Globant ▶

Enabling healthcare authorities to use **real-time information to combat Covid-19**

Introduction: The worry of **healthcare systems overburdened** by Covid-19

As the Covid-19 pandemic hit in early 2020, it threatened to overwhelm healthcare systems around the world. Unfortunately, in many locations this did occur, meaning people were unable to receive the care they needed.

It quickly became apparent that the lack of real time information would make the challenge of responding to the virus even more difficult. It became crucial to know where resources, such as intensive care units and beds with oxygen, were available. Due to the nature of the pandemic, in many cases certain locations or cities could be quickly overwhelmed, while others would still have capability. Clear, real-time information could quite simply save lives.

Taking action:
Creating a real-time dashboard to **optimize healthcare resources**

Realizing the gravity of the situation in early 2020, Argentina's Health Ministry decided to quickly build and implement a real-time dashboard to collect and have access to crucial information. This dashboard would provide the information and insights they needed to make crucial decisions for the country. The Ministry and Globant worked together to co-create the platform, using components from Salesforce.

Given the urgency of the situation, we split the project into two phases. The first lasted 6 weeks, and the second for 10 weeks. There was also an evolution phase of 4 weeks, in which we automatically collected, standardized, and consolidated daily reports that the government increasingly incorporated into their decision-making processes. Importantly, we had the first version of the dashboard up and running in just 6 weeks.

We built and **implemented five** solutions:

1. A real-time dashboard to provide insight into healthcare resources.

This panel provided an overview of the state of healthcare resources at the national, provincial and individual levels, providing invaluable data to leaders as they made decisions.

2. An easy-to-use chatbot.

An additional element to the success of the dashboard was making it easy for individual healthcare institutions to communicate with the monitoring center. By using a chatbot, healthcare personnel could share information as easily as sending a message on WhatsApp. People could also use more traditional web-based reports to send information.

3. Intensive care unit reports.

One of the most important pieces of information was the availability of intensive care units in Argentina. This provided reports on the status of adult and pediatric intensive care services.

4. Supply reports.

Crucial to combatting Covid-19 was ensuring hospitals, clinics, and other healthcare institutions had the necessary supplies, such as for personal protective equipment for nurses. We built this module to enable institutions to send status reports on missing supplies.

5. Institution management.

It was important that the people with the information could share it quickly and easily. We made it simple for representatives of the healthcare institutions to add collaborators to carry out the reports.

Measuring the **impact in lives saved**

Today, more than 1,600 health institutions use the platform nation-wide, and a further 900 are sending reports on a daily basis - representing 96% coverage. It creates an average of 3,300 reports per day. There has been triple-digit (+100%) growth of platform adoption by institutions on a monthly basis since its introduction.

By using the dashboard the health ministry was able to optimize their current resources, particularly with regards to the number of intensive-care beds. At the time of writing, more than half of states in the country are reporting that more than 80% of ICU beds are available.

The platform was quickly adopted throughout the healthcare system due to two key factors. Firstly, it has a decentralized data upload, to avoid a single point of failure or bottlenecks. And secondly, it provided real-time insight into the state of the healthcare system at national and local levels, enabling more efficient care, and better resource allocation. It is also important to highlight that the dashboard has led to greater interconnectedness between institutions. 30% of states are exclusively reporting via the API (they are fully interconnected) and 8% are reporting using both the API and the web form. This is an important KPI as, before this solution existed, no institution was fully interconnected.

"Globant pursued not only a technology transformation, bringing to the table the state-of-art of technology, but also influenced the mindset transformation, focusing on using data as the pillar for making smart and data-based decisions."

"Globant were very flexible organizing a team that could scale up and down based on the rush of the pandemic. When we were approaching the peaks of the pandemic, the team scaled up smoothly. They also proposed an innovative approach to the architecture that we decided to implement."

Fernando **Nuñez**

Director General of Governance and Integration of Health Systems, at the Argentine Ministry of Health.

Conclusion

Working together, Argentina's Health Ministry and Globant created a powerful tool to help improve people's access to healthcare at an incredibly difficult time. It continues to provide crucial information in responding effectively to the Covid-19 pandemic, whilst also helping to improve the digital connectedness of healthcare institutions, which will serve the country well for many years to come.

Globant created the dashboard on an ad-honorem basis as part of our **Be Kind** program. Be Kind is our way to transform organizations and people's lives with kindness. This initiative commits Globant and Globers to be kind to peers, to humanity and to the planet by guaranteeing diversity, gender equality, inclusion and becoming a carbon neutral company.

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Building a secure, robust and reliable system that can successfully collect critical information from the institutions was a challenge not only from a technology perspective but also for our UX team, considering that users had to get familiar with the system in record time during the pandemic. I remember one design session with the team where we set the design constraint: 'users should be able to send a report in less than 2 minutes'. I'm very proud of the team and the work we did".

Gonzalo **Raposo**

Technical Director at Globant

Salesforce
technologies used

- Sales Cloud
- Einstein Analytics Plus
- Einstein Analytics Community Logins
- Community Cloud Logins

Find out more about Globant's dedicated healthcare and **life sciences** services

About **Globant**

We are a digitally native company where innovation, design and engineering meet scale. We use the latest technologies in the digital and cognitive field to transform organizations in every aspect.

- We have more than 14,300 employees and we are present in 16 countries working for companies like Google, Rockwell Automation, Electronic Arts and Santander, among others.

- We were named a Worldwide Leader in CX Improvement Services by IDC MarketScape report.

- We were also featured as a business case study at Harvard, MIT, and Stanford.

- We are a member of the Cybersecurity Tech Accord.

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