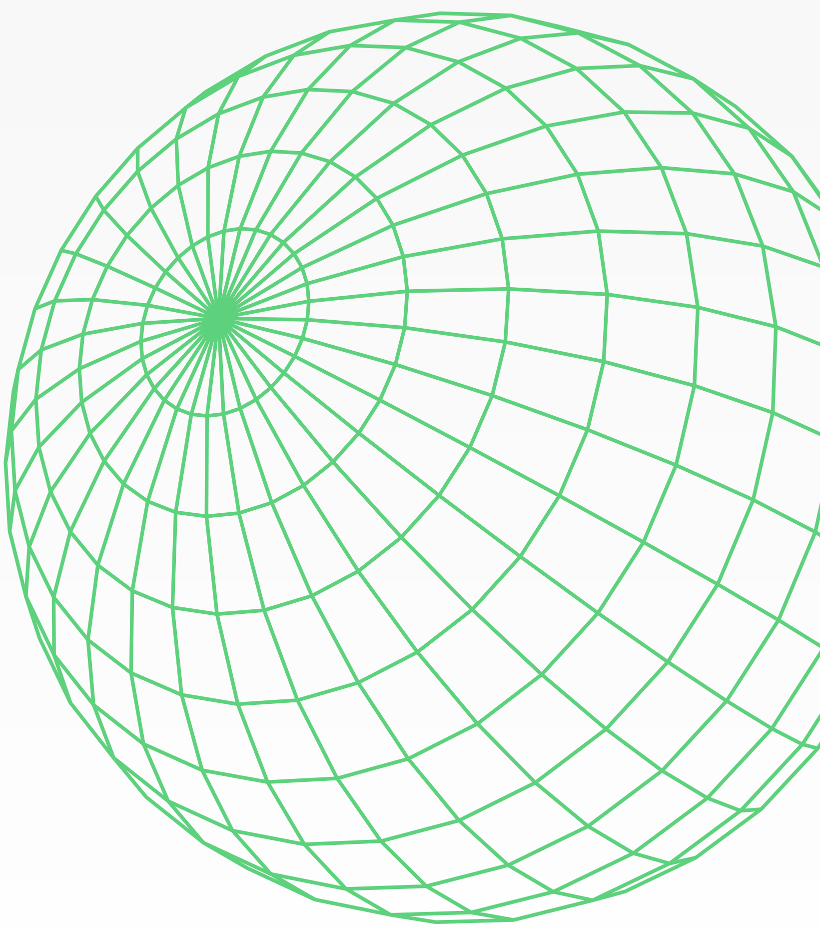
2024

HOW THE WORLD DOES DIGITAL

67,000 Consumers,
11 Countries, the Latest
on **Digital Behaviors
Around the Globe**

PYMNTS
INTELLIGENCE



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I.

INTRODUCTION AND METHODOLOGY

HOW THE WORLD DOES DIGITAL

This report is about how consumers around the world engaged in key activities supported by digital business in 2023. It shows where the digital economy stands from the perspective of consumers almost 30 years after the launch of the commercial internet and 15 years after the opening of the app stores for Apple and Android smartphones.

Last year was a milestone for another reason. The worst of the pandemic, which boosted digital activities, was over.[1] The world had largely returned to normal by the end of 2022, so for most of 2023, consumers could resume physical activities safely.

The report is based on 67,000 consumers in 11 countries who responded to surveys fielded each quarter in 2023. The countries include the United States; the United Kingdom; the five largest EU economies by gross domestic product (GDP) — France, Germany, Italy, the

[1] United Nations. WHO chief declares end to COVID-19 as a global health emergency. United Nations. 2023. https://news.un.org/en/story/2023/05/1136367. Accessed June 2024.

Netherlands and Spain; Australia, Japan and Singapore in the Pacific region; and Brazil in South America.[2] These are highly developed economies except Brazil, the largest economy in Latin America by both population and GDP. The surveys, which are based on a statistically representative sample of the population in these countries, reflect the digital behaviors of 817 million consumers.

At a high level, our surveys find that most consumers, across wide age ranges, engage in at least some digital activities and that digital activities permeate the lives of a sizable minority — particularly younger members of the population. Although some digital activities, such as video streaming, are widely used, many others are not yet.

In short, the digital economy has come a long way since the Netscape browser made web-based activities widely accessible in December 1994, but it has a very long journey before the digital activities of today are fully embedded in daily life. And, over time, innovators will introduce even more digital activities in which consumers can engage.

[2] All GDP figures in this report are adjusted for purchasing power parity (PPP).

This introduction describes our methodology and reports our main results at a high level. The remainder of the report provides more granular detail.

In Section II, we summarize the digital infrastructure, such as the penetration of the 4G networks necessary for supporting digital activities as of 2023. Then we turn to the engagement in digital activities across all 11 countries in Section III. To do this, we focus on 11 pillars, such as banking, which includes online and mobile banking, and mobility, which includes how individuals move from point A to point B. We report the results for these pillars in addition to the underlying activities and the variation across generations and income levels.

Section IV reports the results across countries. It shows how countries differ across each of the pillars, generations and income levels. Over the coming months, we will follow this report with deeper dives into the 2023 data, examine changes over time, and preview the results of our new quarterly surveys.

Survey Methodology

We selected 11 countries for the survey. Figure 1 reports their global rank in terms of population and GDP in 2022, percent of the sample by generation and income and the total sample sizes for the study.[3] Nine of the countries are large, mature, developed economies with relatively high levels of internet and mobile network penetration to support the adoption of digital activities. We also included Brazil, a developing country that has been innovative in spawning digital businesses and popularizing digital payments, and Singapore, a small country that has been a leader in embracing the digital economy. These 11 countries accounted for 48% of global GDP in 2022.

Using online panels provided by a third party, we selected samples that represented the population of each country based on gender, age, income and education. We targeted at least 2,000 consumers in the U.S. and at least 1,000 consumers in each of the other 10 countries.[4] We sometimes overshot or undershot the totals for some subgroups, but overall came close to these targets. The results we report use population weights for the final sample so we have a statistically valid representation of the country's population. We conducted the surveys each quarter, resulting in roughly 12,000 respondents for the U.S. and between 4,000 and 8,000 responses for each of the other countries. These are large sample sizes and enable us to obtain estimates with relatively small margins of error for narrow categories of activities and demographics. For 2023, we have completed responses from 67,024 consumers, representing a total population of 817 million.

To understand the adoption of digital activities, we started with 11 pillars that correspond to significant aspects of consumers' lives, such as banking or shopping.[5] For each pillar, we identified digital activities in which consumers engage for

[3] Income categories are based on each country's official census data. Survey respondents reported their income category in ranges. We then made an approximate assignment to an income category for their country.

[4] We excluded incomplete responses and ones that showed evidence that the responses were not reliable or were generated by a bot. This resulted in the sample sizes reported in Figure 1 that we use for this report.

[5] We originally defined nine pillars but have broken out online grocery and online restaurant ordering for the "eat" pillar and daily mobility from more sporadic air travel for the "move" pillar.

FIGURE 1:

Demographic and GDP characteristics

Key statistics, by country

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

	United States	Japan	Germany	Brazil	United Kingdom	France	Italy	Spain	Australia	Nether-lands	Singapore	ALL COUNTRIES
GDP WORLD RANK (2022)[6]	2	4	5	8	9	10	12	15	21	28	38	
GDP PER CAPITA WORLD RANK	14	47	25	111	38	39	44	51	30	18	5	
AVERAGE SAMPLE AGE	47.8	51.7	50.1	42.0	46.7	49.3	50.0	47.9	46.4	48.5	47.1	47.5
GENERATION												
• Generation Z	12.2%	11.5%	13.4%	19.9%	14.1%	11.4%	12.4%	13.0%	15.8%	21.5%	17.4%	14.2%
• Millennials	27.7%	25.3%	25.7%	39.1%	32.9%	25.5%	23.9%	30.1%	34.8%	30.1%	42.0%	29.9%
• Generation X	24.7%	30.2%	31.7%	26.9%	25.8%	31.9%	30.6%	33.9%	23.0%	24.7%	30.1%	28.4%
• Baby boomers	30.8%	30.8%	27.7%	13.9%	24.9%	30.2%	32.2%	22.3%	23.1%	21.8%	10.3%	25.6%
• Seniors	4.5%	2.3%	1.5%	0.2%	2.3%	1.0%	1.0%	0.8%	3.4%	1.9%	0.2%	2.0%
INCOME												
• High	25.8%	16.5%	16.5%	13.3%	34.9%	44.6%	39.2%	22.5%	25.8%	23.4%	16.6%	25.8%
• Middle	32.6%	27.7%	48.0%	45.4%	42.8%	30.6%	33.8%	50.8%	31.2%	50.0%	35.8%	37.8%
• Low	41.6%	55.7%	35.5%	41.2%	22.3%	24.9%	27.0%	26.8%	43.0%	26.6%	47.6%	36.3%
WHOLE SAMPLE	**12,581**	**6,679**	**5,460**	**6,102**	**4,546**	**8,003**	**5,056**	**5,873**	**4,562**	**3,972**	**4,190**	**67,024**

[6] Central Intelligence Agency. Country Comparisons — Real GDP per capita. The World Factbook. 2022. https://www.cia.gov/the-world-factbook/field/real-gdp-per-capita/country-comparison. Accessed June 2024.

that part of their lives. We initially identified 70 activities. We asked respondents to tell us whether they engaged in these activities daily; not daily, but at least weekly; not weekly, but at least monthly; or not at all. After reviewing the data, we narrowed the list of activities down to 40 core activities that were relatively common in all countries. Table A in the Appendix lists the pillars and the associated activities.[7]

The basic response to how frequently a consumer uses an activity provides detailed information on the extent to which consumers in the country engage in that activity. These responses are highly informative for each activity. We report them overall for every pillar and each country.

These activity-level responses do not, however, provide a universal metric to summarize the data across activities, pillars or across countries. Consider an individual who engages in just three activities during the month: activity one is performed daily; activity two is performed weekly, but not daily; and activity three is performed monthly, but not weekly. It is not possible to calculate how much overall the consumer engaged in digital activities because the categorical responses are not additive. The same issue arises in trying to compare digital use across pillars or countries.

To solve this problem, we estimated the average number of days that consumers engaged in an activity over a month. To do so, we use the actual number of days for daily (roughly 30) and not at all (zero). We estimate the number of days for the other two categories by interpolating for weekly, but not daily, and monthly, but not weekly; these estimates are reasonably accurate when averaged across large groups of consumers.[8] Using this method, for example, we estimate

[7] Including all the activities would not materially change the results of this report.

[8] Assume there are 30 days in a month (the actual is 30.4). Consider a consumer who says they did not engage in an activity daily but did so weekly. The consumer must engage in the activity at least once every four weeks or four times. The consumer must miss at least one day a month (otherwise it would be daily) so the maximum number of days they engage in the activity is 29. Therefore, the consumer engages in the activity at least four times and up to an additional 25 days (29 minus 4) a month. Taking the midpoint of 25 gives us 12.5, so the estimated total number of days is 16.5. Now, consider monthly but not weekly. The minimum is one day. The maximum is based on the consumer missing at least a week, which leaves 23 days (30 minus 7). Therefore, the consumer engages in the activity at least one time and up to an additional 22 days (23 minus 1). Taking the midpoint of 22 gives us 11.5, so the estimated total number of days is 12. Using the midpoint is biased to the extent that the distribution is skewed and not symmetric. We suspect that the distribution is skewed with a relatively larger portion at the low end. As an approximate adjustment for this, we use 40% of the midpoint, giving us 14 days for weekly, but not daily, and 9.8 days for monthly, but not weekly. This method is reasonably reliable as long as there are not substantial differences in the degree of skewness in the weekly and monthly responses for activities.

that consumers across all countries used video streaming, on average, 15.2 days a month.

We define an “activity day” as one in which a consumer engaged in that activity in a given month; they may have engaged in other activities that day as well. To summarize overall digital activity, we add up the estimated number of activity days. Consider an individual who only used video steaming (10 days), messaging (15 days) and telemedicine (3 days). They had a total of 28 activity days — that is 28 days in which they engaged in one of those activities. We then use the same approach to summarize the total activity within a pillar or for a country. Then, we can compare the total number of activity days across pillars, countries or whatever other combination we want to consider.

We can also use the total monthly activity day measure to calculate the average number of activities per day. That is simply total activity days divided by 30. In the example, the individual engaged in an average of 0.6 (18/30) activities per day, considering all activities. Average total activity days per month and average activities are equivalent ways of summarizing the data, as the total number of activity days is always 30 times the total number of activities per day. We find it more convenient to compare total activity days that involve the comparison of whole numbers rather than the average per day, where the differences are often after the decimal point.

The maximum number of activity days is 1,200 — the number for a consumer who engaged in each of the 40 activities for all 30 days in a month (40 per day). It is implausible that many consumers would ever to do that. Most consumers do not need to make a telehealth visit daily, for example. The maximum, however, does provide a useful benchmark for assessing “how digital” consumers are. In fact, the scale from 0 to 1,200 activity days provides the basis for an index of how “digitally engaged” consumers in a country were in 2023.

In reporting generation-specific results, we focus on consumers between the ages of 18 and 77. We chose to exclude seniors over the age of 77 because including seniors with baby boomers would distort the results for the latter, and the sample sizes of consumers older than 77 were often too small to be reliable. When assessing population averages without considering the role of generation, seniors are included in the total population to provide the most representative insights. The results across countries are weighted by population.

A. **Overview of results**

- **Almost everyone does some digital activities, but there is a long way to go before digital permeates our lives.**

Not surprisingly, almost 100% of consumers — 97.3% to be exact — engaged in at least one digital activity during a month. A large portion, however, did not engage in many activities at all. We find that 1.5% of consumers performed at least one digital activity daily, 7.8% weekly, and 97.3% monthly. The average consumer did 16.2 activities a month. Figure 2 shows the distribution of five groups of 20% each by how many digital activities in which they engage. Twenty percent of consumers performed more than 29 activities at least monthly, while 20% performed six or fewer. Notably, 60% use 17 features or less, demonstrating that the bulk of the population does not participate in a large range of digital activities.

FIGURE 2:

Number of activities done at least monthly, distribution by quintiles

QUINTILE	1	2	3	4	5
Range of activities done at least monthly, by 20% of the population	0-6	7-11	12-17	18-29	30-40

FIGURE 3:

Total activity days, distribution by quintiles

QUINTILE	1	2	3	4	5
Total range of activity days per 20% of the population	0-94	95-186	187-256	257-443	444-1183

The average consumer engaged in a digital activity 281 days during the month — an average of 9.4 activities a day. If we think of the digital journey as going from zero activity days a month to the maximum 1,200 a month, the world has made substantial progress. It has a long way to go, however: The average number of activity days was just 23.4% of the maximum.

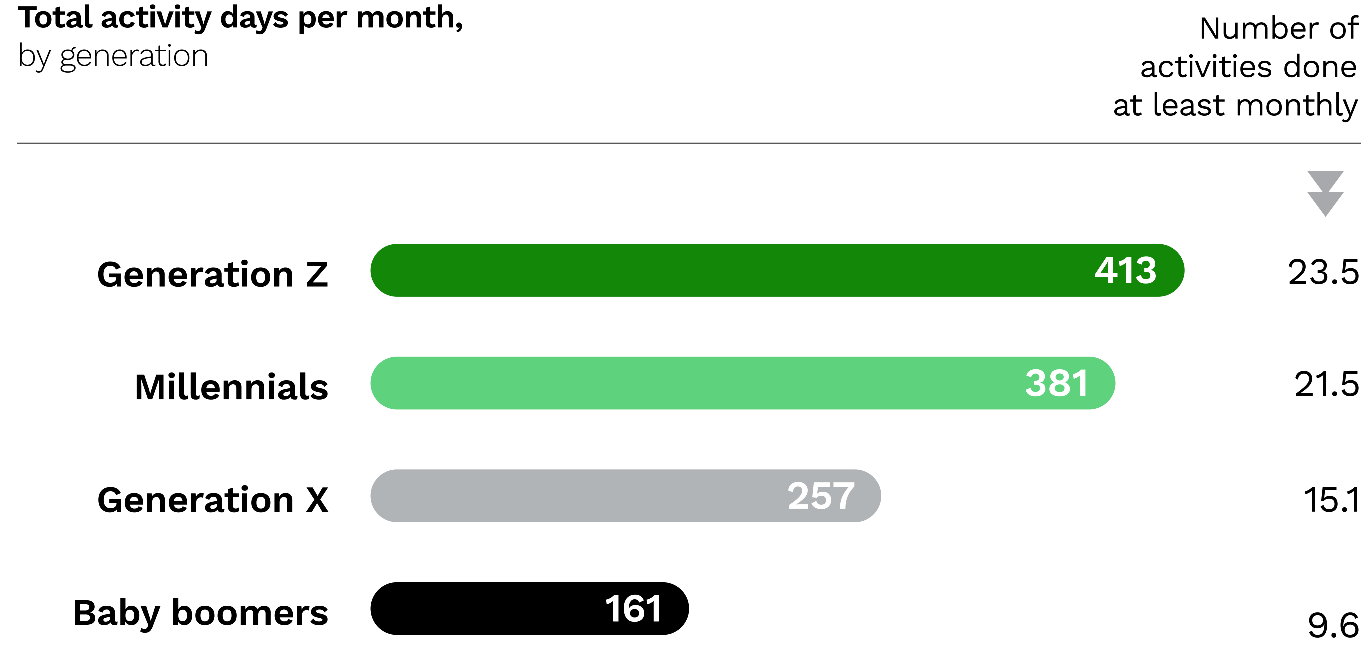
There was a great deal of variation in the activity days across individuals. Figure 3 shows the distribution by quintile.[9] Twenty percent had 94 or fewer activity days during the month, while 80 percent had fewer than 443. The top 20 percent of digital participants had a far larger range of activity days, spanning 443 to 1,183.

Consumers across all age ranges do many digital activities often, but younger consumers are more intensely engaged in them. Figure 4 reports activity days by generation. Gen Z had 2.6 times more activity days than baby boomers, reflecting the fact that they engaged in more activities on more days during the month. Figure 4 also reports the number of activities that each generation engaged in at least monthly. Baby boomers only engaged in an average of 9.6, while Gen Z engaged in an average of 23.5.

[9] The quintiles are approximately 20% each, but vary slightly to give us round numbers for the activity ranges.

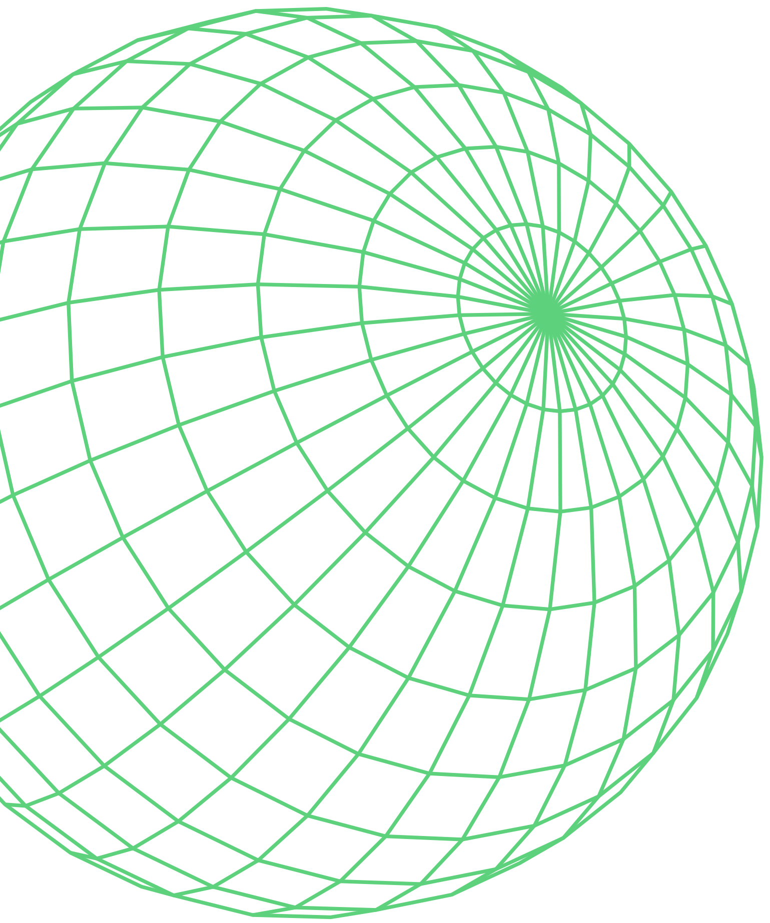
FIGURE 4:

Total activity days per month, by generation



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 65,694: Complete responses excluding seniors, results come from four different surveys fielded each quarter of 2023

The two figures show the sharp generational divide that will appear throughout this report across pillars and countries. Baby boomers and Gen X are much less digitally engaged than millennials and Gen Z. Consumers who came of age during the internet and mobile app eras are much more engaged than those who did not.



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A few activities account for much digital activity.

Consumers engaged in video streaming a lot — bike and scooter apps not so much.

Figure 5 reports the percent of consumers who engaged in an activity at least weekly from most to least frequent. By this measure, the top five activities were video streaming, social media checking (passive usage), messaging, mobile gaming and music streaming. The five least used activities were using an app to rent a bike/scooter, using homesharing websites, purchasing online airfare, virtual therapy and online dating.

The number of days consumers engaged in an activity during a month shows a similar picture, as displayed in Figure 5. The top activity is video streaming, which accounts for 15.2 days per month, and the least used activity is using an app to rent a bike/scooter, which only accounts for 2.8 days per month. The top five activities account for 23.7% of total activity days.

FIGURE 5A:

Digital engagement

Share of consumers who engaged in digital activities at least weekly

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

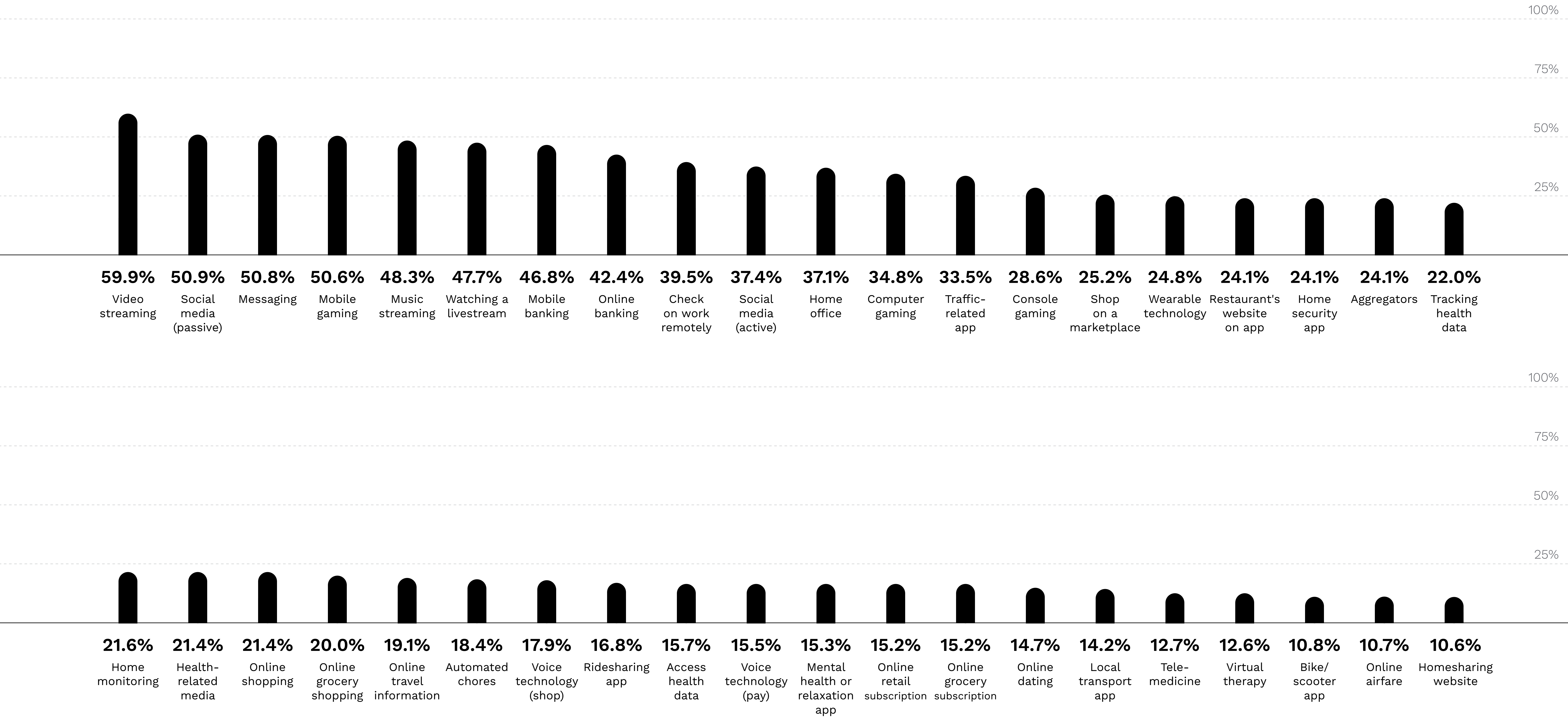
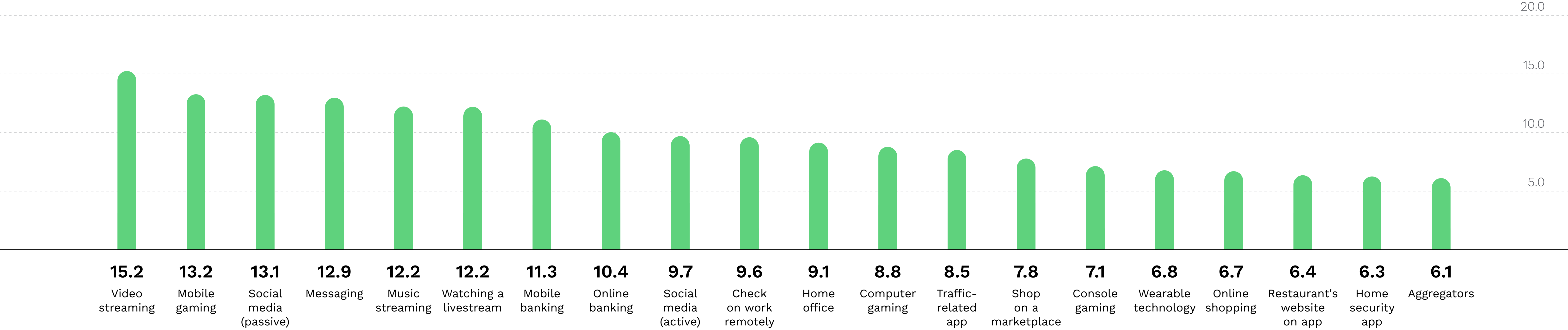


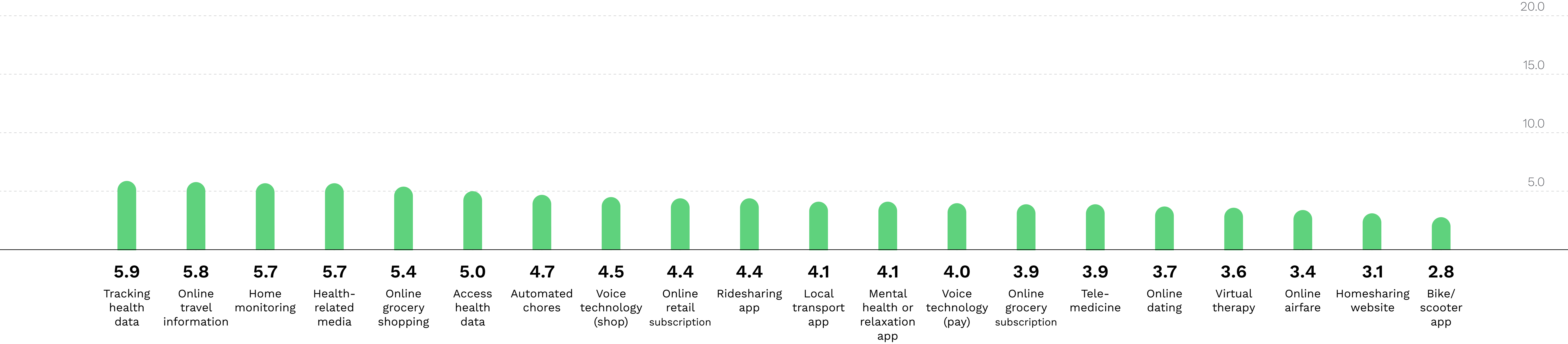
FIGURE 5B:

Digital engagement

Share of consumers who engaged in digital activities, total average activity days per month

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023





Consumers are the most digitally engaged in three pillars.

