

The Role of FinTech Payment Solutions in Accelerating Saudi Arabia's Cashless Economy Transformation

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Article History

Received: 24.04.2026

Accepted: 17.06.2026

Published: 29.07.2026

Abstract: Saudi Arabia's cashless transition has moved from a policy aspiration to a measurable structural shift within retail payments, digital commerce, and platform-based financial services. This review examines how fintech payment solutions, including national card rails, mobile wallets, instant payments, open-banking interfaces, merchant acceptance technologies, and embedded checkout tools, are accelerating the Kingdom's cashless economy agenda under Vision 2030. Using a structured narrative review approach guided by a source-screening protocol and a synthesis framework centred on adoption drivers, ecosystem enablers, and implementation barriers, the paper integrates evidence from policy reports, market studies, and recent peer-reviewed research published between 2020 and 2025. The review finds that Saudi Arabia's progress is not explained by consumer preference alone. It is the product of coordinated public policy, robust payment infrastructure, high smartphone penetration, bank-fintech collaboration, contactless acceptance, regulatory experimentation, and trust-building around security and convenience. Fintech payment solutions speed checkout, widen formal transaction capture, reduce cash handling frictions, support e-commerce conversion, and generate data flows that improve risk management, financial inclusion, and service personalization. At the same time, the transition remains uneven across merchant categories, age groups, business sizes, and use cases. Cybersecurity concerns, compliance burdens, digital capability gaps, and interoperability issues continue to influence adoption depth. The paper concludes that the next phase of acceleration will depend less on basic access and more on ecosystem quality: seamless merchant onboarding, open-banking payment initiation, consumer trust, resilient cyber controls, and targeted inclusion strategies for micro-enterprises and lower-intensity digital users. The review contributes a Saudi-specific framework linking fintech payment innovation to transaction formalization, retail efficiency, and broader economic modernization.

Keywords: FinTech Payments, Cashless Economy, Saudi Arabia, Digital Wallets, Open Banking, Payment Infrastructure, Vision 2030.

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1. INTRODUCTION

Saudi Arabia's move toward a cashless economy is one of the most visible operational expressions of Vision 2030's wider digital transformation agenda. In the Kingdom, the growth of non-cash payments is not simply a story about replacing notes and coins with cards or mobile

wallets. It reflects a deeper restructuring of retail behaviour, merchant acceptance, financial infrastructure, and public-sector coordination around a less cash-dependent economy (Saudi Central Bank [SAMA], 2023; Financial Sector Development Program [FSDP], 2024). Recent official reporting indicates that electronic payments

Citation: Humayun Ahmed Hashmi (2026). The Role of FinTech Payment Solutions in Accelerating Saudi Arabia's Cashless Economy Transformation; *Glob Acad J Econ Buss*, 8(4), 859-868.

accounted for 79% of total retail payments in 2024, up from 70% in 2023, while the number of electronic non-cash payment transactions reached 12.6 billion compared with 10.8 billion a year earlier (FSDP, 2024). These figures matter because they show that the transition is occurring at scale, across daily commerce rather than only in premium segments.

Fintech payment solutions sit at the centre of this transition. In the Saudi context, fintech payments include digital wallets, card-tokenization services, e-commerce gateways, QR and contactless acceptance tools, bill-payment platforms, real-time transfer systems, buy-now-pay-later interfaces, and increasingly open-banking-enabled services that simplify payment initiation and authentication. Their role is strategic because they reduce transaction friction for households and merchants while strengthening the formal, traceable, and data-rich character of economic exchange (Fintech Saudi, 2024; Oxford Business Group, 2025). As these solutions become embedded in retail, transport, food delivery, utilities, and digital marketplaces, the cashless economy ceases to be an abstract macro target and becomes a lived payment environment.

The Saudi case is important because the Kingdom combines top-down policy direction, strong national payment rails, and rapid consumer digitization. It therefore provides a policy-driven example of how fintech ecosystems can be aligned with productivity, transparency, financial inclusion, and private-sector growth (FSDP, 2024; ADL, 2024). The evidence also suggests that local solutions have mattered alongside global brands. In SAMA's 2023 payment usage study, debit cards were the preferred method for last e-commerce purchases among half of users surveyed, NFC-enabled POS transactions represented 96% of total card POS volume, and mobile payments accounted for 47% of those NFC payments, indicating that domestic rails and mobile form factors are functioning together rather than competitively (SAMA, 2023).

