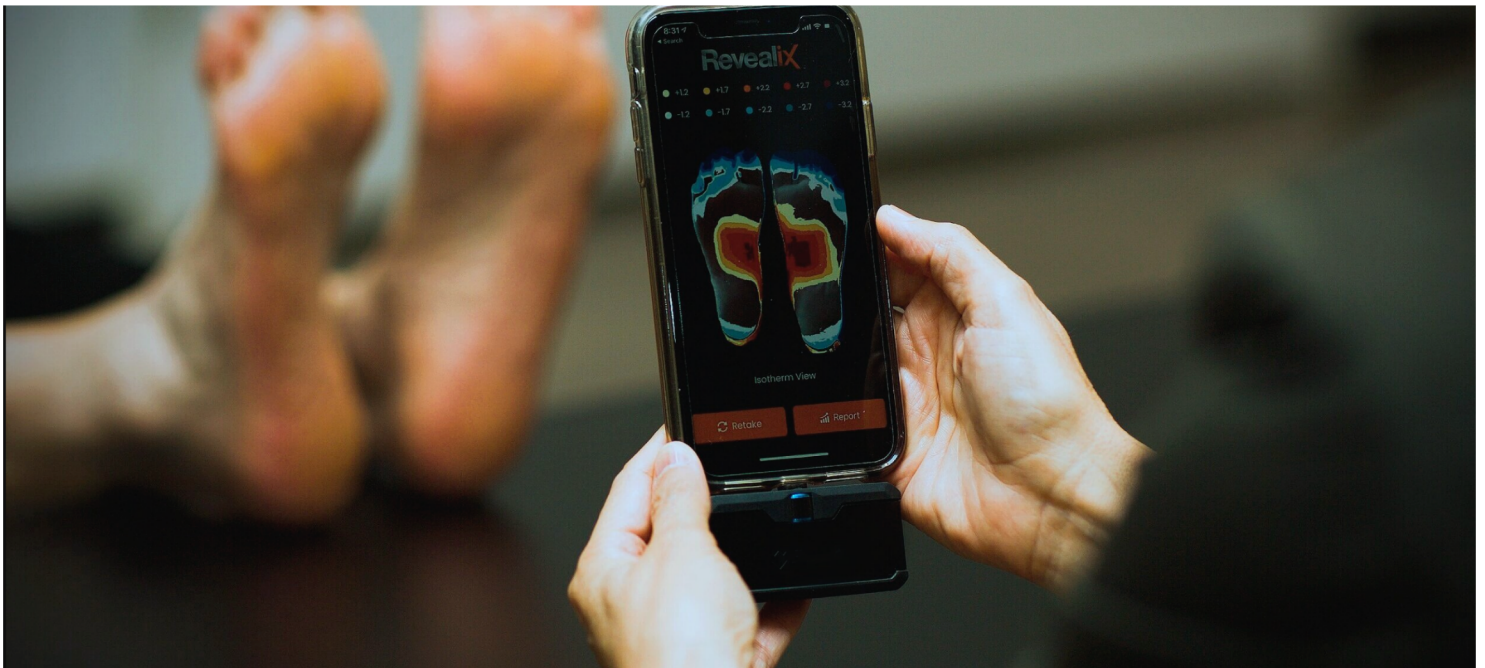


# How Revealix Used GAP to Hit the Accelerator

on Cloud Infrastructure and Get Their App Running **Six Months Faster**



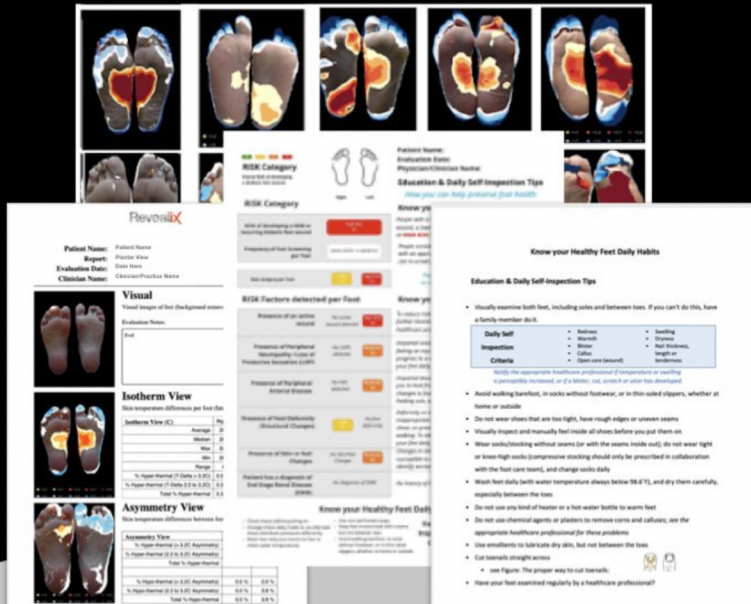
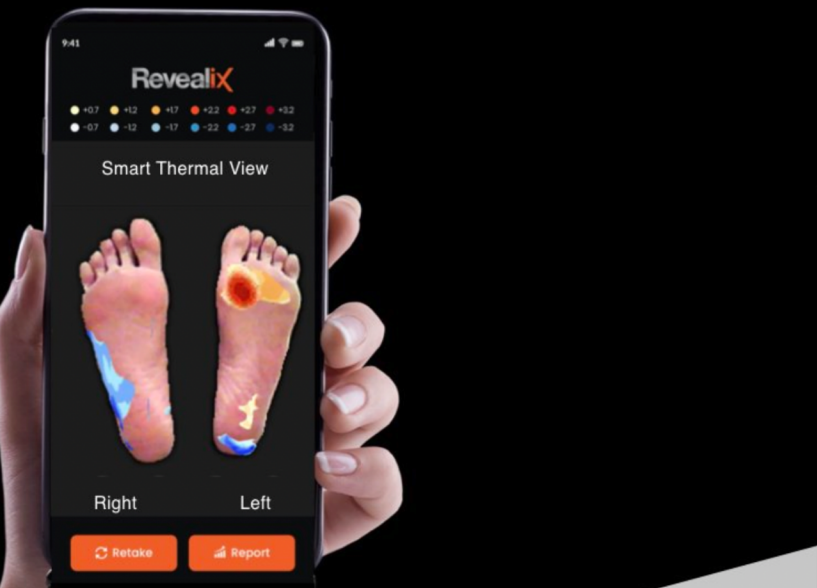
If you are a business owner or senior leader — whether it is a first-year startup or long-established organization — no two days are often the same. You have to make decisions across the various domains required in running a business. And the upshot is you're not only juggling several different plates, but walking a tightrope at the same time.

Any decision you make, such as build versus buy, could set you forward six months, or push you back six months. But when the time comes to advance your product, grow your team or move closer toward go-to-market, you may push up against your team's technical and capacity limitations — and this is where a trusted advisor like GAP can help.



## ***DID YOU KNOW?***

Revealix offers a mobile software solution enabling proactive, personalized and data-centric care based on custom imaging & risk scores.



## INFRASTRUCTURE CHALLENGES THREATEN TO DELAY SOFTWARE LAUNCH

Revealix is a woman-owned digital health startup, based in Austin, TX, and founded by CEO Adrianna Cantu. The company develops thermal imaging and machine learning-based decision support and care coordination software solutions to prevent wounds and amputations in people with diabetes. Revealix had designed its early cloud-based public mobile application for targeted clinical use cases — and thanks to the heavy lifting of their engineering team, the time had come to give it a more commercial-ready scalable and fault tolerant infrastructure to live in. “We had basic app/cloud connections before, but now we’re getting the commercial-grade product ready, and that’s very different,” Cantu said.

Amazon Web Services (AWS) remained the public cloud infrastructure of choice. Revealix’s CTO Doug Wilson had more than 25 years’ experience in IT and was an expert in designing and leading the delivery of custom web applications, particularly in complex environments such as healthcare. Yet this did not translate into the hands-on building of the infrastructure underpinning and deploying it. The divergence of software and infrastructure as separate disciplines meant this would be a challenge for the small team.



