



## Development of Android and iOS Library

# Enhancing Barcode Scanner Integration for Stimare

STIMARE 

## At a glance

In collaboration with Stimare, a prominent player in industrial barcode scanners, Galvia Digital undertook a transformative project aimed at enhancing barcode scanner integration capabilities. Stimare sought to broaden their global market reach and elevate sales by innovating their scanners to seamlessly interface with mobile applications via Bluetooth, USB, and HDI. Recognizing their own limitations in mobile app development, Stimare turned to Galvia Digital for expertise in creating a bespoke SDK and demo application.

Galvia Digital's solution included developing a cross-platform SDK that ensured reliable communication across iOS and Android platforms, alongside a robust demo application to showcase scanner functionality. Through meticulous testing, bug tracking, and version control, Galvia Digital ensured the SDK's reliability and ease of integration, paving the way for enhanced customer satisfaction and streamlined deployment processes. This collaboration not only positioned Stimare as an industry leader in barcode scanning technology but also exemplified Galvia Digital's capability in delivering tailored, high-quality solutions to meet complex technological challenges.

### Client Company Introduction

Stimare is recognised as the world's premier provider of ticketing, Point of Sale (POS), RFID, Original Equipment Manufacturer (OEM), and kiosk hardware solutions. With a steadfast focus on innovation and client success, Stimare specialises in selling cutting-edge, cost-effective POS and barcode scanner solutions that allow clients to improve their business operations.

One of Stimare's many POS systems is the Saveo BOLT™. The company sells this rugged, high-performance scanner to clients who need to transform smartphones into enterprise-grade handheld barcode scanners.

Traditional barcode scanning solutions using smartphone cameras often suffer from poor performance and cheaper phones also struggle with decoding scan data quickly, pushing users towards expensive handheld devices. Additionally, industrial scanners often lack the latest OS functionality and modern hardware capabilities.

Stimare's Saveo BOLT™ addresses these challenges by combining the intelligence of smartphones with robust, industry-level functionality, providing a seamless and efficient barcode scanning solution.

Seeking to expand their global client base and boost sales of their barcode scanners, Stimare aimed to innovate the Saveo BOLT™ to ensure it could seamlessly integrate with any type of mobile device via Bluetooth, USB, and HDI. However, they faced a significant challenge: they lacked in-house application development expertise.

To overcome this hurdle, Stimare turned to Galvia Digital for assistance with this crucial project.

**This case study explores how Galvia Digital's expertise provided the solutions Stimare needed to enhance their barcode scanners, improve product integration capabilities, and ultimately achieve their business growth objectives.**

### Challenges

Stimare aimed to boost their global sales of barcode scanners by innovating their Saveo BOLT™ products to integrate seamlessly with mobile applications via Bluetooth, USB, and HDI. They recognised that such enhancements would make their scanners more appealing to a global consumer base and therefore gain a competitive advantage.

Additionally, Stimare wanted to clearly display and explain the capabilities and advantages of the barcode scanner to their clients by offering a demo application that exhibited how to integrate the scanners with existing systems, utilising an SDK that included standardised commands to facilitate seamless integration. This was required to result in more sales for Stimare.

However, the main challenge preventing Stimare from achieving this goal independently was their lack of expertise in mobile application development. This expertise gap hindered their ability to create the necessary mobile solutions.

To overcome this obstacle and achieve their business objectives, Stimare outsourced Galvia Digital for their specialised knowledge and experience in mobile development and SDK creation, therefore avoiding employment onboarding overhead.

# Challenges

## Lack of In-House Expertise:

- Stimare lacked the necessary internal skills to develop a sophisticated mobile SDK.
- This expertise gap hindered their ability to extend barcode scanner functionality to mobile platforms.

## Complex Integration Requirements:

- A custom SDK was required to facilitate communication between barcode scanners and mobile devices via USB HDI and Bluetooth. Without this, clients faced difficulties integrating scanners with existing systems.
- The SDK also required seamless operation on both iOS and Android platforms.

## Effective Demonstration Tools:

- They needed a demo application to showcase the capabilities of their barcode scanners.
- Without a demo, potential clients would have difficulty appreciating the scanners' value and functionality.

## Reasons to Overcome These Challenges:

### Expand Global Market Reach:

- By addressing these challenges, Stimare could enhance their barcode scanners' functionality and usability.
- This would make their products more attractive to a broader global client base.

### Increase Sales:

- Improved integration capabilities and demonstration tools would boost client interest and sales.
- Streamlined integration processes and comprehensive support would lead to higher adoption rates.

### Enhance Client Satisfaction:

- Providing reliable, easy-to-integrate solutions would improve client experiences.
- High-quality documentation and technical support would minimise errors and support requests, fostering client trust and loyalty.



### Strengthen Market Position:

- Offering advanced, user-friendly products would reinforce Stimare's reputation as an industry leader.
- Innovation and quality improvements would keep Stimare competitive in the global market.



# Solutions Provided by Galvia Digital

To address these challenges, Stimare partnered with Galvia Digital, leveraging their extensive expertise in software development to deliver comprehensive, high-quality solutions.

## Team Extension

As Stimare didn't have the app development capabilities in-house, we provided a team of skilled software engineers to develop the application, utilising good engineering practices to deliver a high-quality product using an agile process. This prevented Stimare from having to expand their team or spend significant overhead to onboard skilled developers for a short-term project. Our expert team began the project by gathering Stimare's requirements to ensure we addressed all of their challenges effectively.

## Custom SDK Application Development

Galvia Digital developed a fully customisable, interoperable SDK for both Android and iOS, enabling seamless integration of Stimare's barcode scanners with any mobile device via USB, HDI and Bluetooth. This specialised SDK facilitated easier and more reliable technology integration for Stimare's clients, enhancing the overall user experience and product appeal.