Three pillars account for much of digital engagement:

Have fun

Streaming and digital gaming

Communicate

Messaging and social media

Be well

Health related apps

These account for 51% of the total average activity days. Figure 6 shows the results by pillar. Consumers perform digital activities in the have fun pillar about 5.5 times more than they do in the eat pillar's restaurants subindex based on the number of days during the month they performed those activities.

FIGURE 6:

Digital activity

Total average activity days per month in each pillar

BANK	21.7
BE WELL	34.9
COMMUNICATE	39.4
EAT (GROCERIES)	9.3
EAT (RESTAURANTS)	12.5
HAVE FUN	68.7
LIVE	25.2
MOBILITY	19.8
TRAVEL	12.3
SHOP	18.9
WORK	18.7

Source: PYMNTS Intelligence

How The World Does Digital, June 2024

N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

And across countries, the winner is ... Brazil.

Figure 7 reports the average number of activity days for each country and the percent of the maximum possible. It also reports activities per day for convenience. Brazil has 361 activity days (12 per day), putting it at 30.1% of the maximum. Japan is at the bottom with a score of 127 activity days (4.2 per day), putting it at only 10.6% of the maximum. Brazil has nearly three times the engagement in digital activities as Japan by this measure.

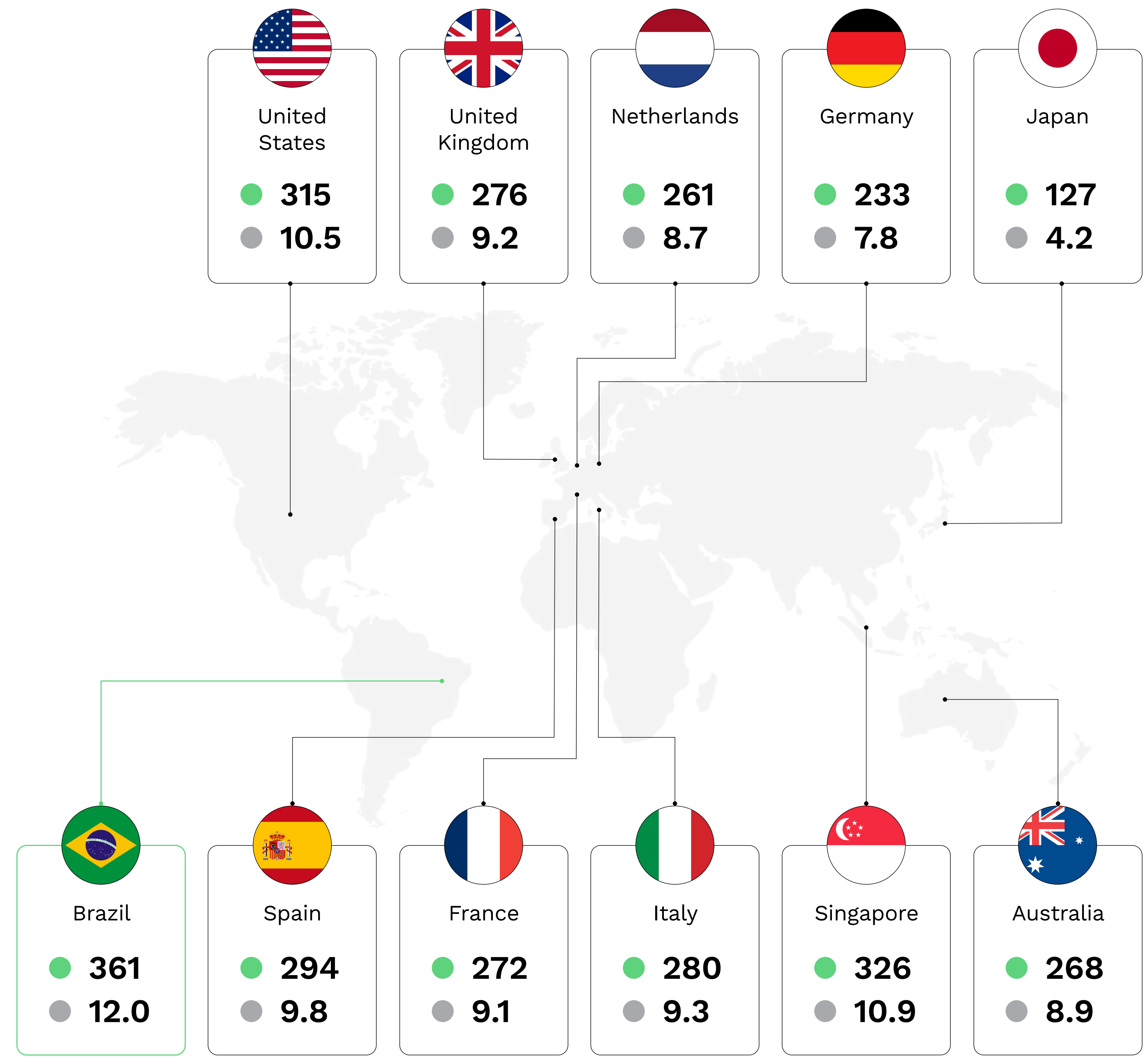
The United Kingdom was the median of the 11 countries with 276 activity days.[10] The United States, ranked third overall, is 14.1% above the median. Germany, which is ranked tenth, is 15.6% below the median.

While readers like rankings, we should be clear that, in some cases, the countries are in a statistical tie given the margins of error. The margins of error are tight enough, however, to conclude that countries are statistically different than countries a few ranks above or below.

[10] It is useful to compare the other countries relative to this median, which we report in Table C in the Appendix.

FIGURE 7:

Total average activity days per month,
by country



Total activity days
Average activities per day

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

II.

THE SPEED OF THE DIGITAL TRANSFORMATION DEPENDS ON THE SPREAD OF DIGITAL INFRASTRUCTURE WITHIN COUNTRIES

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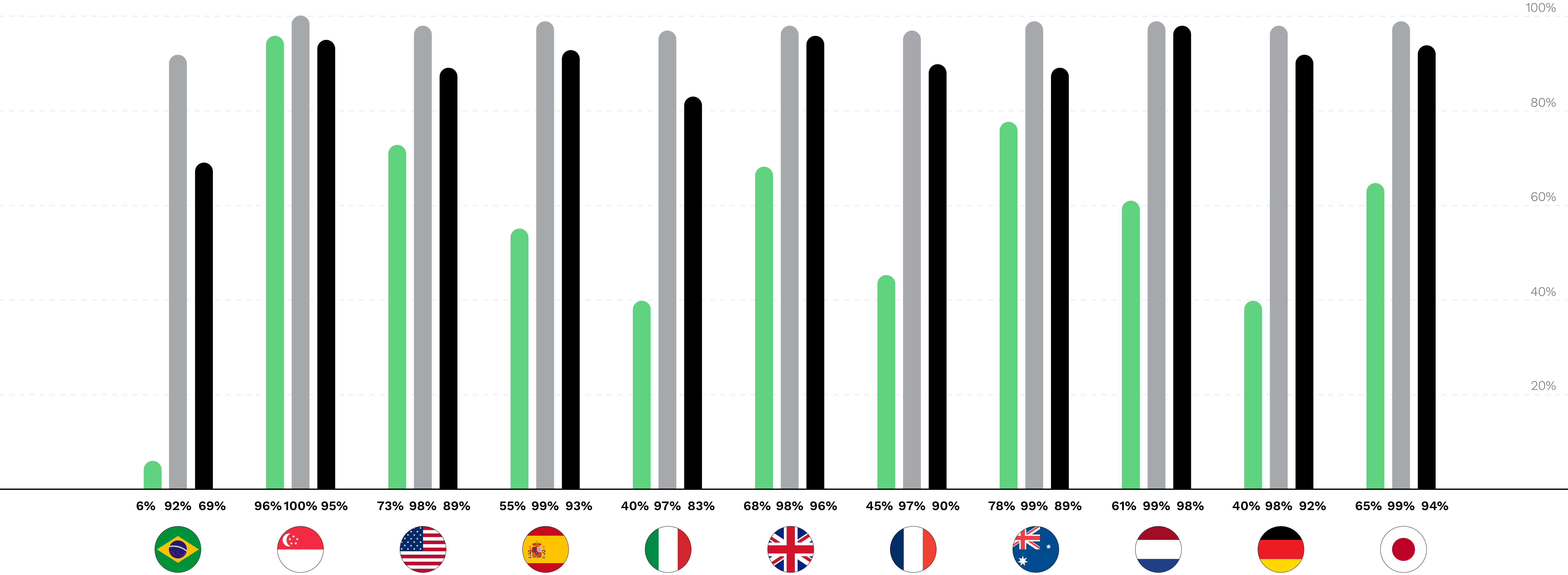
A. Wire, towers and devices

Consumers can engage in digital activities because the world has been enveloped by a fabric of internet cable, stretching across land and oceans, and mobile networks which dot the landscape with cellular towers. Embedded within this digital fabric are connected devices — principally smartphones and consumer computers — that usually connect wirelessly to a fixed or mobile broadband network.

The quality of this digital fabric, and therefore the ability of consumers to engage in digital activities, varies across countries around the world. The 11 countries we've considered are ones that have well-developed digital infrastructure, although there are some differences. Figure 8A reports the percent of households with connections to fixed broadband and the average speed of broadband.

FIGURE 8A:

Household connectivity access,
by country



- 5G population coverage (2022)
- 4G population coverage (2022)
- Broadband access (2022)

GMSA. GSMA Mobile Connectivity Index. GSMA. 2022. https://www.mobileconnectivityindex.com/index.html. Accessed June 2024.
International Telecommunication Union. Households with broadband access at home. ITU DataHub. 2022. https://datahub.itu.int/data/. Accessed June 2024.

FIGURE 8B:

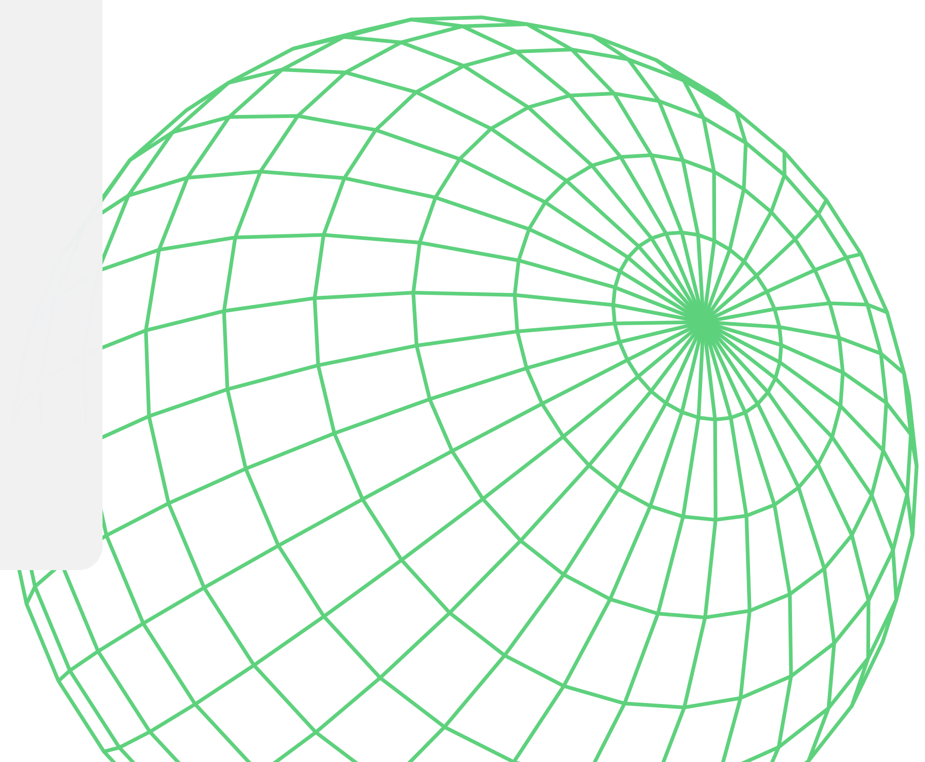
Average speed of fixed broadband (Mbps), by country

BRAZIL	161.7
SINGAPORE	284.1
UNITED STATES	249.9
SPAIN	218.8
ITALY	81.9
UNITED KINGDOM	106.5
FRANCE	243.5
AUSTRALIA	63.4
NETHERLANDS	191.0
GERMANY	91.4
JAPAN	197.0

Speedtest Intelligence. Speedtest Global Index. Speedtest. 2024. https://speedtest.net/global-index. Accessed June 2024.

The speed and data capacity of mobile networks vary by multiples across cellular generations (2G, 3G, 4G and 5G). All 11 countries considered had 4G networks available for most of the population in 2023, and many had made substantial progress in providing 5G networks. Figure 8A also reports the percent of the population with access to 4G and 5G networks. Figure 8B adds the context of how fast the broadband is within each country.

In the countries we've considered, most households have a consumer computer and most consumers have a smartphone, which the figure also reports.



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B. **Cards and other digital payments**

Much, although not all, digital activity involves consumers making payments at some point. This is inconvenient when consumers mainly want to or must use cash and checks. To get web activity off the ground, some countries around the world with limited card penetration developed ways for consumers to pay with cash — upon delivery for example, or to pre-pay with cash or checks. Making payments on the web was much easier in countries that had payment card networks with wide adoption of cards. Even though the cards were physical, the networks mainly involved using digital credentials on those cards.

All the countries we've considered, however, have had domestic payment card systems for a long time. Nevertheless, the use of digital payment methods varies across countries, as shown in Figure 9. Germans, for example, paid with cash or check for 37% of their most recent in-store purchases, compared to 17% of consumers in the U.S. The next highest use of cash or check for in-person purchases after Germany were seen in Italy, at 29% and Japan, at 26%.

This variation may influence the extent to which consumers are willing to engage in digital activities. Alternatively, it may be that consumers who tend to use non-digital payment methods such as cash are also less likely to want to engage in digital activities.

It is possible that consumers who use cash a lot just like modern technologies less, or that they can't engage in digital activities as much because digital payments are not well developed. In some countries, such as Italy, paying with cash in-person is a way to avoid taxes.

FIGURE 9A:

How consumers pay

Payment method used in last online purchase, by country

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

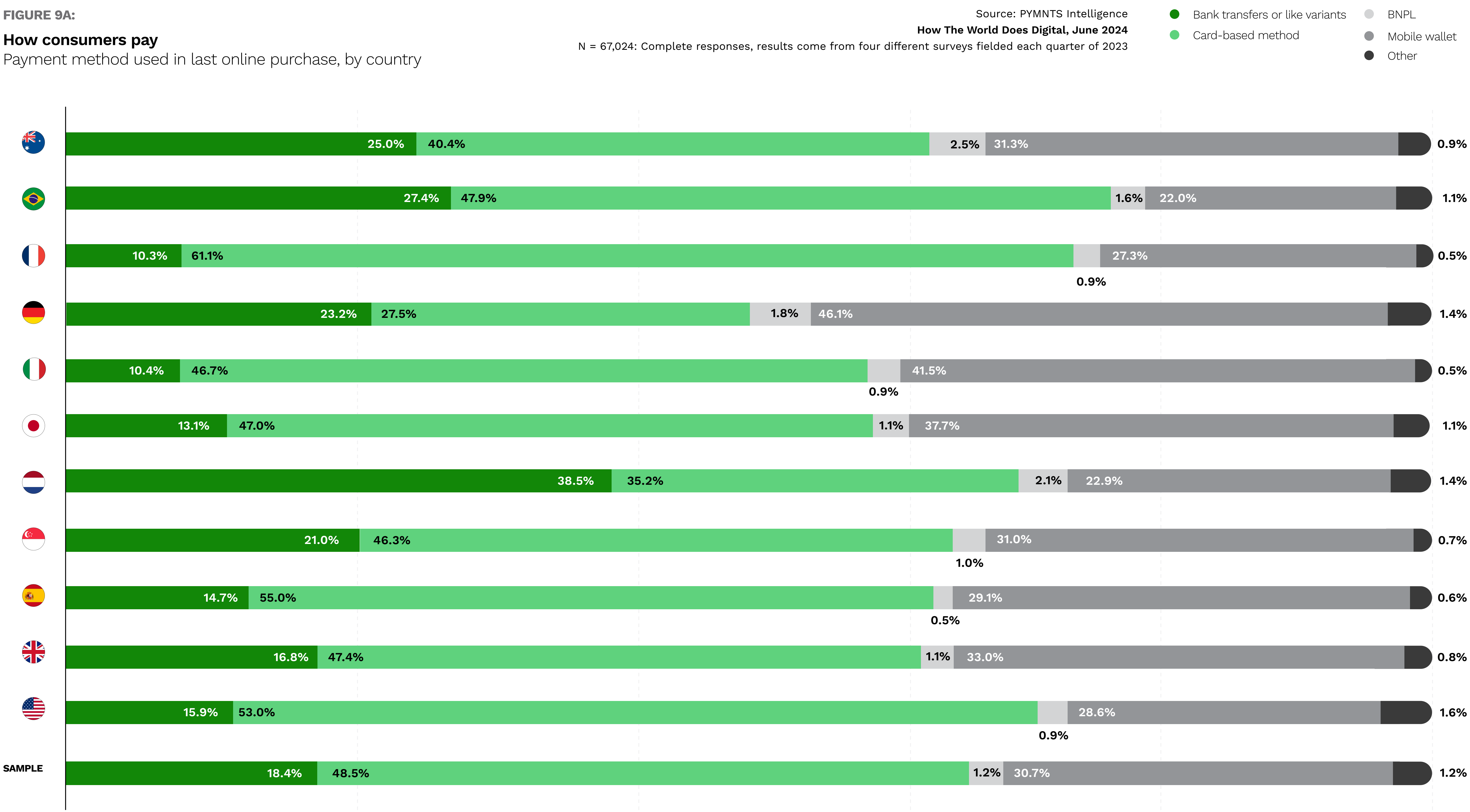
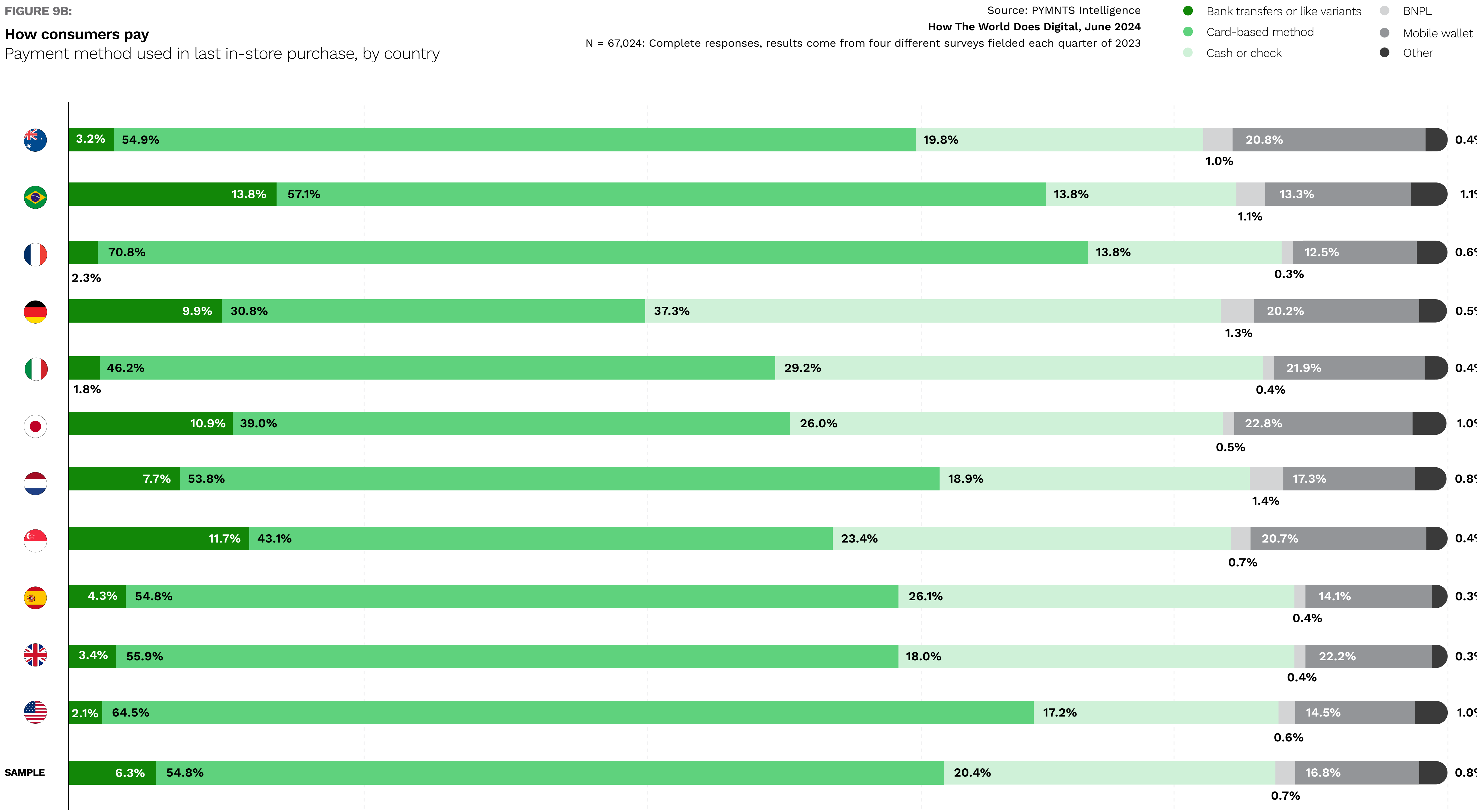


FIGURE 9B:

How consumers pay

Payment method used in last in-store purchase, by country

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023



III.

ENGAGEMENT IN PILLARS VARIES GREATLY ACROSS PILLARS, GENERATIONS AND INCOME LEVELS

HOW THE WORLD DOES DIGITAL

The 11 pillars cover most major aspects of consumers' lives and the areas where businesses could provide solutions, based on digital internet-connected technologies, to make those lives better. For each of these pillars, we identified core activities that consumers had available and used to some degree in most countries.[11]

Figure 10 reports total activity days for each pillar, ranked from the highest to lowest by total number of activity days, and the result for each generation and income category. It shows the relative engagement in these pillars repeating what we saw in the introduction. The have fun pillar — streaming and gaming entertainment — has the highest degree of digital engagement, and the eat pillar's grocery subindex, which refers to online ordering of groceries, is the lowest over the course of the month.

This figure also reports the results by generation and income category for each pillar. Every pillar has the same sharp generational divide — between Gen Z and millennials on one hand and baby boomers and Gen X on the

[11] Please refer to Table A in the Appendix for more details.

other. In most cases, there is a sharp decline in activity days across income groups.

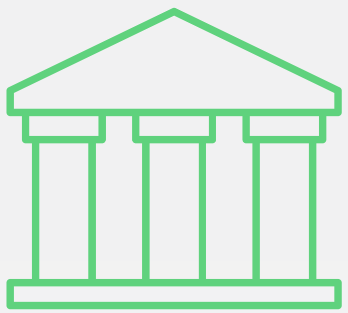
For each of the pillars discussed, we describe the results for each of the activities in the pillar based on frequency of daily, weekly or monthly use and the total number of activities. We present a table with these results for each pillar. We also compare total activity days for the pillar by generation and income. In some cases, we report other detailed activity measures from the data that do not appear in the tables.

FIGURE 10:

Total activity days per month,
by pillar and demographic

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

	HAVE FUN	COMMUNICATE	BE WELL	LIVE	BANK	MOBILITY	SHOP	WORK	EAT (RESTAURANTS)	TRAVEL	EAT (GROCERIES)
ALL GENERATIONS	**68.7**	**39.4**	**34.9**	**25.2**	**21.7**	**19.8**	**18.9**	**18.7**	**12.5**	**12.3**	**9.3**
• **Generation Z**	93.8	53.8	57.8	41.5	25.2	33.9	27.9	22.5	20.1	21.4	15.2
• **Millennials**	89.2	50.4	51.1	37.1	26.7	28.7	25.5	21.5	18.5	18.1	14.0
• **Generation X**	67.9	37.6	29.5	21.5	21.5	16.8	17.0	16.5	11.1	10.2	7.9
• **Baby boomers**	42.2	25.9	15.9	11.2	16.3	9.0	11.0	14.0	5.4	5.5	4.2
INCOME											
• **High**	74.3	41.8	41.9	32.6	23.8	23.8	22.1	21.6	14.4	15.7	11.0
• **Middle**	71.0	40.5	34.6	24.9	23.1	20.6	18.8	17.9	13.1	12.4	9.4
• **Low**	61.0	35.9	28.9	18.8	18.2	15.4	15.8	15.7	10.2	9.3	7.8



A. **Bank**

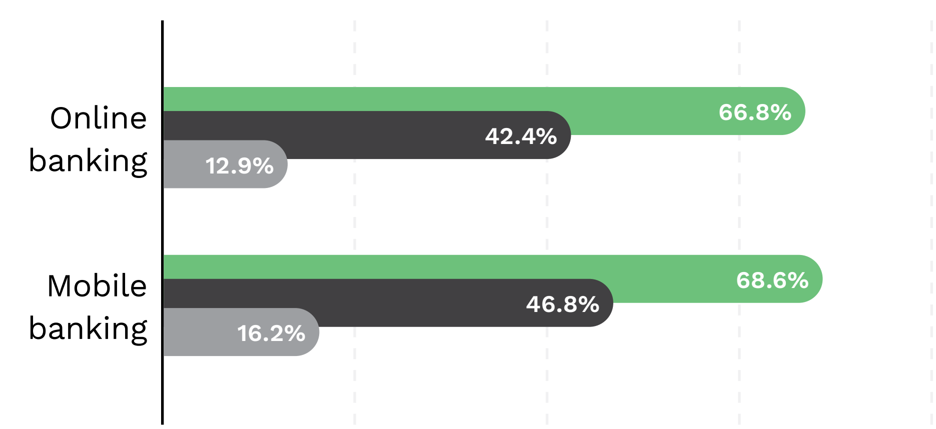
Digital banking activities were the sixth-most frequently used activity based on total activity days.

In 2023, about two-thirds of consumers used an app on their phone for banking (mobile banking: 68.6%) or from their desktop with a browser (online banking: 66.6%) at least monthly, as shown in Figure 11. Almost 47% used mobile banking at least weekly, and 42% used online banking at least weekly. On average, consumers engaged in digital banking activities 21.7 days a month.

FIGURE 11:

Bank pillar

Share of consumers engaging in digital activities



AVERAGE ACTIVITY DAYS PER MONTH
10.4
11.3

- Daily
- At least weekly
- At least monthly

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

The use of mobile and online banking varies significantly across generations and income levels, as shown in Figure 12. Millennials did these activities 26.7 days a month (closely followed by Gen Z), compared to baby boomers, at 16.3 days.

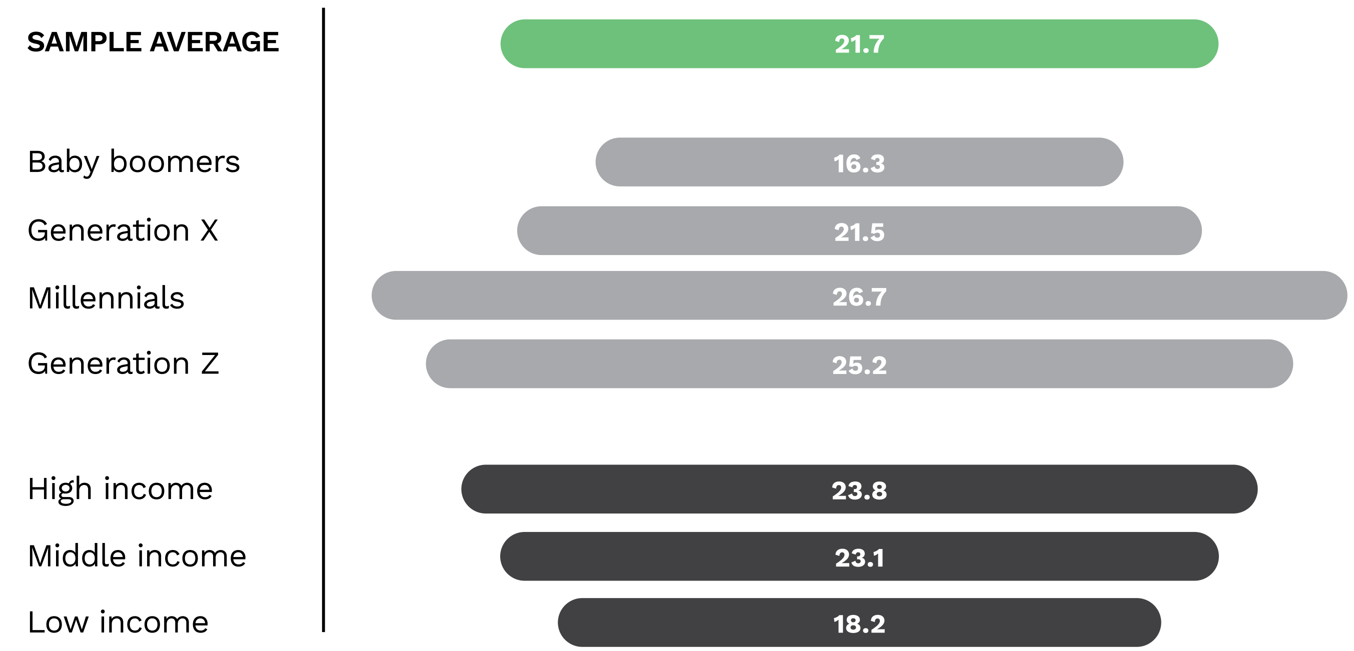
At 18.2 days, low-income earners used digital banking materially less than high-income earners (23.8 days) and middle-income earners (23.1 days). More than half (52.4%) of high-income earners used mobile banking at least weekly, compared to about one-third (37.4%) of low-income earners.

