CORPORATE CIVIC RESPONSIBILITY:

A New Paradigm for Companies to Advance Public Interest Technology

How unlocking private-sector technical talent is the path to meeting the needs of a 21st-century America

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TECH TALENT PROJECT

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ABOUT THE AUTHOR

Clarice Chan is a product manager and technology thought leader working to strengthen the field of public interest technology. For the past two years, Clarice took a civic leave sabbatical from Microsoft to serve as a White House Presidential Innovation Fellow. Upon completion of her fellowship, Clarice has partnered with Tech Talent Project and Ford Foundation to produce this paper.

ABOUT THE EFFORT

In partnership, Ford Foundation, Tech Talent Project and AnitaB.org have come together to support The United States of Technologists, a nationwide campaign to bring the next 10,000 technologists into the government workforce in 2021 and beyond. We hope this paper facilitates conversations about the importance of technical talent in government and serves as a launching pad for the next decade of progress in the field.

This paper has been produced independently and does not represent any of the technology companies mentioned, the White House Presidential Innovation Fellows, and/or the federal government.

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INTRODUCTION

While the wealth of information and the advancement of technology has led to a boom in innovation, it has also led to a rise in the number of digital threats and vulnerabilities facing society. Many of these challenges sit at the frontier of where our legacy institutions intersect with the evolving digital demands of modern society. At this juncture, the government is failing to keep up with the needs of a 21st-century America.

To illustrate the interdependence our country has on the government, the federal government currently employs 2 million people—or one out of every 160 Americans. As an example of its massive scope of services, the U.S. Department of Veterans Affairs (one of 23 major federal agencies[1]) distributed $114 billion in benefits to veterans and their families in 2020 alone. Another example of tremendous scale is the U.S. Department of Health and Human Services (HHS), which houses organizations critical to everything from COVID-19 response (e.g., Centers for Disease Control and Prevention) to healthcare (e.g., Centers for Medicare and Medicaid Services). HHS has an enormous operating budget of $1.37 trillion.[2] For agencies of this scale to be successful, they require tremendous operational infrastructure and coordination.

In order to deliver on the promise of the government's mission, agencies lean heavily on private-sector technology contracts. The Joint Enterprise Defense Infrastructure (JEDI) contract sought by Microsoft and Amazon in 2019 was valued at $10 billion while the government's largest contractor, Lockheed Martin, received over $50 billion in 2020 alone. Given the scope of these massive projects, it's clear that the government's ability to successfully carry out its mission is beneficial not only to the millions who rely on its services, but also to the multi-sector growth and health of our economy. As we experience unprecedented paces of digital disruption and societal change, our democratic institutions and government systems are under tremendous stress to adapt. And despite these substantial IT investments, we continue to read daily news stories on how federal agencies are struggling to digitally safeguard and deliver modern government services.

In this paper, we explore the challenges our modern government faces, and reveal how their biggest pain points are increasingly technological in nature. Most of all, we discuss the urgent need to expand our commitment and investment toward the field of public interest technology (PIT), and we argue that the greatest opportunity to catalyze this transformation is in the hands of private-sector technology companies—and their technical talent. In service to unlocking this potential, we introduce a framework for "corporate civic responsibility," a holistic approach that seeks to reimagine how the private and public sectors can collaborate to meet the needs of modern America. We hope this paper sheds light on the importance of these issues and inspires civic and corporate leadership to engage in the work ahead.

If the topic of public interest technology is new to you, we recommend reviewing the glossary to help ground these ideas as you move through the document. Throughout this paper, we discuss activities that are either public or civic in nature. Generally speaking, we define "public" as the group of people who make up a society or as an activity that takes place in the public sphere. We use "civic" to refer to the relationship between the public and the government.

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[1] General Accounting Office, "The Chief Financial Officers Act: A Mandate for Federal Financial Reform," September 1991. Retrieved from https://bit.ly/33hTrQL

[2] Department of Health and Human Services, "FY 2021 Budget in Brief," 2020. Retrieved from https://bit.ly/2DTzWnW

THE TECHNOLOGICAL THREAT TO OUR GOVERNMENT AND SOCIETY

It is important to begin with understanding the scope of this urgency. The government faces three major digital threats today: an aging pre-digital workforce, the atrophying of legacy systems, and the inability to meet the rising digital demands of the future. This digital divide will continue to widen if we do not act immediately.

As of 2018, 14% of the federal workforce was eligible for retirement. By 2023, that share will increase to over 30%.[3] When this mass exodus occurs, the government will not only lose decades of historical knowledge about systems and processes, but also face a vacuum of leadership at an unprecedented scale. And despite the government's continued growth in budget allocated toward major IT contracts, the percentage of federal IT employees under 30 has decreased from 4.1% in 2007 to 2.7% in 2020.[4] This lack of technical talent in leadership will become more pronounced as our workforce continues to age and will set the stage for the challenges we will collectively face in the future.

Second, we're seeing government services begin to fail our most vulnerable populations due to the atrophying of legacy systems. As one example, state child welfare programs across the country lack modern computer databases to keep track of information about potential caregivers. Without up-to-date information, many children are placed in homes with caregivers who should have been disqualified from participation in the program. This tragedy has played out publicly in Michigan for years, where child mortality has risen from 59 deaths in 2008 to 85 deaths in 2016.[5] When there are people whose well-being relies on government social services to survive, the effects of these failing legacy systems are far from trivial computer glitches.

