



Not all clouds are created equal

A comparison of Google Sites and Microsoft SharePoint Online

Internal sites give your employees the ability to share ideas, connect with each other, and access everything from project-related documents to company policy and calendars. This can improve employee productivity and company culture. The easier it is to set up, update, and access these crucial lines of communication, the more likely users will actually use them.

Here at Principled Technologies, we evaluated how easy it was to create and maintain internal sites with Google Sites™ and Microsoft® SharePoint® Online.¹

Google Sites, a part of G Suite, performed 100 percent of the routine site management tasks we tackled in less time and with noticeably less effort than the Microsoft Office 365® site manager, SharePoint Online. Google Sites also delivered a streamlined user experience and responsive mobile design that SharePoint Online couldn't match—SharePoint Online required more steps to add simple features to a team site, something Google Sites made comparably simple. Read on to learn more.

**PREVIEW A
SITE THEME**

in up to

98%

LESS TIME

**EMBED A
YOUTUBE™ VIDEO**

in a page in

10

FEWER STEPS

**CREATE A
NEW SITE**

in up to

57%

LESS TIME

Break down barriers to success

Keeping internal sites up to date has traditionally taken a great deal of time and energy. Both G Suite and Microsoft Office 365 claim that their tools make it easy to build and maintain internal sites, but which one comes out on top?

We determined how long it took to create sites and maintain existing ones with Google Sites and Microsoft SharePoint Online. We also compared the number of steps both tools required to complete common tasks like adding text, images, video, and calendars to a page. Because mobility is crucial for the enterprise, we used a variety of laptops and smartphones running different operating systems, browsers, and apps to test real-world scenarios.

Having important information at your team's fingertips at all times means everyone can do their jobs better, check the status of projects more easily, and respond to problems more quickly. When employees struggle to share information with their teams or feel that their tools aren't helpful, they may decide to stop wasting time trying to communicate in that forum and revert to old communication practices that are harder to track.

The clock is ticking...

Read below to see how Google Sites and SharePoint Online can improve (or impede) productivity.

A tale of two HR managers

Genevieve and Ralph are in charge of people operations at competing cell phone providers. Both need to create internal sites where employees can learn about new 401(k) options. They must embed video, add images, and edit copy for these pages.

Genevieve's company uses G Suite and Ralph's company uses Microsoft Office 365.

Let's see how each choice shapes their workflow.

