eBook

gomo LEARNING

The power of security and cloud-based authoring tool features

By Mike Alcock and Thom Tate

The power of security and cloud-based authoring tool features

How can you make your technologies and data more secure? That's the question we'll be uncovering in this ebook, which looks at the power of cloud-based applications, why they're so secure, and their importance for generating, distributing and hosting eLearning content.

In a perfect world, technology would be impenetrable and none of the stories we've all heard about catastrophic data breaches would have emerged.

In reality, many of the most heavily-resourced companies around have been damaged by cyber-attacks.

In 2017, Yahoo! admitted that all three billion of its users had been affected by an attack four years previously, while Equifax, a credit reporting agency, said that more than 145 million people were affected by a breach of its systems[1].

We've also seen high-profile cyber-attacks on Uber[2], FedEx Corp, and the National Health Service of England[3], the world's largest single-payer healthcare system, all make global headlines.

These high-profile cases, as well as the constant security threats organizations need to deal with, might explain why people often have security concerns around cloud-based technologies – particularly when they might be more familiar with a fixed, immobile system like desktop-based software.

The scandal that broke in March 2018 around Cambridge Analytica and the Facebook data breach[4] shows just how much the public wants reassurance about the safety of their personal emails and information.

In much the same way, L&D teams need to be certain that their data centers, vendors and in-house processes are as secure as possible.

As we'll see in this ebook, the cloud is at least as secure as on-premise storage. In fact, as well as all of the other benefits you get from working in the cloud, it's very likely to address many of your in-house security concerns while providing several efficiency savings.

Enter Amazon, the world-leader in providing safe and secure cloud technology.

1. The New York Times (2017), 'How Many Times Has Your Personal Information Been Exposed to Hackers?'
2. The Verge (2017), 'Uber covered up a cyberattack last year that exposed data of 57 million riders and drivers'
3. The Telegraph (2017), 'NHS cyber attack: Everything you need to know about 'biggest ransomware' offensive in history'
4. CNNMoney (2018) 'Mark Zuckerberg breaks his silence on Cambridge Analytics scandal'

Index: Table of contents

Amazon isn't just for shopping, TV and Alexa

Amazon isn't just for shopping, TV and Alexa

1

When you think of Amazon, you probably think of shopping, streaming movies and series on your TV, or a smart device called Alexa that can run Internet-based tasks using voice commands. Very handy if you need to check tomorrow's weather or adjust your Spotify playlist while you're cooking dinner.

What you might not know is that Amazon Web Services (or AWS) is a huge part of the company selling cloud-based computing to the world. Its storage space accommodates the hosting of websites, vast databases and many kinds of remotely-run software you probably come into contact with daily.

Originally, AWS was just the engine room of Amazon.

When it was made available to developers worldwide in July 2002, one of its advocates was Tim O'Reilly, the technology and business oracle who popularized terms such as "open source" and "Web 2.0". He described AWS as "a significant leap forward in the next-generation programmable Internet."[5]

Jeff Bezos, the founder and CEO of Amazon.com, said the move extended a "welcome mat"[6] to the developers who would flock to use AWS.

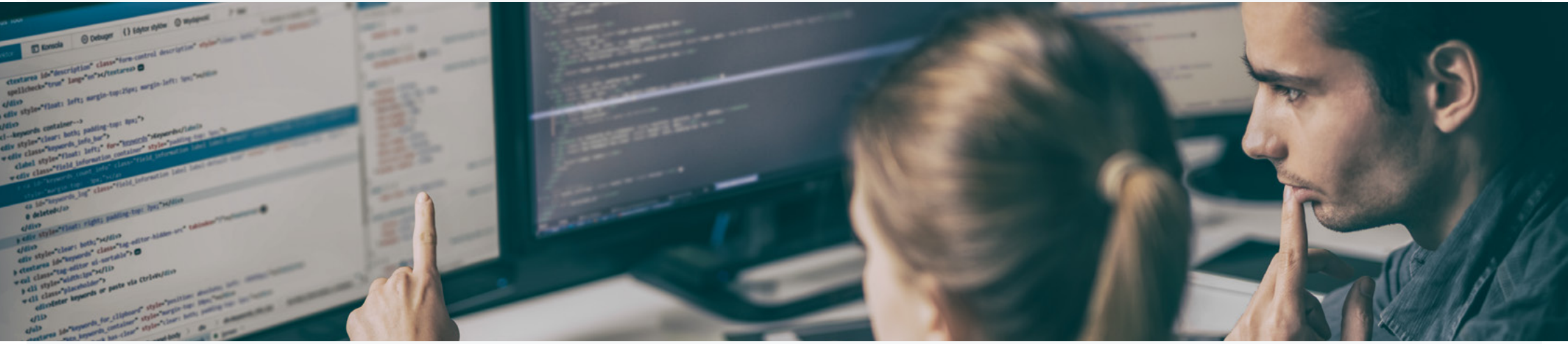
5.Amazon (2002), 'Amazon.com Launches Web Services; Developers Can Now Incorporate Amazon.com Content and Features into Their Own Web Sites; Extends ''Welcome Mat'' for Developers'

