The Future of Payments:
From 'Transactions' to 'Experiences'

Contents

Executive Summary

The future of payments is here, characterized by seamless, safe payments and an improved user experience enriched with loyalty programs and gamification elements. The surge in demand for diverse payment methods, from touch-free to integrated financial services, digital currencies, voice-activated payments, and custom payment experiences, is pushing banks, retailers, and telecom operators to revamp their operational blueprints for more flexibility and resilience. This is achievable by re-envisioning the customer's journey, revisiting business models, and overhauling the technological base to ensure long-term success.

To gain a deeper understanding, Comviva's Research Centre surveyed 205 surveyed decision-makers in the payment industry (refer to the Methodology on page 21). The results reveal how businesses are innovating, the investments they're undertaking, and the obstacles they encounter. From this research emerges the **SPARC framework** to help businesses master the future of the payment landscape. The SPARC framework seamlessly **integrates emerging payment technologies, personalized payment experience, advanced security measures with AI, realizing new business value, and collaborative partnerships.**

Key Findings

Unlocking the future of payments through diversification

The top five transformations that businesses plan to prioritize in the upcoming year are mobile wallets (45%), contactless payments (36%), biometric authentication (32%), and peer-to-peer payments (28%), and subscription-based payments (27%)

Overcoming integration, customization, and expertise barriers

The top three challenges companies face in the implementation and utilization of digital payment solutions are integration challenges with existing payment systems and infrastructure (56%), lack of internal expertise or knowledge about new payment technologies (47%), and lack of personalized payment options or tailored experiences for individual customers (42%).

The promise of embedded payments in transforming the customer experience

Presently, 28% of enterprises have integrated embedded payments, while a substantial 59% are presently contemplating or intending to implement it within the following year. Enhancing customer experience and satisfaction (52%) is the top factor influencing organizations' decision to adopt embedded payments, followed by improving customer loyalty (47%), and increasing operational efficiency (43%).

AI's game-changing impact on payment security

The top three applications companies plan to consider for payment processing and fraud detection are behavioral analytics (42%), pattern recognition and anomaly detection (38%), and machine learning models for risk assessment in payment processing (36%).

Hybrid strategies lead the charge

53% of businesses are gearing up to adopt a hybrid approach, leveraging both internal resources and external partnerships to tackle the complexities of payment-related issues. This trend is followed by focusing on external partnerships, service providers (28%), and in-house solutions (19%).

From Coins to Code
The Inevitable Shift to a Cashless Future

As the digital economy expands and the demand for seamless transactions rises, digital payments have transformed into an integral medium, offering consumers an immersive, frictionless, and continuous experience (see Figure 1), resulting in the rapid decline in the use of cash transactions. Mobile wallets such as M-Pesa (Africa), PayTabs (Middle East), GoPay (Southeast Asia), Apple Pay and Google Pay are leading the charge, with 48% of survey respondents indicating their current adoption of this payment option. Countries like India are at the forefront of this evolution, championing the unified payment interface (UPI) and steering the transition towards cashless transactions. Also, payment service providers lead from the front, ensuring user-centred, secure, and seamless experiences to meet varied customer demands. Notably, three distinct trends are steering the future course of the payments industry.

Contactless payments, utilizing NFC and QR code technologies, are gaining momentum. While 27% of respondents already offer such payment methods, a notable 36% plan to introduce them within the next year.

Biometric authentication, once sci-fi territory, is now mainstream. Technologies like fingerprint scans and facial recognition enhance the safety and personalization of our digital transactions.
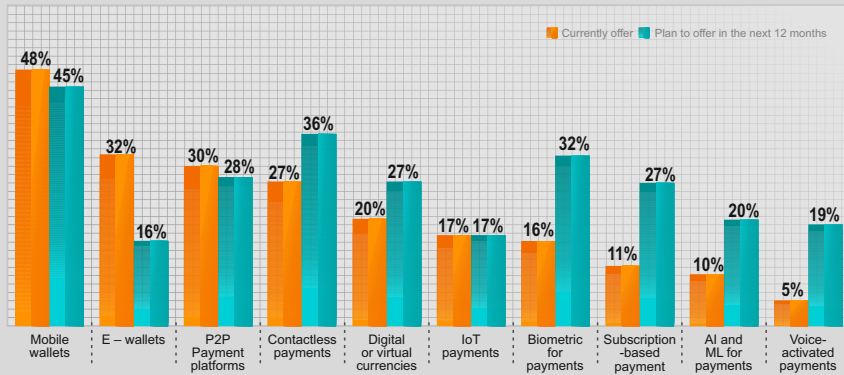
Subscription-based models surge as firms like Birchbox and Dollar Shave Club offer curated regular deliveries, fostering prolonged customer relationships and boosting brand loyalty and engagement.

