



Voatz 2020: Impact Report _____
Advancing Accessible Remote Voting

Technology can empower voters. Proving that was our goal at the outset of 2020. But as the year of tumult continued, it became more than a goal – it became our responsibility.

We met that responsibility. Voatz became the first mobile voting app in history to be used in a U.S. presidential election.

In 2020, the Voatz platform served nearly 1.8 million voters globally including thousands of Americans – many of them US military personnel, overseas US citizens, voters with disabilities or those impacted by the pandemic.



Throughout the year, we were able to act swiftly to respond to the changing demands that surfaced - safety in a pandemic, resiliency despite borders, and certainty in the face of confusion. Voatz was used for political party conventions & caucuses on both sides of the aisle. Also, a South American government in exile used Voatz to conduct a national referendum.

We served as the expert voice and resource on mobile voting security and execution, advancing the potential global expansion of mobile voting in a responsible manner. We provided detailed data on potential threats to our system. We pioneered citizen and public audits that allow, for the first time, 100% auditability of every single vote cast on our platform.



Our advocacy work was vital. We urged the National Association of Secretaries of State to commission a study to establish standards for remote voting. We invited Congress and the Secretary of Defense to consider mobile voting to overcome various challenges posed by the pandemic. We demonstrated the app for dozens of elected officials and their staff.

In the last five years, our impact was imperative as well as deliberate.

2020 became the [milestone](#) year that accelerated the understanding and education around mobile voting's viability for future elections.

Our work will continue to expand globally in a thoughtful and responsible manner. America is catching up to the use of cutting-edge technologies in civic engagement and elections. Voatz is the homegrown company built in collaboration with forward-looking election officials across this great nation and international cybersecurity experts that is laying the groundwork for bringing a new, accessible method of voting to every citizen.

Thank you,

Voatz Team

POSITION

#1

Recognized as the Category Leader



ELECTIONS

- 23 Successful Elections (in 2020)
 - 7 government elections
 - 11 political party elections
 - 5 private, non-political elections
- 30 Counties in 5 U.S. States Have Successfully used Voatz for Governmental Elections
- 1.8 Million Voters Served in 2020
 - 201,937 via Voatz apps
 - 1.6 million via Voatz APIs

SECURITY

- ~13.9 million threats blocked (in 2020)
 - ~351k network infrastructure attacks neutralized
 - 9,420 mobile device and network threats neutralized
 - 12,903 malware threats neutralized
- 0 successful attacks or breaches (all time)

PRESS

- ~400 Press Mentions (in 2020)
- Social Media Impressions (2020) 517,484
- 20,484 Audience Engagements (2020)

To Vote is to Use Your Voice.

Voatz has primarily served three disenfranchised groups of people - overseas citizens, deployed military service members and their families, and people with disabilities. Mobile voting has the potential to benefit many additional groups who've faced voter suppression and historic disenfranchisement.

Native Americans, the elderly, busy parents, and so many others lack equal access to the ballot during elections. Offering well-tested alternatives to traditional in-person and mail-in voting methods only makes our elections more equal and fair. Without mobile voting, it's difficult to envision truly accessible voting.

The Votes are in:

All citizens deserve access to a safe, secure, and accessible method of voting remotely and mobile voting can help us get there.

WHO BENEFITS FROM MOBILE VOTING?

These disenfranchised groups desperately need a remote voting option as the pandemic and other circumstances prevent them from voting by mail or attending physical polls.