6. Amazon (2002), 'Amazon.com Launches Web Services; Developers Can Now Incorporate Amazon.com Content and Features into Their Own Web Sites; Extends ''Welcome Mat'' for Developers'


aws
2
AWS and Software
as a Service (SaaS)

AWS and Software as a Service (SaaS)

2



Most of us are now using Software as a Service (or SaaS) at some point in our day, even if we're not consciously aware of it.

You use SaaS tools when you fire up a search engine or when you check social media.

So what is SaaS?

They are cloud-based applications in which the servers are owned by the media providers, such as Amazon, rather than individuals. In the case of a cloud-based authoring tool, it means that users don't need to download and install software before using it.

This has a number of cost- and resource-saving opportunities. Read more about how that works here.

Being in the cloud means there's no need for huge downloads, complex software installations, license keys, permissions from your IT team, or the complicated maintenance that traditional desktop authoring tools require.

Having access to multiple powerful services negates the need to buy and update powerful computers.

As an example, one technology reporter used AWS on a complex machine learning project they estimated would have taken 50 hours on their laptop. With Amazon's specialized hardware, the work took just eight hours, and cost around $5.50 (approximately £4).


3
Where did the cloud originate?

Where did the cloud originate?

The origins of the cloud can be traced back to the 1950s, as well as the foresight of psychologist and computer scientist J.C.R. Licklider. One of the most important figures in computing history, Licklider envisioned the idea of an "intergalactic computer network"[7].

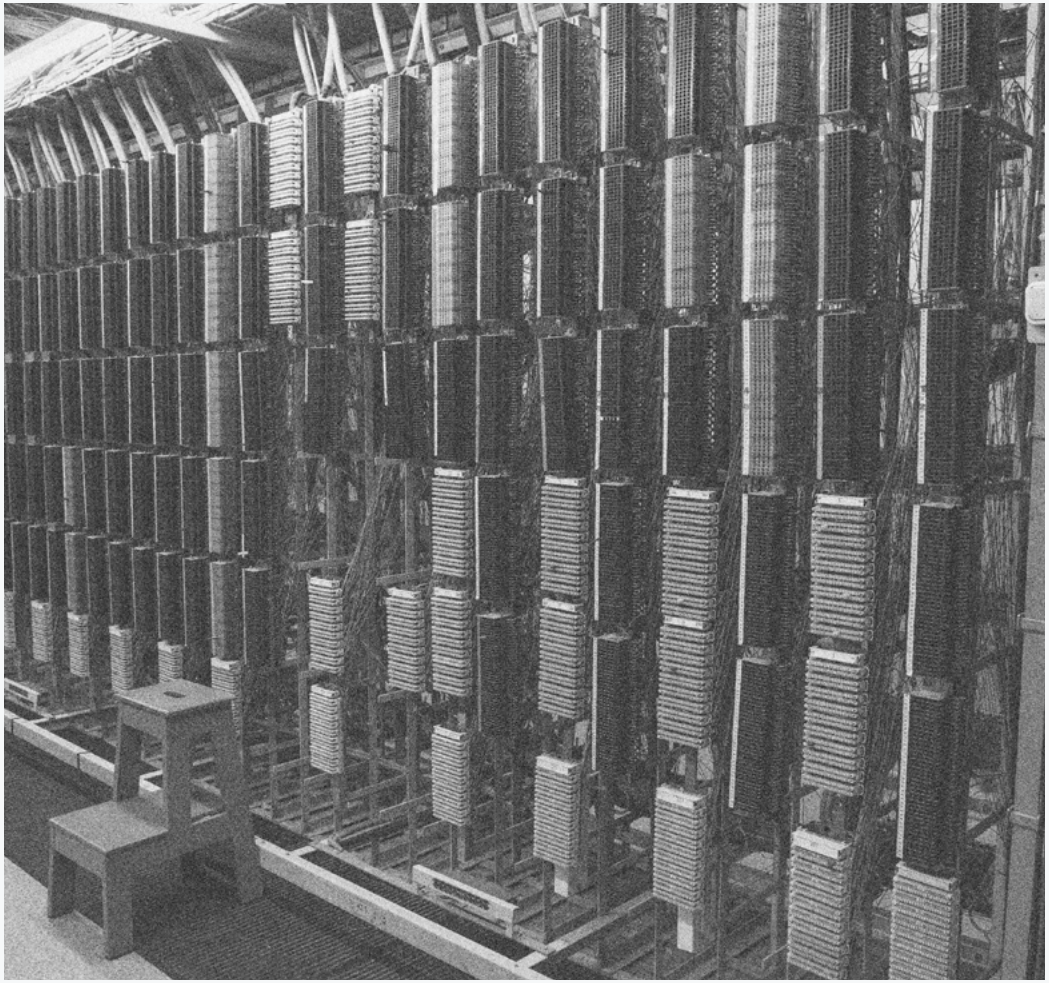
But it only began to be a serious proposition with the bandwidth improvements of the 1990s, and arguably only really entered the mainstream in the early 21st century, when Amazon began to make various cloud-based services widely accessible.