Achieving a cashless future requires addressing the needs of both banked and unbanked individuals, particularly in regions such as Africa, where there is a vast reservoir of untapped economic possibilities. Merely establishing a digital financial footprint is insufficient; companies also build robust, widespread distribution networks to ensure these services reach all corners, including rural areas. The key to transformative growth lies in integrating digital platforms with a far-reaching distribution network, a strategy that promises to revolutionize financial inclusivity.

FIGURE 1   The future of payments: Contactless, biometric and mobile

Q. Which of the following digital payment technologies does your organization currently offer?
Q. Which digital payment technologies does your organization plan to provide in the next 12 months?

Legend: Currently offer | Plan to offer in the next 12 months

- Mobile wallets: 48% / 45%
- E – wallets: 32% / 16%
- P2P Payment platforms: 30% / 28%
- Contactless payments: 27% / 36%
- Digital or virtual currencies: 20% / 27%
- IoT payments: 17% / 17%
- Biometric for payments: 16% / 32%
- Subscription-based payment: 11% / 27%
- AI and ML for payments: 10% / 20%
- Voice-activated payments: 5% / 19%

Transacting Trust:
The Trifecta of Engagement, Loyalty, and Secure Payments

Customer loyalty and satisfaction are the most influential factors driving the adoption of diverse digital payment options (see Figure 2). Imagine customers in Johannesburg scanning an app to enter a store, and then a mixture of facial recognition and sensors are used to track their route through the store and what they put in their basket. When finished, they leave and their account is automatically charged. Interestingly, many consumers have already embraced, or are willing to embrace, this model. Today's discerning consumers are not just paying for products or services; they're paying for experiences. **By intertwining loyalty, rewards, and gamified elements, businesses can ensure that every payment leaves a smile on their customers' faces.**

In the rapidly evolving payment landscape, agility combined with robust security will distinguish the leaders. With the integration of agile platforms and advanced security measures like **secure APIs, encryption, tokenisation, and biometric authentication, the future of payments is not just secure—it's seamless.**

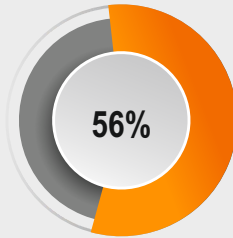**FIGURE 2 Customer loyalty, engagement, and security drive the adoption of multiple digital payment options**

Q. What are the primary factors influencing your organization's choice to adopt multiple digital
payment options? Top three factors shown below

58%
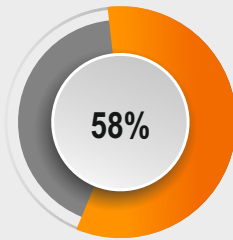
Enhancing customer
loyalty and satisfaction

55%
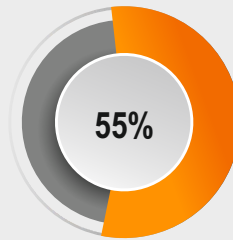
Enhancing security and
mitigating fraud risks

