



Beauty, Cosmetic and Perfumery



#### Team Composition:

1 Technical lead, 1  
Hardware Engineer,  
2 Full Stack Engineers



#### Project Duration:

Ongoing (Support and  
Maintenance)



#### Tech Stack:

Xamarin, .Net,  
Hardware (ESP32  
chip), MAUI

## Project Overview

Aroma Retail's Wi-Fi-enabled scent machines allow users to customize fragrance experiences remotely. However, an unstable app and unreliable connectivity led to poor customer satisfaction, frequent crashes, and a slow pairing process (40–60 seconds). Techverx took over from the previous vendor, re-architecting the platform, optimizing device connectivity, and implementing CI/CD best practices.

## Business Challenges

- **Slow & unreliable device pairing**, disrupting the user experience
- **Frequent app crashes & poor performance**, leading to increased support tickets
- **Lack of CI/CD & version control**, making debugging and deployments inefficient

## Solutions Delivered

- **Codebase Optimization & Architecture Redesign** – Improved stability and scalability
- **CI/CD Implementation & Version Control** – Enabled faster, structured deployments
- **Optimized Device Connectivity** – Reduced pairing time from 40–60 seconds to near-instant
- **Enhanced Testing & QA** – Minimized crashes and improved user satisfaction

## Results & Impact

- **Device pairing time cut from 60 to near-instant**
- **Crashes reduced by 70%**, improving app reliability
- **CI/CD pipeline introduced**, enabling faster deployments & smoother debugging
- **Support tickets significantly reduced**, enhancing customer experience
- **Platform now supports new hardware integration** & future features

## Conclusion

- **Techverx successfully transitioned Aroma Retail from an unstable system to a high-performing, scalable platform**, ensuring seamless connectivity, a better user experience, and readiness for future innovation.