As well as the release to developers, AWS had been tested for several years before it was made available in 2006. These days, many of the world's best-known companies choose to work in the cloud, including enterprises such as Netflix, who moved all of their data over to Amazon Web Services in 2016[8].

To give you a sense of why that's such a big deal, remember that Netflix's biggest competitor is Amazon's own streaming platform.

US governmental departments with critical compliance responsibilities, such as NASA, also use AWS. In 2017, NASA's partnership with AWS led to the first livestream from space in 4K resolution.

But what's also notable is that the vast majority of AWS's million estimated users are small and medium-sized businesses.



7. Computer Weekly (2009), 'A history of cloud computing'

8. Engadget (2016), 'Netflix just finished moving all of its data over to Amazon'

4

The cloud is a highly effective solution for everyone

The cloud is a highly effective solution for everyone

4

Until quite recently, the kind of sophisticated, scalable data storage infrastructure that Amazon offers has been unattainable for most organizations. The effect of cloud computing, as Microsoft partner technology strategist Mark Deakin has pointed out[9], is a leveling of the playing field.

AWS is a simple storage service that offers software developers a highly-scalable, reliable, and low-latency data storage infrastructure at affordable costs. That makes mobility available to companies of all sizes, even if their IT budget is relatively small. No wonder Sunil Khandekar, the founder of global cloud innovators Nuage Networks, describes the cloud as a "powerhouse"[10] for businesses looking to achieve agility.

But is it 100% secure?

As with data decisions that aren't cloud-based, there is a level of calculated risk in allocating security to a cloud service[11]. According to a major report on the cloud by the European Union Agency for Network and Information Security, the level of the risk involved depends heavily on the transparency of the security provider.

Organizations need to be able to properly analyze whether their agreement provides a sufficiently robust service for their needs.

So if you want to understand how safe AWS will be for your organization, having an overview of the features it provides is very important.

9. The Guardian (2013), 'How is cloud computing enhancing our ability to work anywhere?'
10. Nokia (2016), 'Sunil Khandekar on bringing the power of the cloud' (YouTube)
11. ENISA (2009), 'Cloud Computing Security Risk Assessment'


5
Let's dig deeper into what AWS does

Let's dig deeper into what AWS does

AWS is designed as a complete storage platform.

It is built for simplicity, with a web-based management console, mobile app and easy integration with third-party technologies. It is available around the world, replicating information so that it is stored in different regions, and it allows multiple versions of an object to be preserved for recovery at precise points in time.

Perhaps AWS' greatest benefit is the massive scalability it offers, safeguarding trillions of objects each day.

The speed of delivery you're used to with software like an authoring tool is fully supported by AWS, which enables global deployments within minutes.


6
Meeting the highest international standards

Meeting the highest international standards

In 2013, the International Organization for Standardization announced ISO 27000, a new group of standards intended to help organizations of all sizes, in any sector, keep information assets secure.

