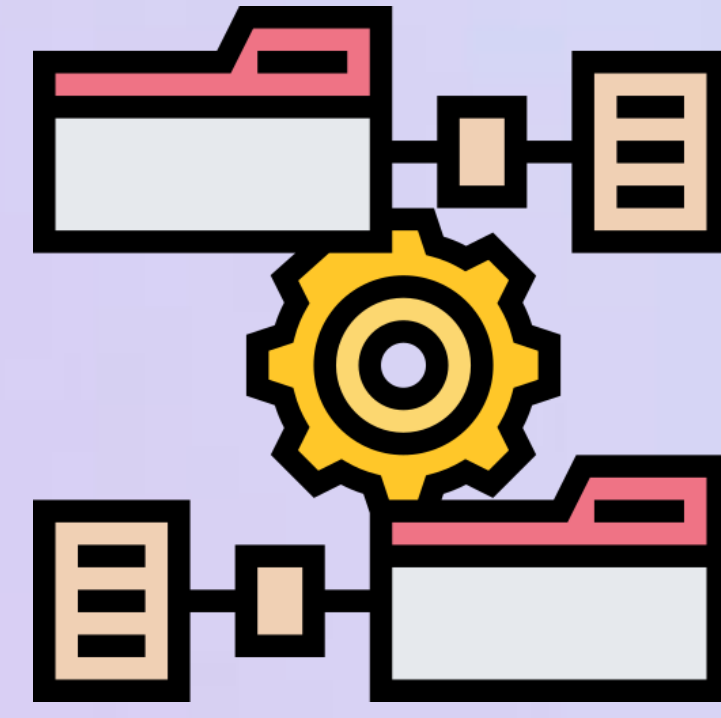




Singapore Healthcare Management 2023

EPIC-MAP



EXCEL-BASED PRODUCTIVITY & IMPROVED CYBERSECURITY—MACRO AUTOMATION PROGRAM

Calvin Lee Kang Rui, SHHQ – Strategic HR (P&P)
John Teo Cheng Su, SHHQ – Strategic HR (P&P)



Introduction: During COVID-19 pandemic, many departments have **experienced an increase in workload and data reporting to several stakeholders.** This resulted large number of sensitive files and documentations are being prepared and circulated mostly via Excel to stakeholders, including those outside of the organization, on a consistent basis which may **require long hours to complete.**

Objective: To handle the increase in workload, we had to improve our productive in our workplace. With this in mind, we brainstormed with different departments and teams to identify our common tasks and current work processes which were inefficient. **Our goal is to improve productivity by at least 100%.**

