

### About this report

The world has changed immeasurably over the past two years, but applications and digital services continue to play a central role in the lives of consumers. Whether it's food delivery, fitness classes, collaboration and productivity tools, or access to healthcare and public services, people across the world are relying on applications and digital services to live, work and play.

The Cisco AppDynamics App Attention Index 2023 examines how attitudes, behaviors and expectations towards these services are evolving.

This latest App Attention Index - the fifth in the series - finds that, with the pandemic now thankfully behind us, consumers have become more discerning in their use of digital services and more mindful about the value - or otherwise - that these services are bringing to their lives.

The report reveals how a new breed of application user has emerged over the past two years – one that is more empowered, sophisticated and demanding in its use of digital services. And it explores what the coming of 'The Application Generation' will mean for businesses and global technologists now and in the future.

The research included interviews with more than 15,000 consumers in 13 countries, including 2,000 interviews in both the United States and the United Kingdom, and 1,000 interviews in Australia, Brazil, Canada, Colombia, France, Germany, India, Japan, Russia, Singapore and the United Arab Emirates. The research was conducted by Insight Avenue in May and June 2023.

### Executive Summary

When we published our last App Attention Index, in 2021, it was at the height of the global pandemic – consumers around the world had no option but to interact digitally with companies. They couldn't engage through traditional, non-digital channels because of various restrictions.

But in 2023, people once again have choices in terms of what they do, where they work and how they engage with friends and family. They can still use digital services, but they can also meet people face-to-face or visit a brand's store or branch. The application user is back in control.

Despite this, appetite for applications and digital services remains strong. Consumers continue to rely on applications in every area of their lives, favoring the ease and convenience that they provide. And with rising costs of living, many people are turning to applications to manage their finances and make their budgets stretch further.

### Consumers have become more discerning and considered in their use of applications

People recognize the efforts that brands have taken to improve their digital offerings over the last two years, innovating at speed to meet changing customer needs. And as they enjoy ever more intuitive and personalized digital experiences, people's expectations towards applications have reached new heights.

Application users today have zero tolerance for poor digital experiences and their reactions when applications don't perform as they should have become more extreme. They feel disrespected and they don't think twice about deleting an underperforming application. What's more, they'll go out of their way to share their negative experiences with others.

Consumers are becoming more selective about the applications they use and more conscious about the time they spend engaging with digital services.

People are thinking harder before installing new applications onto their devices and are constantly evaluating the relevance of the digital services they use. They're taking back control and ridding themselves of a sense of 'application clutter'.

#### The rise of The Application Generation

These shifts in behavior and attitudes are most prevalent within a new cohort of young consumers which is emerging across the world.

The Application Generation is like nothing we've seen before. Highly sophisticated and discerning in their use of digital services this new breed of application user demands the very best and, most secure digital experiences. And critically, they feel empowered to hold to account any brand that falls short of this mark.

The Application Generation has relied on applications to navigate through the pandemic and now they're using them with great skill to live and thrive in a hybrid world. But they're fed up, tired of poorly performing applications and frustrating digital experiences. They're voting with their thumbs, ditching applications that let them down and even turning their backs on some digital services altogether.

#### Brands must be ready for The Application Generation

Application owners should be worried! They need to wake up and recognize the changing attitudes and behaviors of billions of application users around the world. The Application Generation wants more – they're crying out for innovation and the next evolution of digital services.

The bar has been raised in terms of what digital experience means and those brands that fail to act now risk losing an entire generation of application users forever.

## Digital services playing a vital role in the lives of consumers

The average number of applications being used by people on a daily basis now stands at 34, down from 42 in 2021 but still higher than pre-pandemic levels. This downward shift reflects the fact that people are no longer as reliant on applications as they were during the pandemic, when many people were required to stay at home and cut off from their usual routines.

The most heavily used applications in 2023 are for entertainment, connecting with friends and family, retail, banking and insurance, and news and information.



Average number of digital services used,

In the same way that people leant on digital services to navigate through the pandemic, consumers are now turning to applications to help them through the ongoing cost of living crisis. Price comparison websites, budgeting applications, and voucher and discount sites are all playing a crucial role in helping people to cope with rising financial pressures and make their money go further.

