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Top Trends Affecting Payment Providers

Three Major Factors That Will Shape the Industry in 2025 and Beyond

Introduction

The payments industry is undergoing a rapid and disruptive evolution after decades of relatively small changes. Technical innovations are driving most of these new, sweeping changes — from industry-specific advances in areas like embedded payments to broader technologies like artificial intelligence. And, as is always the case, evolving regulations are trailing closely behind those technical advances to ensure consumers and small businesses are properly protected as the industry's new topography settles into place.

In this white paper, five payments experts examine some of the major trends that are shaping the industry as we head into 2025 and beyond. Peter Galvin, Austin Talley, Phillip Goericke, Spero Langaditis and Kate Hampton team up to discuss:

Embedded Payments: How embedded payments will transform the way merchants sell (and consumers pay)

Artificial Intelligence: How AI will kick down the door to new opportunities

Compliance & Regulations: How an evolving regulatory environment could create challenges and reshape key aspects of the industry

> The team also offers actionable advice that payment providers can follow to get ahead of these trends and ensure their products are relevant and merchants are happy for many years ahead.

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Part 1: Embedded Payments Are Becoming a Dominant Force

Embedded payments are payment acceptance solutions built directly into a software application. While the ability to pay directly within a software platform isn't groundbreaking, how software developers are delivering that functionality to their business users is beginning to shift.

In the past, payment processing was something that had to be bolted on using a third-party service provider. Today, more software companies (and tech-savvy payment professionals) provide payment processing to users directly via software platforms and applications.

In essence, **a truly embedded solution** bridges the gap between software development and merchant services, enabling a more streamlined user experience and, allowing the developer to grab a slice of the fees generated by the payments processed through its platform.

Austin Talley: "We're starting to see a shift where software companies are acting like payment processors. These vertical software companies need a one-stop solution where they can act like a payment processor, so to speak, and be able to open new revenue streams. Whether it's a white-label solution, a semi-integrated solution or a fully-integrated solution, they need something that encompasses everything from underwriting to onboarding to life after the merchant is up and running."

Embedded Payments Solve the Problems Created by Changing User Preferences

Today, consumer and small business owner payment preferences are **overwhelmingly driven by convenience and speed**; they expect merchant services to be as fast and frictionless as electronic payments. Because of this, embedded payments represent a huge step up in convenience for one key type of merchant — businesses that use vertical software platforms as a core part of their operations.

Peter Galvin: "Once upon a time, any talk about embedded payments would only really apply to big horizontal platforms like Salesforce, but not anymore. Today, tons of small vertical software vendors are offering payment services. At NMI, we've got clients building payments into specialized software for gyms, spas, hair salons, home services like plumbing, electrical and HVAC and a variety of other verticals. Not to mention practice management software for doctors and dentists, which is a big category."

Embedding payments into these vertical platforms centralizes another key operational task and reduces the number of vendors a merchant has to work with. That enables SaaS providers to offer merchants a more frictionless payments experience and a more streamlined overall workflow.

Embedded payments represent a huge step up in convenience for one key type of merchant — businesses that use vertical software platforms as a core part of their operations.

Galvin: "It simplifies the entire process for the small businesses using these platforms. First and foremost, that means merchants can access payment services more quickly and with less hassle, right from the software they're already using. That's ultimately the big win embedded payments represent. But merchants also gain benefits like increased operational efficiency and a better way to understand the customer journey thanks to better data and analytics.

"Embedded payments also allow merchants to gain more control over the entire experience for their end customers, who can pay faster and more conveniently. The overall upside is so great that I just don't see the industry ever trending back toward integrating BYO payments from a separate vendor. This is the future."

The ability to forgo traditional hardware means embedded payments solutions are becoming increasingly practical for merchants who need to take card-present payments.