At the consumer level, digital payment adoption in Saudi Arabia is strongly associated with convenience, perceived security, and speed. In a recent Saudi study, 78% of respondents preferred digital over cash-based payment options and 85% identified security as decisive in payment choice (Hnidi, 2025). Complementary research found that continuance intention is shaped not only by performance and effort expectancy, but also by system quality, service quality, information quality, social influence, price value, and habit (Abed & Alkadi, 2024).

Despite these gains, acceleration toward a cashless economy is not automatic. The cashless

transition can stall if merchant onboarding remains uneven, if cybersecurity incidents weaken trust, if micro-enterprises perceive compliance costs as too high, or if payment innovation outpaces user understanding. Retailers may support digital payments in principle while still facing settlement, integration, or reconciliation constraints in practice (Islam *et al.*, 2025). Banks may invest in digital transformation without guaranteeing that service quality remains strong enough to produce repeat use and broader ecosystem confidence (Aldaarmi *et al.*, 2024). Therefore, the Saudi experience should be read as an ecosystem challenge rather than a simple technology-adoption curve.

This paper reviews the role of fintech payment solutions in accelerating Saudi Arabia's cashless economy transformation. It is designed as a review paper rather than an empirical survey, and it addresses four questions: What fintech payment solutions are most relevant to the Saudi transition? Through which mechanisms do they accelerate cashless behaviour? Which institutional and market enablers explain Saudi Arabia's progress? What barriers still limit the depth, inclusiveness, and sustainability of the transition? The analysis adopts a structured narrative review informed by recent literature, official policy documents, and market evidence published from 2020 to 2025. The contribution of the paper is a Saudi-specific synthesis that links payment innovation to retail formalization, consumer trust, merchant productivity, and long-term digital economic development.

2. Literature Review and Theoretical Framing

Recent scholarship positions fintech payments as more than a subset of digital banking; they are increasingly understood as a gateway layer through which households and firms enter broader digital financial ecosystems. Across emerging markets, digital payments reduce frictions in exchange, increase transaction visibility, and create behavioural pathways toward platform commerce, formal savings, and credit scoring. Studies on digital payment adoption emphasize usefulness, ease of use, trust, social influence, perceived risk, and facilitating conditions, but newer work also highlights post-adoption quality dimensions such as system reliability, personalization, interoperability, and service continuity (Abed & Alkadi, 2024; Bajwa *et al.*, 2025). This shift from initial adoption to sustained use is especially relevant in Saudi Arabia, where many consumers already have access to digital payment options and the policy challenge is now intensification rather than introduction.

The Saudi literature is still developing but several themes are visible. Consumer-side studies consistently show that trust and security remain

central to continued use. Hnidi (2025) found that security, convenience, and transaction efficiency are primary determinants of digital payment preference in Saudi online purchasing, while Abed and Alkadi (2024) report that continuance intention depends on both adoption factors and information-system quality. A cashless economy requires repeat behaviour, not isolated trial.

Second, merchant-side and ecosystem studies indicate that acceptance readiness is a separate analytical issue from consumer willingness. Retailers may understand the strategic importance of digital payments yet remain constrained by device costs, staff training, charge structures, cybersecurity obligations, or limited knowledge of regulatory procedures. Islam *et al.*, (2025) show that the cashless shift in Saudi Arabia is shaped by retailer awareness, procedural compliance, digital infrastructure quality, and partnership depth between financial institutions and payment providers. This moves the discussion beyond end users and toward the economics of transaction acceptance, which is crucial in cash-intensive sectors dominated by micro and small enterprises.

Third, the literature increasingly connects fintech payments with service quality and organizational sustainability. Aldaarmi *et al.*, (2024) find that tangibles, reliability, and empathy within fintech service delivery significantly influence customer satisfaction in Saudi banking, while customer satisfaction supports reuse intention and broader performance outcomes. This suggests that payment solutions contribute to a cashless economy not only by providing access but also by shaping confidence in digital financial institutions more generally. If payment services are fast, intelligible, and secure, they can improve trust in adjacent services such as digital onboarding, lending, wealth products, or embedded finance.

