

# Fintech 2040

Hidden Agents, Visible Shifts:  
China's Lead and Europe's Path  
in Commerce

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FIVERTY

# Fintech 2040

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**Artificial intelligence is entering a new phase. For years, digital systems mainly helped consumers search, compare and decide. Today, they are beginning to act on our behalf. AI agents can already recommend products, organize services, trigger payments and coordinate transactions across digital ecosystems. Over time, many of these interactions will become increasingly invisible to the consumer, moving from active shopping toward delegated commerce.**

This shift has profound implications for the future of financial services and e-commerce. The question is no longer only how companies attract attention in digital markets. It is increasingly about who controls the infrastructure of trust, permissions, payments and execution behind the scenes.

At the center of this transformation sits what can be described as the new trust layer of commerce. In a world of agentic systems, trust is no longer built only through brands, storefronts or customer interfaces. It increasingly depends on whether AI systems can securely verify identity, operate within clearly defined mandates, execute payments reliably and provide transparency when something goes wrong. The future winners in commerce will therefore not simply be those with the smartest AI, but those capable of building trusted execution environments around it.

China currently offers the clearest preview of what this future may look like. Integrated ecosystems such as Alibaba and ByteDance demonstrate how AI, payments, commerce and everyday digital routines can merge into highly connected consumer environments. Their rapid progress shows how quickly AI can evolve from a conversational assistant into a hidden orchestration layer for daily life.

Europe, however, starts from a different position — and that may ultimately become a strength rather than a weakness. European markets are more fragmented; regulation places greater emphasis on transparency and consumer protection, and trust remains central to digital adoption. This creates the opportunity to shape a distinct European model of agentic commerce: one built not only around convenience and automation, but also around interoperability, accountability and user control.

This paper explores what Europe can learn from China's lead in visible and hidden agents — and where Europe must deliberately choose a different path. It examines how AI agents are changing commerce, why protocol layers and payment infrastructure are becoming strategic control points, and what European companies should build today to remain competitive in the next era of digital markets.

The future of commerce will not simply be defined by the most intelligent assistant. It will be defined by the systems and rules that determine how delegated decisions are executed, governed and trusted.

That debate starts now.

**Alexander Scheibel**  
Product Management Lead

## Management Summary

The shift from passive AI assistants to pro-active AI agents changes the competitive logic of ecommerce. In the platform economy, companies competed for attention, rankings, and conversion. In agentic commerce, they will increasingly compete for machine-readability, trusted execution, payment authority, and access to the protocols that make delegated transactions possible. The decisive layer in the shopping process is no longer the marketplace or checkout screen, but the protocol and trust infrastructure that determines which merchants are visible to agents, which agents are trusted by merchants, and how responsibility is assigned when something goes wrong.

China offers an early view of this future. Alibaba's Qwen and ByteDance's Douyin ecosystem show how agentic commerce can emerge from two directions: from integrated commerce and payment systems or from attention and recommendation systems. Both paths reveal the same thesis: AI becomes commercially powerful only when it is connected to executable service environments. At the same time, the Chinese case highlights the core risk of hidden agents: the more delegated the shopping experience becomes, the harder it is for the customer to understand how choices are shaped, how options are ranked, and where accountability resides.

European companies therefore face a strategic choice. They can accept agentic infrastructures designed elsewhere, or they can build a different model based on interoperability, trusted payments, digital identity, transparent permissions, and contestable delegation. For European finance and fintech companies, this is a major opportunity: payment is the moment where delegated intent becomes binding economic action. The winners of agentic commerce may therefore not simply be the firms with the best AI interface, but those that become interoperable, legible and trustworthy in machine-executed markets.

**Keywords:** Agentic Commerce, Hidden Agents, AI Agents, Ecommerce, Delegated Commerce, Commerce Protocols, Protocol Layer, China, Chinese Use Cases, Payment Authorization, Fintech Infrastructure, Machine-Readable Commerce, Interoperability, Trust Architecture, Digital Identity, Consumer Protection in AI Commerce

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# Introduction

Trust moves below the interface.

What Europe can learn from China’s emerging systems of visible and hidden agents, and where it must deliberately choose a different path.

As an increasing number of repetitive and standardized tasks are transferred from humans to machines and algorithms, a technological revolution is unfolding. For the first time in history, proactive digital assistants are no longer solely acting passively on behalf of their users. Instead, they are assuming greater responsibility, independently determining which decisions and actions are required and carrying them out autonomously. This new phase of technological development is known as the “agentic era” (Nisa et al., 2026).

In the financial services industry, digital banking tools served for many years as passive assistants: they displayed account balances, categorized expenses, or helped users compare products. More recent consumer systems are beginning to move beyond information provision toward

delegated action: Agentic financial advisors can automatically rebalance portfolios within predefined risk profiles or deliver proactively personalized financial insights like a balance forecast for the next 14 days. Fraud-detection systems can block suspicious activity before a human customer has even noticed a problem. These financial systems show how digital services gradually move from helping users understand a situation to executing bounded decisions on their behalf (Horn, 2020).

Ecommerce in 2026 is at a comparable stage when it comes to the integration of autonomous systems. As increasingly capable AI systems begin to search, negotiate, and complete transactions on behalf of users, commerce is shifting from a model of digital assistance to one of digital delegation (Accornero, 2025).



This shift matters because delegation changes the competitive logic of commerce. In the platform era, firms competed primarily for attention. They optimized rankings, interfaces and checkout design in order to influence human buyers (van Dijck et al., 2019). In an agentic environment the rulebook changes: here, infrastructure through which delegated action is authorized and executed becomes strategically decisive. If an AI agent can select products, trigger payments, and manage post-purchase interactions, then the critical layer is the system of permissions and trust behind it (OpenAI, 2025).

The current situation in China offers an early view of what agentic commerce can look like when AI, payments, content, and services develop inside densely integrated digital ecosystems. The country's long trajectory in digital payments and platform-based service integration created favorable conditions for low-friction delegation (Bech et al., 2020). This makes the current situation of agentic commerce in China a good starting point for evaluating possible future measures for European ecommerce companies.

Europe starts from a different institutional and cultural baseline. Its markets are more fragmented, its regulatory environment places greater emphasis on fairness, competition, and consumer protection, and its payment landscape reflects a broader diversity of preferences than the more unified ecosystems in China. European consumers are clearly digital, but the availability of cash still matters to a majority of consumers (European Central Bank, 2025)

in Chapter 2. Chapter 3 then examines the protocol layer as the new operating system of commerce and explains why control over standards, permissions, and transaction logic will shape future market power. Chapter 4 turns to China, focusing on current use cases that show how hidden orchestration is already being embedded into commerce platform ecosystems. Building on that analysis, Chapter 5 analyzes the core decisions that European companies must address today before Chapter 6 and 7 conclude with a strategic proposal for a specifically European model of agentic commerce.

## The new battleground of commerce is not attention. It is authorization.

This mixed pattern is revealing. It suggests that the European path into agentic commerce may not only be shaped by technical possibility, but also by questions of legitimacy, control, and trust. Against this background, the central question of this paper is: What can Europe learn from China's emerging systems of visible and hidden agents in commerce? And where must Europe deliberately choose a different path?

In order to answer these questions, the argumentation of the paper starts with clarifying the difference between today's shopping assistants and tomorrow's hidden agents

# Hidden Agents

## AI moves from advice to action.

Why agentic commerce begins when systems execute intent, not just support choice.

Not every AI system used in commerce can be rightfully called an “agent”. Much of what is currently marketed as “AI shopping” still belongs to the older category of digital assistance. Assistant systems help consumers formulate queries or discover products they might otherwise have overlooked. In economic terms, these systems reduced search frictions and reshaped consideration sets, but they did not yet assume operational responsibility for the transaction itself. Amazon’s Rufus is a useful contemporary example. Rufus has evolved from a simple chatbot into an assistant shopping system. It remembers past search queries, analyzes order history, compares products, and answers specific questions about product details based on reviews and the Amazon catalog (Amazon, 2024). It offers more capabilities than a conventional search bar, yet its main role remains advisory.

