

# Funky Pigeon soars to new heights with Claranet's AWS and DevOps optimisation

#### **Funky Pigeon**

Funky Pigeon is a fast-growing UK-based online retailer of greetings cards, calendars, stationary and gifts, many of which can be personalised with an easy to use online editor.

Funky Pigeon specialise in helping create a memorable keepsake, present or card for any occasion. The company was acquired by WH Smith in 2010 and now has four million active customers.

Another objective was to reduce running costs 10 per cent year-over-year (YoY) without impacting its business performance. Existing procedures meant that each time application code needed to be updated, workers had to remotely log in and install everything by hand. This was a timeconsuming process with high potential for human error and meant staff could not focus on innovating their own services, which was restricting further commercial growth. Overall, the main goal was to grow 20 per cent YoY with a focus on innovation rather than maintenance.

## The challenge

The company always faces seasonal spikes in website traffic and needed to ensure its online platform was stable and fully functional during busy periods. This was especially true at Christmas where workloads could increase by 5x to respond to customer demand and fluctuations in data traffic were creating network instability and having a negative effect on the customer experience.

To cope with these unpredictable spikes in and data traffic, Funky Pigeon migrated their infrastructure to Amazon Web Services (AWS) cloud hosted ecosystem. Although this offered the scalability and flexibility to cope with increased demand, the system was not properly configured for advanced data analysis and needed to be optimised to enable more accurate and efficient data gathering from a single source of truth.

Our customers expected a digital service with a great customer experience, that was fast and reliable even during peak usage times. To make this happen and grow the business we needed to optimise the online service, as I wanted my talented developers working on new ideas, not worrying about whether the infrastructure would run properly."

**Brett King - Head of Service Delivery Funky Pigeon** 



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### The solution

Claranet's team of cloud specialists did a deep dive into Funky Pigeon's infrastructure, with a full review of the website, business operations and risks to identify which areas needed to be improved. It then reverse-engineered the AWS environment to establish best practices for managing resources and handling network changes.

Following the assessment, Claranet highlighted leveraging automation and employing best practice for continual improvement and found that although the company was an early adopter of AWS, it was not using it in the most efficient way. Claranet redefined a new architecture for Funky Pigeon to include: Amazon S3, Amazon CloudFront for application load balancing, performance, and security; AWS Lambda for shortrunning jobs and Amazon Redshift for better and faster analytics and reporting through a single pane of glass.

For security, AWS WAF (Web Application Firewall) was deployed to control traffic or block web apps alongside Amazon Guard Duty to continuously monitor for malicious or unauthorised behaviour, which helps protect users' personal data; AWS CloudTrail was also selected for governance, compliance, and auditing of Funky Pigeon's AWS account to simplify security analysis.

Claranet enhanced DevOps best practices and tooling using infrastructure as code (IoC) which means that the same prescribed instance, server and associated components (such as hard disks) are deployed as one. This means that its developers can wrap up a configuration and deploy the required resources within minutes, without worrying about code updates, as the process is fully automated.

Funky Pigeon also applied the infrastructure as code approach to its in-house photo printing mobile app, Photo Prints, which enables customers to create photo books, and now uses automated builds and config management, as well as DevOps tooling including Terraform, Puppet, and Packer.

### The result

By deploying the Photo Prints app as infrastructure as code, Funky Pigeon simplified the release process for code changes and automated its environment. Not only does this allow Funky Pigeon to offer a better user experience, it has significantly freed up human resourcing to focus on innovation and business development.

Once the optimisation process was complete, web-tier sizing was reduced by approximately 50 per cent and as a result, roughly 35 per cent of cost savings can now be made during peak traffic times. Customer servicing levels have also improved significantly, with an average drop of 50 per cent in transaction times and 100 per cent availability. Self-service reports are now ready in days rather than weeks which has reclaimed time for innovation.

Claranet also helped Funky Pigeon right-size and eliminate redundancies, leading to significant cost savings, and helped the company reduce its expenses 40 per cent during the first year, and an additional 25 per cent the next. The company has also reduced its running costs by 20 per cent per month and the savings have allowed the organisation to reinvest and grow the business to impressive heights.

From the first day of this project, the Claranet team worked tirelessly to help us achieve all of our ambitious business objectives and reduced our running costs considerably, meaning it is practically paying for itself! The biggest benefit is that by eliminating manual deployments, our in-house dev teams can focus on innovation, ensuring the company can continue to grow and remain competitive."

**Brett King - Head of Service Delivery** 

Together, Claranet and Funky Pigeon have established a long-term strategy for the retailer's platform and Claranet continues to review relevant AWS services that Funky Pigeon could adopt and implement.

For more information about Claranet's services, and the benefits these deliver, go to: www.claranet.co.uk

