

SUCCESS STORY

Evolution Dental Lab Optimizes Supply Chain with Smart-Shelf Solution




AMPAworks



ABOUT **EVOLUTION** **DENTAL**

Evolution Dental Science has been the most trusted full-service digital dental laboratory in Buffalo, NY for over 28 years. With precision as their foundation, EDS uses impressions to design models identical to the patients' anatomy. Evolution Dental Science designs state of the art crowns, bridges, implant solutions, provisionals, veneers, and several other products to improve patient outcomes.





THE PROBLEM

Evolution Dental Science was in need, like most dental laboratories, for a significant change in its supply chain and inventory management system. Andrew Jakson, owner of EDS, backed by 25 years of experience, was in search for a solution with a clear objective: “To improve production efficiency, improve inventory tracking, and reduce costs”.

Evolution Dental’s inventory was previously managed by hand-counting supplies and tracking inventory using spreadsheets. This system consumed FTE hours, was mundane, and often inaccurate.

Zirconia pucks serve as the foundational raw material for the production of dental restorations, including crowns, bridges, and implants. The process involves milling and sintering the pre-shaded pucks, transforming them into precisely crafted restorations. Each Zirconia puck comes with a significant price tag, approximately \$200 USD per unit.

Maintaining an inventory of more than 500 Zirconia pucks at any given time is essential for Andrew to meet demand and production requirements. However, the challenges arise when these valuable units go missing. The repercussions of such inventory discrepancies are not just limited to the immediate cost of replacement, but also include hidden costs associated with production delays and partner dissatisfaction.



THE SOLUTION

To combat inventory management and supply chain issues, Andrew Jakson partnered with AMPAworks to optimize efficiency and save costs.

AMPAworks manufactures smart-shelf cameras powered by computer vision artificial intelligence to track inventory 24/7 and provide Evolution Dental Science real-time data via AMPAworks' iOS or desktop application.

In addition to the smart-shelf cameras, Andrew has implemented AMPAworks' mobile kiosks for inventory tracking. These mobile kiosks are stationed at various points in the production process, such as milling, customization, and shipping stations.

The kiosks enable employees to capture an image of the lab pan. Data is extracted from the image to ensure the content in pan remains constant from station-to-station throughout the production process.



THE BENEFITS

By implementing these technologies, Andrew significantly improved inventory management at Evolution Dental Science. In addition to reducing costs, increasing efficiency, and preventing stock-outs, here are some additional key benefits EDS gained by using AMPAworks' solutions:

- **Optimized Workflow:** EDS has optimized its production workflow by implementing mobile kiosks for inventory tracking. These kiosks track dental lab pans from the milling stage through to shipping and every station in between.
- **Quality Control:** This solution allows Andrew to pinpoint exactly where issues may arise in the production process. Additionally, the kiosks provide end-to-end visibility throughout the production process.
- **Production Efficiency:** Andrew can now precisely track what was completed at each station as the content of each pan is captured using the kiosks. He uses the extracted data to identify and mitigate issues in the production process, improving future efficiency. Furthermore, the kiosks count the number of items in each pan for accuracy and to prevent shrinkage.



CUSTOMER TESTIMONIAL

“ AMPAworks’ solutions enable Evolution Dental Science to track inventory 24/7. The smart-shelf cameras have given a passive solution to manage dental pucks and other essential inventory. AMPAworks has helped increase efficiency, reduce costs, and avoid stock-outs at EDS. ”

Andrew Jakson
Owner & CEO
Evolution Dental Science





ABOUT **AMPAworks**

We are a team of doctors, nurses, and engineers who have come together to help organizations build an efficient supply chain infrastructure through cutting-edge technology. Our award-winning technology has been recognized by HIMSS Healthcare, the American Nurses Association, the Los Angeles Business Journal, and The University of Pennsylvania. We are passionate about helping frontline workers have the tools and supplies they need to provide high quality service and care for patients and customers.