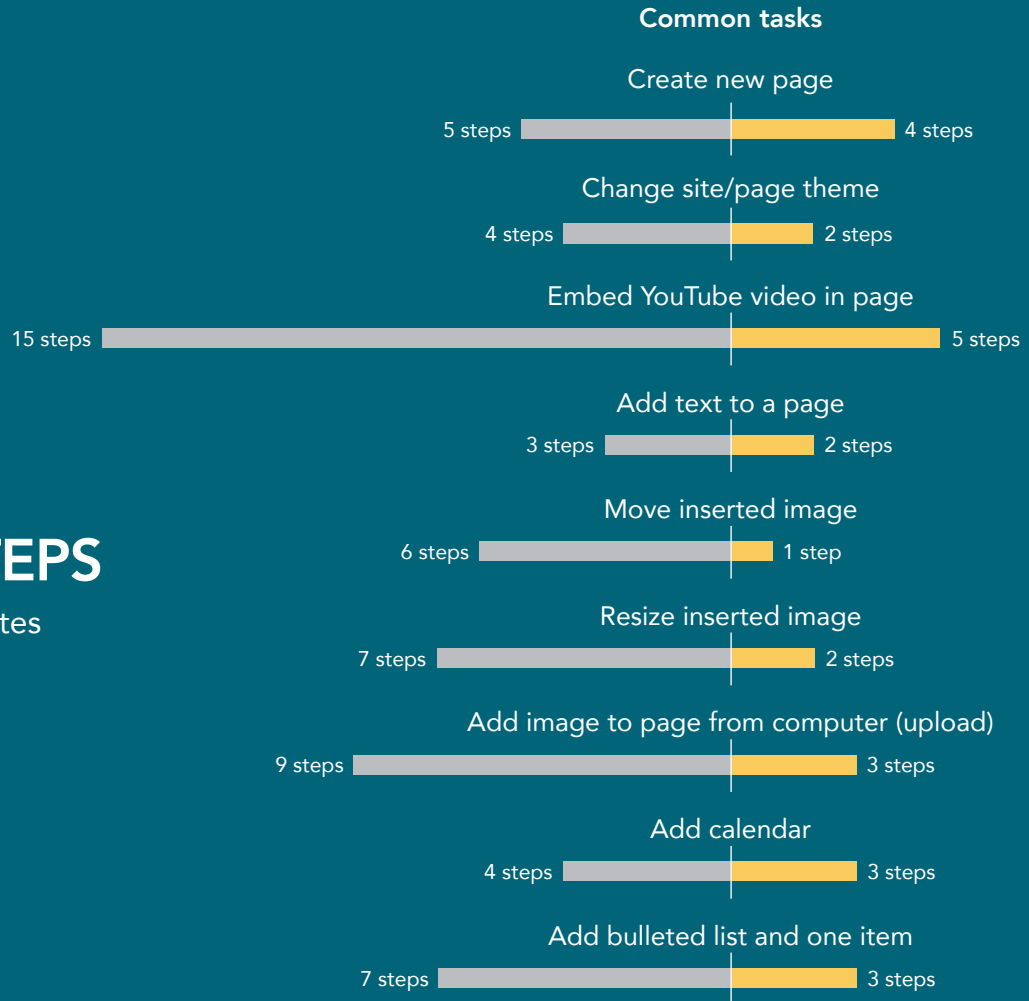


Core competencies

Routine tasks shouldn't be complicated. As our results show, Google Sites helps Genevieve accomplish every task in fewer steps than Ralph, who uses Microsoft SharePoint Online.

The real advantage isn't only saving steps when you embed videos or upload images to a page—it's the fact that Google Sites is generally easier to use than SharePoint Online.

35
FEWER STEPS
with Google Sites



■ SharePoint Online ■ Google Sites

Strategic information management

Genevieve and Ralph now need to update their respective sites by changing the color scheme on the shared calendar and reviewing individual team pages.

It only takes Genevieve half a second to preview a site theme with Google Sites on her Windows® 10 laptop. In contrast, Ralph stares at the computer screen for over half a minute as he waits for SharePoint Online to preview the changes.

Opening a page for editing takes Genevieve about a second with Google Sites—half the time it takes Ralph to do the same thing with SharePoint Online. When you're reviewing dozens of team pages and adding new information to existing files, time quickly adds up; and when you don't have the fastest tools helping you, routine tasks take up more time than they need to.

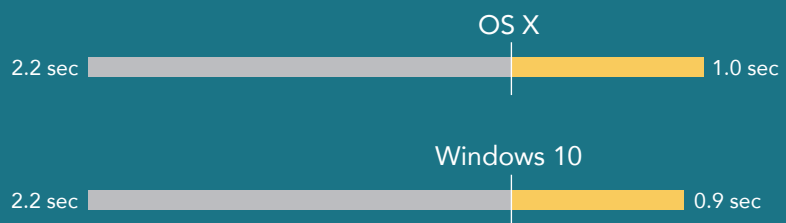
Preview a site theme
in up to

98%
less time
with Sites



Open an existing page
for editing in up to

59%
less time
with Sites



■ SharePoint Online ■ Google Sites

Encourage knowledge sharing

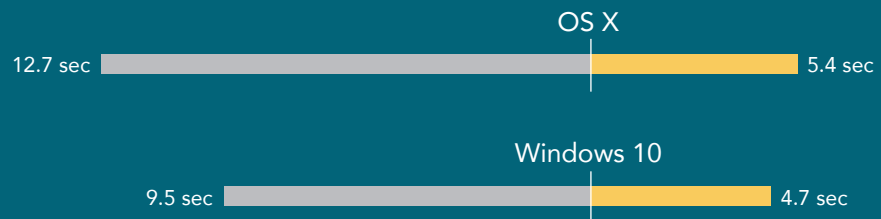
Genevieve and Ralph are creating new sites for their sales reps. They need to make group sales histories, prepare commission breakdowns for store managers, and create a list of sales targets for all territories. Once they're done, they'll send email notifications to individual sales reps and their managers to inform them that the sites are live.