Only 20% of consumers did not use either mobile or online banking at least once a month.

FIGURE 12:

Bank pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

B. **Be well**

Be well was the third-most popular pillar.

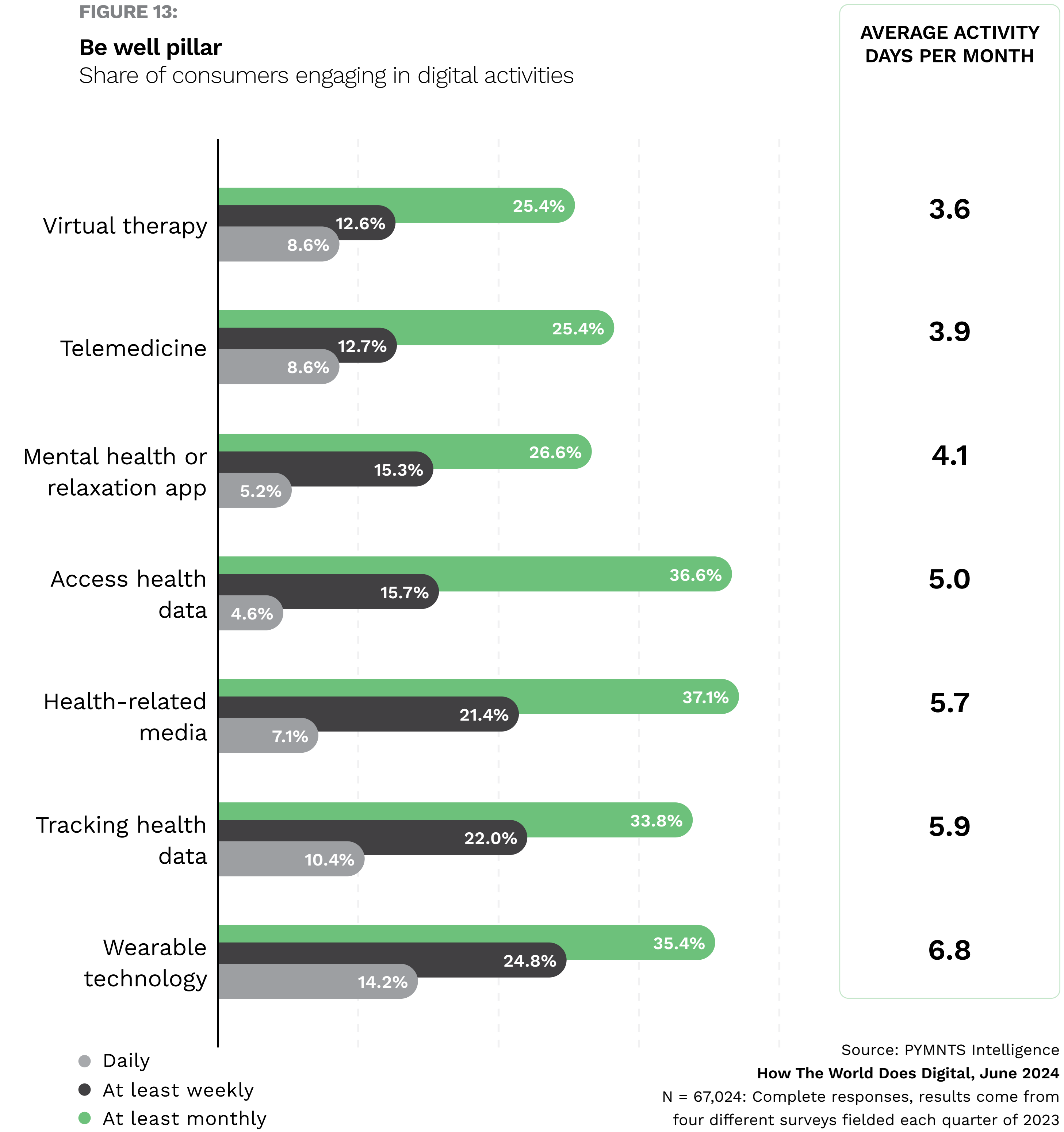
We identified six core activities in this health pillar. On average, as shown in Figure 13, consumers did one of the be well activities for 34.9 days during the month.

It turns out that most consumers did not engage in each individual activity at all during a month. The percent who did not engage in an individual activity ranged from 62.9% for health-related media to 74.6% for virtual therapy. But 61.7% of consumers did at least one of these activities at least once a month, which is why the number of activity days is high.

FIGURE 13:

Be well pillar

Share of consumers engaging in digital activities



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

Engagement in be well digital activities varies dramatically across generations, as shown in Figure 14. Gen Z engaged in be well digital activities on 57.8 days during the month. That compares to only 15.9 days for baby boomers, who are presumably less healthy. Gen X had 29.5 activity days and millennials had 51.1. Reflecting this generational divide, more than one-third (34.9%) of Gen Z consumers consult health-related media at least weekly, compared to only 8.6% of baby boomers.

The consumption of be well activities is strongly related to income, as shown in Figure 14. High-income earners had 41.9 be well activity days a month, versus 34.6 for middle-income earners and 28.9 for low-income earners.

About 40% (38.3%) of consumers did not perform any be well activities at least once a month.

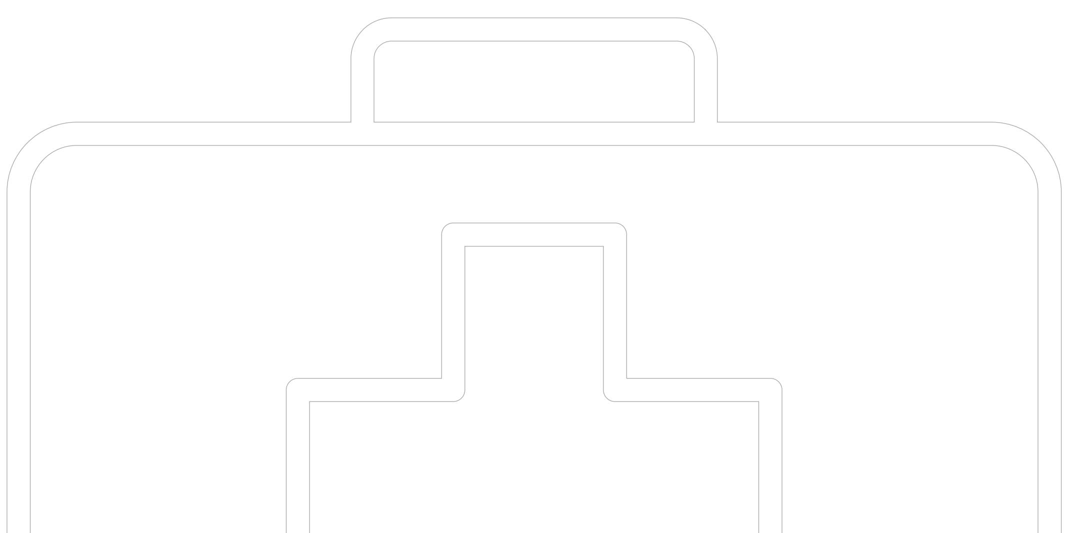
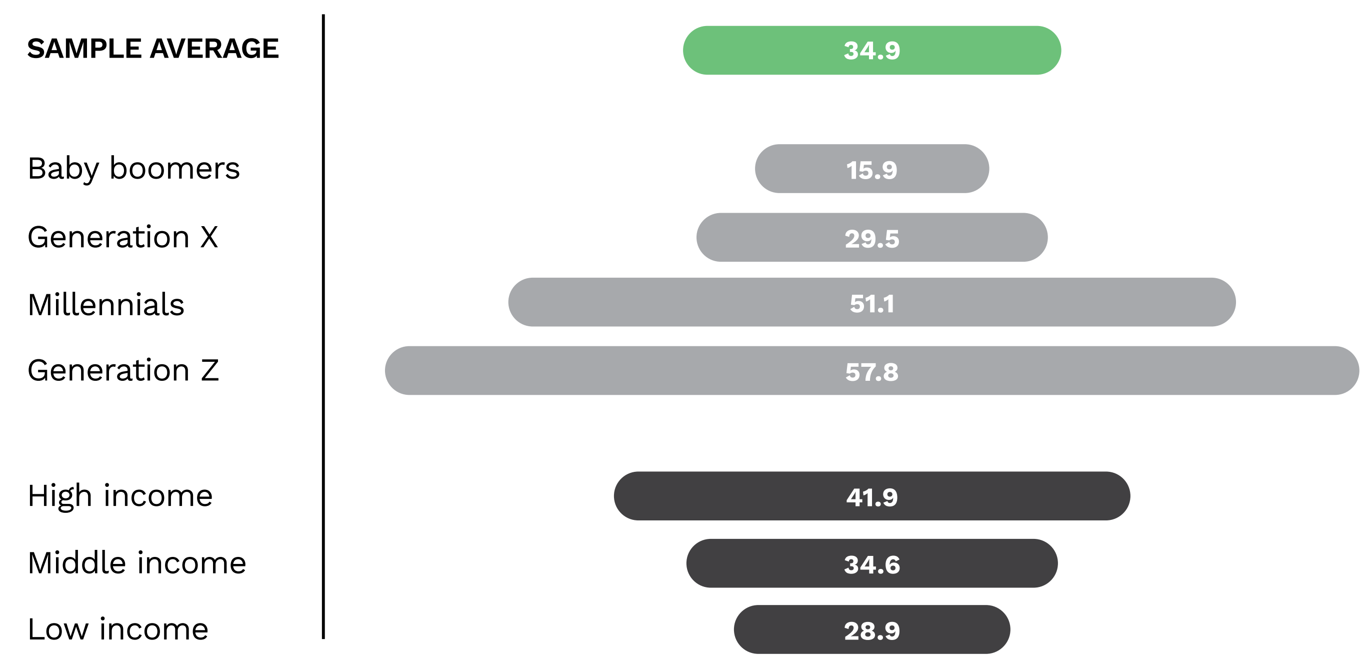


FIGURE 14:

Be well pillar

Total activity days per month, by demographic



● Sample
● Generation
● Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

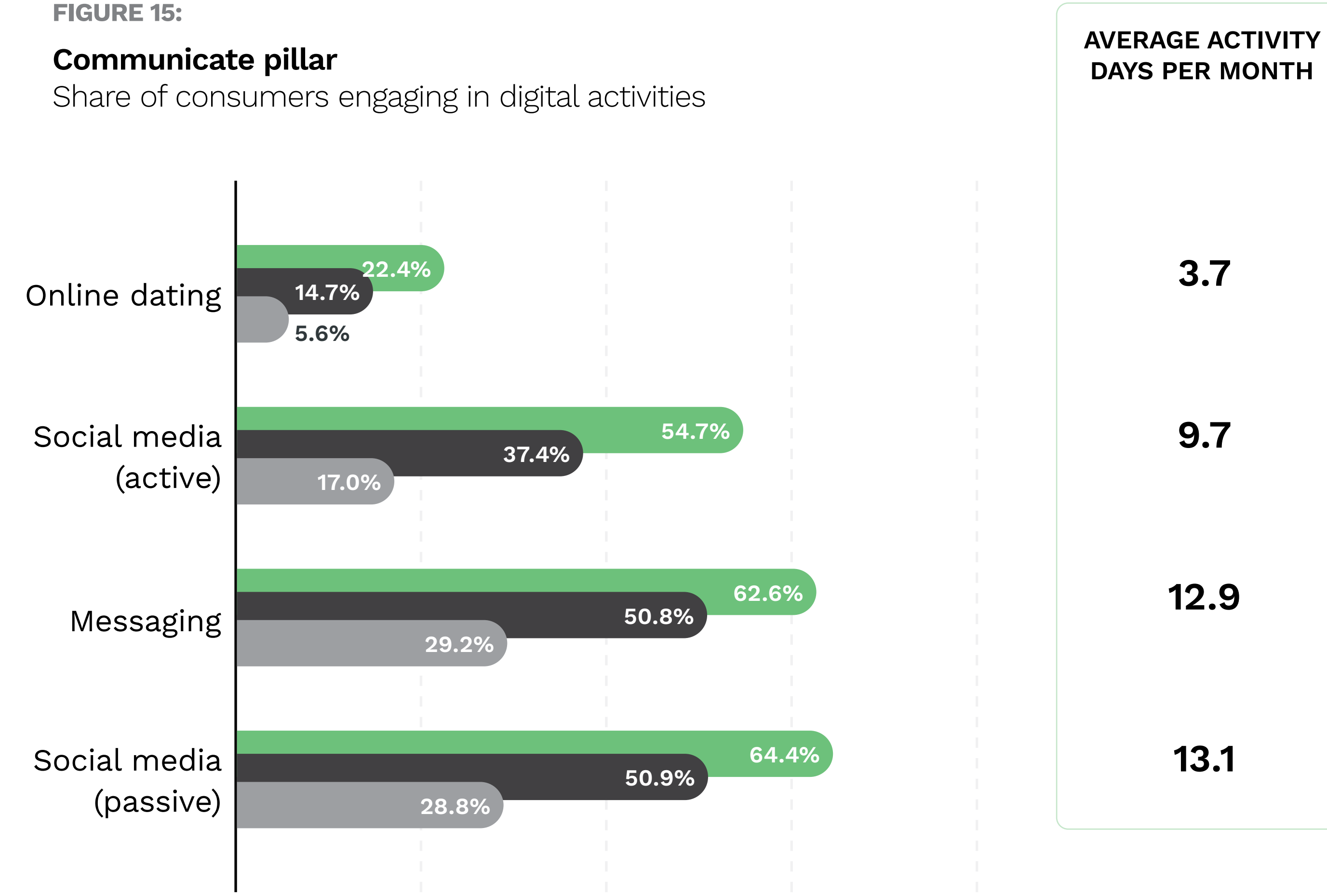
C. Communicate

Communicate, at 39.4 average total activity days, was a virtual tie for top place with have fun (39.5 days). Like streaming, many consumers engage in these activities daily.

The communicate pillar has four core activities: two for social media depending on whether the consumer is using it actively (such as posting) or passively (reading content others post); messaging, such as as using WhatsApp; and online dating, such as Tinder, which we include because it is a method of communicating with potential partners.

FIGURE 15:

Communicate pillar
Share of consumers engaging in digital activities



- Daily
- At least weekly
- At least monthly

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

Not surprisingly, consumers use online communication tools often, as shown in Figure 15. On a daily basis, almost 30% used messaging services (29.2%) or engaged in passive social media (28.8%); 17% engaged in active social media. Online dating was used much less frequently: 77.6% did not use it at all during a month and only 14.7% used it weekly. The preponderance of consumers (80.6%) engaged in at least one of the digital communication activities at least once a month.

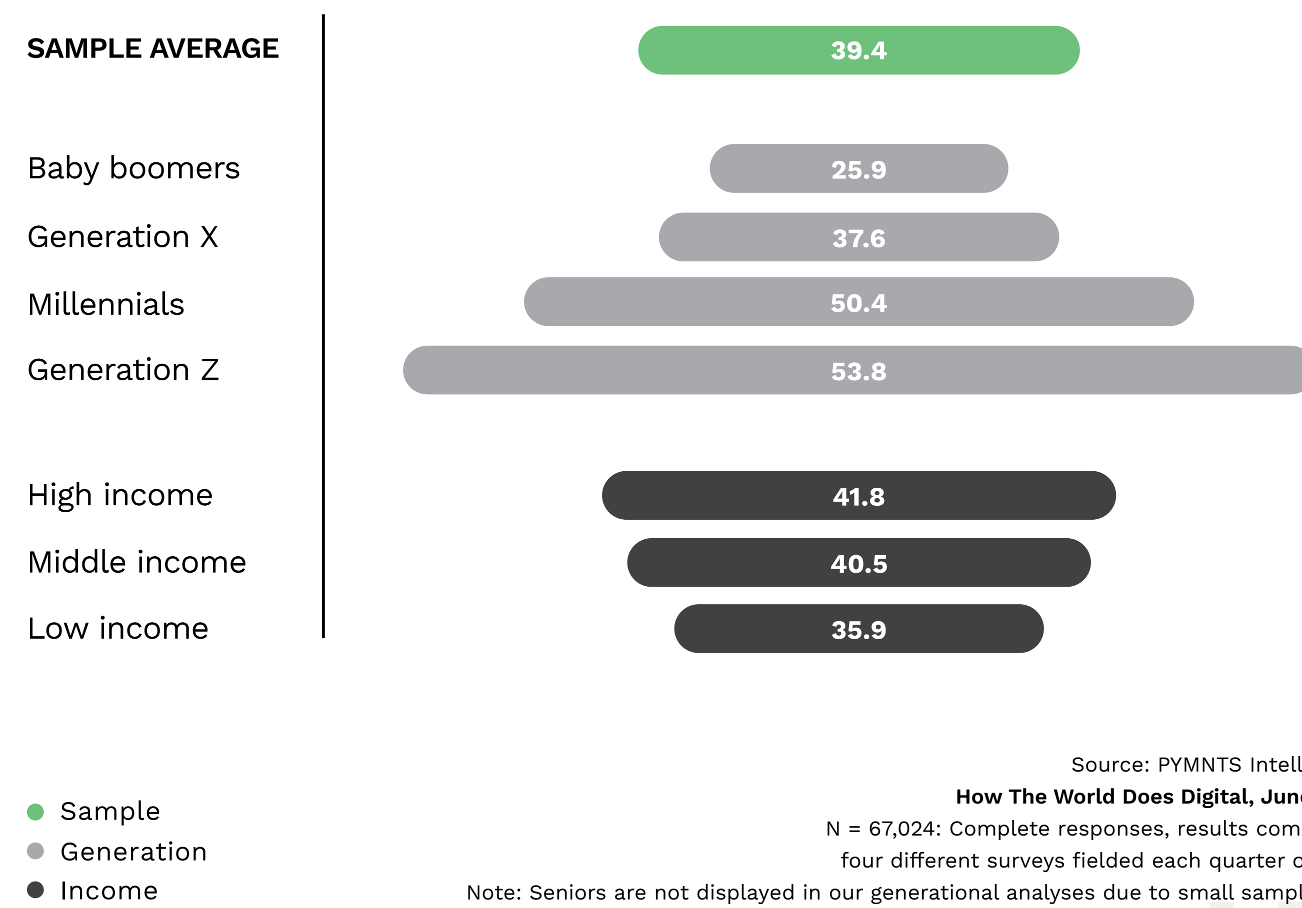
The number of activity days, shown in Figure 15, shows similar results. Consumers performed a digital communication activity 39.4 days per month. Passive social media engagement was highest, with 13.1 days, followed by messaging, at 12.9 days, and active social media, at 9.7 days. Online dating was the straggler with 3.7 days a month. Of course, passive social media often involves streaming short videos, such as on TikTok, and could therefore be considered part of the have fun pillar.

There is a generational divide, as Figure 16 shows. Gen Z reports the highest number of activity days, at 53.8, followed by millennials, at 50.4 — just slightly fewer. Gen X is at 37.6 and baby boomers are at just 25.9 — less than half as much as Gen Z.

Usage of digital communication activities does not vary much across income categories. High-income earners had 41.8 activity days, followed closely by middle-income earners, at

FIGURE 16:

Communicate pillar
Total activity days per month, by demographic



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

40.5. There is a slightly larger drop-off for low-income earners — 35.9 days — but that is much less striking that what we saw for online health and banking activities.

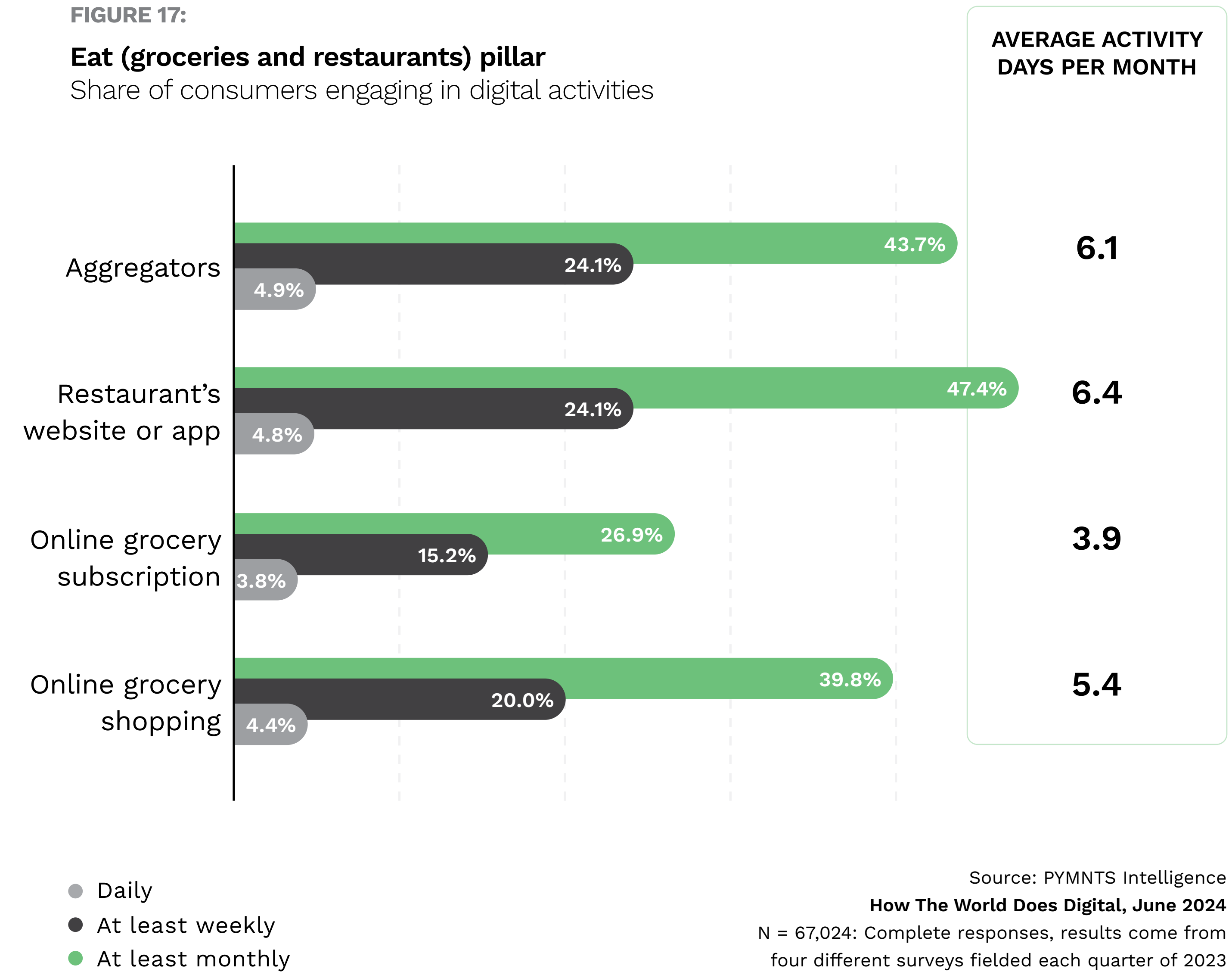
D. **Online grocery and restaurants**

We have two pillars for digital activities involving eating — one for groceries, the other for restaurants — and consider them together, as the results are similar.

Figure 17 reports the results. Online grocery shopping has not caught on much: 60.2% of consumers did not do online grocery shopping at least once a month and 73.1% did not use online grocery subscriptions. They engaged in these activities 9.3 days a month. Online ordering from restaurants was somewhat more popular, with 24.1% saying they used an aggregator to order from a restaurant and another 24.1% also saying they ordered online directly from a restaurant's website. The average activity days stood at 12.5. Across all four activities, 36.7% of consumers did not perform any travel or mobility activities.

FIGURE 17:

Eat (groceries and restaurants) pillar
Share of consumers engaging in digital activities



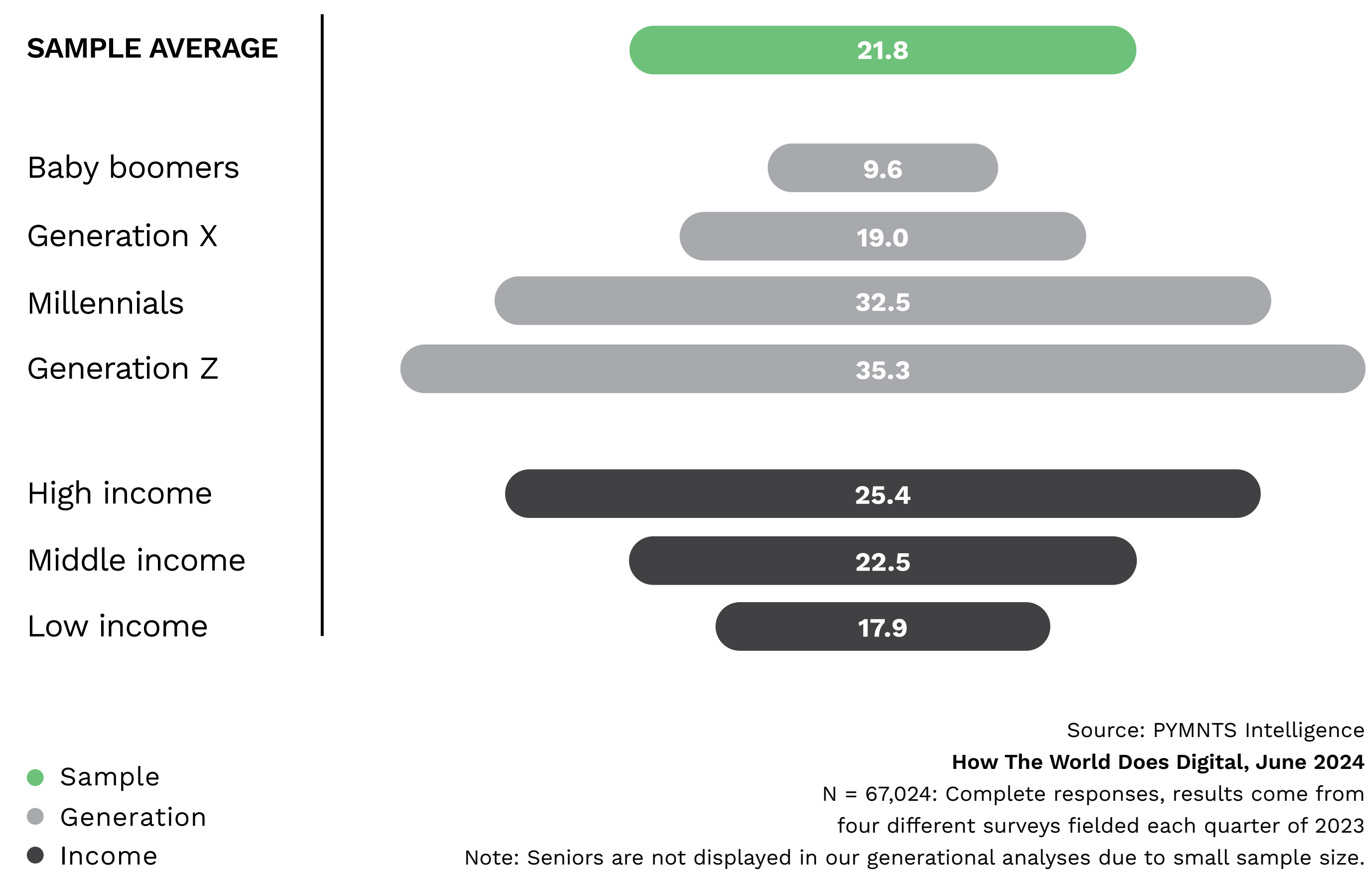
Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

As with communication, there is a significant generational divide between Gen Z and millennials on the one hand and Gen X and baby boomers on the other, as shown in Figure 18. Gen Z consumers have 35.3 activity days across all four online eating activities compared to only 9.6 days for baby boomers — that's almost a fourfold difference. The percentages who say they engage in each of these activities confirms this difference, as shown in the table. Among Gen Z, for example, 31.3% do online grocery shopping at least once a week, compared to just 9% for baby boomers. Similar results hold for using online aggregators to order from restaurants: 39.8% of Gen Z does that weekly compared to only 8.6% of baby boomers.