Our team meticulously designed the SDK to work flawlessly across iOS and Android platforms, ensuring consistent functionality and performance. We ensured that we provided a cross-platform solution to expand Stimare's market reach, allowing them to cater to a diverse client base and increasing their competitive edge.

## Demo Integration App

In response to Stimare's needs, we created a demo application to showcase the capabilities of their barcode scanners. This provided potential clients with a practical tool to experience Stimare's high-quality products firsthand.

The scalable demo application serves as a powerful sales tool, helping to demonstrate the scanners' value and ease of integration, thereby boosting sales and client interest by removing integration difficulties. Galvia Digital established efficient methods for distributing the SDK and demo application through the app store, ensuring easy access and implementation for Stimare's clients. Our streamlined distribution processes reduced barriers to sales and integration, enabling clients to implement the scanners quickly and effectively in their systems.

## Documentation and Technical Support

We provided detailed, branded documentation, offering clear, professional guidance on integrating and using the SDK. High-quality documentation minimised integration errors, reduced support requests, and enhanced the overall client experience, bolstering Stimare's reputation.

Galvia Digital provided technical support to help Stimare communicate with clients on a technical level, ensuring smooth integration and troubleshooting. Our practical technical support improved client satisfaction and facilitated successful product adoption, strengthening client relationships and loyalty.

## Testing and Quality Assurance

Aiming for excellence, we completed extensive testing procedures to ensure the SDK and applications were reliable and free of bugs, with a robust ticket system in place. High-quality assurance practices ensured that Stimare delivered a reliable and functional product, maintaining customer confidence and reducing operational disruptions.

A version control system was implemented to manage updates and changes efficiently, ensuring consistency and reliability of the SDK. Our effective version control maintained the integrity of the SDK, preventing compatibility issues and ensuring clients always had access to the latest, most reliable version of the application.



# Results

The collaboration resulted in substantial benefits for Stimare. Our custom SDK empowered clients to integrate Stimare's barcode scanners seamlessly into any bespoke or older system without barriers, showcasing the scanners' full capabilities and improving user experience. Galvia Digital successfully delivered the project on time and within budget using our strategic and agile development approach.

## **Simplified Integration led to Increased Market Presence and Improved Customer Satisfaction:**

The customisable SDK improved integration ease for Stimare's clients. Our comprehensive documentation delivered by Galvia Digital's development team led to higher adoption rates among clients, boosting Stimare's market presence.

Stimare's clients experienced reduced complexity and faster implementation times, resulting in higher satisfaction and fewer support issues. Offering a high-quality, branded SDK positioned Stimare as a professional and client-focused company, enhancing their reputation and establishing them as a market leader.

## **Increased Sales and Revenue:**

Our high-quality, standardised SDK solution serves as a valuable sales-enablement tool for Stimare. We have established a functional, ease-of-use platform for clients to trial globally and understand the high-quality barcode scanners' unique features, allowing them to integrate the scanners with their current systems seamlessly. Having leveraged our expertise, Stimare has improved their competitiveness, achieving product-market fit and thereby boosting revenue.

## **Innovative Solutions resulting in Superior Product Performance:**

Galvia Digital's comprehensive solutions enhanced Stimare's operational efficiency and client satisfaction. Our expert team developed detailed, branded documentation that streamlined SDK integration and usage, ensuring clarity, professionalism, and ease of understanding to minimise integration errors and reduce support requests.

We also offered crucial technical support, enabling Stimare to communicate effectively with clients on technical matters. Thus, we ensured smooth integration and troubleshooting processes to prevent customer dissatisfaction and potential business loss.

Our rigorous testing and maintenance of the SDK application through a robust bug-tracking system ensured reliable performance, mitigating operational disruptions and enhancing client confidence in Stimare's products. Galvia Digital implemented a robust version control system to manage updates effectively. This system ensures consistency and reliability to prevent compatibility issues and alleviate support burdens for Stimare.

## **Application Launch, Ability to focus on Higher-Level Tasks and On-Going Support:**

Having outsourced the SDK and application development to Galvia Digital, Stimare could concentrate on higher-level business tasks, such as manufacturing and sales, while benefiting from professional and efficient SDK development.

Our expert software engineers provided ongoing support and updates to ensure the SDK remained current and reliable, maintaining high standards of quality and performance. Stimare successfully launched a fully-tested, branded demo application on both iOS and Android platforms.



## Conclusion

Stimare's collaboration with Galvia Digital effectively addressed their challenges and achieved their goals, demonstrating the value of expert partnership in overcoming technical obstacles.

By working with us, Stimare was able to overcome their internal limitations, ensuring the successful development and deployment of their barcode scanner integration tools, thereby enhancing their product's marketability and customer satisfaction.

For technology and industrial companies facing similar challenges, Galvia Digital offers reliable, high-quality solutions that drive business success. Our expertise in developing custom SDKs, comprehensive documentation, and seamless integration make us the ideal partner for enhancing your product offerings. Contact us to learn how we can help you overcome your technical challenges and achieve your business goals.



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***“Galvia Digital is our partner for SDK development because they understand the requirements and challenges of the developer community. The team is up to date with the latest trends and requirements and this ensures our SDKs are up to date. It has been acknowledged by our in-house developers and our customers that our SDKs are clear, concise and use best practices”.***

***“This is largely due to Galvia Digital understanding what is needed and having the ability to deliver. Importantly, The team at Galvia Digital are easy and friendly to deal with and feel part of our own in-house team when working on the delivery of a project.***

***- Brian Dunphy, Stimare CEO***

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