As we approach 2025, emerging technologies and market forces promise to transform mobile app capabilities further. At the core, the future of mobile apps is about redefining how we interact with different technologies.

Whether through enhanced connectivity, smarter personalization, immersive experiences, or IoT ecosystems, there are multiple mobile app trends poised to help people communicate, learn, discover, and thrive.

Read Post: <u>Does Your Business Need A Custom Mobile App?</u>

In this write-up, we'll discuss some of the top mobile app development trends that businesses should monitor to stay ahead of market dynamics and innovate at a rapid pace in 2025.

1. Personalized Al Models

Users demand custom and interactive experiences. With the <u>refinement of Al</u> <u>capabilities</u>, businesses can build applications and platforms that go beyond consumer experiences, drive seamless Al-human collaboration, and reimagine how mobile apps evolve.

However, users are concerned about how third-party AI models from companies like OpenAI and Anthropic use their data. Therefore, we expect a surge in demand for personalized and specialized models, working on specific datasets

and limiting themselves to certain tasks, driving more accurate responses and

outcomes.

We're already witnessing this change with the launch of ChatGPT 'Strawberry,'

also known as OpenAl o1. Unlike GPT 40, the o1 model focuses on specialized

<u>tasks</u> like reasoning and coding, delivering significantly better results.

It does take some time to respond, but with time and more investment into this

technology, we can expect its responses to be faster and more accurate.

In the future, Al won't be a one-size-fits-all technology. There will be a specific,

tailored Al model for every task, driving intelligent process automation and more

human-centric experiences.

Read More: <u>Ultimate Guide: How To Build a Successful Al App</u>

2. Custom Al Chatbots

In our latest episode of "There's an AI for that!" we have custom AI chatbots that

make mobile app experiences more interactive for users. Now, we have dozens

of GPT-powered chatbots for different use cases.

However, with the launch of specialized models like OpenAl o1, we'll see <u>custom</u>

Al chatbots built on specialized models trained on relevant, high-quality data.

This will not only dramatically increase the accuracy of the responses generated

by such chatbots, but it'll also ensure the output is relevant.

For instance, you may see custom chatbots that specialize in creating horror

short stories and are trained on relevant data to provide responses that are

creative, accurate, and relevant to the niche.

Read More: Boost Sales with Chatbots in Mobile Apps

3. On-Demand App Development

To stay relevant and ahead of their competitors, business leaders must

continually adapt their apps to the changing needs of their target audiences.

According to PwC, the market for on-demand digital solutions is expected to

reach \$335 billion by 2025.

Moving forward, one-size-fits-all solutions won't suffice. Development teams will

have to keep up with different technology trends and <u>create mobile app solutions</u>

accordingly to provide stand-out, tech-forward digital experiences.

The right Android and iOS development company can make your business

visible, profitable, and adaptable. Read More: <u>How to Develop an On-Demand</u>

Delivery App

4. Tailored Apps for Foldable Smartphones

Foldable smartphones represent the <u>next frontier of mobile technology</u> innovation. As brands like Samsung, Google, Motorola, and OnePlus compete to launch ever-more advanced foldable devices packed with new features and flexible display designs, demand surges for apps optimized to unlock this category's full potential.

These specialized apps seamlessly adapt across changing screen aspect ratios from phones to tablets. They allow <u>continuous user experiences</u> across displays and enable immersive new multi-tasking capabilities mixing productivity, creativity, and entertainment.

Custom apps transform how users interact with and utilize their smartphones by leveraging exclusive features of foldable devices.

Our experts now stand ready to partner with foldable smartphone brands and technology leaders to deliver perfectly <u>tailored mobile apps</u>.

Read More: <u>UI/UX is the Key to a Successful Customer-Centric App</u>

5. Extended Reality (XR)

In the past decade, developments in the extended reality (XR) space have accelerated significantly. From entertainment to gaming to business use cases, companies are integrating XR into their apps to <u>deliver immersive experiences</u> and reinvent user interactions.