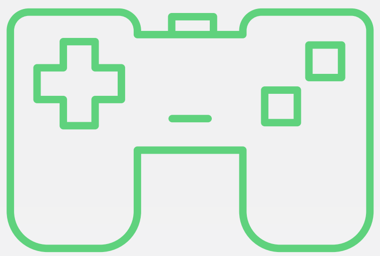
There is strong relationship between use and income. That is to be expected since consumers who use online ordering are trading off paying more for delivery in return for having to spend less of their time. The average number of activity days was 25.4 for high-income earners, 22.5 for middle-income earners, and 17.9 for low-income earners. These results would be even stronger controlling for age, since high-income earners tend to be older and older consumers use these activities less.

FIGURE 18:

Eat (groceries and restaurants) pillar
Total activity days per month, by demographic



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.



E. Have fun with streaming

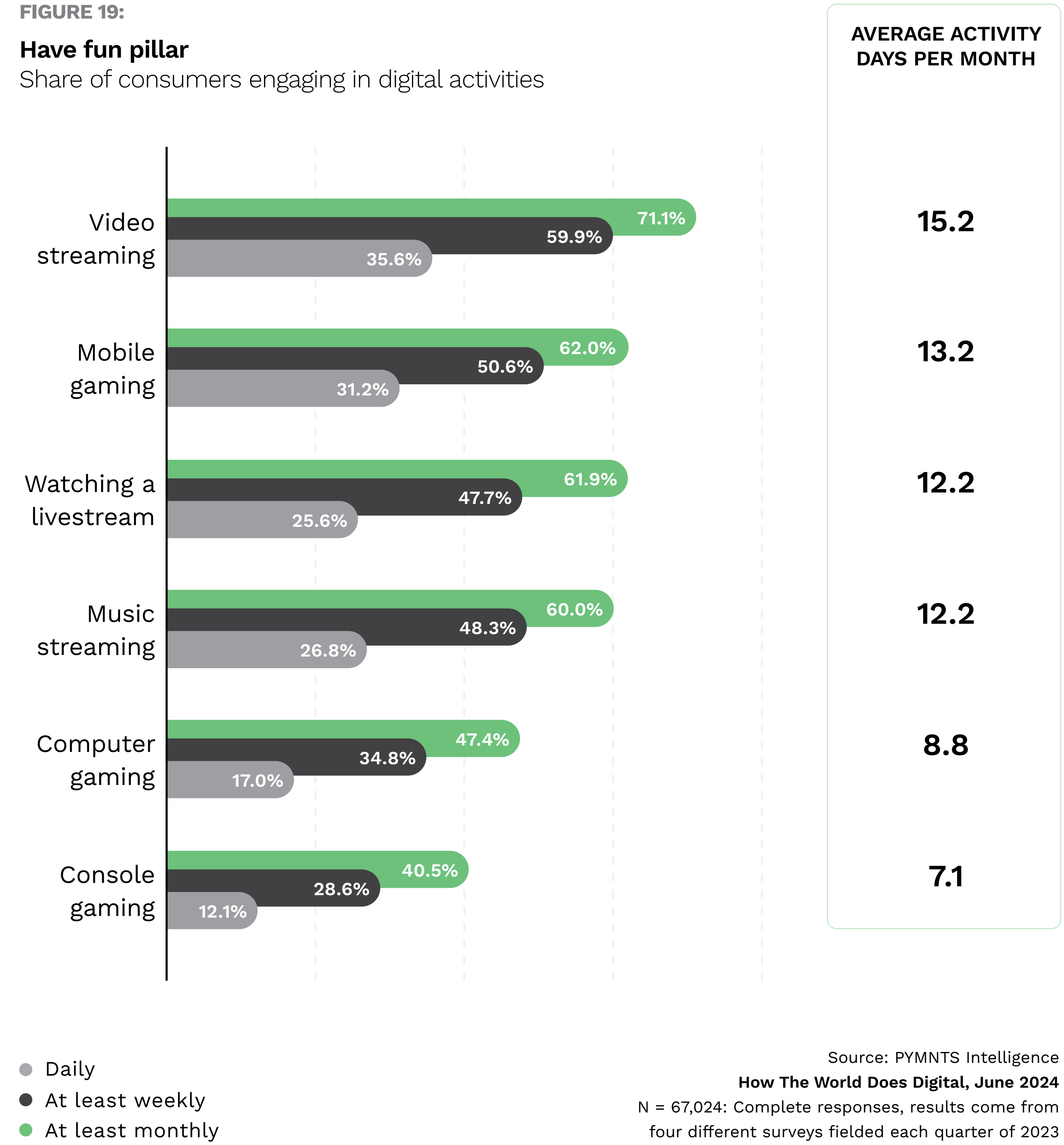
Streaming and online gaming are two major online entertainment developments over the last decade or so around the world.

We've tracked online video streaming, livestreaming, and music streaming, in addition to mobile gaming, computer gaming and console gaming. Together, they make the have fun pillar the one in which consumers engage most often.

FIGURE 19:

Have fun pillar

Share of consumers engaging in digital activities



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

Figure 19 summarizes the results. Daily, almost 35.6% streamed video, 31.2% played a mobile game, 25.6% watched a livestream, 26.8% streamed music, 17% played a game on their computer and 12.1% gamed on their consoles.

Activity days show similar popularity: 15.2 for video streaming, 13.2 for mobile games, 12.2 for live streaming, 12.2 for music streaming, 8.8 for computer gaming and 7.1 for console gaming. Some consumers engaged in these activities using apps they downloaded on their devices and then played those games without connecting to the internet.

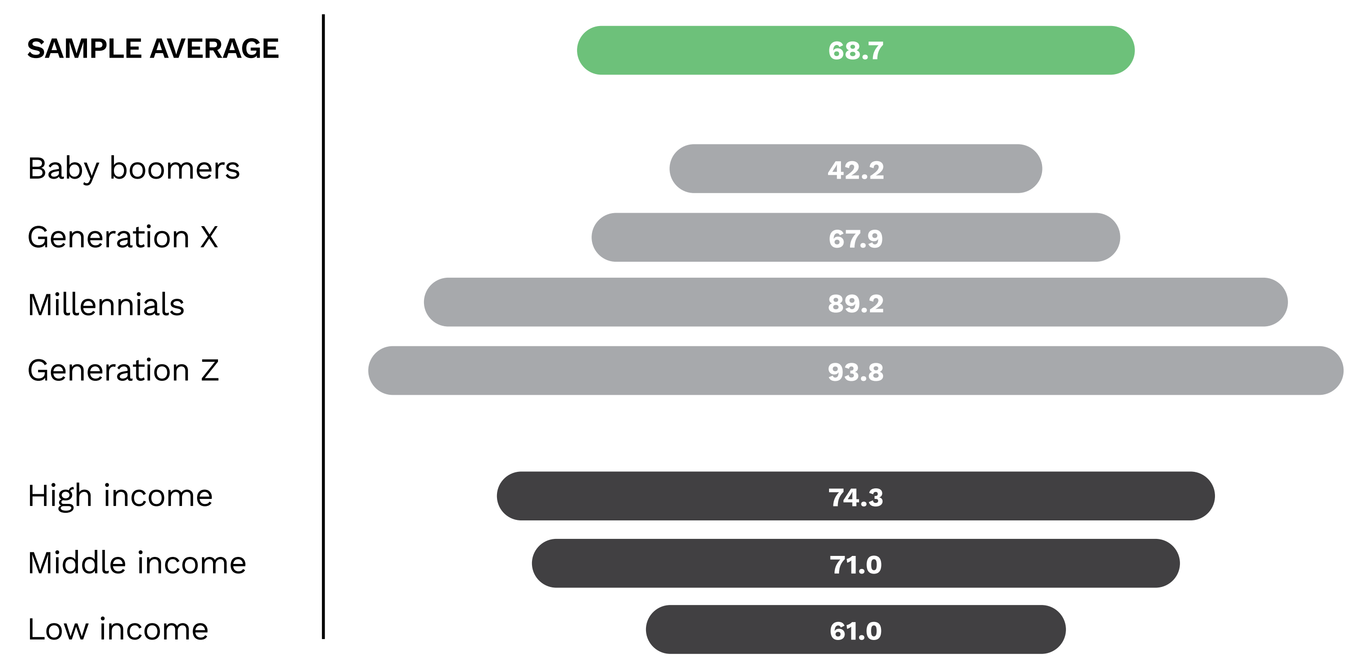
Overall, Gen Z engages in streaming activities for 93.8 days, compared to 82.9 for millennials, 67.9 for Gen X, and 42.2 for baby boomers, as shown in Figure 20. Baby boomers, by this measure, use streaming and online gaming platforms less than half as intensely as Gen Z. Nevertheless, compared to other pillars, baby boomers engage in streaming activities often and the disparity with Gen Z is less. An average 43.2% of baby boomers stream video at least weekly.

Streaming and gaming platform use declines with income, which is not surprising since the premium versions of games and devices often cost a lot of money; consumers need

FIGURE 20:

Have fun pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

to invest in more sophisticated and expensive devices to play some computer games. The average number of activity days is 74.3 for high-income earners, 71 for middle-income earners, and 61 for low-income earners.

E. **Live with online devices at home**

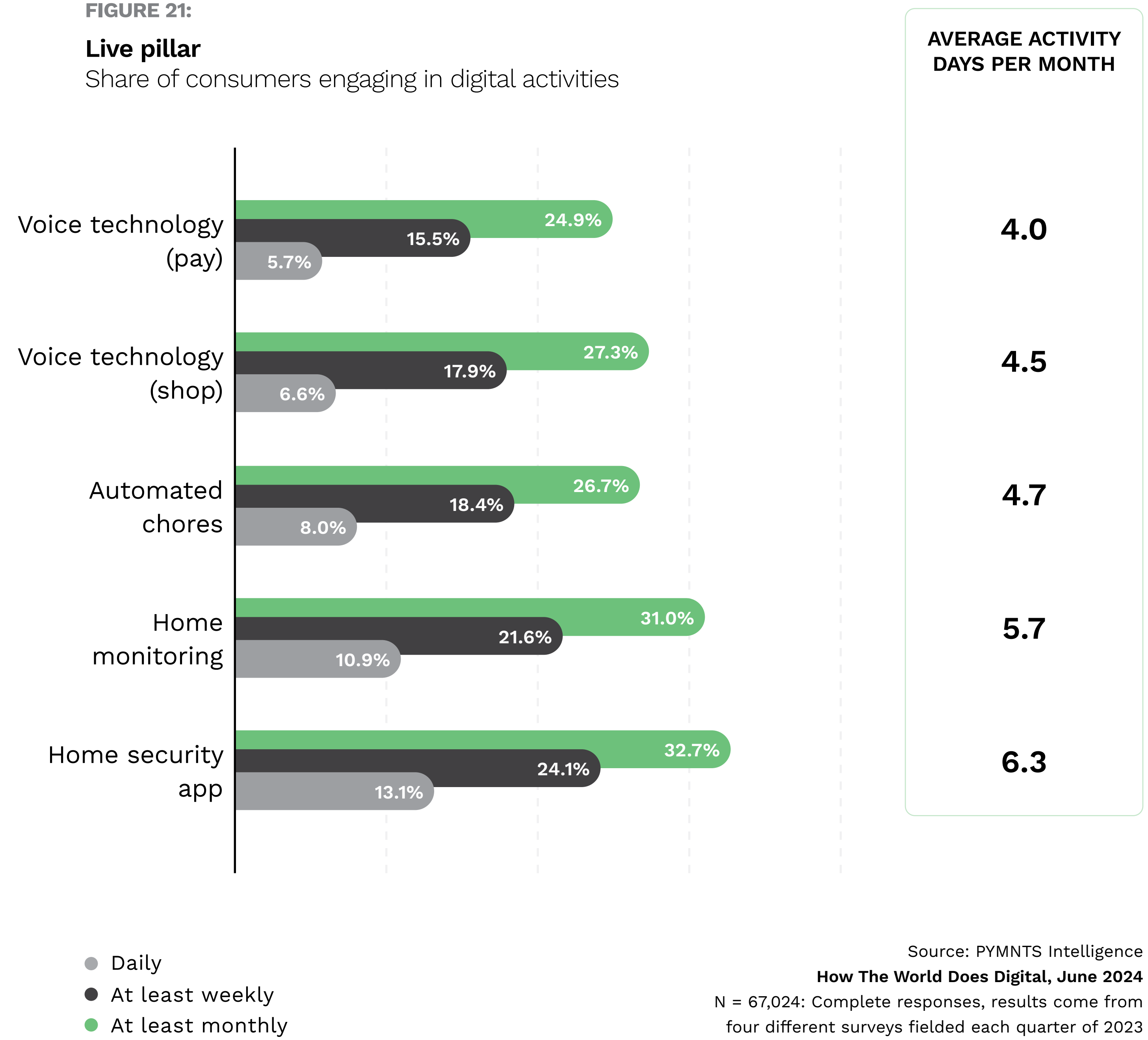
Based on total activity days, the live pillar is the fourth-most popular.

Consumers engage in several activities at home with internet-connected devices that help with home security and chores and to engage in commerce using voice commands. Figure 21 summarizes the results for this pillar. These individual activities aren't used at all by large portions of the population. The percent who don't use them at all at least monthly ranges from 67.3% to 73.3%. More than half (53.1%) of consumers don't engage in any of the activities

FIGURE 21:

Live pillar

Share of consumers engaging in digital activities



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

at least once a month. Enough of those who do push the average number of activity days to 25.2 per month.

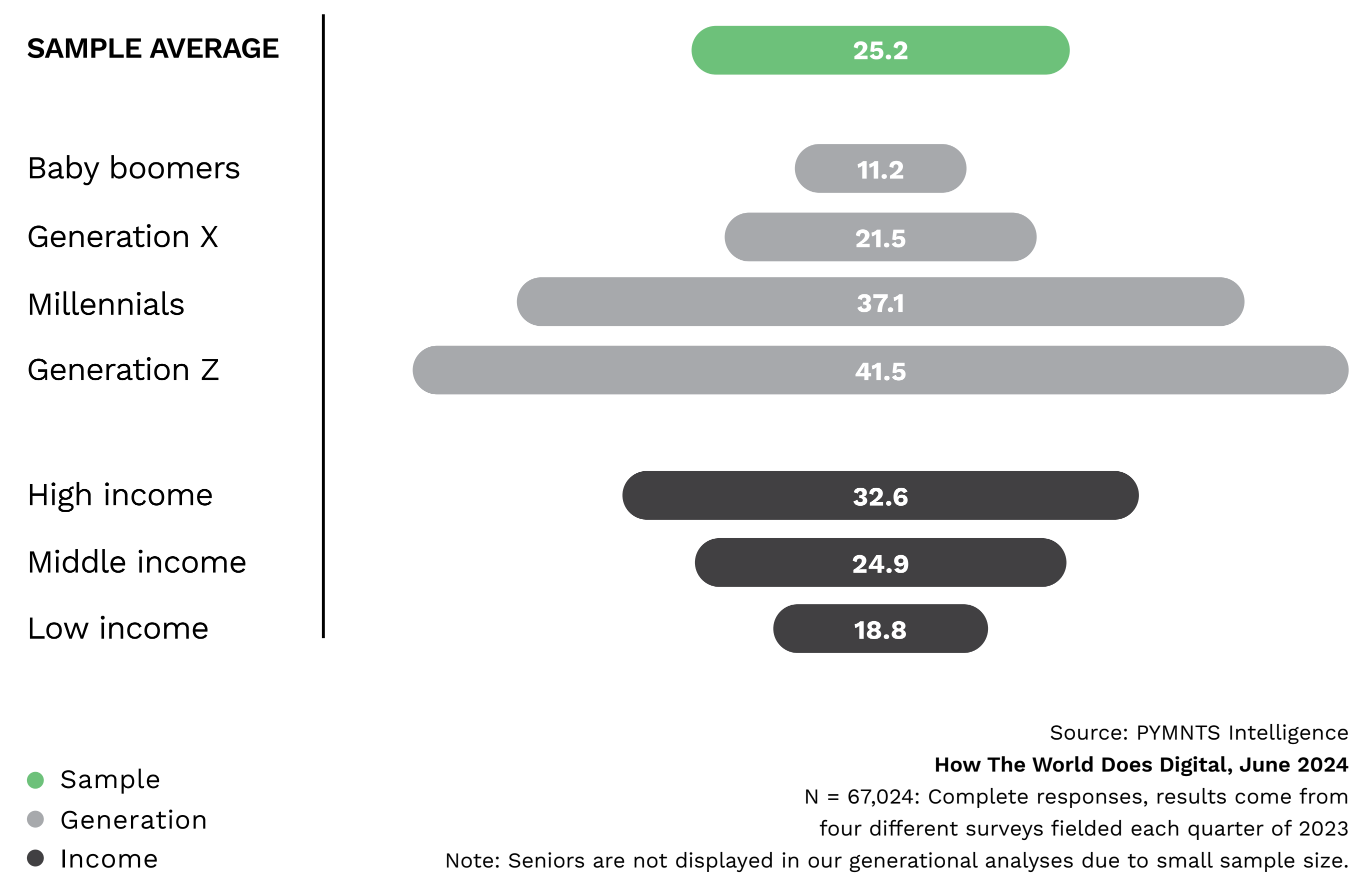
Figure 22 shows the now familiar generational divide. At a high level, we see this from the number of days consumers engaged in any of these five activities. The total is 41.5 for Gen Z and 37.1 for millennials. Usage drops off by about half to 21.5 days for Gen X and falls off a cliff to 11.2 for baby boomers. The percentage of consumers who use one of these activities at least weekly tells a similar story. For Gen Z, use at least weekly ranges from 29.5% to 34.8%, compared to 4.1% to 13.1% for baby boomers.

The use of these activities, which increase productivity and security at home, decline dramatically with income. For high-income earners, the average number of activity days is 32.6, falling to 24.9 for middle-income earners and to 18.8 for low-income earners.

FIGURE 22:

Live pillar

Total activity days per month, by demographic



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

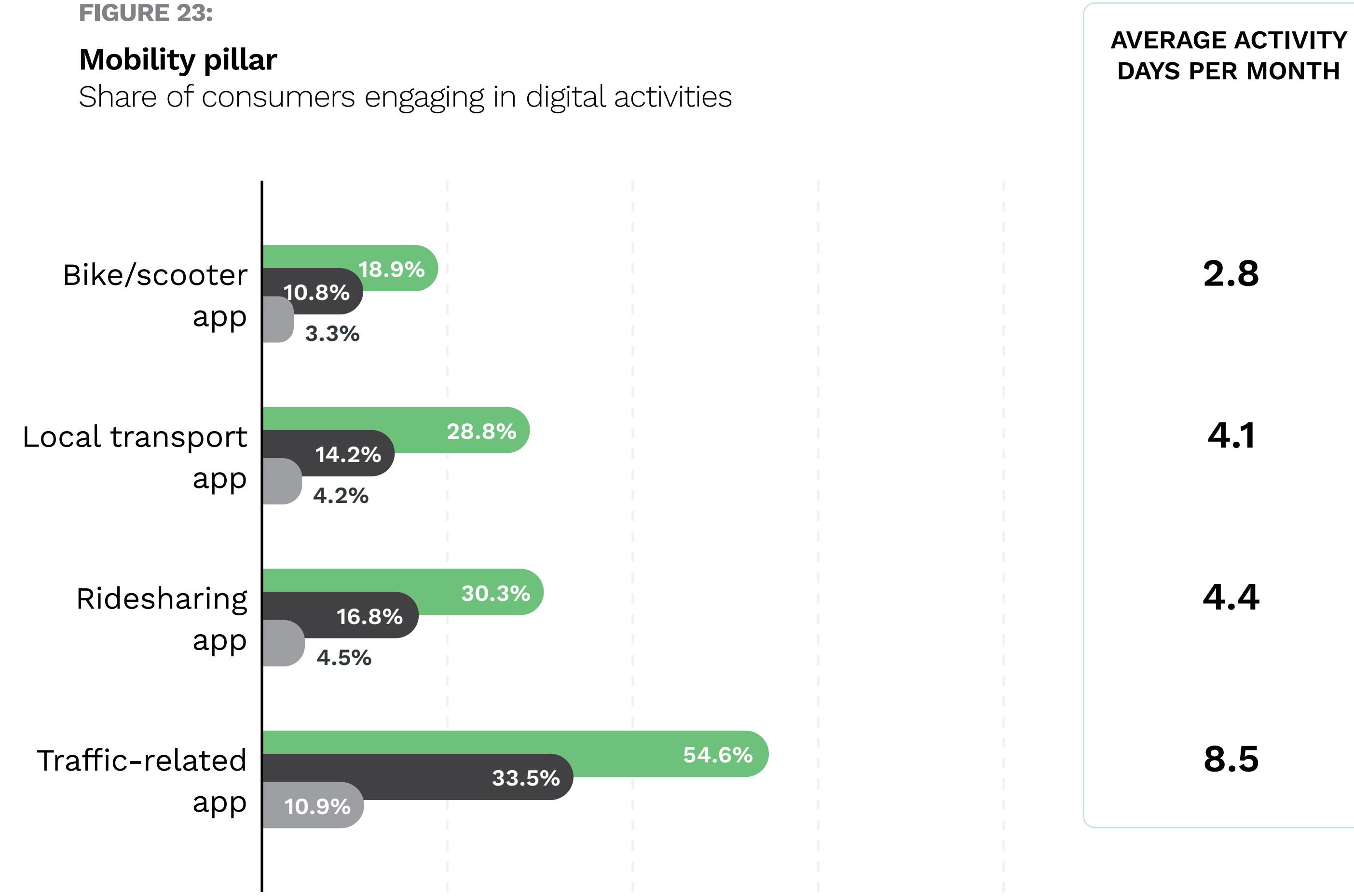
G. **Mobility**

Consumers use digital solutions for moving about on a regular basis. These include bike/scooter apps, ridesharing, local transport apps — such as for subways — and traffic-related apps for navigation and avoiding congestion. Consumers used these solutions for an average of 19.8 days a month, with the traffic-related apps, at 8.5 days, far ahead of the others, as shown in Figure 23.

FIGURE 23:

Mobility pillar

Share of consumers engaging in digital activities



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

A sizable portion of the population does not use bike/scooter apps, ridesharing apps or local transport apps at all during the month: The figures for those not performing these activities range from 69.7% for ridesharing to 71.2% for local transport to 81.1% for bike/scooter apps. Traffic-related apps were more popular, with more than 56% of consumers using these at least once a month. Few consumers used these daily — less than 5% — except for traffic-related apps, for which 10.9% of consumers used one of those apps daily.

Overall, only 61.9% of consumers engaged in one of these mobility-related activities at least once a month. Of course, the world was still getting back to normal in 2023 following the peak of the pandemic, and it is plausible use of these activities will increase in the future.

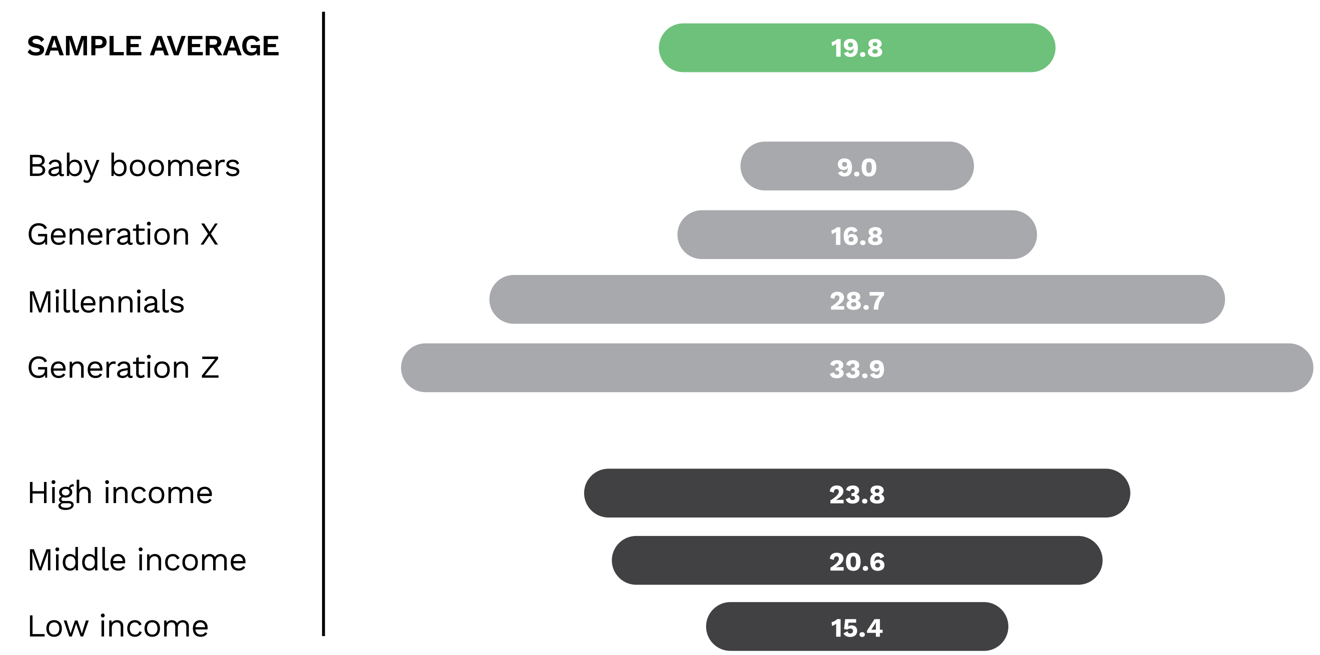
As shown in Figure 24, Gen Z and millennials are more active users: 33.9 activity days for Gen Z and 28.7 for millennials. Baby boomers are infrequent users, with only 9 days, and Gen X almost doubles that with 16.8.

Usage declines with income: 23.8 days for high-income earners, 20.6 for middle-income earners and 15.4 for low-income earners.

FIGURE 24:

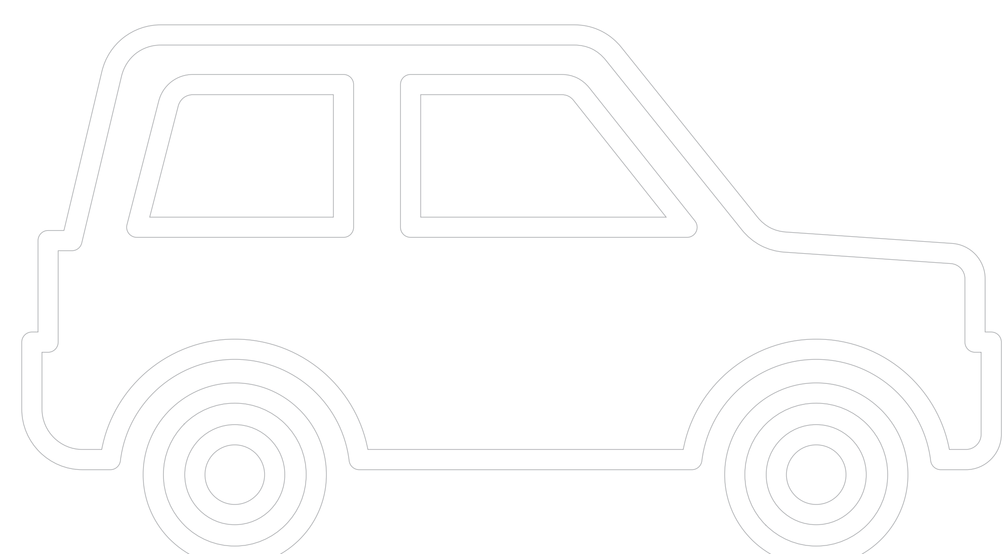
Mobility pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.



