



ENTERPRISE PAYMENTS ARE EVOLVING

When will you?

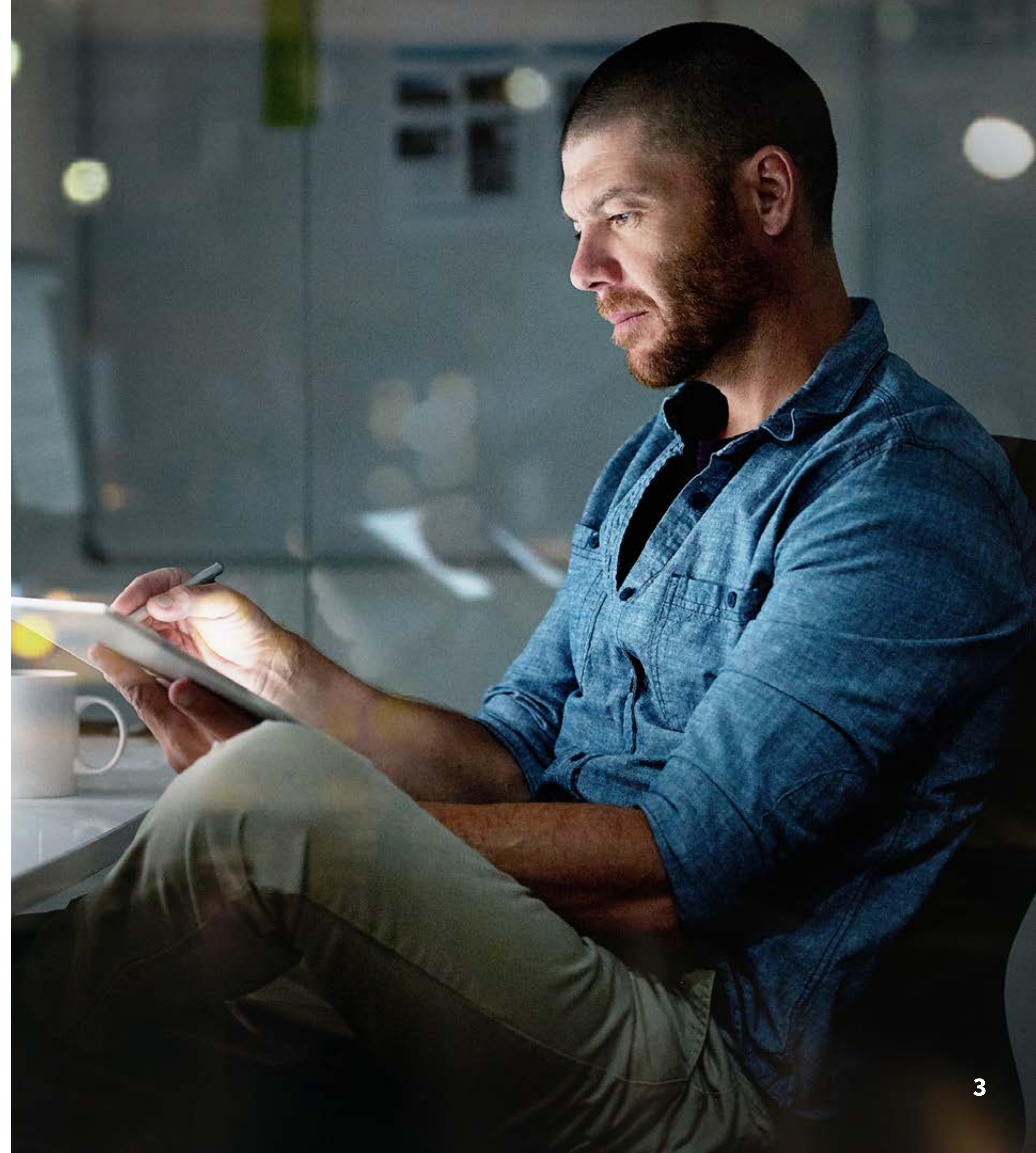
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IT'S TIME TO MOVE FORWARD

