

OUTLOOK
2021



Mobile App Development Outlook for 2021 and Beyond

WHITE PAPER

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As the world strives to cope with the consequences of the coronavirus, the year 2020 stood witness to an unprecedented number of mobile app downloads, app usage, and consumer spending. This has proved that apps have the potential to survive and transcend the onslaught of a pandemic. In this white paper, we highlight the factors that enterprises and app development firms need to take into account to capture markets with game changing mobile apps in 2021.

Despite its severe consequences, there are silver linings to the Covid-19 pandemic. Beyond the crippling impact, the crisis has taught a critical lesson— businesses must keep pace with the evolving world and establish the perfect sync with digitization. It's little surprising that enterprises with the foresight to embrace the digital shift before the virus struck, experienced the least disruption even when the crisis was at its peak.

The lesson, although learned the hard way, should serve as an anchor for businesses to chart their comeback in the post-pandemic age. Since mobile apps remain a keystone aspect of digitization, app development becomes a critical area of focus for enterprises aiming to reclaim their lost foothold.

In the second quarter of the year 2020, the usage of mobile apps **grew 40%** year-over-year, even hitting a record of over 200 billion hours in April.





5 Widespread Uses of Mobile Apps During the Covid-19 Pandemic

Manage Office Operations

For some organizations, executing operations remotely seems like a long shot; for the rest, it's a reality. While the first type was forced to curtail business during the pandemic, members of the second group went about their daily work from their homes by leveraging custom mobile apps that facilitate unhindered communication.

Custom apps help create visual workflows, devise methodologies managing projects, monitor and analyze workforce productivity, identify anomalies and areas that need attention, and maintain seamless communication with stakeholders. With user-friendly apps for emails, video calls, document sharing, and real-time collaboration, keeping the wheels of the organization running is within reach.

By 2021, the number of mobile users worldwide is estimated to touch 7 billion. Also, **90%** of the total smartphone time is spent just on applications.

Promote Marketing Activities



In the past, advertising was the most prominent marketing channel to promote brands or products. With massive transformations in the digital landscape, a strong mobile presence is a non-negotiable requisite for businesses to thrive. In the face of the pandemic, marketers used mobile apps to foster a connection with netizens across demographics, which helped promote brand awareness, and garner the right market visibility.

With the virus restricting travel, traditional marketing structures were disrupted. This worried most stakeholders but some marketers saw an opportunity to seize. They took to mobile apps to connect with the audience, convey brand messages, engage users, and create unshakable customer loyalties while spending substantially low as compared to conventional marketing expenses.



Consumer Behavior Monitoring

For any commercial establishment, gathering and analyzing data about the preferences of their customers and prospects is vital to discovering insights into upcoming trends and product demands. Organizations usually shell out a whopping portion of their marketing budget to study customer behavior and still end up with ambiguous and inaccurate conclusions.



With the Covid disaster causing depletion of revenue streams, sales and marketing teams faced massive budget cuts. On the flip side, the ones equipped with mobile apps to know their target audience tasted success. Apps give an in-depth, granular view of the interests of the customer, helping marketers adopt the right strategy based on the gender, spending ability, and expectations of the target audience.

Education, Entertainment, Shopping, Socializing

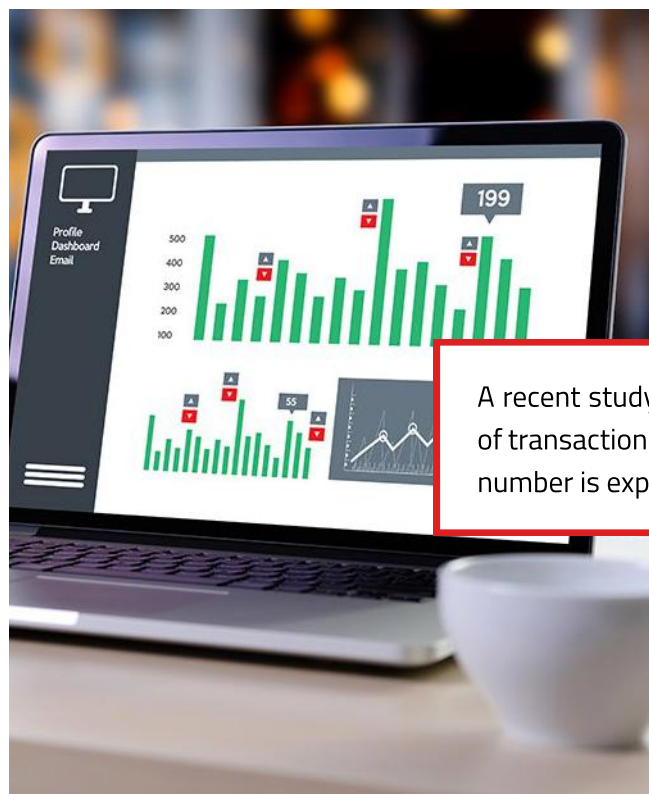
The pandemic has underscored the fact that the future is digital. It highlighted that education, socializing, entertainment, and other essentials of human life cannot be denied, come what may. The only changelies in the way of fulfilling these needs in the pre and post-Covid ages. The pandemic periodwitnessed the skyrocketing popularity of apps that facilitate such activities.

