

CASE STUDY

Papa John's Accelerates Time to Market by 3X with Kong



CHALLENGES

- Partner-specific custom development was a bottleneck for the Commerce Platform Team to rapidly launch new digital services
- Opportunity cost of direct revenue lost due to delayed feature launches to digital channels and third-party delivery platforms/aggregators



SOLUTION

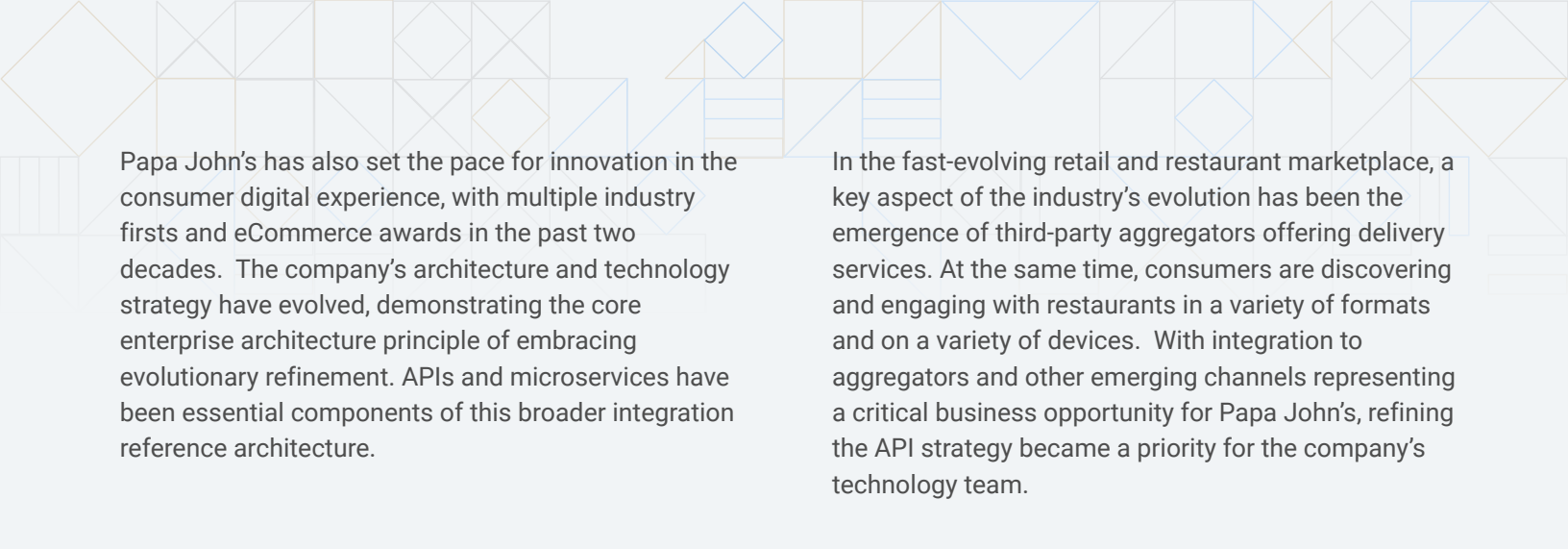
- Kong Enterprise as service connectivity platform, including developer portal and integrations to CI/CD pipeline
- Hybrid environment combining on-premise and GCP, with Kong Ingress Controller for Kubernetes ingress



RESULTS

- Commerce Platform Team is at the center of the technology strategy for tapping into innovation wherever it resides, with integrations to various store, digital, and partner channels
- Accelerated time to market for new services by 3X
- Over 70% of sales from digital channels, and the strongest month of overall sales and new customer growth in the company's 35 year history

Papa John's was founded more than 35 years ago and has grown to more than 5,300 locations in 49 countries and territories across the world. Guided by a strategic priority to build a technology infrastructure that enables the company's business operations, and the company's core value of innovating to win, Papa John's continues to differentiate itself from competitors by innovating with new products and menu offerings that delight customers.



Papa John's has also set the pace for innovation in the consumer digital experience, with multiple industry firsts and eCommerce awards in the past two decades. The company's architecture and technology strategy have evolved, demonstrating the core enterprise architecture principle of embracing evolutionary refinement. APIs and microservices have been essential components of this broader integration reference architecture.

In the fast-evolving retail and restaurant marketplace, a key aspect of the industry's evolution has been the emergence of third-party aggregators offering delivery services. At the same time, consumers are discovering and engaging with restaurants in a variety of formats and on a variety of devices. With integration to aggregators and other emerging channels representing a critical business opportunity for Papa John's, refining the API strategy became a priority for the company's technology team.

PACE OF INNOVATION LEADS TO EXTENSIVE CUSTOM DEVELOPMENT REQUIREMENTS

Sarika Attal, Senior Director of Enterprise Architecture and Platforms at Papa John's, led the effort to address this challenge. "As these integrations scaled up, the addition of a robust API Gateway solution like Kong to our technology stack was a no-brainer," said Attal.

