



Street cop to CIO: The tragic and brilliant career of an unlikely tech leader



It might sound absurd, especially coming from a CIO, but Flint Waters will tell you that digital transformation has never really been about technology. It's about what technology can do. And Waters has seen firsthand how it can change lives.

AT A GLANCE

- Flint Waters, CIO of the State of Wyoming from 2011 to 2016, has a **non-traditional IT background**. His passion for technology started with a Commodore VIC-20 and a determination to change the world.
- As Wyoming's Chief Information Officer, Waters encouraged state agencies to update their legacy systems, but he also emphasized the need to **modernize outdated processes**. He focused on impactful and sustainable projects.
- A former cop, he worked in a **high-tech crime unit**, using technology to rescue children from sexual predators. After a tragic incident prompted a career change, he had an opportunity to become a CIO.
- In this article, Waters — now a Google employee — opens up about his background, his views on how technology affects people, and how he decided to undertake a **massive migration to the cloud**.

Waters wasn't your typical CIO. Raised on ranches in California and Wyoming, he spent seven years in active-duty military service before entering what would be a long and life-changing career in law enforcement. Technology was a side passion — Waters smiles when describing his first computer, a Commodore VIC-20 — until the day he saw it save a child's life by helping law enforcement pinpoint the location of a sexual predator. Later, as the CIO of the State of Wyoming, Waters saw the impact technology could have on hundreds of thousands of citizens and state employees.

This story isn't about technology, though. It's about the vision and the fight required of those who wish to use technology to make things better.

This article is the first in a series of interviews with CIOs and IT leaders.



Flint Waters, Wyoming CIO 2011 - 2016

Flint Waters looks a little out of place among the hoodie-clad software developers at the Google office in Boulder, Colorado— but then, he's used to being an outsider. On a cool, windy day in February, he's wearing jeans and cowboy boots with a sport jacket; his buzz cut is a subtle reminder of his years in the military. His eyes are bright blue, almost piercing, but he smiles easily and cracks jokes, usually at his own expense.

Waters shrugs off the two hours he just drove to be here. He commutes down from his home in Cheyenne, Wyoming, a few times a week. He's clearly excited about his (still new) job as part of Google Cloud's Professional Services team.

He also has an incredible story to share: how he went from a street cop to the CIO of the state of Wyoming, and how many lives he changed in the process—all because of technology.

"I grew up in a ranching family," Waters says, by way of introduction. "We did the rodeo circuit, that sort of thing. My sister married a professional bronc rider." Wyoming is the smallest state in the U.S. by population but the tenth-largest by area. Waters describes it as "one small town with really long streets in between." After graduating high school, he served in the military for seven years, traveling around the world. "I would be somewhere overseas, and someone would say, 'Oh, you're from Wyoming, do you know this person?'" he laughs. "The funny thing was, there was a fair chance I knew them."

Waters returned to Wyoming in 1985 and did the logical thing after a long stint in the military: He became a cop. He started as a street cop, going out on patrol to catch criminals. "I was a hard-ass," he says. "I was like the most hated cop...I didn't have real refined social skills." He liked the adrenaline rush of the job, and he was reluctant to accept promotions that took him away from the action. But he also had a hobbyist's passion for technology, and spent his free time tinkering on his computers. So when he saw an opportunity to join a high-tech crimes unit, Waters jumped at the chance.

At first, Waters' job in the high-tech unit involved things like planting video and audio equipment to record illegal business activity or catch burglars. But when the internet began to take off, Waters' job — and his life — would change forever.

"Pretty soon, we were rescuing kids all over the world"

The internet connected people in completely new ways. Chat rooms enabled someone in Wyoming to speak directly to someone in Germany or Australia. They also enabled people to communicate on their own terms. New identities could be invented in a millisecond. Communications were largely unregulated, and legal precedent was virtually nonexistent.

It was an environment ripe for crime — specifically, child sexual abuse and child pornography. Abusers had new access to victims and a new venue to share imagery, all without the risk of discovery. Law enforcement couldn't begin to keep up.

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"The nature of being an innovator and a disruptor is that you don't like anything around you," he says, cracking a smile. "That's why you're innovating: because you're not satisfied with the status quo."

Waters, a father of four, was appalled at what he saw—and, as an innovator, he was determined to fix it. Leveraging his side passion for technology, he embarked on a new role leading an internet crimes task force.

The first time he went undercover, Waters posed as a mother with a young teenage daughter. “I had guys contacting me wanting to meet the child to have sex,” he recalls. The first offender they caught “was really prolific,” Waters says. “He actually ran discussion forums on how to find children and victimize them.” Waters sat the man down and listened to him, trying to understand how an offender’s brain worked. As he spoke to more offenders, he started to recognize patterns: the cycles of guilt and remorse they experienced, for example, and how these cycles affected time between crimes. But this particular offender mentioned something so horrifying that it stuck with Waters: the story of a mother using the internet to offer her two-year-old to abusers. It became his personal mission to find and rescue that child.

There was Waters’s challenge. It struck him that offenders were using technology for evil — he had to use technology to stop it. “I started building based on that child.”