Using education apps, students and teachers could collaborate virtually and even conduct exams. The already soaring popularity of video streaming and gaming apps received another boost from the social distancing mandates. Likewise e-Commerce, food delivery, news, video chat, and the multitude of social medial apps registered historic numbers in terms of revenue and users.



Digital Transactions and Market Forecasts

Mobile apps present the most seamless platform to invest in the share market and purchase financial products. Digitally secured mobile wallets facilitate safe monetary transactions with just a few taps on the mobile screen. For financial advice, investment and brokerage apps leverage features of AI and Big Data, offering hidden insights to investors for the highest return.



Apps integrated with machine intelligence are being increasingly used by firms to identify market dynamics. Considering the uncertainties caused by the Covid-19 crisis, the demand for such capabilities would rise sharply in the upcoming days. Apps can be used to predict sales, revenue, profits, market trends, and the success of business endeavors, making them an integral part of modern business.

A recent study claims that there was **\$6.1 billion** worth of transactions through mobile wallets in 2019. By 2022, this number is expected to touch **\$13.98 billion**.

Unmissable Mobile App Trends for 2021

The Covid-19 catastrophe has uprooted many age-old practices, including the way mobile apps were perceived and used. With digitalization as the primary goal of enterprises around the world, mobile apps are set to take the center stage in business development. In their attempt to ride on mobile apps to navigate the aftermath of the virus, organizations should be aware of the upcoming trends in the realm of app development and align their workflows along those.

A Mobile-first Lifestyle

The shift to mobile-first has been in progress for several years, but the crisis has forced enterprises to fire on all cylinders to realize the objective at the earliest. A mobile-first strategy implies that a business launches its app before the desktop version. In 2021, the trend to prefer mobile apps over all other forms of digital presence will gain even more traction.



Mobile apps enable businesses to be in constant touch with prospects and customers, heightening the chances of engaging the customer better. In the competitive post-Covid world, the quality of apps would decide the success of a business to a large extent.



Mobile apps can be built with intuitive designs and their features can be customized as per the user's needs, making them an effective channel to offer a delightful experience to the customer.

In an interview, **Mark Zuckerberg** mentioned three reasons why mobile was the future of Facebook - a) There are more mobile users, b) users spend more time on it, c) mobile gives a platform for better advertising.

Unpredictable Demand Spikes for Apps

As the world steps into the post-Covid age, the requirement for engaging mobile apps can cause unexpected trends across app stores. Businesses must optimize their apps to cater to sudden influxes of users and the ones contemplating about going mobile must act urgently. Apps should be robust enough to handle high traffic and businesses must be ready to deliver what they promote via the apps.



In 2021, a proactive plan to promote mobile apps is critical to avoid missing out on opportunities. Investing in promotional activities and focusing on practices like keyword optimization and app store optimization (ASO) would be the key.



To make it easy for even the non-tech savvy customer to use the app, developers must focus on building a seamless user journey. A lack of clarity around the value offered by the app, a complex onboarding process, and similar pain points deter the neutral user from trying out the app.





The Focus on Mobile UI/UX Optimization

The average user has a shockingly short attention span. And as the app store is insanely competitive and buzzing with a strikingly high number of similar apps, the user doesn't care about checking out apps that test their cerebral ability. This makes UI/UX the cornerstone of any successful mobile app. For a great app idea to click with the audience, it has to be complemented by the user experience it offers.



A great UX begins with thorough research about the user base before jumping into mockups or prototypes. The developers and designers must be careful not to clutter the app's interfaces with buttons, images, or any piece of content that's avoidable.



Features must be determined by the core objectives of the app. Refinements of the app design can be based on the usage of these features. For users, touch accuracy is critical, hence, developers should create controls, buttons, links, at least 7-10 mm (average fingertip width).