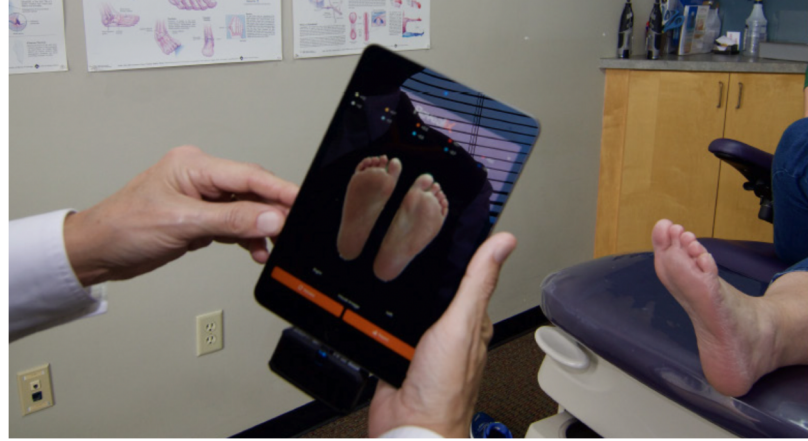
After initially “Googling like a maniac” around phrases like cloud infrastructure, AWS infrastructure and automation, and many other keyword combinations, Wilson had been struggling for a number of weeks on the problem, and had only a half-working set of infrastructure as a result. Containers, specifically Docker, were a key component in the stack, offering the combination of application source code with operating system libraries. For an application such as the one Revealix was building, the portability of containers — being able to easily deploy and run in multiple environments in the cloud — was key.

With more than 200 services overall, AWS not surprisingly has multiple offerings in this space. But with the comprehensiveness comes the complexity, particularly for a tech team with little hands-on infrastructure experience. Amazon ECS (Elastic Container Service) offers a fully managed container orchestration service. AWS resources can be scripted with AWS CloudFormation, an infrastructure as code (IaC) tool that allows a declarative approach to infrastructure, enabling resources to be deployed in a repeatable and testable manner. Yet for Wilson, it was a nightmare.

“As it gets more complicated, the script gets longer, and it gets more convoluted about what has to be there and how things have to connect,” Wilson explained.

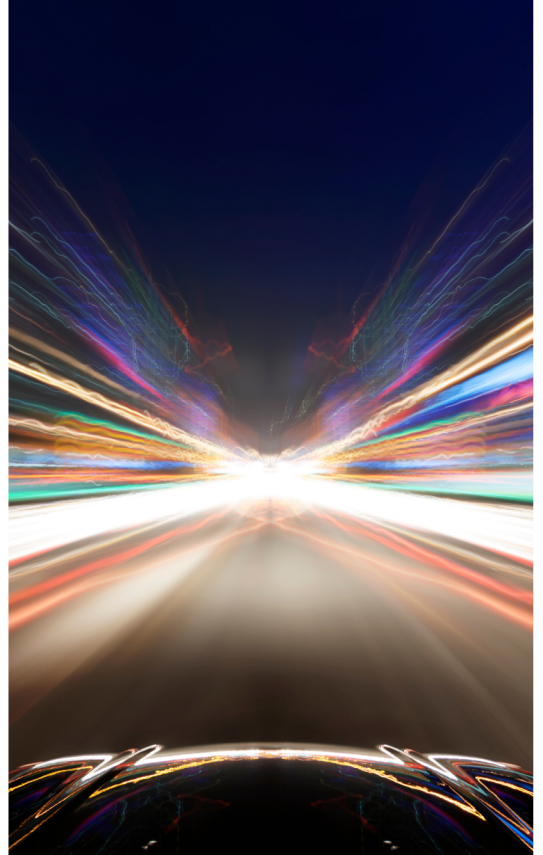
“It’s like a whole career to become an expert DevOps, AWS CloudFormation and CDK, Terraform, etc. — and I don’t have five to 10 years to figure out how to become a master.”

Much more recent than CloudFormation was the launch of the AWS CDK (Cloud Development Kit) in 2019, which offers the opportunity to model application logic and infrastructure in a programming language. This sounded ideal — but there was still a layer of complexity not apparent at first glance.



