The science behind the report:

Accelerate complex tasks with AI PCs featuring AMD Ryzen processors

This document describes what we tested, how we tested, and what we found. To learn how these facts translate into real-world benefits, read the report Accelerate complex tasks with AI PCs featuring AMD Ryzen processors.

We concluded our hands-on testing on September 19, 2025. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on September 19, 2025 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

Our results

To learn more about how we have calculated the wins in this report, go to http://facts.pt/calculating-and-highlighting-wins.
Unless we state otherwise, we have followed the rules and principles we outline in that document.

Table 1: Results of our testing. Less time is better.

Time to complete task (mm:ss)	HP EliteBook X G1a 14 AI		Dell Pro 14 Plus	
	without AI	with AI	without AI	with AI
Summarizing an email chain	16:28	02:05	16:59	02:18
Taking notes during video conferencing	10:10	09:27	10:04	09:28
Creating a Gantt chart in Excel	08:03	02:20	09:17	02:20
Summarizing comments on a Jira ticket	11:58	02:53	11:36	03:11
Generating a project plan	30:14	12:06	30:14	13:10
Composing an email	15:18	00:52	15:41	01:03
Total (hh:mm:ss)	**01:32:12**	**00:29:43**	**01:33:51**	**00:31:29**

Table 2: Results of our testing extrapolated over a workweek. Less time is better.

Time to complete task (mm:ss)	Iterations	HP EliteBook X G1a 14 AI		Dell Pro 14 Plus	
		without AI	with AI	without AI	with AI
Summarizing an email chain	20x weekly	05:29:20	00:41:40	05:39:40	00:46:00
Taking notes during video conferencing	20x weekly	03:23:20	03:09:00	03:21:20	03:09:20
Creating a Gantt chart in Excel	1x weekly	00:08:03	00:02:20	00:09:17	00:02:20
Summarizing comments on a Jira ticket	10x weekly	01:59:40	00:28:50	01:56:00	00:31:50
Generating a project plan	1x weekly	00:30:14	00:12:06	00:30:14	00:13:10
Composing an email	40x weekly	10:12:00	00:34:40	10:27:20	00:42:00
Total (hh:mm:ss)		**21:42:37**	**05:08:36**	**22:03:51**	**05:24:40**

System configuration information

Table 3: Detailed information on the systems we tested.

System configuration information	Dell Pro 14 Plus	HP EliteBook X G1a 14
Processor		
Vendor	AMD	AMD
Model number	AMD Ryzen AI 7 PRO 350 w/ Radeon 860M	AMD Ryzen AI 9 HX PRO 375 w/ Radeon 890M
Core frequency (MHz)	2,000	2,000
Number of cores	8	12
Cache (MB)	16	24
Memory		
Amount	32	32
Type	DDR5	DDR5
Speed (MHz)	8,000	8,000
Graphics		
Vendor	AMD	AMD
Model number	AMD Radeon™ 860M Graphics	AMD Radeon 890M Graphics
Storage		
Amount	512 GB	1 TB
Type	HDD	HDD
Connectivity/expansion		
Wired internet	1 RJ45 (1 Gbps) Ethernet port	Via USB-C Adapter
Wireless internet	Wi-Fi 7 MT7925	MediaTek Wi-Fi 7 MT7925
Bluetooth	2x2, 802.11be, Bluetooth® 5.4 wireless card	Bluetooth® 5.4 wireless card
USB	1 USB 3.2 Gen 1 (5 Gbps) port with PowerShare 1 USB 3.2 Gen 1 (5 Gbps) port	1 USB Type-C® 10Gbps signaling rate 1 USB Type-A 10Gbps signaling rate
Thunderbolt	2 x USB Type-C Thunderbolt™ 4.0 with Power Delivery	Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate
Video	AMD Radeon 860M Graphics	AMD Radeon 890M Graphics
Battery		
Type	ExpressCharge™ Capable, ExpressCharge Boost Capable	HP XL-Long Life
Size	3-cell	4-cell
Rated capacity (Wh)	55	74.5

