## FLORENCE = CORPORATION

## CASE STUDY

HERE'S HOW ONE COMPANY WENT FROM TRADITIONAL TO CLOUD-BASED MANUFACTURING WITH SUMMIT.

**A CASE STUDY BY** 



## **COMPANY:**

Florence Corporation

## **COMPANY DESCRIPTION:**

Florence Corporation is the industry leader in USPS-approved commercial mailboxes and centralized mail and package delivery solutions.

## **INDUSTRY:**

Manufacturing

## **SUMMIT PRODUCTS:**

Cloud Transformation

Package delivery is changing. Pick-up, drop-off, same-day, drones — today, it's all about managing that last mile of package delivery faster, cheaper, smarter.

Florence Corporation came to Summit with more than 83 years of experience designing and manufacturing secure centralized mailboxes and mechanical parcel lockers. The company had also created a whole new business segment built around automating the package delivery/pick-up process. They knew IoT had the potential to help them grow the automated locker solutions business and pursue new markets. But they were looking for a partner.

Summit's job: Help Florence understand how the cloud could transform not just their smart locker products, but also their way of doing business ... and then help make it happen.



 $-\,\mathrm{VP}$  of Engineering, Florence Corp.



## REALIZING THE POTENTIAL IN A CLOUD TRANSFORMATION

For Florence, the "a-ha!" moment came from their deep experience with parcel lockers designed for U.S. Postal Service package delivery - parcel lockers that are both secure and shared - facilitating a secure USPS customer package delivery process. But others also needed a secure, seamless way to exchange packages... offices, apartment buildings, anyone who has to manage the exchange of packages for a large number of recipients involving all types of delivery services.

The Florence team got to work developing a smart locker system that would automate the delivery and pick-up processes. Packages could be delivered to an available locker by any delivery company, and users/residents/customers would be sent a barcode via email or text that they could scan to open the door.

Florence developed an initial IoT-enabled locker system, but quickly saw that scaling the solution would require cloud transformation services. When Summit came in to bring the Florence smart locker system into the cloud and up to today's digital standards, we also helped the Florence team embrace their company's new advanced technology focus in a way to supplement and support their long-term manufacturing excellence.



## SCALING MANUFACTURING TO MEET THE OPPORTUNITY

Florence Corporation designed and deployed its first automated locker system in 2010. After several product iterations and increasing demand, Florence recognized that its manufacturing and support processes were too complex to scale efficiently. To fix problems or push updates it was necessary to log into each individual system. To effectively scale and meet and ultimately exceed expectations, they determined a full-blown cloud transformation was the answer.



I was looking for a technology partner. We had lots of people who wanted to sell us a service, but we weren't willing to turn over the future of the business to someone who said, 'Don't worry, we'll take care of it' Summit did not do that. From day one, they wanted to understand our issues and our problems, where we were going, and why.

— VP of Engineering, Florence Corp.



Florence had done tremendous research before coming to Summit. They had an idea about where they needed to go, but needed a technical partner who could validate their assumptions and get them to their destination. Our relationship kicked off with a couple big questions:

- 1. Can we swap the computer for a less expensive/less complex computer?
- 2. Should we switch how we run the proprietary circuits in the lockers?

The answer to both questions was "yes" ... and decisions were made that significantly decreased hardware costs and manufacturing setup times, while maintaining defined quality standards.

The number of automated locker systems Florence can now produce using new manufacturing methodologies, facilitated by its work with Summit, has increased exponentially. This increase in manufacturing capacity equates to efficiency in meeting growing demand.

With the hardware basics solved, we moved on to creating a cloud capable of running the system.



# DEVELOPING A CLOUD TRANSFORMATION STRATEGY TO IMPROVE USABILITY, SCALABILITY, AND FUTURE COMPATIBILITY

In the discovery phase of the project, we quickly realized that the primary issue Florence was facing with deployed systems was the need to individually login to each machine to identify software version and/or to upgrade systems installed in the field. Eliminating this one-to-one requirement would provide Florence the scalability it desired.

After learning as much as we could about what Florence needed and what they already had, we designed a cloud transformation that would support the new locker systems and give Florence all of the control and flexibility it needed to scale.



The real fun thing is how quickly we can update software now. It takes a matter of seconds, where previously it was hours. It's awesome.

— VP of Engineering, Florence Corp.



We also scoped out an overhaul of some of the DevOps processes and methodologies used to produce the smart lockers. Upgrading systems to current standards and deploying a series of web tools gave Florence the foundation it needs to deliver 24/7 access to storage both now and as it expands.



## AN ENTERPRISE CLOUD TRANSFORMATION MOVES FLORENCE TO AN IOT MANUFACTURING COMPANY

Summit didn't just stop with the user-facing product — we delivered a cloud transformation framework for the manufacturing process as well.

Now, each step of production is tracked. Automated tests run as the systems are built, with data stored on the cloud. When the tests are complete, a shipping label automatically prints to let employees know the smart locker system is ready to be packed out for the customer. With the data we get from tracking the manufacturing process in the cloud, we can work with Florence to find even more efficiency improvements over time.



We're using AWS in our manufacturing environment. That isn't something we had anticipated — it's something new Summit brought to the table. It's made our manufacturing facility a lot more efficient, which was an unexpected benefit.

— VP of Engineering, Florence Corp.



To keep improving the technology, we've been working closely with Florence and its engineering team to bring cloud computing and IoT learning into the organization.

Following the cloud transformation roadmap from traditional manufacturing processes to running an IoT solution requires a whole new set of skills, and we've been helping Florence and its staff manage that transition from both the technology and strategy sides.



## SUPPORTING DIGITAL TRANSFORMATION IN THE BUSINESS

Transitioning Florence's smart locker business from traditional manufacturing to cloud-enabled manufacturing touched every department and involved many employees across the enterprise.

From the discovery phase on, we were planning what this shift would ultimately mean for management, operations, sales, marketing and anyone else wrapped around the product.

Building new technology-related strengths and adding agility in the design and deployment of products means Florence will continue to dominate the markets it participates in even as it faces increasing competition.

Today, the challenge is keeping up with new opportunities. Now that Florence has a scalable, cloud-based system for its IoT-enabled lockers, the company is looking into new markets and opportunities beyond their initial vision. And Summit is right there with them, helping to make it possible.



## ENABLING FUTURE CLOUD TRANSFORMATIONS WITH INFRASTRUCTURE AS CODE

Since implementing the smart locker system successfully, Summit has continued to refine and improve the way we work for Florence's customers. As the number of lockers deployed and the frequency of use increases, Summit recognized the need for near real-time code deployments to meet customer requests.

The original solution Summit built is agile, so future improvements could happen swiftly. To make that process even faster, we proposed a continuous integration and continuous delivery, or CI/CD, system that allows developers to deploy code updates within minutes. The CI/CD system also commits the deployment process into a revision history. That Infrastructure as Code, or IaC, model means the infrastructure setup is automated. Migrating to a new region or account is as easy as running a script — no manual intervention needed. And because the IaC is committed to revision control, it is accessible to developers to view if they need to investigate the environment setup.

With Summit as its technology experts, Florence can focus on its core goals as a manufacturer. The CI/CD system and IaC model allows Florence to respond to customer requests quickly, giving its teams a process for growing the business faster.



Summit has adapted our needs, and they're performing seamlessly. I don't view them as outsiders; I treat them as part of our development team. That's a rare and valuable thing.

— VP of Engineering, Florence Corp.