“There’s a ton you have to know and understand that’s just assumed about how this stuff works; it’s not really written down,” Wilson said. “If you’re trying to do something with a clock — like you really need to get this out by the end of the month — it’s a nightmare.”

Part of the problem was that while there were parts and pieces in place, it was difficult to provide an estimated time of delivery. The result is that even if you have a service or product that customers are beating down your door to utilize, if you’re hamstrung by your infrastructure, then it is the worst-case scenario not even being able to offer a ballpark release date. Instead, you’re forced to say “just as soon as it’s ready, we’ll let you know.” And that simply won’t cut it.



## An Accelerator Paired With Expert Service Unlocks “A Miracle”

Revealix needed two things:

- An expert in cloud-native development who could guide the company’s infrastructure framework projects — in this case AWS — to completion
- To fully deploy infrastructure at the push of a button with easy maintenance and modification abilities.

As Wilson said, “Our application had a great technical design or application architecture. What we needed was infrastructure.” Enter Growth Acceleration Partners, who was able to assist Revealix through its services to Modernize for the Cloud.

More specifically, GAP provided Revealix with the required infrastructure components, customized the GAPBuilt Accelerator for its web application, and provided technical assistance services throughout the implementation. It was a critical time (and decision), but Revealix was ready to do what it takes to take the next big step forward.

Within a couple of days, the updated infrastructure was broadly working. And after a few tweaks around deployment, Revealix was able to deploy IaC for AWS at the push of a button. “We are at the point where we can make decisions that get us further along in our roadmap,” Cantu said.

“We had been oriented around making short-term decisions to get ‘quick-wins’ often a necessity for early stage development. But this actually unleashes something much bigger for us.”

The GAPBuilt Accelerator, which focuses on IaC for common scenarios, is the secret sauce to the Modernize for the Cloud service. It is powered by Terraform capabilities, where users can deploy or destroy infrastructure with one touch in a target environment, enabling greater scalability and repeatability based on reusable architecture components. It expedites the application lifecycle process through easily saving six to nine months or more of development time.

“It’s a big gap between knowing what you want to do and knowing specifically how best to do it,” Wilson explains as trying to lash together a raft, and along came a starship.

Seeing this infrastructure — this fault-tolerant, scalable, standards-based architecture — come into being in less than a week is a miracle. I’ve never seen anything like it before.”

As a value-add, one of GAP’s lead developers walked through the necessary steps with Wilson. This was a vital part of the success Revealex experienced. “The output of the accelerator is a miracle... but giving somebody a miracle and then walking away isn’t really doing them a favor,” Wilson notes. “That first walkthrough... thank goodness we recorded it. I still go back to that recording and learn from it. It gave us a lot of confidence that he knew what he was talking about in such great detail.”

For Cantu, the value of GAP has been incredible as she, like many founders, has to become an expert in multiple disciplines.

“For what we’re doing, it is invaluable to be in this position: to have basically accelerated ourselves five or six months,” she explains. “When you have a small team, that becomes all the more meaningful.

I’m proud of what we’ve accomplished with GAP. Our team was tasked to find an option that provided the most efficient, effective and reliable path to a commercial ready product. And here we are.”

Ultimately, Revealex chose GAP because there was inherent trust with a long-time steward in the Austin community. Yet the benefits have gone far beyond the stack. “This has really unleashed a new productivity, but also an energy for our team,” Cantu says. “We’re not being frustrated or stymied by other things — and now we can move forward. It unlocks a lot more than you think it can.”

In summary, evolving a cloud-based infrastructure — from a beta MVP version that enabled a narrow and more targeted use case, to a more flexible infrastructure to handle expanded use case configurations for commercial use — is hard. The Revealex team did a lot of groundwork, with scripts and an infrastructure plan in place, but they ultimately turned to GAP to implement their updated infrastructure environment. And whether you’re running a startup or working within a much bigger organization, GAP’s services to Modernize for the Cloud can get you moving faster.

**“Startups are always playing against the odds; but even for businesses with a large team and the required expertise — even if they know the path forward — GAP’s offering still makes sense,” Cantu said. “It’s a no-brainer! Without a doubt, this is a fast-track to where they are going anyway.”**