Using data his team gathered in undercover operations and his growing understanding of offender guilt cycles, Waters built an algorithm that could predict an offender’s physical location. But he would still need a warrant. “I knew that the data was valid,” he says. “I just wasn’t sure I could convince a judge.” So he appealed to Matt Mead, then-U.S. Attorney for the District of Wyoming.

“I said, ‘I think I have math that will justify a search warrant and rescue a child,’” Waters recalls. “Of course, it was unheard of. This was 2002. Law enforcement wasn’t doing that type of thing.” Mead saw the potential in Waters’ proposal and agreed.

When Waters received his warrant, it was a validation of what he instinctively knew: that technology could make the world a better place.

“I always looked at computers like a way to shift how I impacted my surrounding world,” Waters says. “Pretty soon, we were rescuing kids all over the world. It’s in 50-something countries now. It took off and just went crazy.”

“If I can tell you that I can bring technology that can help you figure out how to take a 3-year-old in your jurisdiction and remove them from the most horrific moments of their life and help change the direction of their life, that’s impactful. That’s time to sit up and say, ‘Okay, now this isn’t just technology.’ I live for that.”

FLINT WATERS

From street cop to CIO

Within the law enforcement community, the technology was a sensation. Waters' team won an International **Chiefs of Police Award**, testified before the Senate Judiciary Committee in 2008, and even **appeared on Oprah** with former abuse victims who had been rescued using his technology. Eventually, though, the work became too much, and Waters made the decision to retire.

Waters didn't intend to become a CIO. It wasn't even on his radar. But he'd kept in touch with Mead, who was running for governor of Wyoming and would occasionally stop in to see Waters. "We'd talk about technology and how you could impact the world, how you could change quality of life," Waters recalled. Later that year, when Mead was elected, he offered Waters a position as the state CIO. Although Waters was hesitant at first, the opportunity to achieve impact using technology was irresistible.

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His first months in office were challenging. "I was a non-traditional CIO, obviously," Waters says. "I'm not educated. I don't have a degree, and I don't come from that world. A street cop to CIO, you would be hard-pressed to find that career path recommendation."

Being an outsider wasn't Waters' only challenge. He faced the classic IT hornet's nest of antiquated systems, entrenched employees, insufficient resources, and plenty of political distractions. What's more, part of his mandate was to consolidate several different IT teams with historic rivalries. "Nobody trusted anybody," Waters recalls. "They had competed with each other, some of them for 25 years. The morale was unbelievably low."

But he also had a unique strength: his track record in law enforcement. "Even if I completely blew it, everyone would say, 'Yeah, he was terrible as a CIO, but he rescued some kids, so it's all right,'" he says with a smile. "I could take some big risks."

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One of his first big bets was on cloud technology. Waters had inherited a contract with Google for G Suite, a set of cloud-based productivity tools for email, document storage, real-time collaboration, and video conferencing. Now it was up to him to get the IT department on board.

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At the time, his team was working in an old junior high school alongside an on-prem backup data center Waters describes as "comical": wood floors and an ancient generator that required an EPA waiver. To increase adoption

of cloud tools, Waters took a dramatic step: He forbid his staff from sending him non-cloud files. “‘You’re never to send me a Word or Excel document, and I don’t want any physical storage on-prem,’ Waters remembers telling his staff. “I want everything we do as a business on the cloud, because if this building collapses, I want to be able to walk down the street to the library, get on a public terminal, get into my account and pick up where I left off.”

It was a controversial step. “You tell Finance they can’t have an Excel spreadsheet, and you’ll have people who just seize up,” Waters jokes. But he also took measures to ensure his team could see the value of these new tools, even if they’d built a career on being the only one who knew how to operate a certain system. During the consolidation, he made strategy documents like the communications and consolidation plans accessible in a shared document. As leadership edited the document, employees could see changes happening in real time. They had new insights into the process and new input on decisions that affected them. It was a small shift, but one Waters describes as “game-changing.”

Waters also used videoconferencing to livestream Q&A sessions with supervisors. “If the employees don’t know that you’re going to bat for them, you’re robbing them of trust, of confidence in who you are and what you’re doing for them,” Waters says. By opening up the conversation, he saw employees become more engaged and retention rates improve.

It wasn’t just state employees who saw the impact. One Thanksgiving, Gov. Mead was overseas, serving dinner to Wyoming troops in the field, at the time of the annual state budget press conference. In an unprecedented move, Waters and his team opted to livestream the press conference so Mead could talk to the press directly from the field. “One minute he’s looking in the eyes of reporters, taking their questions, interacting — he’s a real dynamic guy,” Waters recalls. “Next minute, it’s finished, and he goes back to feeding the troops. It’s a force multiplier.”

“Now they’re believers”



Many of the changes Waters made had less to do with technology than they did with processes and workflows — the ripple effects of outdated technology. “If your vacation request system was invented when fax was popular, it probably involved you filling out a physical piece of paper and sending it to somebody,” he says. “Or, if it was invented when people used floppy disks, maybe you made a duplicate and hid it in your drawer because you knew the original disk would get lost or corrupted.”

