex was forced to leave his desk. After a while, his work status changed to **away**. Upon his return, he was met with a similar stream of emails from his supervisor.

These are among the few examples that illustrate a current problem in the corporate environment where supervisors micromanage and do not always respect the personal time of their employees.

> According to a study conducted by Trinity Solutions, 79% of employees have experienced micromanagement, with 71% reporting that micromanagement interfered with their job performance. Of those, 69% have considered changing jobs due to micromanagement and 36% have actually changed jobs [1, 2].

Further studies from 2020, published by Thomas Alsop on 1 February 2022 [3], show the following results:
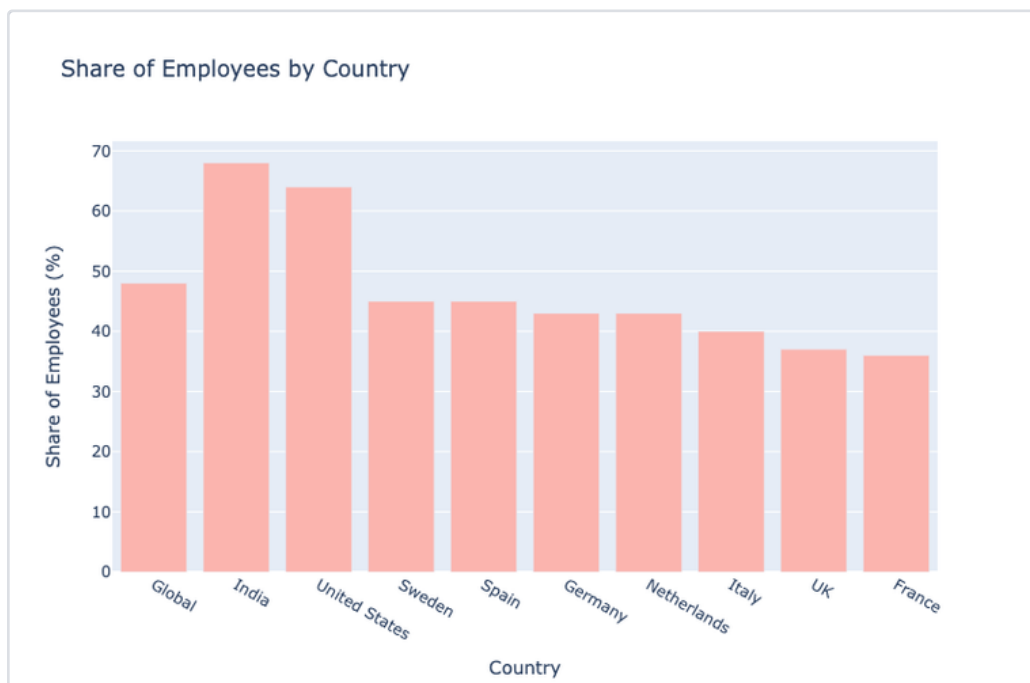

Figure 1. A study published by Thomas Alsop on February 1, 2022, showing the prevalence of employees feeling micromanaged while working remotely in 2020 across different countries.

⁉️ Is micromanagement a problem?

Micromanagement is a leadership style in which the manager is overly controlling of his subordinates [4]. This may include monitoring their work, constantly giving them instructions or getting too involved in their work [1,2,4].

Micromanagement can be a problem for employees for several reasons. It can lead to:

- Reduced employee motivation and engagement
- Reduced productivity
- Increased stress and burnout
- Deteriorated relationships between employees and supervisors

In some cases, micromanagement can even be detrimental to the business. It can lead to mistakes because employees can feel as if they have no control over their work. It can also lead to employees not feeling valued or trusted.

✅ How could MouseMover be a good way to solve micromanagement problems?

MouseMover is a device that mimics human mouse movement. It can be used to keep the computer in an active state even when the user is not physically at the computer.

MouseMover can be a good way to solve micromanagement problems because it allows employees to walk away from their computers without worrying about looking like they're lazy or unproductive. This can help employees feel more trusted and respected by their supervisors.

Even though it is a very convenient device, it can also have some negative effects:

- **Decreased productivity**: MouseMover can lead to decreased productivity because employees may be less motivated to work when they know their computer will remain active even when they are not at it.

  Increased dependence on technology: MouseMover can lead to increased dependence on technology because employees may rely on MouseMover to walk away from their computers without having to worry about appearing lazy or unproductive.

  Misuse: MouseMover can be misused to make employees look like they are more active than they actually are. For example, an employee could use MouseMover to keep their computer in an active state even though they are not actually doing any work throughout the day.

That said, it is important to note that the negative impacts of MouseMover can vary depending on the specific circumstances. For example, MouseMover may have less of an impact on productivity for employees who are naturally motivated and who work in an environment that fosters trust and flexibility. Therefore, it is recommended to use it only if employees are motivated to work but have a problem with micromanagement.

❓ What functional and non-functional requirements are required?

Functional requirements:

- MouseMover should be **able to mimic human mouse movement accurately** enough to keep the computer in an active state.
- MouseMover should be **able to work with different types of computers** and operating systems.
- MouseMover should be **easy to use** and set up.