Google Sites helps Genevieve achieve her goals much faster than Ralph can with SharePoint Online. Creating a new site with three blank pages takes Genevieve as little as 7.8 seconds (when she's using an Apple® MacBook Air®). The same task takes Ralph as long as 18.4 seconds. That's twice as long as it takes Genevieve! When you multiply that time savings over 15 or 20 new project sites, it's clear that Genevieve can start working on other objectives while Ralph's still far from done with his list.

Once each new project site is ready to go, Genevieve lets various team members know that their new team portal is up and running. With Google Sites, Genevieve accomplishes this in less time than it takes Ralph to notify his workers with SharePoint Online.

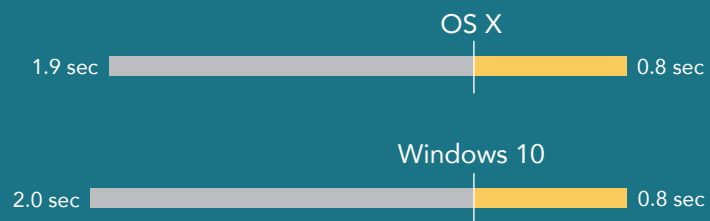
Create a new site
in up to

57%
less time
with Sites



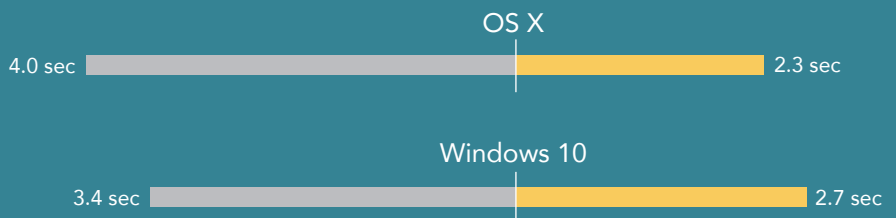
Create a new
blank page in up to

60%
less time
with Sites



Invite/share via
email in up to

42%
less time
with Sites



■ SharePoint Online ■ Google Sites

Get the whole picture

Saving time and steps is important, but that's not the only difference between Google Sites and Microsoft SharePoint Online.

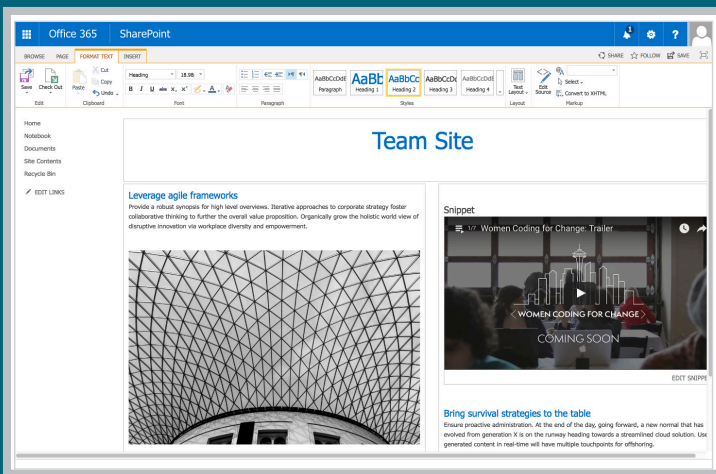
The Google Sites experience

Google Sites presented our testers with a consistent experience across devices, including Android and iOS smartphones. It also created responsive pages that scaled properly on both laptop and mobile screens.