56%

Expanding market reach
and attracting new
customer segments
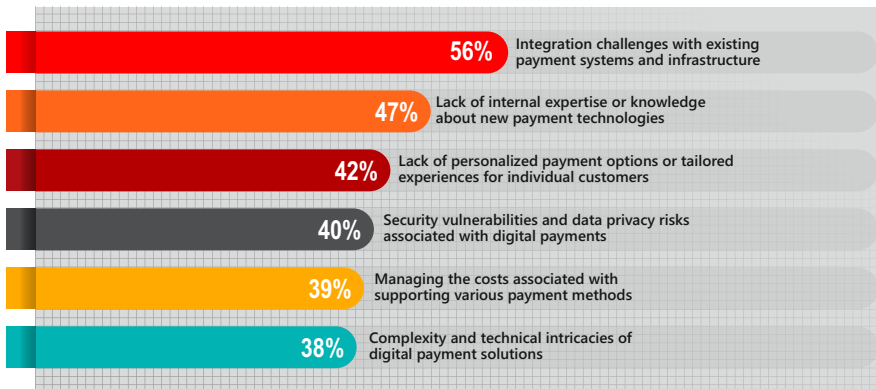
Digital Payment Dilemmas:
Navigating the Complexities of Modern Payment Landscape

Today, payments are core to modern life and integral to the running of societies. A service outage can have major repercussions for individuals and businesses – potentially causing mass disruption and financial loss, as well as undermining faith in financial institutions. **From grappling with security vulnerabilities and data privacy risks to addressing the demand for personalized payment experiences, businesses must navigate the complexities of adapting to new payment technologies while ensuring compatibility with existing systems** (see Figure 3). In Nigeria, for instance, companies like Flutterwave are addressing the need for seamless and secure payment solutions across Africa.

The complexities inherent in adopting new payment technologies are further intensified by a need for in-house expertise, prompting collaborative partnerships with specialized payment providers to bridge knowledge and skill gaps.

FIGURE 3   Technolgy integration, lack of expertise and limited personalized payment options are the prime hurdles

Q. What are the primary challenges your organization faces during the implementation and utilization of digital payment solutions? Top six categories are shown below.

56%	Integration challenges with existing payment systems and infrastructure
47%	Lack of internal expertise or knowledge about new payment technologies
42%	Lack of personalized payment options or tailored experiences for individual customers
40%	Security vulnerabilities and data privacy risks associated with digital payments
39%	Managing the costs associated with supporting various payment methods
38%	Complexity and technical intricacies of digital payment solutions

The SPARC Framework:
Forging the Path to the Future of Payments

As digital transactions become the norm, it is imperative for leaders to not only confront challenges but also to navigate a path toward continuous innovation. Our study has unveiled a strategic approach—the SPARC Framework—that can guide companies on this journey of progress. The SPARC acronym encapsulates five pivotal elements, including:

Seamlessly integrating emerging payment technologies

Crafting personalized payment experiences

Cultivating collaborative partnerships

Implementing advanced security measures empowered by AI

Realizing new business value
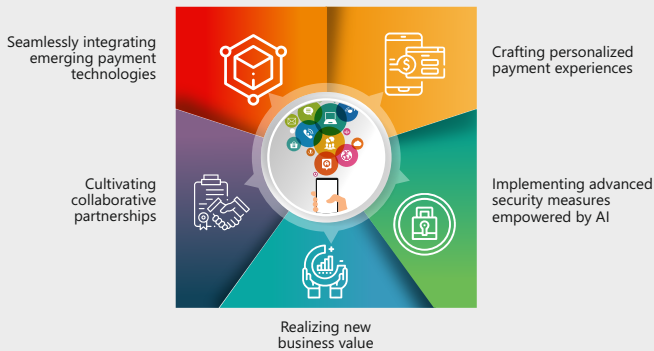
The SPARC framework amalgamates seamless technology integration, enhanced payment experiences, robust security, expanded business horizons, and synergistic partnerships, providing a spark that ignites excellence in the dynamic payment industry.

Seamless Technology Integration:
Moving Beyond the Plug-and-Play Approach

Companies are proactively addressing payment-related challenges and fostering optimal customer experiences (see Figure 4):