62%

of consumers say that applications and digital services are hugely important in helping them manage their personal finances during the cost-of-living crisis.

### How applications are supporting people through the cost-of-living crisis

Price comparison websites

42%

Finance, budgeting or money management applications

42%

Voucher and discount websites

40%

Content creation / media sites to supplement income

25%

Training or skills / online education to enhance employability

25%

Government support

19%

None of the above

16%

Other

1%

Which types of digital services / applications are you relying on more now as a result of the cost-of-living crisis?



## Here comes The Application Generation

The research reveals the extent to which behaviors and attitudes to digital services have evolved differently amongst younger application users, below the age of 35.

As you would expect, younger people are heavier users of applications across every area of their lives – on average they use 41 different applications each month, compared to 30 amongst people aged 35 and above.

This new cohort of global consumers - The Application Generation - have relied on applications to get through the pandemic, stay close to their friends, continue their education and start out in the world of work. They've leant on digital services like no generation before them, and this experience has shaped their way of seeing the world.

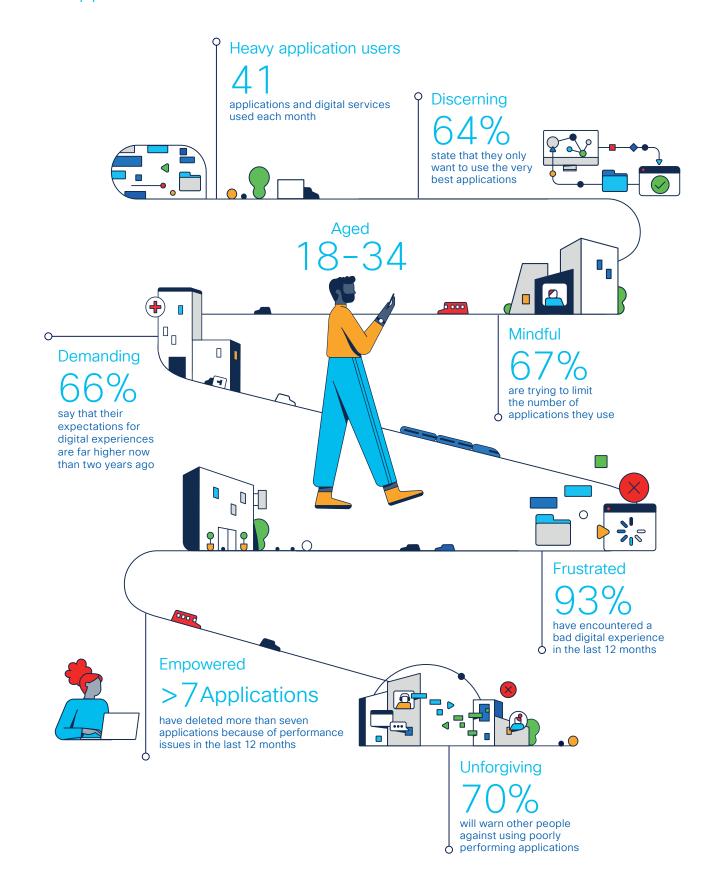
The Application Generation are far more discerning about the quality of the applications they use, and they are constantly evaluating the relevance and value – or otherwise – of digital services. They want each and every digital experience to enrich their lives.

Unlike their predecessors, The Application Generation feel in total control over their use of applications, empowered to demand the very best digital experiences and comfortable walking away from any brand that falls short of this mark.

This new breed of application users pride themselves on using only the most innovative, intuitive and secure applications and digital services, and they're on a mission to punish any brand whose application lets them down.



### Key characteristics of The Application Generation



# Consumers favor quality over quantity in application usage

Many people are now realizing that applications that were once useful are no longer relevant to their lives. They're finding and deleting forgotten applications on their devices, ridding themselves of a feeling of 'application clutter'. And they're thinking longer and harder before they download and install new applications on their devices.