SoftPOS Systems Are Making Embedded Payments an Easy Choice for Many Brick-and-Mortar Sellers

SoftPOS, short for software-point-of-sale, is a relatively new category of products that eliminate the hardware aspect of traditional POS systems. They enable devices like smartphones and tablets to become payment terminals using only an app. While access to payments hardware has traditionally been part of the old-school payment providers' value proposition, SoftPOS "tap-to-mobile" apps allow merchants to get the tech they need to take card-present payments with a quick trip to the app store.

The ability to forgo traditional hardware means embedded payments solutions are becoming increasingly practical for merchants who need to take card-present payments. In the past, hardware requirements might have been enough to keep a merchant working with a traditional payment provider, even if they were integrating their processing services into a vertical software platform. But, thanks to SoftPOS, that friction point no longer exists, and more merchants are free to access payments directly from their SaaS platform or next-gen payment provider.

Galvin: "We live in a contactless world, and today every phone has the capability to be a contactless payment acceptance device. We're already seeing physical payment devices start to be replaced by phones and tablets. As embedded payments and SoftPOS systems become more popular, you'll start to see more instances of people getting a text with their medical bill or using a digital wallet on their phone to tap another phone to pay. Soon, replacing old school POS systems with more generalized, flexible digital payment options is going to be the norm, and when that happens, the dominance of embedded payments is going to explode."

Talley: "There are some big security and anti-fraud implications, too. For instance, Visa is coming out with its cloud tokenization product that turns nearly every device into a terminal. That means once a consumer transacts on the device, and the device is trusted and verified, it acts the same way as a card-present transaction. The device leverages a cloud-based token and, as soon as it is used, becomes provisioned in the network. Because that process allows devices to make card-present transactions, consumers can't issue charge-backs for purchases made on that tokenization network.

"If someone using their device for a purchase tries to issue a charge-back, claiming fraud, we can easily see their phone number, fingerprint and other data points that will prove the person is who they said they were at the time of purchase."

We live in a contactless world, and today every phone has the capability to be a contactless payment acceptance device.

✦ Key Takeaways

To stay ahead, software developers, independent sales organizations (ISOs) and payment facilitators (PayFacs) should start looking into how embedded payments can be leveraged as a way to unlock new revenue and keep up with rapidly changing preferences among both merchants and end consumers.

Galvin: "At NMI we always like to say the best payment experience is the one you never had — meaning if people are spending time thinking about payments, whether it's a merchant or an end customer, then you're already losing. Vertical software companies targeting businesses need to start prioritizing ways to help their users think about payments less. There is no better way to do that than embedded solutions.

"It's critical to consider how you'll integrate embedded payments into your system. Make sure that you have an understanding of what APIs [(application program interfaces)] you need or what low-code or no-code solutions you want to use. It's also crucial to understand the vertical you support and what payment needs those merchants and their end customers have. It's not always a one-size-fits-all solution. A practice management system in a dental office versus a software application for a gym will be very different. So understanding not only how your target merchants want to employ payments but also how their end customers want to pay is very important."

> The best payment experience is the one you never had — meaning if people are spending time thinking about payments, whether it's a merchant or an end customer, then you're already losing.

Part 2: Artificial Intelligence Is Starting To Reach All Corners of Payments

Generative artificial intelligence has taken the world by storm. The newest models like OpenAI o1 and GPT-4o on OpenAI's ChatGPT can now perform exceptionally complex tasks with high accuracy. Each new update introduces improvements in the systems' abilities to do nearly everything — writing code, understanding the context of dense documents, speaking in realistic human voices and beyond.

With those new capabilities and even wider, easier access for both individual and organizational users, the value all types of AI represent to the payments industry is exploding.