"Our solution delivery team needed to write a lot of custom code to bring new services to market, especially as the velocity of product releases increased and the number of digital channels multiplied," explained Attal. "It would take us two to four weeks to stand up new services, even small ones." Part of the challenge Attal's team faced came from needing to separately create and manage policies such as authorization and authentication for each service. With multiple services to manage across several partners, versioning and upgrades were becoming an administrative nightmare. The team needed one central place to do all administrative functions, rather than several places with inconsistently applied rate-limiting, security, and other traffic management policies.

"We knew an API gateway would allow our team to focus more on centralized business logic, and less time on the details of interfacing with partners," explained Nicholas Lawson, solutions architect. "We wanted to reduce redundant coding work and reduce management complexity."

CHOOSING KONG'S SERVICE CONNECTIVITY PLATFORM TO ENABLE ARCHITECTURAL FREEDOM

When evaluating vendors, Papa John's main concern was selecting a solution that would fit well with their API strategy of enabling rapid internal and external innovation, as well as robust integration protocol support and ease-of-use for multiple engineering teams. "Our API strategy evolved over recent years as we saw a lot of organic adoption of our services from various business partners," said Attal. "As part of that growth, we realized we needed a better way to manage the APIs."

"Compared to other legacy API management solutions we evaluated, Kong gave us more architectural

flexibility to manage connections in any environment," said Lawson. "This was key given our hybrid use case, and since we were launching services on Kubernetes. Kong's native integration with Kubernetes was a key factor for us." In addition to working well with Kubernetes and hybrid use cases, Kong made CI/CD integration simple. This was important to ensure release velocity and quality.

The team was also excited about Kong's open-source roots. "We were able to prove out whether we needed and liked the product," said Lawson. "We also were confident that given Kong's active developer community and open-source nature, we would be able to customize our solution easily."

KONG ENABLES THE FULL LIFECYCLE OF SERVICE MANAGEMENT IN A HYBRID ENVIRONMENT

"With the expanding usage, our Commerce Platform was the first immediate use case for Kong," said Attal. With Kong in place, the Commerce Platform Team is able to focus on feature development and delivering business value rapidly, rather than partner-specific administrative controls. This greatly reduces the amount of redundant coding effort each service release requires for every partner integration or back-end. "With solutions for both on-prem and cloud workloads, Kong made it very easy for us to manage the authorization and rate-limiting needs across the Platform," said Lawson.

Other key components of Papa John's solution include integrating Kong with their CI/CD pipeline to enable automated deployments. "We have the ability to push individual development teams so they are not stuck waiting for an action from an infrastructure engineer," said Lawson. "We let developers define REST endpoint signatures themselves, and deploy and test them without dependencies on other teams." The team also makes use of Kong's developer portal to conveniently make OpenAPI specifications available to integration partners.

"As we further expand on our API strategy with additional channel opportunities, Kong will remain a key component of our stack to accelerate integrations and more importantly maintain them over time," said Attal.

PAPA JOHN'S REDUCES TIME TO MARKET FOR ITS COMMERCE PLATFORM TEAM

"Kong has greatly improved our time to market," said Attal. "Our engineering teams are able to focus on providing business value rather than setting up policies and pipelines. What used to take us 2-3 weeks of developer time can now be done in a week."

As a result, today the Commerce Platform Team is able to more effectively contribute to the company's business strategy and innovation capabilities, and Papa John's has the infrastructure and processes in place to more seamlessly launch products across all store systems and digital channels. "Having a dedicated component for API Management in the technology stack gives us flexibility in our technology roadmap in support of the evolving restaurant industry trends," said Attal.

Technology enablement and innovation has also played a key role in driving revenue. Attal shared that "over 70% of our sales originate in digital channels, and we've seen sustained double-digit growth rates in new customers." Key to this adoption has been ensuring customers can place their order, check their rewards, and track their pizza any time, any place, on numerous devices and platforms. CEO Rob Lynch shared that Papa John's was the first pizza company to fully integrate no contact delivery into its digital channels and that the company had achieved its best month of sales in its 35 year history.

"Kong has been more than a vendor for us," said Attal. "As we continue to grow and innovate, we see Kong as a strategic partner supporting our customer-first mindset and our ability to swiftly iterate and improve our technology platforms for digital engagement, restaurant operations, and commercial growth."

For Papa John's, the recipe to market leadership and continued innovation seems clear: Better Ingredients. Better Pizza. And now, a better API strategy.

Running Mission-Critical Microservices and APIs on Kong Enterprise



Global HQ
150 Spear Street, Suite 1600,
San Francisco, CA 94105
United States

Contact
(415) 754-9283
sales@konghq.com
www.konghq.com

Kong provides a next-generation service connectivity platform to intelligently broker information across modern architectures. The world's largest companies, financial institutions, and government agencies use Kong to orchestrate, secure, manage, and monitor their services infrastructure.