System configuration information	Dell Pro 14 Plus	HP EliteBook X G1a 14
Display		
Size (in.)	14	14
Type	LCD	LCD
Resolution	1,920 x 1,200	1,920 x 1,200
Touchscreen	Yes	Yes
Operating system		
Vendor	Microsoft	Microsoft
Name	Microsoft Windows 11 Enterprise	Microsoft Windows 11 Enterprise
Build number or version	10.0.26100 (Build 26100)	10.0.26100 (Build 26100)
BIOS		
BIOS name and version	Dell Inc. 2.1.5	HP X90 Ver. 01.02.03
Dimensions		
Height (in.)	0.80	0.52
Width (in.)	12.30	12.29
Depth (in.)	8.80	8.45
Weight (lb.)	3.51	3.3

How we tested

Summarizing an email thread

We conducted a comparative evaluation of Microsoft Copilot's AI-powered email summarization against traditional manual email reading. This test employed realistic email threads to simulate authentic workplace scenarios, enabling an accurate assessment of productivity differences in information processing.

AI-enhanced workflow

1. Open a web browser.
2. Go to https://outlook.office.com.
3. Type your email address.
4. Press Enter or click Next.
5. Type your password.
6. Press Enter or click Sign in.
7. Click on the first email in the list (topmost message).
8. Wait for the email to open and display its contents.
9. Prepare the stopwatch.
10. Simultaneously start the stopwatch and click the Copilot button.
11. In the Message Copilot field, type `Summarize the thread titled Urgent: Website Updates for MexiCat Pet Feeder Launch` and press Enter.
12. From the Copilot menu, click Summarize.
13. Wait for Copilot to generate and display the email summary.
14. When the summary is completely generated, read through it once and stop the stopwatch on completion.
15. Record the result.
16. Repeat steps 1 through 15 two more times.

Traditional workflow

1. Open a web browser.
2. Go to https://outlook.office.com.
3. Type your email address.
4. Press Enter or click Next.
5. Type your password.
6. Press Enter or click Sign in.
7. Click on the first email in the list (topmost message).
8. Wait for the email to open and display its contents.
9. Prepare the stopwatch.
10. Simultaneously start the stopwatch and read through the thread.
11. After you have finished reading through the thread, open Word and write a summary.
12. When the summary is complete, stop the stopwatch.
13. Record the result.
14. Repeat steps 1 through 13 two more times.

Video Conferencing with Teams AI Note-Taking

AI-enhanced workflow

1. Launch Camo Studio by running `C:\Program Files (x86)\Camo Studio\camostudio.exe`
2. In Camo Studio, configure it to use the video file AMDClip.mp4 from the resources folder.
3. Wait 15 seconds for Camo Studio to fully load.
4. Minimize the Camo Studio window.
5. Open the Microsoft Teams application.
6. Click Calendar view.
7. Click Meet now.
8. Click Start meeting.
9. Configure meeting settings to use Camo Studio as the camera source.
10. Join the meeting with video enabled.
11. Launch Windows Media Player Legacy by running `C:\Program Files (x86)\Windows Media Player\wmplayer.exe`
12. In Windows Media Player, open and play the audio file AMDClipAudio.mp3 from the resources folder.
13. Minimize the Windows Media Player window.
14. Let the meeting run for 5 minutes (300 seconds).
15. After 5 minutes, close Camo Studio completely.
16. Close Windows Media Player.
17. In Teams, leave the meeting.
18. Wait 1 minute for Copilot AI Recap to generate.
19. Open the Chat pane.
20. Navigate to the latest meeting.
21. Open Recap.
22. Maximize the recap window.
23. Open the Copilot pane.
24. Enter the following prompt:

    ```
    Were there any action items to take note of?
    ```

25. Navigate to Transcript save options.
26. Click Save Transcript to Downloads.
27. Close Microsoft Teams.

Traditional workflow

1. Open the Microsoft Teams application.
2. Navigate to the Calendar view.
3. Click Meet now.
4. Click Start meeting.
5. Configure meeting settings to use Camo Studio as the camera source.
6. Join the meeting with video enabled.
7. Launch Windows Media Player Legacy by running `C:\Program Files (x86)\Windows Media Player\wmplayer.exe`
8. In Windows Media Player, open and play the audio file AMDClipAudio.mp3 from the resources folder.
9. Minimize the Windows Media Player window.
10. Launch Microsoft Word.
11. Wait for Word to fully load (about 30 seconds).
12. Press Enter to select Blank Document from the welcome screen.
13. Wait an additional 5 seconds before beginning note-taking.
14. Minimize the main Teams window while keeping the meeting window active.
15. Keep Word in the foreground and begin taking meeting notes.
16. Type the document header `MexiCat Project Meeting Notes` with the current date.
17. Press Enter twice to create space for notes.
18. During the meeting, take timestamped notes about key discussion points including project vision, product features, marketing strategy, and technical requirements.
19. Type notes in a rushed, informal style with occasional typos and abbreviations to simulate real-time note-taking.

20. Continue taking notes for the full duration of the meeting (approximately 5 minutes).
21. When the meeting ends, minimize Word and wait for cleanup phase.
22. After the meeting concludes, restore Word to the foreground.
23. Go to the end of the document using Ctrl+End.
24. Add a separator line and create a "CLEANED UP MEETING NOTES" section.
25. Add a professional meeting overview summarizing the key points discussed.
26. Create organized sections for "KEY DISCUSSION POINTS," "ACTION ITEMS," and "NEXT STEPS"
27. Include attendee information and meeting date in the cleaned-up section.
28. Save the document.
29. Close Word.
30. Return to the Teams application window and leave the meeting.
31. Check for and dismiss any call quality feedback prompts that appear.
32. If a feedback dialog appears, click Dismiss or Close to dismiss it.
33. Stop timer.

Creating a Gantt Chart in Excel

AI-enhanced workflow

1. Launch Excel with Copilot.
2. Prepare the stopwatch.
3. Simultaneously start the stopwatch and open this project plan Project Plan MexiCat MexiPet.xlsx.
4. Click the Copilot button in the ribbon.
5. Enter the following prompt:

```
Give me the steps to make a Gantt chart of tasks from this sheet
```

6. Review the summary that Copilot has generated.
7. Follow the steps to create Gantt a chart.
8. Stop the stopwatch when the Gantt chart is created.
9. Record the time.
10. Repeat steps 1 through 9 two more times.

Traditional workflow

1. Launch Excel (no Copilot).
2. Prepare the stopwatch.
3. Simultaneously start the stopwatch and open the project plan Project Plan MexiCat MexiPet.xlsx.
4. Click Help in the menu bar.
5. Click Help in the ribbon.
6. Enter the following prompt:

```
Give me the steps to make a Gantt chart of tasks from this sheet
```

7. Review the static help text.
8. Follow the steps and download the Simple Gantt chart from New.
9. Use a search engine to look up additional help resources.
10. While referencing the support resources, replace the data in the Simple Gantt chart with the correct fields from the Project Plan MexiCat MexiPet.xlsx.
11. Ensure data is structured as explained in support resource.
12. Stop the stopwatch when the Gantt chart is complete.
13. Record the time.
14. Repeat steps 1 through 13 two more times with different users.

Summarizing the comments in a Jira ticket

AI-enhanced workflow

1. Open a browser and go to following link: https://radteam-lab.atlassian.net/jira/software/projects/KAN/list?atlOrigin=eyJpIjoiOTZmZWJkYTJmNTI1NDAxN2IzOWQzNjI5M2Y4YzgzYTIiLCJwIjoiaiJ9
2. Enter your username and password and click Log in.
3. Ensure User is logged into JIRA with appropriate permissions.
4. Ensure Atlassian Intelligence summarization is enabled for the project/instance.
5. Under the Projects there is MexiCat – navigate to List view, expand the epic Picture 1, Picture "New Product Launch: MexiPetFeeder to MexiCat Line."
6. Prepare the stopwatch.
7. Simultaneously start the stopwatch and click JIRA bug ticket KAN-36 "BETA TESTER FEEDBACK: Catastrophic UI Input - Malicious Firmware Update Trigger & Device Bricking."
8. The ticket should have a pop-up expanding all details.
9. Click Picture 1, the picture in upper right.
10. Click Summarize comments.
11. Under the Ticket's Activity, an inner window will appear showing Picture 1. Atlassian Intelligence's comment summary will appear in this inner window.
12. Read through the summary to verify the summary accurately reflects the content of the various comments.
13. Copy the summary and past it in an email.
14. Stop the stopwatch and record the time.
15. Repeat steps 1 through 14 two more times with different users.