The AI Trifecta — Reduced Costs, Improved Security and New Revenue Opportunities

Artificial intelligence is not new in payments. Limited AI capabilities have been in play for years — specifically in fraud protection through products like **Kount's advanced screening and detection tools**. But the incredible advances in technology over the past few years now mean that it can impact all areas of payment operations.
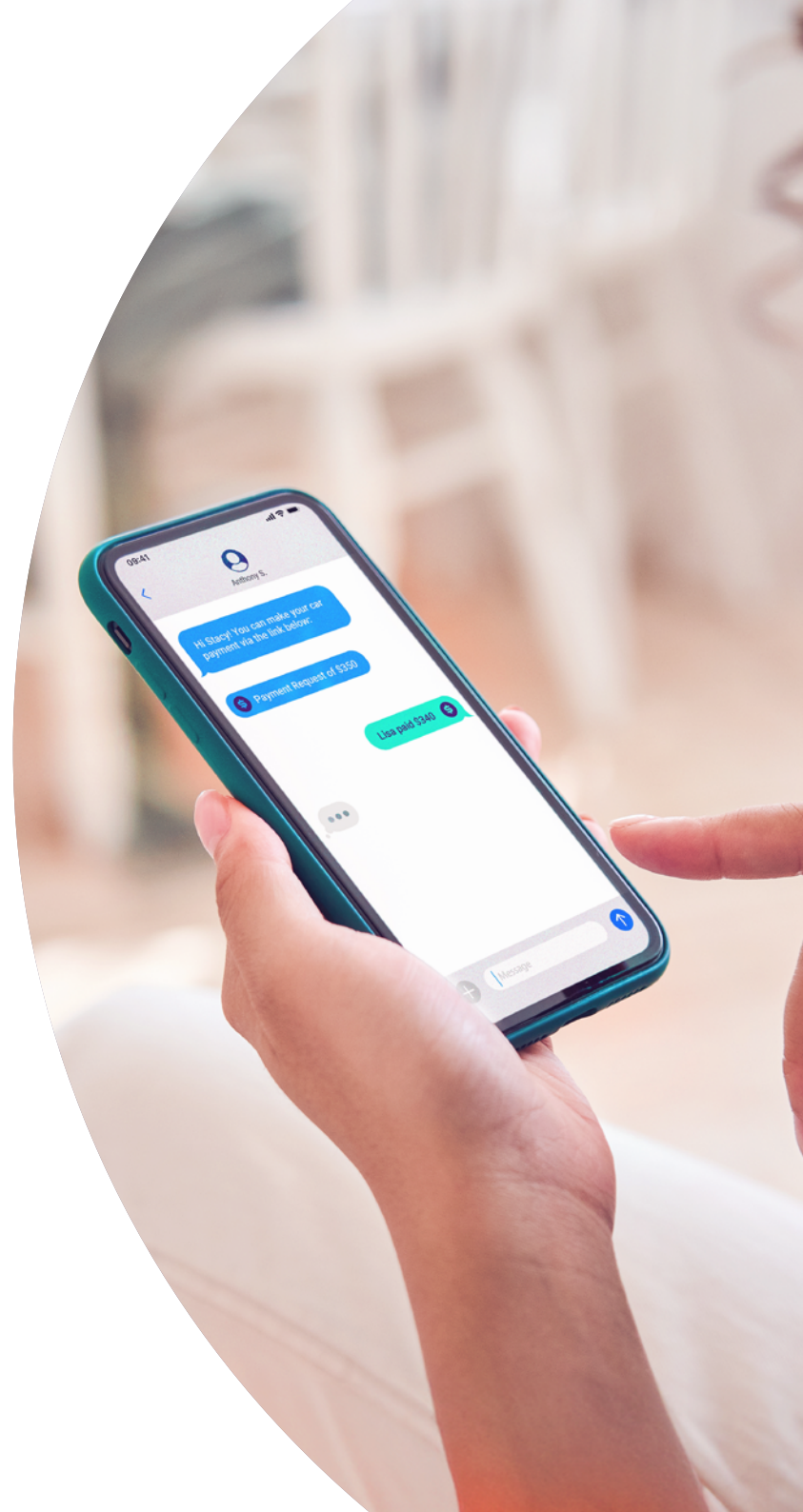
Phillip Goericke: "Commercially available AI tools can already help payment companies reduce operational costs, enhance security and create new revenue opportunities. At NMI, we're using tools like ChatGPT, Github and Copilot within our engineering group to speed up our coding tasks, help us debug issues and save time on projects. We also use it in customer-facing product applications to streamline support and reduce ticket volume, through examples like our chatbot Penny, which is powered by a generative AI system that scans our knowledge base in seconds and provides accurate answers to plain-language support requests. The reach is already exceptionally widespread."