The third concern is the growing societal need to address and regulate new emerging technologies. From the rise of AI, to the prevalence of online misinformation, to the introduction of autonomous vehicles and more, the government is responsible for regulating consumer safety and ensuring national security. As the infrastructure of our modern world becomes more digital and less physical, systemic failures will become increasingly invisible and harder to detect. This makes monitoring

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[3] Eric Katz, "The Federal Agencies Where the Most Employees Are Eligible to Retire," Government Executive, June 18, 2018. Retrieved from https://bit.ly/38LT70j

[4] "Budget Underscores Lack of Younger Federal Employees," Fedweek, Feb. 25, 2020. Retrieved from https://bit.ly/3f0FfAx

[5] Justin A. Hinkley, "More Michigan kids die despite 10 years of trying to fix the system meant to protect them," Lansing State Journal, May 3, 2016. Retrieved from https://bit.ly/2H3kZBx

these systems and training stewards to maintain them so much more critical. The U.S. government needs to be proactively preparing, developing and growing the next generation of civic technology leaders to meet the needs of these unknown future challenges.

In unpacking the breadth of the government's digital needs, it's helpful to consider these needs on a scale from low-tech to high-tech.

	LOW-TECH	MID-TECH	HIGH-TECH
Technology solutions	Updating process and infrastructure Ensuring all government websites are secure and accessible	Redesigning modern government service delivery with modern development environments Developing new apps and civic experiences	Leveraging cutting-edge advanced technology (such as AI/ML) to strengthen our government's efficacy Addressing emerging cybersecurity threats
Talent solutions	Tech advisory toward infrastructure decisions, such as removing data silos	Tech professionals working with subject matter experts on developing solutions	In-house multidisciplinary teams solving mission and operational challenges

On one end of the spectrum are the critical issues of decaying infrastructure. On the other end are the emerging challenges that come with the advent of a new technology. No matter the agency, the government cannot address all its technical and digital needs with its current staffing approach. Human and technical investments need to be bolstered to solve the full-stack of problems from front-end to back-end and from low-tech to high-tech.

> "There's so much room right now for technologists in government to help modernize our infrastructure, to help [government] think in more sophisticated ways about how technology lives in our society, and you shouldn't pass up that opportunity."
>
> **Nicole Wong, former United States deputy chief technology officer**

The longer we delay addressing this aging workforce and refactoring these legacy systems, the greater the technical debt we will incur. We will inevitably and eventually need to face this debt in the future. To effectively safeguard our democracy, it is paramount that we take action toward these threats immediately, starting with digital workforce transformation.

HEALTHCARE.GOV: THE WAKE-UP CALL TO OUR DIGITAL DEFICITS

Even though the decline of many government systems has gone unnoticed, the failed launch of Healthcare.gov caused the eruption that ultimately drew national attention to the consequences of not addressing these threats. Following a lengthy and brutal legislative battle over the Affordable Care Act, the Obama administration faced an even greater feat—developing, building and deploying an ambitious new healthcare portal. With 49 million Americans uninsured in 2010, this new program would need to help enroll millions of users in newly created healthcare marketplaces.[6] After three years of development, in late 2013, the Obama administration launched Healthcare.gov—a single portal consumers could use to browse and select new plans.

Few can forget the technological failures that followed. From failing to sign up new users to not consistently determining a user's eligibility, Healthcare.gov was plagued by critical operational problems. Upon launch, the site was overwhelmed by user traffic. On its first day, Healthcare.gov successfully enrolled a total of just six people.[7] In this example, it was not the legislation or policy that failed the American people; it was the technical implementation and execution. The original budget for Healthcare.gov was $94 million, but by the time the portal was fully functional, costs skyrocketed to more than $2 billion.

It was not the legislation or policy that failed the American people; it was the technical implementation and execution.

The story of Healthcare.gov is part of a larger trend. According to research by the Standish Group, 94% of large federal IT projects over the past 10 years were unsuccessful. Across all projects, more than 50% were delayed, over budget or didn't meet expectations, and 41% failed completely.[8] This inability to successfully deliver modern government services poses a huge threat to upholding our democratic institutions. The failed launch of Healthcare.gov drew so much national attention that it became the wake-up call to ignite a new movement: the civic tech movement.

CIVIC TECH AND PUBLIC INTEREST TECHNOLOGY

Where there is opportunity, there is hope. In the wake of the Healthcare.gov debacle, a number of technologists answered the call to serve their country—not through war, but through web delivery. This group of brave technologists would be an early part of what is known today as the civic tech movement.

> "It's really urgent that we take responsibility. Government is whoever shows up. That's all it is, so please show up."
>
> **Megan Smith, CEO and founder, shift7, and former United States chief technology officer**

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6 Dan Mangan, "Take a look at the maps that show Obamacare's big effect on Americans' health insurance coverage," CNBC, Sept. 12, 2017. Retrieved from cnb.cx/3gRbnY1

7 Robinson Meyer, "The Secret Startup That Saved the Worst Website in America," The Atlantic, July 9, 2015. Retrieved from https://bit.ly/2IFk9f9

8 Clay Johnson and Harper Reed, "Why the Government Never Gets Tech Right," The New York Times, Oct. 24, 2013. Retrieved from https://nyti.ms/2ID40qn

The White House Presidential Innovation Fellows (PIF) program, founded by former U.S. Chief Technology Officer Todd Park, recruited private-sector technologists to join federal agencies and partner with civil servants to deliver improved government services. In its eight-year history, the PIF program has resulted in more than 190 technologists, designers and strategists tackling major digital challenges across 35 federal agencies. In the years that followed, early PIFs further propelled the movement by helping to stand up the United States Digital Service (USDS) and 18F, two programs that expanded the role and presence of core engineering and design thinking within government.

