TechFabric case study

SmartCert solution uses QR codes and Microsoft Azure services to offer scalability and greater efficiency to global supply chains

Supply chains bogged down by paper-based processes

Managing paperwork slows down global supply chains, where each leg of the journey holds the potential for delay because of missing or incorrect certifications.

A digitization solution built with Microsoft Azure services

Microsoft partner TechFabric and Aramid Technologies created SmartCert, a solution that uses QR codes and Azure services to digitize documentation.

Connectivity means less time spent tracking documentation

Now, the Software as a Service connects required documentation and certifications to parts as they move along the supply chain, saving time and money.

Microsoft

Teaming up to improve supply chain efficiency

TechFabric, headquartered in Gilbert, Arizona, is a Microsoft gold partner specializing in digital transformation products, with a focus on developing web, mobile, and cloud-based applications using Microsoft technologies. The company's consulting services, such as its 10-Day Digital Transformation E-Commerce Workshop, are available in the Microsoft Azure Marketplace.

Aramid Technologies, also based in Gilbert, Arizona, has a history in manufacturing and distribution. With Aramid's supply chain experience and TechFabric's approach to agile application development, the team designed SmartCert, which automates procedures by electronically binding certifications to products as they move along the supply chain.

How SmartCert works with Azure services

Data is central, so SmartCert needed to have a secure but flexible environment where data could be safely stored and easily accessed by any number of authorized users. Azure SQL Database provides a very fast and stable platform for both data entry and extraction.

Azure SQL Server collects information for swift and easy access and is continuously monitored by Azure Application Insights. The technology allows for scalability, using REST APIs for customer-requested enterprise resource planning and other system integrations. Fuzzy search from Azure Cognitive Search allows SmartCert to suggest results based on only partial information: for instance, if a QR code is damaged.

One of the most important capabilities Azure provides is the agility to migrate to different storage options if required. Azure Blob storage enables the transfer of documents in a split second with supply chain partners around the world.

"Storage of files for distributed access was one of the key goals for SmartCert," said Preetham Reddy, TechFabric Founder and CEO. "Microsoft Azure Blob storage allows us to serve images and/or documents directly to the browser. Being cloud-based is a key advantage over on-premises solutions."

SmartCert is in the early adopter phase. Companies implementing SmartCert will significantly reduce time spent tracking and transferring documentation.

"SmartCert is not only going to benefit our customers by providing access to certs when and where they need them, but it's also going to drive efficiency within our supply chain," said Matt Boyd, Vice President of Sales, Parker Fasteners. "I want a SmartCert QR code on every single box we send and receive."

"We chose the Microsoft Azure platform knowing it would allow us to build SmartCert in a slick, modular way with the ability to create a library of APIs to connect with common systems."

- Lyndon Lattie, SmartCert Co-Founder, Aramid Technologies