The impacts AI can make on a payment company's efficiency, customer experience and bottom line are already significant. But, for all the value it offers on the front and back ends of payment processing, we haven't even scratched the surface of what AI will eventually be capable of in the not-too-distant future.

Spero Langaditis: "Within the payments industry, I think there are going to be large strides in using AI for things like fraud prevention and risk management. That could include real-time analysis of transaction patterns to detect and prevent fraudulent activities or using AI to manage credit risk by analyzing vast amounts of data.

"Personalization is often called one of the holy grails of AI, and I also foresee it offering personalized service as a major future application. And not just for customer service — AI will also be useful in really gauging and developing customer insights and analytics that we may not have had access to before."

Goericke: "There are certain things on the near horizon that I'm really excited about. For instance, in the future, I believe that AI will lower the barrier to entry for companies looking to embed payments into software by automatically and dynamically updating APIs, saving developers from having to manually code or maintain those integrations.

AI could advance in a million different ways that none of us can predict, so we really can't imagine the extent of the impact it'll make.

"But, the thing is, AI could advance in a million different ways that none of us can predict, so we really can't imagine the extent of the impact it'll make. But what we do know is that it's ideally suited to the payments industry because of one thing: complexity. Payments is a highly complex ecosystem that has evolved over decades and requires a ton of knowledge to understand how everything is interconnected and works together. That kind of knowledge synthesis is exceptionally hard for humans, but it's a breeze for good AI tools. So, ultimately, I think the biggest impact AI is going to have will be simplifying the dense layers of complexity for everyone involved in payments."

✦ Key Takeaways

For payments companies, there are two keys to adopting AI: do it quickly and do it safely. Speed is important because the train is already rolling and the best time to get onboard is right now. With such low barriers to getting started with powerful yet free tools like ChatGPT, there is no reason to risk getting left behind.

Safety is important because the technology is new and moving quickly and the risks around AI are not completely understood yet, and that means security considerations need to be well thought out.

Goericke: "If you're not using AI yet, it's not too late. But, if you don't start soon, you might be left behind by the competition. You can always get started down the line, but how much ground will you have lost? It really can't be overemphasized how important it is to start getting familiar and comfortable with the tech today.

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"But be thoughtful and considerate about how you use AI tools and, most importantly, how you secure data. It's extremely important to develop robust AI usage policies because there are myriad concerns on this frontier — especially with regard to sensitive data.

"For instance, the differences between open-source and closed-source AI solutions are big. If your use case involves feeding sensitive data into an AI tool, like customer information or your source code, then a closed-source option like ChatGPT — that lives on someone else's servers – may not make sense. You can use an open-source LLM (large language model) that runs in your environment without worrying about critical data leaving your network, but that's a taller order than just logging into a ready-to-use system like ChatGPT. It's a balance, and you need to really consider your specific use case and data privacy needs to get it right. Just don't let fear stop you from at least dipping your toe in."

Langaditis: "To add to Phillip's point, one of the biggest pieces of advice I have is to invest in AI capabilities internally. Make sure your employees are educated and trained on how to use AI effectively, whether that involves training engineers to use better prompts or teaching them best practices around how to use tools like ChatGPT, Claude or Google Gemini. Education is paramount.

"It's also important to keep ethical considerations in mind. Make sure your employees adopt internal ethical AI practices to ensure transparency, fairness and accountability — especially when interacting with or using third-party systems."