The Talent Act of 2017 was the last piece of legislation signed by President Obama, ultimately securing and safeguarding this path to bringing technologists into the federal government. And still, even with the growth of these three programs combined, the total headcount of technologists working across PIF, USDS and 18F is no greater than 450 technologists. In contrast to major technology companies, where it's common to have 500 to 1,000 technologists supporting a single application or platform, the federal technical workforce is nowhere near where it needs to be.

In order to meet the demands of a user base of 330 million people, our federal workforce of 2 million must diversify and expand its digital expertise. In order to scale human-centered design work effectively, the government needs to recruit not just the next 100 or 1,000 technologists, but the next 100,000 technologists into its workforce. This is why we need to accelerate the growth of public interest technology.

> "If we continually have this flow of great people coming in and out of government, we can fix so many things."
>
> **Ryan Panchadsaram, advisor to the chairman, Kleiner Perkins, and former United States deputy chief technology officer**

The civic tech movement and the field of public interest technology are like-minded in ethos, but different in approach. Given its genesis and character, you can think of early civic technologists akin to "digital activists." They are early pioneers breaking ground and raising awareness of an unseen issue. Public interest technology, however, would be the systemic and institutional response to follow—a field established to address and encapsulate this new industry domain.

Today, early thought leaders of PIT have made a concerted effort toward building a robust and sustainable talent pipeline. Formalizing PIT as a career pathway requires a strong supply of interdisciplinary students. This necessitates diversifying computer science curriculum to include interdisciplinary coursework across engineering, policy, law, anthropology, philosophy and more. The Public Interest Technology University Network (PIT-UN), housed at New America, now includes 36 higher education institutions committed to training the next generation of public interest technologists. Funders, including Siegel Family Endowment, Mastercard Center for Inclusive Growth, Schmidt Futures, Ford Foundation and Patrick J. McGovern Foundation, support an annual "challenge" fund for the institutions in the network. This investment sponsors exposure to practical PIT thinking at an early age within academic settings.

Within the network, these institutions are collaborating on new ways to diversify the type of training their technology students receive. The new curricula, labs, clinics and cross-institutional partnerships within PIT-UN help ensure that the next generation of computer scientists will be grounded in ethics, legal frameworks, history and humanities. These programs will result in graduates who are increasingly well-equipped to navigate complex sociotechnical environments across sectors. But what jobs will this next generation of civic tech leaders fill?

Today, despite the growing demand, the job availability for public interest technologists in government and in corporations is extremely limited. The federal government is decades behind overhauling the breadth of job descriptions needed to hire innovators into government. As an example, it is currently easier to hire a seamstress into the federal government than it is an interface designer. In parallel, the private sector and big technology companies have yet to fully embrace their role and potential in catalyzing public interest technology.

But like every technology trend, timing is everything. Perhaps we have never been in a more opportune time to recognize this mutual demand. From challenging systemic injustices in our democratic institutions to responding to the needs of communities during a pandemic, citizens and employees have never been more engaged in civic issues. In these challenging and uncertain times, we are seeing an increased demand for civic thought-leadership from our country's top executives across every industry. The moment to embrace corporate civic responsibility is now.

It is currently easier to hire a seamstress into the federal government than it is an interface designer.

FRAMING CORPORATE CIVIC RESPONSIBILITY

A practical guide to how corporations and their tech talent can authentically participate in the public interest technology ecosystem

Many in the private sector are familiar with "corporate social responsibility" (CSR)—a field dedicated to aligning corporate mission with societal impact. CSR programs trace back as early as the 1950s, when consumers began to recognize the rising role of major business entities.[9] These strategists and evaluation experts were tasked with developing new accountability frameworks and understanding how to measure (and storytell) corporate social responsibility.

CSR teams have long focused on strategies ranging from setting sustainability goals, to ensuring ethical procurement practices, to organizing employee volunteerism, to providing product discounts to entities like schools and nonprofits. Given the nature and the scope of this work, these teams are often siloed within HR, corporate philanthropy and/or marketing functions. In many cases, CSR's greatest value is to reduce business liability, increase employee satisfaction and raise customer sentiment.

What is the line between corporate altruism and corporate responsibility?