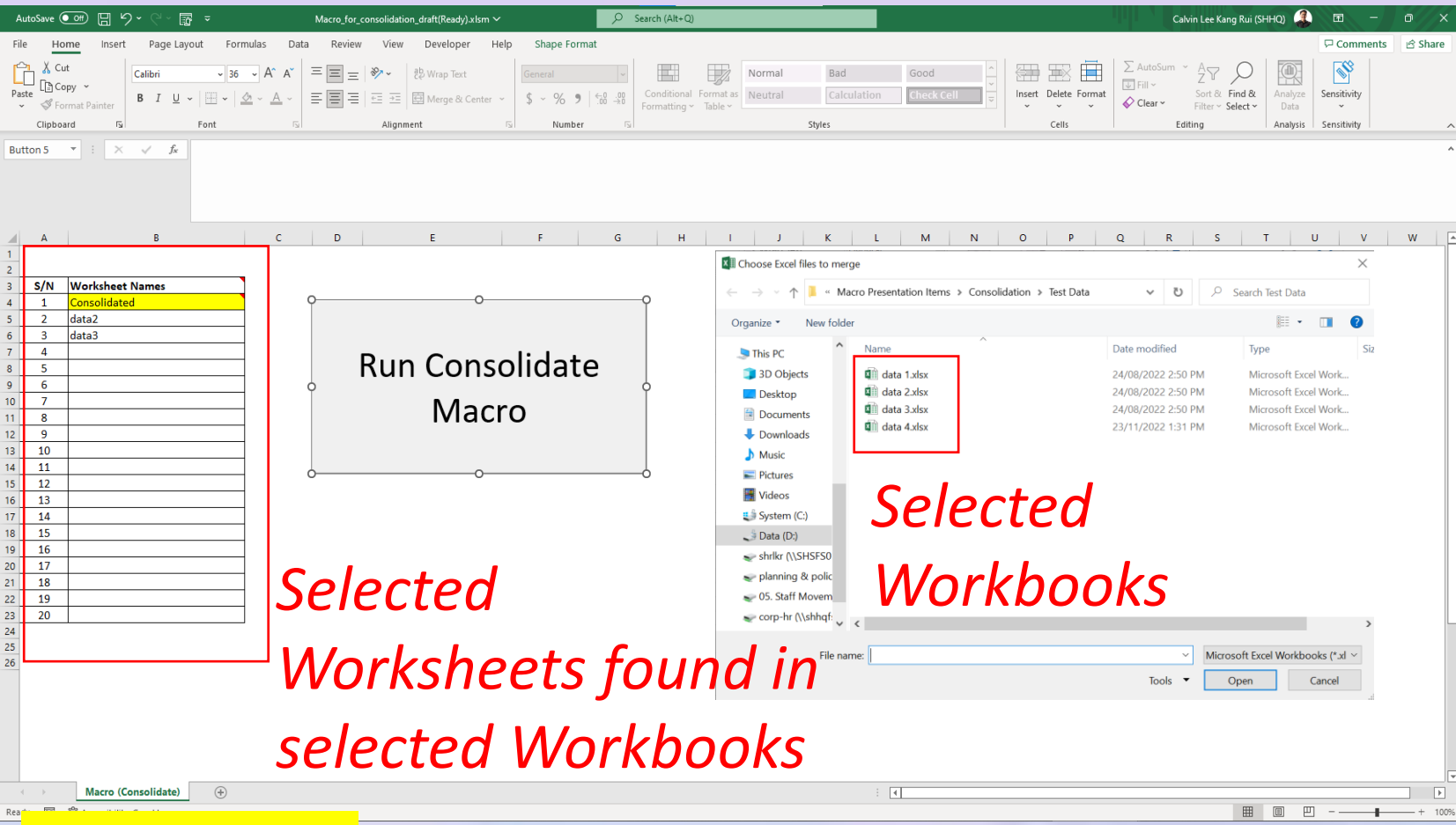
Methodology: We identified 3 commonly repeated tasks that were done when preparing our documentations:

1. Manually Copying & Pasting selected data from institutions' reports to consolidate them.
2. Manually segregating information from a large data source into individual documents for respective stakeholders.
3. Manually creating passwords to secure files and documents that have sensitive information.

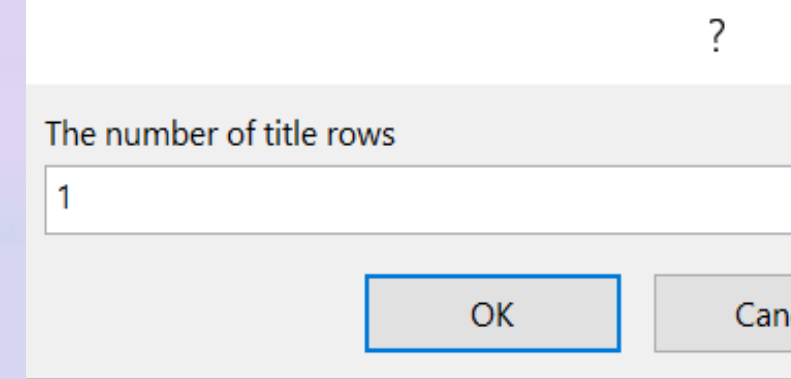
Hence, we explored on **solutions using technology** and **created 3 Macro scripts** to tackle the above issues!



Showcase Example: (Task 1 – Consolidate Macro)



1. Run **Consolidate Macro**, it will merge selected worksheets based on a name list, from selected workbook, and append data on selected worksheets into a "Consolidated" worksheet.