Fourth, recent Saudi and regional studies stress the role of institutional architecture. Fintech ecosystems scale faster when regulation, infrastructure, and market incentives evolve together. Fintech Saudi (2024) documents rapid growth in active fintech entities and investment, while the FSDP (2024) frames payment digitalization as part of a coordinated modernization agenda. Oxford Business Group (2025) further emphasizes regulatory advances, infrastructure upgrades, and cross-border partnerships as drivers of payment-system expansion. In this view, fintech payments do not diffuse solely because users like convenience; they diffuse because the state, banks, acquirers, and startups collectively reduce transaction and compliance friction.

To interpret these studies, the review draws on an integrated theoretical framing rather than a single model. Technology acceptance theories remain useful because convenience, perceived usefulness, effort reduction, and social normalization clearly affect payment behaviour. Yet in a mature adoption environment such as Saudi Arabia, those theories require extension. A service-quality perspective is needed to explain why users continue, expand, or intensify use. Institutional theory helps explain how regulation, public policy, and sector coordination create legitimacy for digital payments. Network-effects logic is also relevant because payment systems become more valuable as more consumers, merchants, issuers, acquirers, and platform firms participate.

Accordingly, this paper uses four analytical lenses. The first is consumer acceptance, focused on trust, security, speed, and convenience. The second is merchant adoption, focused on onboarding, costs, operational integration, and settlement. The third is institutional enablement, focused on payment rails, regulation, sandboxing, open banking, and national targets. The fourth is macro-transformation, focused on how rising digital payment intensity supports formalization, transparency, productivity, and inclusion. These lenses allow the review to avoid a narrow user-centred explanation and instead treat the cashless transition as a multi-layered system.

The literature also shows that cashless progress should not be equated with universal inclusion. Digital payment systems can widen access, but they can also reproduce capability gaps if users lack confidence, merchant coverage is inconsistent, or interfaces assume high digital fluency (Lye *et al.*, 2025). For Saudi Arabia, success cannot be measured solely by transaction volume; quality, reach, and resilience also matter.

Overall, the literature suggests that fintech payment solutions accelerate cashless transformation when three conditions are met. They must be easy and trusted for users, economically workable for merchants, and institutionally reinforced through infrastructure and policy. The Saudi case appears strong on all three, but unevenness persists. The remainder of the paper examines how these conditions are being assembled in practice and where the next bottlenecks are likely to emerge.

3. METHODOLOGY

This study is a review paper based on a structured narrative review design. The methodology was selected because the topic spans policy documents, market evidence, official payment statistics, and recent academic studies rather than

one homogeneous body of empirical work. A meta-analysis was not appropriate because the relevant Saudi evidence uses different methods, units of analysis, and outcome variables, ranging from national payment-system reporting to consumer surveys, merchant adoption studies, and ecosystem reports. The structured narrative approach therefore allows systematic screening and transparent synthesis while preserving contextual richness for country-specific interpretation.

Source collection was limited to English-language materials published between 2020 and 2025. The review included four categories of sources: peer-reviewed journal articles, official publications from Saudi regulatory and policy bodies, reputable market and ecosystem reports, and the attached reference paper provided by the client as a model. Searches prioritized terms such as Saudi Arabia, fintech payments, cashless economy, digital payments, mobile wallets, payment acceptance, open banking, instant payments, and financial inclusion. Sources were retained when they met at least one of three criteria: they presented direct evidence on Saudi payment behaviour; they analyzed Saudi fintech adoption or payment infrastructure; or they offered recent conceptual or comparative insight clearly relevant to the Kingdom's cashless transition.

The screening process emphasized credibility, recency, and thematic fit. Official publications from the Saudi Central Bank and the Financial Sector Development Program were used as anchor sources for national indicators and regulation. Fintech Saudi and Oxford Business Group materials contextualized ecosystem development. Peer-reviewed studies were selected when they examined Saudi consumer adoption, retailer readiness, banking service quality, payment-app continuance, loyalty, or broader fintech inclusion dynamics.

The synthesis framework organized evidence under five themes: infrastructure and payment rails; consumer adoption drivers; merchant acceptance and platform integration; institutional enablers; and barriers to deeper cashless transformation. During analysis, findings were compared across source types to identify convergence and divergence. For example, official reports showing rapid growth in non-cash transactions were assessed alongside consumer studies on security and convenience, and alongside merchant-side work highlighting compliance and capability frictions. This triangulation improved interpretive balance and reduced overreliance on any single perspective.

