TechFabric Results

"WE'RE MISSING OUT ON GROWTH DUE TO OUTDATED, MANUAL SYSTEMS"

techfabric

Challenges

Manual processes increase risk and impede growth.

For every process that has a manual element, the genuine risk of human error lurks just beneath the surface.

Ideal Solution

Process automation using Azure Service Fabric can help.

APIs reduce the need to centralize process automation. Exposing APIs allows departments to instantly access data they need. Using Microsoft Azure, we can improve agility, amplify innovation, and enable faster time to market.

Outcomes

Phenomenal ROI

TechFabric customers using Microsoft Azure have reported:

- 50% + increase in productivity in operational tasks.
- 34% + Increase in staff production in retail storefronts.
- 60% + faster time to market

Tech Fabric. Custom Software Development

techfabric

We're a team of dreamers and passionate stakeholders united by a simple idea: If we make a difference for your customers, we will make a difference for your business too.

Enhance Productivity

With Workflow Automation

- We break down legacy monolithic web applications into a set of event-driven microservices, each responsible for automating business processes that drive large scale eCommerce engines as well as complex fin-tech solutions.

Delight Your Customers

With Cutting Edge Responsive Design

- State-of-the-art design paradigms, agile methodology, and continuous delivery approach.
- Thoughtful user experiences to deliver maximum impact to your business objectives.

Dramatic Cost Savings

With Microsoft Service Fabric

- New containerized microservices are deployed to a Service Fabric Cluster or Azure Kubernetes Cluster.
- Allows increase in density and deployment of more microservices to the same nodes.

Get More Value

With Tech Fabric Custom Software Development

- Enhance Productivity
- Customer Delight
- Dramatic Cost Savings
- Quicker Time to Market

"Their team took the time to learn about our business and became a partner instead of just a third-party provider."

Nick Vincelli: President, CU Direct Member Protection Services

Custom Software Development with Microsoft Azure

"We chose Microsoft because their products deliver the most reliability and value for our Partners"

-Preetham Reddy, CEO, Tech Fabric

Solution Alignment

KL Wines® + Microsoft Azure

- Scalable e-commerce platform
- Implementation of paperless environment, enhanced POS integration, and mobile applications for fulfilment team increased operational tasks by over 50%.

AutoApprove Engine® + Microsoft Azure

- Custom, secure, and scalable CRM
- Workflow automation allowed the business volume to more than double without adding additional staff.

iLending Direct® + Microsoft Azure

- Custom, secure, and scalable web application
- Using ASP.NET, MVC framework, and Azure Cloud increased critical factors like security, efficiency, productivity, visibility, control, and scalability empowering iLending Direct to expand its footprint in the Auto Refinance Industry.

Customer Success Story

Auto Approve

"We have doubled the size of the business. We're trying to triple growth by the end of the year and the technology TechFabric has built for us is a big factor in how we're able to do that."
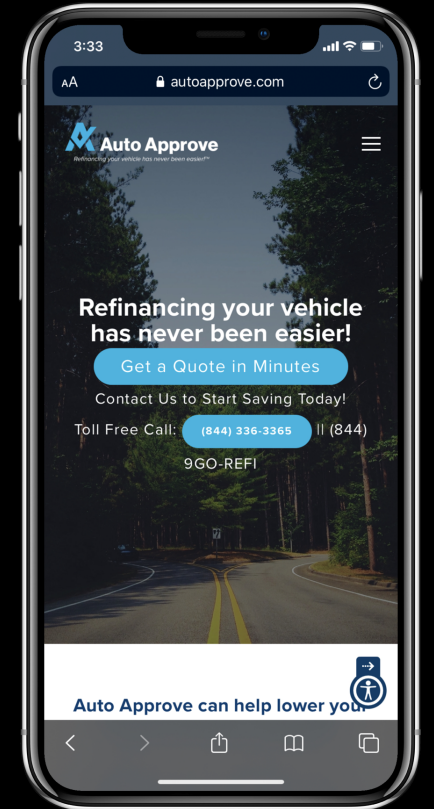
- Austin Scott, AutoApprove Director of Product & Technology

Win Results

Reduced loan processing time from 2-3 day average to within minutes.