2. Afterwards key in the number of 'header' rows in your data sheets.

Name	Title	Header 1	Header 2	Header 3	Header 4	Header 5	Header 6	Header 7	Header 8
1	SGH	Col 1	1	2	3	4	5	6	7
2	SGH	Col 2	1	2	3	4	5	6	7
3	SGH	Col 3	1	2	3	4	5	6	7
4	SGH	Col 4	1	2	3	4	5	6	7
5	SGH	Col 5	1	2	3	4	5	6	7
6	SGH	Col 5	1	2	3	4	5	6	7

3. Output worksheet 'Consolidated' will be created and data from selected files will be merged into this sheet, with their respective headers.

Name	Title	Header 1	Header 2	Header 3	Header 4	Header 5	Header 6	Header 7	Header 8
1	KKH	Col 1	1	2	3	4	5	6	7
2	KKH	Col 2	1	2	3	4	5	6	7
3	KKH	Col 3	1	2	3	4	5	6	7
4	KKH	Col 4	1	2	3	4	5	6	7
5	KKH	Col 5	1	2	3	4	5	6	7
6	KKH	Col 6	1	2	3	4	5	6	7
7	KKH	Col 7	1	2	3	4	5	6	7
8	KKH	Col 8	1	2	3	4	5	6	7
9	KKH	Col 9	1	2	3	4	5	6	7
10	KKH	Col 10	1	2	3	4	5	6	7
11	KKH	Col 11	1	2	3	4	5	6	7
12	KKH	Col 12	1	2	3	4	5	6	7
13	KKH	Col 13	1	2	3	4	5	6	7
14	KKH	Col 13	1	2	3	4	5	6	7
15	SHHQ	Col 1	1	2	3	4	5	6	7
16	SHHQ	Col 2	1	2	3	4	5	6	7
17	SHHQ	Col 3	1	2	3	4	5	6	7
18	SHHQ	Col 4	1	2	3	4	5	6	7
19	SHHQ	Col 5	1	2	3	4	5	6	7
20	SHHQ	Col 6	1	2	3	4	5	6	7
21	SHHQ	Col 7	1	2	3	4	5	6	7
22	SHHQ	Col 8	1	2	3	4	5	6	7
23	SHHQ	Col 9	1	2	3	4	5	6	7
24	SHHQ	Col 10	1	2	3	4	5	6	7
25	SHHQ	Col 11	1	2	3	4	5	6	7
26	SHHQ	Col 12	1	2	3	4	5	6	7
27	SHHQ	Col 13	1	2	3	4	5	6	7
28	SHHQ	Col 13	1	2	3	4	5	6	7
29	SHHQ	Col 13	1	2	3	4	5	6	7
30	SHHQ	Col 13	1	2	3	4	5	6	7
31	SHHQ	Col 13	1	2	3	4	5	6	7
32	SHHQ	Col 13	1	2	3	4	5	6	7
33	SHHQ	Col 13	1	2	3	4	5	6	7
34	SHHQ	Col 13	1	2	3	4	5	6	7