In 2023, consumers are giving more consideration to their application usage, classifying their applications in terms of value, necessity, enjoyment and fulfillment. From the 'daily essentials' and the 'personal pleasures' through to the 'annual must-haves' and 'rainy day fallbacks'. On average, consumers feel that they could probably live without 40% of their downloaded applications.

And as people give greater focus to their wellbeing, many are taking a more rigorous approach to the amount of time they spend using applications and digital services. They still want to access the life-changing benefits that applications bring them in terms of accessibility, convenience and enjoyment, but they don't ever want to feel that they are wasting their time. They want every moment when they're using an application to enhance their lives.

68%

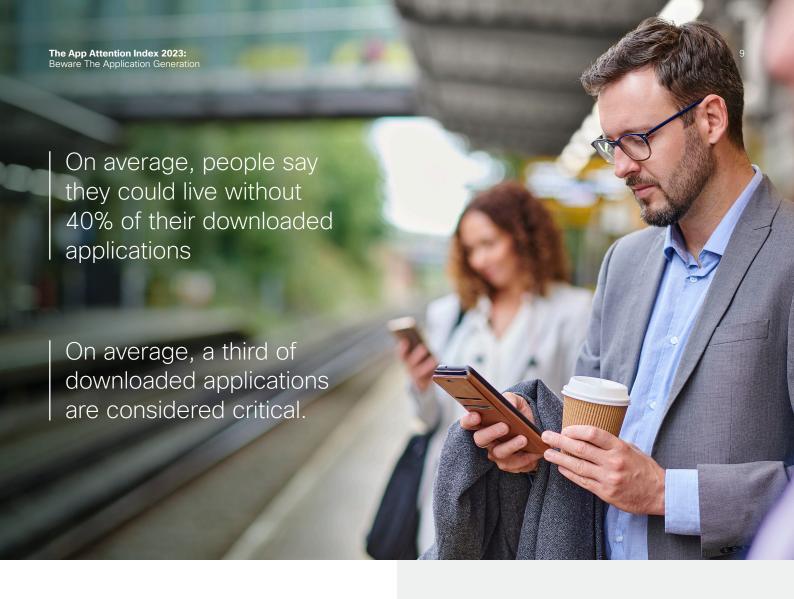
of consumers report that they are keen to get rid of application clutter (applications that they don't use enough or value anymore).

62%

say they want to control or limit the number of applications on their devices, and this figure rises to 67% for The Application Generation.

#### Top six reasons for limiting the number of applications on devices

- 1) To simplify my life / reduce "application clutter" on my device
- To reduce screen time / help with my wellbeing
- 3 No longer relevant to me / add no value to my life now
- To reduce or have more control over my spending during current cost-of-living crisis
- 5 I'm less tolerant of digital services that don't perform as I expect
- 6 I have become more discerning and now focus on my favorite brands / applications



Proportion of current downloaded applications perceived as critical or important



- Critical I use often, rely on heavily or they add significant value to my life
- Important I use sometimes and would find it difficult to live without
- Nice-to-have I like to use sometimes but could probably live without
- Unnecessary I rarely use and could live without

Thinking about all the different applications or digital services that you currently have downloaded or installed, what % of these do you consider to be the following?

56%

of consumers report that having too many applications on their devices can make them feel overwhelmed and impact their wellbeing.

47%

can think of at least one occasion in the last 12 months where a bad digital experience has affected their wellbeing. This figure rises to 53% amongst The Application Generation.

79%

claim that they now give more thought to the applications that they download and install than 12 months ago.

54%

have deleted more applications than they have installed over the last 12 months. And this figure climbs to 60% amongst The Application Generation.

## An insatiable appetite for innovation

As consumers become more sophisticated and selective in their use of applications, they're looking to try out the most innovative digital experiences available. They're embracing new applications that can simplify and enrich their lives.

In particular, 73% of people say that they feel positive about the prospect of using Super Apps which combine multiple digital services into a single application. And amongst The Application Generation, this figure soars to 80%.

Consumers point to a wide range of potential benefits that they believe Super Apps can offer, such as saving time, simplifying their lives and reducing application clutter.

