Futureproofing a retail website with the cloud



With over 50 000 monthly users, partnerships with leading mobile providers and expertly trained employees, BBD's client in the telecoms retail space offers daily deals on tech-related gadgets. The client reached a crevasse where their website, one of their main sources of income, became dated, slow and difficult to maintain. After realising the need to future proof their website and review their plans, they turned to BBD.

Objectives

- > Develop a highly scalable and always-on solution
- > Real-time availability
- > Allow for dynamic content creation
- > Mobile friendly, responsive site
- > Boost SEO through modern frameworks and technologies

Benefits

- > Managed services to enable easy adjustments to the website
- > Low total cost of ownership to ensure scalable hosting
- > Ability to scale while preserving the current size of maintenance and support teams

Overview of the solution

The e-commerce site was extremely slow, ran predominantly on WordPress and was not mobile-friendly. To combat this, an SEO-friendly JavaScript variant, Next.js, solution was proposed and implemented. This solution, hosted on Amazon Web Services (AWS), ensured scalability and reliability while the South African based AWS CloudFront was utilised to ensure low latency. The solution was also elastic, enabling it to scale based on the current load and traffic on the website.

The client's deal page, their main feature and what draws customers to the website, was originally outsourced to a UX designer. This became extremely costly and outdated. The new solution allowed for the client to dynamically build and render the deal cards themselves, furthermore reducing their monthly expenditure, increasing their website speed and allowing them to change any information instantaneously. BBD designed and built a custom Content Management System (CMS) that was conjointly hosted on AWS with a specific user management system to empower the client to update content in real-time.



Approach

After an initial investigation into which technology stack would be best for the client's environment, BBD's team of certified cloud solutionists and software engineers developed an always-on solution alongside providing the infrastructure for the managed cloud services to enable the automatic scaling. This approach meant that the client would not have to learn deep tech themselves, but could rather focus on their core business.

The combined development team of BBD specialists and the client's product owners followed an Agile methodology of iterative and incremental development to analyse the business needs, create features and test and deploy them. After each iteration, the lessons learned were used to improve the team's next deliverable - leading to a process of continuous self-analysis and improvement.

Through this approach, BBD was able to seamlessly implement a like-for-like solution that fully integrated into existing back-ends, in a cloud-native architecture. This ultimately meant that the slow and WordPress-run website was reimagined into a mobile-friendly, elastic and scalable tool that improved the client's ability to engage with their customers.

Impact of BBD's partnership

BBD's solution has decreased the website's loading speed, increased its maximum capacity and its ability to scale to the required size, all while creating a mobile-first and user-friendly site. This has enabled more customers to concurrently use the site with minimal time to interact. The designed and implemented CMS has put the power back in the client's hands - avoiding the need for costly outsourcing.

The solution has also led to vast performance improvement and increased SEO rankings - resulting in sales growing three-fold week-on-week.



Get in touch

If you'd like to engage with us, we'd love to hear from you.



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