Technavio predicts that the overall market cap of extended reality is estimated to increase by \$421.42 billion by 2027. Moreover, augmented and virtual reality have now become integral parts of the media and marketing strategies of businesses worldwide.

In the near future, we can expect extended reality to have the same level of significance in the global <u>digital landscape</u> as AI.

Read More: Your Gateway to Metaverse Success

6. B5G and WiFi 7

In the upcoming years, we'll see cutting-edge technologies reinventing how humans connect and interact with machines and vice versa. To ensure real-time

responsiveness and faster mobile experiences, B5G networks and the upcoming

WiFi 7 will be the new connectivity standards.

They are poised to unlock unprecedented wireless speeds, reduced latency, and

enhanced bandwidth. Specifically within mobile apps, B5G and WiFi 7 are

expected to make the following advancements:

Streaming

Gaming

Collaboration

Wearables

Self-driving Vehicles

Smart Homes

So, how fast are B5G and WiFi 7 going to be?

Thanks to its terahertz bands, B5G is expected to reach 100 Gbps, while 6G is

expected to reach 1 Tbps. For comparison, 5G only manages to hit 20 Gbps.

On the other hand, WiFi 7 is expected to be four times faster than WiFi 6E,

offering peak rates up to 40Gbps.

This massive bandwidth, speed, and connectivity expansion sets the stage for a

world of ambient computing power. It'll enable enhanced capabilities that allow

people and IoT and IoE ecosystems to connect, communicate, and compute

across shared networks rather than isolated channels.

Read More: The Impact of 5G on Android App Development

7. Low-Code Solutions

With the rising demand for <u>custom mobile app solutions</u> across industries, companies gravitate towards tailored apps built without intensive coding.

Low-code platforms are gaining traction and being used to <u>develop</u>

<u>enterprise-grade apps</u> faster.

Business owners can save significantly on <u>development costs for high-scale</u>

apps built using low-code tools. These apps allow businesses to <u>meet their</u>

changing needs and adapt to global trends. It also frees developers from repetitive tasks and allows them to focus more on innovation and growth.

Despite not being heavily programmed, low-code apps can compete with
high-scale apps built using conventional programming in terms of functionality
and responsiveness. As low-code platforms mature, we can expect businesses
to launch <u>custom mobile apps</u> faster than ever.

8. Distributed Cloud-Based Networks

Cloud technologies have <u>revolutionized several aspects</u> of our operations, including storage, collaboration, and connectivity.

But moving forward in 2025, we might witness its dominance across mobile networks and technologies. Cloud platforms provide a distributed web infrastructure for mobile clients to access on demand.

Cloud computing also <u>transforms static software</u> constraints into flexible, almost unlimited capacity that expands or refocuses based on your needs. This will allow developers to concentrate more on app functionality and innovation rather than getting held back by technical limitations.

Here are some upsides of cloud migration and adoption for your business:

Serverless computing to scale cloud capacity dynamically

Faster feature updating aligned to user demands

Reduced development costs & time to market

Consistent experiences across mobile, desktop, and IoT

Heightened resilience versus device failures

As mobile apps continue to scale, introduce cutting-edge features, and become more complex in terms of UX, security, integrations, and real-time use cases, cloud-based networks are expected to drive innovation by reliably delivering advanced functions and ingenious experiences.

This is why cloud computing is expected to retain its spot as one of the top mobile app trends in 2025.

Read More: Benefits of Adopting a Cloud Native Approach

9. Touchless UI

Customers are demanding touchless digital experiences, and we see technology leaders capitalizing on it. Technologies like facial, voice, and gesture recognition drive a paradigm shift in customer preferences and behavior.

For instance, users prefer unlocking their phones via <u>facial recognition</u> instead of using fingerprint sensors because it's faster and easier. It might not necessarily be more secure, but it's definitely more convenient than fingerprint scanning. However, companies are striking the perfect balance between touchless experiences and security with robust 2-factor authentication systems. In 2025, we can see several touchless features integrated into <u>mobile UIs</u> that'll take app experiences to a whole new level.