The transition from commerce assistants to commerce agents should not be misunderstood as a simple upgrade from “better recommendations” to “smarter chat.” The more important development is the emergence of systems that can move from interpretation to execution. Alibaba itself describes this transition as a move from “AI that responds” to “AI that acts” (Yicai Global, 2026).

Once an AI system can carry a user’s intent across several steps of a commercial workflow, the role of the technology changes qualitatively. It no longer merely informs a decision – it begins to enact one. Recent infrastructure initiatives show how close the market already is to this threshold. OpenAI’s commerce documentation is explicitly designed to support end-to-end checkout flows inside ChatGPT while leaving the merchant’s existing order management and payment handling in place. The result is a new intermediate zone between assistants and full agents: a system that still asks for approval at key points, but increasingly performs the surrounding workflow itself (OpenAI, 2025).

From the perspective of the consumers, these new forms of AI agents take on the role of butlers in the 19th century. When equipped with the right data sources and effective feedback these employees were able to act more and more autonomously. And the employers were willing to increase their autonomy and spending budgets in order to increase their own freedom from these market interactions.

The contrast between visible and hidden agents is defined by three dimensions: interface visibility, delegated execution authority, and embedded orchestration across multiple systems. With more hidden agents, the user may still set goals, preferences, budgets, brand exclusions, delivery constraints, or approval thresholds, but the orchestration of these rules begins to disappear into the background of the system. The consumer no longer has to manually carry intent from app to app or screen to screen. Instead, the software translates intent into a sequence of actions. In this sense, hiddenness is best understood as an organizational property of the workflow rather than as a visual property of the interface. The more reliable the system becomes, the less frequently it needs to ask for direction, and the more commerce starts to resemble delegated routine rather than active navigation (Tomašev et al., 2026).

An example of today’s consumer reality in China can help illustrate the difference: A young professional wearing smart glasses walks through the Chinese city of Yancheng on her way to work. The agentic system “Qwen” already has learned relevant patterns of her daily routine: her morning route, her preferred coffee order, the fact that she buys a small pastry on workdays, and the location of nearby Luckin Coffee stores. Instead of waiting for a fully specified command from the customers, Qwen infers the likely intent from this recurring routine and asks for a confirmation: “You are passing your usual Luckin Coffee in twelve minutes. Should I order your regular cappuccino and add a blueberry muffin?” After her confirmation, the



agent selects the store, places the order, triggers payment through the connected wallet, and prepares the pickup interaction. When she arrives at the store, the glasses scan the merchant QR code, the purchase is confirmed, and the amount appears in the display (Alibaba, 2026; Reuters, 2026).

In this case, the Chinese customer used the aid of a proactive semi-hidden agent that helped the consumer in a real-life situation: The agent knew what the customer wanted and just needed a clear confirmation. One step further into the hidden delegation process a sovereign agent could order the coffee and the muffin even without asking. These differences may appear small at first glance, but they will reshape the commerce industry in the next decade.

A helpful way to think about this evolution from assistants to visible agents to hidden agents is a spectrum: At one end are assistive systems that help users when being actively asked by the users. In the middle are visible agentic systems that prepare actions, pre-fill decisions, or execute only after confirmation. At the far end are delegated systems that can pursue predefined goals across multiple commercial environments with minimal to no intervention (See illustration 1).

This continuum matters because it clarifies why hidden agents are likely to emerge first in recurring, low-complexity, and low-emotion purchases. Reordering printer cartridges, booking a familiar train connection, or selecting a preferred household staple within a spending limit are structurally different from buying a wedding dress or choosing a mortgage. Delegation expands where preferences are stable, the stakes are legible, and exceptions can be handled through clear escalation rules. Intelligent delegation research reinforces this insight by stressing that delegation requires explicit boundaries, transfer of authority, accountability, and mechanisms for trust, rather than mere technical autonomy (NIST, 2024).

At the same time, the move from shopping assistant to hidden agent introduces new forms of risk. In delegated commerce, payment authorization becomes the moment where intent delegation turns into legally binding action.

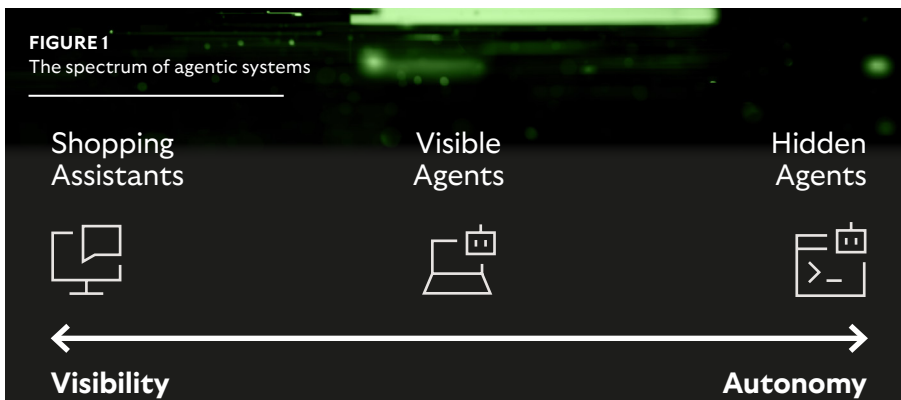
If future commerce is increasingly mediated by AI systems acting on behalf of users, then the question is no longer only whether recommendations are relevant, but whether delegated action is aligned, contestable, and fair (Bar-Gill, 2023). Therefore, payment systems evolve from transaction processors into decision and control layers. That includes the concrete definition of how identity is bindingly verified, how permission frameworks are scoped and how auditability, reversibility and liability clarity are ensured.

That explains why governance becomes more important as the agents become more hidden. The less often consumers are asked to intervene, the more crucial it becomes to specify what the system is permitted to do, how its actions are logged, and how errors can be challenged. NIST's generative AI risk profile emphasizes precisely these issues by highlighting the need for documentation, monitoring, and human oversight in systems whose outputs may be difficult for users to fully understand (NIST, 2024). Holzinger and colleagues make a related point when they argue that human oversight becomes harder, not easier, as AI systems grow more complex and less interpretable (Holzinger et al., 2025). Hidden agents therefore cannot be treated as a convenience feature alone. A system that quietly books, buys, switches, or subscribes on a user's behalf must also provide evidence, traceability, and meaningful recourse when something goes wrong.

The example of the young Chinese employee in Yancheng indicates how this transition may unfold when commerce, payments, and everyday digital routines are tightly integrated. Europe, by contrast, is more likely to pass through a longer visible-agent phase. Research on European super-app preferences suggests that multifunctional agents are attractive, but acceptance depends strongly on trust, usefulness, and the perceived balance between convenience and control (Hasselwander and Weiss, 2025).

The strategic implication for European companies is clear. The real divide in future commerce will not run between firms that have AI and firms that do not. It will run between systems that merely assist human shopping and systems that can reliably carry delegated intent into action.

Once that distinction is recognized, the next analytical question follows: through which technical and institutional layer is this delegated action coordinated, verified, and governed? That is the subject of the next chapter, which turns from the hidden agents to the deeper architecture beneath them.



# Commerce OS

## Protocols shape who gets seen.

The new control layer of commerce is no longer the storefront, but the rules that make merchants visible, trusted, and executable.

In agentic commerce, economic value moves through the rules that allow one system to request action, verify identity, exchange payment authority, and complete the transaction without losing accountability. That is why the protocol layer can be called the new operating system of commerce. An operating system does not merely sit in the background as a technical convenience; it allocates permissions, defines valid instructions, coordinates components, and determines which actions can actually be executed. The same is increasingly true in commerce. If AI systems are able to search and buy on behalf of users, then the commercial order shaped by the standards that make those actions machine-readable, machine-executable, and institutionally trustworthy (OpenAI, 2025).

