Leading multinational software company adopts data as one of their most valuable assets to understand, market, sell and deliver value to their clients, in a rapid and continuous fashion.

Globant helps leading multinational software firm to become data-driven.
Background

Our case study focuses on a leading multinational software corporation that builds software for the architecture, engineering, construction and manufacturing industries.

Having many different products being used by users all over the world, our client knew that in order to thrive in a global economy they needed to get closer to their users. They needed to understand who was using the products, which products were being used, when, why, where and how. Having a better understanding of their users and their behavior would enable the company to improve adoption, reduce churn, detect cross-selling and upselling opportunities, address piracy issues, etc.

In addition to the above, like most software companies, they had to adapt to digitization and the cloud. The company was changing its business model to a cloud-delivered subscription-based model adopting AWS as the main cloud platform. With licensed software, the relationship between customer and provider is simple. You sell the software, the customer uses it and you provide an annual maintenance for an additional fee. With a move to cloud delivery of subscription-based software, the monetization of the software moves to a usage-based model, deployments are produced faster, software is always updated, the revenue is recognized in monthly or quarterly installments but most importantly, users are no longer tied to perpetual licenses with large up-front payments, which can lead to a quick increase in churn if their experience with the software and the brand does not live to their expectations.

It was clear to the executives of the company that data was key to their business transformation and becoming a data-driven company was no longer an option, but a must.
Business Challenge Customer Faced

In order to become a data-driven company, the first step, was to collect the data. Then transform it, store it, make it available to the business users and enable various types of analytics on top of it, train your analysts and managers to trust and act upon the data. This is how the company's data program was born, with the sponsorship of senior executives.

In the center of the program, the company's data platform was designed and developed to bring together:

- Demographical data of clients (users and companies)
- Entitlements and subscription data, including activations, renewals and upgrades
- Product specific data
- Product usage data, also known as behavioral data
- Performance of various marketing initiatives
- Business data from back office systems, such as the company's CRM
- Cloud resources consumed by products and associated billing

The data platform was designed as the foundation to collect, transform, curate and analyze product adoption, usage and user behavior across the entire company, providing the teams and executives with a unified view of the performance of their products over time, enabling them to move forward.

The early stages of the company's vision was to obtain reliable insights from the data, supported by a scalable platform, with secure data governance and a robust streamlined toolset. Being in a high tech space with engineering teams across the globe, the decision was made to build a team of highly qualified professionals to design, develop and run the platform. The team would evangelize the company and train the internal users in order to promote and facilitate adoption.
The goal was to have:

- Consistent product and business data on a single data platform that would give rise to the company's single version of truth.

- A stack of tools that would allow non-technical users to have a more meaningful and interactive conversation with the company's data, democratize access to the data, promoting collaboration and sharing among users.

- A highly-available, fully-managed resource for the company, available anytime, anywhere.

For the product teams, this would translate into a fully managed and governed analytics pipeline. From the products being used by the end users all the way to an internal dashboard, with a highly accessible and secure platform, with centralized infrastructure and low maintenance cost. This is simply game changing. To have the chance to know how the users are interacting with the product, and focus the development efforts on the features and workflows most relevant to them.

For business areas such as marketing, sales, support and other customer-facing support systems, it gave them the possibility of knowing in a matter of seconds who was on the other side of the interaction: who they were, what products they were using, and their latest transactions and interactions with the brand. In other words, being closer to their customer.
As a trusted development partner, Globant has contributed continuously to the company's transformation, not just by blending with the company's data teams and co-developing the data platform and leading the development of different data products, but also by working with different product teams and business areas such as marketing and customer support to promote its adoption.

Globant’s involvement in the initiative can be traced all the way to the very beginning, where the data is originated: the products. Globant was instrumental in creating the data pipelines between the platform and products, and the means to pump the data through those pipelines. Such achievement was done developing the necessary SDKs in various programming languages that the products are written in (e.g. iOS, Android, Java, JavaScript).