Traditional workflow

1. Open a browser and go to following link: https://radteam-lab.atlassian.net/jira/software/projects/KAN/list?atlOrigin=eyJpIjoiOTZmZWJkYTJmNTI1NDAxN2IzOWQzNjI5M2Y4YzgzYTIiLCJwIjoiaiJ9.
2. Enter your username and password and click Log in.
3. Ensure User is logged into JIRA with appropriate permissions.
4. Ensure Atlassian Intelligence summarization is enabled for the project/instance.
5. Under the Projects there is MexiCat – navigate to List view, expand the epic Picture 1, Picture "New Product Launch: MexiPetFeeder to MexiCat Line."
6. Simultaneously start the stopwatch and click JIRA bug ticket KAN-36 "BETA TESTER FEEDBACK: Catastrophic UI Input - Malicious Firmware Update Trigger & Device Bricking."
7. The ticket should have a pop-up expanding all details.
8. Read through the entire ticket and comments.
9. Write a summary of ticket and comments in an email.
10. Stop the stopwatch when the summary is complete, and record the time.
11. Repeat steps 1 through 10 two more times with different users.

Generating a project plan

AI-enhanced workflow

1. Launch LM Studio.
2. Click Discover in the left panel.
3. Search for Gemma 3 12B, ensuring it is the Q4_K_M version in the right information pane.
4. Click Download.
5. In the left panel, click Chat.
6. Load the gemma-3-12b Q4_K_M model by clicking on module at top center of chat interface, and selecting the model from the drop-down menu.
7. Wait for the model to load completely (may take several minutes).
8. Navigate to the Chat interface in LM Studio.
9. Start a new conversation.
10. Prepare the stopwatch.
11. Simultaneously start the stopwatch and start typing the following prompt:

```
Make a project plan in Excel to run a mini project to solve a critical problem in final UI design.
Include all roles needed, 4 week duration
```

12. Review the generated project plan for accuracy, conciseness, and key insights.
13. Enter the following prompt: `Create a CSV file of the table that I can import into Excel`
14. Update the Excel project plan to include these steps, mapping to the appropriate roles in sheet.
15. Stop the stopwatch when the spreadsheet is complete.
16. Record the time.
17. Repeat steps 1 through 16 two more times.

Traditional workflow

1. Identify Key Tasks/Activities: Brainstorm all the things that need to happen to complete your project.
2. Break items into appropriate phases (e.g., Planning, Design, Development, Testing, Deployment).
3. Estimate Task Durations: How long will each task take? Consider dependencies and potential roadblocks.
4. Assign Resources: Who's responsible for each task? This helps with accountability and workload management.
5. Define Milestones: These are significant checkpoints in your project – key deliverables or completion of phases.
6. Review the updated project plan for accuracy, conciseness, and key insights.
7. Update the Excel project plan to include these steps, mapping to the appropriate roles in sheet.

Composing an email

AI-enhanced workflow

1. Open a browser and navigate to https://outlook.office.com.
2. Type your email address.
3. Press Enter or click Next.
4. Type your password.
5. Press Enter or click Sign in.
6. Wait for the Outlook inbox to load completely.
7. Click New message to open the compose window.
8. Type the recipient's email address in the recipient field.
9. In the subject field, type `Updated MexiCat Press Deck`
10. Type the following casual email message:

```
hey chris!! omg i finally got that mexicat thing done lol. so basically we were trying to make this
slide deck and it was such a pain bc we couldn't find anything. like seriously spent FOREVER digging
through old files and presentations... ugh. but then we used some AI stuff (recall and copilot)
and it was actually pretty cool! recall grabbed images super fast and copilot summarized the
press release which saved tons of time. mixed that with some manual work and boom - got a decent
slide together. anyway the slide looks good now i think?? has some nice visuals and the messaging
seems ok. this whole thing shows how we can use AI to make our jobs easier without replacing
us entirely which is the goal right? check it out and lmk what u think! hopefully its what ur
looking for. thx! alex
```