It's extremely important to develop robust AI usage policies because there are myriad concerns on this frontier — especially with regard to sensitive data.

Part 3: New Regulations Are Changing How the Game Is Played With Potentially Significant Consequences

Whenever large, sweeping technical advances happen, regulators eventually swoop in to have their say in how things evolve. Regulators work to ensure that consumers and small businesses are protected. Although these efforts don't always generate the intended results, new laws and regulations are ultimately unavoidable.

We're in the early stages of discussing regulations for technologies like advanced artificial intelligence, and these rules will likely play a critical role in shaping the industry's future.

🌐 The United States Is Playing Catch-Up

It's no secret that when it comes to digital payments, the United States lags behind other countries in some key ways. One example is the lack of faster payment solutions, and another is the regulation of things like credit card swipe fees and consumer data. Notably, the U.S. has some of the highest credit card swipe fees in the world — American merchants paid Visa and Mastercard **over $100 billion in fees** for the first time in 2023.

> The gap between U.S. and international card markets is not new. The U.S. has always been slow to adopt both new payments technologies and new regulations. But now, with the market moving so quickly, the U.S. is playing catchup, especially compared to peers like the European Union and the United Kingdom.

Kate Hampton: "Regulations in Europe are often viewed as being stricter than in the U.S., but what tends to happen is the U.S. eventually adopts similar legislation, just some time later and tailored to the American market. So, in a sense, Europe provides a directionally relevant view of the issues U.S. payments legislation will tackle.

"Right now two examples of European initiatives that are well established are PSD2 and open banking. PSD2 — the update to the EU Payment Service Directive — is about increasing competition in the payments industry by simplifying the rules of engagement. The European Union identified that many of the rules and laws were too complex for anyone to navigate, which meant they had become a barrier to entry. Their complexity, they reasoned, stifled competition and innovation, so the EU decided to lower the barrier to entry. In my opinion, objectively, it's a good thing. But, the question for the U.S. market specifically is how do we go about doing the same thing? That remains to be seen.

"Open banking is all about putting the consumer in control of their data, allowing them to choose how they want it to be used and what they want to get out of it. That will eventually make its way to the U.S. in one form or another, but right now it's not nearly as high a priority here as it is in Europe."

Potential New Payments Regulations on the Horizon

While the U.S. is behind, some legislators are trying to close the gap. The Credit Card Competition Act of 2023 (CCCA) is a bill with bipartisan support in both the U.S. Senate and House of Representatives that aims to tackle America's sky-high swipe fees.

While the bill has struggled to move forward in a highly partisan and historically unproductive Congress, many believe it's only a matter of time before it (or legislation like it) passes.

Hampton: "The CCCA intends to lower the cost of card acceptance by increasing competition outside of the Visa/Mastercard duopoly. The conversation stems from the U.S. interchange rates being some of the highest in the world, and the intended outcome is to lower the cost of acceptance for merchants by forcing the big two to compete with smaller players, hopefully on price.

"But it's a complex topic that's getting a lot of pushback from the industry. For instance, a lot of opponents point to the way the debit swipe fee caps imposed by the Durbin Amendment to Dodd-Frank killed debit rewards. They fear that the CCCA could do the same with credit rewards, which are a critical part of the industry and something consumers expect. Others point out that companies may end up just charging annual fees to make up the difference. The bill has been sitting stagnant for a couple of years, but it's a good example of how legislators are keenly aware of how much American businesses pay in swipe fees, and the wheels are already turning to try to catch up to the rest of the world — albeit very slowly."

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✦ Key Takeaways

The payments space is complex, and changing regulations increase the complexity to a level that most frontline providers like ISOs, PayFacs and software companies can't keep up with effectively.