Once the data had been sent by the products to the other side of the pipeline, Globant’s data engineers worked to create the necessary ETL processes (Extract, Transform and Load) to clean, aggregate and normalize the data for further analysis, in a more performant, scalable and robust manner. In addition to the developing of the ETL processes, Globant’s data engineers worked closely with the platform architects to define developments standards and best practices, as well as monitoring, high availability (HA) and disaster recovery (DR) strategies.

At the end of the day, no matter how big, smart and fast your data is, it's worthless unless you do something with it. On the analytics aspect, Globant has led the design and development of several projects and data products. For example, a tailor-made web portal where business users can see what the different product teams are spending in various AWS services over time. This helps them gain valuable insights in order to reduce costs and increase efficiency in the cloud, which was and remains essential in the business transformation. Even though this data product was built for a specific area of the company, it quickly picked the interest of other areas that started to replace 3rd party software such as cloudability, improving not only their cloud spend, but also cutting the cost of commercial software.
Another great data product built on top of the data platform is an analytics web portal that unifies and normalizes Key Performance Indicators (KPIs) for all of the company’s products. This provides near real-time information to managers and above, all the way to the C-Level executives who can monitor KPIs such as daily active users, churn rates by cohorts, various demographical analysis of the users, etc., and compare the products between each other on a set of unified business metrics across all products and divisions.

Last but not least, if we’re talking about becoming a data-driven company, Machine Learning (ML) and Artificial Intelligence (AI) cannot go unmentioned. Globant is currently working with product teams that are looking to include ML and AI in their products. This would replace 3rd party tools with a new platform built using managed services in the Cloud (AWS EMR, SageMaker, S3, API Gateway, Lambda Functions, RDS) and leveraging open-source projects such as Jupyter Notebooks, a web application that enables data scientists to create and share web documents (notebooks) with which they can clean, transform and aggregate data, run numerical simulations, create statistical models as well as run machine learning algorithms in order to provide personalized recommendations as well as risk reports to the end-users of their product.

Over the years, from our many delivery centers in Asia, LATAM a US, Globant has provided PODs with interdisciplinary skills, such as data engineers and data scientists, user experience and visual designers, cloud engineers and development ops, backend and web UI developers, Q analyst and Scrum Masters. Ultimately, Globant was able to prevail as a trusted partner not just because of the strong capacity in a complex technology stack that included niche technologies such as Spark, AWS, Tableau, Python, Docker, D3.js and Highcharts, to mention just a few, but also in the business knowledge acquired over the years and how the company has implemented and integrated the building blocks of the platform.

Thanks to Globant’s agile team methodology and internal trainings not just in the technologies involved but the data platform itself, Globant was able to scale quickly and organically, converting Java developers into data engineers and Web-UI developers into data visualization experts as needed to create additional capacity, fulfilling the company’s need and meeting the business milestones.
Globant has successfully partner with the engineering and product teams in a very niche space such as data and analytics to accelerate the business transformation of the company, using data as a competitive advantage.

During the different phases of the program and the various projects it involved, Globant was always able to provide the company with the right talent, and build additional capacity in various delivery centers as needed.

Today Globant is involved in more than 12 on-going data related projects in the client company and has increased its footprint in this area 5x in the past 18 months.
The following are some takeaways of the work that has been done over the years:

The company’s products are sending data to the company’s data platform in real-time, in a transparent and seamless manner to the users.

The data is being continuously cleansed and normalized in the data refinery in order to provide business users with the data they need, when needed, where needed.

Modern and tailor-made data products that allow finance, product and engineering teams to monitor and keep track of their cloud spend.

Unified set of KPI across all products in near real-time for middle and upper management, as well as executives.

Product teams currently have a better understanding of who their customers are and how they are using the product in order to create personalized marketing actions to improve stickiness and reduce churn.

Cost reduction thanks to the replacement of expensive 3rd party software.

The company was outfitted with the data analytics it needed to understand the performance and growth trends of its cloud-based products.

Globant is recognized as the go-to vendor when it comes to data.