



CASE STUDY

**HOW CAR-SA USED iBWAVE Wi-Fi®
TO CUT Wi-Fi NETWORK
DESIGN TIMES IN HALF**



With a field engineering presence in 54 cities across Mexico and a reputation as innovators in the infrastructure management industry, CAR-SA was looking to upgrade their wireless design tools with the goal of offering excellent customer service. This case study explores how iBwave Wi-Fi helped CAR-SA cut project design times in half, leaving customers ecstatic with the software solution.

ABOUT CAR-SA



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Y ASESORIA DE
REDES S.A. DE C.V.**

CAR-SA is a company with more than 17 years of experience offering solutions in IT and Telecommunications. They have a presence in 54 cities strategically located across the country to offer their services wherever the client may require them.

With an innovative client-first approach, CAR-SA's vision is to provide infrastructure management service of the highest standard. Aligned with this vision, and aware of the trend towards mobility in devices that make use of Wi-Fi technology, they are committed to offering quality service in this vital market segment.

INTRODUCTION

Knowing that software plays a crucial role in the successful deployment of a Wi-Fi network, CAR-SA searched far and wide to find the best tools to support their goal of excellence in wireless design. The previous software they were using simply wasn't cutting it.

Then CAR-SA discovered iBwave.

iBwave helped CAR-SA achieve their objective of designing high-performance Wi-Fi networks for their customers, and thanks to the software, their team of Wi-Fi engineers can carry out site surveys, design, maintenance, and troubleshooting, all in a single project with key information centralized in the cloud.

But it wasn't always this way. Before adopting iBwave, CAR-SA had some challenges with their existing workflow of network design for warehouses, convenience stores, gas stations and offices. Spread out sites like these present unique challenges when designing networks, and their existing software did not have the features to solve these issues.

THE CHALLENGES

SHARING SITE SURVEY INFORMATION

With sites spread out across the country, engineers had to be dispatched from head offices to complete site surveys, and results had to be manually sent before design production could begin. In the past, CAR-SA's survey results were sent via email attachments in many different formats, which made it tricky to compile data in an organized manner. Additionally, their engineers had varying levels of

experience and skill, often leading to survey results that were inconsistent in detail and quality.

To further complicate things, the lack of a mobile solution meant engineers had to use bulky laptops (of varying performance) to complete surveys. Some audits required up to 5 kilometers of walking, which made carrying expensive, heavy pieces of equipment risky and inefficient.

DESIGN OPTIMIZATION & PREDICTION ACCURACY

Issues with previous software caused incorrect wall attenuation values, inaccurate interpolation, and had no consideration for reflection and diffraction, which can have a huge impact on prediction accuracy in a complex environment like a warehouse. As a result, customers often ended up buying and installing more

access points than required because the design was not properly optimized.

These issues also led to corrupt results, and some warehouses required up to four surveys before their network design was perfected. Customers were left understandably frustrated.

REPORTING

With previous software, only 2D report visualizations were available. Limited options made it difficult to provide an accurate visualization of the network's design and performance to customers. The lack of consistency in documentation and report generation

also made it a challenge for CAR-SA to provide essential information to their clients in a format of their convenience. With reports being sent via email in a variety of different file types, projects quickly became disorganized.

THE SOLUTION

The iBwave Wi-Fi® Suite

Mobile and PC-based software providing a radically more productive and collaborative way to design and deploy Wi-Fi networks.



THE RESULTS

STREAMLINED SITE SURVEYS

Once CAR-SA partnered with iBwave, sharing key information within the team was simplified. With engineers all using iBwave Wi-Fi® Mobile to survey, site information can be instantly shared with project stakeholders across the country through the iBwave cloud.

Cloud connectivity enables engineers to capture pictures of warehouse interiors and annotate to design specialists at head offices. This simplifies the process for network

troubleshooting and reduces the number of site surveys required per venue. It also allows them the ability to capture accurate data measurements, and even complete preliminary designs with heatmaps.

iBwave's shared licensing across devices meant that the software could now be used as needed, regardless of warehouse location.

Bulky laptops for site surveys became ancient history, too. Engineers now use iBwave Wi-Fi® Mobile to perform surveys, drastically reducing the time, cost, and hassle of sharing results.

ACCURATE PREDICTION RESULTS & OPTIMIZED DESIGNS

"With features like 3D modelling and prediction accuracy, iBwave does things a little differently than other wireless network software vendors."

iBwave's 3D modelling, ability to consider reflection and diffraction, and advanced prediction algorithms provides CAR-SA with unprecedented accuracy. Customers no longer buy unnecessary equipment

or access points, and the number of site surveys required to complete projects has dropped.

The bottom line? CAR-SA provides excellence to their clients by providing them with accurate high-quality Wi-Fi network designs that work correctly from the time they're activated.

iBwave is the only vendor that has a high-quality mobile app and cloud for site surveys.

REPORTING

“Before iBwave, clients had never seen such detailed reports from other vendors.”

iBwave Wi-Fi® offers CAR-SA a host of report generation features that prove invaluable to streamlining the design process.

The Access Point report function provides CAR-SA’s customers with a convenient at-a-glance breakdown of AP placement information. The report displays AP locations against the building floor plan, and also indicates which channel and band each access point operates on.

3D visualization of the network’s heatmaps are also invaluable for CAR-SA. Since key decision makers are not always technically inclined, iBwave reports provide them with stunning 3D visualizations of how a design will be installed and perform, leaving them confident in CAR-SA’s ability to complete the project.

In the past, CAR-SA were unable to provide reports with this level of detail and simplicity. And regardless of the report type, iBwave Wi-Fi® allows CAR-SA to export in the file format of the client’s choosing. This helps keep projects organized and customers satisfied.

THE IMPACT

CAR-SA provides quality and consistency in Wi-Fi network design to clients in over fifty cities across Mexico, with the help of essential iBwave features such as cloud collaboration and 3D modelling.



About iBwave

iBwave Solutions, the standard for converged indoor network planning is the power behind great in-building wireless experience, enabling billions of end users and devices to connect inside a wide range of venues. As the global industry reference, our software solutions allow for smarter planning, design and deployment of any project regardless of size, complexity or technology. Along with innovative software, we are recognized for world class support in 90 countries, industry’s most comprehensive components database and a well-established certification program. For more information visit www.ibwave.com