Read More: Why Mobile-First Design is Essential for Your Project

10. Al-Powered QA & Testing

With many development teams embracing automation, stringent QA and testing are essential to drive high-quality, rapid delivery. With several advancements in neural networks and computer vision, mobile app testing can be intelligently automated.

QA teams will be able to foster better testing outcomes and improved accuracy by detecting patterns that negatively impact test cases and eliminating false failures. Al-powered test automation reduces manual testing efforts significantly by seamlessly optimizing and updating test cases.

Read More: Al's Real Impact on Software Testing in 2025

Lead Change in the Mobile App Industry?

While the future of <u>mobile app development</u> is exciting, to say the least, what truly matters is how people benefit from apps and how their needs and expectations will be shaped in the near future.

Developers must carefully anchor progress around user needs and problem-solving as features and processing power continue expanding exponentially, leading to exciting possibilities.

The evolution of mobile app development

To understand the future of mobile app development, we have to understand its history.

The <u>first handheld cellular mobile phone</u> was invented in 1973. But it took another 20 years for the first commercially available cell phones to start paving the way for today's technology.

In 1993, <u>IBM's Simon</u> was the first phone released with a touch screen and built-in apps, including a contact book and calendar.

Next came the Java-based <u>Blackberry</u> 5810 in 2002. The game-changing device included integrated apps, like connected wireless email, and set the stage for rapid app development. To this day, Java remains the primary development language for Android-based apps.

Then, in 2008, both Apple and Google launched online app stores. <u>Apple's App Store</u> reached one billion downloads just nine months after launch. In 2021, there were 230 billion <u>first-time mobile app downloads</u> worldwide across Apple and Android devices.

As mobile phones began appearing everywhere and development exploded, apps became more advanced. The first apps mainly displayed information based on inputs supplied by the user. But many of today's apps can proactively provide users with information before being prompted to do so.

5 mobile app development trends for the future

1. 5G lays the groundwork

The hype around fifth-generation wireless technology (5G) has been building for the better part of a decade. But most carriers only started rolling out <u>5G access</u> in 2021.

Speed is the focus of 5G. It's not just faster than 4G technology; it's exponentially faster. 5G is capable of operating at 100x the speed of most existing networks. This matters because it allows users to connect with wearables, devices, and machines in addition to phones.

Due to its high speed, information is transferred in milliseconds, which reduces latency and provides a better user experience.

5G can operate at 100x the speed of most existing networks.

Use cases range from simple to complex. A simple use case might be users watching HD videos on their devices without buffering or quality loss.

A study from PwC describes a more complex use case. A <u>5G-enabled healthcare</u> <u>ecosystem</u>—including apps, IoT, and wearables—can help patients track their health and quality of life better. This could also help with identifying diseases earlier and reducing healthcare costs by approximately \$2,000 per patient.

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Further reading

Why Building the Best Customer Experience Means the Right Multi-experience

2. AR & VR go beyond gaming

Augmented reality (AR) technology imposes artificial images and objects on real-life objects. This is how users can play Pokémon Go while walking around their neighborhood. In contrast, virtual reality (VR) creates an artificial environment.

A great example is the <u>Meta's Oculus Quest 2</u>. It allows users to work out, explore new countries, and watch concerts created in an immersive world—all from their living room.

However, AR and VR are no longer just for gamers. These technologies are rapidly expanding to other industries, including travel, real estate, and retail.

The use of AR technology in the real estate industry is booming, accelerated by an unexpected catalyst: COVID-19. When the pandemic hit, attending open houses in person was no longer a safe option for many. In response, rapid app development helped make virtual at-home walk-throughs possible.