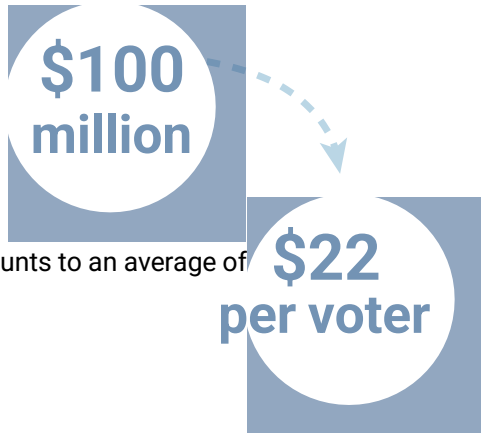
WHO						
	Voters with Disabilities	Deployed Military & Overseas Voters	Native Americans & Alaska Natives	Elderly Voters	Caregivers & The Busy	Those Targeted by Voter Suppression
WHY	If disabled voters were voting at the same rate as other populations, there would be 2.35 million more voters.	These voters have a low 7% voter turnout out – FVAP estimates that with barriers removed, the rate would increase to 37.5%.	Thousands of voters don't have a traditional home address essentially preventing them from receiving a ballot by mail.	Challenged by limited mobility and often immunocompromised, elderly voters are hindered from voting in person especially this year.	In 2016, 2.7 million people were "too busy to vote" , with no time off from employers to vote in person.	In 2016, voters in black neighborhoods waited 29% longer to vote , with many unable to take that time without risking their jobs.

Using Voatz is Cost Efficient and Ecologically Responsible.

Electronics have always produced waste. A lot of paper is used for ballots. Tens of thousands of polling locations must be lit and heated. Outdated equipment must be stored, replaced and discarded. If voters used their own devices to vote, these ecological hazards would be significantly reduced.

Mobile voting also has profound implications on cost control.

New Jersey estimates that replacing the state's aged fleet of voting machines with new technology to enable early voting is around



which amounts to an average of

Fast Company reported that Voatz' client Utah County estimated the cost of providing special booths for disabled voters in each precinct which this year meant

\$130,000

spent for six voters.



With mobile voting, election officials are able to operate securely at a fraction of the cost, along with the ability to conserve resources.

Georgia reported that despite deep budget cuts, the state government is paying

\$432,000

a year to store

30,000

voting machines that will never be used again.



An analysis by the University of Pittsburgh and the activist group Citizens for Better Elections in 2019 found that all ballot marking devices (BMD) setups cost an average of

\$23.35 per voter,

while setups with mostly paper ballots, plus a few BMDs for voters with disabilities, cost an average of

\$12.51 per voter.



Comparatively, mobile voting costs

\$3.95 per voter

and updating technology is not an additional cost to jurisdictions.

Blockchain has the potential to revolutionize the future of governance.

Voatz and election officials now have a safe and secure mobile platform mathematically guaranteed to be unmodified.

Blockchain brings the highest level of transparency to elections, building the foundation to establish trust and transform digital record keeping. Smart Cities worldwide are using blockchain in plans to enhance urban living, and voting is a critical element for administrators who wish to increase civic engagement.

This is becoming a more ubiquitous reality. In the 2020 presidential election, the Voatz platform supported safe, accessible elections for deployed military, overseas voters, and disabled voters in three counties across two states. 1,151 voters voted via the app.