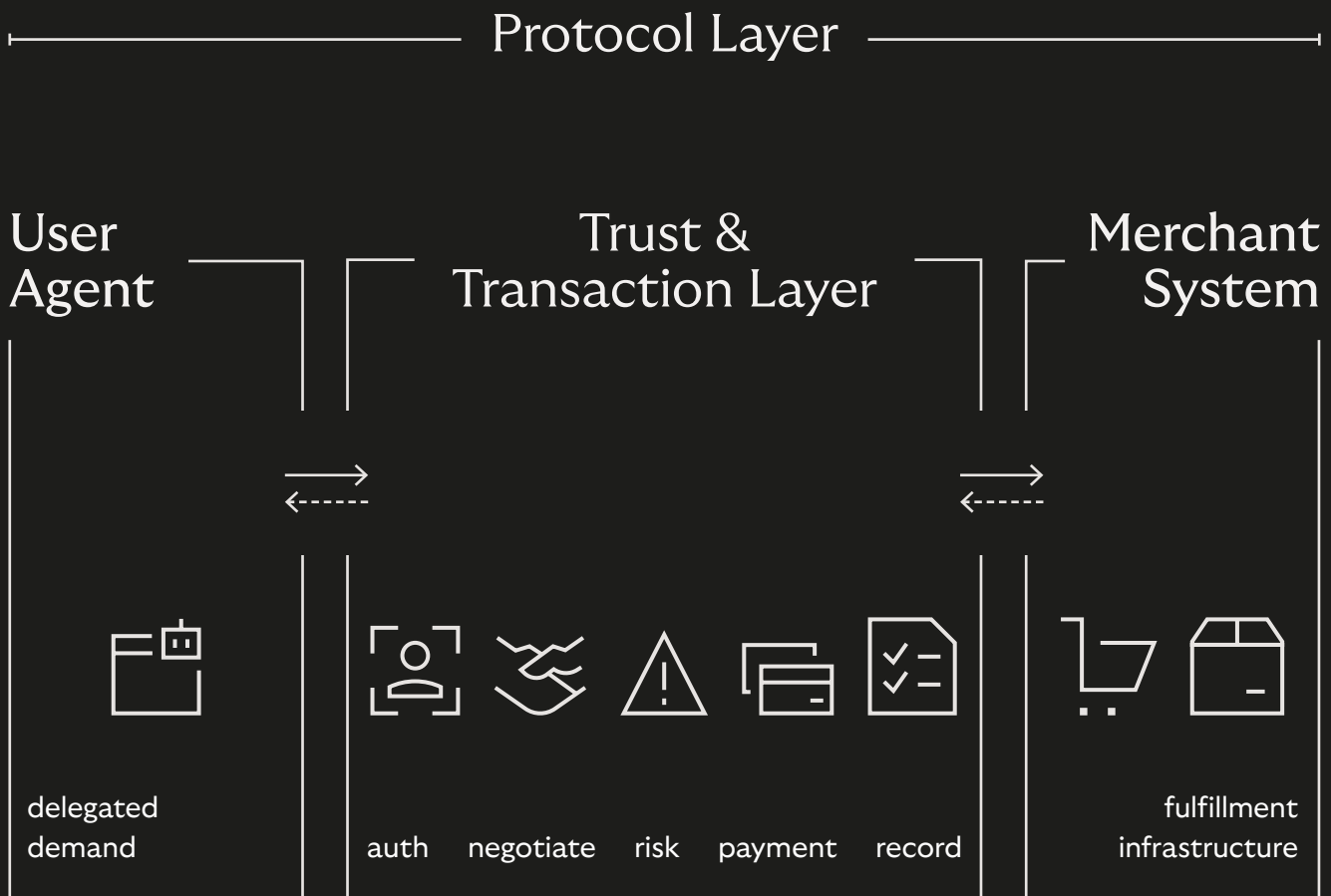
From this perspective, a commerce protocol for delegated action is not just a technical format. It is a governance mechanism. It decides how a merchant becomes legible to an agent, and also the other way round: how an agent becomes recognizable, trustworthy, and actionable for a merchant. These protocols control how a user's intent is translated into a structured request, which capabilities may be invoked, which compliance information must be provided, and how exceptional cases are handled when the smooth path breaks down.

A simple example explains the logic: A user asks ChatGPT for help building a raised bed for his balcony garden. The model first operates as an advisor and generates a list of needed items such as the bed frame, soil, and herbs. The protocol layer becomes relevant in the next step: ChatGPT can match that shopping list with concrete products from a nearby garden center because the retailer has exposed his machine-readable catalog and inventory data. ChatGPT can then assemble a cart, check whether pickup is possible at the local store of the garden center, and

either complete the purchase inside the chat or direct the user seamlessly to the merchant's checkout if instant in-chat checkout is not available. The result is a continuous journey from recommendation to local purchase. The merchant still defines prices, product availability, fulfillment options, return conditions, and legal disclosures. The agent, however, may influence which merchant becomes visible to the customer. If two nearby garden centers offer the same products, the system could rank them according to transparent decision criteria such as distance, stock availability, pickup time or delivery cost. This is why protocol design matters: it determines not only whether a transaction can be executed, but also how competing offers are compared and whether the user can understand why one merchant was selected over another.

In order to make these delegated processes happen, OpenAI's Agentic Commerce Protocol (ACP; published in September 2025) defines structured catalog ingestion, checkout sessions, and payment handoff mechanisms that allow ChatGPT to move from product discovery toward completion while leaving merchant operations and payment processing largely intact (OpenAI, 2025). Google's Universal Commerce Protocol (UCP) documentation (published in January 2026) follows a similar path by making clear that merchants must provide machine-readable product and eligibility data, compliance attributes, checkout capabilities, and order-lifecycle endpoints if they want to participate in agentic purchasing across Google surfaces (Google Developers Blog, 2026). The hidden significance of these specifications is that they turn commercial participation into a question of protocol conformance. A merchant – for example the garden center nearby – that cannot speak the right machine language risks becoming commercially invisible to the next generation of buying systems.

FIGURE 2  
Three-Sided architecture of commerce protocol layers



This description also clarifies why the protocol layer can be described as a three-sided coordination architecture. On one side stands the user-facing agent that expresses delegated demand. On another stands the merchant system that exposes product, policy, and fulfillment capabilities in a machine-actionable form (See illustration 1). Between them lies a trust-and-transaction layer that authenticates participants, negotiates capabilities, carries risk signals, transfers payment authority, and records what was allowed and what was done (Rochet and Tirole, 2003; Armstrong, 2005).

An economic analysis of that layered architecture shows that markets with interdependent sides are governed not simply by price, but by the structure that coordinates participation between the sides. In two-sided or multi-sided settings – like in the agent-protocol-merchant setting –, the actor that controls the terms of access, matching, and transaction design enjoys a decisive strategic advantage. Current research on digital business ecosystems sharpens this point by describing “control points” as the positions in a layered architecture from which firms can influence bargaining power and value capture. Agentic commerce extends this logic into a new domain. The decisive control point is no longer only the marketplace homepage, the app store, or the payment terminal. It increasingly sits in the rules that determine which merchants are interpretable to agents, which agents are trusted by merchants, and which transaction paths count as legitimate. If those rules are proprietary, market power can harden around a few gatekeepers that decide upon the rules of the game. If these protocols are open and widely adopted, competitive pressure can shift back toward product quality, service performance, and trusted execution (Rochet and Tirole, 2003).

In the second scenario the storefront of the merchants remains relevant, but his store must now be also discoverable and actionable at the protocol level. In practice, that means that machine-readable policy, inventory, pricing logic, legal disclosures, and post-purchase state changes become part of commercial competitiveness itself (Google Developers Blog, 2026).

Leading US technology companies understood earlier than many European firms that these technical protocol layers could become the future control points of commerce. OpenAI’s ACP, Google’s UCP, and related agent-to-agent initiatives all point in the same direction: the firms that define how agents identify merchants, compare offers, authorize payments, and record consent may also shape who becomes visible, trusted, and commercially executable in agentic markets. The strategic race is therefore not only about building the most capable AI assistant. It is about setting the rules through which future assistants and agents will be allowed to act.

In China, the role of agentic protocol layers is slightly different from the Western debate around open proprietary standards such as UCP and ACP. In China, the protocol layer is likely to be less visible as a separate standard and more deeply embedded inside large platform ecosystems. China already shows what such a layer can look like in practice. Ant Group launched an Alipay MCP server in April 2025 to let AI agents connect directly to payment services through a standardized interface, and Ant has also described Alipay as an AI-driven open platform that integrates agents into everyday service flows (Alibaba Group, 2026; Chui, 2021).