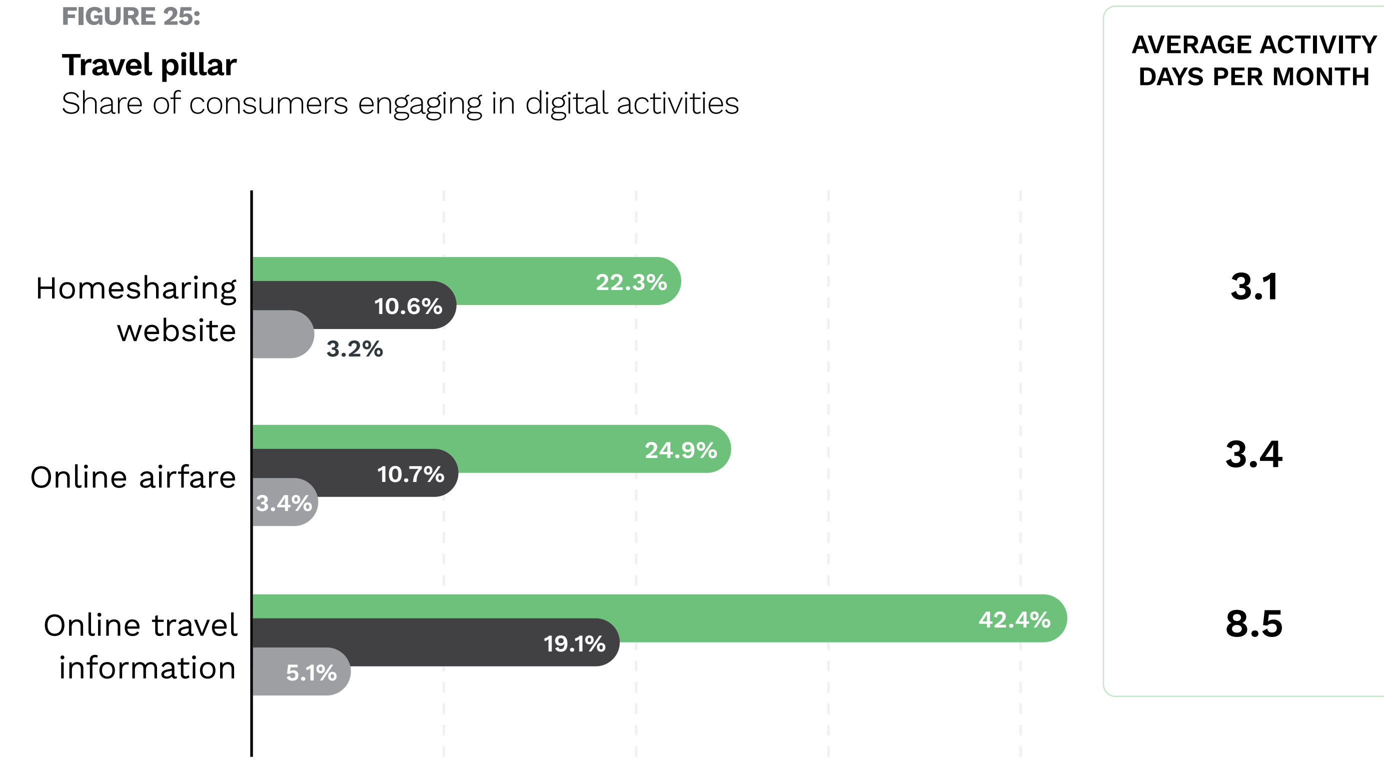
H. **Travel**

We considered three main activities for travel: using a homesharing website, buying airfare online and using a travel information website. The results are summarized in Figure 25. Given that consumers engage in these sorts of travel activities sporadically throughout the year, it is not surprising that the activities are not done much overall. The total number of activity days across all three activities is only 12.3. Most consumers do not use them at all monthly: 77.7% do not use homesharing websites, 75.1% do not buy airfare online and 57.6% do not use online travel information sites.

FIGURE 25:

Travel pillar

Share of consumers engaging in digital activities



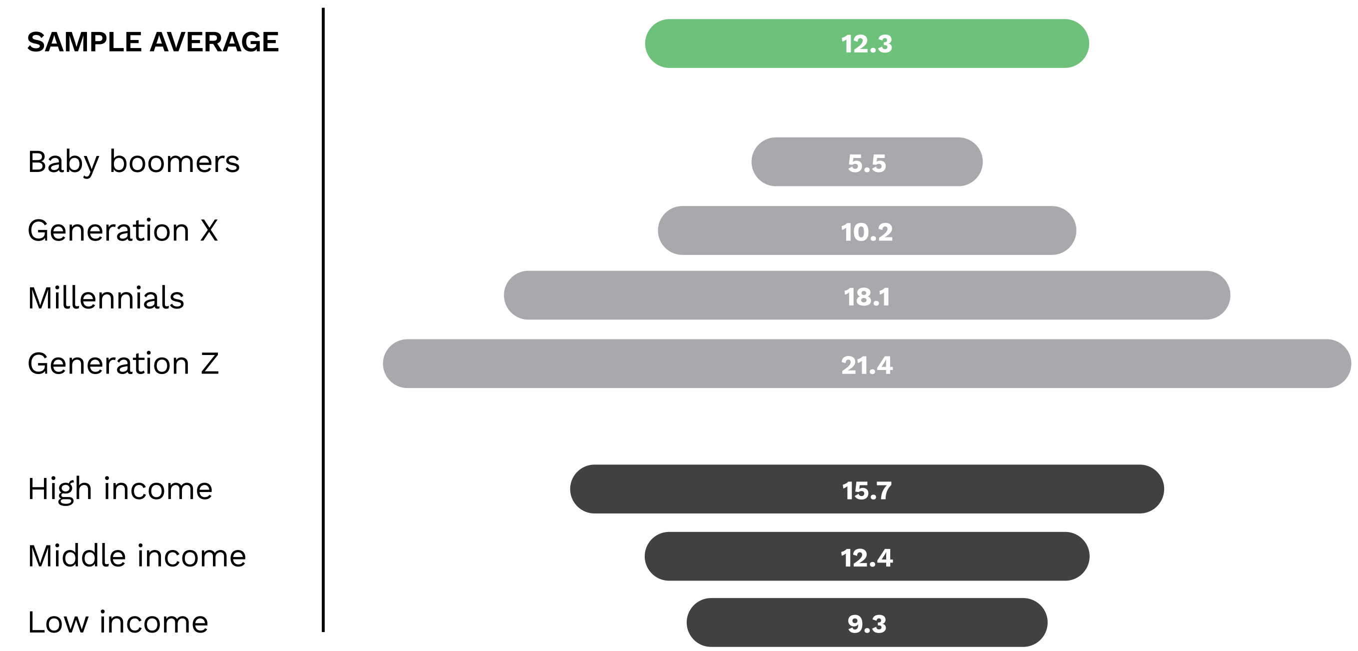
Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

Again, there are substantial generational differences. Gen Z performed these activities for 21.4 days and millennials did so for 18.1. Gen X performed these activities about half as often as Gen Z, at 10.2 days, and baby boomers did so about one-quarter as often, at 5.5 days. Income matters as well, with high-income earners having 15.7 activity days, middle-income earners having 12.4 and low-income earners having 9.3.

FIGURE 26:

Travel pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

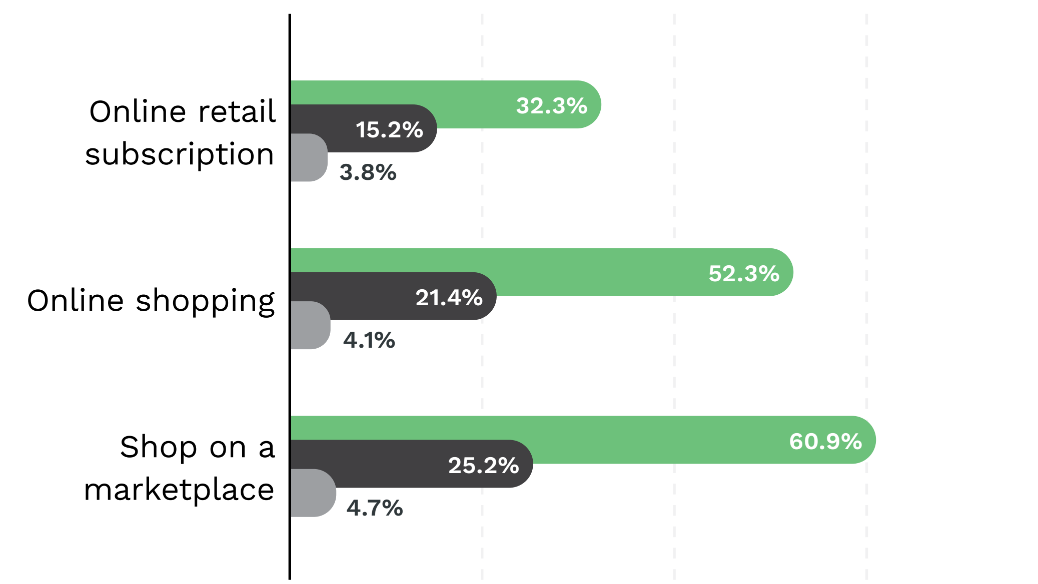
I. Shop

We asked consumers about shopping online at a marketplace (e.g., Mercado Libre, Etsy) or an online retailer (e.g., Walmart, Nike). As we show in Figure 27, we found that 25.2% shopped at a marketplace at least weekly, 21.4% at an online retailer and 32.1% at either a marketplace or store at least weekly. In all, consumers engage in these forms of online shopping for 14.7 days (7.8 for marketplaces and 6.7 for retail) during the month. Consumers can also order subscriptions to retail products: 15.2% used an online subscription at least weekly.

FIGURE 27:

Shop pillar

Share of consumers engaging in digital activities



AVERAGE ACTIVITY DAYS PER MONTH

4.4

6.7

7.8

- Daily
- At least weekly
- At least monthly

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

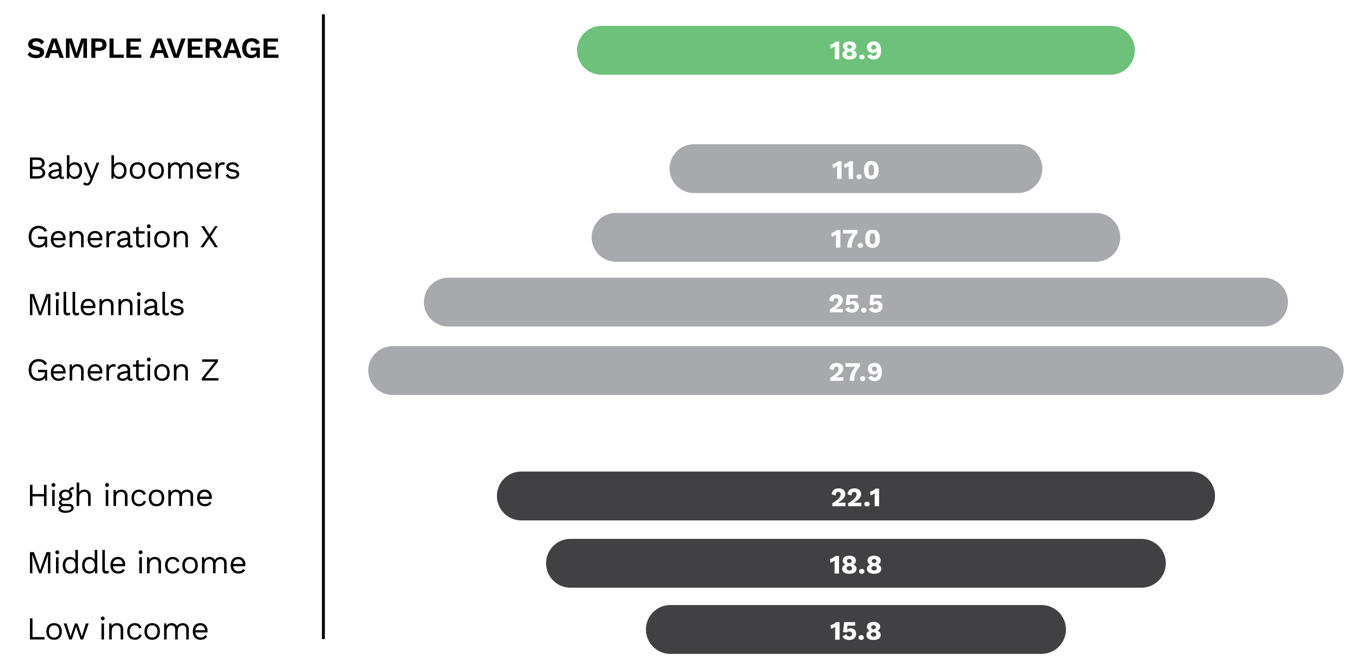
Gen Z and millennials were the most avid online shoppers, as shown in Figure 28. The results show that 37.3% of Gen Z, for example, used an online marketplace at least weekly and millennials did so slightly less, at 36.2%. In contrast, 12.6% of baby boomers used a marketplace at least weekly, as did 22.7% of Gen X. The differences are even more striking for online subscriptions. For Gen Z, 28.3% used these at least weekly, more than six times as often as baby boomers, at just 4.2%.

Engagement with online shopping activities declined sharply with income. Summarizing behavior with activity days, high-income earners had 22.1 activity days, middle-income earners had 18.8 activity days and low-income earners had 15.8 activity days.

FIGURE 28:

Shop pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 47,992: Respondents who shopped in the last 30 days, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

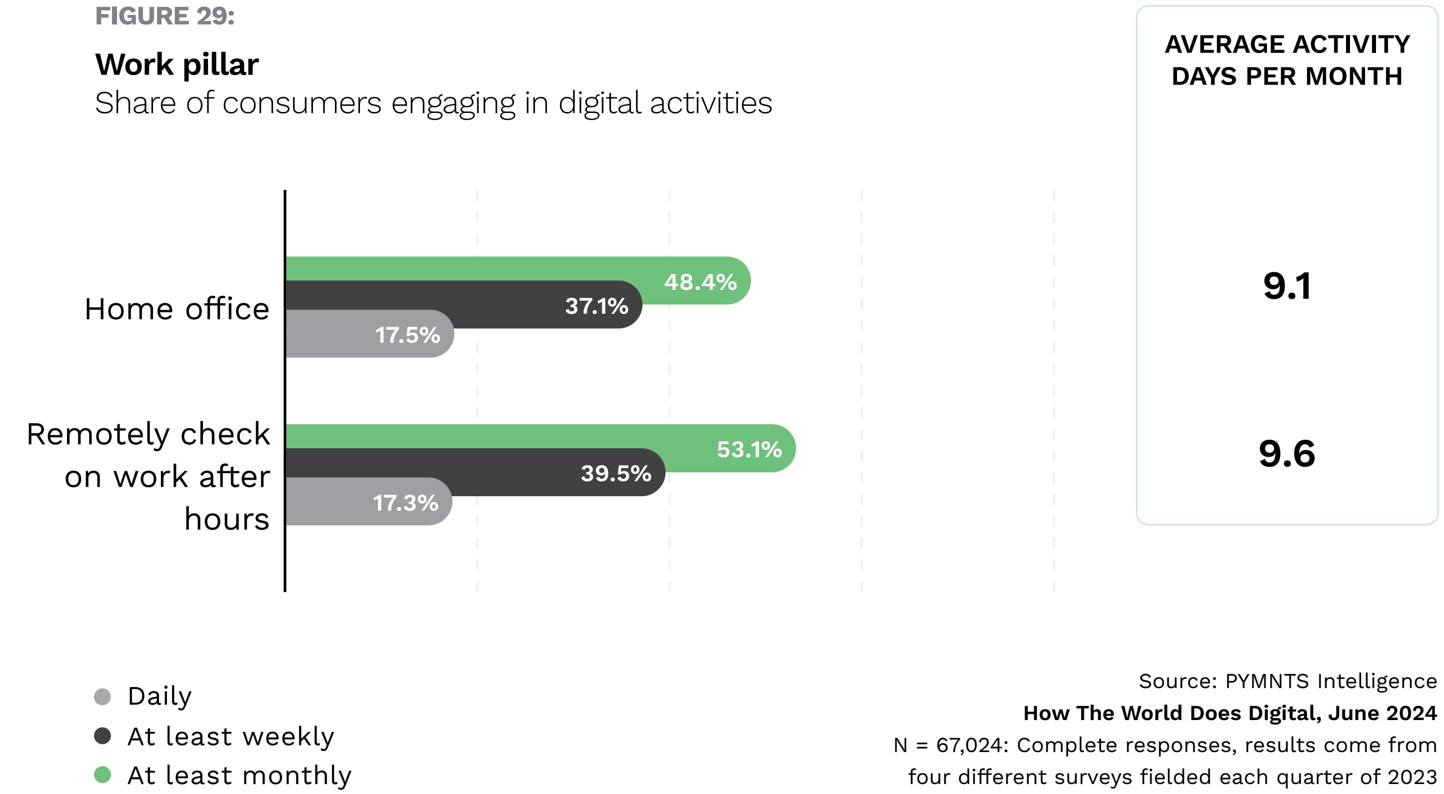
J. Work

Finally, we looked at working through internet-enabled technology by asking about two activities: checking on work remotely and having a home office.

FIGURE 29:

Work pillar

Share of consumers engaging in digital activities



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

As shown in Figure 29, about half of consumers who worked in the last month didn't engage in these activities at least monthly: 51.6% did not have a home office and 46.9% did not check on work remotely. Another large chunk of workers did so frequently. In fact, 37.1% worked at a home office at least weekly, and 39.5% checked on work remotely at least weekly. The total number of activity days for those who worked was 18.7 — about evenly divided between checking on work remotely (9.6) and working from a home office (9.1).

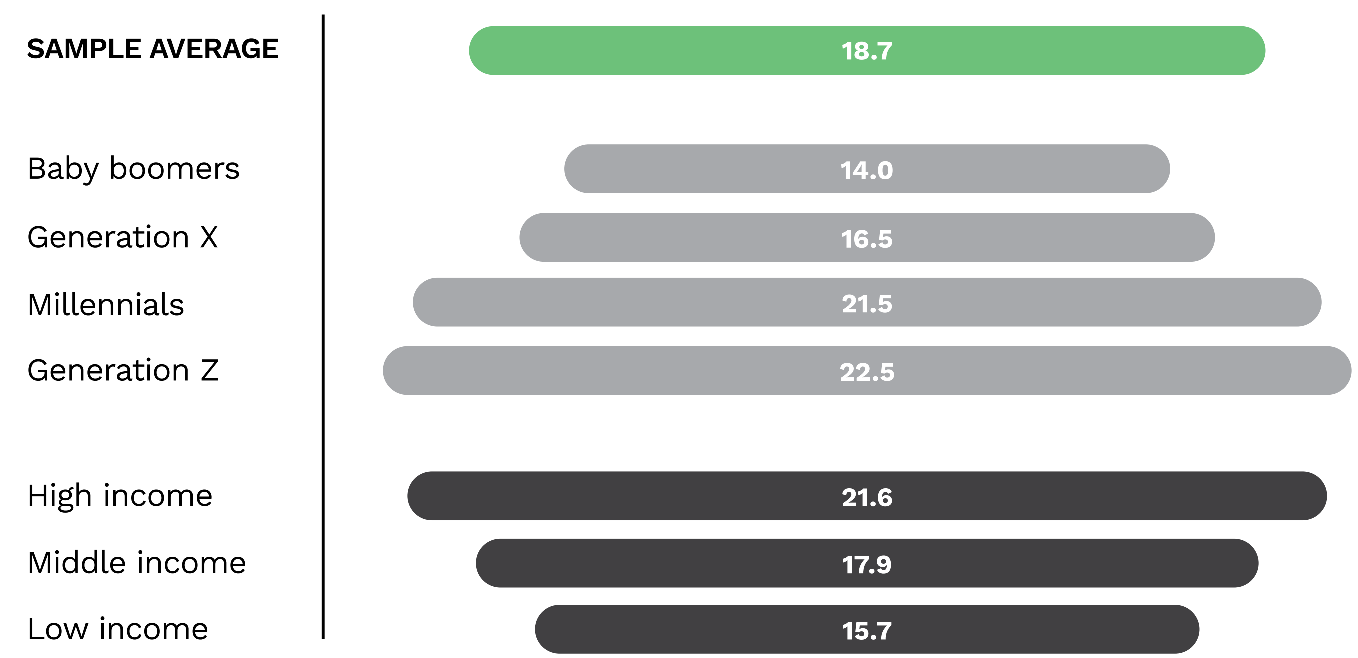
There was much less of a generational divide than we've seen in other pillars, as shown in Figure 30. Comparing the youngest and oldest generations, 48.5% of Gen Z checked on work remotely and 40.9% worked from a home office at least weekly, compared to 28.4% of baby boomers who checked on work remotely and 28.8% who worked from a home office.[12] Not surprisingly, given the correlation between office work and income, the table shows that there is a substantial decline in engaging in these activities at least weekly with income.

[12] See Table A in the Appendix.

FIGURE 30:

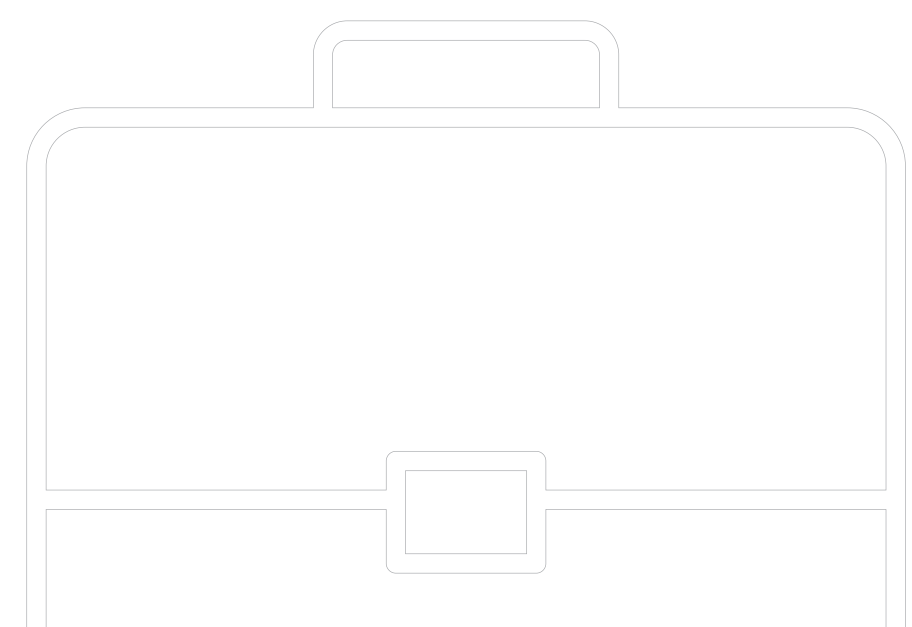
Work pillar

Total activity days per month, by demographic



- Sample
- Generation
- Income

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 28,110: Respondents who worked for a pay in the last 30 days, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.



IV.

RESULTS BY COUNTRY

HOW THE WORLD DOES DIGITAL

A. Comparison of countries

We showed earlier that there are substantial variations in the degree of digital engagement for consumers in different countries based on the average number of activity days per month across the population, as shown in Figure 6. Brazil had the highest number of activities days, at 361 (12 activities per day). The U.K., which was the median country, had 276 activity days (9.2 activities per day) — 77% of Brazil's score. Japan was the lowest, with just 127 activity days (4.2 activities per day) — barely one-third of Brazil and less than half of the U.K. There is a 234-day spread between Brazil and Japan and a 93-day spread between the second highest, Singapore, and the second from last, Germany.

Countries that have lower activity scores overall tend to have lower scores in each pillar relative to the median, but it is hardly systematic. There are material differences in the relative rankings of countries by pillar. Figure 7 showed this by reporting the ratio of the number of activity days per pillar for each country relative to the median country for that pillar. Taking the two extreme countries, Brazil is much higher and Japan is much lower than the median for every pillar. The Netherlands, on the other hand, is above the median for digital banking activities (bank) but well below it for eCommerce (shop).

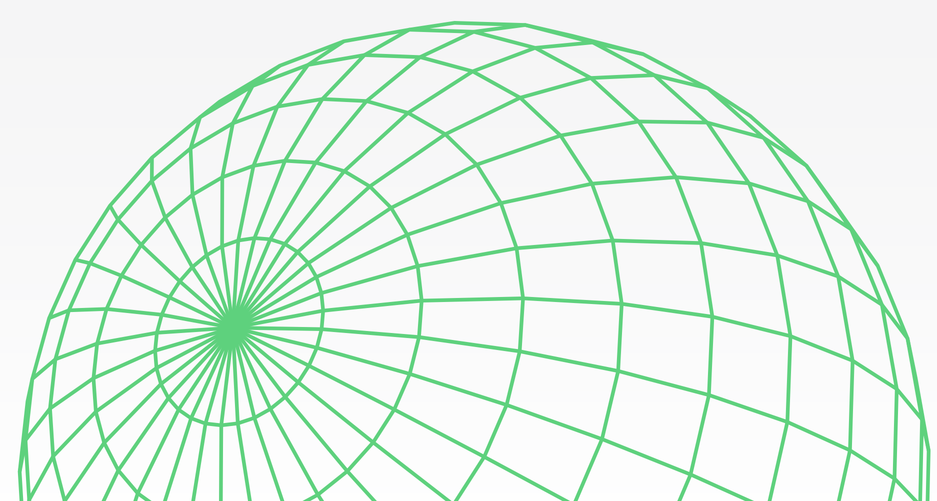
The most popular digital activities also vary across countries. To see this, we report the top 10 digital activities in each country based on activity days and the percent of consumers who engaged in them at least weekly.[13] Video streaming is the most popular activity in five countries by activity days and seven countries based on at least weekly viewing. Messaging, however, is middling in popularity in Australia but the most popular activity in Japan. Mobile banking is the most popular activity in the Netherlands but only the seventh most popular activity in Germany based on activity days, with similar results for at least weekly use.

[13] Please refer to Table D and Table E in the Appendix to see the full list of top digital activities in each country.

This report is purely observational and does not try to isolate the causes for these differences across countries, which are likely complex. We plan to explore causal relationships more deeply in future work.

B. **Country deep dives**

- **We will go through the countries in order of their rank in terms of digital engagement, beginning with Brazil and ending with Japan.**



1. Brazil

Brazil is a developing country, with 215 million consumers, but one that has substantial success with digital innovation. By 2023, PIX, an instant-payment app for mobile phones launched by the country's central bank, was in widespread use. The "Amazon of Latin America" — Mercado Libre — launched in Brazil in 1999 and is still in widespread use. As of 2022, two-thirds of consumers had smartphones and 92% had access to at least a 4G network. About 75% of consumers had a debit card that year and 77% used PIX. Brazil is poorer than all the other countries considered: Per capita GDP was $8,900, adjusted for PPP, in 2022, and it was ranked 79th among all countries.

FIGURE 31:

Top 10 activities,
by share of local consumers engaged at least weekly in Brazil

69.0%	**Video streaming**
63.2%	**Mobile banking**
62.5%	**Mobile gaming**
60.8%	**Music streaming**
59.7%	**Messaging**
59.4%	**Online banking**
59.3%	**Social media** (active)
58.2%	**Watching a livestream**
55.3%	**Checking on work remotely after hours**
55.2%	**Social media** (passive)

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,102: Complete responses for Brazil, results come from four different surveys fielded each quarter of 2023

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Figure 31 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. More than 55 percent of the population engaged in the other top-10 activities at least weekly: mobile banking, mobile gaming, music streaming, messaging, online banking, social media (active), watching a livestream, checking on work remotely after hours and social media (passive).

Figure 32 shows similar results for total activity days. Again, the most popular activity is video streaming. The following activities account for more than 50% of the 361 total average activity days for consumers in Brazil: video streaming, mobile gaming, messaging, music streaming, mobile banking, social media (active), watching a livestream, social media (passive), online banking, checking on work remotely after hours, home office use and computer gaming.

Figure 33 reports the total activity days per pillar, by generation and by income. Millennials and Gen Z are roughly tied for the most digitally engaged generation, with 411 days for Gen Z and 405 for millennials. Gen X has somewhat lower digital engagement, at 335 days, and baby boomers are far behind, at 271 days. High-income earners are the most digitally active, at 456 days, compared to 363 days for middle-income earners and 309 days for low-income earners.

FIGURE 32:

Top 10 activities
with the highest monthly average activity days in Brazil

18.1	**Video streaming**
16.3	**Mobile gaming**
15.6	**Messaging**
15.5	**Music streaming**
15.3	**Mobile banking**
15.2	**Social media** (active)
15.0	**Watching a livestream**
14.5	**Social media** (passive)
14.4	**Online banking**
13.3	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,102: Complete Brazil responses, results come from four different surveys fielded each quarter of 2023

FIGURE 33:

Total activity days per pillar in Brazil
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**29.7**	**43.4**	**49.7**	**12.5**	**18.5**	**85.2**	**32.7**	**27.0**	**13.9**	**22.1**	**26.1**	**360.8**
GENERATION												
• **Generation Z**	28.1	54.6	52.2	15.3	21.5	92.6	40.2	32.9	19.2	26.8	27.4	**410.8**
• **Millennials**	31.7	51.6	53.3	14.9	20.7	94.5	39.8	30.1	16.6	25.0	27.0	**405.0**
• **Generation X**	29.2	36.7	49.2	11.0	17.2	84.1	28.1	24.9	11.6	19.7	23.4	**335.1**
• **Baby boomers**	28.0	26.5	42.0	8.0	13.8	64.2	19.5	18.9	7.3	16.2	26.2	**270.7**
INCOME												
• **High**	35.2	57.8	55.3	16.8	25.3	104.6	49.2	35.8	19.7	27.6	28.7	**456.1**
• **Middle**	31.4	40.8	51.6	11.8	18.8	88.8	31.2	27.8	13.5	21.4	25.8	**362.9**
• **Low**	24.5	39.7	44.3	11.4	14.8	70.5	26.5	21.6	11.6	20.2	24.2	**309.4**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,102: Complete responses for Brazil, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

2. Singapore

Singapore is a city-state that had a population of 5.7 million in 2022. It is an important business and financial hub for Asia and home to many multinationals. It had the second highest per capita GDP in the world in 2022. In this small, densely populated country, almost everyone has access to high-speed internet, at least 4G cellular networks and a smartphone. Almost everyone uses credit or debit cards for payment.