Low-code/No-code platforms: In today's business landscape, seamless technology integrations reign as a top priority. Addressing challenges such as third-party integrations, catering to evolving end-user demands, expediting time-to-market, and managing costs stands as imperative. Composable platforms emerge as the solution by offering UI-based integrations and swift creation/modification of business services, thereby reducing the integration time for new payment methods. These platforms empower developers without specific domain expertise to incorporate payments into their core products. In addition to facilitating seamless integrations and accelerating time-to-market, security and regulatory compliance stand as paramount considerations within low-code/no-code platforms. Upholding stringent security protocols and adapting swiftly to evolving regulatory landscapes ensures data privacy and compliance adherence, thereby bolstering trust and reliability in these platforms for customers & businesses alike. A significant number of companies have either prepared or transitioned to composable platforms, reaping benefits of effortless integrations, accelerated deployments, and enhanced flexibility in their payment processes.
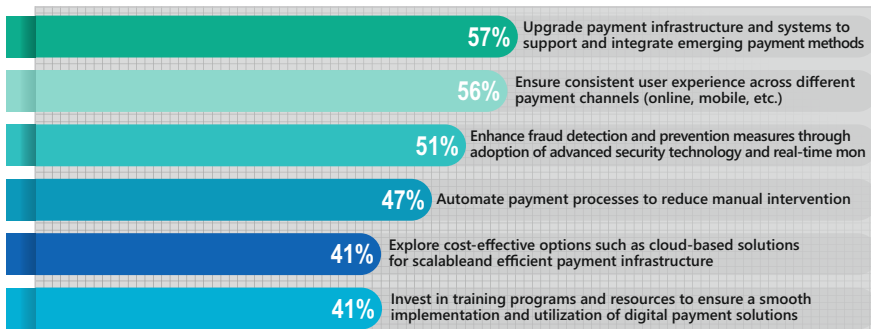
Modernizing payment infrastructure: Companies plan to assess their systems and pursue enhancements. Adopting a cloud-native and microservices approach offers swift modernization, plug-and-play features, lower TCO, and quick time-to-market, positioning businesses to tackle current demands.

Enhancing fraud protection: Prioritizing the security of digital transactions is crucial. By using cutting-edge security technology and real-time monitoring, businesses plan to proactively defend transactions, bolstering customer trust and protecting sensitive data.

Prioritizing uniform user experience across channels: Amid the complexities of technological integration, it's essential to stay centered on the heart of transactions—the users. Ensure smooth transitions across payment channels, including cross-device synchronization for uninterrupted transactions. A consistent user experience sets you apart in a competitive market.

FIGURE 4   Modernizing payment infrastructure to ensure consistent experience

Q. What measures is your organization implementing or planning to implement to overcome payment related challenges. Top six categories shown below.

%	Measure
57%	Upgrade payment infrastructure and systems to support and integrate emerging payment methods
56%	Ensure consistent user experience across different payment channels (online, mobile, etc.)
51%	Enhance fraud detection and prevention measures through adoption of advanced security technology and real-time mon
47%	Automate payment processes to reduce manual intervention
41%	Explore cost-effective options such as cloud-based solutions for scalableand efficient payment infrastructure
41%	Invest in training programs and resources to ensure a smooth implementation and utilization of digital payment solutions

Personalized Experience:

Embedded Payments to Redefine Engagement and Loyalty

Despite efforts to improve customer journey touchpoints, only 18% of organizations prioritize payment integration (see Figure 5). This underscores a chance to elevate user experiences through seamless payments, enhancing trust, loyalty, and brand reputation.

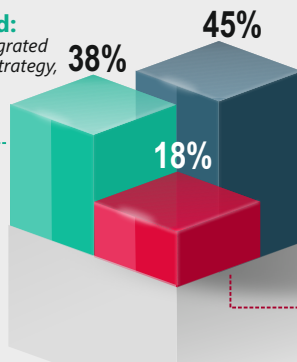**FIGURE 5   Payments are yet to be fully integrated into customer experience strategies**

Q. To what degree does your organization incorporate payments into its overall customer experience strategy?

Moderately Integrated:
Payments are moderately integrated into the customer experience strategy, with some cohesive elements in place

38%

45%

18%

Not Integrated at all:
Payments are considered as a separate function and not closely tied to the overall customer experience strategy

