Executive Summary

Blackwood was established in 2000 with the mission of becoming the leading human capital advisory firm in the United Kingdom. Over the years, they have achieved that goal with an emphasis on advising clients on optimizing performance through the smartest and most considered human capital decisions.

With an impetus of GDPR compliance, Blackwood sought to modernize their software development process using Lambda Functions, CloudFormation, and other AWS tools. Team Blackwood chose Stackery to help them adopt an agile AWS serverless strategy with confidence and speed.

The agility challenge

Over nearly 20 years of operation, Blackwood has built a multifaceted software strategy consisting of a traditional SQL server, a client-server database app to manage executive candidates and clients, and a billing service. All of these systems had historically been written in traditional .NET with a SQL server backend and ElasticSearch for autocompletion and predictive completion.

But at this current juncture, a large portion of Blackwood's staff are young, recent graduates used to the advanced processes they learned in university. These employees expect easy access to Blackwood's data on various different devices including laptops and tablets. Previously, that data was only accessible through their WinForms app-client.

This friction led Blackwood's software leaders to completely redevelop their front-end in web tech, begging the question of what it would truly take to secure data by leveraging agile, modern technology.

Blackwood found that the answer to this agility question was AWS, specifically API Gateway and Lambda Functions. But Blackwood ultimately discovered that managing APIs and Lambda Functions and the time consuming process of writing YAML was not an option for their busy team.

AWS' cloud-based solutions

Blackwood found that the process of deploying APIs and Lambda functions was relatively smooth and very worthwhile for their technological goals. In short, Blackwood had figured out which AWS solutions would launch them into a new, modern class of software development but lacked the time and organization to implement them properly

Turning to Stackery

By this point in the redesign of their software strategy, Blackwood knew that serverless using AWS was the right path, given their desire to shorten time-to-market while homing in on innovation. Being a UK-based company, Blackwood was also heavily focused on GDPR compliance, which involved sending out email forms; the perfect way to begin utilizing Lambda functions. They were able to pick up the smooth form off of AWS S3, which would come back and update their database of clients and candidates.

Blackwood found that this approach worked well and was perfectly suited to their company needs while costing nothing. But while serverless seemed to be the right

approach to their reshaped development strategy, Blackwood was initially intimidated by the deluge of resources and information in the AWS universe.

The team set out to split serverless into smaller components, making the concepts more digestible to their current and future developers. After discovering Stackery at an AWS event, they found a solution in Stackery.

Stackery's answer: write functions, not YAML

While Blackwood had previously been able to deploy a few APIS and Lambda functions properly, they ran into a time and bandwidth issue when it came to consuming processes like writing YAML and connecting their serverless development to other resources. In regard to AWS CloudFormation, the team felt they would have to better understand the inner-workings of AWS before moving their development along. Terry Wells, CTO of the Blackwood Group, describes the payoffs of opting for Stackery as immediate:

"When we first began researching serverless, the team was daunted by the menu of AWS resources and the time it would take to discover all of them. When we started using Stackery, we saw that it wasn't necessary to thrash through that process. It immediately did the job for us. We're not experts in SAM or YAML; we leave that to Stackery's serverless engineers." says Wells.

Results and benefits

With Stackery, the Blackwood Group's software engineering team regularly adds APIs, puts them into a VPC, and is able to see the developmental payoff instantaneously. They also find Stackery's support staff and approach to AWS education to be a game-changer.

"If you get a deployment error, Stackery immediately sends a popup that says, 'looks like you have an error; how can we help?'" reports Wells. "It's that proactive and reactive support experience of Stackery that is so valuable."

Between AWS' complete catalogue of fully-managed serverless tools and Stackery's confidence and velocity-building solutions, Blackwood has seen a massive boost in the health and modernization of their development workflow.

Because of this efficiency and deeper serverless understanding, the team now uses a number of other AWS services such as AWS SNS, SQS, S3, Secrets Manager, CloudWatch Events, VPC, REST APIs, and more. Even so, their total spend is now less than it was before with an estimated spend reduction of 30%.