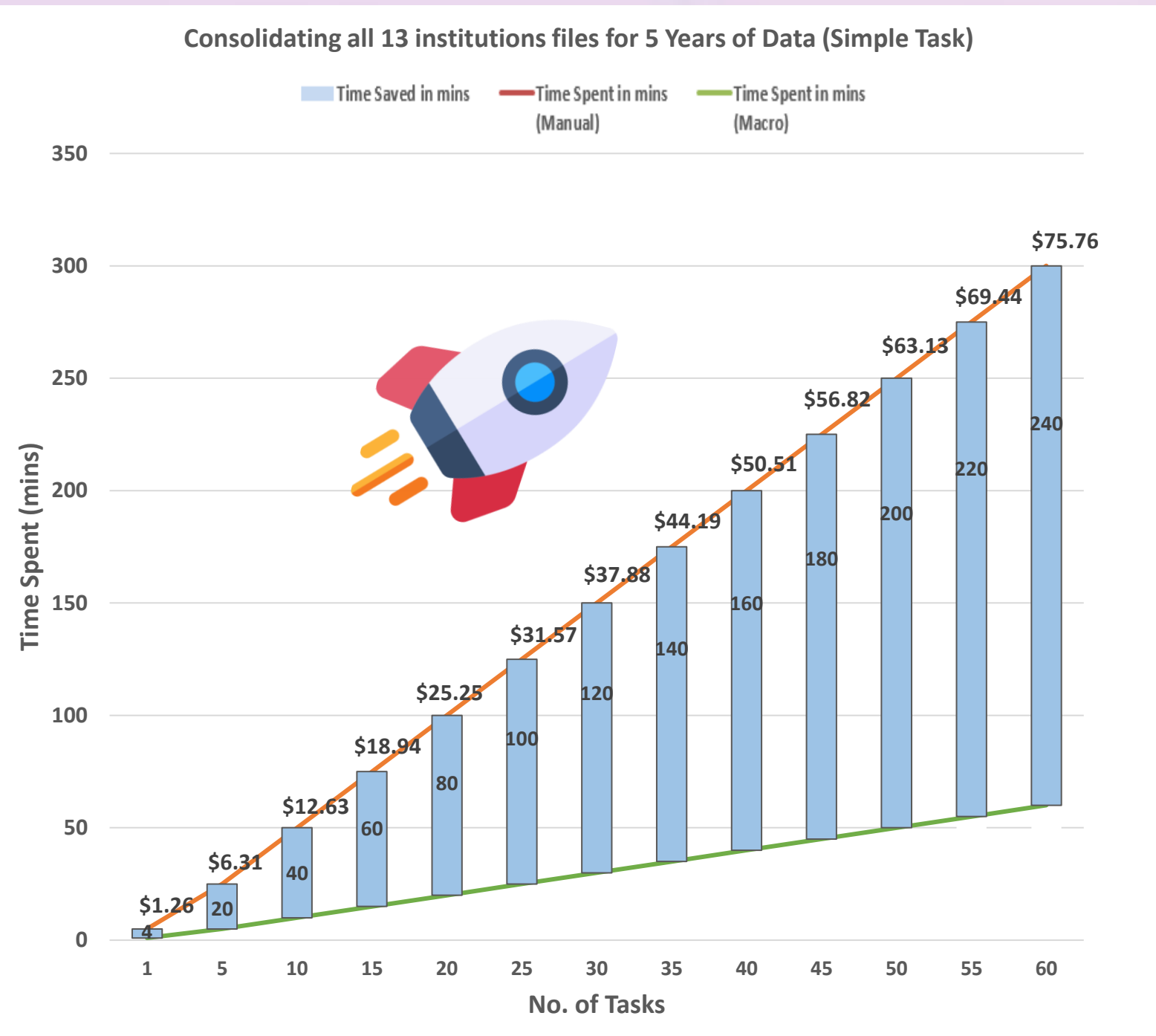
Results:

Given scenario: An Executive is required to prepare a consolidated document with specific data inputs, that were submitted on a **monthly** basis, form the whole cluster (13 institutions) for the past 5 years to perform some analysis. (Approx. Total of 60 simple tasks)

Hypothetical Executive pay:	
Per Month	\$ 3,500.00
Per Day	\$ 159.09
Per Hour	\$ 18.94

Consolidating all 13 institutions files for 5 Years of Data (Simple Task)

No. of Task	Time Spent in mins (Manual)	Time Spent in mins (Macro)	Time Saved in mins	Total Savings in Cash
1	5	1	4	\$ 1.26
5	25	5	20	\$ 6.31
10	50	10	40	\$ 12.63
.
.
60	300	60	240	\$ 75.76



(Copy & Pasting data for 1 month worth of Clusters' data = "1 Simple Task")

Hence, we can see that **exponentially more \$\$\$ can be saved**, when larger number of tasks are to be completed!