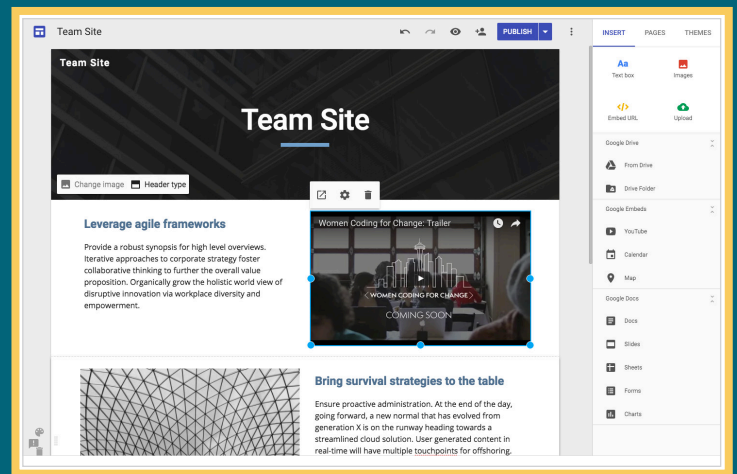
What a page editor on desktop sees



SharePoint Online



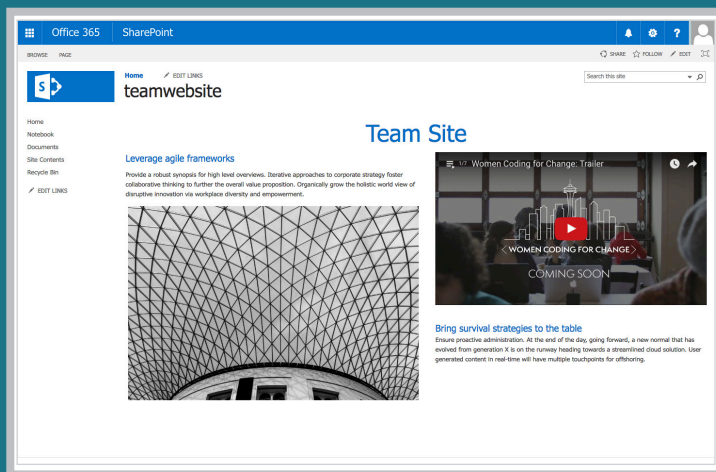
Google Sites



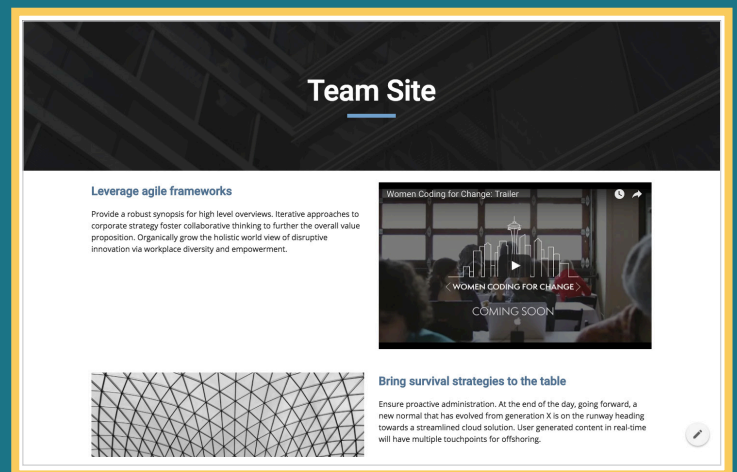
What a user on desktop sees



SharePoint Online



Google Sites

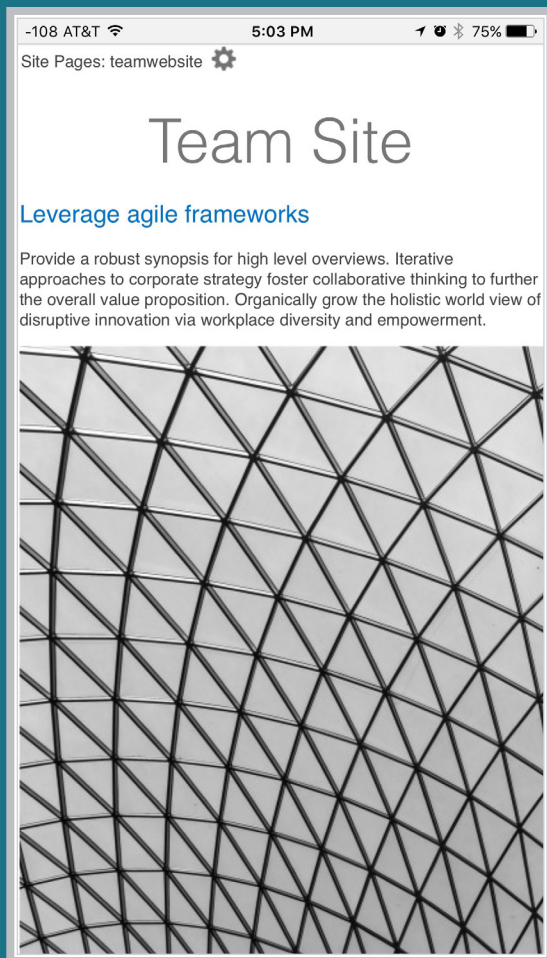


The Microsoft SharePoint Online user experience:

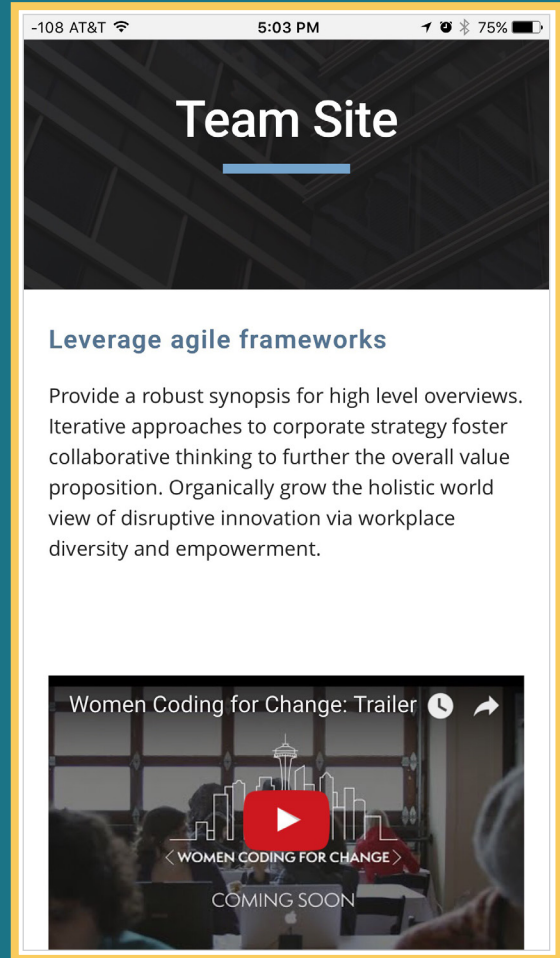
Microsoft SharePoint Online has some mobile support, but what you see when designing a site isn't always what you get. For example, in the screenshot on the left, the page title's formatting doesn't match how it appears in the SharePoint Online editor screen on the previous page, and you only see half of the image; you have to scroll horizontally to see the whole thing.

What a mobile user sees

SharePoint Online




Google Sites



In contrast, Google Sites was mobile friendly and didn't have any issues fluidly scaling from mobile screen sizes to laptops.

Conclusion: Routine tasks shouldn't be complicated

Internal sites are essential hubs of intra-company communication. Easy maintenance of these sites brings even more value to the users by making access easy and engagement intuitive.



In our hands-on testing, accomplishing day-to-day tasks using Google Sites was simpler and more intuitive. When we attempted the same tasks with SharePoint Online, we experienced longer wait times—tasks took up to 61 times longer.

