API-First Banking: Evolution of Customer Journey Analytics

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Abstract: *API-first banking is a novel approach to banking in the rapidly changing financial services industry, with a focus on using Application Programming Interfaces (APIs) to improve customer journey analytics and customer experience. Regulatory requirements, growing fintech competition, and banks' need to adapt to the digital revolution are the main motivators. API-first banking is now a revolutionary model that fundamentally changes how customer data is collected, analyzed, and responded to. This paper examines how customer journey analytics evolved in API-first banking architectures, illustrating how the shift from traditional banking architectures to API-based systems enabled it to gain unprecedented insights into customer behavior and preferences. With analysis of real-world deployments at multiple banking institutions, we demonstrate how API-first approaches facilitate real-time journey mapping, predictive analytics, and tailored service delivery at scale. We also reveal key technical and organizational barriers to API-first analytics adoption, including data governance complexity and cross-functional alignment necessities. This research contributes to the current body of knowledge on digital banking revolution through the presentation of a comprehensive framework for understanding how API-first approaches are revolutionizing customer journey analytics and shaping the future of banking services. This research paper aims to examine the revolution of customer journey analytics in the context of API-first banking, looking at how banks are leveraging data and technology to enhance their understanding and delivery of services to customers.*

Keywords: API-first Banking; Customer Journey Analytics; Digital Banking; Financial Services Technology; Banking Architecture.

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DOI: 10.48175/IJARSCT-23633

ISSN
2581-9429
IJARSCT

199