Two limitations should be noted. First, the Saudi literature remains uneven, with stronger

evidence on consumer adoption than on micro-merchant economics or rural-use patterns. Second, some market reports provide useful directional insight but are less methodologically detailed than peer-reviewed studies. To address this, the review uses market material primarily for ecosystem context and relies on official and academic sources for core analytical claims. Even with these limitations, the methodology is sufficient to produce a robust review of how fintech payment solutions are accelerating Saudi Arabia's movement toward a less cash-dependent economy.

4. Saudi Arabia's Fintech Payment Landscape

Saudi Arabia's fintech payment landscape has evolved through the interaction of national rails, regulated innovation, widespread merchant acceptance, and high consumer readiness. At the infrastructure level, the Kingdom has not relied on a single dominant payment format. Instead, it has built a layered ecosystem in which domestic debit rails, contactless cards, tokenized mobile wallets, bill-payment systems, instant payments, and digital commerce gateways operate as complementary solutions. This diversity matters because cashless acceleration depends on use-case coverage across in-store purchases, online checkout, peer transfers, utilities, government fees, subscriptions, and low-value daily spending.

The first foundational layer is national payment infrastructure. The prominence of Mada in card-linked retail transactions has given the Saudi market a localized rail with strong banking integration and broad acceptance. In SAMA's 2023 payments usage study, debit cards emerged as the preferred payment method for e-commerce purchases among 50% of users surveyed, indicating that the domestic ecosystem is shaping online payment behaviour, not just in-store purchasing (SAMA, 2023). This matters for a cashless economy because it reduces dependence on limited or imported pathways and supports transaction continuity across channels.

The second layer is contactless and mobile-led activation. Official evidence shows the intensity of contactless behaviour in Saudi retail. SAMA's 2023 report notes that NFC-enabled transactions represented 96% of card POS volume, while mobile payments accounted for 47% of those NFC transactions (SAMA, 2023). These figures illustrate that the Saudi market has moved beyond basic card penetration to habitual low-friction payment behaviour. Fintech payment solutions accelerate cashless usage when transaction effort approaches zero, and contactless mobile experiences are central to that outcome. They compress checkout time,

reduce cash-handling needs, and normalize digital payment even for small-ticket purchases.

The third layer is platform and bill-payment digitization. SADAD remains a key part of the formal payments environment, and SAMA reports that more than 90% of bills issued across covered sectors are settled through SADAD (SAMA, 2023). This is important because a cashless economy is sustained not only through discretionary consumer spending but also through recurring obligations such as utilities, telecommunications, insurance, and government-related transactions. When routine payments become digitally defaulted, the population's overall dependence on cash declines structurally rather than episodically.

The fourth layer is instant payments and transfer modernization. SAMA describes the Sarie instant payments system as a new generation of payment services for the Kingdom, emphasizing flexibility, efficiency, and innovation potential (SAMA, 2021). Instant payments matter for cashless acceleration because they reduce one of the remaining advantages of cash: immediacy. When individuals and firms can move funds rapidly and reliably, the behavioural case for cash weakens in peer transfers, small business payments, and time-sensitive commercial interactions.

The fifth layer is open banking and programmable payment capability. SAMA's open-banking agenda, first formalized through its policy framework and later expanded through payment

initiation rules, is intended to deepen competition and improve user experience by allowing secure third-party access and innovation under regulatory guardrails (SAMA, 2020; Saudi Press Agency, 2024). Payment initiation services are strategically important because they can lower dependence on card rails in some use cases, simplify account-to-account payments, and create more seamless embedded payment journeys for e-commerce and app-based commerce.

This payment architecture has been supported by broader ecosystem growth. The FSDP reports 261 active fintech players in 2024, showing that the market has moved beyond a thin startup layer into a more populated innovation environment (FSDP, 2024). Fintech Saudi's 2024 reporting likewise points to a maturing ecosystem shaped by investment, institutional support, talent development, and use-case diversification.

Consumer-side evidence indicates that this infrastructure is meeting a receptive market. Saudi users repeatedly rank security, speed, and convenience as decisive in digital payment behaviour (Hnidi, 2025; Abed & Alkadi, 2024). Merchant-side studies indicate broad strategic alignment, though operational unevenness remains (Islam *et al.*, 2025). Together, these findings suggest that Saudi Arabia's payment landscape is already capable of supporting high levels of cashless activity. The policy challenge is now to deepen quality, reach, and interoperability so that digital payment becomes the default across the full diversity of household and business transactions.