Therefore, protocol layers in China act as hidden orchestration layers that connects AI intent, merchant data, payment authorization, and local service fulfillment without forcing the user to jump across separate apps and interfaces. In other words, the protocol layer is what turns China’s platform ecosystems into early agent networks. It does not merely move information between systems. It makes agent-to-agent commerce operational at scale.

Europe has to read the Chinese case carefully. The lesson is not merely that protocol layers matter. The more important lesson is that the institutional form of the protocol layer matters just as much as its technical performance. For Europe, this point is strategically significant. Infrastructure sovereignty depends on whether open, governable protocol layers exist through which European merchants, payment firms, and consumer-facing agents can participate without accepting total dependency on one external ecosystem (European Commission, 2023).

## Protocols shape who gets seen, trusted, and ultimately chosen.

The broader conclusion is that future competition in commerce will not be decided only by the firm that has the most persuasive assistant or the most recognizable consumer interface. It will be decided by who helps define the operating rules for delegated transactions. Protocols determine which offers can be found, which claims can be trusted, and where accountability resides when something fails. In that sense, protocol design is becoming market design. The next chapter turns from this infrastructural logic to the empirical laboratory in which many of these dynamics can already be observed at high speed: China (Bohnsack et al., 2024).



# China's Lead

China shows agentic commerce in motion.

Alibaba turns payments and services into orchestration.

ByteDance turns attention and recommendation into execution.

The Chinese ecommerce market is an impressive example of today's possibilities of agentic commerce. Their market combines the prevalence of large consumer platforms, deeply embedded digital payments, dense service integration, and a population already accustomed to moving through multifunctional mobile environments. Earlier work by the World Bank and the BIS had already identified China as a leading case of digitally integrated finance and platform-mediated service delivery. What is new in 2026 is that this environment is now being connected to consumer-facing AI systems that can begin to convert intent into action rather than merely conversation into output (Bech et al., 2020; Chui, 2021; World Bank and People's Bank of China, 2018 and World Bank, 2022).

For Europe, the analytical value of the Chinese pathway lies in the fact that it shows two different roads into hidden agentic commerce. Alibaba represents the first route: commerce, payments, and local services move outward into AI-driven orchestration. ByteDance represents the second: a recommendation and attention machine moves inward toward commerce and transactional execution.

## Alibaba's Qwen

Alibaba's Qwen ecosystem is particularly instructive because it shows how an AI assistant becomes strategically important once it is embedded across an existing commercial stack. Alibaba's January 2026 upgrade framed its LLM called "Qwen" not simply as a chatbot with better reasoning, but as a consumer-facing layer capable of

operating across Taobao, Alipay, Fliggy, Amap, and related services. Reuters reported that the upgraded app could already handle tasks proactively such as ordering food – like the employee in Yancheng – and booking travel directly from within the chat interface or other devices. Alibaba itself described the move as a shift from isolated AI capabilities toward executable real-world services. The significance of this development lies less in any single feature than in the architecture behind it. Qwen reduces the need for the user to move manually between discovery, merchant selection, payment, and fulfillment coordination. The consumer states a goal, and the system increasingly handles the sequence (Alibaba Group, 2026; Yicai Global, 2026).

In the case of Qwen, the visible interface remains conversational, but the economically important activity has shifted below the surface into coordination across services. In other words, the assistant is no longer valuable only because it explains options more elegantly than search. It becomes valuable because it "agenticallly" organizes action across a commercial environment.

In February 2026, Alipay announced that AI payment had exceeded 120 million transactions in one week and stated that Qwen had become the first platform to adopt its Agentic Commerce Trust Protocol, linking Qwen, Taobao Instant Commerce, and Alipay AI Pay. That announcement is important not only because of the sheer numbers, but because it shows that the Chinese market is moving beyond isolated AI assistant functionality toward a trust and authorization layer for delegated transactions [Yicai Global, 2026].

From a European perspective Qwen matters not only because it is becoming a smart agent, but because it sits inside an ecosystem in which those adjacent systems already exist. Europe can learn from this use case that a hidden agent becomes commercially powerful only when it is supported by a payments and trust layer capable of operationalizing delegated intent.

## ByteDance's Douyin

ByteDance's path into hidden commerce is different and, in some respects, even more strategically unsettling for European incumbents. ByteDance begins with attention, recommendation, and habitual media use, then moves toward transaction capability. Reuters has described TikTok and Douyin's recommendation architecture as unusually effective because it relies on rapidly updating interest signals: The Douyin App learns a user's interests from feed behavior, then serves a shoppable video or livestream with an embedded product link so the user can move from discovery to checkout inside Douyin – for example, after repeatedly watching and liking skincare clips, a user may be shown a creator demoing a serum, tap the cart icon, and buy it in the same app flow. The short-video format allows the platform to learn quickly, refine relevance continuously, and present users with content slightly beyond their established preferences in order to strengthen engagement and discovery. In a commerce context, that matters enormously: A platform that already shapes desire, curiosity, and consideration at scale is well positioned to shorten the distance between inspiration and purchase (Li et al., 2022 and Reuters, 2024).

Douyin's commercial environment shows why this close relation matters. Recent academic work from the two authors Liu and Jingwen on platforms finds that purchase intention in Douyin live commerce is strongly influenced by trust, interactivity, and platform-specific social dynamics (Liu and Jingwen, 2025). Li and colleagues find that integrated in-stream purchasing performs better than sending users out to third-party purchase environments, because every extra transition interrupts momentum and reduces conversion (Liu and Jingwen, 2025).

This is precisely what makes the ByteDance route so important for a European analysis. Hidden agents do not need to originate in marketplaces or payment providers. They can emerge from environments that already mediate everyday attention and possess fine-grained behavioral data about interest formation. Once those environments gain stronger agentic capabilities, they can begin to govern not only what consumers notice, but also what gets acted upon.

Its LLM "Doubao" gives ByteDance the missing AI layer for this strategy. Reuters reported in late 2025 that ByteDance

was rolling out a Doubao-based voice assistant capable of finding content and booking tickets on smartphones, and in February 2026 it described Doubao 2.0 as ByteDance's bid for the "agent era," with stronger multi-step execution capabilities. Reuters also noted that Doubao crossed 100 million daily active users during the Lunar New Year period, aided by deep integration into major media events and by its growing role as a practical AI utility. These details show that ByteDance is not simply building a chatbot to compete in a general consumer AI race. It is trying to install an execution-capable AI layer inside an ecosystem already optimized for attention capture, behavioral learning, and high-frequency mobile engagement. The strategic consequence is obvious: where Alibaba can turn transaction infrastructure into orchestration, ByteDance can turn recommendation infrastructure into a hidden commerce gateway (Reuters, 2025).

## The Learnings for European Companies

The difference between the Alibaba case and the ByteDance case is crucial for Europe. Alibaba demonstrates the power of deeply integrated commerce infrastructure once an AI layer can act across it. ByteDance demonstrates the power of recommendation dominance once an AI layer gains the ability to execute.

There is, however, a second lesson in the Chinese case, and it is a cautionary one. The same integration that makes hidden agents effective can also concentrate power and reduce transparency. If product discovery, recommendation, payment authorization, and execution all occur inside the same tightly managed ecosystem, then delegated choice risks becoming difficult to inspect and even harder to contest. Research on Chinese live-streaming and AI-mediated commerce repeatedly points to the importance of trust, governance, and consumer protection in environments where persuasion and transaction are closely coupled. The issue is not that China is uniquely problematic. The issue is that China reveals, earlier than other markets, the trade-off built into highly integrated hidden commerce: lower friction for the user can coincide with greater dependency on the ecosystem operator (Meng, 2026).

For European companies, the central conclusion is therefore twofold. China can be treated as a lead market for observation because it shows how quickly AI can move from conversation to orchestration when embedded in dense consumer ecosystems. But European companies should not blindly treat their Chinese counterparts as blueprints, because the very features that make Chinese hidden agents effective also deepen ecosystem dependency and reduce the visibility of delegated decision-making.