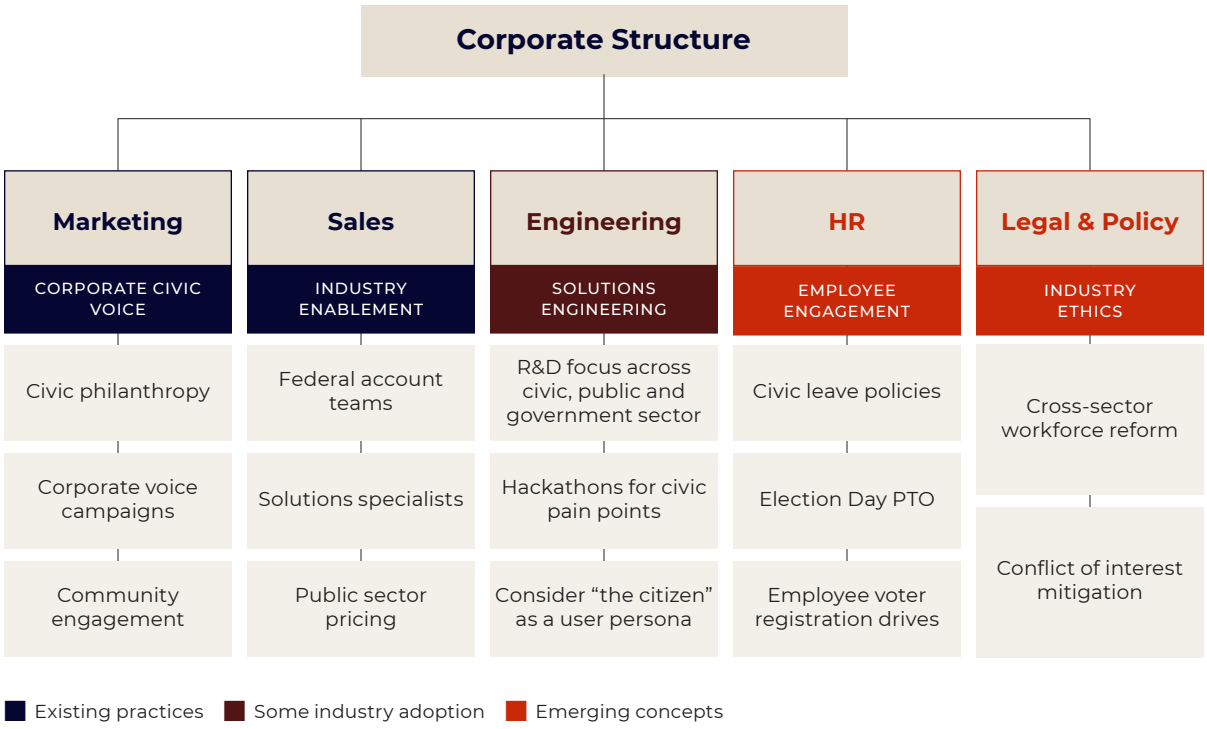
While CSR's mission has been foundational in understanding the corporate model for driving positive social change, CSR programs miss one focal point today: a company's civic duty and responsibility. Smaller in scope than its worldview but larger than its local community investments, a company's civic responsibility seeks to address its role and obligation toward its national priorities. While companies certainly play a role in growing the economy and the job market, how much should these business institutions support broader civic or public interests? And what is the line between corporate altruism and corporate responsibility? Given the outsized demand for digital transformation in government, private-sector technology companies may be the only producer of technical talent equipped with the knowledge to scale solutions that meet the needs of modern America. This key factor influences the duty of these institutions.

As we introduce the model of corporate civic responsibility (CCR), it is important to note that we are proposing a fundamentally different model and a paradigm shift for how companies should consider adopting CCR compared to CSR. We see CCR as a cross-functional and company-level directive. In this framing, "corporate civic responsibility" is more like a corporate philosophy than a corporate agenda. With this belief, CCR practices must permeate and align with core business domains.

[9] Archie B. Carroll, "A History of Corporate Social Responsibility: Concepts and Practices," ResearchGate, January 2008. Retrieved from https://bit.ly/3nsnBsq

CORPORATE CIVIC RESPONSIBILITY AS A CROSS-COMPANY STRATEGY

Below is an organizational chart that illustrates how teams within a corporate structure could commit to a company-wide strategy toward authentic civic engagement.



As seen in the proposed framework, under each function we provide examples of the kinds of programs and activities each respective division could make as commitments toward PIT. The organizational chart also expresses a range of adoption from left to right, with existing corporate practices that already support the public sector on the left, and more emerging concepts for corporate civic responsibility on the right. While many of these practices are not completely new, companies can use this holistic framework to spark ideas for how to adopt and incorporate a comprehensive CCR strategy.

Given that companies are at different stages of growth and have varying resources, each company may not be able to champion all these pillars simultaneously. Here, we are inviting companies to assess their capacity and understand how they can implement two or more of these pillars and initiatives to maximize their impact across CCR.

In the sections that follow, we deconstruct the five core pillars of CCR, which map to the organizational chart. These five pillars are:

1. **LEVERAGING CORPORATE CIVIC VOICE, "MARKETING"**
   How a company uses its brand, voice and platforms to raise awareness among citizens and promote civic activities.
2. **ENABLING GOVERNMENT AND CIVIC SOLUTIONS, "SALES"**
   How a company enables the applications of its products and services to be readily available for adoption of use toward public interest.
3. **INVESTING IN CIVIC R&D, "ENGINEERING"**
   How a company invests resources and talent toward "solutions engineering" for civic issues. These may or may not be government-led initiatives.
4. **SPONSORING CIVIC LEAVES AND EMPLOYEE ENGAGEMENT, "HR"**
   How a company supports, or even incentivizes, its employees to contribute and engage in civic participation. This may range from PTO on voting day to sponsoring civic leaves.
5. **REIMAGINING CORPORATE ETHICS, "LEGAL & POLICY"**
   How a company's legal and public policy teams engage with public officials and lawmakers to shape and reform the legal pathways to enable cross-sector partnerships.

As the approach to CCR is meant to conceptualize a new corporate ethos, these five pillars are not meant as an exhaustive or exclusive list of teams involved. We believe every discipline should consider and understand the role it plays in embracing this new corporate philosophy.

1: LEVERAGING CORPORATE CIVIC VOICE

The first and most recognizable way companies can pursue CCR work is by leveraging corporate civic voice. Corporate civic voice describes the activities a company undertakes to use its brand, voice and platforms to raise awareness among citizen-consumers to promote healthy civic engagement. Done well, these activities can promote the public good while illustrating a company's commitment to key values. However, if these activities fail to align with a company's strategic efforts, critics may view them as merely performative, which can deeply damage a company's brand and undermine any good intentions.

Case Study A: Technology companies respond to the COVID-19 crisis[10]

Since the beginning of the coronavirus pandemic, America's technology companies have undertaken a series of product launches designed to create awareness around public health measures from the CDC. With a major focus on leveraging their homepages to curb the spread of misinformation, many companies have surfaced in-product banners that ensure users are directed to official government websites.[11]

[10] It is important to note that the use of case studies throughout this paper is not intended to laud or criticize the success or effectiveness of various corporate initiatives, but rather to deconstruct the various approaches companies can take.