To avoid creating a more modern version of the same problem, Waters encouraged the directors of state agencies to think beyond what was possible. “If you try to craft your workflow based on your knowledge of what the technology can do, that’s backwards,” he says. “I would tell people, ‘Imagine your perfect workflow, and we’ll make the tech rise to that.’”

He also tried to keep his sense of humor. In his first year, during a spending freeze, Waters got a surprising email. While all state employees were in a spending freeze, remote employees were told that they could still use their corporate credit cards to FedEx their timesheets.

"What?!" Waters recalls with incredulity. "They would physically fill out their timesheet, then pay \$40 to stick it in an envelope and send it overnight. This was the state technology agency in 2011!"

"The Lord was able to build the heavens and Earth in six days, but he had no legacy data."

FLINT WATERS

Waters knew it would be hard, but he also knew it was possible. His team had started to embrace the cloud, which meant far fewer hard copies and on-premise files to worry about. "Two years before, that would've been crippling; it would've been a two-year project," Waters says. "If you went into a lot of corporate IT shops and said, 'You need to vacate your primary data center six months from now,' they'd laugh at you and say, 'It's not going to happen. There's absolutely no way.'"

Here's where the story gets crazy: Remember that old backup data center in the school gym, hitched to a sputtering old generator? Right in the middle of migrating off of the state's primary data center, the backup generator literally exploded.

"I've got a great picture of this big smoke cloud puffing out of the IT building," Waters says, chuckling. He grins. "We had no down time because we had moved everything that core IT needed into the cloud. That would have been paralyzing for a lot of entities. It was one of those situations where I had the misfortune and good fortune of being able to validate decisions for my people very, very quickly. Now they're believers."



Flint Waters, Wyoming CIO 2011 - 2016

Waters was shocked and set about investigating the practice. “Of course, the first answer — which I eventually taught everybody to believe was the wrong answer — was ‘because we’ve always done it that way,’” he laughs. Eventually, the agency switched to electronic timesheets, which saved a significant amount of money. It became one of the stories he used to illustrate the value of technology. “It’s an example that makes sense to every director of every agency,” he explains. “It’s not a tech conversation; it’s an absurdity conversation.”

Waters was lucky enough to have an executive who believed in him. Gov. Mead, the CEO to Waters’ CIO, empowered him to take risks and try new strategies. But even then, Waters sometimes struggled. “I have a very low tolerance for bureaucratic doublespeak and incompetence, and I wear that right on my face,” he says. “There were times I needed to send somebody else in to talk to the leadership because I failed at getting ego out of the way.”

Often, though, Waters relied on his innate knack for storytelling. He had seen technology change countless children’s lives, and he knew it could do the same for citizens of Wyoming. When it comes to dealing with your CEO, Waters says, “Tell that down-to-earth, impactful change story, and then talk to them about what you can do together based on their brilliance and your knowledge of the technology. Help them do what they need to do. That approach got me the farthest.”

Halfway through his tenure as Wyoming CIO, Waters had an opportunity to see the impact of his work. The state legislature decided to shut down the capitol building for renovations, which included turning off the state’s primary data center. Waters was given 12 months to migrate a huge volume of data, networking, and communications. He gave his team six months.

"I told them, 'If they're going to empty that building, it's not just going to be that data center,' Waters recalls. "There's 30 agencies that are also going to relocate. You know who's going to move all of their tech? We are, so we have to be done. Our data center's going to be finished, closed, shut down, and then we need to be taking care of them."

"You just have to be bold"

Waters saw that the CIO's role needed to shift away from building and toward maintaining, and he made the decision to leave government.

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"The nature of being an innovator and a disruptor is that you're something of an architect," Waters says. "Once things are moving pretty well, we're not really sometimes the best folks to operate. When I realized the Deputy CIO was spending a lot of her time making sure I wasn't outside my office terrorizing the villagers, I knew I needed to find someplace else to try to innovate."

Waters joined Google late in 2016 as the company's first Wyoming employee. Now, one of the most exciting parts of his job is talking other CIOs through challenges he can relate to, like organizational hurdles and cloud migration projects. And he still gets calls from law enforcement officials and former victims who were rescued using his technology.

Throughout his career, Waters has always come back to the same imperative: to make the world a better place. While CIO, "My staff could be very effective at inundating me with minutiae. They could bring me millions of things that were on fire." If he addressed every one of these himself, he says, he'd find himself in the exact same position five years down the road, having not changed a thing.

"I decided early on to take some time each week to sit down and think about how to have the biggest impact," he says. "In other words, what were the projects that required 20 percent of the effort but could make 80 percent of the impact? Then I committed my time to those." Fire drills still happened, of course, but Waters helped his staff learn to put out most fires on their own so he could focus on strategic projects. "You just have to be bold," he says. "If you're going to leave an organization in a state that is sustainable and at a level that the next CIO can build on, you have to commit to doing those projects that are sustainable, impactful, and lead to exponential change."