# Europe's Path

The rules are there. The rails are not.

Europe's advantage depends on turning regulation into interoperable infrastructure for delegated commerce.

The observation of China's agentic commerce system leads to a necessary strategic decision for European companies: is European policymaking going to be the Achilles' heel, or could it become the game changer that helps them get back into the race? The answer depends on execution. If European rules remain fragmented across payments, AI, identity, data sharing and consumer protection, then companies may face the worst of both worlds: heavy compliance efforts, fragmented implementation, and insufficient interoperability, while foreign protocol ecosystems set the pace. But the same landscape could become a competitive asset if the pieces are treated as parts of one market design (European Commission, 2025).

By spring 2026, Europe already possesses many of the institutional building blocks that the creation of a delegated commerce environment would require, but not yet a coherent market architecture that binds them together.

- The payment services reform package moved forward significantly when the Council and Parliament reached a provisional political agreement on **PSD3** and the new Payment Services Regulation in November 2025.
- The Commission's open-finance proposal under the Framework for Financial Data Access (**FIDA**) remains aimed at customer-controlled data sharing beyond payment accounts, but it is still under negotiation.
- The European Digital Identity framework is no longer hypothetical: the regulation is in force, and Member States are required to provide **EU Digital Identity** wallets by the end of 2026.
- At the same time, the **AI Act** has already entered into force, its first provisions have been applying since

February 2025, GPAI obligations since August 2025, and the main body of the regime is due to apply from 2 August 2026.

- The Data Act has applied since September 2025, and **DORA** has applied to the financial sector since 17 January 2025.

Taken together, these measures mean that Europe is not starting from zero. It is assembling identity rails, data access rules, AI governance, and operational resilience requirements that could become highly relevant for agentic commerce (Visa, 2025).

If these elements are implemented as a coherent market architecture rather than as isolated legal files, European companies could gain something highly valuable: a continental commerce environment in which delegated action is interoperable, transparent and contestable by design (Anthropic, 2026).

From the perspective of European merchants, the central challenge in such an environment is whether they can avoid becoming dependent on a small number of external gatekeepers by supporting shared standards early enough (European Commission, 2023). For European payment providers and specialized fintechs, the challenge looks different. Once commerce is delegated to software, the key bottleneck moves from checkout design to authorization, identity, mandate management, fraud control and recourse.

The strategic difficulty is that these perspectives do not automatically align. Merchants want reach, conversion and control over customer relationships. Payment providers want secure execution, low fraud and manageable liability. Fintechs want access to reliable data, permissioned

# Build Now

The first agents must be narrow, not invisible.

Europe's advantage lies in bounded autonomy: agents that execute routine tasks while keeping permission, evidence, and recourse intact.

In agentic commerce, the firms that will matter most are not simply those that can attach an AI agent to an existing interface. They are the ones that can make delegation safe and commercially useful. The decisive capability is dependable bounded autonomy: systems that can act within clearly defined mandates, surface the right information at the right moment, and preserve enough evidence for every consequential step. Recent protocol documentation and merchant guidance point in exactly this direction.

This is why European firms should begin with a narrow product development before extending their AI agent ambitions. The first commercially meaningful systems will not be universal personal shoppers. They will be constrained agents designed for a limited class of tasks in which the user's preferences are stable, the downside risk is manageable, and escalation rules can be specified in advance. The emerging delegation literature strongly supports this view. The authors Tomašev, Franklin, and Osindero define intelligent delegation as a transfer not only of task execution but also of authority, responsibility, accountability, role boundaries, and trust mechanisms (Tomašev et al., 2026). NIST's Generative AI Profile reaches a parallel conclusion from the risk-management side by emphasizing documentation,

monitoring, human oversight, and context-sensitive controls. Taken together, these sources imply that the first viable hidden agents in Europe will not be the most autonomous ones. They will be the ones whose mandate is easiest to explain, audit, and revoke (NIST, 2024).

That has immediate product consequences. European companies should start by building narrow mandate systems before they build general assistants. In practical terms, this means starting with use cases such as replenishment of routine household goods, repeat purchase of low-variance items, subscription management, travel rebooking under predefined constraints, or post-purchase service actions such as delivery changes and return initiation. These are settings in which a firm can define spending ceilings, preferred merchants or brands, exclusion rules, approval thresholds, and fallback conditions without requiring the system to interpret the full ambiguity of human preference.

A useful example comes from the food and convenience sector. The idea is not that a household should immediately hand over all grocery shopping decisions to an AI. The more plausible first step is a replenishment agent for recurring everyday products. A connected fridge or kitchen



inventory system could track staple goods such as butter, milk, eggs, or yogurt, combine that information with historic consumption patterns, and estimate when certain items are likely to run low. In a first stage, the system would merely send a stock alert. In a second stage, it could prepare a purchase proposal, for example when a preferred product is currently on sale at a retailer such as Rewe. Only in a third stage would the agent move toward a more autonomous form of action by reordering low-risk standard items like butter within predefined limits for brand, quantity, price, and delivery timing – and finally make the long-discussed “intelligent fridges” become reality. This example illustrates particularly well how agentic commerce is likely to evolve in Europe: not through one sudden leap into full automation, but through gradual delegation in highly standardized, low-complexity purchasing situations.

Beside this choosing of the right starting point for their agentic journey, European firms should also focus on building a reliable permission architecture. Delegated commerce is often described as frictionless, but the strategically important question is how to move friction to the right place. Consent should not be reduced to a vague one-time acceptance of AI agents. It needs to be translated into a rule-based system that specify what the system may buy, within which price bands, from which merchant categories, under what timing constraints, and with which requirements for human confirmation. Google’s identity-linking framework is a good example here because it bundles checkout-lifecycle permissions into a clear consent scope. OpenAI’s delegated payment design similarly restricts how credentials are used and keeps payment handling within the merchant’s or PSP’s normal authorization flow. Visa’s Trusted Agent Protocol pushes the same logic further by emphasizing agent verification and merchant-side trust checks. European firms should read these developments not only as technical specifications but as design principles. A hidden agent becomes acceptable only when its mandate is intelligible before the transaction and contestable after it (OpenAI, 2025; Google Cloud, 2025 and Visa, 2025).

Rather than stopping at checkout, European firms should also build post-purchase intelligence. Much of the current public discussion of agentic commerce still assumes that the breakthrough moment is the purchase itself. In reality, trust is often lost after payment has already been made. If an order changes, a shipment is delayed or a refund becomes necessary, the commerce agent must be able to stay synchronized with the merchant’s operational system. Both Google and OpenAI now explicitly require order-lifecycle updates through webhooks or equivalent APIs so that the AI surface does not become detached from the fulfillment system. This is a crucial lesson for European firms. A hidden agent that can buy but cannot manage returns, corrections, or substitutions, will produce exactly

the kind of unresolved consumer frustration that undermines long-term trust. The better path is to design the agent around the full commercial lifecycle.

This development includes the preservation of meaningful human re-entry points. This is where Europe’s likely market advantage differs most clearly from the current Chinese model. The strongest European systems may not be those in which the agent disappears completely, but those in which the consumer can understand when and why the system is acting, inspect the decision basis, and intervene when needed without destroying convenience. Consumer research on super apps and AI agents suggests that users respond positively to integrated digital services, but that perceived risk remains a major constraint on acceptance from the perspective of the consumers (Hasselwander and Weiss (2025); Hasselwander et al., 2026).

A useful illustration is the mentioned routine grocery or household replenishment case. Properly designed, such a system would begin by asking for allowance before checking predictable depletion patterns for low-variance items. When these agents present a proposal from a preferred

## Bounded autonomy is Europe’s path to agentic commerce.

retailer, they should in advance check whether the item is within the approved brand and price constraints, and only then either asking for confirmation or auto-executing within a narrowly pre-set mandate. The key point in this example is not the intelligent refrigerator or the connected shopping agent. The key point is the architecture of trust within.

Narrow agents should therefore be understood as the first operational product within a broader long-term architecture of delegated commerce. By focusing on this task, European companies can overcome emerging problems like misaligned intent execution of the user, pricing errors and dispute explosions.