Summary & Conclusion:

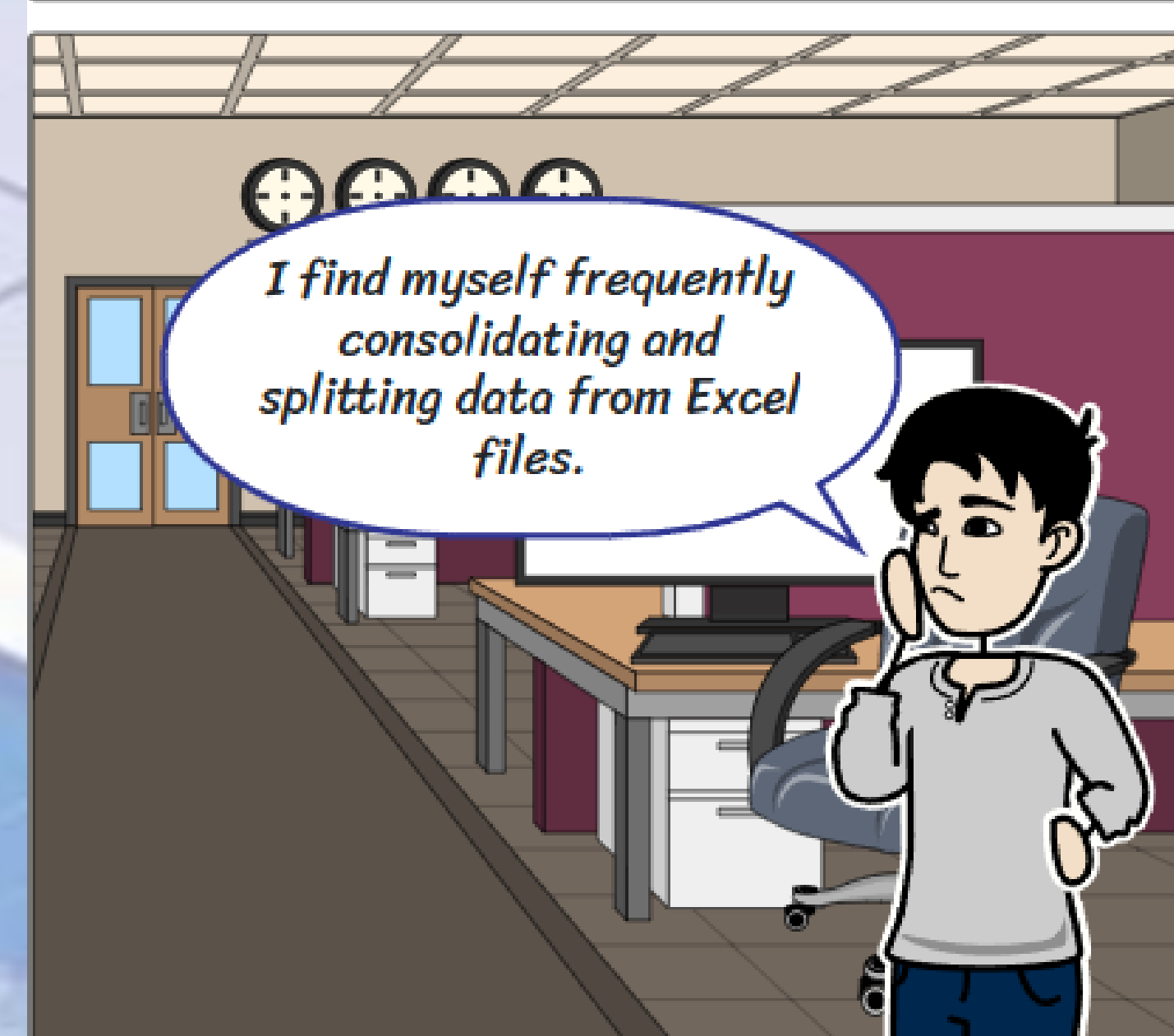
Step 1. Identify tasks to improve efficiency on.