11. Prepare the stopwatch.
12. Simultaneously start the stopwatch and click Insert in the toolbar.
13. From the insert menu, click Attach.
14. Click Browse this computer.
15. Go to ../Automated_Workloads\Module_5_Email\demo_data where mexicat_campaign_deck.pptx is located.
16. Select and attach the file.
17. Highlight the text.
18. Click Copilot in the compose window.
19. Navigate to the Change Tone option.
20. Navigate to More formal, and apply the changes.
21. Wait for changes to be applied.
22. Read through the email to check for accuracy.
23. Click the email body area to refocus.
24. Simultaneously stop the stopwatch and click Send to send the email.
25. Record the time.
26. Repeat steps 1 through 25 two more times.

Traditional workflow

1. Open a browser and navigate to https://outlook.office.com.
2. Type your email address.
3. Press Enter or click Next.
4. Type your password.
5. Press Enter or click Sign in.
6. Wait for the Outlook inbox to load completely.
7. Click New mail or New message to open the compose window.
8. Type the recipient's name in the recipient field.
9. In the subject field, type `Updated MexiCat Press Deck`
10. Type the following casual email message:

```
hey chris!! omg i finally got that mexicat thing done lol. so basically we were trying to make this
slide deck and it was such a pain bc we couldn't find anything. like seriously spent FOREVER digging
through old files and presentations... ugh. but then we used some AI stuff (recall and copilot)
and it was actually pretty cool! recall grabbed images super fast and copilot summarized the
press release which saved tons of time. mixed that with some manual work and boom - got a decent
slide together. anyway the slide looks good now i think?? has some nice visuals and the messaging
seems ok. this whole thing shows how we can use AI to make our jobs easier without replacing
us entirely which is the goal right? check it out and lmk what u think! hopefully its what ur
looking for. thx! alex
```

11. Simultaneously start the stop watch and wait 8 seconds to review the casual draft
12. Delete the first email draft and type: `Dear Chris, I'm pleased to present the updated MexiCat press deck for your review.`
13. Press Enter twice to create line breaks.
14. Type the following:

```
This revision demonstrates our enhanced approach to content creation, combining strategic manual
processes with advanced technological solutions. Initially, we invested considerable time searching
through historical MexiCat presentations and documents, but encountered challenges locating
essential assets due to fragmented file organization.
```

15. Press Enter twice to create line breaks.
16. Type the following:

```
Leveraging Microsoft Recall and Copilot significantly improved our workflow productivity. Recall
enabled rapid retrieval of critical visuals from previous MexiCat campaigns, while Copilot's AI
capabilities facilitated precise summarization of our press release content.
```

17. Press Enter twice to create line breaks.
18. Type the following:

```
These tools, combined with careful manual curation from our archives, ensured the final slide
accurately represents the brand's identity and messaging standards.
```

19. Press Enter twice to create line breaks.
20. Type the following:

```
The attached slide features compelling visuals and precise messaging, ready for your immediate
consideration. This initiative demonstrates our strategic integration of AI and automation to
enhance productivity while maintaining quality standards.
```

21. Press Enter twice to create line breaks.
22. Type the following:

```
Please review the slide at your earliest convenience and provide your feedback or next steps.
```

23. Press Enter twice to create line breaks.
24. Type the following: `Best regards,`
25. Press Enter.
26. Type the following: `Alex`
27. Click Insert in the toolbar.
28. From the Insert menu, click Attach.
29. Click Browse this computer.
30. Type the folder path where mexicat_campaign_deck.pptx is located.
31. To select and attach the file, press Enter.
32. Simultaneously stop the stopwatch and click Send to send the email.
33. Record the time.
34. Repeat steps 1 through 33 two more times with different users.

Read the report ▶

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