With custom software developed by Tech Fabric via Microsoft Azure, business <u>doubled</u> in the first six months of deployment.

Business Process Automation using Microsoft Azure allowed AutoApprove to scale up without needing to increase customer service staff.

In a high stakes market with complex processes, Auto Approve® assists consumers in refinancing auto loans with an extensive lender network across the United States. Using microservices architecture on the Microsoft Azure, the "Approve Engine" application is architected to scale and optimize the overall business process and value stream.

As a result, within the first 12 months of deployment, Auto Approve® more than tripled the number of loans closed per month without needing to substantially increase the number of staff.

Auto Approve® a nationwide auto loan refinance company founded in 2016 and based in based in Maple Grove, MN. They built a groundbreaking refinance platform "Approve Engine" entirely powered by Microsoft Azure to assist vehicle owners in reducing their interest rates and payments. Auto loans reached almost $1.2 trillion in 2019, up 6.5% over 2018, and makes up 9.5% of American consumer debt according to Experian.

"A key Auto Approve objective was to be able to keep up with the rapid market growth,"

Jerry Kroshus, CEO Auto Approve®

Digital Transformation: From Monolith to Event-Driven Microservices

TechFabric strategically broke down the legacy monolithic application into a set of event-driven, reactive microservices. Each of these microservices are responsible for automating business processes and collectively drive the "Approve Engine" platform.

"We knew we had to automate our manual processes and turned to Microsoft Azure. Having TechFabric working hand in glove with our own IT talent was instrumental in enabling Auto Approve to bring our unique programs to market in the desired timeframe."

Austin Scott
Director of Sales and Training, Auto Approve®

Supercharging System Wide Search Through Azure Search

Azure Search was selected for its excellent support for faceted navigation, search suggestions, synonyms, accented characters, and fine tuning of results through scoring profiles. In a Refi platform, relevant search results to agent's queries is perhaps the single most important factor affecting loan closing rates. Better search results enable agents to close more loans faster by providing better information to customers more quickly.
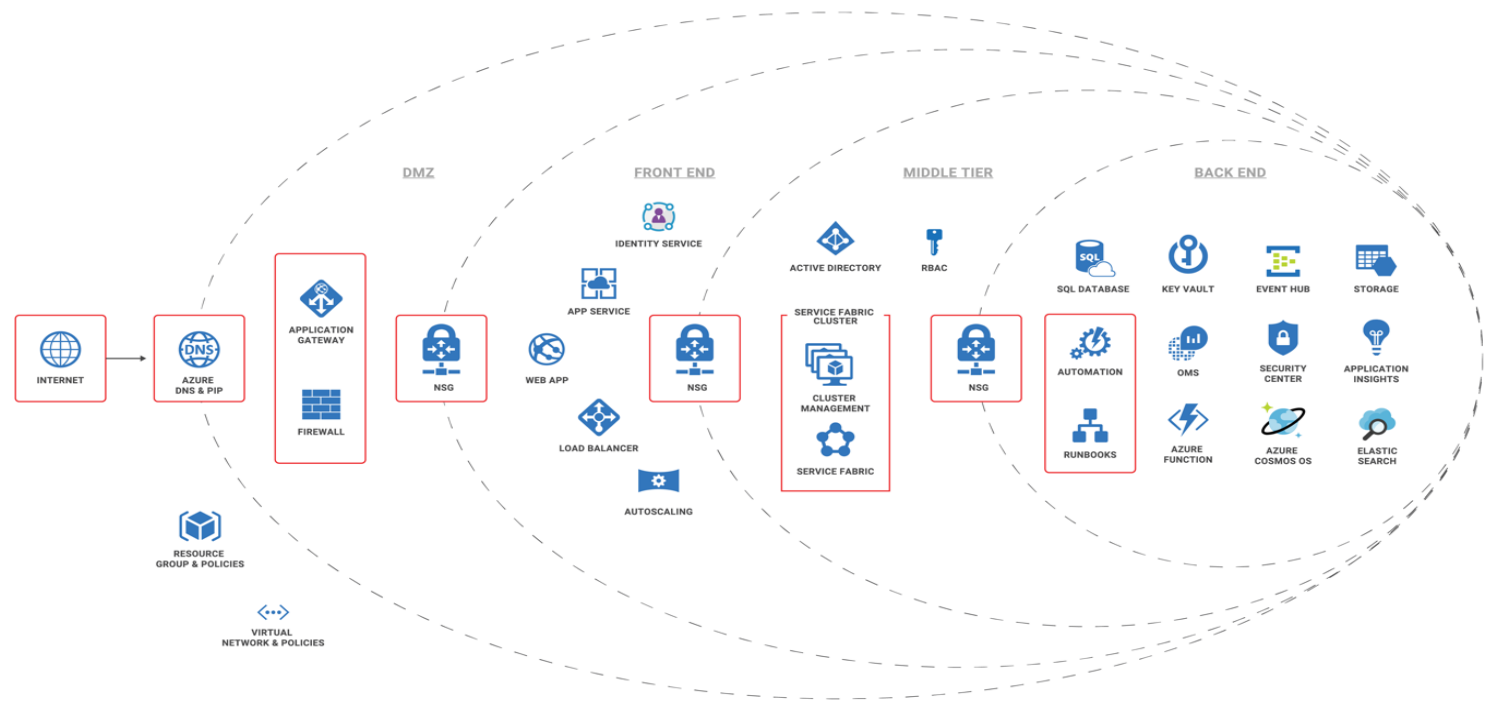
Using a combination of these features, the new Search API vastly outperforms the previous search system. Azure Search yields the most relevant results to a query based on a variety of attributes, with pre-configured weights and boosted values in scoring profiles. By carefully assigning weights to specific attributes, the search engine is configured, and continually optimized, to return optimal results.