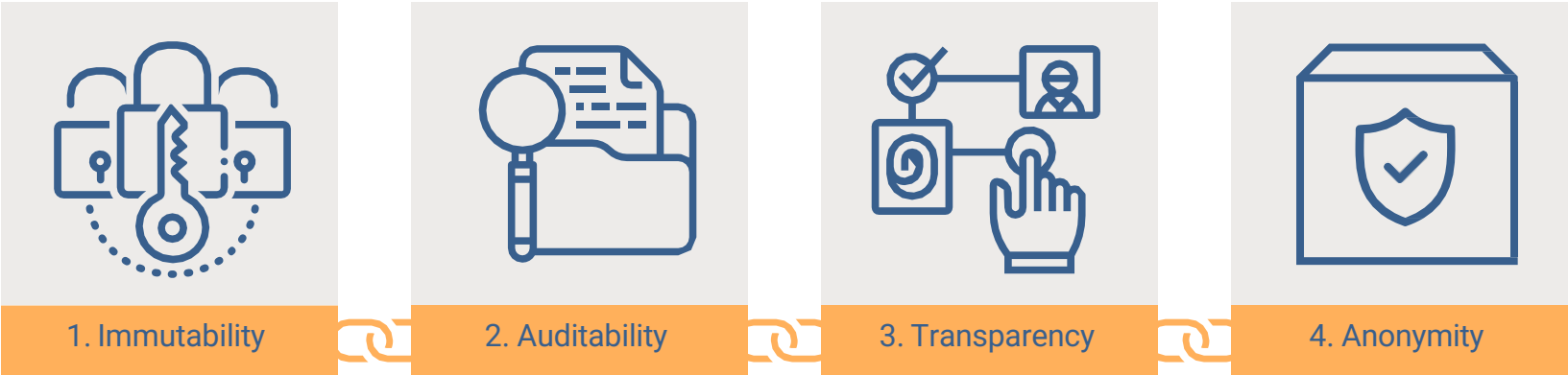
We worked with trailblazing, forward-looking election officials who disproved claims that the internet is not safe for voting.

This means each transaction -- in Voatz's design, a marked oval on a voted ballot -- is signed with a unique key. This digitally signed transaction is then broadcast to multiple nodes on the blockchain. If some-

one alters a record somewhere on the chain, anyone who seeks to create a new block, read data from the chain or add a block to the chain will find that the chain has been broken. It is the immutability of the original transaction and the inherent immutability of the chain that assures the integrity of the election.

In the most recent elections, 35% of voters who cast their ballot using Voatz checked their digital receipt. There is clearly interest among voters - blockchain is that key that allows us to fulfill the demand and build trust in mobile voting options.

VOATZ HAS PIONEERED THE USE BLOCKCHAIN IN ELECTIONS



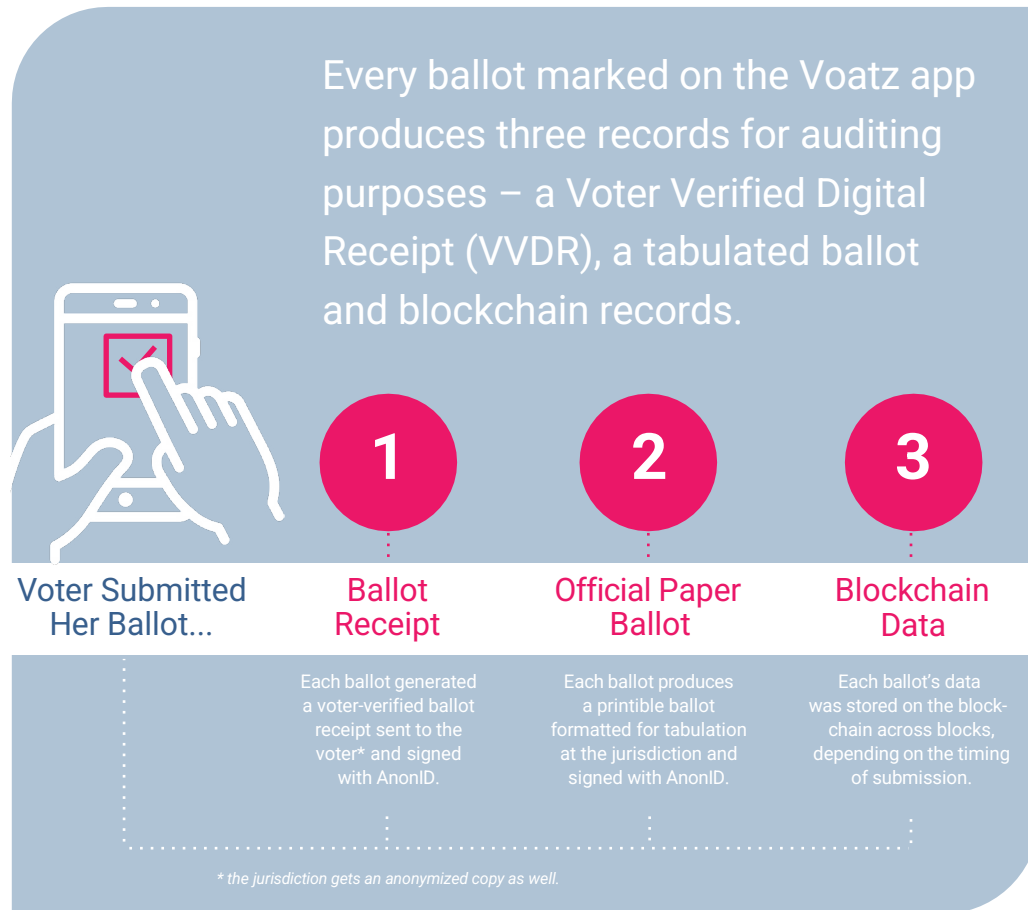
Voatz pioneered the concept of enabling everyone to audit its public elections. It remains the only mobile voting company that not only enables this, but also publishes the results on its website (<https://voatz.com/audits/>).