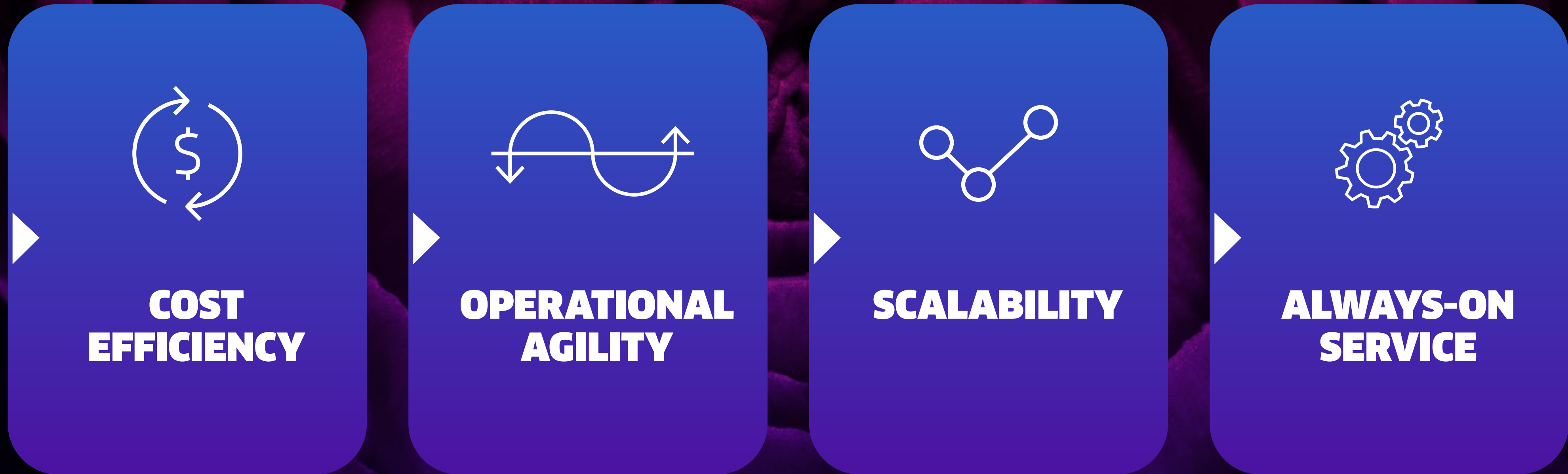
The choice to delay modernization, or do nothing, is no longer on the table.

Enterprise payments (i.e., account-to-account payments) remained largely unchanged for decades. Yet, with the introduction of ISO 20022, change has been on the drawing board of the industry for the last fifteen years. Global adoption of ISO 20022, an influx of real-time payments, value-added overlay services, request to pay and advancements in cross-border payments now conclude this period of change. Modernizing to respond to these challenges gives financial institutions an opportunity to bring innovative, value-added services to clients and create new paths to increase market share and offset margin pressures.

The choice to delay modernizing, or do nothing at all, is no longer on the table. But, determining how to contend with legacy infrastructures and siloed systems is no small feat. In this e-book, we explore how using microservices and the cloud can put financial institutions on an active and efficient path for modernizing enterprise payments systems.



THE KEY IMPERATIVE FOR TODAY'S ENTERPRISE PAYMENTS



WHAT'S DRIVING CHANGE?

The account-to-account payments landscape is evolving from both a business and a technical point of view. Once dominated by batch systems that settled a few times a day, single-oriented, always-on processes are the way forward. In turn, this demands that systems be responsive. Often called the missing link in the real-time payments puzzle, request to pay is also gaining traction.

The emerging cross-border interconnectivity of instant payment schemes is also challenging established architectures and business models. In today's market, a payment may be eligible for clearing through multiple different payment rails, emphasizing the need for flexible routing within a modular de-siloed architecture.

Strong system resiliency is now a must-have with SLAs on latency and uptime becoming very high. There is no time to lose, or to be lost.

As processing moves away from batch towards real-time, the volume of instant payments is set to explode, both domestically and cross-border.

TAKING THE FIRST STEPS TO MODERNIZATION

To keep pace with the changing market, financial institutions must embrace that the time has come for wide-reaching systems transformation. In its entirety, the process may take several years to complete, but there is no longer a need for a big-bang approach. Banks can address the modernization journey strategically yet in digestible phases. Key to this are cloud-native principles, continuous integration and deployment and solution architecture based on loosely coupled microservices.

A gradual journey towards a cohesive componentized modular payments infrastructure will allow financial institutions to address the challenges of today's market while also providing the agility needed to meet the yet unknown requirements that lie ahead in the longer-term future.





THE ROLE OF MICROSERVICES

Under the influence of real-time payment and settlement, request to pay, changing scheme rules and the move towards ISO 20022 standardization, banks' systems must evolve.

