

**THE IMPLEMENTATION OF A MOBILE-BASED E-COMMERCE SYSTEM USING API AND WEB SERVICE TO OPTIMIZE COMPANY PERFORMANCE**  
**(Case Study: CV. Bintang Tiga Jaya Cirebon)**

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**ABSTRACT**

*In the digital era, the transformation of sales systems through information technology has become essential for companies striving to remain competitive. CV. Bintang Tiga Jaya, a printing company based in Cirebon, still relies on conventional sales methods, limiting customer access to product information and slowing down transaction processes. To address these challenges, this study developed a mobile-based e-commerce system leveraging REST API and web service technologies. The mobile application was built using Flutter (Dart), while the web service was developed with Laravel (PHP) to enable administrative data management. The system integrates with Midtrans as a payment gateway to support fast and secure digital transactions. In addition, a real-time communication feature was implemented using Firebase Realtime Database and Firebase Storage, facilitating seamless interactions between customers and administrators. The implementation results demonstrate a significant improvement in operational efficiency and product information accessibility, thereby enhancing the overall performance of the company's digital ecosystem.*

**Keywords:** *E-commerce, Mobile Application, REST API, Web Service, Flutter, Laravel, Midtrans, Firebase.*