Figure 34 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Music streaming was the most popular activity by this measure. More than 50% of the population engaged in each of the other six

FIGURE 34:

Top 10 activities,
by share of local consumers engaged at least weekly in Singapore

67.6%	**Music streaming**
64.9%	**Mobile banking**
64.5%	**Messaging**
62.9%	**Mobile gaming**
62.8%	**Watching a livestream**
62.8%	**Social media** (passive)
58.1%	**Video streaming**
48.6%	**Checking on work remotely after hours**
48.2%	**Online banking**
44.8%	**Traffic-related app**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,190: Complete responses for Singapore, results come from four different surveys fielded each quarter of 2023

activities at least weekly: mobile banking, messaging, mobile gaming, watching a livestream, social media (passive) and video streaming.

Figure 35 shows similar results for total activity days. Again, the most popular activity is music streaming. The following activities account for more than 50% of the 326 total average activity days for consumers in Singapore: music streaming, messaging, mobile gaming, watching a livestream, social media (passive), video streaming, mobile banking, checking on work remotely, tracking health data, online banking, wearable technology and traffic-related app use.

Figure 36 reports the total activity days per pillar, by generation and by income. As in Brazil, millennials and Gen Z are almost tied for the most digitally engaged generation: 422 days for Gen Z versus 419 days for millennials. They far outpace Gen X which, with average activity days of 287, is two-thirds of Gen Z's results. As we've seen earlier with the pillar results, baby boomers are far behind: At 235 days, they represent just 56% of Gen Z's use. High-income earners are the most digitally active with 388 days, compared to 331 days for middle-income earners and 288 days for low-income earners.

FIGURE 35:

Top 10 activities
with the highest monthly average of activity days in Singapore

16.9	**Music streaming**
16.6	**Messaging**
16.5	**Mobile gaming**
16.2	**Watching a livestream**
15.9	**Social media** (passive)
14.5	**Video streaming**
14.5	**Mobile banking**
11.8	**Checking on work remotely after hours**
11.2	**Tracking health data**
11.2	**Online banking**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,190: Complete responses for Singapore, results come from four different surveys fielded each quarter of 2023

FIGURE 36:

Total activity days per pillar in Singapore,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**25.7**	**43.8**	**44.9**	**11.7**	**16.7**	**78.5**	**23.4**	**24.9**	**14.0**	**21.3**	**20.9**	**325.8**
GENERATION												
• **Generation Z**	28.4	58.2	57.5	15.4	22.7	98.5	31.9	36.1	22.2	27.9	23.3	**421.9**
• **Millennials**	30.0	56.8	55.6	16.5	22.6	96.0	35.1	34.7	20.8	27.6	23.3	**419.1**
• **Generation X**	25.2	36.2	41.4	9.5	14.3	73.8	17.9	20.6	11.0	18.3	18.7	**286.8**
• **Baby boomers**	20.0	34.3	33.0	7.5	10.7	56.7	13.9	15.6	8.3	14.9	19.4	**234.5**
INCOME												
• **High**	30.5	52.3	50.6	14.6	21.4	89.5	30.3	29.8	17.7	24.5	26.5	**387.5**
• **Middle**	25.2	45.9	43.8	12.4	17.6	79.7	23.8	26.2	14.3	22.0	19.7	**330.5**
• **Low**	23.2	37.7	42.4	9.6	13.5	71.7	19.3	21.4	11.8	19.1	17.9	**287.6**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,190: Complete responses for Singapore, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

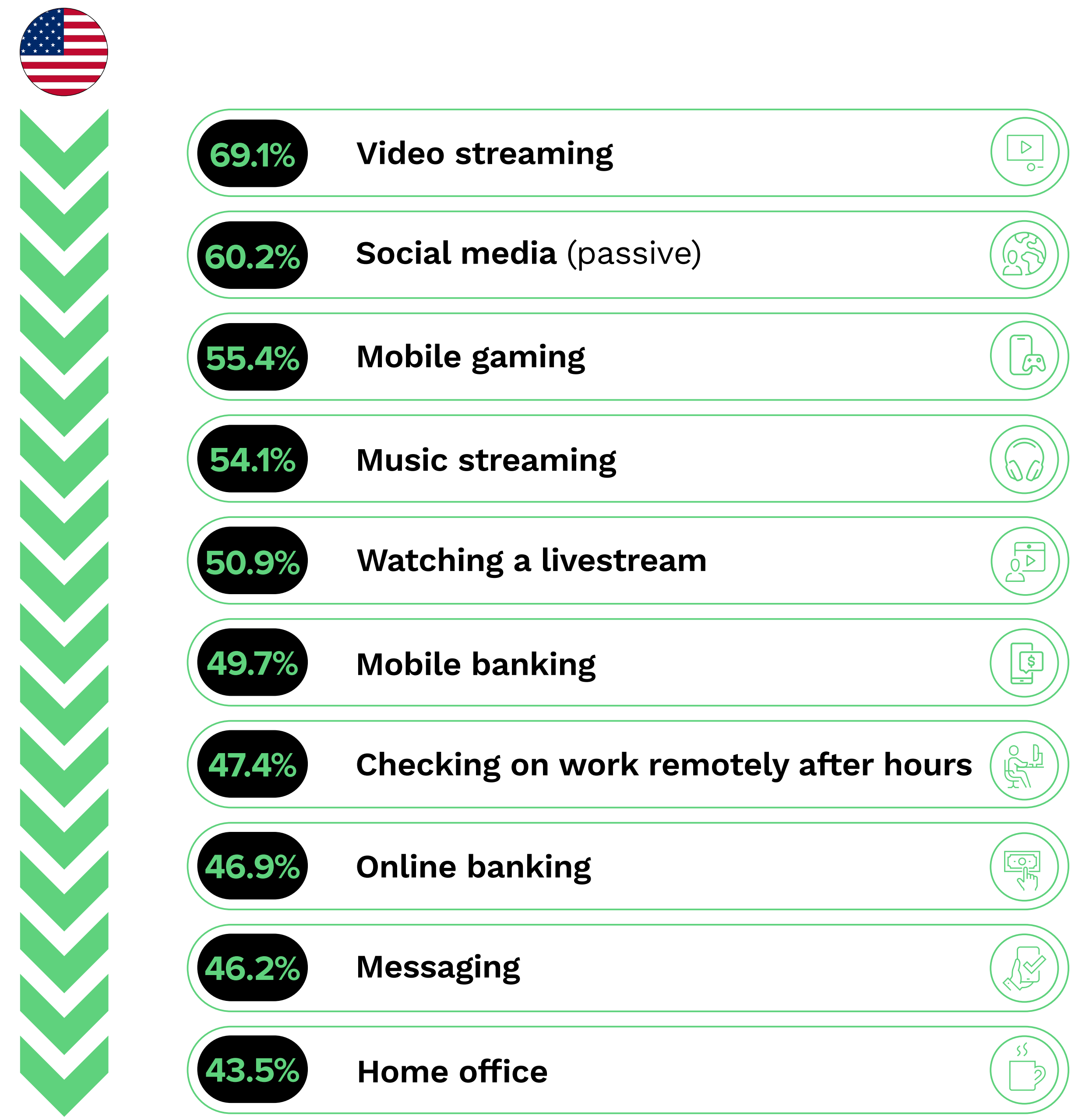
3. **United States**

The United States is where the commercial internet started. Many of the most successful digital businesses started in the U.S. It is one of the largest countries in the world. In 2023, it had the highest GDP per capita income in the world outside of a handful of small countries with populations of less than 10 million in 2022. By 2023, almost all households had access to high-speed broadband networks and at least 4G cellular; more than half had access to 5G networks by 2022. Ninety percent of adults had smartphones. Almost all adults had bank accounts; 93% had a debit card and 82% had a credit card. U.S. consumers have everything they need to engage in digital activities.

Figure 37 reports the rank-ordered list of activities based on the percent

FIGURE 37:

Top 10 activities,
by share of local consumers engaged at least weekly in the U.S.



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 12,581: Complete responses for the U.S., results come from four different surveys fielded each quarter of 2023

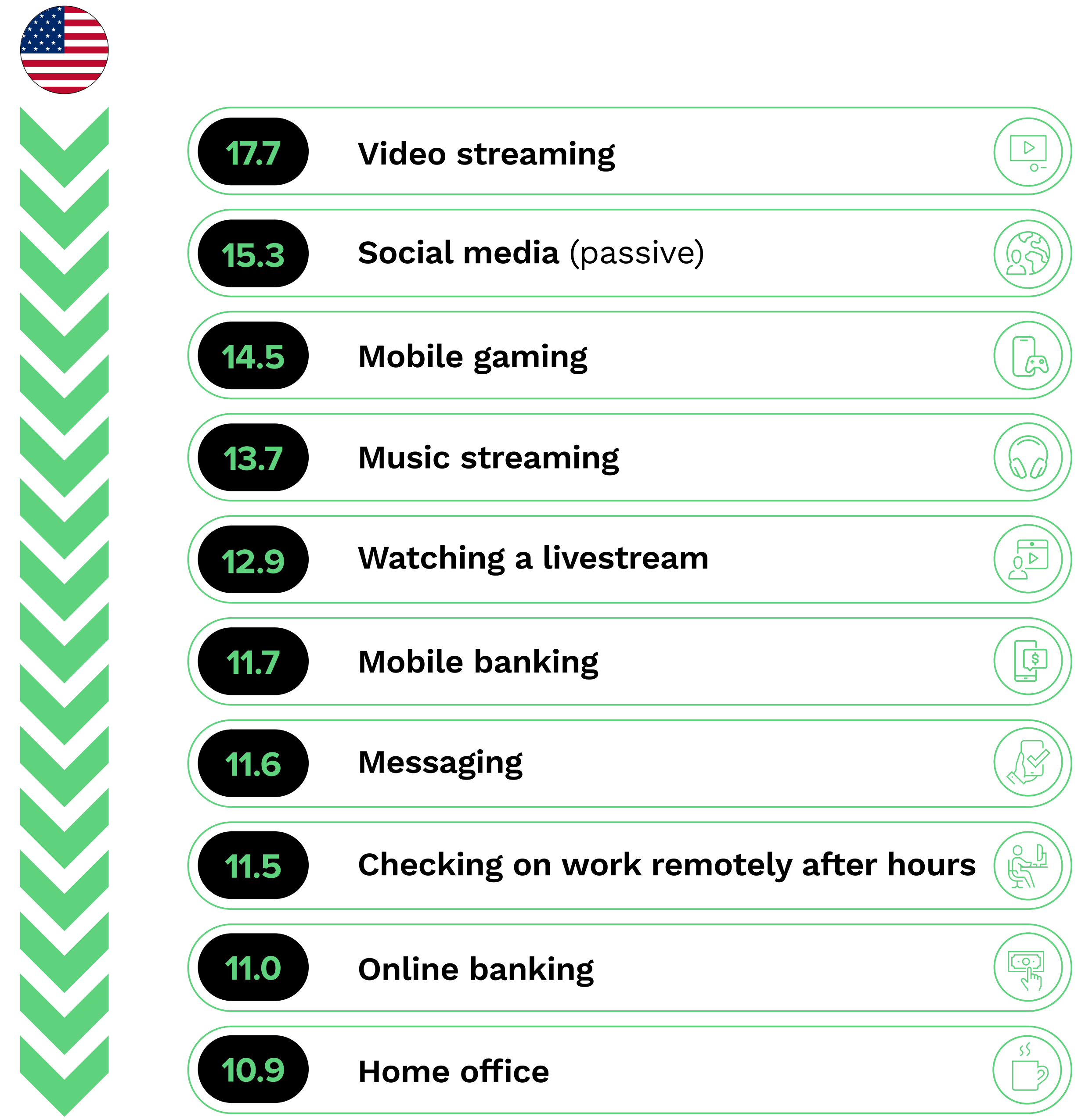
of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. More than 50% of the population engaged in five activities at least weekly: video streaming, social media (passive), mobile gaming, music streaming and watching a livestream.

Figure 38 shows similar results for total activity days. The most popular activity remains video streaming. The following activities account for more than 50% of the 315 total average activity days for consumers in the U.S.: video streaming, social media (passive), mobile gaming, music streaming, watching a livestream, mobile banking, messaging, checking on work remotely, online banking, home office use, social media (active), traffic-related app use and wearable technology.

We now turn to the pillars. Figure 39 reports the total activity days per pillar, by generation and by income. Millennials and Gen Z are almost tied for the most digitally engaged generations: 447 days for millennials versus 440 days for Gen Z. They far outpace Gen X which, with average activity days of 293, is about 65% of millennials. Baby boomers are far behind: at 168 days, their engagement represents just 37% of millennials' activity days. High-income earners are the most digitally active, with 380 days, compared to 310 days for middle-income earners and 241 days for low-income earners.

FIGURE 38:

Top 10 activities
with the highest monthly average of activity days in the U.S.



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 12,581: Complete responses for the U.S., results come from four different surveys fielded each quarter of 2023

FIGURE 39:

Total activity days per pillar in the U.S.
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**22.7**	**41.4**	**41.3**	**10.0**	**14.1**	**76.6**	**30.4**	**21.0**	**13.9**	**21.2**	**22.4**	**314.8**
GENERATION												
• **Generation Z**	26.1	64.2	56.1	16.0	21.3	99.0	46.7	34.8	22.5	29.6	24.0	**440.2**
• **Millennials**	28.9	64.7	55.1	17.2	22.2	99.2	47.5	33.9	22.7	30.6	24.8	**446.7**
• **Generation X**	23.0	35.4	39.5	8.1	12.8	78.6	26.3	17.3	11.3	19.4	20.9	**292.6**
• **Baby boomers**	16.3	16.9	25.3	2.9	5.4	48.1	12.4	7.3	4.9	11.2	17.5	**168.4**
INCOME												
• **High**	26.2	53.4	45.8	12.9	17.1	83.5	41.4	27.6	19.2	26.3	26.4	**379.8**
• **Middle**	23.2	40.3	40.8	9.8	14.4	76.8	29.1	20.6	13.4	20.8	20.7	**309.8**
• **Low**	18.2	28.4	36.4	6.9	10.5	68.3	18.9	13.6	8.0	15.3	16.6	**241.0**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 12,581: Complete responses for the U.S., results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

4. **Spain**

Spain is the fourth largest economy based on GDP in the European Union after Germany, France and Italy. It had a population of 48 million in 2022 and ranked 51st. Most consumers — 96.1% — had access to high-speed broadband in 2022. Almost everyone at least had access to 4G and about 55% had access to 5G that year. Nearly 90% of consumers had smartphones in 2023. Debit and credit cards are in widespread use, with more than 80% of adults having a debit card as of 2022. Spaniards have all they need to be digitally active.

Figure 40 reports the rank-ordered list of activities based on the percent of the population who engaged in the activities at least weekly. Video streaming was the most popular activity by this

FIGURE 40:

Top 10 activities,
by share of local consumers engaged at least weekly in Spain

70.2%	**Video streaming**
59.6%	**Messaging**
57.9%	**Mobile banking**
57.0%	**Social media** (passive)
55.7%	**Music streaming**
53.3%	**Mobile gaming**
53.2%	**Watching a livestream**
45.1%	**Online banking**
39.4%	**Social media** (active)
36.5%	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,873: Complete responses for Spain, results come from four different surveys fielded each quarter of 2023

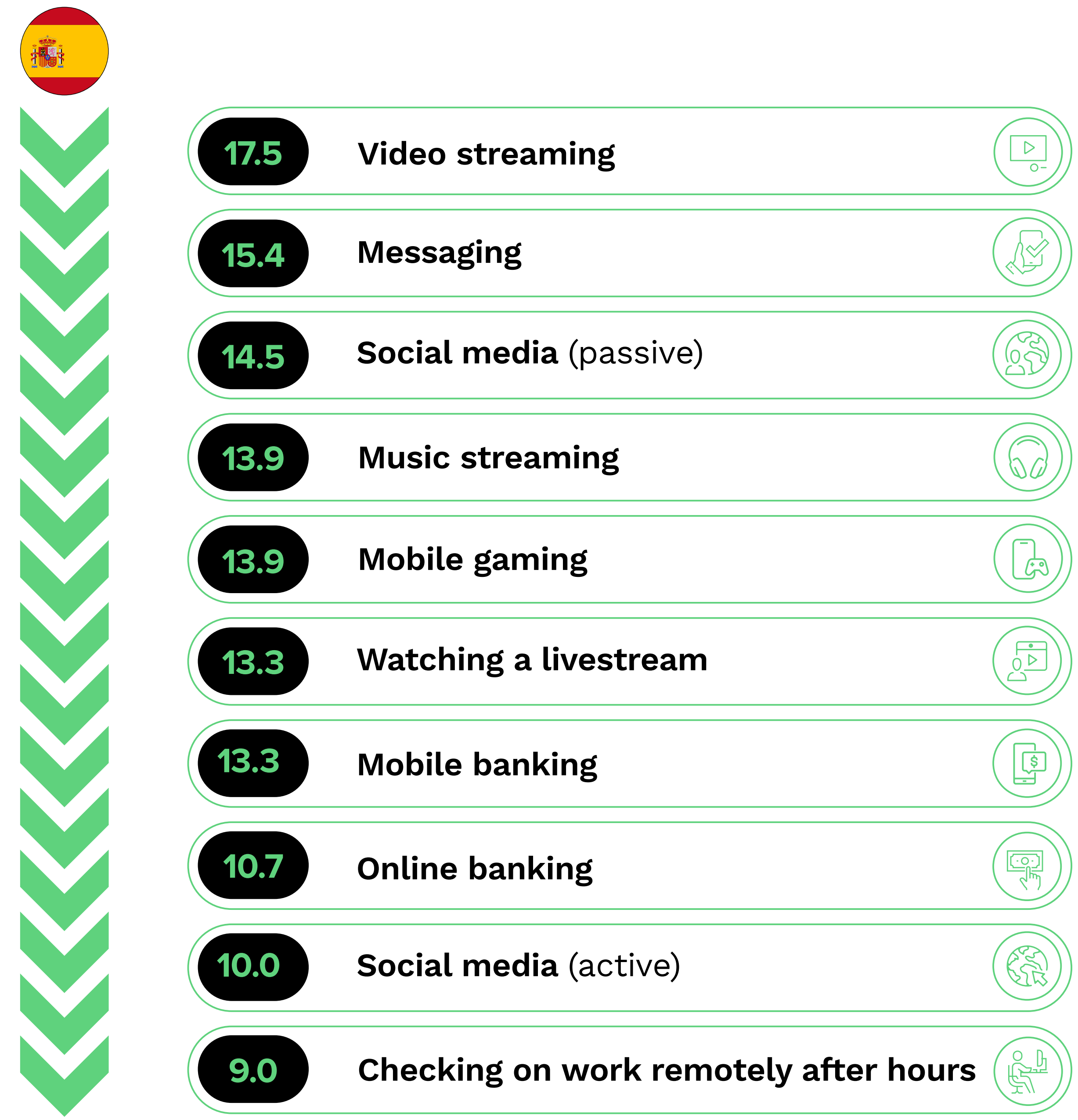
measure. More than 50% of the population engaged in the other six activities at least weekly: messaging, mobile banking, social media (passive), music streaming, mobile gaming and watching a livestream.

Figure 41 shows similar results for total activity days. The most popular activity, again, is video streaming. The following activities account for more than 50% of the 294 total average activity days for consumers in Spain: video streaming, messaging, social media (passive), music streaming, mobile gaming, watching a livestream, mobile banking, online banking, social media (active), checking on work remotely, traffic-related app use and computer gaming.

Figure 42 reports the total activity days per pillar, by generation and by income. Gen Z has the highest digital engagement among generations, with 438 activity days. Millennials are slightly behind at 384 days. There is then a big drop to 274 days for Gen X, representing 62% of Gen Z's share. And as we have seen elsewhere, baby boomers are far behind with 183 days — 42% of Gen Z. High-income earners are the most digitally active, with 311 days, compared to 293 days for middle-income earners and 277 days for low-income earners. Notably, the differences across income categories are more compressed here than seen in the other countries considered so far.

FIGURE 41:

Top 10 activities
with the highest monthly average of activity days in Spain



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,873: Complete responses for Spain, results come from four different surveys fielded each quarter of 2023

FIGURE 42:

Total activity days per pillar in Spain, by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**24.0**	**35.5**	**43.5**	**9.2**	**11.9**	**75.0**	**25.1**	**20.2**	**13.7**	**19.2**	**16.5**	**293.8**
GENERATION												
• **Generation Z**	25.5	63.0	58.5	14.5	18.8	103.0	44.0	36.1	23.7	29.3	21.5	**437.8**
• **Millennials**	28.3	50.0	52.8	13.3	17.2	92.3	37.5	28.0	19.6	26.1	18.7	**383.9**
• **Generation X**	25.6	29.9	40.8	8.3	11.6	75.7	21.7	17.3	11.6	17.7	14.0	**274.0**
• **Baby boomers**	18.5	18.0	32.9	4.8	5.4	49.8	11.0	10.7	7.4	11.0	13.4	**182.9**
INCOME												
• **High**	25.4	35.1	45.5	9.5	13.4	81.5	25.9	22.3	14.6	20.3	17.4	**310.9**
• **Middle**	24.3	35.8	42.8	9.1	11.9	74.9	25.3	19.6	13.7	19.0	16.1	**292.7**
• **Low**	21.9	35.3	42.2	9.1	10.5	68.1	24.1	18.92	12.8	18.2	16.1	**277.2**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,873: Complete responses for Spain, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

5. Italy

Italy is the third largest economy based on GDP in the European Union after Germany and France. It had 59 million consumers in 2022 and ranked 44th in per capita GDP. About 88% of Italians had access to high-speed broadband in 2022. Almost all Italians had access to 4G and 40% to 5G cellular networks by 2022. Almost all adults had smartphones. In 2022, 83% of Italian adults had debit cards, which is a bit low relative to other developed countries.

Figure 43 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Messaging was the most popular activity by this

FIGURE 43:

Top 10 activities,
by share of local consumers engaged at least weekly in Italy

68.0%	**Messaging**
59.4%	**Video streaming**
53.0%	**Social media** (passive)
48.7%	**Watching a livestream**
47.9%	**Mobile gaming**
44.9%	**Music streaming**
41.9%	**Mobile banking**
41.2%	**Social media** (active)
37.9%	**Computer gaming**
37.3%	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,056: Complete responses for Italy, results come from four different surveys fielded each quarter of 2023

measure. More than 50% of the population engaged in two more activities at least weekly: video streaming and social media (passive).

Figure 44 shows similar results for total activity days. The most popular activity is still messaging. The following activities account for more than 50% of the 280 total average activity days for consumers in Italy: messaging, video streaming, social media (passive), watching a livestream, mobile gaming, music streaming, social media (active), mobile banking, checking on work remotely, computer gaming, online banking and traffic-related app use.

Figure 45 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 435 activity days. Millennials were 68 days behind at 367 days. There is then a big drop off to 281 days for Gen X, representing 64% of Gen Z. As with other countries, baby boomers are far behind, with 178 days — 41% of Gen Z. High-income earners are the most digitally active, with 288 days, compared to 285 days for middle-income earners and 264 days for low-income earners. Like Spain, the differences across income categories are more compressed than the other countries considered so far.

FIGURE 44:

Top 10 activities
with the highest monthly average of activity days in Italy

18.2	**Messaging**
14.6	**Video streaming**
13.7	**Social media** (passive)
12.4	**Watching a livestream**
12.2	**Mobile gaming**
11.2	**Music streaming**
10.5	**Social media** (active)
10.1	**Mobile banking**
9.6	**Checking on work remotely after hours**
9.2	**Computer gaming**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,056: Complete responses for Italy, results come from four different surveys fielded each quarter of 2023

FIGURE 45:

Total activity days per pillar in Italy, by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**19.3**	**33.2**	**45.9**	**8.8**	**10.5**	**66.4**	**25.9**	**20.2**	**13.6**	**17.6**	**18.2**	**279.6**
GENERATION												
• **Generation Z**	24.3	59.6	59.1	15.6	19.0	99.5	42.4	38.7	25.7	29.3	22.1	**435.2**
• **Millennials**	23.6	47.0	54.9	12.4	15.8	85.5	35.6	28.0	19.1	24.6	20.4	**366.8**
• **Generation X**	20.0	33.6	46.5	8.8	10.6	67.3	26.8	19.4	13.3	17.5	17.0	**280.8**
• **Baby boomers**	14.8	16.9	36.3	4.5	4.8	44.8	14.5	10.9	7.0	9.9	13.5	**177.9**
INCOME												
• **High**	21.2	33.3	46.6	8.6	11.0	68.5	27.1	20.6	14.0	17.8	18.7	**287.5**
• **Middle**	19.9	34.6	46.4	9.0	10.6	67.2	26.3	21.0	14.6	18.1	17.3	**284.9**
• **Low**	16.1	31.6	44.7	8.8	9.7	62.8	24.0	18.8	11.9	16.8	18.8	**263.9**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,056: Complete responses for Italy, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

6. United Kingdom

The United Kingdom, the median country in this report, was the ninth largest economy the world based on GDP. It had a population of 67 million in 2022 and ranked 38th in per capita GDP. About 95.9% of U.K. residents had access to high-speed broadband in 2022. Almost all had access to at least 4G cellular networks by 2022 and 68% had access to 5G in 2022. Almost all adults had smartphones. In 2021, 95.5% of U.K. adults had debit cards and 62.1% had credit cards.

FIGURE 46:

Top 10 activities,
by share of local consumers engaged at least weekly in the U.K.

66.7%	**Video streaming**
61.1%	**Mobile banking**
59.7%	**Social media** (passive)
53.7%	**Messaging**
50.3%	**Mobile gaming**
50.2%	**Music streaming**
45.8%	**Watching a livestream**
43.5%	**Online banking**
39.1%	**Home office**
37.7%	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,546: Complete responses for the U.K., results come from four different surveys fielded each quarter of 2023

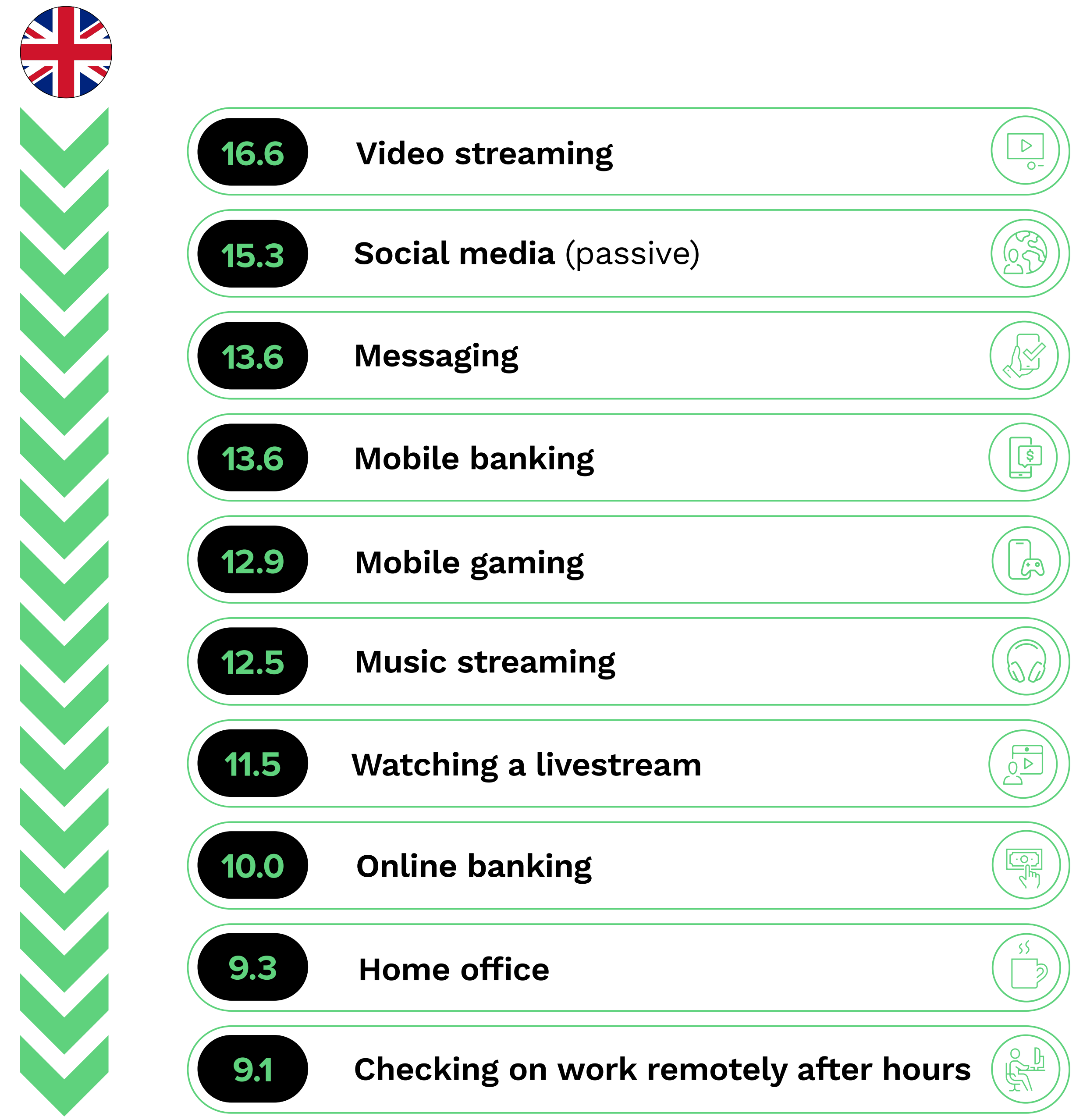
Figure 46 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. More than 50% of the population engaged in five other activities at least weekly: mobile banking, social media (passive), messaging, mobile gaming and music streaming.