The Search for a Data-transparent Future

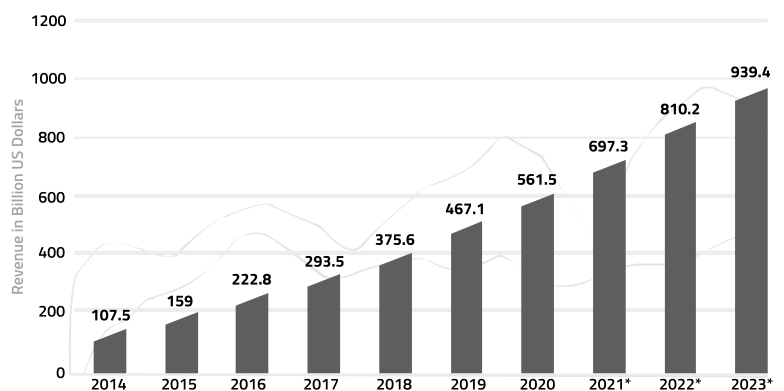
The ability of app users to make informed choices pertaining to their privacy has been extremely limited. They rely mostly on the privacy policies and permission mechanisms, which generally do not convey how information is used, stored, and shared. That's partly because developers go largely unrewarded for creating privacy-conscious apps, but this is changing rapidly as the consumer is evolving into a conscious user.



With an increased need for security in 2021, users would want to know what data an app collects and the context in which it's used, stored, and shared. Rather than just knowing what data the app has access to, users should learn about the context surrounding their data.



There could be a trend among app developers to use machine-readable privacy policies to provide the transparency that privacy-conscious users seek. This would be a great leap towards winning the user's approval, which can lead to economic benefits for the owners.





5 Dominant App Features in the Post-Covid Era

To ensure success in mobile app development, it should acknowledge that things are changing rapidly, implying what worked well before the pandemic might be outdated by now. Just implementing a robust app development strategy doesn't assure success, apps must incorporate the latest development trends for that. This naturally leads app investors and developers in the search for what's ruling the landscape in 2021.

The Rise of Chatbot Apps

In 2021, the demand for do-it-yourself (DIY) custom service tools would take off. Among developers looking to elevate their customer service, apps integrated with powerful AI chatbots would gain widespread popularity. Such apps can be configured to handle customer queries without human intervention. They can also help the user with an easy product and content search and personalized experience.



Chatbot apps reduce the need to invest in customer support agents, enabling businesses to save substantially in these cash-crunch times.

Gartner claims that by 2020, **chatbots** will deliver **\$8 billion** in cost savings.

Apps for Wearable Devices

The unmatched conveniences offered by wearable devices have made wearable apps the buzzword. With the virus causing people to take extra care of their health and fitness, they would look for wearable devices such as smartwatches and fitness trackers that work in pairs with mobile apps. Compatible apps help people track their sleep, count calories, track their workouts, and even detect diseases like diabetes.



With people chasing a healthy lifestyle, wearable apps that help them observe data and instrument readings, analyze and create reports, and share health information with others would be in demand.

By 2022, the number of connected wearable devices worldwide would be over **1.1 billion**.



The Proliferation of Mobile Wallets

The rise in the popularity of online shopping has also boosted the use of digital wallets among users. As the user is in constant search for more convenience and a safer way of transacting that doesn't put them at the risk of contracting the virus, digital wallets emerge as the obvious choice. The instant transactions, robust security, and tempting rewards and offers would remain the biggest draw of mobile wallet apps in 2021.



With people avoiding crowded places even with restrictions withdrawn, mobile wallets are the de facto choice for money transactions and bill payments.

A report claims that in 2018, the total transaction value through mobile wallets stood at **\$4,296 billion**. By 2022, this number is expected to reach **\$13,979 billion**.

A Growing Need for App Security

In 2020, as the world was grappled with the health hazards posed by the dreaded coronavirus, there was a tangible growth in the instances of cybercrimes. With miscreants discovering ways to breach all security measures, 2021 would see app investors, in their effort to protect user data and adhere to information privacy laws, invest more in cybersecurity. Besides other capabilities, apps must be integrated with features that monitor real-time threats and block attempts of tampering or reverse engineering by cyber criminals.



Organizations betting big on mobile applications in 2021 should consider joining forces with external application security solution firms to assure users of total data safety.