More than 12 standards were created as part of this "family", with the best-known one becoming ISO 27001, which provides requirements for an information security management system. People, process and IT systems are included in the standard, and accreditation helps companies to:

- Prove that data is secure through independent audits
- Meet client security demands
- Avoid penalties and losses caused by data breaches
- Protect and enhance organizational reputation
- Meet local and global security legislation[12]

You'll want to make sure your authoring tool's SaaS operation is ISO 27001 certified – gomo is! – as it significantly eliminates many common concerns.

The certification guarantees that many of the fundamental policies, procedures, operations and automated protection mechanisms to defend against security lapses are in place.

12. International Organization for Standardization (accessed March 2018), 'ISO/IEC 27000 family - Information security management systems'


7
Dealing with high demand and growing as you grow

Dealing with high demand and growing as you grow

If you have a large global staff – or if your workforce might expand in the future – escalating storage and server demands can be a major drain on your resources. In the past, if you wanted to hire servers to host your courses and training data, you'd have had to pay a variable fee to providers. The cost of this service would depend on the amount of space and bandwidth you required.

This was a costly exercise, and companies frequently found their sites crashed if too many people tried to visit them at once.

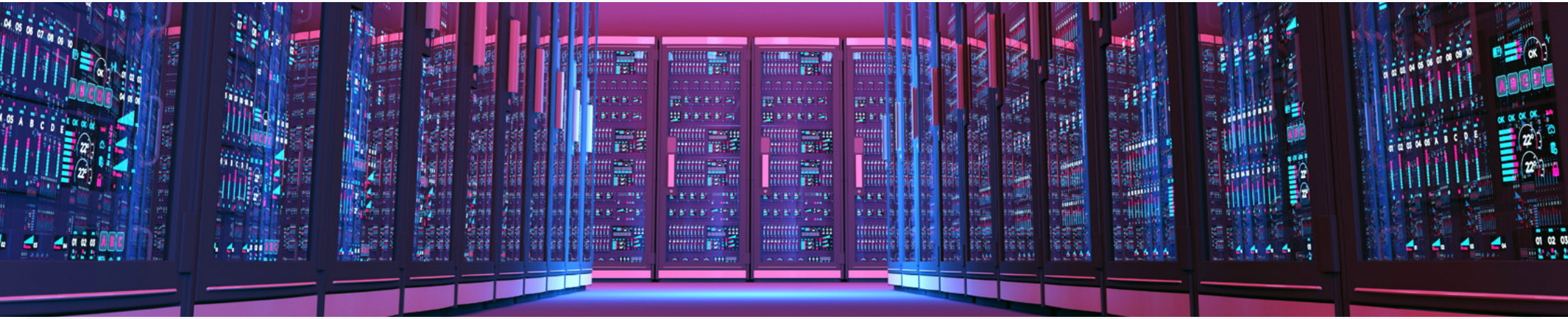
Let's use an analogy made by Erik Anderson, a Principal Architect at IBM, to explain how the cloud works here. He compares cloud computing to a choice of rental cars you might use when on vacation. Regardless of what make or size of car you need, you can choose the one that's right for you and access it as and when you need it.

The cloud is the same. You can access its resources whenever and wherever you need them.

8

Where is the data held?

Where is the data held?



Now let's take a look at how your training is backed up in the cloud.

The data centers that hold your information are built in clusters in various global regions. None of these data centers are "cold", which means they're all online and serving customers. From day one, Amazon's cloud infrastructure was designed to deliver a customer promise of 99.999999999% durability.

How does your data get to these centers?

It's automatically distributed across a minimum of three physical facilities that are geographically separated within a region, and can also be automatically replicated to any other AWS Region[13].

If there is a failure, automated processes move your data traffic away from the affected area. Core applications are deployed in a configuration that creates the capacity for traffic to be "load-balanced" to the remaining sites if things go wrong in one center. The availability zones are physically separated within a typical metropolitan region, and are located in lower-risk flood plains. They also use an uninterruptible power supply and on-site backup generation facilities, each fed via different grids from independent utilities to further reduce single points of failure.

Using these multiple zones protects your data from natural disasters, system failures and other types of problems. Disaster recovery also allows new services to be established quickly in the event of a problem.

