

butic The New School is Spain's leading academic institution offering certified training in architecture, engineering and construction 4.0. Its objective is to offer the best certified training programs based on the use of new technologies by employing the best technical and human resources and through the use of new educational methodologies and collaboration with the industry's leading companies. It also aims to have the greatest social impact possible on both people and within its professional ecosystem.



THE PROJECT

butic The New School is a project that aims to innovate the field of training by implementing a cloud-based technological infrastructure, which will provide countless benefits and is a model that does not exist yet in this field.

The project has **two objectives**. Firstly, we will offer the best training possible in all of our areas of focus. Secondly, to achieve the primary objective, we will remove the technological barriers that restrict access for end users.



Marco Antonio Fernández
CEO & Founder of butic The New School

Initially, our market is the entire community of Spanish-speaking students. As a result, our systems must be configured to offer the **highest quality online training without barriers**. This requires having digital ecosystems to transmit information using direct online methodologies and ensuring **compatibility with collaborative** cloud-based **environments** that have substantial computer graphics capabilities.

The project also seeks to offer companies tailored training options so customers do not have to invest time in configuring the physical equipment needed to participate in training projects involving remote groups that are distributed over a wide geographical area.







CHALLENGES AND REQUIREMENTS

The butic project requires both teachers and students to have workstations with high-end computer graphics capabilities that must be accessible from anywhere.

Additionally, the project requires a solution that can help contend with other challenges to meeting the program objectives such as latency, students' management of usage and licenses, monitoring concurrency, availability of additional work hours outside the center and working in a 100% collaborative environment.

Creating this new virtual environment represented a major technological challenge.













THE SOLUTION

Butic partnered with Simple Cloud to develop the solution. The **Simple Cloud Education** platform, met the organization's needs in all locations by using **IBM Cloud** data centers. With this new solution, the **Centro de Desarrollo Tecnológico e Industrial (Center for Technological and Industrial Development), which reports to the Ministerio de Ciencia, Innovación y Universidades [Ministry for Science, Innovation and Universities], which supports technological innovation and development among Spanish companies, approved the "butic The New School" project in November 2018. The platform helped butic remove the barriers it faced, and globalize and democratize training without requiring expensive workstations.**

Simple Cloud Education is a SaaS technology platform developed by Simple Cloud in collaboration with butic. It includes **high performance and scalable virtual workstations** that use NVIDIA GRID technology, supports software licenses from industry leaders such as Autodesk, Adobe, Chaos Group, Blender, EPIC and/or The Foundry and provides **data management and storage**. The platform also enables production management using an asset manager (Shotgun), a configurable pipeline and a cloud rendering process. The platform's cloud architecture allows students to access it **from anywhere in the world**, which enables them to work remotely within a collaborative environment on a pay-per-use basis.

The platform offers a robust architecture with redundant systems without the need to invest in expensive hardware or IT personnel, which is also scalable and flexible so it can be adapted to the school's needs. Summus Render currently employs three IBM Cloud data centers worldwide which are used to support all workloads. Each data center is connected to a private global network owned by IBM, which **enables data to be transferred more quickly and efficiently** in any area of the world, whilst providing reliable connectivity and servers configured with **high performance graphics processing units** (GPUs), which are essential for animation and design. This enables all material generated to be centralized and accessible without the need to download.

The **Simple Cloud Education** solution from Simple Cloud is a **private cloud** environment created using IBM Cloud bare metal servers. **VMWare** solutions provide a virtual office for each user. Creative content can be transferred quickly and securely using **IBM Aspera**. Unauthorized access and the potential to lose data are significantly reduced as content is stored in secure storage systems in IBM'S worldwide data centers.

"CLOUD ARCHITECTURE ALLOWS TO ACCESS FROM ANYWHERE IN THE WORLD"









TRANSFORMATION AND BENEFITS OF THE SOLUTION

butic is currently the only virtual school in the world that is equipped with systems that enable users to operate workstations with high graphics capabilities in **100% collaborative** environments.

Therefore, it represents the future for an industry that is about to experience extensive digital transformation.

The solution offers many benefits, including open training for end users and bespoke training for companies and institutions. These benefits include: (1) seamless management of complex academic or user-

training environments, computer resources and access timetables, (2) seamless management of legal licenses, (3) lower local infrastructure costs, (4) lower computer maintenance costs, (5) lower energy costs.

This technology provides both students and teachers with access to virtual workstations with remote licenses, which, among other benefits, means that butic's training courses can be offered worldwide and are not restricted by geographical barriers.



RESULTS

The development and implementation of this system has produced some very positive results. In November 2018, the project received support from the CDTI (Ministry for Science, Innovation and Universities). Thereafter, it also received the following awards and recognitions:

- Selected as a finalist from among the best 400 projects presented at South Summit 2018.
- Selected as a finalist from among the best 400 projects presented at South Summit 2019.
- Recognition as an "Innovative SME" in August 2019 by the Ministry for Science, Innovation and Universities.





- Project approved by ENISA in October 2019.
- Finalist project in the SIMO Impulso 2019 competition.

Within the academic and operating environment, the solution that has been developed definitely fulfilleds butic's proposed objectives and is even being implanted in other interest areas by butic. It is scalable and equipped to deal with the subsequent developments needed to be able to provide training programs on subjects as they arise within the industry over coming years.