Allowing us to complete tasks in fewer steps is another way that Google Sites streamlined the process; the step-by-step process with Microsoft SharePoint Online was more complicated. Google Sites also provided users with a consistent experience across devices, a consistency that was lacking in our SharePoint Online experience. These inconsistencies and extended wait times can cause employees to become reluctant to use the tool. This can result in less communication, out-of-date content, or low employee engagement.

Want to try out the tests yourself? Follow the methodologies at the end of the report.

This is the fifth report in our five-part series that examines the performance of collaboration and productivity tools from G Suite and Microsoft Office 365. Read the entire series for a complete picture of how the cloud you choose can affect your business.

Additional reports in the “Not all clouds are created equal” series:

[A comparison of Google Docs™ and Microsoft Word Online](#)

[A comparison of Google Drive, Microsoft OneDrive for Business, and SharePoint Online](#)

[A comparison of Google Hangouts™ and Skype™ for Business](#)

[A comparison of Gmail™ and Outlook®](#)

1 For our testing, we used the rebuilt Google Sites via the Google Sites Early Adopter Program: <https://cloud.googleblog.com/2016/06/powering-a-more-connected-and-collaborative-enterprise.html>

On July 19, 2016, we finalized the hardware and software configurations we tested. Updates for current and recently released hardware and software appear often, so unavoidably these configurations may not represent the latest versions available when this report appears. For older systems, we chose configurations representative of typical purchases of those systems. We concluded hands-on testing on July 26, 2016.

On September 29, 2016, Google rebranded Google Apps for Work as “G Suite.” We completed our testing prior to that rebranding.

Appendix A – What we tested

The table below shows the system information for the mobile devices we tested.

System	Apple iPhone® 6s Plus	Google Nexus™ 6P
Processor		
Vendor	Apple	Qualcomm®
Model number	A9 + M9 coprocessor	Snapdragon™ 810
Core frequency (GHz)	1.85	1.95 + 1.55
Number of cores	2	8 (4 + 4)
Memory		
Amount (GB)	2 (built-in onboard)	3 (built-in onboard)
Type	LPDDR4	LPDDR4
Graphics		
Vendor	Imagination® Technologies	Qualcomm
Model number	PowerVR® GT7600	Adreno™ 430
Storage		
Amount (GB)	64	64
Type	NAND Flash	NAND Flash
Connectivity		
Wireless internet	802.11ac (802.11a/b/g/n compatible)	802.11ac (802.11a/b/g/n compatible)
Cellular	LTE Advanced	LTE Advanced
Bluetooth	4.2	4.2
Battery		
Type	Lithium-polymer	Lithium-polymer
Size	Integrated	Integrated
Rated capacity (Wh)	10.45	13.11
Display		
Size	5.5"	5.7"
Type	LED-backlit widescreen Multi-Touch	AMOLED widescreen Multi-Touch
Resolution	1,080 x 1,920	1,440 x 2,560

System	Apple iPhone® 6s Plus	Google Nexus™ 6P
Camera		
Front-facing (MP)	5 (720p FaceTime® HD)	8
Rear-facing (MP)	12 (iSight®)	12.3
Operating system		
Vendor	Apple	Google
Name	iOS	Android™
Build number or version	9.3.2	6.0.1
Dimensions		
Height	6.23"	6.27"
Width	3.07"	3.06"
Depth	0.29"	0.28"
Weight (oz.)	6.77	6.27

The table below shows the system information for the laptops we tested.

System	Apple 13" MacBook Air (Early 2015)	Lenovo® ThinkPad® X1 Carbon
Processor		
Vendor	Intel®	Intel
Model number	Core™ i5-5250U	Core i7-6600U
Core frequency (GHz)	1.6 (up to 2.7 Turbo Boost)	2.6 (up to 3.4 Turbo Boost)
Number of cores	2	2
Cache	3MB L3	4MB L3
Memory		
Amount (GB)	8 (built-in onboard)	8 (built-in onboard)
Type	LPDDR3	LPDDR3
Speed	1,600 MHz	1,866 MHz
Integrated graphics		
Vendor	Intel	Intel
Model number	HD Graphics 6000	HD Graphics 520
Storage		
Amount (GB)	256	256
Type	PCIe-based flash	PCIe NVMe™ SSD