Figure 47 shows similar results for total activity days. Again, the most popular activity is video streaming. The following activities account for more than 50% of the 276 total average activity days for consumers in the U.K.: video streaming, social media (passive), messaging, mobile banking, mobile gaming, music streaming, watching a livestream, online banking, home office use, checking on work remotely after hours, social media (active) and shopping on a marketplace.

Figure 48 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 427 activity days. Millennials were 69 days behind, at 358 days. Gen X, at 247 days, represents 58% of Gen Z's share. Baby boomers, at 146 days, represent 34% of Gen Z. High-income earners are the most digitally active, with 295 days, compared to 275 days for middle-income earners and 252 days for low-income earners.

FIGURE 47:

Top 10 activities
with the highest monthly average of activity days in the U.K..



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,546: Complete responses for the U.K., results come from four different surveys fielded each quarter of 2023

FIGURE 48:

Total activity days per pillar in the U.K.
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**23.5**	**31.8**	**40.7**	**9.5**	**12.0**	**68.0**	**22.7**	**18.4**	**11.9**	**19.3**	**18.4**	**276.2**
GENERATION												
• **Generation Z**	26.6	57.6	57.4	15.5	22.1	97.4	41.4	36.7	22.8	28.7	20.4	**426.7**
• **Millennials**	28.2	44.3	51.4	12.6	17.3	87.9	30.4	25.6	15.9	24.2	20.4	**358.1**
• **Generation X**	22.9	26.0	36.9	8.3	10.0	65.7	19.3	14.2	9.3	17.0	17.4	**247.1**
• **Baby boomers**	17.8	12.5	25.9	4.7	3.9	37.4	9.1	6.5	5.2	10.1	12.8	**145.9**
INCOME												
• **High**	24.8	35.4	41.4	10.3	12.8	70.0	26.2	19.9	13.2	20.6	20.0	**294.7**
• **Middle**	23.7	31.7	40.6	9.5	12.1	68.6	22.1	18.7	11.9	19.0	17.6	**275.4**
• **Low**	21.3	27.2	39.9	8.3	10.7	64.1	19.3	16.0	10.3	17.9	16.9	**251.7**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,546: Complete responses for the U.K., results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

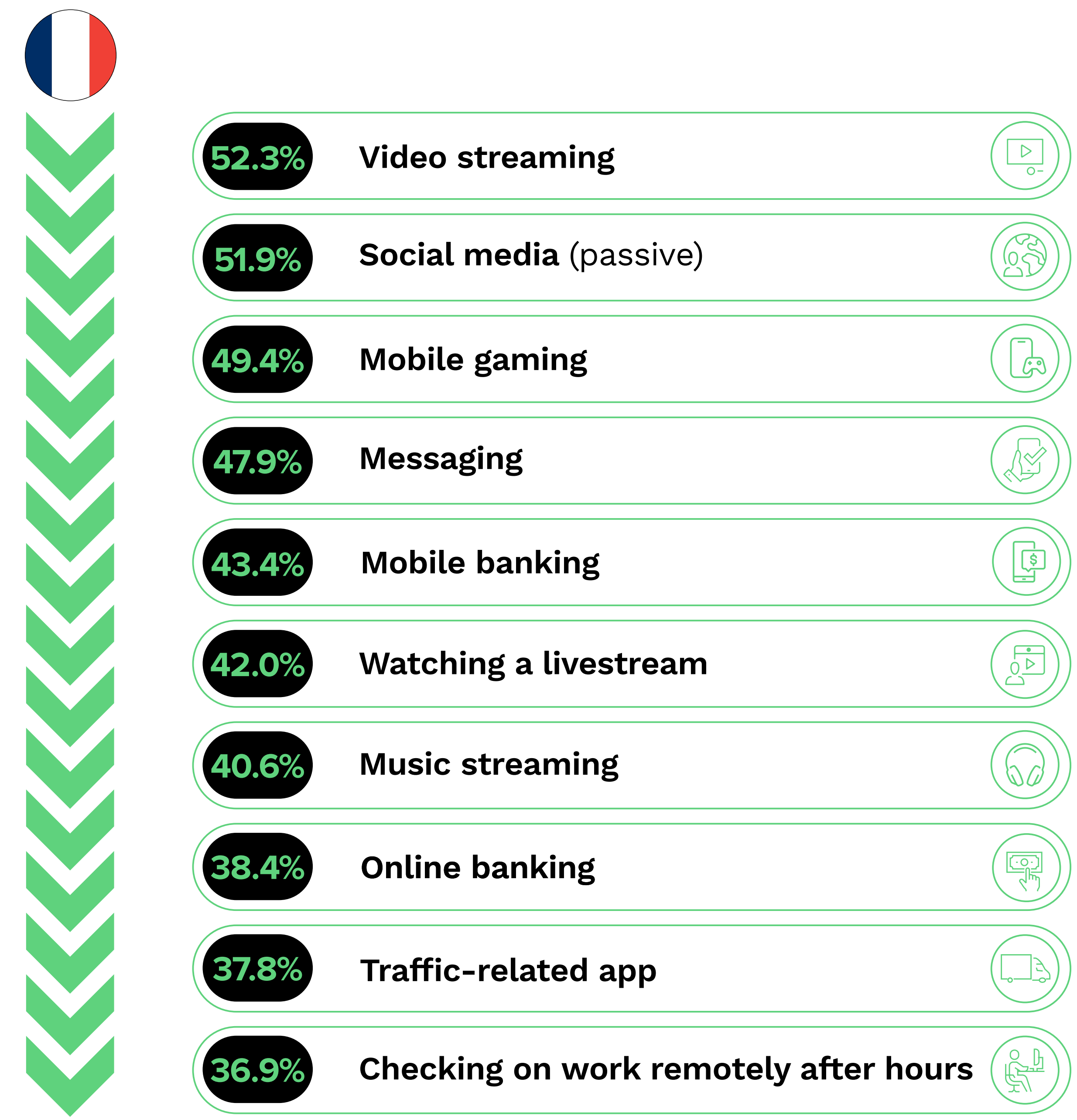
7. France

France, following the U.K., is the first of four countries below the median.

France is the second largest economy in the EU based on GDP. It had a population of 68 million in 2022 and ranked 39th in per capita GDP. About 87.3% of France residents had access to high-speed broadband in 2022. Almost all had access to at least 4G cellular networks by 2022, and 45% had access to 5G. Almost all adults had smartphones. In 2021, 86.3% of adults had debit cards.

FIGURE 49:

Top 10 activities,
by share of local consumers engaged at least weekly in France



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 8,003: Complete responses for France, results come from four different surveys fielded each quarter of 2023

Figure 49 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. Only one other activity — social media (passive) — had at least 50% engagement by this measure.

Figure 50 shows similar results for total activity days. The most popular activity is social media (passive). It takes 13 activities to get to more than 50% of the 272 total average activity days for consumers in France: social media (passive), video streaming, mobile gaming, messaging, mobile banking, watching a livestream, music streaming, online banking, traffic-related app use, checking on work remotely after hours, social media (active), computer gaming and home office use.

Figure 51 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 465 activity days — the highest engagement by Gen Z in any country. Millennials were 87 days behind, at 378 days. Gen X, at 256 days, represented 55% of Gen Z's share. Baby boomers, at 150 days, represented just 32% of Gen Z. There are minimal differences by income. High-income earners are the most digitally active, with 276 days, compared to 273 days for middle-income earners and 268 days for low-income earners.

FIGURE 50:

Top 10 activities
with the highest monthly average of activity days in France

13.3	**Social media** (passive)
13.2	**Video streaming**
13.1	**Mobile gaming**
12.1	**Messaging**
11.0	**Mobile banking**
10.8	**Watching a livestream**
10.4	**Music streaming**
10.3	**Online banking**
9.7	**Traffic-related app**
9.2	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 8,003: Complete responses for France, results come from four different surveys fielded each quarter of 2023

FIGURE 51:

Total activity days per pillar in France,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**21.3**	**36.4**	**38.4**	**8.4**	**10.8**	**63.2**	**22.6**	**21.1**	**14.4**	**18.0**	**17.1**	**271.8**
GENERATION												
• **Generation Z**	26.5	69.2	59.2	18.2	22.3	96.5	47.4	42.4	29.3	30.9	23.0	**464.8**
• **Millennials**	26.3	53.0	52.6	12.9	17.5	85.5	33.7	30.8	20.5	26.1	19.7	**378.4**
• **Generation X**	21.8	33.7	36.8	7.7	9.7	64.3	19.7	18.7	12.6	16.8	14.2	**256.1**
• **Baby boomers**	16.0	17.4	24.0	3.1	3.6	37.5	9.9	10.1	7.1	9.3	12.2	**150.0**
INCOME												
• **High**	22.6	35.5	37.3	7.7	10.2	65.6	23.5	22.0	14.7	18.0	18.4	**275.5**
• **Middle**	21.5	36.6	38.6	8.5	10.8	63.3	23.1	21.2	14.7	17.8	16.5	**272.6**
• **Low**	19.8	37.0	39.2	9.1	11.2	61.1	21.3	20.3	13.7	18.3	16.6	**267.6**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 8,003: Complete responses for France, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

8. **Australia**

Australia, with a population of 26 million, was the 21st largest economy in the world based on GDP and the 30th by per capita GDP. Almost everyone in the country had access to high-speed broadband and 4G cellular networks in 2022, and almost all adults had smartphones. In 2021, 95.9% of adults had debit cards.

FIGURE 52:

Top 10 activities,
by share of local consumers engaged at least weekly in Australia

67.8%	**Video streaming**
64.7%	**Mobile banking**
60.8%	**Social media** (passive)
54.9%	**Music streaming**
53.0%	**Online banking**
51.1%	**Watching a livestream**
50.4%	**Messaging**
49.0%	**Mobile gaming**
38.7%	**Checking on work remotely after hours**
35.3%	**Traffic-related app**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,562: Complete responses for Australia, results come from four different surveys fielded each quarter of 2023

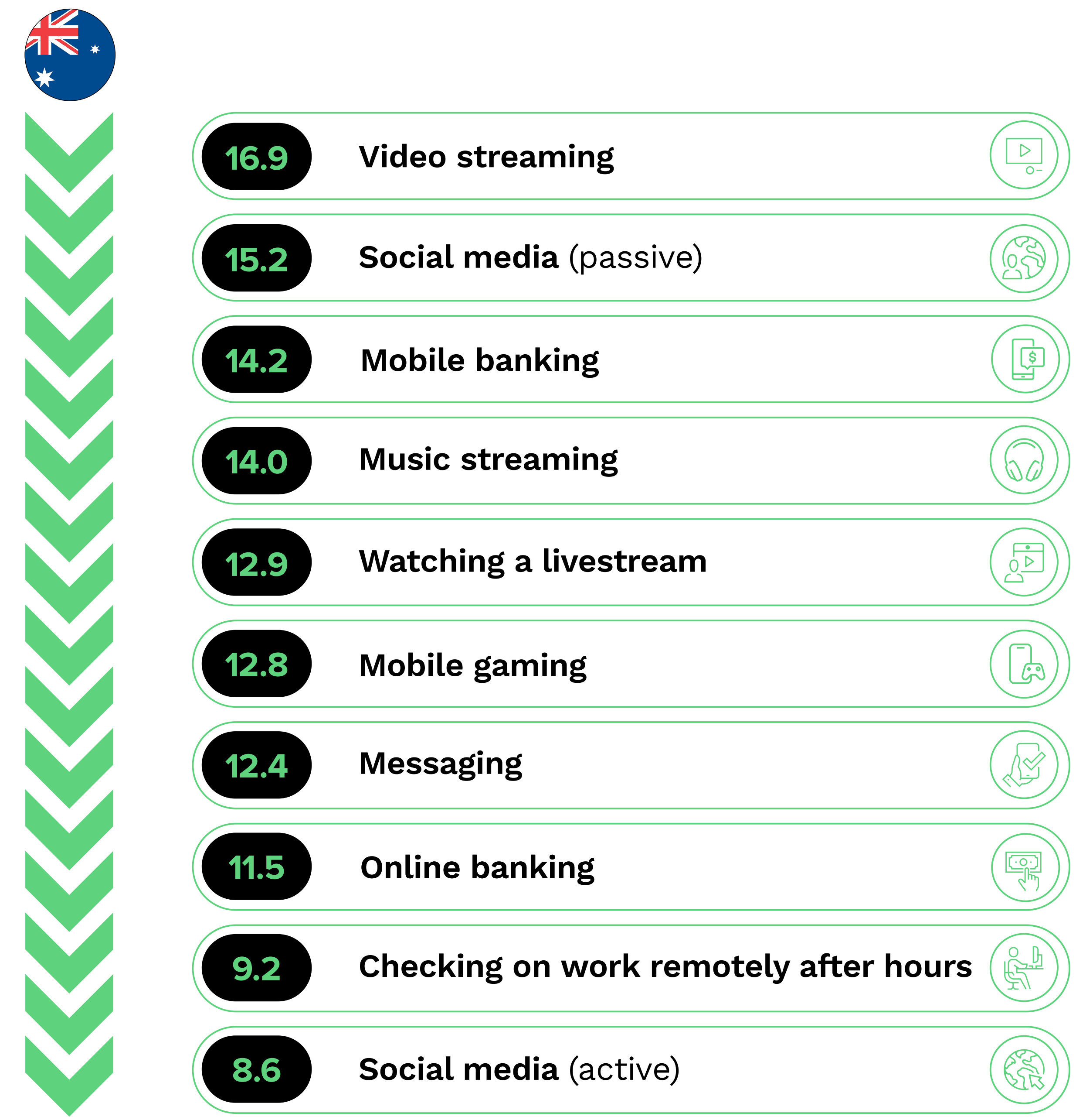
Figure 52 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. More than 50% of the population engaged in six other activities at least weekly: mobile banking, social media (passive), music streaming, online banking, watching a livestream and messaging.

Figure 53 shows similar results for total activity days. The most popular activity remains video streaming. Eleven account for more than 50% of the 268 total average activity days for consumers in the Australia: video streaming, social media (passive), mobile banking, music streaming, watching a livestream, mobile gaming, messaging, online banking, checking on work remotely after hours, social media (active) and traffic-related app use.

Figure 54 reports the total activity days per pillar, by generation and by income. Gen Z had the highest digital engagement among generations, with 393 activity days. Millennials were 38 days behind, at 355 days. Gen X, at 244 days, represented 62% of Gen Z's share. Baby boomers, at 138 days, represented 35% of Gen Z. High-income earners are the most digitally active, with 211 days, compared to 298 days for middle-income earners and 232 days for low-income earners.

FIGURE 53:

Top 10 activities
with the highest monthly average of activity days in Australia



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,562: Complete responses for Australia, results come from four different surveys fielded each quarter of 2023

FIGURE 54:

Total activity days per pillar in Australia,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**25.8**	**31.6**	**39.2**	**8.0**	**12.3**	**71.6**	**18.7**	**18.0**	**10.7**	**14.8**	**17.7**	**268.4**
GENERATION												
• **Generation Z**	28.0	53.5	55.3	12.3	20.8	95.6	33.4	32.3	19.6	23.1	18.8	**392.8**
• **Millennials**	31.3	43.7	51.0	11.8	17.8	91.6	27.2	25.9	15.0	20.4	19.2	**354.8**
• **Generation X**	26.2	26.7	35.6	6.7	11.1	70.3	14.4	15.2	8.3	13.0	16.3	**243.8**
• **Baby boomers**	18.8	12.5	22.5	3.2	3.8	40.4	6.4	5.8	4.5	6.3	13.6	**137.8**
INCOME												
• **High**	29.3	37.9	42.5	10.1	14.8	76.7	24.5	22.3	14.2	17.3	21.6	**311.3**
• **Middle**	28.8	36.9	43.6	8.8	13.9	79.3	21.5	21.2	12.2	16.3	15.9	**298.4**
• **Low**	22.6	26.1	35.4	6.6	10.4	65.0	14.7	14.4	8.4	12.8	15.8	**232.3**

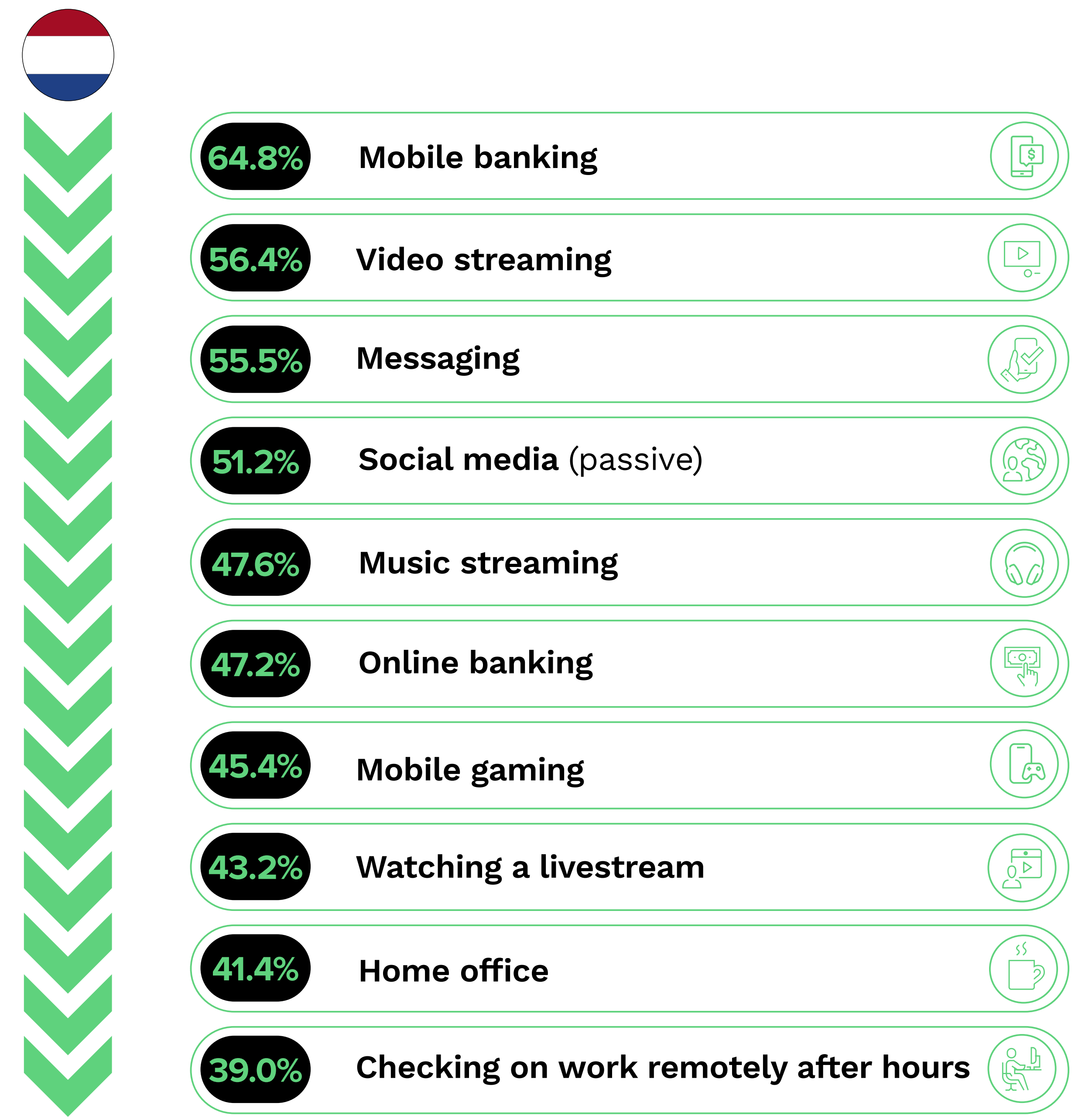
Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,562: Complete responses for Australia, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

9. Netherlands

The Netherlands is the fifth largest economy in the EU based on GDP. It had a population of 18 million in 2022 and ranked 18th, behind Denmark, in per capita GDP adjusted. About 98% of residents had access to high-speed broadband in 2022. Almost all had access to at least 4G cellular networks by 2022 and 61 percent had access to 5G. Almost all adults had smartphones. In 2022, almost all adults had debit cards. The Netherlands also innovated an online payment network, IDEAL, enabling consumers to pay online from their bank accounts.

FIGURE 55:

Top 10 activities,
by share of local consumers engaged at least weekly in the Netherlands



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 3,972: Complete responses for the Netherlands, results come from four different surveys fielded each quarter of 2023

Figure 55 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Mobile banking was the most popular activity by this measure. More than 50% of the population engaged in three other activities at least weekly: video streaming, messaging and social media (passive).

Figure 56 shows similar results for total activity days. The most popular activity is still mobile banking. Twelve activities account for more than 50% of the 261 total average activity days for consumers in the Netherlands: mobile banking, messaging, video streaming, social media (passive), music streaming, mobile gaming, online banking, watching a livestream, home office use, checking on work remotely after hours, traffic-related app use and computer gaming.

Figure 57 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 421 activity days. Millennials were 67 days behind, at 354 days. Gen X, at 246 days, represents 58% of Gen Z's total activity days. Baby boomers, at 138 days, represent just 33% of Gen Z. High-income earners are the most digitally active, with 275 days, compared to 274 days for middle-income earners and 239 days for low-income earners.

FIGURE 56:

Top 10 activities
with the highest monthly average of activity days in the Netherlands

14.2	**Mobile banking**
14.1	**Messaging**
13.9	**Video streaming**
13.1	**Social media** (passive)
12.0	**Music streaming**
11.8	**Mobile gaming**
11.1	**Online banking**
10.9	**Watching a livestream**
9.8	**Home office**
9.5	**Checking on work remotely after hours**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 3,972: Complete responses for the Netherlands, results come from four different surveys fielded each quarter of 2023

FIGURE 57:

Total activity days per pillar in Netherlands,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**25.4**	**29.1**	**38.5**	**8.6**	**12.2**	**62.8**	**19.9**	**18.2**	**11.7**	**15.6**	**19.3**	**261.2**
GENERATION												
• **Generation Z**	30.6	57.3	54.7	15.8	21.3	94.0	39.9	35.5	23.3	27.3	21.5	**421.0**
• **Millennials**	29.9	44.7	48.5	12.9	17.9	83.3	29.5	27.1	17.0	21.2	21.7	**353.7**
• **Generation X**	25.0	24.2	38.8	7.5	11.9	64.1	17.4	15.1	9.7	14.0	18.7	**246.4**
• **Baby boomers**	20.7	9.4	25.5	3.6	4.8	34.8	7.1	7.5	5.0	8.3	11.7	**138.4**
INCOME												
• **High**	27.0	28.3	39.3	9.2	12.6	66.9	21.9	19.2	12.6	16.6	20.9	**274.6**
• **Middle**	26.2	32.0	39.7	9.0	12.7	65.7	21.3	19.8	12.6	16.2	18.7	**274.0**
• **Low**	23.5	26.2	36.8	7.8	11.4	57.1	17.2	15.7	10.1	14.2	18.7	**238.7**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 3,972: Complete responses for the Netherlands, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

10. **Germany**

Germany is in next-to-last place for digital engagement of the 11 countries in this report.

Germany is largest economy in the EU based on GDP. It had a population of 84 million in 2022 and ranked 25th in per capita GDP. About 91.7% of German residents had access to high-speed broadband in 2022. Almost everyone had access to at least 4G cellular networks by 2022 and 40% had access to 5G. About 90% of adults had smartphones. In 2021, 94% of adults had debit cards. Germans, however, tend to use cash more than most developed countries for payments: Based on our survey, 37% of Germans used cash for their last physical transaction, compared to 14% in France and 20%, on average, across all countries.

FIGURE 58:

Top 10 activities,
by share of local consumers engaged at least weekly in Germany

51.6%	**Video streaming**
49.3%	**Messaging**
42.2%	**Online banking**
41.9%	**Music streaming**
41.3%	**Mobile banking**
39.9%	**Mobile gaming**
36.1%	**Watching a livestream**
35.5%	**Home office**
35.3%	**Social media** (passive)
31.4%	**Computer gaming**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,460: Complete responses for Germany, results come from four different surveys fielded each quarter of 2023

Figure 58 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. Video streaming was the most popular activity by this measure. No other activity was used at least weekly for 50% or more of the population. The second-most popular activity was messaging, which 49.3% of the population engaged in at least weekly.

Figure 59 shows the results for total activity days. The most popular activity is messaging. Thirteen activities account for more than 50% of the 233 total average activity days for consumers in the Germany: messaging, video streaming, music streaming, mobile gaming, online banking, watching a livestream, mobile banking, social media (passive), home office use, shopping on a marketplace, computer gaming, checking on work remotely after hours and traffic-related app use.

Figure 60 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 439 activity days. Millennials were 93 days behind, at 346 days. Gen X, at 211 days, represents 48% of Gen Z's share. Baby boomers, at 118 days, represent just 27% of Gen Z. High-income earners are the most digitally active, with 249 days, compared to 247 days for middle-income earners, and 213 days for low-income earners.

FIGURE 59:

Top 10 activities
with the highest monthly average of activity days in Germany

12.3	**Messaging**
12.2	**Video streaming**
10.3	**Music streaming**
10.1	**Mobile gaming**
9.4	**Online banking**
9.1	**Watching a livestream**
9.0	**Mobile banking**
8.7	**Social media** (passive)
8.3	**Home office**
7.9	**Shopping on a marketplace**

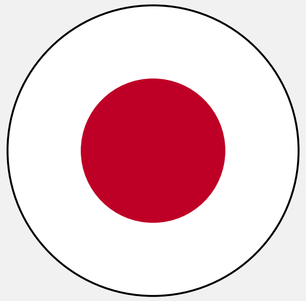
Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,460: Complete responses for Germany, results come from four different surveys fielded each quarter of 2023

FIGURE 60:

Total activity days per pillar in Germany,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**18.4**	**29.9**	**31.3**	**7.7**	**9.7**	**55.6**	**19.5**	**16.9**	**10.6**	**18.1**	**15.1**	**232.8**
GENERATION												
• **Generation Z**	25.2	67.9	51.9	17.0	20.8	90.9	45.5	41.3	25.5	31.5	21.3	**438.6**
• **Millennials**	23.3	49.4	43.6	12.5	16.7	82.1	31.4	27.2	17.0	24.7	17.6	**345.5**
• **Generation X**	18.4	24.3	30.9	6.6	8.4	55.1	16.5	13.6	8.6	16.6	12.5	**211.4**
• **Baby boomers**	13.4	11.1	18.2	2.9	3.2	30.0	7.1	6.2	4.0	11.0	11.2	**118.4**
INCOME												
• **High**	21.6	32.4	31.9	7.6	10.2	60.2	21.9	17.6	10.6	19.4	15.7	**249.2**
• **Middle**	19.5	31.8	31.3	8.4	10.7	57.8	22.6	18.4	11.7	19.5	15.4	**247.1**
• **Low**	16.2	27.3	31.1	7.0	8.6	52.0	15.6	15.1	9.5	16.2	14.5	**213.1**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,460: Complete responses for Germany, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.



11. **Japan**

Japan is in last place for digital engagement.

Japan is the fourth largest country in the world in GDP adjusted for PPP. It had a population of 125 million in 2022 and ranked 47th in per capita GDP. About 94% of Japanese residents had access to high-speed broadband in 2022. Almost everyone had access to at least 4G cellular networks by 2022 and 65% had access to 5G. About 77% of adults had smartphones. In 2021, 88.3% of adults had debit cards and 69.7% had credit cards.