Centralizing Notifications Using Logic Apps and Azure SignalR

To keep customers engaged during the refi process, Logic Apps provides deep integration with phone and email systems used by Agents. With Logic Apps' connectors for Office 365 and Twilio, all emails and text messages sent or received by customers are instantly displayed on the agent dashboard via Azure SignalR service. This way, all customer communication is preserved and can be used later for a follow up events. Overall, Logic Apps and Azure SignalR plays a critical role in closing more loans.

"Microsoft technology helped us triple our business in under a year."
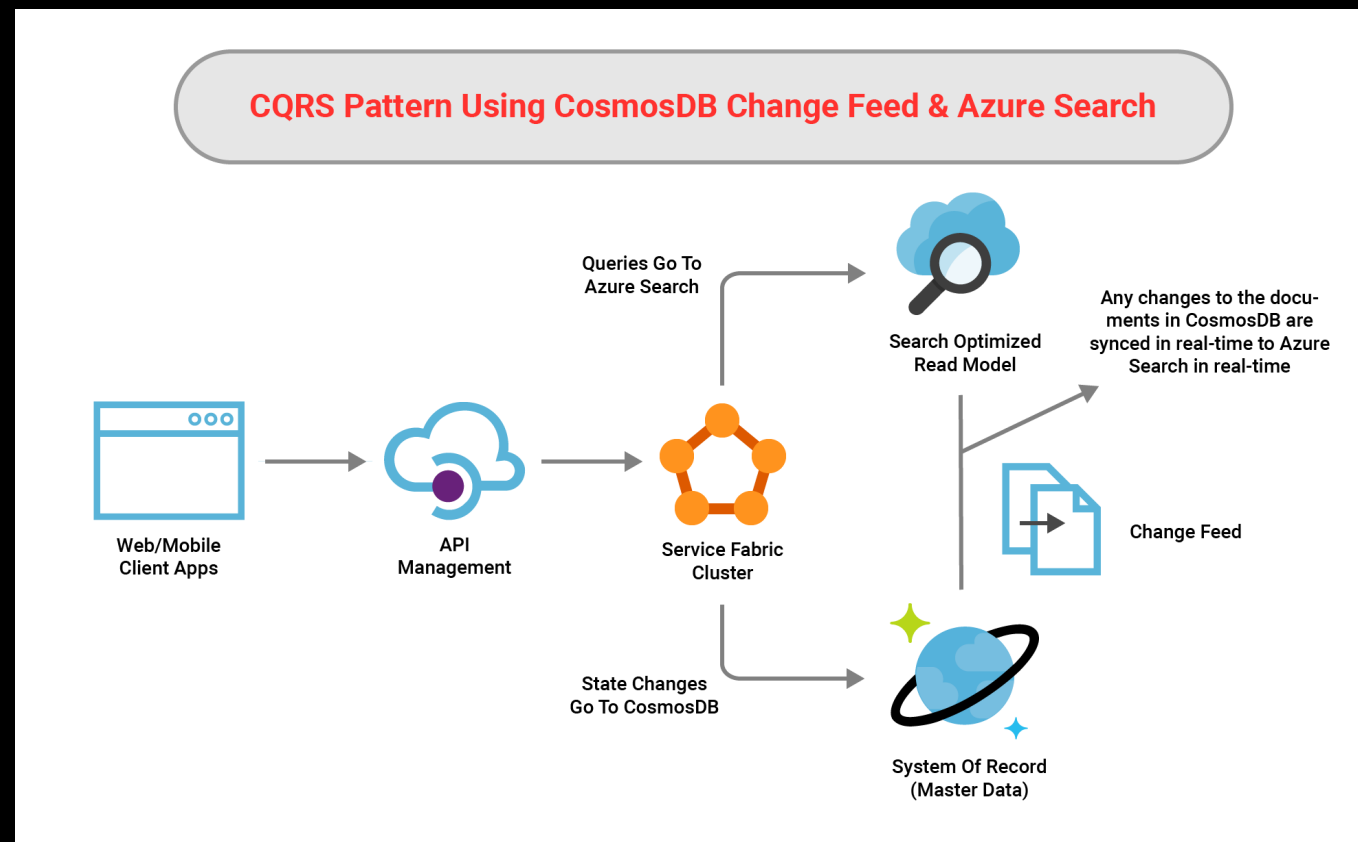
Jerry Kroshus, Auto Approve® CEO.