[11] EU DisInfo Lab, "Platforms' responses to COVID-19 mis- and disinformation," March 27, 2020. Retrieved from https://bit.ly/35AkpEV

In one instance, in addition to banner ads and government PSA placements, Spotify released a series of relief initiatives tailored across its multi-stakeholder audiences. In support of artists and musicians losing work, Spotify launched a fundraising campaign. In support of the millions of subscribers coping with anxiety and uncertainty, Spotify curated "Daily Wellness" playlists as a means of delivering personalized well-being content. And to help officials keep listeners well informed, Spotify created a "COVID-19 Hub" as a series of reliable news podcasts.

By targeting relief initiatives toward its unique constituents, Spotify is able to authentically connect its response efforts to its core business and community stakeholders. While many companies surfaced similar in-product messages, it's this deeper authentic stakeholder engagement with artists, musicians and listeners that makes Spotify's corporate voice approach stand out.

In this case study, we also see how mobile app experiences can act as a proxy for disseminating public health information via in-product placements. Given the daily reach and usage of platforms like Spotify, technology companies have a direct-to-user channel to reach citizens more efficiently than the government is often able to. As corporate pressure to engage in civic issues becomes increasingly prevalent, companies have the opportunity to authentically respond if they leverage their platforms in meaningful ways.

How to get started

In an effort to leverage corporate civic voice in a way that benefits both corporate activities and society, companies should consider:

- Leading with a stakeholder-first response model to authentically address points where a company's mission is most aligned
- Proactively engaging on advocacy and social issues throughout the year, not just in response to social and political events
- Recognizing the power of their platforms and using them purposefully and responsibly
- Focusing on user-centered stories by amplifying community voices and platform influencers, not just releasing corporate leadership memos

As a first step, technology companies should identify what conversations they are having with the world: Whom is this product for? What does it do? Why do users need it? How can it serve the community? And in deconstructing this living message, companies should seek to understand how their products and voice can be leveraged as a platform for civic engagement.

2: ENABLING GOVERNMENT AND CIVIC SOLUTIONS

This second pillar describes how companies make products and services readily available for commercial adoption toward public interest solutions. In the context of ensuring that governments, agencies, nonprofits and institutions are meeting the digital demands of emerging civic needs, it's paramount for companies to collaborate, partner and even tailor their offerings to the public sector.

Many companies are already focused on enabling government and civic solutions through their sales and account management divisions. Where this becomes more controversial is when applications of emerging technology become withheld from certain clients, applications or use cases.

Case Study B: Google, Microsoft and Government Defense Procurement

Google and Microsoft take opposite approaches to technology for combat purposes.

In June 2018, Google announced that, in response to a company-wide employee petition stating concerns about the use of its AI technology to support war and defense efforts, it would not renew a contract to support the Pentagon's Project Maven. Later that same year, Microsoft entered into a contract with the U.S. Army to support training and combat efforts by providing as many as 100,000 of its HoloLens augmented reality headsets to the military.

These two divergent decisions represent opposing approaches to the question of how tech companies should support certain government efforts. On the one end, Google has decided to withhold a capability in the interest of ensuring responsible use of technology—by rejecting partnering on applications toward warfare. The petition from employees highlights a social-political aversion to enabling AI technology to be used in "the business of war."[12] On the contrary, Microsoft's approach has been to empower the U.S. Army with technology to better facilitate, inform, train and react during critical combat situations. The latter argument supports a viewpoint of ensuring that cutting-edge technology should be made readily available in the service of defense and national security efforts. In this alternate perspective, this technology could save lives through greater situational awareness among service members.

This dichotomy highlights a great debate among technologists as to determining what constitutes a moral or ethical use of technology. This case study demonstrates the importance of acknowledging the theoretical gray areas in conversations about what it means for technology to serve the public interest, as well as the role that technology companies have in deciding the applications of their tools. The ethical use debate is not limited to national security; rather it extends to issues such as targeted advertising to minors, public space data collection, facial recognition technology and many more.

There is no obvious answer to many of these complex use cases. It would be an oversimplification to insist that all applications of emerging technology should be made available to the government.

[12] Scott Shane and Daisuke Wakabayashi, "The Business of War: Google Employees Protest Work for the Pentagon," April 4, 2018. Retrieved from nyti.ms/3pZP3zD

It would be equally biased or detrimental to say technology companies and the inventors of new technology should solely determine the uses of technology and its applications. Understanding the impact of new technologies on society will require much deeper cross-sector exchange, understanding and implementation. Ultimately, what this pillar underscores is the urgent need to ascertain how companies can successfully create and deploy future technologies responsibly. To do so, we need corporate civic responsibility thought-leadership and practices embedded directly within technology adoption teams.

Leading with conscious strategy

Companies looking to be more purposeful and ethical about the products and services they provide in the public interest should consider:

- Assessing geopolitical sensitivities associated with various applications of technology
- Ensuring that global account teams are focused on the nuances between regional market, sector and public interest needs
- Implementing inclusive design practices: "Who is being left out from the conversation if this tool or technology is not made available?"
- Mitigating inadvertent conflicts of interest between corporate mission and/or corporate voice
- Providing tailored enterprise solutions and discounted pricing across the public and nonprofit sector
- Ensuring that the organization's best technologists are working on the most civically impactful accounts

As a first step, CCR efforts should encompass a set of playbooks and/or methodologies for how ethical technology adoption and deployment should be carried out. These recommendations are just the start of the conversation, but we hope they ignite ideation and action across industry sales and solutions experts.