Fully Integrated:
Payments are fully embedded into the customer experience strategy, playing a central role in delivering a cohesive and exceptional experience to customers
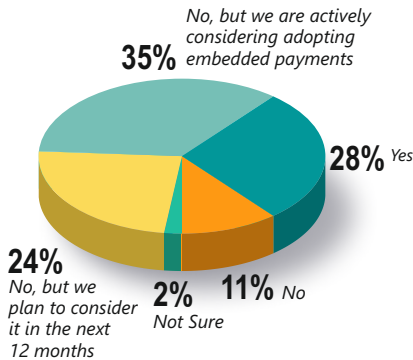
Elevating customer experience is pushing organizations towards embedded payments. 28% have integrated it, while 59% plan to do so within a year (see Figure 6). A significant 81% believe it will profoundly influence their industries. In East Africa, particularly in tech-forward economies like Kenya, embedded payments are integrating effortlessly into popular daily apps, allowing businesses to provide a more seamless, frictionless shopping experience.

Embedded payments streamline operations by consolidating payment tasks, allowing organizations to simplify financial processes and optimize resources. This boosts efficiency, reduces costs, and enhances market adaptability. For instance, Shopify's embedded payment system provides online sellers a unified platform for payments, order management, and sales, focusing resources on growth.

The future of payments is here, and it's embedded with customer experience.

FIGURE 6   Embedded payments to revolutionize user experience

Q. Does your organization currently
   offer embedded payments

*No, but we are actively
considering adopting
embedded payments*
35%

28% *Yes*

24%
*No, but we
plan to consider
it in the next
12 months*

2%
Not Sure

11% *No*

Q. What are the factors that influence your
   organization's decision to adopt embedded payments
   or the factors that would motivate you to consider
   adopting embedded payments?
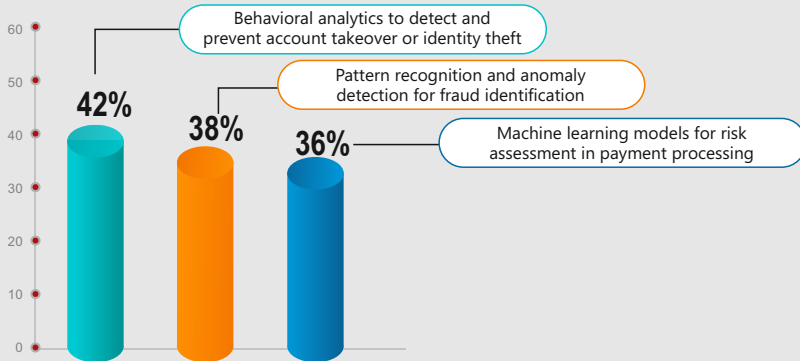   Top 3 categories shown below

52% Enhancing customer
experience and satisfaction

47% Improving customer loyalty
and retention by providing a
unifiedexperience

43% Increasing operational
efficiency by consolidating
payment related activities

Advanced Security:
The Power of AI in Payment Protections

Our research uncovers the surging impact of AI on the payments landscape. Behavioral analytics,
embraced by 42%, is becoming a preferred method to thwart account breaches and identity theft
(see Figure 7). Pattern recognition and anomaly detection driven by machine learning algorithms
provide a robust countermeasure to detect and deter fraudulent activities (38%). These models
adeptly assess real-time transaction risks, empowering organizations with informed decision-
making capabilities to flag suspicious transactions. For instance, payment processor Stripe
harnesses machine learning to evaluate transactions and gauge the potential for fraud.

FIGURE 7   **AI stands poised to advance security measures**

Q. Which of the following AI and machine learning applications do you consider hold the highest
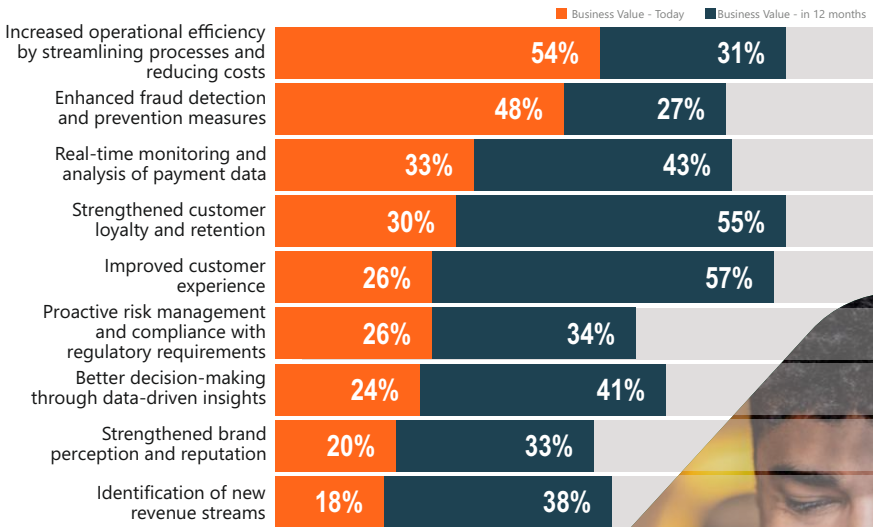potential in the realms of payment processing and fraud reduction? Top 3 categories shown below