We have worked alongside election officials and independent cybersecurity organizations to develop a very strict post-election audit process that, for the first time in history, is open for anyone to participate. These audits verify that every single ballot submitted using Voatz reflects the voter's intent and provides an accurate tabulation.

These audits are critical to both involving the community in our innovation process, but also to ensuring that every single ballot submitted on our system can be verified independently without compromising the voter's anonymity.

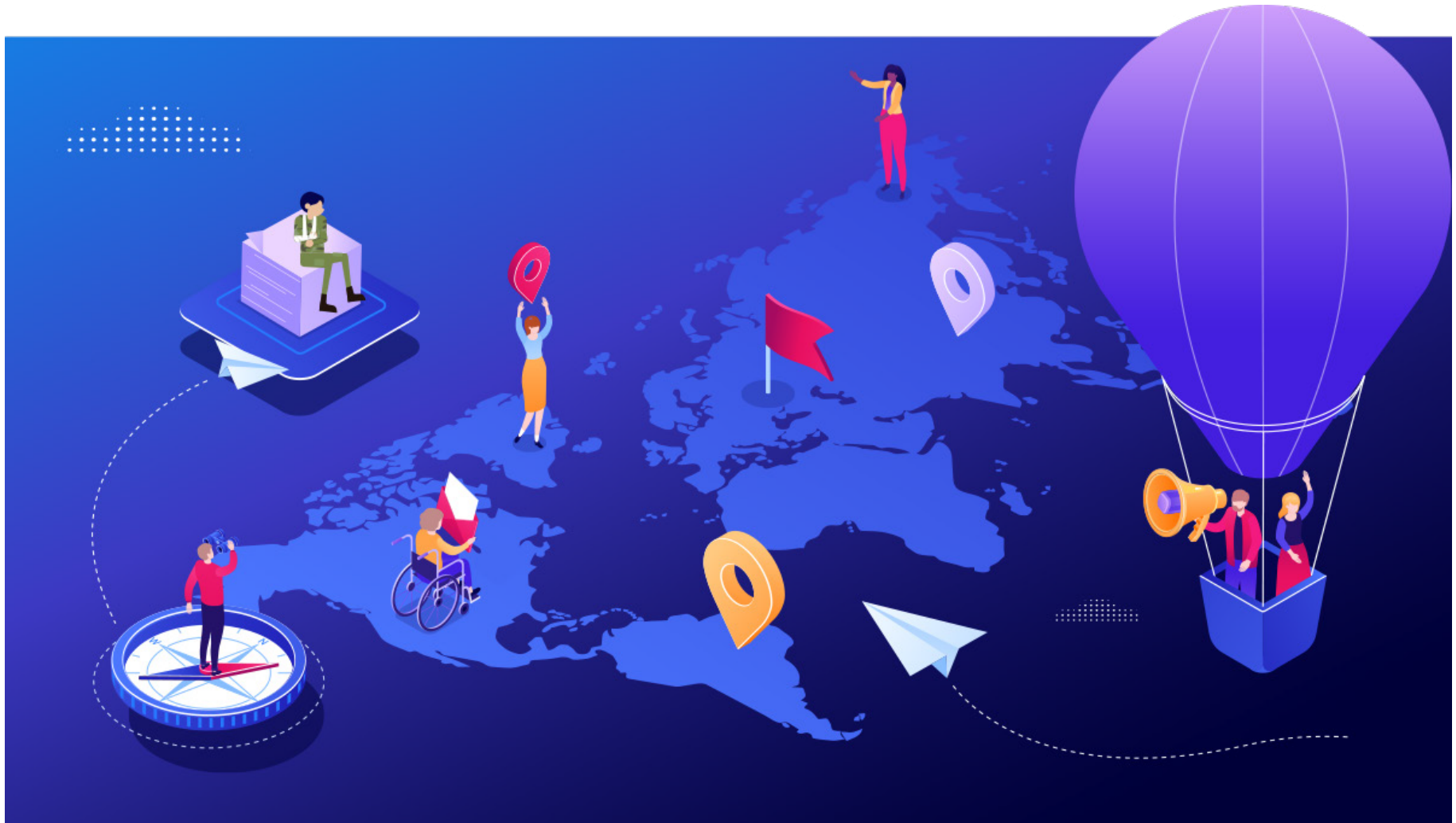
Starting with its Citizens Audit of the 2019 Denver County (CO) municipal election, Voatz has had its work audited more than a dozen times.