> **As a result, one of the most important things these companies can do is offload as much compliance burden as possible by leaning on partners that can keep up with changes and make any necessary adjustments on their behalf.**

Hampton: "As a payment acceptance enablement platform, one of our value propositions is that NMI owns the technical side of compliance. There are regulations that are non-technical in nature, and the ball is in our customers' court. But, to the extent that there is a technical side to the regulation, we support our partners by taking on that burden. That's a huge benefit because it frees up their time, money and brainpower to work on problems that are more core to their businesses.

"One of the best and simplest ways to keep up with changes is to let a tech partner like us worry about network-level regulation like PCI compliance and legal regulations governing things like data."

One of the best and simplest ways to keep up with changes is to let a tech partner like us worry about network-level regulation like PCI compliance and legal regulations governing things like data.

Partner With NMI To Keep Your Business at the Cutting Edge of New Industry Trends

NMI is a payments enablement company completely focused on offering payment providers turnkey access to all the technology, infrastructure and expertise they need to serve merchants better. With over 20 years of experience leading innovation in the space, NMI stays at the cutting edge of payments so our partners can stay focused on growing their portfolios and providing outstanding customer service, no matter where the market goes.

To find out more about how our one-stop payments platform can help you thrive in a rapidly evolving market, **reach out to a member of our team today**.

Check out the NMI Payments Playbook Podcast for More Insights from Some of the Industry's Top Players

NMI Payments Playbook is a podcast examining some of the most important issues facing the payments industry today. In each episode, our host Greg Myers sits down with some of the payment industry's top thought leaders to discuss strategy, technology, the market and more.

For more thoughts on the future of payments, tune in to our three-part series on trends shaping the industry in 2025 and beyond.

About Our Payments Experts

Peter Galvin | Chief Marketing Officer

Peter is Chief Marketing Officer at NMI and is a 20-year veteran of global technology organizations specializing in promoting innovative enterprise and Cloud-based software companies to leadership positions. He previously served as Chief Marketing Officer at Entrust and Proofpoint, as well as Chief Strategy & Marketing Officer for nCipher (formerly Thales e-Security). Peter has also served in senior marketing leadership roles at leading technology companies including Openwave, Inktomi (acquired by Yahoo) and Oracle. He's passionate about skiing and travel, and enjoys cooking and spending time with his family.

Kate Hampton | Chief Strategy Officer

Kate Hampton is the Chief Strategy Officer at NMI. She brings 15 years of extensive experience in the payments industry. She previously served as the SVP of Product – Payments at Entrata where she implemented the pay-fac model, expanded the payments function, and grew it into one of the highest revenue-generating products for the company. She also held management positions in Corporate Finance at Global Payments, Accelerated Payment Technologies, and CAM Commerce. Kate enjoys reading, running, as well as creating and visiting gardens.

Phillip Goericke | Chief Technology Officer

Phillip is CTO of Engineering at NMI and brings more than 15 years of experience working in software development. He previously served as VP of Product Engineering at Alkami Technology where he scaled up and managed delivery teams of 160 software and quality engineers. Phillip enjoys spending time with his family, traveling and spending time outdoors.

About Our Payments Experts Continued

Austin Talley | Everyware Founder & CEO

With the birth of Everyware in 2015, Austin Talley is and has always been the mastermind behind certifying the mobile number as a form of payment.

As Everyware's CEO, Austin works relentlessly to establish the company as a household name and revolutionize the world of contactless payments. An avid Motocross dirt bike racer, in his spare time, he can be found on the race tracks and spending quality time with his wife and their three sons in Austin, Texas.

Spero Langaditis | Director of AI & Automation

Spero Langaditis is the Director of AI & Automation at NMI, where he leads the development and execution of NMI's AI strategy. With a strong background in product engineering, Spero previously served as a Director of Product Engineering, playing a key role in the development of NMI's ScanX product. Now focused on leveraging AI to drive operational effectiveness, efficiency and AI-powered innovation, Spero combines deep technical expertise with strategic thought leadership to drive NMI's AI initiatives.

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