Taking this pathway, European companies should stop asking whether they are “agent-ready” and start asking whether they are “delegation-worthy” in specific commercial contexts. Companies that build these capabilities now will not merely be compatible with the next generation of agents. They will help define what legitimate delegated commerce looks like in the future.

# Two Futures

## The agent becomes the gatekeeper.

By 2040, commerce may be controlled by closed ecosystems or opened through interoperable delegation.

By 2040, delegated systems are likely to become the default infrastructure for a large share of routine consumption, even if they will not dominate every single purchase category. For example, luxury purchases, identity-sensitive services, and emotionally charged consumption will probably still need direct human involvement. But for repeatable, low-emotion, high-frequency transactions, consumers will presumably define goals, spending limits, preferences, and exceptions in advance at increased levels and let software manage a bigger part of the transactional execution. In such a scenario, economic value will move away from actors who relied mainly on human traffic aggregation and toward those who control trusted workflow entry points, permission layers, and reliable execution systems (Allouah et al., 2025).

The central question is therefore not whether agentic commerce will exist by 2040, but which institutional form it will take. Two pathways are especially plausible. In the first pathway, highly embedded agents of large platforms take more and more control of consumer choice. In the

second, decentralized agents act primarily on the basis of the consumer's own intent and can operate across interoperable systems. Both futures are technically possible. But they would produce very different distributions of power, visibility, and value.

In the first scenario, discovery, ranking, payment, financing, delivery coordination, and post-purchase service are increasingly organized within a small number of tightly integrated ecosystems. The consumer experiences this as extraordinary convenience. One agent knows preferences, understands context, chooses between merchants, applies platform-specific payment logic, and resolves routine follow-up tasks without requiring much active management. The system appears frictionless because it disappears into daily life. It sits inside the smartphone, the messaging environment, the social platform, the voice assistant, the operating system, or the payment wallet. Commerce becomes something that happens almost incidentally within one continuous digital environment (van Dijck et al., 2019).



The commercial logic of such a world is straightforward. The closer a company sits to everyday intent formation, the stronger its structural advantage. Platforms that already mediate communication, entertainment, mobility, search, or payments would be especially well positioned. If they also control identity rails, trust services, reputation systems, or protocol layers, their power deepens further. The winners in this scenario are therefore likely to be those actors that can combine consumer access with execution authority. The hidden agent becomes not just a helpful tool, but the new gatekeeper of economic attention and action.

For consumers, this future offers real benefits. Transactions become faster, coordination costs fall, and routine decision-making becomes less burdensome. But the price of convenience is that choice is increasingly pre-structured by the systems that control the agentic environment. The consumer may still feel free, but the available options, rankings, defaults, financing pathways, and merchant visibility are more heavily shaped by the platform than before. What used to be the visible power of the marketplace homepage becomes the invisible power of the orchestration layer. The losers in this scenario are likely to be merchants, payment providers, and specialized intermediaries that remain outside those dominant ecosystems or are only accessible through them on unfavorable terms. Smaller intermediaries in particular may discover that their former role as traffic brokers or interface providers has become dispensable.

In the second scenario, decentralized agents act primarily on the basis of consumer-defined intent, permissions, and preferences. Here the user is not locked into one dominant environment. Instead, interoperable systems allow agents to search, pay, and trigger service processes across merchants, payment providers, and financing partners. The decisive difference is that delegation remains attached more closely to the consumer than to the platform. Agents compete for the trust of the consumers by earning delegated trust through performance, transparency, and clear governance (Anthropic, 2026). In such a scenario, the consumer can choose on his own, which agent he trusts when it comes to performing autonomously commercial interactions.

This second future would shift economic value in a very different way. Large platforms like Amazon would not disappear, but they could lose some of their gatekeeping power. If interoperable protocols and open discovery layers become strong enough, platforms may increasingly appear as middlemen that are no longer necessary for many transactions. Merchants and brands could regain more direct access to consumers through agent-mediated channels. Payment providers, banks, fintechs, and identity services could remain specialized actors with their own agent offerings rather than being absorbed into one

vertically integrated super-platform. The winners in this world would be those who enable effective, transparent, and consumer-oriented execution: firms that provide trusted data, secure authorization, auditable payment mandates, dispute resolution, and machine-readable service quality.

This scenario would not necessarily feel as seamless as the first one, at least not initially. Consumers might interact with more visible agent types and choose among merchant agents, bank agents, payment agents, or device-based assistants. But what appears less elegant at first glance may in fact prove more resilient. Greater visibility can support clearer consent, easier contestability, better understanding of who acts for whom, and a healthier degree of competition among agent types and classes. In such a system, trust is not monopolized by one integrated environment. It is distributed across interoperable participants. That could become a decisive European advantage.

## The winners of 2040 may not be the firms with the smartest agents, but those with the most trusted execution.

In practice, future commerce is likely to combine elements of both pathways, with some domains tending toward ecosystem concentration and others toward interoperable delegation. From a European perspective, the strategic aim should be to make the second pathway more likely. That does not mean rejecting convenience or slowing innovation. It means avoiding a future in which delegated commerce becomes synonymous with closed control systems. Europe's task is to foster transparency in data access, agent decision-making, levels of autonomy, and recourse when things go wrong. If it succeeds, then 2040 need not belong automatically to the biggest integrated platforms. It could instead belong to those actors that make delegated commerce interoperable and trustworthy at scale (European Commission, 2024).

# Conclusion

**The European Answer: Hidden agents need visible accountability.**

Europe should not copy China's speed. It should show how delegated commerce can become powerful without becoming opaque.

The rise of visible and hidden agents marks a structural turning point in the history of commerce. The change is not simply that artificial intelligence becomes better at answering questions, summarizing reviews, or supporting search. The deeper change is that software systems are increasingly becoming able to act under delegated authority. Once this happens, the basic logic of commerce begins to shift. Digital markets are no longer organized only around storefronts, brands, and consumer attention. They are increasingly organized around permissions, protocols, identity, payment authority, and trusted execution. In other words, the center of gravity moves from the visible surface of commerce toward the hidden architecture that allows software to search, decide, transact, and resolve problems on behalf of users (Verhoef et al., 2021).

China offers an especially revealing view of this transformation because it shows how quickly the distance between recommendation and execution can shrink when digital ecosystems are dense and integration barriers are low. The examples discussed in this paper demonstrate two particularly important pathways. Alibaba's Qwen shows how hidden orchestration emerges when AI is linked directly to commerce, payment, travel, and local services.

ByteDance's Doubao-Douyin stack shows that hidden commerce can also grow out of recommendation systems and attention environments, where desire is formed before transactions are settled. Together, these examples make clear that agentic commerce will not develop only in one institutional form. It can be built from commerce outward, or from content inward. In both cases, however, the decisive development is the same: AI becomes commercially powerful once it is connected to executable service environments.

For Europe, the strategic challenge is therefore not whether agentic commerce will arrive, but under which conditions it will take shape. Europe is unlikely to outperform China or the largest American platforms by simply copying their models of highly integrated ecosystems. Nor would such imitation necessarily be desirable. The European opportunity lies elsewhere. It lies in building a distinct interoperable architecture of delegated commerce in which agents are interoperable, permission-based, transparent, auditable, and contestable. This is not a weaker alternative to convenience. It is a different answer to the question of how commerce should function once software begins to act for humans.



This implies a demanding agenda for European companies. Merchants must become machine-legible without surrendering all strategic control to external gatekeepers. Payment providers must develop rails that can verify mandates, enforce boundaries, and document consent in real time. Banks and fintechs must position themselves as trusted providers of identity, financing, and recourse within delegated transaction flows. Across all these roles, the essential task is not only to become technically compatible with other agents or merchants, but to become delegation-worthy. Companies will need to prove that their systems work seamlessly together within the e-commerce environment and can be trusted by consumers and by other market participants alike. In the agentic era, usefulness alone will not be enough. Interoperability becomes a form of competitive infrastructure.

The central thesis of this paper follows directly from this diagnosis. The future of commerce will not be shaped only by the intelligence of the best assistant. It will be shaped by the architecture of delegated action. The decisive issue is who is allowed to act on behalf of the consumer, under which conditions, through which protocols, with what payment authority, and with what safeguards when something goes wrong.