Monolithic payment hubs lack support for isolated regression, customizations, integrations or other bank-specific features and make change extremely difficult. Furthermore, when payment volumes spike unexpectedly, monolithic systems struggle to scale.

While architectures that use one application per payment scheme do permit isolation of execution, independent upgrades and reduced regression testing, they do not allow for central order management and cannot provide the routing flexibility demanded by today's complex payments landscape. Furthermore, they require replication of integrations and other functionality.

Microservices architecture, on the other hand, puts each functional domain in its own service that runs in a container and communicates over APIs. Iterations, changes or even failures of one component will not impact the other services. The system can add resources if there are increases in activity, and scale back once the load subsides.

THE ROLE OF MICROSERVICES

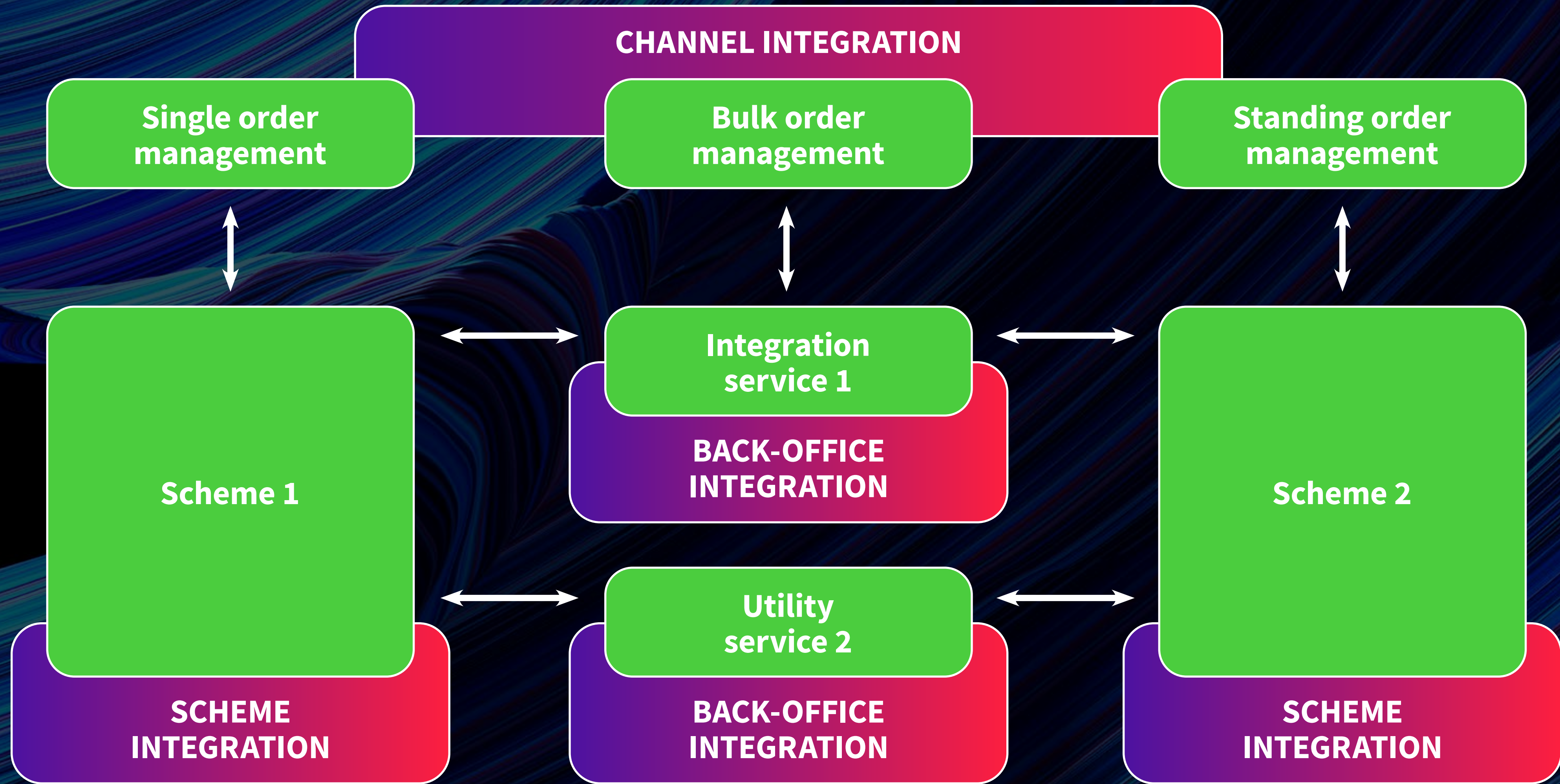
A monolithic payments hub cannot adequately adapt to today's rapidly evolving landscape in which new payment schemes are introduced and existing payment rails become interconnected.