Non-functional requirements:

- MouseMover should be **reliable** and should work continuously.
- MouseMover should be **energy efficient**.
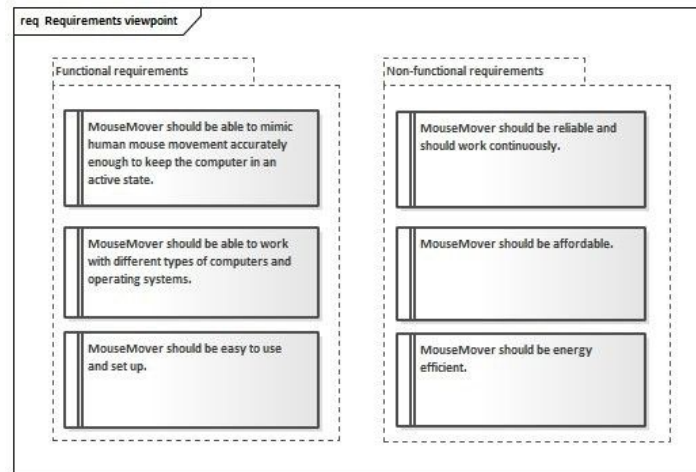- MouseMover should be **affordable**.

Figure 2. Functional and non-functional requirements

Solution proposal

The following sketch shows the early proposal of the solution. Inside will be a motor that will rotate the mouse.
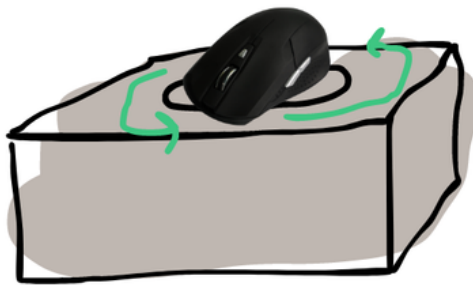

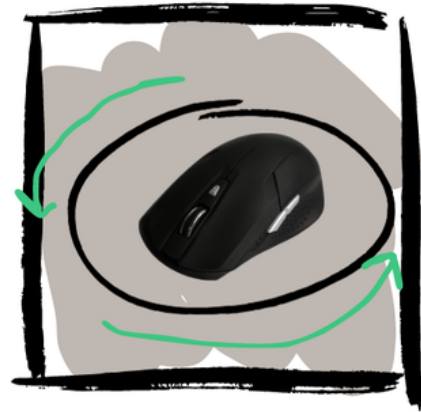Figure 3. Solution proposal from the side

Figure 4. Solution proposal from the above

Design of the box

The box was designed by us in SketchUp, which is freely available on the internet. The dimensions of the box can be seen on the picture:
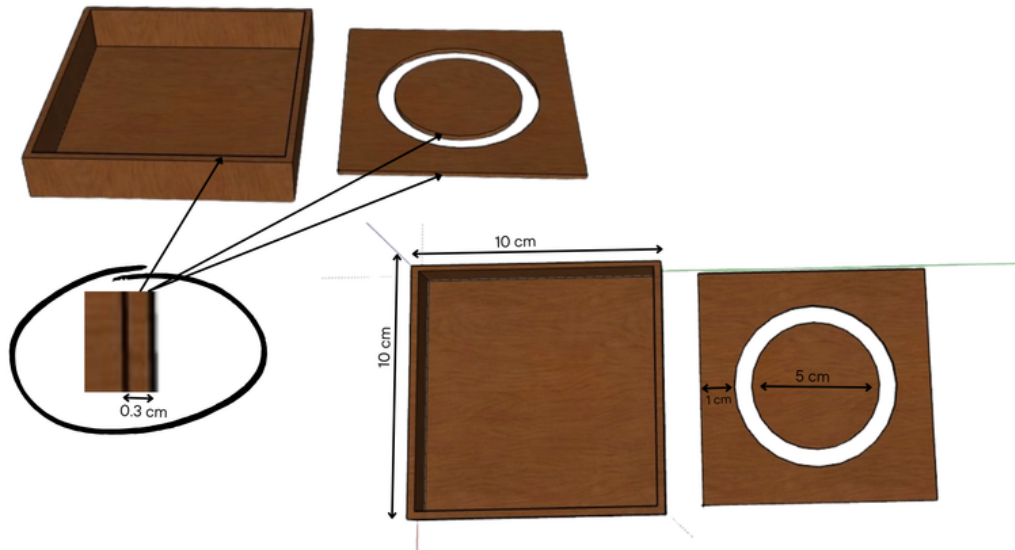
Figure 5. The dimensions of the box designed in SketchUp

The box was made at home with our own hands, using a 3 mm thick raw HDF board. We used tools such as a ruler, a wood frame saw and a compass to shape it. The finishing touches were were achieved using sandpaper. A glue gun was used to connect the parts.

Figure 6. Tools

Figure 6. Progress

Figure 7. Progress

The box was then coloured to make it look better.

Figure 8. Final box from the side

Figure 9. Final box from the above

References :

[1] 🄵 Is Micromanaging A Form Of Bullying? Here Are 3 Things You Should Know

[2] ◉ Micromanagement destroys teams — here's how to nip it in the bud

[3] ◸ Employees micromanaged when remote working by country 2020 | Statista

[4] ↻ What Is a Micromanager? Impact, Signs, and Ways to Reform