

CSC 581: Mobile App Development

Spring 2019

Future of mobile

- Hacker Noon: The Future of App Development
- DCI: Future of App Development 2018
- Value Coders: Mobile App Development Trends
- Fingent: Top Technologies Used to Develop Mobile Apps

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HACKERNOON COMMUNITY LATEST TOP 2.0 | AMA W/ INDIE HACKERS COURTLAND ALLEN 4/18 @NOON PST

The Future of App Development

 Avery Phillips [Follow](#)
Aug 29, 2018 · 5 min read

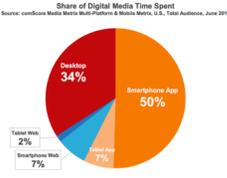
app usage continues to grow and revenue mounts

- in 2017, 2.8+ million Android apps; 2.2+ million iOS apps
- app revenues to exceed \$189 million by 2020

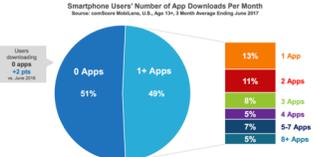
however, a majority of users download 0 apps/month

*"The mobile app boom kicked off in July 2008, when Apple introduced the App Store. Now it is over."
-- Peter Kafka, recode.net, 2016*

IS THE APP BOOM REALLY OVER?



Share of Digital Media Time Spent
Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience, June 2017



Smartphone Users' Number of App Downloads Per Month
Source: comScore Mobile, U.S., Age 15+, 3 Month Average Ending June 2017

Users downloading 0 apps = 51% of smartphone users

1 App 13%
2 Apps 11%
3 Apps 8%
4 Apps 5%
5-7 Apps 7%
8+ Apps 5%

0 Apps 51%
1+ Apps 49%

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Hacker Noon

claim: people want to use apps, but they're sick of downloading them

- in the future, apps will need to speak to each other, the same way IoT works
- the cloud and its ability to connect things via APIs is essential
- low-code approach: rapid design & development, minimal coding via 3rd party APIs
- can lead to lower cost, fewer bugs & greater accessibility
- e.g., Uber app
 - ✓ Box for storage, Google for maps, Braintree for payments,
 - ✓ Twilio for messaging, SendGrid for email

conclusion: app developers should hone their skills in data science, cloud operations & security technologies

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25 Infographic: Future of Mobile App Development 2018

Jan By Raja 4 mins read

App Development Trends 2018:

1. Artificial Intelligence:

- Google CEO Sundar Pichai has said that the company is undergoing "An important shift from a mobile-first world to an AI-first world."
- Further anticipated: 200 of the world's largest companies will develop intelligent apps within the next year.
- According to a new report from IDC, the AI market will experience a revenue growth of more than \$47 billion in 2020.
- Deloitte also estimates that 6 billion connected "things" such as connected appliances, cars, wearables and smart devices will be needing support from AI platforms by 2018.
- The \$300-350 million spending for AI in 2015 is projected to be \$30 billion by 2020 - Forbes

2. Internet of Things (IoT):

- Global spending on the IoT across markets by 2020: 1.29 Trillion
- Smart home investments by consumers will more than double over the forecast period: \$63 billion by 2020
- Number of connected devices is expected to rise 23.14 billion in 2018 & 31 billion by 2020

Popular IoT Integrated mobile apps

- Bluesmart App**
Get location of the suitcases from anywhere for free.
- U by Moen**
To personalize and control shower from smart phone.
- Ring Video Doorbell**
Open door from anywhere

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Dot Com Infoway

3. Augmented Reality

01 Total number of mobile apps with built-in AR capabilities will cross:
 • 1580 million in 2018
 • 4670 million in 2022

02 The global market for mobile Augmented reality apps is projected to reach US \$3.9 billion by 2020.

03 By 2025, the worldwide user base of AR and VR games is expected to grow to 216 million users.

Brands using Augmented Reality:

Augmented Reality Games:

Pokemon Go
 Total Downloads: 650 Million
 Daily Active Users Globally: 5 Million
 Estimated amount of revenue generated: \$1 Billion

Real Strike
 World's first ever Augmented Reality First-Person-Shooting app
 Ranked 1st in the U.S. and China during the limited free offering
 Best ranked top 50 in the U.S. and top 10 in Japan and Germany

4. Chat Bots:

01 Chatbot interaction is expected to increase from just 20% in 2017 to 93% in 2022

02 In 2018, we will see more brands adopting voice assistant bots. An estimated 30% of interactions would be conversation-based in 2018

03 As per Gartner's top strategic predictions for 2018 more than 50% of enterprises will spend more on chatbots.

04 Chatbot would save an average of 4+ minutes compared to traditional call centers

Great examples of Native Chat Bot:

duolingo
 This learning app has gained 200 Million User
 Fund Raised: \$108.3 million

The Luka app
 An app that connects people and chatbots on one platform; the product scored \$442 million in funding.

Poncho
 An app that sends funny personalized weather forecasts and alerts. It raised \$24 million in funding.

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11 Mobile App Development Trends To Look In 2019

Are You Looking Budget

1. Accelerated Mobile Pages (AMP) are changing the Web app landscape
2. AR & VR will show some magic
3. Artificial Intelligence is real now
4. Cloud driven mobile apps are on the rise
5. Enterprise apps & micro-apps will advance further

Tech Chart of the Day

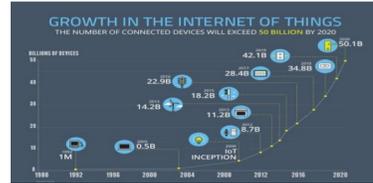
The Diverse Potential of VR & AR Applications
Predicted market size of VR/AR software for different use cases in 2021*

* Based on Statista. BUSINESS INSIDER. Source: Statista, Statista Research Department. © 2019 statista

Mobile Non-Cloud Traffic: IP Voice, File Sharing, FileApp Downloading. Mobile Cloud Traffic: Video Streaming, Audio Streaming, Online Gaming, Social Networking, Web Browsing, Online Storage.

Value Coders

6. More focus on security in apps
7. Wearable devices are getting attention
8. M-commerce is becoming a new standard
9. Internet of Things will be much bigger
10. Beacons & location based servers are on the rise
11. Swift is much swifter now



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Company Services

DECEMBER 19, 2018 BY
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Top Technologies Used to Develop Mobile App

Top development languages

1. Swift
2. C++
3. Java
4. HTML5
5. PHP

Top development tools

1. PhoneGap
2. Appcelerator
3. RhoMobile
4. WidgetPad
5. MoSync

Trending development frameworks

1. Flutter
2. React Native
3. Ionic
4. Xamarin

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Questions

1. The first three articles are different views of the future of mobile development. Describe three (3) things you found interesting and useful from these articles.
2. Which of the three articles did you find most compelling? Explain why?
3. The fourth article, from Fingent, lists different technologies that can be used to develop apps. It lists five tools that are commonly used: PhoneGap, Appcellerator, RhoMobile, WidgetPad, and MoSync. Scan the Web site for one of these tools and describe one fact that you learned about the tool from that site.