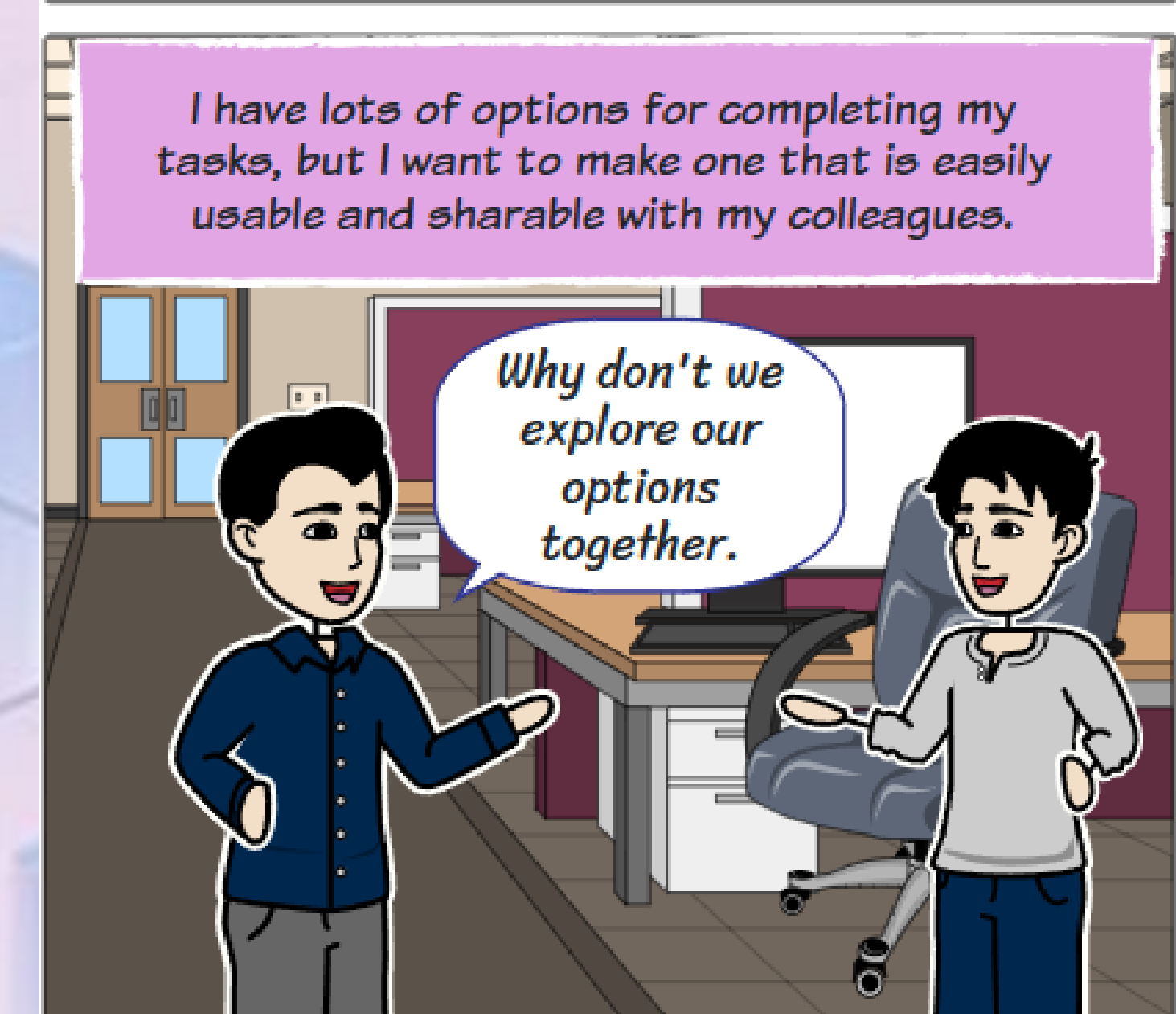
Step 2. Decide on how you should solve the issues.