3: INVESTING IN CIVIC R&D

This third pillar describes how a company devotes time and resources toward "solutions engineering" across civic pain points. Where the last pillar discussed how companies can sell solutions to empower or enable government initiatives, this pillar redefines the level of direct involvement a company may take. These solutions may or may not partner with government-led initiatives, and in some cases, could be seen as competing with public-sector innovation in order to meet the needs of civil society.

Case Study C: Apple, Google and Coronavirus Contact Tracing Partnership[13]

By using their network of devices to address a public health issue, Apple and Google work with the government to provide citizens with tools to combat a collective threat.

In April 2020, as the coronavirus pandemic began to take root in communities across the U.S., Apple and Google announced a joint effort to develop contact tracing technology. Through the Exposure Notifications System, participating iPhone and Android users are notified if they were exposed to someone who had previously tested positive for the virus in the last 14 days. To protect user privacy, the system does not collect or exchange any user identity or location data. Current availability is limited as each state's public health authority must develop its own app in order to leverage the Exposure Notification API. During the production of this paper, the two companies recently announced the exploration of an "express" feature that would allow for the Exposure Notifications to surface without downloading an app.[14]

In this example, Apple and Google are making a direct investment toward civic R&D by developing solutions that would traditionally be left entirely to the public sector to deliver. This case study serves as a strong example for how the government collaborates with private-sector experts to troubleshoot and innovate in times of national crisis.

While the launch, effectiveness and success of this initiative has yet to be fully understood, the partnership opens up a dialogue on how technology companies may be positioned to lead coordinated efforts more effectively than the federal government alone. And despite this solution still requiring participation from state officials, the speed and ability to develop this complex, interoperable and privacy-preserving solution is made possible only with the collaboration of these two major technology companies.

From a staffing perspective, the government is not yet equipped to readily recruit, hire and onboard technical teams quickly enough to address the complexities of these technical issues. Today, the average time to fill a federal position is 106 days.[15] This is especially problematic when the problem that needs addressing is a fast-moving crisis, like a pandemic. In addition, government funds are often pre-allocated or restricted, making reacting to market needs and developing real-time solutions near impossible.

Today, the average time to fill a federal position is 106 days.

Ultimately, this contact tracing partnership demonstrates how technology companies—in coordination with the government—can most effectively build timely and accessible civic experiences aimed to meet the needs of public interest. We need to infuse government with best practices of human-centered design, data-driven decision making and agile development. Only through this hands-on approach can the public benefit from the industry's best-in-class customer experience and service delivery experts.

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[13] This case study was ongoing at the time of publication.

[14] Darrell Etherington, "Apple Launches COVID-19 'Exposure Notification System' with iOS 13.7 — Android to follow later this month," Tech Crunch, Sept. 1, 2020. Retrieved from https://tcrn.ch/32Llh7M

[15] Partnership for Public Service, "Fed Figures 2019: Federal Workforce," August 2018, 3. Retrieved from https://bit.ly/35wPj0M

Be directly invested in the problem

Companies seeking to deeply and authentically engage in R&D for the public interest should consider:

- Investing in public-sector engineering teams, not just sales teams
- Applying similar data-driven and human-centered design best practices to civic-centric challenges, not just consumer products
- Balancing R&D portfolios to include a proportion of civic investments
- Providing community grants to fund moonshot ideas that spark innovation and solutions in support of public interest
- Hosting internal hackathons to engage corporate talent in some of society's biggest issues

As a first step, technology companies should identify where their corporate mission intersects with relevant civic issues. What if a ride-sharing company worked to enhance public transportation options? What if mobile banking apps helped increase financial literacy? Companies should question how a civic or government competitor might approach the same space, and consider what making this investment would look like for themselves.

4: SPONSORING AND SUPPORTING EMPLOYEE CIVIC ENGAGEMENT

Above all, possibly the most overlooked solution is human capital. Within the technology sector, it's no secret that the most valuable asset to the company is not proprietary technology or patents, but technologists themselves—top technical talent. Sponsoring employee civic engagement refers to how a company supports its employees in participating in their civic duties. More specifically, it refers to how HR policies may encourage, or even incentivize, employees to contribute their expertise to advance technology for the public interest.

Contrary to the first three pillars, which primarily address how companies can directly solve or sell solutions to support civic endeavors, this pillar sheds light on how companies can make a significant impact without a resource-intensive engineering or business investment. And that impact can be made by lending technical thought-leadership to the public sector through talent exchange.

Civic leave programs can range in commitment and intensity. On the shortest scale, companies can offer paid time off (PTO) for activities like voting on Election Day. On a deeper level of engagement, companies can sponsor longer sabbaticals for employees to serve term-limited government opportunities, such as participation in PIF, USDS and 18F.

In recent years, talent within major technology companies have increasingly demanded greater opportunities for personal growth. They've also voiced a desire to see their employers dedicated to broader civic missions. Policies like civic leave could be a powerful vehicle for employee growth, loyalty, and ultimately, talent retention.

Case Study D: Microsoft's Civic Leave Policy

In 2013, President Obama tapped Microsoft executive Kurt Del Bene to assist the administration in resolving issues with the launch of Healthcare.gov.[16] Upon his return to Microsoft, Del Bene sponsored a civic leave policy that, "allows leaves for significant work that is an opportunity for employees to apply the skills normally used in the course of their work for Microsoft to advance civic goals, and to gain skills that can provide development opportunities and increase market knowledge."[17]

While a handful of companies already have shorter-term civic leave programs (around three months or less), Microsoft's policy is the longest and offers employees up to 12 to 18 months of leave. Microsoft employees began taking advantage of this unpaid civic leave sabbatical as early as 2015. As a new policy, civic leave lacks broad awareness among employees, and for various reasons, not every applicant has been approved for civic leave. As policies like this are in their infancy, their effectiveness and/or return to the company has yet to be measured or documented.