The post-election audit ensures the equipment and procedures used to mark and tabulate votes work as intended so the proper electoral outcome is produced.



In an audit, the anonymous ID on the VVDR is matched with the one on the tabulated ballot. Next, the auditor ensures the selections on the VVDR match what is on the tabulated ballot and the jurisdiction's tabulation export. Finally, the vote transaction stored on the blockchain is matched with the VVDR selections for final verification.

The ultimate goal is to have a fully end-to-end verifiable voting process, and post-election audits go a long way toward making that happen. Most importantly it brings a further layer of transparency and confidence to the electoral system.



Voters face challenges that remote voting can solve.

Many voters are left behind for a variety of reasons - unable to take time off from work to vote, fewer polling booths, mismatch in signature, lack of witness, physical disability, poor mail service. The list of exclusions is long. Voter suppression, unfortunately, is inherent in the system's design.

We believe more than ever that remote voting using advanced technology is able to empower voters. This year, Voatz has **taken action by** calling on elected officials both at Federal and State to ensure every voter has an opportunity to vote.

STANDARDS

Voatz called on the National Association of Secretaries of State (NASS) for updated and comprehensive standards in a paper titled - [“Standardization of Remote Ballot Marking & Return Through a Rigorous National Study & Examination”](#).

In order to build trust and accountability for mobile voting at scale, we must have a comprehensive study that defines the security and functional requirements for apps designed to receive the appropriate blank ballot, enable marking of the ballot, and assure the return of a ballot using a commercial off-the-shelf computer. This study should consider if these apps can take full advantage of the security features of the platform, while being able to verify the voter, secure their markings of the ballot, encrypt & guarantee the return of the marked ballot all while assuring the anonymity of the voter.