Another example is Matterport, a <u>3D virtual tour platform</u>. The Matterport team created an iOS app in late 2020, allowing home sellers to scan their homes using the LiDAR sensors on their phones or tablets. Previously, that capability was only possible with expensive camera equipment.

According to Redfin, 63% of buyers who viewed virtual walk-throughs in late 2020 made offers on homes they hadn't visited in person. Monthly views of 3D walk-throughs via the app were up over 500% from February 2020.

3. Al is king

<u>Artificial intelligence</u> (AI) is by no means a new technology in mobile app development. But as AI and machine learning become more sophisticated, so will app capabilities.

For example, algorithms can learn from past user behavior with advanced machine learning. Then, they can pull data to predict what may happen next.

Where AI stands out is facial and speech recognition—biometric markers that can enhance safety features. Companies, especially those in the insurance and financial sectors, can use AI and machine learning not only to improve user safety and data

security but also to help spot fraud. McKinsey estimates the potential annual value of Al for global banking at over \$1 trillion.

Identifying and preventing fraud will undoubtedly become even more important as more people use phones and wearables as payment devices.

Estimates say that <u>2.8 billion mobile wallets</u> were in use worldwide in 2020, and that number could rise to 4.8 billion by 2025. As people use those wallets to complete more transactions online, fraud detection companies are creating Al-based technology for banks and retailers to help:

- Reduce false positives
- Increase fraud detection
- Minimize investigation time

4. Wearables do more

Wearables include watches, earbuds, and other smart devices—even certain articles of clothing. They can fulfill a range of functions, from voice activation for phone calls to helping people keep track of the number of steps they take each day.

There are approximately <u>1 billion connected wearable devices</u> in use worldwide. In 2021, the wearable technology market was valued at approximately <u>\$116 billion</u>, with significant growth yet to come.

Consumer electronics make up the most significant share of wearables. But there's increasing interest in using them for purposes beyond simple step counting. Especially in healthcare.

wearables like Fitbit and Apple Watch have clearance from the U.S. Food and Drug Administration for an <u>electrocardiogram</u> app to track heart irregularities.

Other features you can expect to see from wearables in the near future include smart app capabilities tied to security. Recently, Apple teamed up with lock manufacturer

Schlage to create <u>smart locks</u> that you can open using an Apple Watch or iPhone. Users can also add a virtual house key to their mobile smart wallet.

5. Security is a pressing issue

As more personal information is online, fears around consumer security and privacy are increasing. Consumer data is routinely collected to provide better services, especially in use cases involving AI and machine learning. But consumer concerns about personal information getting out aren't unfounded.

A study of popular Android apps by Synopsis found that 63% had open-source components with known security vulnerabilities. That leaves many consumers exposed to having their information hacked or leaked. This would affect customer experience and confidence in an app.

But two innovations are rising to help resolve security issues such as these.

- One is biometric authentication, which uses eye, facial, fingerprint, or voice recognition to verify a user. This helps to provide the first line of defense against fraud or stolen information and is easy for consumers to use.
- 2. The other is the use of <u>distributed ledger technology</u> (DLT), of which blockchain is one part. This helps boost IoT security on mobile and other smart devices through more layers of encryption.

What is the future of mobile app development?

The application of existing technologies and the development of new ones will continue to push growth in the mobile app industry.

The motivation for developers to get in on the action is obvious. Estimated growth trajectories predict mobile app development will yield over \$600 billion in revenue by 2025. And that, it seems, is just a down payment on the rewards of mobile app development.

Mobile devices have become indispensable for tasks ranging from opening a bank account to ordering pizza, pushing app developers to find innovative ways to attract and engage users.

With 2025 on the horizon, advancements in mobile technology promise to unlock even greater possibilities for mobile apps. Key trends shaping the future include harnessing the full power of 5G, merging real and virtual experiences through augmented reality, and accelerating development with low-code tools.

From predictive analytics and machine learning to redefining app functionality for foldable smartphones, this article explores the trends shaping the mobile app industry and reimagining how we interact with technology.