From a corporate management perspective, civic leave policies could be one of the best ways companies can promote employee growth and impact while also serving the public interest. Despite long-term civic leave being an unpaid sabbatical, its cost to companies is not zero. Since employees on sabbatical are technically employed, companies may still be required to continue providing certain employee benefits. Additionally, since the employee is eligible to return after their leave, companies must continue budgeting for the employee's headcount. While there are nominal costs to civic leave policies, there could be outsized benefits to companies and society at large.

AUTHOR'S NOTE:

Microsoft deepened my practice of inclusive design and modern development processes. These skills are invaluable and much needed across government agencies today. My civic leave experience has proven to be tremendously beneficial in both directions. In a short amount of time, I was able to create a meaningful impact on improving the usability and accessibility of government services. At the same time, the government made me a more empathetic and complex systems thinker—something that companies will benefit from upon return.

Regardless of whether you return to the same company or a different company, the growth from the experience and the richness of cross-sector immersion will make you a better leader and a more responsible technologist. It's this kind of exchange we need to systemically invest in. True leadership requires us to think at the societal level, not just the individual or business level.

Clarice Chan, former Microsoft employee on civic leave, former Presidential Innovation Fellow

[16] Shira Ovide, "Microsoft Brings Back Kurt DelBene for New Senior Strategy Post," The Wall Street Journal, April 13, 2015. Retrieved from https://on.wsj.com/38MKySM

[17] Tajha Chappellet-Lanier, "The White House wants to make civic leave for technologists normal and accessible. Will it take off?" Fedscoop, Oct. 24, 2018. Retrieved from https://bit.ly/2IwptSd

A key theme of this paper is the reality that people are critical to leading the digital transformation journey across these government agencies. More than simply products and systems, the government needs technical talent—and much of this talent resides in the private sector. By providing employees with opportunities to serve their country firsthand, civic leave policies have the potential to catalyze bridging the public-private digital divide.

Focus on the people

In an effort to sponsor and support employee civic engagement, companies should consider:

- Adopting civic leave programs that enable technical talent to temporarily serve the public interest, while strengthening cross-sector knowledge upon return
- Providing PTO for Election Day and civic volunteering
- Engaging in company-wide voter registration and championing civic engagement
- Implementing engineering rotational programs with field teams to facilitate firsthand civic and public partnership experiences
- Rewarding employees and teams for their impact to citizens, not just growth of services

As a first step, corporate leadership should engage in an employee listening tour. What are employees saying, and how do they want to seek support toward civic engagement? What is the employee interest and feasibility in adopting civic leave policies? Companies could consider a capped approach where they set aside a fixed headcount cross-company for civic leave sabbaticals. Understanding these parameters is the first step to being able to define the policies and actualize these goals.

5: REIMAGINING CORPORATE ETHICS

Finally, we turn to the last pillar. One of the biggest elephants in the room that this paper has yet to address is conflict of interest. As companies drive significant enterprise business through government contracts, it's critical that any reform in this space tackles these issues in the interest of public trust and not corporate interests.

Today, the government has a number of rules and regulations in place to protect against corporate and personal corruption, collusion and conflict of interest. While thoughtful and well intentioned, these same rules now prevent us from facilitating some of the much needed, healthy cross-sector exchange. As an example, for an experienced corporate executive to lend their expertise to a distressed government agency, they may be required to divest millions of dollars worth of stock to fully recuse themselves from a conflict of interest. While this is the extreme case, financial friction and opportunity cost is a significant barrier for many technologists looking to make public service feasible.

Reimagining the overall health and wellbeing of our society will require a new vision for cross-sector collaboration. As we reform how we legally, and not just technically, bring more private-sector technologists to the decision-making tables of the government, it is critical that we do so by protecting public trust to the highest degree.

To advance this agenda, legal and public policy leaders should come together and collaborate transparently and diligently to more thoroughly understand how we can better facilitate this exchange responsibly. Ultimately, we must expand on the legal framework supporting and advancing the field of public interest technology, and build on the work established by the Office of Government Ethics. This final pillar further exemplifies how corporate civic responsibility cannot simply function as a stand-alone team solely within marketing or engineering—it must be approached across all these functions, including HR and legal, to fully succeed.

~~Write~~ Right the rules

In an effort to reimagine corporate ethics, companies should consider:

- Rewriting the social contract between how the private and public sector can collaborate meaningfully in the best interest of the public
- Mitigating conflict of interest liability by ensuring that any talent exchange is broad or general and does not self-serve or advance corporate interest
- Establishing term limits and exchange structures that meet the needs of the private and public sector alike

As a first step, HR and legal professionals across the private and public sector should convene to understand how employee codes and restrictions currently govern, and begin workforce reform as to how these policies may need to change to set us up for the future.

TECHNOLOGY IS BECOMING INCREASINGLY POLITICAL

As we bring together the five pillars of corporate civic responsibility, it's important to frame them in today's moment in time. While many technology companies are trying to stay out of the limelight and are fighting to remain apolitical, our increasingly digitally governed world is making this a difficult objective to maintain. Over the past few years, we've seen a rise in headlines surrounding the geopolitical challenges facing technology companies and their role in securing and protecting online and offline borders. As these societal demands evolve, so must we.