ADVOCACY

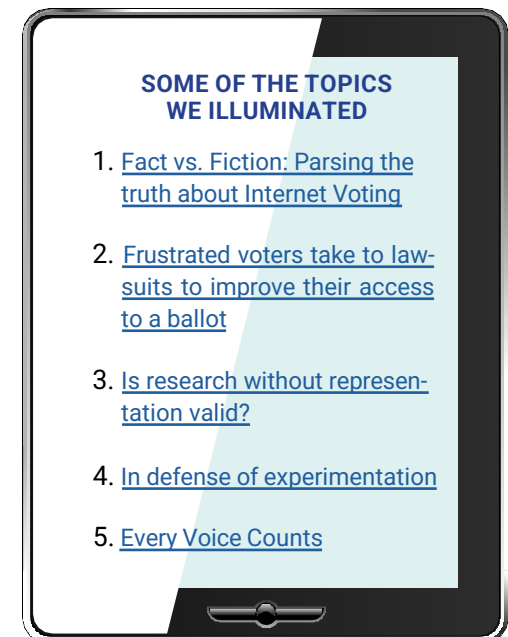
When the pandemic reached its peak in the summer, it became apparent that world events could disrupt access to voting especially for members of the military deployed overseas, American citizens abroad and immunocompromised voters. We took serious action by writing to leaders of Congress and Secretary of Defence Mark Esper, urging them to ensure our overseas military have a chance to vote in the November election. [Dear Congress: We Must Enable Mobile Voting for Our Overseas Voters and Deployed Military](#)

[Dear Secretary Esper: It's Time To Allow Mobile Voting for our Deployed Military and Overseas Voters](#)

EDUCATION

In June 2020, we launched a newsletter distributed to stakeholders, partners, media, supporters, and beyond to educate the public on the tenets of mobile voting. Like every other aspect of voting this year, remote voting has been shrouded in misinformation and speculation that has resulted in a skewed view on voting online.

Throughout the year, we offered research, facts and sharp rebuttal for misinformation to help people understand the stakes if America did not take careful steps towards understanding the use of technology and applying best practices in elections.



Security is a Ongoing Journey, not a Destination.

Security is a critical issue as we improve voter access. Voatz believes security, product design, and responsiveness to real-world threats must be deeply interlinked. Our platform is not only built to protect but to be resilient in the face of ongoing and developing threats. It satisfies rigorous security criteria, meets the standards for voter ease of use, grants the ability to audit, and offers full integration with existing legacy infrastructure.



The Voatz-supported virtual political party conventions, where our remote voting system processed a record 7,000 votes on the platform during a single election period, offered a unique opportunity to test and learn about the resiliency of remote options. We were able to collect a rich dataset of device and network-level threat detection and mitigation events showcasing real-world threats.



We published a detailed whitepaper based on our findings. We confirmed that Voatz's advanced security threat detection mechanisms were able to detect, mitigate and thwart a number of smartphones from voting that had malware, were operating on insecure networks or had insecure applications installed.

THREATS

iPhone Vs Android: More voters in the U.S. use iPhone, not Androids. However, far more threats were detected on the Android platforms.

Man-in-the-Middle Attacks: We detected and thwarted voters using unsafe WiFi networks, possibly leading to a "Man-in-the-Middle" attack, where a malicious attacker hijacks traffic, steals credentials, or delivers malware to the device.

Malware: We thwarted smartphones with malware or unsecure applications.

Device PIN: We required that voters activate their device PIN or biometric features allowing secure entry.

Sideloaded Apps: We detected and thwarted devices with applications that bypass the device's security protocols

DEFENSE

Smartphone Security Vs Web browser: [Smartphone app-based systems](#)¹¹ contain unique security features that distinguish them from web browser-based platforms, ensuring that a compromised device cannot submit a vote.

If a voter attempts to sign up to receive a ballot through the Voatz platform and does not have a device PIN set, the voter will receive an error until they set their device PIN or enable biometrics.

Sideloaded apps could contain malware, the voter is requested to remove the application from their device before they are able to proceed and vote.

USB debugging: If the device is connected to a computer, the Voatz system will not let a vote be submitted and the voter will receive an error.

Untethered Hacks: This ability for advanced threat detection makes breaking into smartphones without physically connecting to the device very resource intensive and expensive.

Voter Identity: Smartphones allow the ability to remotely verify a voter's identity, offers enhanced accessibility features, and the ability to conduct a rigorous post-election audit to ensure integrity in the results.