As well as these stringent safeguards, AWS carries out extremely regular data integrity checks and automatic 'self-healing'. That means you avoid the lengthy manual repair work which is sometimes required from IT teams using traditional systems.

13. Amazon.com, 'Regions and Availability Zones' (accessed March 2018)


9
Ultra-safe storage in the cloud

Ultra-safe storage in the cloud

The opportunity to collaborate and publish anywhere, anytime is one of the features we shout about most at gomo.

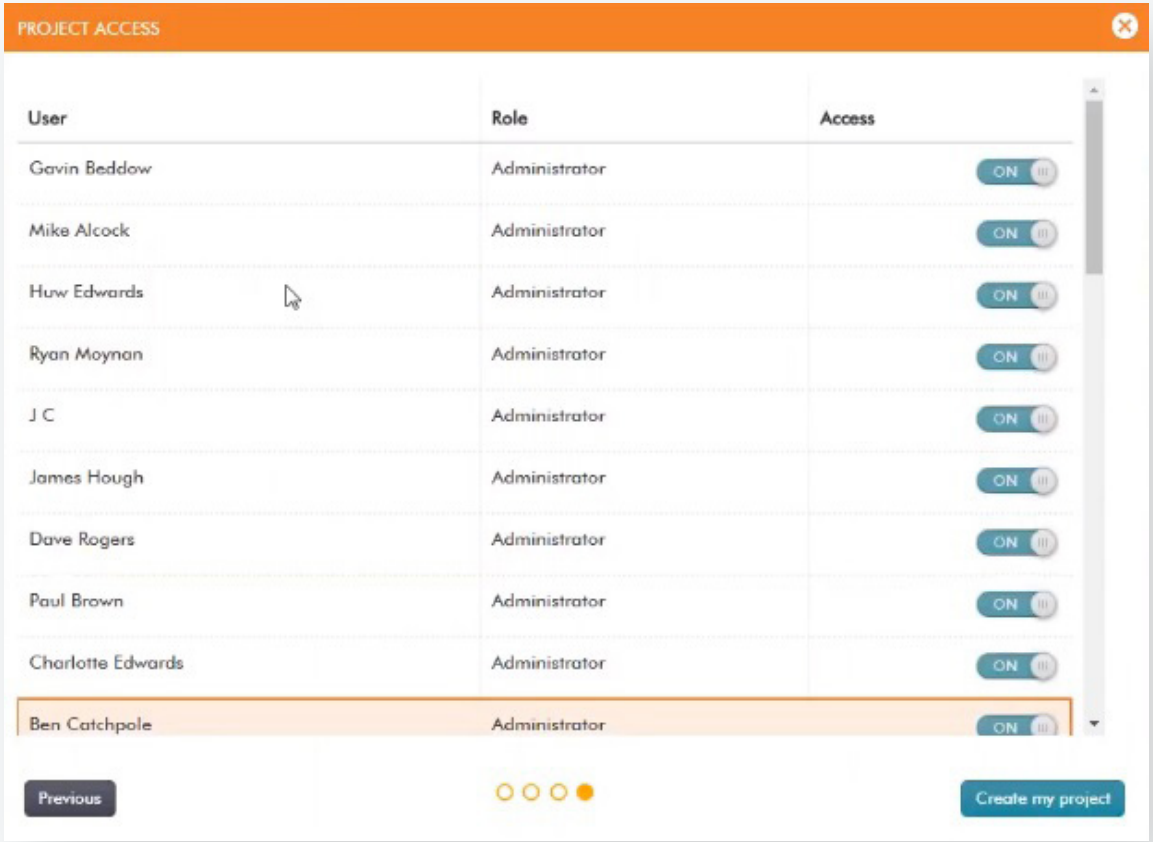
Creating training for a global team can be highly complex, making collaboration more essential than ever in our always-on, super-connected world.

However dispersed your team is and whatever time zones you're working in, you'll be able to build courses and publish updates instantly. You can share notes and ideas, and update courses, all the while avoiding the traditional problems of being unable to track who's made changes to which content.

As gomo is hosted in the cloud, all of your users can access your course resources, whether they're images, videos, themes or anything else. Working within a central area helps you to get your content organized, make sure that everyone is aligned, and helps bring consistency across your brand.

If you've ever suffered the inconvenience of a project being stuck on a designer's laptop, you'll appreciate the benefits of having everything in one place. Our permissions functionality also allows you to put the right people in the right roles without any need for installing in-house software, from administrators, to editors and reviewers.