This desire for brilliant digital services also extends to the world of work where many people are now relying on applications to work remotely - from email and messaging tools to sales and marketing databases to HR and accountancy platforms.

However, 80% of employees report that poorly performing digital services at work are affecting them to some degree and the research exposes the contrasting reactions amongst workers when they encounter bad digital experiences. One the one hand, some people feel stressed and worried about their productivity; while on the other hand, some consumers are left so frustrated that they are much more inclined to leave their place of employment altogether.



58%

of employees say poorly performing applications and digital services hinder their ability to work remotely.

# Improvements in digital services have raised expectations to new heights

Consumers recognize the efforts that brands are making to enhance the performance and security of their digital offerings. 69% feel that application design has improved over the last three years and 67% believe that applications are now more intuitive and responsive.

However, the sense of gratitude that people felt towards brands that offered good digital experiences to help them during the pandemic has evaporated. There is now only a sense of expectation.

People have experienced first-hand how some brands are continually improving and optimizing their digital services. They've been exposed to the very best digital experiences from the world's most innovative companies. And they now demand this each and every time they use an application.

62%

of consumers claim that their expectations for digital experiences are far higher now than they were two years ago.

53%

feel that some of the applications they relied on during the pandemic no longer meet their expectations for digital experience.



## Consumers report increased digital disruption

Alarmingly, while expectations for seamless digital experiences have reached a record high, as many as 88% of consumers report that they have experienced performance issues when using applications over the past 12 months. This figure has climbed from 83% in 2021.

These incidents occur most frequently when people are using digital services for entertainment, collaboration and productivity, government services, and connecting with friends and family.

As in the 2021 report, the majority of consumers always blame the application and the brand behind it when they encounter a performance or security-related problem with a digital service, irrespective of the actual cause of the issue. Even if the problem is external to the application itself - such as poor internet or mobile network connectivity, slow payment gateways or technical issues with third party plug-ins - consumers point the finger at the application.

This blame game now extends to Super Apps. While consumers are overwhelmingly positive about the prospect of using them, they feel that a performance or security issue would be even more disruptive than with a regular application. And as a result, their reactions would also be more extreme. 53% admit that if a Super App failed to perform properly, they would have negative feelings towards all the brands associated with it.

### Six most frustrating performance problems with digital services

- 1 Slow page / screen loading
- Crashing / stopped working
- 3 Poor connectivity
- Sign in or password issues
- 5 Slows down device / drains battery
- 6 Slow streaming of content / media

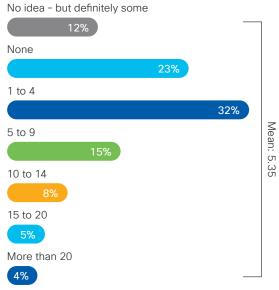


## Digital experience is now a question of respect

Over the last two years, people's reactions when they encounter problems with an application or digital service have become even stronger. They feel stressed and anxious, they share their negative experiences with friends and family, and they immediately look for alternative providers. Most of all, consumers feel that a brand that delivers poor digital experiences simply doesn't value them as a customer.

Consumers are now much more likely to turn their back on applications that fail to live up to their expectations. A staggering 77% of consumers have stopped using or deleted applications from their devices as a result of performance issues over the

Number of applications deleted because of performance issues



In the last 12 months, how many applications or digital services have you stopped using or deleted because of performance issues such as these?

last 12 months and, on average, consumers have deleted more than five applications on the back of a poor digital experience.

Amongst The Application Generation, the number of applications deleted due to bad digital experiences rises to more than seven in the past year, compared with four amongst consumers aged 35 and above.

These findings should ring alarm bells for application owners who are now operating in an environment where a single slip up in application availability, performance or security will see consumers deleting their applications and digital services and switching to their competitors.

64%

of consumers report that they are now less forgiving of poor digital services than they were 12 months ago.

67%

are more likely to warn people off applications that don't perform than they were 12 months ago.

55%

state that performance issues with digital services make them feel that a brand has no respect for their time.



Where people are 'locked in' to relationships with service providers, such as banks and insurance companies, utility providers, and government services, they can't simply move to an alternative application. They're 'stuck' with the service provider. And this means that they find performance issues with these applications even more frustrating.