Multi-layer security: Smartphone app-based systems incorporate multiple layers of security to provide defense-in-depth, or at every layer of the platform - system-level security, network-level security, application-level security, and transmission-level security. If one layer is penetrated, the threat is detected and stopped at additional levels.

Team by Numbers

VOATZ HAS RECRUITED CANDIDATES WITH DEEP EXPERTISE IN THE FOLLOWING INDUSTRIES

- | | |
|---------------------------|------------------------|
| Academia | Financial Services |
| Advertising | Gaming |
| Advertising Technology | Healthcare |
| Communications | Information Technology |
| Consulting | Journalism |
| E-Commerce | Law |
| Education | Pharmaceuticals |
| Energy Technology | Public Service |
| Enterprise Software | Software |
| Environmental Remediation | Telecom |

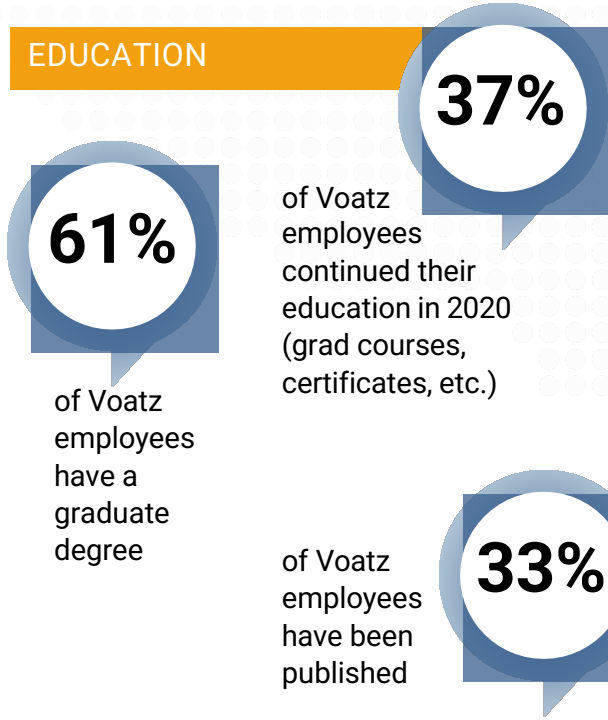
LANGUAGES SPOKEN

- English
- Spanish
- Italian
- German
- French
- Hindi

INDUSTRY EXPERIENCE



EDUCATION



DEMOGRAPHICS

Gender Breakdown

- 73% Male
- 27% Female

Nationalities

- Canadian,
- American,
- Indian,
- Spanish

Ethnicities

- Caucasian
- Asian
- East Indian
- European
- Hispanic
- Multi-Race

VOLUNTEERING

64% of Voatz employees spent some of their free time volunteering in 2020

Employees completed a total of **422 volunteer hours** in 2020 (company-wide total)

Testimonials

“



REBECCA LEACH, Military Spouse

“It was my first time voting on my phone. I was a little worried it’d be complicated, but I was so happy it turned out to be easy to do.”

“I don’t miss going to the polls. I’d love to see this everywhere.”

“When I’m working, to stop what I’m doing and drive to a polling place is somewhat inconvenient. But this time I voted from my living room.”

”

“I always wondered if my mailed ballot would arrive and be counted, and with COVID and the mail being backed up, I didn’t know if my ballot would even get to Utah.”

“I’m studying to be a web developer, so I was very pleased to see a high level of security. There were multiple steps you had to go through, making it as close to unhackable as I’ve ever seen. I trust this level of security.”



PETER WATSON, Overseas Voter



VANCE WOOLLEY
Unexpectedly Out of State on Election Day

“I got more [notifications] from Voatz than I ever got from my mail-in ballots.”

“I like the fact that I was identified. I couldn’t vote four or five times.”