But what if someone takes a misstep or fails to follow best security practice? With the cloud, you'll never lose anything.




10
Safe, always-available data

Safe, always-available data

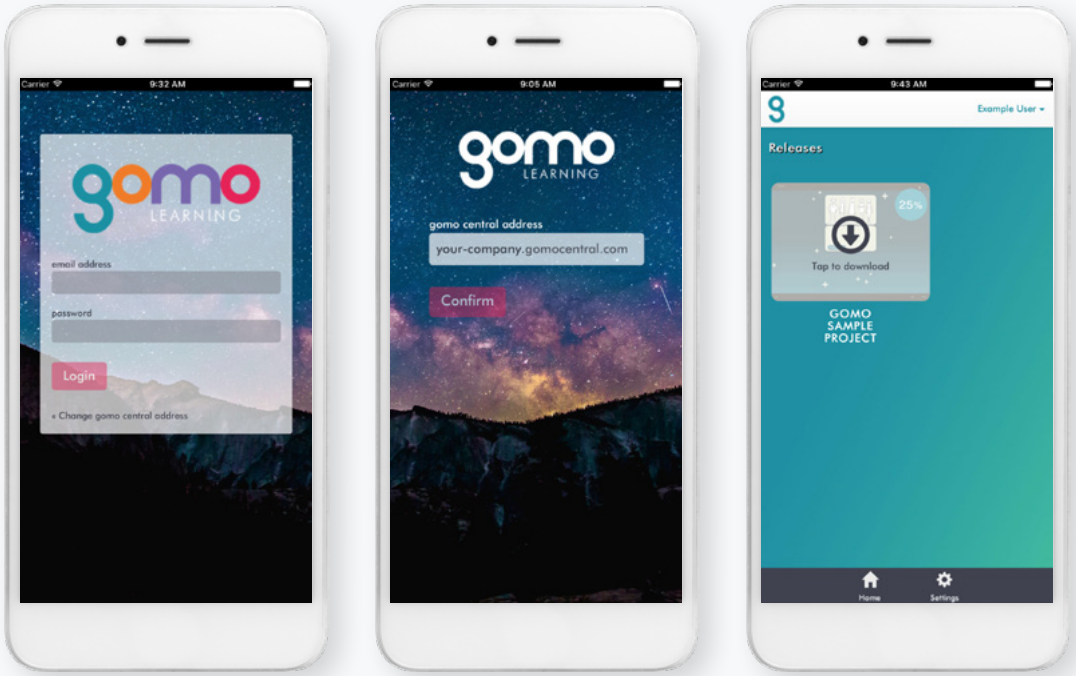
Our use of AWS guarantees you a highly cost-effective and fully managed hosting solution you can rely on. You can store pretty much any kind of data in any format, and the total volume of data and number of objects you can store are unlimited.

While gomo's LMS wrapper means you don't need to worry about making huge, time-consuming uploads each time you need to make changes to your courses, you'll also know that the full range of your content and data will be stored and available 99.99% of the time.

If you store 10,000 objects, you can, on average, expect to suffer a loss of a single object every 10 million years with AWS.

What's more, the gomo central app allows your learners to take their training offline without any data being lost. The app stores all the data on their device in offline instances, and uploads everything to you once your learners are connected again.

That's a great solution to have at a time when more and more employees are working from multiple locations and taking their training in non-traditional ways.



The gomo central app allows learners to take eLearning courses on mobile devices at their moment of need. It also comes complete with full xAPI tracking which provides useful learner data, like who's falling behind and which questions people struggled with the most.


11
The cloud at work

The cloud at work

From local authorities to global enterprises, a diverse variety of organizations have transformed their eLearning with gomo's cloud-based learning solutions.