European companies should not try to win the future of commerce by copying China one-to-one. They should try to win by shaping a different model of agentic commerce: one in which the degree of agentic invisibility is balanced by interoperability and accountability. A model in which delegation is enabled by trust and user choice rather than opacity, and one in which interoperability prevents the new execution layer from becoming the next closed bottleneck of digital markets. If China currently shows how fast hidden agents can emerge, Europe still has the chance to show how they should be governed. That may ultimately prove the more durable advantage.

If China shows how fast  
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- Accornero, Paul F. (2025):** The Shopper Schism: Structural Disaggregation of Consumer and Shopper in AI-Mediated Commerce, published in: [www.ssrn.com](http://www.ssrn.com), URL: [\[https://ssrn.com/abstract=5753722\]](https://ssrn.com/abstract=5753722).
- Alibaba Group (2026):** Alibaba's Qwen App Advances Agentic AI Strategy by Turning Core Ecosystem Services into Executable AI Capabilities, published in: [www.alibabagroup.com](http://www.alibabagroup.com), URL: [\[https://www.alibabagroup.com/document-1948497434959151104\]](https://www.alibabagroup.com/document-1948497434959151104).
- Allouah, Amine, Omar Besbes, Josué D. Figueroa, Yash Kanoria and Akshit Kumar (2025):** What Is Your AI Agent Buying? Evaluation, Biases, Model Dependence, & Emerging Implications for Agentic E-Commerce, published in: [www.arxiv.org](http://www.arxiv.org), URL: [\[https://arxiv.org/abs/2508.02630\]](https://arxiv.org/abs/2508.02630).
- Alipay (2025):** Alipay Tap! Users Reach 200 Million, Expands to Over 1,000 Scenarios Beyond Payments, published in: [www.businesswire.com](http://www.businesswire.com), URL: [\[https://www.businesswire.com/home/20250911881010/en/Alipay-Tap-Users-Reach-200-Million-Expands-to-Over-1000-Scenarios-Beyond-Payments\]](https://www.businesswire.com/home/20250911881010/en/Alipay-Tap-Users-Reach-200-Million-Expands-to-Over-1000-Scenarios-Beyond-Payments).
- Amazon (2024):** Amazon announces Rufus, a new generative AI-powered shopping assistant, published in: [www.aboutamazon.com](http://www.aboutamazon.com), URL: [\[https://www.aboutamazon.com/news/retail/amazon-rufus\]](https://www.aboutamazon.com/news/retail/amazon-rufus).
- Anthropic (2024):** Introducing the Model Context Protocol, published in: [www.anthropic.com](http://www.anthropic.com), URL: [\[https://www.anthropic.com/news/model-context-protocol\]](https://www.anthropic.com/news/model-context-protocol).
- Anthropic (2026):** Donating the Model Context Protocol and establishing the Agentic AI Foundation, published in: [www.anthropic.com](http://www.anthropic.com), URL: [\[https://www.anthropic.com/news/donating-the-model-context-protocol-and-establishing-of-the-agentic-ai-foundation\]](https://www.anthropic.com/news/donating-the-model-context-protocol-and-establishing-of-the-agentic-ai-foundation).
- Alibaba (2026):** Alibaba's Qwen App Advances Agentic AI Strategy by Turning Core Ecosystem Services into Executable AI Capabilities, published in: URL: [\[https://www.alibabagroup.com/en-US/document-1948497434959151104\]](https://www.alibabagroup.com/en-US/document-1948497434959151104).
- Armstrong, Mark (2005):** Competition in two-sided markets, published in: [www.discovery.ucl.ac.uk](http://www.discovery.ucl.ac.uk), URL: [\[https://discovery.ucl.ac.uk/id/eprint/14583/1/14583.pdf\]](https://discovery.ucl.ac.uk/id/eprint/14583/1/14583.pdf).
- Bar-Gill, Oren (2023):** Algorithmic Harm in Consumer Markets, published in: [www.academic.oup.com](http://www.academic.oup.com), URL: [\[https://doi.org/10.1093/jia/laad003\]](https://doi.org/10.1093/jia/laad003).
- Bech, Morten L., Umar Faruqui and Takeshi Shirakami (2020):** Innovations in payments, published in: [www.bis.org](http://www.bis.org), URL: [\[https://www.bis.org/publ/qtrpdf/r.qtr2003f.htm\]](https://www.bis.org/publ/qtrpdf/r.qtr2003f.htm).
- Bohnsack, René, Michael Rennings, Carolin Block and Stefanie Bröring (2024):** Profiting from innovation when digital business ecosystems emerge: A control point perspective, published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://doi.org/10.1016/j.respol.2024.104961\]](https://doi.org/10.1016/j.respol.2024.104961).
- Chui, Michael (2021):** Money, technology and banking: what lessons can China teach the rest of the world?, published in: [www.bis.org](http://www.bis.org), URL: [\[https://www.bis.org/publ/work947.pdf\]](https://www.bis.org/publ/work947.pdf).
- European Central Bank (2025):** Study on the payment attitudes of consumers in the euro area (SPACE 2024), published in: [www.ecb.europa.eu](http://www.ecb.europa.eu), URL: [\[https://www.ecb.europa.eu/stats/ecb\\_surveys/space/html/ecb.space2024-19d46f0f17.en.html\]](https://www.ecb.europa.eu/stats/ecb_surveys/space/html/ecb.space2024-19d46f0f17.en.html).
- European Commission (2023):** Financial data access and payments package, published in: [www.finance.ec.europa.eu](http://www.finance.ec.europa.eu), URL: [\[https://finance.ec.europa.eu/publications/financial-data-access-and-payments-package\\_en\]](https://finance.ec.europa.eu/publications/financial-data-access-and-payments-package_en).
- European Commission (2024):** Questions and Answers on the Digital Fairness Fitness Check, published in: [www.ec.europa.eu](http://www.ec.europa.eu), URL: [\[https://ec.europa.eu/commission/presscorner/detail/fi/qanda\\_24\\_4909\]](https://ec.europa.eu/commission/presscorner/detail/fi/qanda_24_4909).
- European Commission (2025):** New data shows strong levels of consumer trust, but online threats persist, published in: [www.cyprus.representation.ec.europa.eu](http://www.cyprus.representation.ec.europa.eu), URL: [\[https://cyprus.representation.ec.europa.eu/news/new-data-shows-strong-levels-consumer-trust-online-threats-persist-2025-03-14\\_en\]](https://cyprus.representation.ec.europa.eu/news/new-data-shows-strong-levels-consumer-trust-online-threats-persist-2025-03-14_en).
- Google Cloud (2025):** Announcing Agent Payments Protocol (AP2), published in: [www.cloud.google.com](http://www.cloud.google.com), URL: [\[https://cloud.google.com/blog/products/ai-machine-learning/announcing-agents-to-payments-ap2-protocol\]](https://cloud.google.com/blog/products/ai-machine-learning/announcing-agents-to-payments-ap2-protocol).
- Google Developers Blog (2025):** Announcing the Agent2Agent Protocol (A2A), published in: [www.developers.googleblog.com](http://www.developers.googleblog.com), URL: [\[https://developers.googleblog.com/en/a2a-a-new-era-of-agent-interoperability/\]](https://developers.googleblog.com/en/a2a-a-new-era-of-agent-interoperability/).
- Google Developers Blog (2026):** Under the Hood: Universal Commerce Protocol (UCP), published in: [www.developers.googleblog.com](http://www.developers.googleblog.com), URL: [\[https://developers.googleblog.com/under-the-hood-universal-commerce-protocol-ucp/\]](https://developers.googleblog.com/under-the-hood-universal-commerce-protocol-ucp/).
- Hasselwander, Marc and Daniel Weiss (2025):** Consumer preferences for super app services: E-commerce, social media, and banking dominate, published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://doi.org/10.1016/j.iiedeen.2025.100284\]](https://doi.org/10.1016/j.iiedeen.2025.100284).
- Hasselwander, Marc, Varsolo Sunio, Oliver Lah and Emmanuel Mogaji (2026):** Toward agentic AI: User acceptance of a deeply personalized AI super assistant (AISA), published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://doi.org/10.1016/j.jretconser.2025.104620\]](https://doi.org/10.1016/j.jretconser.2025.104620).
- Holzinger, Andreas, Kurt Zatloukal and Heimo Müller (2025):** Is human oversight to AI systems still possible?, published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://doi.org/10.1016/j.nbt.2024.12.003\]](https://doi.org/10.1016/j.nbt.2024.12.003).
- Horn, Matthias (2020):** Automated portfolio rebalancing: Automatic erosion of investment performance?, published in: [The Journal of Asset Management](http://The Journal of Asset Management), Volume 21, URL: [\[https://link.springer.com/article/10.1057/s41260-020-00183-0\]](https://link.springer.com/article/10.1057/s41260-020-00183-0).
- Li, Xitong, Jörn Grahl and Oliver Hinz (2022):** How Do Recommender Systems Lead to Consumer Purchases? A Causal Mediation Analysis of a Field Experiment, published in: [www.pubsonline.informs.org](http://www.pubsonline.informs.org), URL: [\[https://doi.org/10.1287/isre.2021.1074\]](https://doi.org/10.1287/isre.2021.1074).
- Liu, Huifang and Liang Jingwen (2025):** A Study on the Factors Influencing Chinese Costume Consumers Utilizing Live Streaming Platforms to Purchase Products: A Case Study of Douyin, published in: [www.mdpi.com](http://www.mdpi.com), URL: [\[https://doi.org/10.3390/jtaer20010038\]](https://doi.org/10.3390/jtaer20010038).
- Meng, Yuxi (2026):** Governing AI virtual anchors in China's live streaming E-commerce ecosystem: Policy challenges and global implications, published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://www.sciencedirect.com/science/article/pii/S030859612500206\]](https://www.sciencedirect.com/science/article/pii/S030859612500206).
- National Institute of Standards and Technology (2024):** Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile, published in: [www.nvlpubs.nist.gov](http://www.nvlpubs.nist.gov), URL: [\[https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.600-1.pdf\]](https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.600-1.pdf).
- Nisa, Umem, Muhammad Shirazi, Mohamed Ali Saip and Muhammad Syafiq Mohd Pozi (2026):** Agentic AI: The age of reasoning—A review, published in: [www.sciencedirect.com](http://www.sciencedirect.com), URL: [\[https://www.sciencedirect.com/science/article/pii/S2949855425000516\]](https://www.sciencedirect.com/science/article/pii/S2949855425000516).
- OpenAI (2025a):** Buy it in ChatGPT: Instant Checkout and the Agentic Commerce Protocol, published in: [www.openai.com](http://www.openai.com), URL: [\[https://openai.com/index/buy-it-in-chatgpt/\]](https://openai.com/index/buy-it-in-chatgpt/).
- OpenAI (2025b):** Agentic Checkout Spec, published in: [www.developers.openai.com](http://www.developers.openai.com), URL: [\[https://developers.openai.com/commerce/specs/checkout/\]](https://developers.openai.com/commerce/specs/checkout/).
- PayPal Editorial Staff (2026):** What Merchants Need to Know About Agentic Commerce and Why It's Harder Than It Looks, published in: [www.paypal.com](http://www.paypal.com), URL: [\[https://www.paypal.com/us/brc/article/agentic-commerce-merchant-readiness-checklist\]](https://www.paypal.com/us/brc/article/agentic-commerce-merchant-readiness-checklist).
- Rochet, Jean-Charles and Jean Tirole (2003):** Platform Competition in Two-Sided Markets, published in: [www.academic.oup.com](http://www.academic.oup.com), URL: [\[https://academic.oup.com/jeea/article/1/4/990/2280902\]](https://academic.oup.com/jeea/article/1/4/990/2280902).
- Reuters (2024):** What is so special about TikTok's technology, published in: [www.reuters.com](http://www.reuters.com), URL: [\[https://www.reuters.com/technology/what-is-so-special-about-tiktoks-technology-2024-04-26/\]](https://www.reuters.com/technology/what-is-so-special-about-tiktoks-technology-2024-04-26/).
- Reuters (2025):** ByteDance rolls out AI voice assistant for Chinese smartphones, published in: [www.reuters.com](http://www.reuters.com), URL: [\[https://www.reuters.com/world/china/bytedance-rolls-out-ai-voice-assistant-chinese-smartphones-2025-12-01/\]](https://www.reuters.com/world/china/bytedance-rolls-out-ai-voice-assistant-chinese-smartphones-2025-12-01/).
- SAE International (2021):** SAE Levels of Driving Automation Refined for Clarity and International Audience, published in: [www.sae.org](http://www.sae.org), URL: [\[https://www.sae.org/news/blog/sae-levels-driving-automation-clarity-refinements\]](https://www.sae.org/news/blog/sae-levels-driving-automation-clarity-refinements).
- Tomašev, Nenad, Matija Franklin and Simon Osindero (2026):** Intelligent AI Delegation, published in: [www.arxiv.org](http://www.arxiv.org), URL: [\[https://arxiv.org/abs/2602.11865\]](https://arxiv.org/abs/2602.11865).
- van Dijck, José, David Nieborg and Thomas Poell (2019):** Reframing platform power, published in: [www.policyreview.info](http://www.policyreview.info), URL: [\[https://policyreview.info/articles/analysis/reframing-platform-power\]](https://policyreview.info/articles/analysis/reframing-platform-power).
- Verhoef, Peter C., Thijs Broekhuizen, Yakov Bart, Abhi Bhattacharya, John Qi Dong, Nicolai Fabian and Michael Haenlein (2021):** Digital transformation: A multidisciplinary reflection and research agenda, published in: [www.doi.org](http://www.doi.org), URL: [\[https://doi.org/10.1016/j.jbusres.2019.09.022\]](https://doi.org/10.1016/j.jbusres.2019.09.022).
- Visa (2025):** Enabling AI agents to buy securely and seamlessly, published in: [www.corporate.visa.com](http://www.corporate.visa.com), URL: [\[https://corporate.visa.com/en/products/intelligent-commerce.html\]](https://corporate.visa.com/en/products/intelligent-commerce.html).
- Visa (2025):** Visa Introduces Trusted Agent Protocol: An Ecosystem-Led Framework for AI Com-