Microservices are loosely coupled and reactive by design. Many subscribe to events happening in the system, process them, and broadcast any state changes to Azure Service Bus for other interested microservices to subscribe. This approach dramatically improves Approve Engine's ability to react to changes happening in the system and ultimately set the groundwork for wholesale automation of the business.

Geo-replicated Database Using CosmosDB
In order to support large volume of
transactions going through the system and
meet the performance requirements,
CosmosDB was selected as the database. It's a
globally replicated database with many
consistency levels to choose from. It's used as
a system of record for storing all the master
records and transactions. Any changes made
to the documents in CosmosDB are synced to
Azure Search in real time using ChangeFeed
feature of CosmosDB.

That way, all read requests are sent to Azure
Search while all the writes are sent to
CosmoDB, thereby maximizing throughput and
taking advantage of read-optimized query
engine like Azure Search.

By implementing this CQRS pattern, the
system is fast, robust, secure, and scalable.

CQRS Pattern Using CosmosDB Change Feed & Azure Search

Queries Go To
Azure Search

Any changes to the docu-
ments in CosmosDB are
synced in real-time to Azure
Search in real-time

Search Optimized
Read Model

Web/Mobile
Client Apps

API
Management

Service Fabric
Cluster

Change Feed

State Changes
Go To CosmosDB

System Of Record
(Master Data)

The ROI is Simple, and Results are Clear. Using the New "Approve Engine" Powered by Microsoft Azure, Auto Approve®:

1. More than tripled monthly loans closed without having to substantially increase internal staff.
2. Eliminated substantial manual work for agents, thereby improving the overall cycle time for closing loans.
3. Eliminated numerous, tedious, error-prone processes.
4. Efficiently stores operational data.
5. Dynamically triggers customer incentives (upsells).
6. Provides performance insights; Dashboards and custom reporting provide managers with enhanced visibility and decision-making data.
7. Export data as needed.
8. Improved security: SSL encryption and multifactor authentication.
9. Is positioned well for growth with a scalable and flexible platform to accommodate evolving feature sets and growing user demand.

Using Microsoft Azure, Auto Approve® is quickly expanding its footprint in the auto refinance industry and delivering a faster, positive, and delightful approval process for customers.

Contact Us via hello@techfabric.co to learn more about custom software development and digital transformation

T tech**fabric**