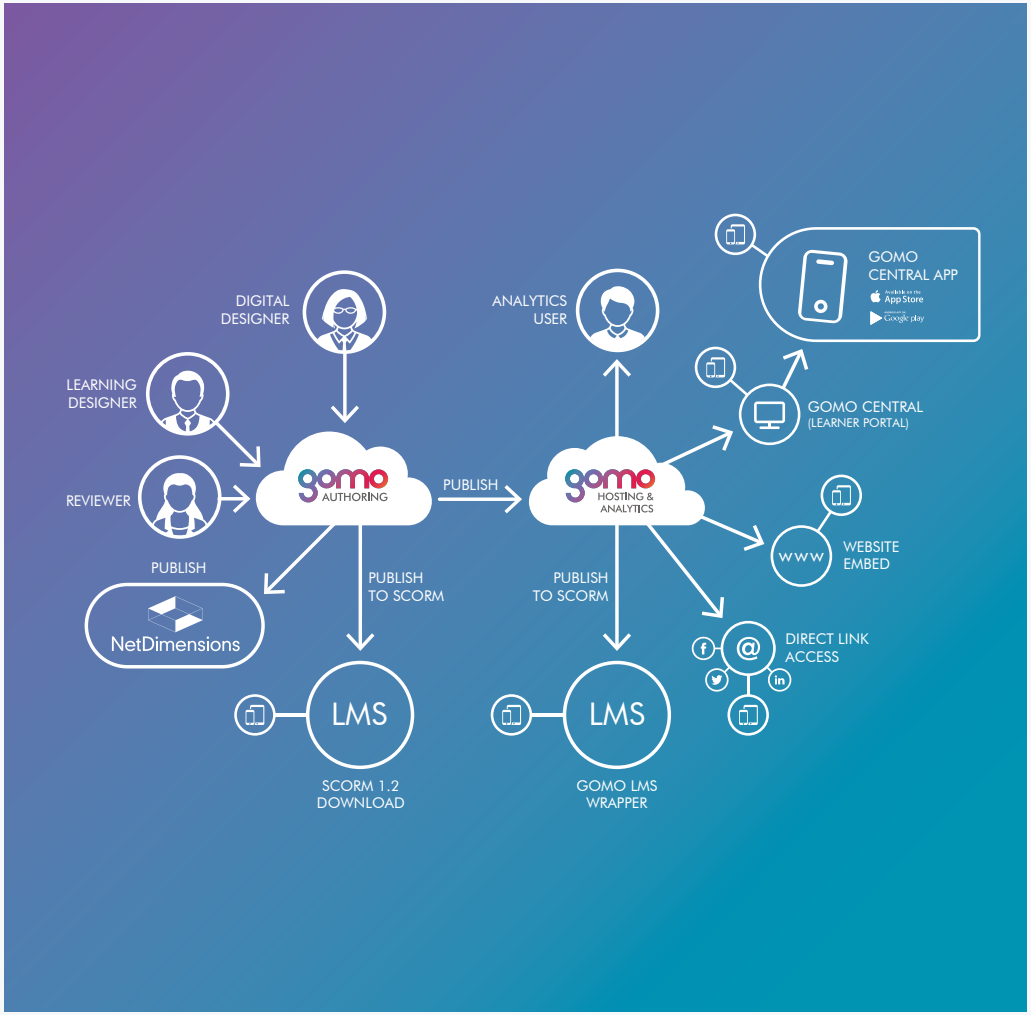
Members of their learning teams are empowered to make as many changes as often and as quickly as they like to courses, and can do this from anywhere with Internet access. They're no longer tied to the desktop, and their courses won't become outdated – a necessity in fast-paced sectors where regular content updates are crucial to business success.

In one market-leading multinational we worked with, the L&D team was able to provide 25,000 employees with up-to-date, on-time information on products and services in minutes. To discover how they used gomo to transform their learning, watch this webinar.

Ultimately, this gave their learners the confidence and knowledge to have engaging conversations with customers. Other major advantages the cloud gives them include:

- The ability, for the first time, to bring non-digital developers together to create content
- Instant roll-out of content, created in a new turnaround time of days or hours rather than weeks
- Unprecedented, seamless collaboration on course creation among the learning design team

To see how global organizations are getting the most out of gomo, check out our case studies.



12

The freedom to concentrate on creating great learning

At gomo, our ambition is always to provide you with the highest security and quality of service, and our partnership with Amazon Web Services, as the world's leader in cloud-based hosting, is a key part of this.

For all the compelling reasons why the cloud can give you great peace of mind, security remains everybody's responsibility, not just technology providers'.

Organizations who trust the cloud when facing huge security challenges, such as the UK's Department for Transport, have underlined the necessity of adhering to best practice at all times in order to maximize safety. In a major report on making the transition to the cloud securely, digital analysts McKinsey emphasized that it is "incumbent" on companies to "fully understand" the range of services being provided.