Case Study E: Consumer technology increasingly a matter of national security[18]

TikTok

One dominant national security headline this year has been the federal government's demand for TikTok's U.S. data to be sold to a U.S. company. TikTok, owned by Bytedance, is the first major Chinese social media company to have such global, wide-scale success. With concerns over geopolitical jurisdictions and the use of data, the principal concern in the case was whether TikTok could or would be used to collect U.S. citizens' private data on behalf of a foreign government. And while there hasn't been any sign of such abuse, the mere possibility was enough for the U.S. government to initiate a ban on the social media app as a matter of national security. Following frantic negotiations, U.S.-based companies agreed to purchase the rights to manage TikTok's U.S. data, ultimately guaranteeing that it would be protected under U.S. law. This conflict highlights how digital domains are becoming increasingly influential and political.

Apple

In a parallel example, in 2016, following a mass shooting in San Bernardino, the FBI requested that Apple aid its investigation by providing a "master key" to unlock the suspect's phone. Apple refused, arguing there would be no feasible way to enable such technology without creating a potential "master key" for any and all iPhones, which, if compromised, would create an even bigger security threat to attacks. This drew tremendous controversy across both the national security industry and the technology sector.

[18] This case study was ongoing at the time of publication.

In order to protect citizens both online and offline, companies must rise to this challenge and recognize that the regulatory landscape of these technologies is quickly becoming their greatest pain point. The security risks in both of these examples illustrate how the U.S. needs public interest technology leaders who understand the technical threats, capabilities and implications of these digital ecosystems. Given the scale and impact of these emergent issues on society, we must act urgently, immediately and—most of all—responsibly as we invest in corporate civic responsibility structures. We believe an overarching cross-company CCR strategy will be the only way to provide this level of comprehensive oversight and accountability.

TAKING ACTION AND NEXT STEPS

The ideas presented in this paper are a paradigm shift to how we're structuring civic investments at the corporate level. These ideas are intended to be not the end, but rather the beginning. What are we missing from this conversation? Where does it need to go next? That is ultimately in the hands of you, the reader. The goal of this document is to shed light on emergent themes and insights at the intersection of technology and society, and bring them to the forefront of understanding the opportunity and possible solution landscape.

The work and commitment of the private sector will be just as important as that of the government toward shaping the future health and wellbeing of our society. As foundations, nonprofits and individual technologists pursue public interest technology with depth and focus, the biggest levers (that have yet to be pulled) are in the hands of our nation's top technology companies. Even though this paper is grounded in issues that face the U.S. government, the theme of ensuring a government is meeting the needs of modern society is borderless.

As a next step, technology companies should work internally to determine how they can adopt a corporate civic responsibility framework that strategically and authentically aligns with their mission and vision. Meanwhile, employees should continue to champion the desire to improve upon public interest technology and garner leadership support in adopting company-wide civic leave policies. Finally, it's the product and engineering teams themselves that have immense power in shaping the products and services that get developed—as well as their application. This publication can serve as a framework to spark a need for more empathetic and ethical-design practices across sectors in service to the public.

Meeting all the needs of our increasingly digital society may seem insurmountable, but actualizing this ambitious vision is within sight. Luckily, the U.S. already has the elements it needs: hundreds of the world's most innovative technology companies, each home to some of the country's best and brightest technologists, and deeply committed civil servants and subject matter experts. The talent is available. The time is now. The challenge is finding a way to align and harness the strengths of each sector to work in harmony toward protecting a shared digital and well-governed future. If we commit to this vision and investment, addressing the needs of our society can and will be in scope.

Corporate civic responsibility is not a new side project. It's the ultimate project.

APPENDIX A

Glossary of Terms

Public Interest Technology (PIT)
Applying technological expertise to advancing civic or public values shared by a community or region. Public interest technology should not be conflated simply with "government technology" or "public-sector technology." It is the overarching field of adopting and applying modern technology practices to any civic endeavor in the interest of the public—which in some cases can exist outside the scope of government-led programs.

Corporate Social Responsibility (CSR)
An approach companies have considered since the 1950s to ensure better corporate accountability to society at large, which considers the company's core business activities and its additional philanthropic activities.[19] Examples of CSR may include ethical procurement, employee volunteering programs, discounted product offerings to nonprofits, setting sustainability goals and more.

Corporate Civic Responsibility (CCR)
For the purposes of this paper, civic causes are a subset of social causes that are specifically related to public and government interests. Corporate civic responsibility is the term to describe what a corporation's civic duty and responsibility should be to its country and its inhabitants.

Employee Engagement
Employee engagement refers to how companies support and sponsor various employee activities through corporate programs and policies. In the context of CSR, this has historically been programs like employee volunteerism. In the context of CCR, employee engagement can now be thought of as how companies support employee civic activities, such as voting and/or sponsoring civic leave sabbaticals.

Civic Leave
Civic leave policies describe any short-term or long-term leave policies that aim to empower employees to take time off to participate in civic activities. Civic leaves can be both paid or unpaid and are developed through corporate HR policies.

Talent
Talent throughout the paper may be colloquially used in place of describing the technical workforce. In this context, it primarily refers to technologists, innovators, designers and engineers whose specific knowledge and skills are highly sought after in today's competitive innovation landscape.

[19] Archie B. Carroll, "A History of Corporate Social Responsibility: Concepts and Practices," ResearchGate, January 2008. Retrieved from https://bit.ly/3nsnBsq

APPENDIX B

Project Team

In collaboration with the author, the following individuals contributed to the research, writing, and production of this paper.

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It’s the ultimate project.