Indeed, the pressure on application owners in these industries is even more intense – customers are angrier and more vocal when they encounter a bad digital experience.

In some situations, people are actually turning their back on these under-performing digital services altogether and reverting to 'offline' channels. For organizations looking to control costs during the current economic climate, this potential shift away from applications represents a significant risk. Brands need to maximize the number of customers using their digital services to reduce demand and pressure on more costly channels such as call centers and physical stores and branches.

### Reaction and response to performance issues when "locked in" with a digital service

I get stressed, angry or anxious

39%

I remain patient and keep trying

34%

I start looking for alternative providers or ways of accessing what I need

33%

I would phone a call centre/center or visit a branch / outlet

32%

I vent about it to other people

20%

None of the above

6%

Other

1%

What do you see as the potential benefits of Super Apps (applications that enable you to do more than one thing by combining previously separate digital services)?

53%

of consumers state that poor digital experiences make them want to go back to face-to-face and phone interactions with brands.

# The Application Generation demands an exceptional digital experience

Power has shifted dramatically back to the application user. People are no longer constrained in how they use applications; in fact, they no longer have to use digital services at all. They have unprecedented levels of choice, not just between different applications, but between digital services and non-digital channels.

At the same time, with the emergence of The Application Generation, consumers have become far more discerning about the applications they're using. The desire to consume more and more digital services has faded away; the focus has shifted to quality over quantity. Digital experience now sits at the very heart of consumer thinking and behavior.

The 'total application experience' has evolved over the last two years; The Application Generation is searching for a broader range of qualities that combine to provide an exceptional digital experience, one that stands out from the competition.

People still want security, simplicity and speed. And most of all, they still want applications to be reliable. But now consumers are looking for more - they want applications to be intuitive, fun to use, personalized and meaningful.

70%

of consumers feel more empowered to find alternative applications than they did 12 months ago.

65%

feel more empowered to use alternative channels such as face to face or phone to contact and engage with brands than they did 12 months ago. For brands whose customer base matches or includes the profile of The Application Generation, there is now an urgent imperative to ensure that their applications and digital services are available, secure and performing at an optimal level at all times. But other organizations should also beware – they will be looking to target and engage this new cohort of consumers in the coming years. They should be preparing themselves now, differentiating their brands by becoming famous for delivering outstanding, seamless digital experiences. The data from the last five Application Index research studies tells a clear story – consumer expectations around digital experience will continue to rise, and no organization can afford to be complacent.

66%

of consumers state that they now only want to use the very best applications and digital services and expect an exceptional digital experience as standard.

### The qualities that define an exceptional application or digital service



Reliable and secure (performs consistently and as standard)



Speedy (fast loading and processing)



Effective problem / Issue resolution



Intuitive (easy to use and transact)



Meaningful (adds value to my life)



Fulfills more than one need / Super App



Engaging and fun to use



Personalized (treats me as an individual, considers my preferences)



Beautiful simplicity

#### cisco AppDynamics

# Delivering exceptional digital experiences with Cisco AppDynamics

The emergence of The Application Generation is intensifying the pressure on application owners to deliver seamless and secure digital experiences at all times. Brands risk losing customers, reputation and revenue if their applications and digital services fail to meet soaring consumer expectations.

But as organizations respond to heightened demand for more innovative and intuitive digital experiences, IT teams find themselves engulfed by overwhelming complexity. Rapid adoption of cloud native technologies and the shift to hybrid application environments is making it ever more challenging for technologists to identify and resolve application performance issues before they impact customers and employees.

Cisco AppDynamics is committed to helping technologists to deliver exceptional digital experiences as standard, providing them with the tools and insights they need to swiftly and effectively troubleshoot application availability, performance and security issues.

Cisco AppDynamics enables organizations to deliver exceptional user experiences by centralizing and correlating availability, performance and security data into contextualized insights of key business metrics – providing them with the power to prioritize actions based on business needs.

To find out more about how Cisco AppDynamics is helping organizations to optimize application performance, <u>click here</u>.