Harvard Business Review Grows Its Reputation in the AWS Cloud

By Asim Iqbal

When the tech leadership of the Harvard Business Review (HBR) called Enquizit, their need seemed straightforward: with the lease for their on-premises datacenter expiring and the building slotted for demolition, it was the ideal time to free themselves from hardware and migrate their operations to the AWS Cloud. But the reality was more complicated. With a storied history of being the top business press in the world, serving multiple global audiences, HBR had a reputation to maintain. HBR's non-technical stakeholders were satisfied with their current on-prem setup and worried about the potential impact to user satisfaction and brand reputation with such a significant shift.

Enquizit's task would be twofold: move an entire datacenter to the cloud before the existing building was evacuated, and prove to academic stakeholders that the AWS Cloud could not only provide the same positive experience for the end user—but could actually improve it.

A Tight Timeline With a Hard Stop

For many years, HBR had been housed in an off-campus building—but that lease was ending, with the building scheduled for demolition. At the same time, the institution's contract with its DR datacenter was also expiring. HBR leadership had considered relocating to Harvard's central datacenter, but there was no physical space in that location to accommodate HBR's machines.

To make the point that there were no other options—and to remind everyone that time was ticking—HBR's Director of IT posted the DR cancelation notice on the bulletin board in the team's break room, along with a blueprint of the new building, which showed there was no datacenter there. He also planned a "Pulling the Plug" ceremony for the day before the move. With these physical prompts in place, the team was reminded of the stakes every day.

Achieving Stakeholder Buy-in

Enquizit was chosen for their deep technical experience migrating organizations to the AWS Cloud, but their background in organizational change management was needed first. HBR's application portfolio was comprised of several primary apps, each with a different owner—and few of these stakeholders were fully convinced that migrating to the cloud was the best option. To get all the stakeholders to buy into the project, the Enquizit team first needed to make a critical business strategy case: not only was the demolition forcing change, but the AWS Cloud was the best choice to take HBR's operations to the next level.

Making a Business Case for the AWS Cloud

As one of the world's most famous business presses, HBR has a reputation for publishing cutting-edge business insights and strategies. Making a foundational operational transition, therefore, required more than simply updating technology. The stakeholders wanted to know that migrating to the AWS Cloud would also enhance HBR's operations from a business perspective—and uphold their reputation of excellence.

Enquizit achieved stakeholder buy-in by showing them that the AWS Cloud would be a business force-multiplier in the following ways:

> » **Security.**
> An on-premises datacenter relies on a physical perimeter that requires constant defending—and is always one human error away from being breached. Moving HBR's security to the AWS Cloud would enable the apps to function seamlessly for users while running in a much more secure environment. By using automation for detecting known vulnerabilities (and then remediating them), the AWS Cloud provides better security patrolling and better alerting.

> » **Performance and availability.**
> The stakeholders wanted to know: how can any solution be as good as what we're currently using to keep our systems and applications up and running? Enquizit showed them how their system would run 10-20% more efficiently in the new AWS environment. The cloud system provided better reporting on configuration management and allowed the IT team to set up alerts to show whether the environment was following performance rules—something that had to be done manually in the existing system (and had been subject to human error).

> » **Build as-you-go.**
> A move to the cloud let HBR build its platform in a more scalable, plug-and-play fashion, as opposed to an "all or nothing" mentality of change that is a common barrier to making progress. In the AWS environment, it is no longer necessary to reconstruct an entire application from scratch. The app is composed of multiple layers, allowing the stakeholders to ask: which layers can be replaced with other, more useful technologies that exist in the cloud, while still leaving the user with the same experience? Think of it as a vintage car—which pieces can you replace with better technology while retaining the look and feel of the automobile people know and love? Using an agile methodology, Enquizit helped HBR evolve its applications in stages, learning from the experience, comparing expectations vs. reality, and then deciding how to develop the next 10%.

Working Against the Clock

Timing was an enormous challenge for the Enquizit team. Although the timeline for the migration was less than a year, HBR's global presence made it incredibly difficult to schedule the downtime needed for the migration. HBR runs a press that publishes books and journals. The organization digitally operates in multiple locales and languages, meaning its systems are in constant use in some time zone. Enquizit had to move quickly, which meant no time for a lengthy pilot program. To execute the migration as fast as possible, Enquizit took the following steps:

1. Create an overall infrastructure and plan. This included duplicating legacy systems in the cloud with application, web, and database servers.

2. Move the applications to the cloud in quick succession. This required an analysis of and familiarization with the apps during migration. Each app had been running for over a decade, and each had its own flavors, behaviors, and complexities. As Enquizit learned about each app, they documented those learnings before migrating the next.

3. Optimize the app in the cloud. After moving each app, Enquizit provided direction for optimization and strategies tailored to the unique aspects of the app. As IT staff became comfortable working in the cloud environment, they used solutions such as Amazon CloudFront, Autoscaling, and AWS Beanstalk for deployments and scaling.

Becoming Flexible, Not Rigid

The move to the cloud not only saved HBR up to 15% of their prior annual IT costs, but it also provided the organization with greater flexibility and scalability, making them more competitive in a crowded digital education marketplace where change is constant. Most importantly? HBR's cloud transformation allowed the organization to maintain its mission of providing top business insights to customers around the world—without disruption to its many users.

To speak with experts about how Enquizit helps colleges and universities migrate their data and systems to the AWS Cloud, go to enquizit.com.