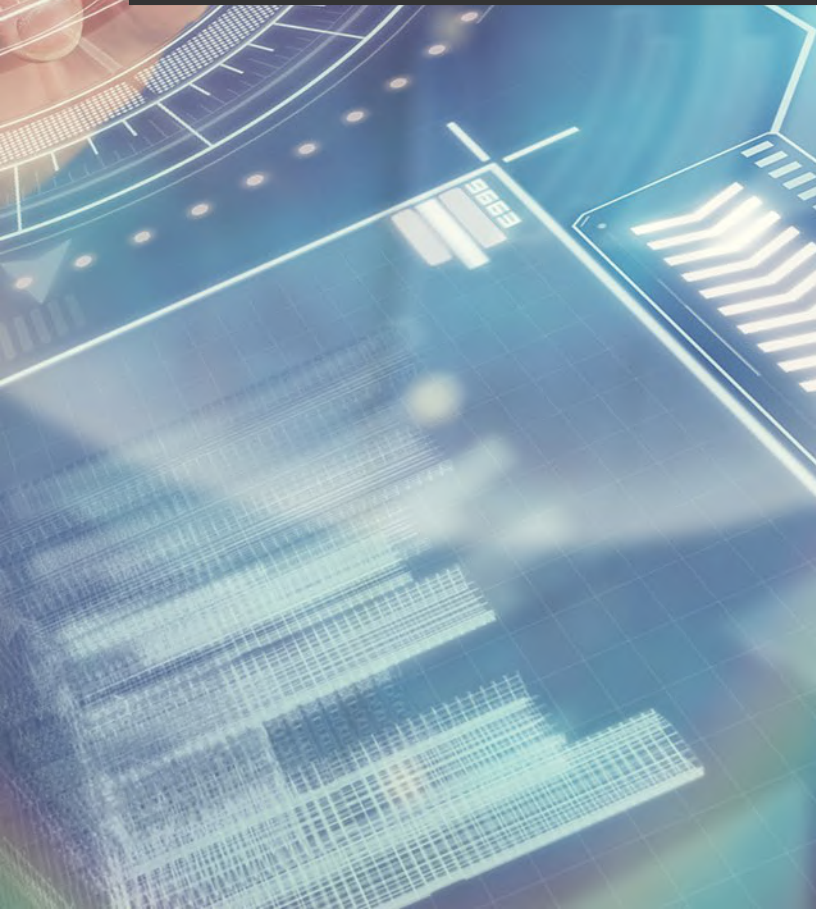


The Excitement around Augmented Reality (AR) and Virtual Reality (VR)

The breakneck speed of technological advancements has created new avenues for cutting-edge stuff like AR and VR. With the introduction of 5G networks that facilitate superfast downloads and streaming, such emerging technologies would find more traction with app developers. As businesses and developers explore the deeper possibilities of these technologies in 2021, they would find countless use cases in all fields of technology, ranging from healthcare to industrial development.



The application of AR and VR can help app developers cash in on untapped opportunities in the field of healthcare, education, industrial design, gaming, social media, and many more.



The use of AR headsets would grow exponentially during 2018-2022. In the next 5 years, AR devices would account for about **97%** of the overall AR/VR market.

Placing App Developers Ahead of the Competition in 2021



Take Note of the Competition

Developers are not playing in isolation; they are part of the industry that's building mobile apps for the common user. Market and competitive analysis form the beacon that guides them to successful app development. At a time when businesses are just recovering from the financial losses inflicted by the pandemic, undertaking a resource-hungry project like app development necessitates thorough preparation. Just possessing the required resources doesn't guarantee success; knowing precisely what the app should be is the key. Blindly copying the competition should not be the objective, rather, studying it to recognize the demand flow should be the priority.

According to **65 percent** of mobile users, poor mobile experiences have negative impacts on their opinion of the brand.

Choose the Most Suitable Approach

Mapping available resources to the project requirements gives a clear picture of the most fitting app development method. In 2021, when businesses would be want to keep operating costs low, resource optimization should be pursued with all seriousness. For instance, if the in-house developers specialize in Android apps but the need is for an iOS product, the management must decide if they will take a chance with the team, hire new resources, or seek help from an outsourcing partner. Opting for multiple app versions and different programming languages, and picking between cross-platform and hybrid development must be dictated by the economic viability.

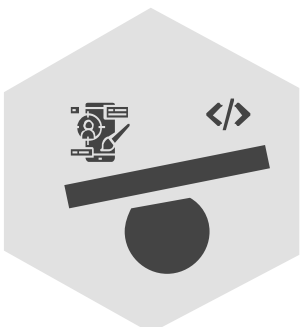


Prioritize App Security

While a lot of the processes around app development seem ambiguous, one thing is certain – there is no substitution for app security. As users evolve to become more aware of what to expect from the apps they use, developers must be on their toes to earn their trust by deploying the most robust data protection measures such as encryption, two-factor authentication (2FA), and others. Also, the industry regulations are expected to be more stringent regarding sensitive matters such as the gathering of personal information, payment details, phone number, etc. Apps whose security gets breached, cause irreversible damage to the image of the brand.