FIGURE 61:

Top 10 activities,
by share of local consumers engaged at least weekly in Japan

38.1%	**Messaging**
32.6%	**Watching a livestream**
30.0%	**Mobile gaming**
26.0%	**Video streaming**
22.7%	**Social media** (passive)
20.4%	**Music streaming**
19.9%	**Checking on work remotely after hours**
15.5%	**Home office**
14.9%	**Computer gaming**
14.9%	**Traffic-related app**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,679: Complete responses for Japan, results come from four different surveys fielded each quarter of 2023

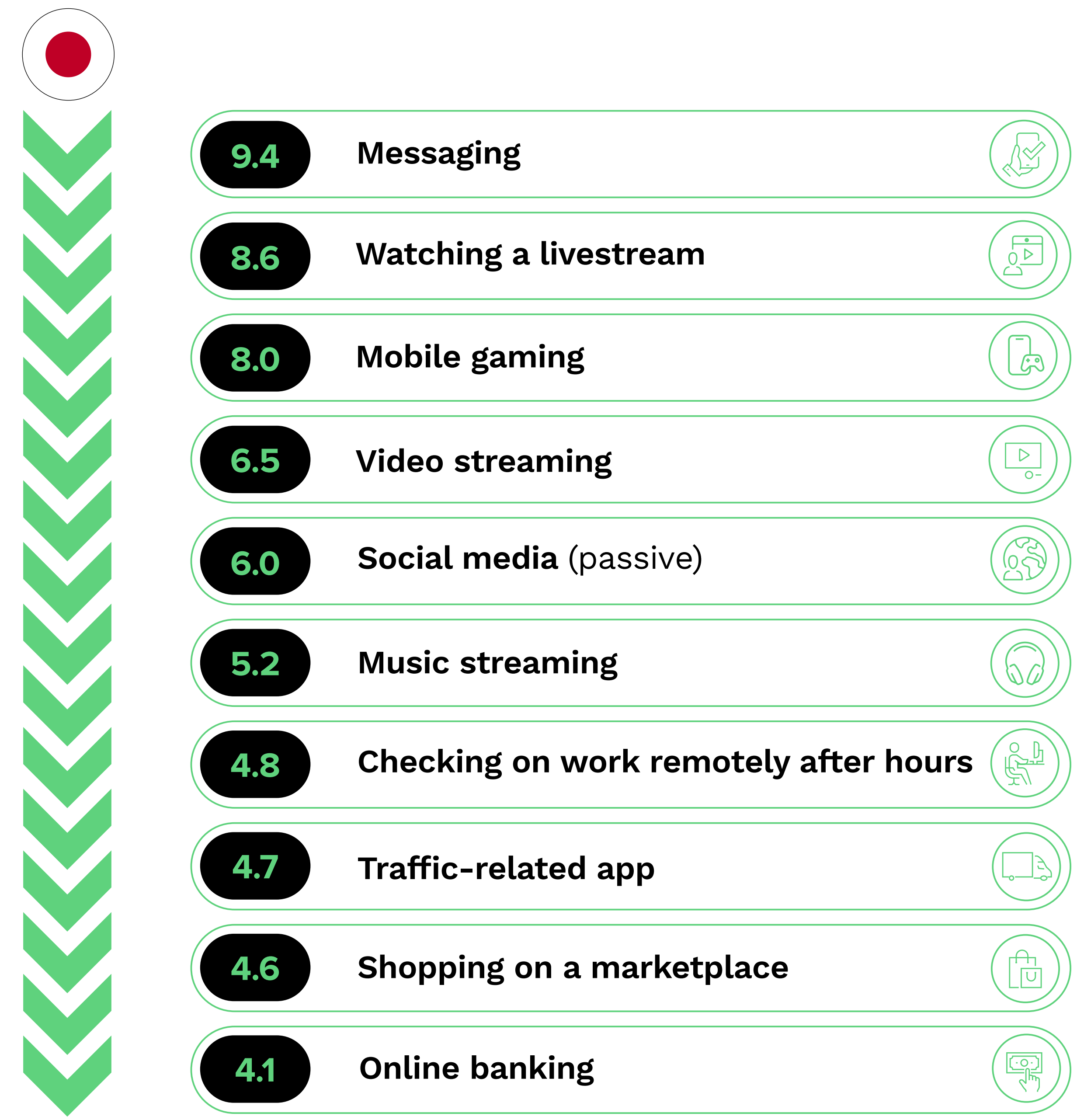
Figure 61 reports the rank-ordered list of activities based on the percent of the population who engaged in these activities at least weekly. No activity was used by 50% of the population at least weekly. Messaging was the most popular activity by this measure, at 38.1%.

Figure 62 shows the results for total activity days. The most popular activity remains messaging. Eleven activities account for more than 50% of the 127 total average activity days for consumers in Japan: messaging, watching a livestream, mobile gaming, video streaming, social media (passive), checking on work remotely after hours, traffic-related app use, shopping on a marketplace, online banking and online shopping.

Figure 63 reports the total activity days per pillar, by generation and by income. Gen Z has by far the highest digital engagement among generations, with 244 activity days. Millennials, at 178 days, represented 73% of Gen Z's activity days. Gen X, at 112 days, represented 46% of Gen Z, and baby boomers, at 87 days, represented just 36% of Gen Z. There are substantial income differences. High-income earners are the most digitally active, with 159 days, compared to 122 days for middle-income earners and 96 days for low-income earners.

FIGURE 62:

Top 10 activities
with the highest monthly average of activity days in Japan



Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,679: Complete responses for Japan, results come from four different surveys fielded each quarter of 2023

FIGURE 63:

Total activity days per pillar in Japan,
by demographic

	BANK	BE WELL	COMMUNICATE	EAT (GROCERIES)	EAT (RESTAURANTS)	HAVE FUN	LIVE	MOBILITY	TRAVEL	SHOP	WORK	TOTAL
SAMPLE	**8.1**	**12.1**	**20.1**	**5.0**	**3.7**	**35.7**	**8.7**	**8.6**	**5.8**	**10.3**	**8.5**	**126.6**
GENERATION												
• **Generation Z**	10.0	27.1	39.0	9.2	9.2	67.3	20.6	17.6	12.0	18.7	13.7	**244.3**
• **Millennials**	9.6	16.5	29.4	5.9	6.1	53.8	12.0	12.6	8.4	13.1	10.4	**177.7**
• **Generation X**	8.4	10.2	18.3	3.9	2.9	33.3	7.0	7.0	4.5	9.0	7.6	**112.1**
• **Baby boomers**	6.9	8.6	12.4	4.7	2.1	21.2	5.6	6.2	4.8	8.4	6.3	**87.2**
INCOME												
• **High**	9.9	16.5	23.0	6.6	5.2	39.0	13.2	12.0	8.4	13.5	11.3	**158.6**
• **Middle**	8.1	11.2	20.4	5.2	3.5	35.9	7.0	8.1	5.5	9.5	7.6	**121.9**
• **Low**	6.2	8.4	16.8	3.3	2.5	31.9	5.3	5.4	3.5	7.7	5.4	**96.4**

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,679: Complete responses for Japan, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

C. **The generational divide**

It is apparent from the deep dives into the countries that there are vast relative differences between engagement with digital activities in the countries, just as there were between pillars. It is useful to summarize digital engagement by generation for the countries. Figure 64 reports the average number of days that each generation spent on digital activities during a month (counting each day they engage in a single activity) overall and for each generation.

The digital engagement "winners," based on total activity days, vary by generation. France is the winner for Gen Z, who have 464.8 activity day per month. French Gen Z consumers use about 15.5 activities a day. For millennials, the U.S. is the winner, with 446.7 activity days and 14.9 activities per day. Brazil is the winner for Gen X: Brazilian Gen X consumers have 335 activity days and 10.1 activities per day. Brazil is also the winner for baby boomers, with 270.7 activity days per month and 9.0 activities per day.

This summary table also shows, however, that the pattern of generational differences is uniform. Based on total activity days, the rank from highest to lowest in almost every country is Gen Z, millennials, Gen X and baby boomers, except for the U.S., where millennials are slightly above Gen Z.

HOW THE WORLD DOES DIGITAL

FIGURE 64:

Total activity days per month,
by country and generation

	SAMPLE	Generation Z	Millennials	Generation X	Baby boomers
ALL COUNTRIES	**281**	**413.2**	**380.9**	**257.4**	**160.6**
Brazil	**361**	410.8	405.0	335.1	270.7
Singapore	**326**	421.9	419.1	286.8	234.5
United States	**315**	440.2	446.7	292.6	168.4
Spain	**294**	437.8	383.9	274.0	182.9
Italy	**280**	435.2	366.8	280.8	177.9
United Kingdom	**276**	426.7	358.1	247.1	145.9
France	**272**	464.8	378.4	256.1	150.0
Australia	**268**	392.8	354.8	243.8	137.8
Netherlands	**261**	421.0	353.7	246.4	138.4
Germany	**233**	438.6	345.5	211.4	118.4
Japan	**127**	244.3	177.7	112.1	87.2

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 65,694: Complete responses excluding seniors results come from four different surveys fielded each quarter of 2023

APPENDIX

HOW THE WORLD DOES DIGITAL

TABLE A:

Core digital activities
per pillar

PILLAR	ACTIVITY
BANK	• Mobile banking • Online banking
BE WELL	• Access health data • Telemedicine • Virtual therapy • Health-related media • Tracking health data • Wearable technology • Mental health or relaxation app
COMMUNICATE	• Messaging • Social media (active) • Online dating • Social media (passive)
EAT (GROCERIES)	• Online grocery shopping • Online grocery subscription
EAT (RESTAURANTS)	• Aggregators • Restaurant’s website or app
HAVE FUN	• Music streaming • Watching a livestream • Console gaming • Video streaming • Mobile gaming • Computer gaming
LIVE	• Automated chores • Voice technology (pay) • Home security app • Home monitoring • Voice technology (shop)
MOBILITY	• Bike/scooter app • Ridesharing app • Traffic-related app • Local transport app
TRAVEL	• Homesharing website • Online airfare • Online travel information
SHOP	• Online retail subscription • Online shopping • Shopping on a marketplace
WORK	• Home office • Checking on work remotely after hours

TABLE B:

Income brackets,
per country

Australia

LOW	Under AUS $40K
MIDDLE	Between AUS $40K-$80K
HIGH	More than AUS $80K

Brazil

LOW	Under 20K reales
MIDDLE	Between 20K-50K reales
HIGH	More than 50K reales

France

LOW	Under €24K
MIDDLE	Between €24K-€45K
HIGH	More than €45K

Germany

LOW	Under €24K
MIDDLE	Between €24K-€54K
HIGH	More than €54K

Italy

LOW	Under €18K
MIDDLE	Between €18K-€30K
HIGH	More than €30K

Japan

LOW	Under 3M yen
MIDDLE	Between 3M-6M yen
HIGH	More than 6M yen

Netherlands

LOW	Under €20K
MIDDLE	Between €20K-€50K
HIGH	More than €50K

Singapore

LOW	Under SGD 7K
MIDDLE	Between SGD 7K-15K
HIGH	More than SGD 15K

Spain

LOW	Under €24K
MIDDLE	Between €24K-€36K
HIGH	More than €36K

United Kingdom

LOW	Under £20K
MIDDLE	Between £20K-£40K
HIGH	More than £40K

United States

LOW	Under $50K
MIDDLE	Between $50K-$100K
HIGH	More than $100K

TABLE C:

Countries' relative performance on total activity days,
compared to the U.K.

	ALL PILLARS	HAVE FUN	COMMUNICATE	BE WELL	LIVE	BANK	MOBILITY	SHOP	WORK	EAT (RESTAURANT)	TRAVEL	EAT (GROCERIES)
Brazil	**30.6%**	25.3%	22.0%	36.2%	43.8%	26.2%	46.6%	15.0%	41.7%	54.9%	16.4%	32.1%
Singapore	**17.9%**	15.5%	10.4%	37.5%	3.0%	9.1%	35.3%	10.5%	13.5%	39.2%	17.4%	23.1%
United States	**14.0%**	12.6%	1.4%	30.0%	33.9%	-3.4%	13.8%	10.0%	21.5%	18.0%	16.4%	5.5%
Spain	**6.4%**	10.3%	6.8%	11.5%	10.6%	2.0%	9.8%	-0.5%	-10.3%	-0.2%	15.1%	-2.9%
Italy	**1.2%**	-2.4%	12.8%	4.4%	14.0%	-18.0%	9.7%	-8.7%	-1.0%	-12.3%	13.9%	-7.6%
United Kingdom	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
France	**-1.6%**	-7.0%	-5.6%	14.4%	-0.4%	-9.5%	14.8%	-6.5%	-6.9%	-10.0%	20.7%	-10.9%
Australia	**-2.8%**	5.3%	-3.7%	-0.6%	-17.6%	9.6%	-2.2%	-23.1%	-4.0%	3.1%	-10.6%	-16.0%
Netherlands	**-5.4%**	-7.6%	-5.3%	-8.4%	-12.4%	7.9%	-1.3%	-19.2%	4.8%	1.8%	-2.1%	-9.3%
Germany	**-15.7%**	-18.2%	-23.1%	-6.0%	-14.3%	-21.7%	-8.4%	-5.9%	-17.9%	-18.8%	-11.3%	-19.2%
Japan	**-54.2%**	-47.5%	-50.6%	-62.0%	-61.9%	-65.6%	-53.5%	-46.8%	-53.6%	-68.7%	-51.2%	-47.6%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023

TABLE D:

Top 10 activities with the highest activity days,
by country

Australia

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	16.9
2	Social media (passive)	15.2
3	Mobile banking	14.2
4	Music streaming	14.0
5	Watching a livestream	12.9
6	Mobile gaming	12.8
7	Messaging	12.4
8	Online banking	11.5
9	Checking on work remotely after hours	9.2
10	Social media (active)	8.6

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,562: Complete responses for Australia, results come from four different surveys fielded each quarter of 2023

Brazil

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	18.1
2	Mobile gaming	16.3
3	Messaging	15.6
4	Music streaming	15.5
5	Mobile banking	15.3
6	Social media (active)	15.2
7	Watching a livestream	15.0
8	Social media (passive)	14.5
9	Online banking	14.4
10	Checking on work remotely after hours	13.3

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,102: Complete responses for Brazil, results come from four different surveys fielded each quarter of 2023

France

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Social media (passive)	13.3
2	Video streaming	13.2
3	Mobile gaming	13.1
4	Messaging	12.1
5	Mobile banking	11.0
6	Watching a livestream	10.8
7	Music streaming	10.4
8	Online banking	10.3
9	Traffic-related app	9.7
10	Checking on work remotely after hours	9.2

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 8,003: Complete responses for France, results come from four different surveys fielded each quarter of 2023

Germany

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Messaging	12.3
2	Video streaming	12.2
3	Music streaming	10.3
4	Mobile gaming	10.1
5	Online banking	9.4
6	Watching a livestream	9.1
7	Mobile banking	9.0
8	Social media (passive)	8.7
9	Home office	8.3
10	Shop on a marketplace	7.9

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,460: Complete responses for Germany, results come from four different surveys fielded each quarter of 2023

TABLE D (continued):

Top 10 activities with the highest activity days,
by country

Italy

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Messaging	18.2
2	Video streaming	14.6
3	Social media (passive)	13.7
4	Watching a livestream	12.4
5	Mobile gaming	12.2
6	Music streaming	11.2
7	Social media (active)	10.5
8	Mobile banking	10.1
9	Checking on work remotely after hours	9.6
10	Computer gaming	9.2

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,056: Complete responses for Italy, results come from four different surveys fielded each quarter of 2023

Japan

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Messaging	9.4
2	Watching a livestream	8.6
3	Mobile gaming	8.0
4	Video streaming	6.5
5	Social media (passive)	6.0
6	Music streaming	5.2
7	Checking on work remotely after hours	4.8
8	Traffic-related app	4.7
9	Shopping on a marketplace	4.6
10	Online banking	4.1

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,679: Complete responses for Japan, results come from four different surveys fielded each quarter of 2023

Netherlands

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Mobile banking	14.2
2	Messaging	14.1
3	Video streaming	13.9
4	Social media (passive)	13.1
5	Music streaming	12.0
6	Mobile gaming	11.8
7	Online banking	11.1
8	Watching a livestream	10.9
9	Home office	9.8
10	Checking on work remotely after hours	9.5

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 3,972: Complete responses for the Netherlands, results come from four different surveys fielded each quarter of 2023

Singapore

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Music streaming	16.9
2	Messaging	16.6
3	Mobile gaming	16.5
4	Watching a livestream	16.2
5	Social media (passive)	15.9
6	Video streaming	14.5
7	Mobile banking	14.5
8	Checking on work remotely after hours	11.8
9	Track health data	11.2
10	Online banking	11.2

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,190: Complete responses for Singapore, results come from four different surveys fielded each quarter of 2023

TABLE D (continued):

Top 10 activities with the highest monthly average activity days,
by country

Spain

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	17.5
2	Messaging	15.4
3	Social media (passive)	14.5
4	Music streaming	13.9
5	Mobile gaming	13.9
6	Watching a livestream	13.3
7	Mobile banking	13.3
8	Online banking	10.7
9	Social media (active)	10.0
10	Checking on work remotely after hours	9.0

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,873: Complete responses for Spain, results come from four different surveys fielded each quarter of 2023

United Kingdom

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	16.6
2	Social media (passive)	15.3
3	Messaging	13.6
4	Mobile banking	13.6
5	Mobile gaming	12.9
6	Music streaming	12.5
7	Watching a livestream	11.5
8	Online banking	10.0
9	Home office	9.3
10	Checking on work remotely after hours	9.1

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,546: Complete responses for the U.K., results come from four different surveys fielded each quarter of 2023

United States

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	17.7
2	Social media (passive)	15.3
3	Mobile banking	14.5
4	Music streaming	13.7
5	Watching a livestream	12.9
6	Mobile banking	11.7
7	Messaging	11.6
8	Checking on work remotely after hours	11.5
9	Online banking	11.0
10	Home office	10.9

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 12,581: Complete responses for the U.S., results come from four different surveys fielded each quarter of 2023

TABLE E:

Top 10 activities engaged at least weekly, by country

Australia

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	67.8%
2	Mobile banking	64.7%
3	Social media (passive)	60.8%
4	Music streaming	54.9%
5	Online banking	53.0%
6	Watching a livestream	51.1%
7	Messaging	50.4%
8	Mobile gaming	49.0%
9	Checking on work remotely after hours	38.7%
10	Traffic-related app	35.3%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,562: Complete responses for Australia, results come from four different surveys fielded each quarter of 2023

Brazil

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	69.0%
2	Mobile banking	63.2%
3	Mobile gaming	62.5%
4	Music streaming	60.8%
5	Messaging	59.7%
6	Online banking	59.4%
7	Social media (active)	59.3%
8	Watching a livestream	58.2%
9	Checking on work remotely after hours	55.3%
10	Social media (passive)	55.2%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,102: Complete responses for Brazil, results come from four different surveys fielded each quarter of 2023

France

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	52.3%
2	Social media (passive)	51.9%
3	Mobile gaming	49.4%
4	Messaging	47.9%
5	Mobile banking	43.4%
6	Watching a livestream	42.0%
7	Music streaming	40.6%
8	Online banking	38.4%
9	Traffic-related app	37.8%
10	Checking on work remotely after hours	36.9%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 8,003: Complete responses for France, results come from four different surveys fielded each quarter of 2023

Germany

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	51.6%
2	Messaging	49.3%
3	Online banking	42.2%
4	Music streaming	41.9%
5	Mobile banking	41.3%
6	Mobile gaming	39.9%
7	Watching a livestream	36.1%
8	Home office	35.5%
9	Social media (passive)	35.3%
10	Computer gaming	31.4%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,460: Complete responses for Germany, results come from four different surveys fielded each quarter of 2023

TABLE E (continued):

Top 10 activities engaged at least weekly,
by country

Italy

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Messaging	68.0%
2	Video streaming	59.4%
3	Social media (passive)	53.0%
4	Watching a livestream	48.7%
5	Mobile gaming	47.9%
6	Music streaming	44.9%
7	Mobile banking	41.9%
8	Social media (active)	41.2%
9	Computer gaming	37.9%
10	Checking on work remotely after hours	37.3%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,056: Complete responses for Italy, results come from four different surveys fielded each quarter of 2023

Japan

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Messaging	38.1%
2	Watching a livestream	32.6%
3	Mobile gaming	30.0%
4	Video streaming	26.0%
5	Social media (passive)	22.7%
6	Music streaming	20.4%
7	Checking on work remotely after hours	19.9%
8	Home office	15.5%
9	Computer gaming	14.9%
10	Traffic-related app	14.9%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 6,679: Complete responses for Japan, results come from four different surveys fielded each quarter of 2023

Netherlands

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Mobile banking	64.8%
2	Video streaming	56.4%
3	Messaging	55.5%
4	Social media (passive)	51.2%
5	Music streaming	47.6%
6	Online banking	47.2%
7	Mobile gaming	45.4%
8	Watching a livestream	43.2%
9	Home office	41.4%
10	Checking on work remotely after hours	39.0%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 3,972: Complete responses for the Netherlands, results come from four different surveys fielded each quarter of 2023

Singapore

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Music streaming	67.6%
2	Mobile banking	64.9%
3	Messaging	64.5%
4	Mobile gaming	62.9%
5	Watching a livestream	62.8%
6	Social media (passive)	62.8%
7	Video streaming	58.1%
8	Checking on work remotely after hours	48.6%
9	Online banking	48.2%
10	Traffic-related app	44.8%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,190: Complete responses for Singapore, results come from four different surveys fielded each quarter of 2023

TABLE E (continued):

Top 10 activities engaged at least weekly,
by country

Spain

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	70.2%
2	Messaging	59.6%
3	Mobile banking	57.9%
4	Social media (passive)	57.0%
5	Music streaming	55.7%
6	Mobile gaming	53.3%
7	Watching a livestream	53.2%
8	Online banking	45.1%
9	Social media (active)	39.4%
10	Checking on work remotely after hours	36.5%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 5,873: Complete responses for Spain, results come from four different surveys fielded each quarter of 2023

United Kingdom

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	66.7%
2	Mobile banking	61.1%
3	Social media (passive)	59.7%
4	Messaging	53.7%
5	Mobile gaming	50.3%
6	Music streaming	50.2%
7	Watching a livestream	45.8%
8	Online banking	43.5%
9	Home office	39.1%
10	Checking on work remotely after hours	37.7%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 4,546: Complete responses for the U.K., results come from four different surveys fielded each quarter of 2023

United States

RANK	ACTIVITY	TOTAL ACTIVITY DAYS
1	Video streaming	69.1%
2	Social media (passive)	60.2%
3	Mobile gaming	55.4%
4	Music streaming	54.1%
5	Watching a livestream	50.9%
6	Mobile banking	49.7%
7	Checking on work remotely after hours	47.4%
8	Online banking	46.9%
9	Messaging	46.1%
10	Home office	43.5%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 12,581: Complete responses for the U.S., results come from four different surveys fielded each quarter of 2023

HOW THE WORLD DOES DIGITAL

TABLE F:

Share of consumers engaging in digital activities at least weekly,
by demographic

		SAMPLE	INCOME			GENERATION			
			High	Middle	Low	Generation Z	Millennials	Generation X	Baby boomers
BANK	• Mobile banking	46.8%	52.4%	50.9%	37.4%	55.6%	60.5%	48.3%	31.0%
	• Online banking	42.4%	48.2%	45.8%	33.5%	47.2%	51.0%	41.4%	34.2%
BE WELL	• Access health data	15.7%	19.6%	15.2%	12.9%	27.8%	24.1%	11.9%	6.6%
	• Health-related media	21.4%	24.2%	22.3%	18.0%	34.9%	32.6%	18.6%	8.6%
	• Mental health or relax app	15.3%	18.7%	15.2%	12.4%	29.4%	24.5%	11.9%	4.5%
	• Telemedicine	12.7%	15.5%	12.5%	10.6%	26.1%	20.3%	9.2%	3.5%
	• Track health data	22.0%	28.1%	21.6%	17.0%	37.2%	32.8%	19.2%	9.0%
	• Virtual therapy	12.6%	15.8%	12.0%	10.6%	25.8%	21.0%	9.1%	2.9%
	• Wearable technology	24.8%	32.9%	24.1%	18.4%	35.5%	36.0%	22.6%	12.7%
COMMUNICATE	• Messaging	50.8%	54.9%	52.6%	45.2%	64.0%	60.6%	50.2%	38.3%
	• Online dating	14.7%	16.3%	14.3%	13.6%	28.1%	23.8%	11.6%	3.8%
	• Social media (active)	37.4%	38.7%	40.1%	33.3%	52.9%	51.1%	35.5%	21.4%
	• Social media (passive)	50.9%	55.3%	52.0%	45.8%	61.0%	61.1%	49.9%	39.2%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

TABLE F (continued):

		SAMPLE	INCOME			GENERATION			
			High	Middle	Low	Generation Z	Millennials	Generation X	Baby boomers
EAT (groceries subindex)	Online grocery shopping	20.0%	23.8%	20.5%	16.0%	31.3%	30.2%	17.2%	9.0%
	Online grocery subscription	15.2%	18.9%	15.0%	12.0%	27.5%	25.1%	11.8%	4.4%
EAT (restaurants subindex)	Aggregators	24.1%	29.2%	25.7%	17.8%	39.8%	38.1%	20.4%	8.6%
	Restaurant's website or app	24.1%	28.9%	25.4%	18.6%	38.6%	36.9%	21.1%	9.8%
HAVE FUN	Music streaming	48.3%	54.4%	50.5%	40.4%	69.6%	64.2%	48.1%	27.0%
	Video streaming	59.9%	67.5%	62.1%	50.6%	71.4%	72.2%	62.8%	43.2%
	Watching a livestream	47.7%	50.5%	49.5%	43.1%	60.2%	60.6%	48.6%	31.2%
	Computer gaming	34.8%	39.0%	36.1%	29.8%	48.4%	42.7%	29.9%	26.1%
	Mobile app gaming	50.6%	53.1%	51.6%	47.2%	64.2%	63.7%	52.6%	33.2%
	Console gaming	28.6%	33.0%	29.8%	23.5%	48.1%	46.1%	25.9%	7.9%
LIVE	Automated chores	18.4%	24.2%	18.5%	13.0%	31.3%	28.4%	15.2%	7.0%
	Home monitoring	21.6%	27.7%	21.2%	16.5%	34.1%	31.3%	18.6%	10.4%
	Home security app	24.1%	33.3%	23.8%	16.3%	34.8%	34.0%	21.9%	13.1%
	Voice technology (pay)	15.5%	19.7%	15.7%	11.6%	29.5%	25.5%	11.8%	4.1%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

TABLE F (continued):

		SAMPLE	INCOME			GENERATION			
			High	Middle	Low	Generation Z	Millennials	Generation X	Baby boomers
LIVE (continued)	• **Voice technology (shop)**	17.9%	23.4%	17.5%	13.4%	30.4%	27.6%	14.9%	6.8%
MOBILITY	• **Bike/scooter app**	10.8%	14.2%	10.5%	8.1%	23.2%	18.7%	7.3%	1.7%
	• **Local transport app**	14.2%	17.4%	14.4%	11.2%	28.9%	22.8%	10.3%	4.1%
	• **Ridesharing app**	16.8%	19.4%	18.4%	12.7%	30.2%	26.2%	13.3%	6.2%
	• **Traffic-related app**	33.5%	41.4%	35.0%	24.8%	47.6%	45.3%	32.0%	19.3%
TRAVEL	• **Homesharing website**	10.6%	14.4%	10.0%	8.0%	23.0%	18.0%	7.4%	1.9%
	• **Online airfare**	10.7%	13.7%	10.6%	8.2%	22.2%	18.2%	7.6%	2.1%
	• **Online travel information**	19.1%	24.4%	19.2%	14.3%	31.9%	27.4%	15.9%	9.6%
SHOP	• **Online retail subscription**	15.2%	18.8%	14.7%	12.4%	28.3%	25.0%	11.7%	4.2%
	• **Online shopping**	21.4%	26.6%	21.1%	16.8%	35.4%	31.6%	18.2%	9.5%
	• **Shopping on a marketplace**	25.2%	32.7%	24.4%	18.9%	37.3%	36.2%	22.7%	12.6%
WORK	• **Check on work remotely after hours**	39.5%	46.0%	38.3%	31.7%	48.5%	46.4%	33.7%	28.4%
	• **Home office**	37.1%	44.0%	34.8%	30.4%	40.9%	42.3%	34.1%	28.8%

Source: PYMNTS Intelligence
How The World Does Digital, June 2024
N = 67,024: Complete responses, results come from four different surveys fielded each quarter of 2023
Note: Seniors are not displayed in our generational analyses due to small sample size.

ABOUT

PYMNTS
INTELLIGENCE

PYMNTS Intelligence is a leading global data and analytics platform that uses proprietary data and methods to provide actionable insights on what's now and what's next in payments, commerce and the digital economy. Its team of data scientists include leading economists, econometricians, survey experts, financial analysts and marketing scientists with deep experience in the application of data to the issues that define the future of the digital transformation of the global economy. This multi-lingual team has conducted original data collection and analysis in more than three dozen global markets for some of the world's leading publicly traded and privately held firms.

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We are interested in your feedback on this report. If you have questions, comments or would like to subscribe, please email us at feedback@pymnts.com.