Behavioral analytics to detect and
prevent account takeover or identity theft

Pattern recognition and anomaly
detection for fraud identification

Machine learning models for risk
assessment in payment processing

Realizing New Business Value:

From Inside-Out to Outside-In

Harnessing the potential of payment-related data and analytics yields a plethora of immediate business benefits, notably boosting operational efficiency (shown in Figure 8). As businesses realize the essence of "value beyond payment," the focus shifts from just transactions to creating holistic customer experiences. This encompassing approach involves offering pertinent services before and after payments, propelling companies towards becoming all-encompassing "one-stop destinations" for their customers. In this pursuit, the strategic significance of composable architecture becomes evident. This architecture expedites the conception and launch of innovative products and services, thereby unveiling new revenue streams.

Ethical practices in handling customer data are also becoming paramount; our study indicates that 54% of respondents feel consumers will gravitate towards payment providers displaying trustworthiness. This sentiment rings particularly true for the 18-24 age group. As they mature and wield greater financial power, their emphasis on sustainability may champion the integration of ethics in payment practices. Consequently, consumers might shy away from vendors not upholding ethical standards

FIGURE 8   Realizing new business value demands forward-thinking and innovative strategies

Q. What new business value has your organization achieved by harnessing payment-related data and analytics?

Q. What new business value does your organization strive to achieve by harnessing payment-related data and analytics within the next 12 months?

■ Business Value - Today   ■ Business Value - in 12 months

|	Business Value - Today	Business Value - in 12 months
Increased operational efficiency by streamlining processes and reducing costs	54%	31%
Enhanced fraud detection and prevention measures	48%	27%
Real-time monitoring and analysis of payment data	33%	43%
Strengthened customer loyalty and retention	30%	55%
Improved customer experience	26%	57%
Proactive risk management and compliance with regulatory requirements	26%	34%
Better decision-making through data-driven insights	24%	41%
Strengthened brand perception and reputation	20%	33%
Identification of new revenue streams	18%	38%

Cultivating Collaborative Partnerships:

Hybrid Partner Ecosystem to Fuel Innovation

Enterprises are adopting a hybrid strategy against payment challenges, combining internal resources with external partnerships (see Figure 9). This tactic melds in-house expertise with partners' specialized insights, equipping businesses to collaboratively handle evolving trends and challenges.
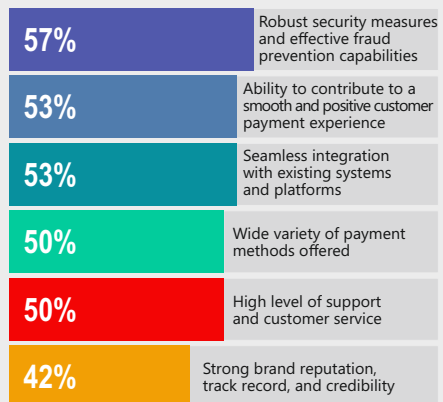
Selecting the right payment partner ecosystem is crucial. In light of the ever-evolving array of threats, the security of sensitive customer data and financial transactions (57%) is a paramount factor in selecting the payment provider, followed by the vendor's ability to contribute to a seamless and positive customer payment experience (53%), and the seamless integration of new payment technologies into existing systems (53%). Combining these key factors will create a partner ecosystem that will not only enhance security but also enrich customer experiences and smoothly meld with existing systems.