Table 1: FinTech payment enablers and their cashless-economy channels in Saudi Arabia

Payment domain	Saudi evidence or institutional anchor	How it accelerates cashless behavior
Domestic and card-linked rails	Mada's wide banking integration and debit-card preference in e-commerce (SAMA, 2023)	Creates trusted, familiar non-cash pathways across online and physical retail.
Contactless and mobile wallets	96% of POS card transactions were NFC-enabled and 47% of NFC transactions were mobile payments (SAMA, 2023)	Reduces checkout friction and normalizes digital payment for low-value everyday spending.
Bill-payment digitization	SADAD settles more than 90% of bills issued in covered sectors (SAMA, 2023)	Shifts recurring household and service payments away from cash and toward digital routines.
Instant payments	Sarie provides real-time transfer capability under SAMA oversight (SAMA, 2021)	Weakens the immediacy advantage of cash in peer and business payments.
Open banking and APIs	Phased open-banking framework and payment initiation rules (SAMA, 2020; SPA, 2024)	Enables lower-friction account-to-account payments and new embedded payment use cases.
Ecosystem scale	261 active fintech entities reported in 2024 (FSDP, 2024)	Supports competition, product diversity, and faster iteration in payment innovation.

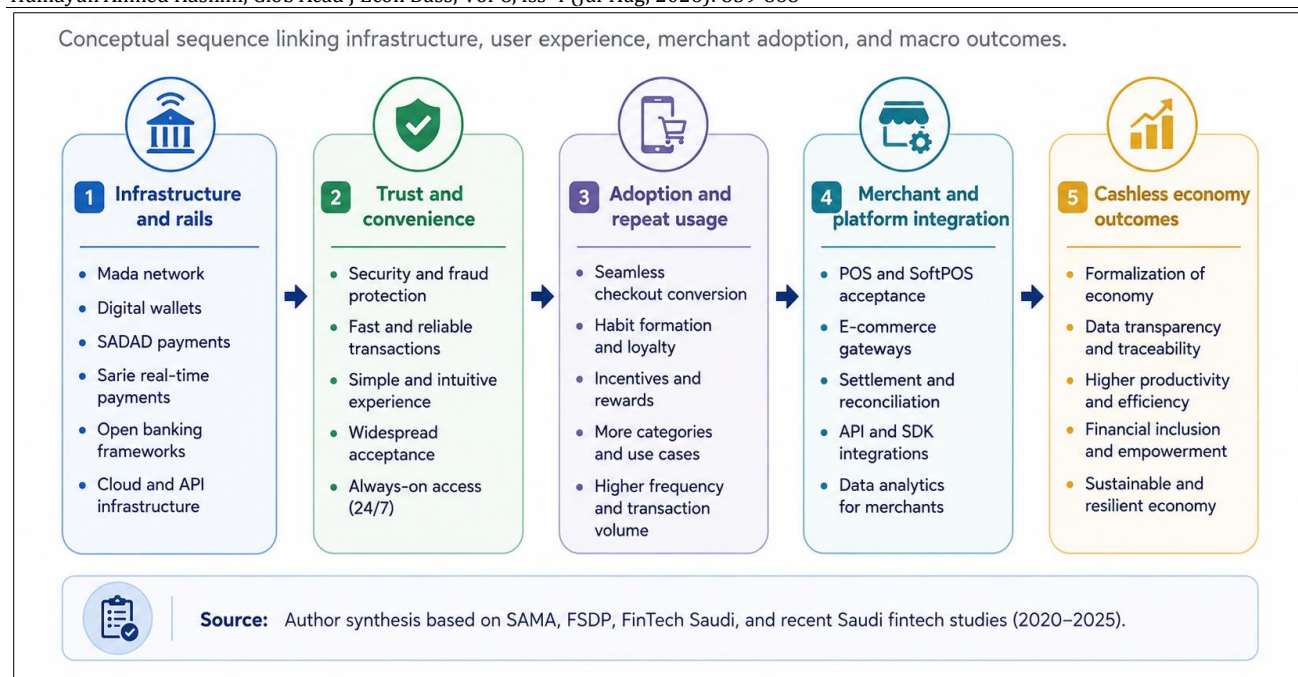


Figure 1: FinTech payment acceleration pathway for Saudi Arabia's cashless transition

5. How Fintech Payment Solutions Accelerate the Cashless Economy

Fintech payment solutions accelerate Saudi Arabia's cashless economy through five interconnected mechanisms: friction reduction, trust formation, merchant formalization, data generation, and ecosystem spillovers. Each mechanism matters on its own, but their combined effect explains why payment digitalization in the Kingdom has advanced quickly and why it now influences broader economic transformation.