System	Apple 13" MacBook Air (Early 2015)	Lenovo® ThinkPad® X1 Carbon
Connectivity/expansion		
Wireless internet	802.11ac (802.11a/b/g/n compatible)	802.11ac (802.11a/b/g/n compatible)
Bluetooth	4.0	4.1
USB	2 x 3.0	3 x 3.0
Thunderbolt	2 x 2	N/A
Video	N/A	1 x HDMI®, 1x Mini DisplayPort
Battery		
Type	Lithium-polymer	Lithium-polymer
Size	Integrated	4-cell
Rated capacity (Wh)	54	52
Display		
Size	13.3"	14"
Type	LED-backlit glossy widescreen display	LED IPS
Resolution	1,440 x 900	1,920 x 1,080
Touchscreen	No	No
Operating system		
Vendor	Apple	Microsoft
Name	OS X El Capitan	Windows 10 Pro
Build number or version	10.11.4	1511, OS Build 10586.318
Camera		
Front-facing	720p FaceTime HD	720p
Dimensions		
Height	0.11" to 0.6"	0.6"
Width	12.8"	13.1"
Depth	8.94"	9.00"
Weight (lb.)	2.96	2.58

Appendix B – How we tested

About our testing

Network infrastructure

We used two of each device under test. We connected the two devices in each pair to separate wireless networks. We connected the devices to the 5GHz band of identical, 802.11 ac-based TP-Link AC1750 wireless routers. We configured each router identically but set them to use different channels, to minimize traffic from nearby networks.

Devices

- Lenovo ThinkPad X1 Carbon (Windows 10)
- Apple 13" MacBook Air (OS X El Capitan)

Running the laptop tests

Measuring the time to create a new site

1. In Google Chrome™, navigate to the dashboard page for the site management service being tested.
2. Create the site:
 - In Google Sites, simultaneously click the Create New Site button and start the stopwatch.
 - In SharePoint Online, click the Create Site button and provide a name, then simultaneously click Create and start the stopwatch.
3. Stop the stopwatch:
 - In Google Sites, stop the stopwatch when the new site appears and has fully loaded.
 - In SharePoint Online, stop the stopwatch when the new site's dashboard appears and has fully loaded.
4. Record the result.

Measuring the time to share site via email

1. Prepare another notebook (the same model as the one being used for testing) by navigating to the browser-based email client for the platform under test, Gmail™ or Outlook® Online.
2. On the notebook under test, prepare to share the site:
 - In Google Sites, click the Add Editors button, provide the email address being used on the other notebook, then simultaneously click Done and start the stopwatch.
 - In SharePoint Online, click the Share button, provide the email address being used on the other notebook, then simultaneously click Share and start the stopwatch.
3. When the invite email appears in the inbox on the other notebook, stop the stopwatch.
4. Record the result.

Measuring the time to create a new blank page

1. In Google Sites, navigate to the Pages tab, or in SharePoint, navigate to the Site Contents page, and click Site Pages.
2. Create a new blank page:
 - In Google Sites, click the Add Page button, provide a name for the page, then simultaneously click Done and start the stopwatch.
 - In SharePoint Online, click the New button, provide a name for the page, then simultaneously click Create and start the stopwatch.
3. Stop the stopwatch:
 - In Google Sites, when the new page has fully loaded and is editable, stop the stopwatch.
 - In SharePoint Online, when the new page appears in the editor and is editable, stop the stopwatch.
4. Record the result.

Measuring the time to open an existing page for editing

1. Open an existing page:
 - In Google Sites, navigate to the site under test, then simultaneously click the button for an existing page (that is not currently open in the editor) and start the stopwatch.
 - In SharePoint Online, navigate to an existing page, then simultaneously click the Edit button and start the stopwatch.
2. When the page appears in the editor and is fully loaded, stop the stopwatch.
3. Record the result.