FIGURE 9   Tapping into Hybrid Ecosystems for Next-Level Innovation

Q. What is your preferred approach for implementing measures to address payment-related challenges in your organization?
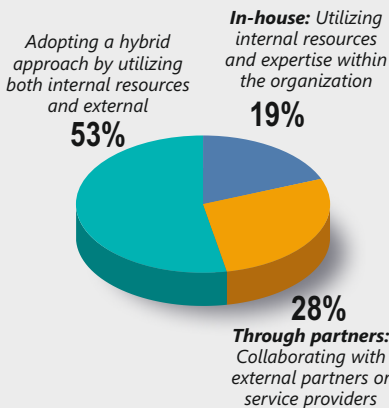
Q. What key factors does your organization consider when evaluating its payment partner ecosystem? Top six categories shown below.

Adopting a hybrid approach by utilizing both internal resources and external
53%

In-house: *Utilizing internal resources and expertise within the organization*
19%

28%
Through partners: *Collaborating with external partners or service providers*

57%	Robust security measures and effective fraud prevention capabilities
53%	Ability to contribute to a smooth and positive customer payment experience
53%	Seamless integration with existing systems and platforms
50%	Wide variety of payment methods offered
50%	High level of support and customer service
42%	Strong brand reputation, track record, and credibility

The Future of Payments is here

It's bridging the gap between technology and experience

As the payment landscape evolves at an unprecedented pace, companies find themselves at the forefront of a digital revolution, compelled to embrace innovation and elevate customer experiences. Drawing insights from our comprehensive study, we've distilled five essential recommendations that can steer organizations through this transformative journey:

→ **Synthesize your digital, security, and payment strategies into a unified approach.** This alignment creates a competitive advantage in the modern business landscape, where robust security measures, seamless payments, and digital interactions are paramount. Establish a comprehensive framework that prioritizes user experience, data security, and streamlined payment procedures.

→ **Start small, and scale wisely.** Begin with a focused approach and scale wisely. Instead of attempting to deploy every emerging technology at once, choose solutions that align with your strengths and market demands. Gain deeper insights into customer needs and solution efficacy. Gradually expand through a thorough evaluation, ongoing monitoring, and gradual enhancements.

→ **Leverage expert insights.** Seek advice from industry experts, consultants, and technology partners. Their perspectives can guide you through the intricate landscape of emerging payment technologies, helping you identify solutions that align closely with your business objectives.

→ **Adopt AI in a dual capacity.** Use AI to provide personalized, seamless payment experiences that meet modern expectations while integrating AI-driven security to protect payment data. This approach boosts customer trust, and loyalty, and strengthens the payment ecosystem.

→ **Empower data-driven decision-making.** Establish a robust data collection and analysis framework that examines customer behavior, preferences, and payment trends. By understanding these insights, companies can tailor their payment offerings, optimize user experiences, and anticipate changing market demands.

Master the Digital Payment Landscape with the **SPARC Framework**

As companies race to master the future of payments, the SPARC framework emerges as a guiding beacon. By weaving technology into the fabric of operations, curating individualized user journeys, bolstering security measures, innovating with new value propositions, and cultivating strategic partnerships, businesses can adeptly navigate the intricate landscape of payments. While the path may be challenging, the potential payoffs—streamlined operations, superior user experiences, and a distinct competitive advantage—make the endeavour richly rewarding.

Methodology and Demographics

Comviva commissioned Curious Insights, an independent global market research firm, to conduct an online panel survey with 205 senior executives at telecom, banking and financial services, and retail/ eCommerce companies around the globe. The sample was distributed across the US, UK, Singapore, Indonesia, Vietnam, UAE, Saudi Arabia, Qatar, East Africa, West Africa & South Africa markets.

About Comviva's Research Centre

Comviva's Research Centre examines current and future trends that will shape the future of the telecom industry. The Centre provides thought-provoking research and analysis of business and technology trends and dynamics, and collaborates with a wide range of business, technology, and academic thinkers regarding what the future of telecom will look like as technology changes every aspect of the industry. For more information, visit **www.comviva.com**

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