The first mechanism is friction reduction at the point of transaction. Digital wallets, tokenized cards, one-click checkout tools, stored credentials, and contactless POS interactions reduce the time and cognitive effort needed to complete a purchase. In the Saudi context, where mobile penetration is high and retail activity is increasingly platform-mediated, transaction speed directly influences completion and repeat use. Hnidi (2025) found that 72% of surveyed respondents said checkout speed positively affected their likelihood of completing an online purchase. This means that payment technology does not merely process demand after a consumer decides to buy; it shapes whether the purchase is finalized at all. Faster payments increase conversion, particularly in e-commerce, food delivery, and mobile-first service environments, thereby normalizing digital over cash.

The second mechanism is trust formation. Cash has historically functioned as a trust technology because users can see and control it directly. Fintech solutions must therefore replace that assurance through visible security, authentication quality,

dispute-handling credibility, and institutional legitimacy. Saudi research shows that perceived security remains one of the strongest determinants of payment choice and continued use (Hnidi, 2025; Abed & Alkadi, 2024). Nationally anchored rails, strong bank integration, regulatory oversight, and standardized authentication help convert abstract trust into practical confidence. Once users believe that digital payments are safe and recoverable, the psychological premium previously attached to cash declines sharply.

The third mechanism is merchant formalization and operating efficiency. Digital acceptance tools change the economics of doing business by reducing cash counting, shrinkage, deposit handling, and manual reconciliation. They can also improve sales visibility, settlement tracking, and integration with accounting and inventory systems. For formal retailers, these gains strengthen productivity. For smaller merchants, digital acceptance can provide an entry route into more standardized business processes, even if capability gaps remain. Islam *et al.*, (2025) argue that retailer adoption depends on procedural understanding, infrastructure quality, and financial-institution partnerships, indicating that merchant digitization is a managed transition rather than a purely spontaneous one. In a cashless economy, merchant acceptance depth is critical because consumers cannot sustain digital-first behaviour if payment options disappear at the final point of sale.

The fourth mechanism is transaction data creation. Digital payments leave standardized,

analyzable records. This supports fraud detection, risk scoring, cash-flow forecasting, targeted product design, and more efficient compliance. Greater transaction visibility can strengthen tax integrity, improve consumer and SME products, and enhance economic measurement. From a firm perspective, it allows payment providers and merchants to identify payment drop-off points, preferred channels, and customer segments. These data advantages help explain why fintech payment solutions often become a platform for wider financial innovation. They make it easier to embed loyalty features, instalment options, budgeting tools, and cross-sell opportunities into routine commerce.

The fifth mechanism is ecosystem spillover. Payment innovation tends to pull adjacent systems with it. When digital payments become common, e-commerce grows more easily, on-demand services become more viable, public-service digitization becomes more usable, and open-banking or embedded-finance models gain traction. In Saudi Arabia, this spillover is visible in the alignment between payment digitalization, fintech sector expansion, digital onboarding, and broader financial-sector modernization (FSDP, 2024; Fintech Saudi, 2024). Payments are often the first habitual digital-finance touchpoint for consumers. Once trusted, they lower the behavioural barriers to other forms of digital financial interaction.

These mechanisms have macroeconomic implications. A less cash-dependent economy typically experiences lower transaction frictions, improved transparency, stronger retail analytics, and wider platform-based participation. In Saudi Arabia, the cashless agenda also aligns with efforts to diversify the economy, strengthen formal private-sector activity, and improve service delivery under Vision 2030 (FSDP, 2024; Oxford Business Group, 2025).

Yet acceleration is not uniform across all fintech payment types. Some solutions operate as mass-market accelerators because they fit existing habits, especially contactless cards and mobile wallets. Others, such as open-banking payment initiation, may become more important in the next phase because they can improve cost efficiency and user control in account-to-account flows. Still others, such as BNPL-linked payment interfaces, may accelerate cashless use in specific digital commerce segments while introducing consumer protection questions. Not all payment innovations contribute equally, and policymakers must distinguish between solutions that deepen inclusive everyday cashless behaviour and those that merely expand volume.