Measuring the time to preview a site theme

1. In Google Sites, click the Themes tab, or in SharePoint, click the What's your style? button.
2. Simultaneously click a theme (other than the one you're currently using) and start the stopwatch.
3. Stop the stopwatch:
 - In Google Sites, when the new theme loads on the page in the editor, stop the stopwatch.
 - In SharePoint Online, when a preview of the new theme loads, stop the stopwatch.
4. Record the result.

Measuring the number of steps to add bulleted list and one item

Google Sites

1. In the Insert menu, click Text box.
2. Click the bulleted list icon.
3. Type item text.

SharePoint

1. Click add an app.
2. Click Custom List.
3. Type name.
4. Click Create.
5. Click New Item.
6. Enter a title.
7. Click Save.

Number of steps to add calendar

Google Sites

1. In the Insert menu, under Google Embeds, click Calendar.
2. Click a calendar in the list to select it.
3. Click Insert.

SharePoint

1. Click Add lists, libraries, and other apps.
2. Click Calendar.
3. Provide name.
4. Click Create.

Number of steps to add image to page from cloud

Google Sites

1. In the Insert menu, click Images.
2. Click the Google Drive tab.
3. Click an image to select it.
4. Click Select.

SharePoint

1. Click Edit.
2. Click Insert tab.
3. Click Picture.
4. Click From SharePoint.
5. Click existing image.
6. Click Insert.
7. Click Save.

Measuring the number of steps to add image to page from computer (upload)

Google Sites

1. In the Insert menu, click Images.
2. Drag an image file to the upload box from a local folder.
3. Click Upload.

SharePoint

1. Click Edit.
2. Click Insert tab.
3. Click Picture.
4. Click From Computer.
5. Click Choose File.
6. Select existing image.
7. Click Open.
8. Click OK.
9. Click Save.

Number of steps to resize inserted image

Google Sites

1. Click the image in the editor.
2. Click and drag one of the circles on the corners to resize it.

SharePoint

1. Click Edit.
2. Click the image you want to resize.
3. Click the Image tab.
4. Click in either the Horizontal Size or Vertical Size fields.
5. Type the desired width or height in pixels.
6. Press Enter.
7. Click Save.

Number of steps to move inserted image

Google Sites

1. In the editor, click and drag the previously embedded image to the desired location.

SharePoint

1. Click Edit.
2. Click the previously embedded image.
3. Click Image tab.
4. Click Position drop-down menu.
5. Click a position.
6. Click Save.

Number of steps to add text to page

Google Sites

1. In the Insert menu, click Text box.
2. Enter the text.

SharePoint

1. Click Edit.
2. Enter text.
3. Click Save.

Measuring the number of steps to embed YouTube video in page

Google Sites

1. In the Insert menu, under Google Embeds, click YouTube.
2. Enter a search query.
3. Press Enter.
4. Click the desired video.
5. Click Select.

SharePoint

1. Click Edit.
2. Click Insert tab.
3. Click Embed Code.
4. Navigate to <http://www.youtube.com> in another tab.
5. Enter search term or phrase.
6. Press Enter.
7. Click the desired video.
8. Click Share.
9. Click Embed.
10. Select Embed Code.
11. Copy embed code.
12. Return to the tab in which SharePoint is open.
13. Paste embed code in the Embed dialog in SharePoint.
14. Click Insert.
15. Click Save.

Number of steps to change site/page theme

Google Sites

1. Click the Themes tab.
2. Click a theme to apply it.

SharePoint

1. Click What's your style? Change the look of your site.
2. Click the desired theme.
3. Click Try it out.
4. To apply the theme, click Yes, keep it.

Number of steps to create new page

Google Sites

1. Click the Pages tab.
2. Click the Add page icon.
3. Type in the desired page name.
4. Click Done.

SharePoint

1. Click Site Contents.
2. Click Site Pages.
3. Click New.
4. Type in the desired page name.
5. Click Create.

This project was commissioned by Google.



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