DEREK BROWN
Chairperson of the Utah Republican Party

“Using Voatz allowed us to digitally recreate our usual convention procedures and implement technology in a way that made the process more convenient and secure.”



CHRISTY JENSEN
Executive Director of the Michigan Democratic Party

“There were so many unique challenges with this year’s convention because of the pandemic, but the Voatz platform eased many of our concerns.”

“Voatz enabled our delegates to be verified remotely and participate through their smartphones. The convenience, safety and accessibility of voting this way was eye-opening for everyone who participated.”

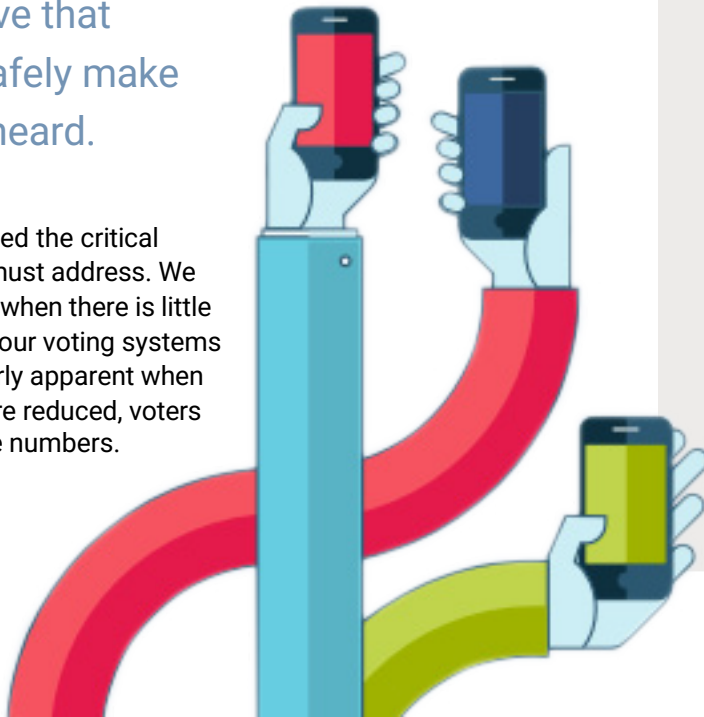
Citizens have the right to vote for elected officials at every level. Every vote matters.

We have made critical strides to make this a reality. The 2020 US Presidential election was the first to use mobile voting, and enabling those who are disabled, dealing with Covid challenges, serving the country or living overseas, and other traditionally disenfranchised groups helps ensure an election that is truly representative of all voters voices. Our platform ensures that all citizens regardless of their circumstances have an ability to cast a private, secure ballot, in a manner that enables the election officials and the public to seamlessly audit 100% of all votes cast.

The argument to limit the accessible methods of voting is one that has no place in a vibrant democracy. Looking forward, we firmly believe that every action by lawmakers and election administrators should and must be in service of increasing voter access.

It is imperative that voters can safely make their voices heard.

2020 only spotlighted the critical gaps in voting we must address. We saw what happens when there is little resiliency built into our voting systems and it became clearly apparent when barriers to voting are reduced, voters will turn out in large numbers.



We will relentlessly strive to **improve our platform** in service of access, security and transparency.

We will increase our **advocacy for the voting rights** of all those who face challenges in secure, private access to a ballot.

We will **champion higher standards** for remote voting machines and urge lawmakers to set standards and certifications to ensure that election officials have accountable and modern technology to conduct free and fair elections.

We continue to **provide expert advice and research** from our experience with actual elections on adoption, voter response and threats in mobile voting.

We will invest in our **work with disenfranchised groups**, advocates, voting right activists, cyber security experts to create the most inclusive platform for voting.

We will make our **platform available** through our bug bounty program to help us build the most secure voting platform.

Our mission is to empower every election administrator to run free and fair elections and to empower every voter by eliminating hurdles to a ballot.

Thank you

Voatz Team



info@voatz.com