Saudi Arabia's progress shows that acceleration works best when payment solutions are layered rather than isolated. Consumers use digital payments more when there is continuity between online checkout, in-store acceptance, recurring bills, and peer transfers. Merchants accept digital methods more willingly when onboarding, settlement, and compliance are manageable. Fintech providers scale faster when regulation enables controlled experimentation. Banks deepen digital relationships when payments become gateways to higher-value services. The Saudi case therefore demonstrates a systems logic: fintech payments accelerate a cashless economy most effectively when they are embedded in a coordinated architecture of trust, convenience, acceptance, and policy support.

6. Constraints, Risks, and Unevenness

Despite strong progress, Saudi Arabia's cashless transformation still faces constraints that may slow or unevenly distribute the benefits of fintech payment expansion. The first constraint is cybersecurity and fraud anxiety. Rapid growth in digital payments increases exposure, and even a small number of visible incidents can weaken confidence. Security is not a background variable in the Saudi market; it is a central behavioural determinant. This means fintech providers must continuously invest in authentication, fraud monitoring, dispute resolution, and transparent user communication rather than assuming that early adoption guarantees lasting trust (Hnidi, 2025; Oxford Business Group, 2025).

The second constraint is uneven merchant readiness. Large retailers and digitally native platforms can integrate payment technologies relatively quickly, but smaller merchants may face greater burdens in onboarding, device management, reconciliation, staff training, and procedural compliance. Islam *et al.*, (2025) highlight the continuing relevance of retailer awareness and regulatory understanding in Saudi digital payment adoption. If small businesses perceive that digital acceptance is administratively heavy or commercially ambiguous, cash can persist longer in specific local segments even while national indicators improve.

The third constraint is capability inequality among users. High smartphone penetration does not eliminate gaps in digital confidence, language comfort, accessibility needs, or financial literacy. Some consumers may use digital payments for familiar situations while reverting to cash in contexts they perceive as risky, complex, or less recoverable. Inclusion-focused research reminds us that fintech can widen access only when design, affordability, and institutional support address vulnerable or hesitant

user groups rather than assuming homogenous readiness (Lye *et al.*, 2025).

The fourth constraint involves interoperability and ecosystem fragmentation. As the number of fintech players rises, user experience can deteriorate if merchants and consumers encounter inconsistent acceptance standards, weak integration across platforms, or confusing fee structures. Open banking offers a route toward more seamless innovation, but it also increases the importance of technical standards, consent governance, and liability clarity (SAMA, 2020; Saudi Press Agency, 2024). Without strong interoperability, innovation may increase choice while also increasing friction.

The fifth constraint concerns governance and consumer protection in emerging payment models. Instalment products, embedded finance, and highly personalized payment journeys can improve convenience, but they can also blur the boundary between payment facilitation and credit extension. Saudi Arabia's cashless transition will be more sustainable if payment innovation is accompanied by clear disclosure, dispute processes, and proportionate supervision. In short, the Kingdom's challenge is no longer whether digital payments can grow. It is whether they can grow securely, inclusively, and coherently enough to replace cash dependence across the full payment landscape.

Table 2: Principal constraints and strategic responses for the next phase of cashless growth

Constraint	Why it matters for the cashless transition	Priority response
Cybersecurity and fraud anxiety	Visible incidents can weaken trust and slow habitual digital use.	Strengthen authentication, fraud analytics, dispute resolution, and user-facing transparency.
SME and micro-merchant readiness	Operational burdens may keep cash dominant in smaller business segments.	Simplify onboarding, reduce setup friction, and improve settlement and reconciliation support.
Capability and literacy gaps	Some users remain selective or hesitant in unfamiliar digital-payment contexts.	Target inclusion programs, simplified interfaces, and practical digital-finance education.
Interoperability and fragmentation	Too many inconsistent workflows can increase effort despite more choice.	Use strong standards, API governance, and shared technical certification.
Consumer protection in emerging models	Embedded finance and instalment products can blur risk and payment boundaries.	Ensure proportionate supervision, disclosure, and accessible complaint mechanisms.