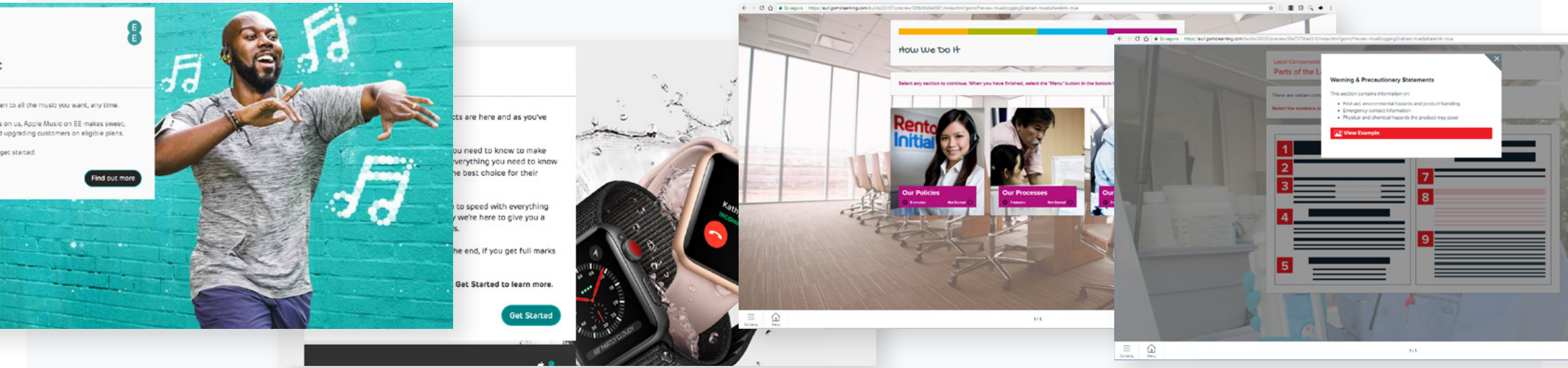
As well as simplifying this process for you, the level of security that AWS provides is a differentiator in the market.

With cyber criminals and hackers increasing in numbers and deepening their skillsets, the cloud's world-class security setup means you don't have to spend your time racing to keep up.

13

gomo and AWS – maximizing the power of the cloud

gomo and AWS – maximizing the power of the cloud



Everything you create, host and distribute with gomo is certified to the highest security standards. Rather than having to worry about spending time and money constantly updating the security surrounding your training courses, you can be safe in the knowledge that the security processes around your data are optimal and continuously enhanced.

We install operating system updates and patches when they become available, scan for viruses and perform daily data backups.

Our authoring tool is designed to be incredibly easy to use for people of all levels of knowledge. This means you can start creating, distributing and hosting multi-device courses within a matter of days.

With everything stored and processed by AWS in the cloud, there's potentially no limit to the number of people who can access and interact with courses at the same time.

Being in the cloud is also incredibly useful in meeting the major challenges many business face when they need to scale up. gomo's use of AWS means you never need to deal with unwelcome surprises. Whether you want to provide training for 20 employees or a limitless number of learners, our choice of three plans takes all the hassle out of your training delivery.

And you can increase your storage or add more users at any time, for as long as you need.


14
Choose the market-leading authoring tool

From easily building multi-device HTML5 eLearning content to effortlessly distributing it and analyzing its effectiveness, the gomo learning suite brings your organization's learning and development efforts together – in the cloud.

When everything works together, teams have more time to focus on what matters, giving them more space to deliver innovative learning with real benefit and true business impact.

The gomo learning suite allows L&D teams and designers around the world to bring out the best in each other, collaborate more effectively and instantly deliver content.

Whether you already have a huge, complex learning infrastructure, or absolutely none at all, the gomo learning suite can save you time, effort and money. gomo makes learning and development in your organization more dynamic, scalable and seamless.

That's why we've been ranked as a Core Leader in the industry by leading HR analysts, Fosway Group, and named the number one authoring tool in the world by experts.

gomo LEARNING

Meet our **experts**

Mike Alcock
Managing Director

Thom Tate
Business Development Manager

gomolearning.com

About **gomo**

All eLearning content produced with the gomo authoring tool is 100% responsive and adaptive.

To discover how our beautifully-designed solutions create learning programs that can be viewed in the cloud on any device, anytime and anywhere, get in touch today on:

contactus@gomolearning.com

@gomolearning