Enterprise payments demand that scheme, channels, order management and back-office systems be in lockstep. A modern payment solution should deliver out-of-the-box, dedicated-purpose, highly configurable microservices for payment execution, integration and other functions like centralized order management. Externalization of integration points and extension by custom microservices complete the picture, delivering all the necessary elements: control, flexibility, agility and a lower total cost of ownership.

Microservices: Payment solution with out-of-the-box, dedicated-purpose, highly configurable microservices for order management, payment execution, integration and other functions.



THE ROLE OF MICROSERVICES



MODERNIZE ON YOUR TERMS

Componentized mix-and-match solutions empower financial institutions to respond to their most pressing challenges first. This phased approach for rolling out a modernized payment ecosystem enables the gradual decommissioning of legacy systems while delivering quick wins during the entire modernization journey. FIS' solutions can be seamlessly integrated with solutions from other institutions or third-party vendors through standard interfaces.

IMPROVED AGILITY

Smaller components mean faster time-to-market and fewer regressions. Components with different life cycles can also be upgraded independently (like different payment orchestration services), and integration domains can be isolated. At the same time, cross-component concerns can be managed with a shared state for stand-in functionality, flexible routing and method of payment selection, and functions like order management can be delegated.





STANDARDIZATION

Out-of-the-box configurable microservices with custom microservice extension points (where applicable) allow for standardization. With a clear definition of component responsibilities, duplication is minimized, configuration is prioritized and project-level efforts are reduced. When customization is necessary, it takes place at the microservices level rather than heavy-handed classpath extensions, centralizing customization points. This allows for the scalability and future-proof approach that enterprise payments demand.

CLOUD'S ROLE IN COST-EFFICIENCY

An always-on environment demands certainty; enterprise payment volumes can fluctuate and bring significant peaks.

With traditional infrastructure, costs are based on projected transactions and volumes. If volumes are lower than expected, the institution wastes money on unused capacity. If the bank underestimates volumes, it could experience outages. In either situation, there is a price to be paid.

A cloud-native infrastructure offers elastic scalability that can accommodate both possible scenarios. An institution's cloud costs will reflect the actual transaction volumes being processed at any given time, and it gains the flexibility to scale up when peak times come, without taking additional action to ensure capacities can be met. Because the cloud is always-on, no matter what regions the institution services, demand can always be met securely, efficiently and cost-effectively. Cloud flexibility also allows for a modernization strategy that is based on continuous integration, development and delivery over time.



LET'S POWER NEXT

The FIS enterprise payments ecosystem includes a cloud-native stack, microservices and a REST API catalogue. FIS offers multiple deployment options from customer private cloud to public cloud or full Software-as-a-Service (SaaS). SaaS effectively insulates banks from change, freeing up resources and focus to concentrate on areas of business growth. With SaaS, banks can move from high-cost in-house models to low-cost hosted models in which continuous enhancements and modernization of the solution are part and parcel of the service. This helps the bank not only keep pace, but also get ahead of competition.

Our multi-cloud vision combined with our multi-deployment options means our clients gain a transparent, heavily simplified and automated enterprise payments environment. This ensures the far-reaching plug and play of components, resilience, availability and infinite scalability needed to easily adapt to whatever the future brings.

To learn more about how FIS can support your enterprise payments evolution, click here or contact us at getinfo@fisglobal.com

About FIS

FIS is a leading provider of technology solutions for financial institutions and businesses of all sizes and across any industry globally. We enable the movement of commerce by unlocking the financial technology that powers the world's economy. Our employees are dedicated to advancing the way the world pays, banks and invests through our trusted innovation, system performance and flexible architecture. We help our clients use technology in innovative ways to solve business-critical challenges and deliver superior experiences for their customers. Headquartered in Jacksonville, Florida, FIS is a member of the Fortune 500® and the Standard & Poor's 500® Index.

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FIS | **ADVANCING THE WAY THE WORLD PAYS, BANKS AND INVESTS™**

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