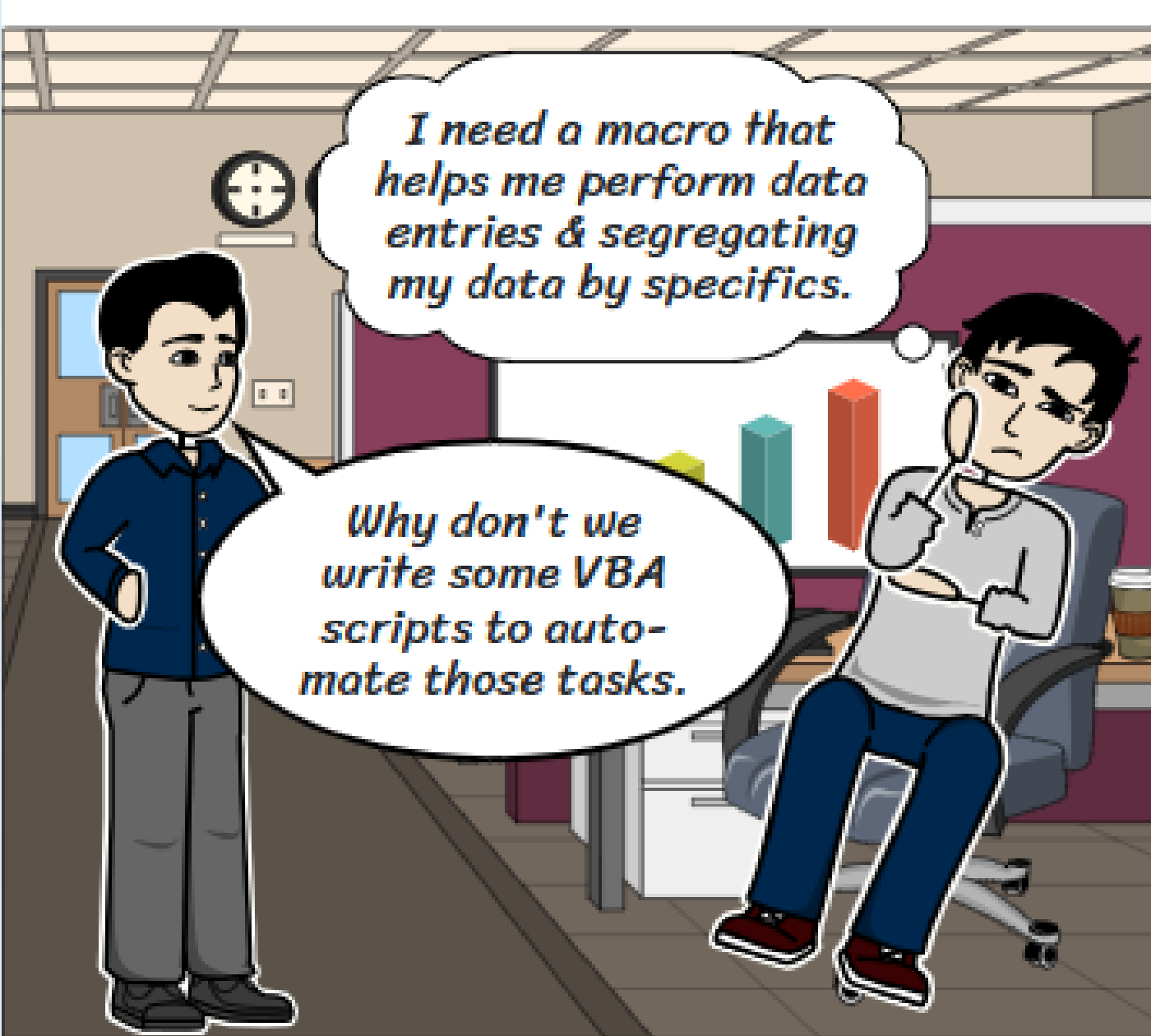
Step 3. Decide on our needs and tools to use



Step 4. Create the Macro scripts templates



Step 5. Share with colleagues to help test the scripts, and collect their feedback



Step 6. Finalize the Macro to be distributed to everyone!



Step 7. Share with colleagues to help test the scripts, and collect their feedback



Step 8. Finalize the Macro to be distributed to everyone!