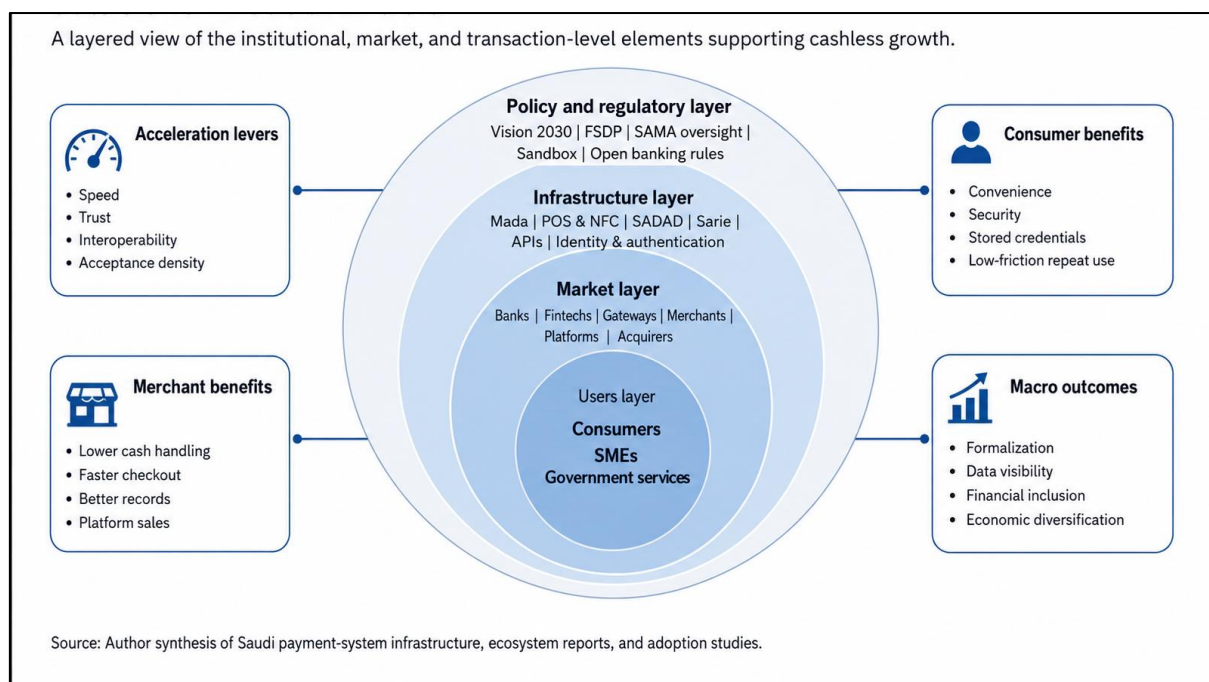


Figure 2: Ecosystem architecture of fintech payment solutions in Saudi Arabia

7. Strategic Implications and Future Outlook

The next stage of Saudi Arabia's cashless transformation will depend on moving from adoption breadth to ecosystem depth. For policymakers, the priority is to sustain regulatory clarity while accelerating open-banking payment use cases, low-friction merchant onboarding, and cyber-resilience standards. For banks and payment firms, the priority is to make digital payments feel universally dependable across physical retail, e-commerce, subscriptions, government interactions, and peer transfers. For merchants, especially SMEs and micro-enterprises, support should focus on affordable acceptance, settlement transparency, and simple reconciliation tools. For consumers, the future of cashless behaviour will hinge on trust-preserving design: faster checkout, clearer controls, safer recovery pathways, and interfaces that work for ordinary daily transactions.

Saudi Arabia is well positioned for this deeper phase. Its payment infrastructure is strong, policy support is visible, and the fintech ecosystem is expanding rapidly (FSDP, 2024; Fintech Saudi, 2024). The likely growth areas are payment initiation through open banking, richer mobile wallet ecosystems, more embedded payments in service platforms, and smarter data use for personalization and fraud prevention. As these layers mature, the Kingdom can shift from measuring progress mainly through transaction share toward measuring resilience, inclusion, merchant productivity, and ecosystem interoperability.

8. CONCLUSION

Fintech payment solutions are accelerating Saudi Arabia's cashless economy transformation by making digital transactions faster, safer, more convenient, and more operationally valuable for both consumers and merchants. The Kingdom's progress is rooted in coordinated infrastructure, institutional support, merchant acceptance, and user trust rather than in technology diffusion alone. Official indicators and recent research show that the transition has already reached scale, yet the next phase will depend on ecosystem quality, cyber-resilience, open-banking execution, and inclusive design. Saudi Arabia's experience offers a strong model of how payment innovation can support national economic transformation when policy, infrastructure, and market behaviour reinforce one another.

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