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## A Study of the Trap of Multi-Homing in Customers: A Comparative Case Study of Digital Payments

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Abstract: In the digital payment market, some consumers use only one payment wallet while many others play multi-homing with a variety of payment services. With the diffusion of new payment systems, we examined the determinants of the adoption of multi-homing behavior. This study aims to understand how a digital payment provider dynamically expands business touch points with cross-business strategies to enrich the digital ecosystem and avoid the trap of multi-homing in customers. By synthesizing platform ecosystem literature, we constructed a two-dimensional research framework with one determinant of user digital behavior from offline to online intentions and the other determinant of digital payment touch points from convenient accessibility to cross-business platforms. To explore on a broader scale, we selected 12 digital payments from 5 countries of UK, US, Japan, Korea, and Taiwan. With the interplays of user digital behaviors and payment touch points, we group the study cases into four types: (1) Channel Initiated: users originated from retailers with high access to in-store shopping with face-to-face guidance for payment adoption. Providers offer rewards for customer loyalty and secure the retailer's efficient cash flow management. (2) Social Media Dependent: users usually are digital natives with high access to social media or the internet who shop and pay digitally. Providers might not own physical or online shops but are licensed to aggregate money flows through virtual ecosystems. (3) Early Life Engagement: digital banks race to capture the next generation from popularity to profitability. This type of payment aimed to give children a taste of financial freedom while letting parents track their spending. Providers are to capitalize on the digital payment and e-commerce boom and hold on to new customers into adulthood. (4) Traditional Banking: plastic credit cards are purposely designed as a control group to track the evolvement of business strategies in digital payments. Traditional credit card users may follow the bank's digital strategy to land on different types of digital wallets or mostly keep using plastic credit cards. This research analyzed business growth models and inter-firms' coopetition strategies of the selected cases. Results of the multiple case analysis reveal that channel initiated payments bundled rewards with retailer's business discount for recurring purchases. They also extended other financial services, such as insurance, to fulfill customers' new demands. Contrastively, social media dependent payments developed new usages and new value creation, such as P2P money transfer through network effects among the virtual social ties, while early life engagements offer virtual banking products to children who are digital natives but overlooked by incumbents. It has disrupted the banking business domains in preparation for the metaverse economy. Lastly, the control group of traditional plastic credit cards has gradually converted to a BaaS (banking as a service) model depending on customers' preferences. The multi-homing behavior is not avoidable in digital payment competitions. Payment providers may encounter multiple waves of a multi-homing threat after a short period of success. A dynamic cross-business collaboration strategy should be explored to continuously evolve the digital ecosystems and allow users for a broader shopping experience and continual usage.

 $\textbf{Keywords:} \ \text{digital payment, digital ecosystems, multihoming users, cross business strategy, user \ \text{digital behavior intentions}$ 

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