The Magic of Continuous Integration (CI)

Continuous integration optimizes the application development process, a requisite in the post-Covid-19 age. It allows team members to work on the app in isolation without facing issues. As multiple developers work on the code, there are high chances of errors when the different sets of codes are stitched together; continuous integration helps avoid such glitches. CI facilitates the testing of codes every time something is changed in the app. With a CI platform in place, all new code versions pass through a series of tests, and changes are implemented only after the code passes the test, virtually eliminating all chances of errors.



Strike a Balance Between Technicalities and Aesthetics

For the most part, coders tend to focus solely on the technical aspect of the app while designers might tend to over do the aesthetics part. It is for the project manager to ensure that the entire team is on the same page. There are purpose-built tools and methodologies to help managers establish cross-departmental sync for the best outcomes. This streamlines the development process and reduces the need to make lots of changes later in the game, thus helping realize a quick time to market.



App Development Outsourcing and its Implications in 2021

The idea of relying on the in-house development team to build custom applications is tempting but often far-fetched. For most enterprises, maintaining an in-house team of app developers is beyond the budget. Especially at a time when organizations are reeling under financial stress, employing expensive specialists, providing them with space and equipment, and covering all other associated expenses is simply an absurd idea.

To tackle such roadblocks, businesses have always enlisted the skills and wealth of experience that an app development outsourcing firm brings to the table. Competent outsourcing firms specializing in building apps for a variety of businesses, employee professionals with a range of skills. This makes it possible for the client to meet any problem head-on and solve development issues swiftly. Here are a few things to consider before choosing an app development vendor.

The Best-fit Experience

It's important to work with a vendor possessing relevant experience and a strong business portfolio. Preference should be given to firms that have served in the same industry as the client. A look into its past would give a clear picture of how well the vendor fits the requirements of the client.



Checking out some of its previously created products to verify the functionality, usability, reviews, and ratings gives the client a fair idea of the abilities of the vendor.



A walkthrough of how the vendor built those apps and an assessment of whether it has the expertise in the platform the client wants should help in determining its expertise.

ROI Matters

One of the most common reasons why enterprises outsource their software development tasks is the substantial cost benefits the vendor delivers. This makes it imperative for the client to assess the overall savings and cost-benefits an engagement with the prospective vendor would bring.



An analysis of the development strategies adopted by the vendor and its commitment to those can give an idea of how satisfactory an outcome they can deliver to the client.



Timeline adherence is a principal factor in the success of a project. For the app to create the maximum return on investment, the vendor must assume responsibility for its timely launch.



Third-Party Software Integration

Bearing in mind the evolving demands of the user, a feature-rich app that's also integrated with a wide range of external services carries high chances of acceptance. The ability to add necessary external data using APIs (Application Program Interfaces) accelerates the app development process.



In order to maintain the code quality for integrations, the vendor should deploy the best developers to utilize all required third-party APIs and make them work like a charm.



Third-party integrations necessitate holistic testing, implying that the vendor team must check the compatibility and interaction of the app with the provider's API.

Future-proofing the Product

The way a vendor launches an app or submits it to the app store and its handling of the app release are important as the development process. A vendor should collaborate with the clients throughout the development process and must be willing to ship the code on the completion of the initial development process and the hosting of the app.



It must have a well-structured post-release app support and maintenance plan. Reliable firms are known to deliver round-the-clock support to clients for an enhanced experience.



The vendor must address all bugs discovered during the trials and implement feedbacks and suggestions received once the app gets an initial release.

A zillion mobile applications are already competing for user attention in Google Play, Apple App Store, and other app marketplaces. With the pandemic forcing the world to go full throttle toward digitization, the app industry should prepare for busy days ahead. To stand out from the competition, app developers must stay abreast of the trends and technologies for the year and leverage the expertise of a reliable app development partner.

Who We Are And Why You Need to Count On Our Mobile App Development Expertise

GetSmartCoders is a renowned name in the end-to-end mobile application services circle. In 2020, when Covid-19 caught the world unawares, we went remote in quick time to assist our clients manage their business continuity needs round-the-clock. As the challenges and focus for businesses is likely to change rapidly this year too, we are fully geared to help businesses meet the exigencies with are inforced remote collaboration model, scalable cloud strategy and a nimble development methodology that adapts to the stressing needs of remote software development. If you are looking to seize an opportunity in these trying times, contact us now.



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