merce, published in: [www.investor.visa.com](https://investor.visa.com/news/news-details/2025/Visa-Introduces-Trusted-Agent-Protocol-An-Ecosystem-Led-Framework-for-AI-Commerce/default.aspx), URL: [https://investor.visa.com/news/news-details/2025/Visa-Introduces-Trusted-Agent-Protocol-An-Ecosystem-Led-Framework-for-AI-Commerce/default.aspx].

**World Bank (2022):** The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19, published in: [www.worldbank.org](https://documents1.worldbank.org/curated/en/099818107072234182/pdf/ID-U06a834fe908933040670a6560f44e3f4d35b7.pdf), URL: [https://documents1.worldbank.org/curated/en/099818107072234182/pdf/ID-U06a834fe908933040670a6560f44e3f4d35b7.pdf].

**Waymo (2026):** Florida's New Way to Ride: Waymo Opens to Everyone in Miami and Orlando, published in: [www.waymo.com](https://waymo.com/blog/2026/04/floridas-new-way-to-ride), URL: <https://waymo.com/blog/2026/04/floridas-new-way-to-ride>.

**World Bank and People's Bank of China (2018):** Toward Universal Financial Inclusion in China: Models, Challenges, and Global Lessons, published in: [www.worldbank.org](https://documents.worldbank.org/curated/en/281231518106429557/pdf/123323-FinancialInclusionChina-9Aug18.pdf), URL: [https://documents.worldbank.org/curated/en/281231518106429557/pdf/123323-FinancialInclusionChina-9Aug18.pdf].

**Yicai Global (2026):** Alibaba Turns Qwen From Chatbot to AI Task Performer Across Its App Suite, published in: [www.yicaiglobal.com](https://www.yicaiglobal.com/news/qwen-transforms-ai-that-responds-into-action-ai-across-alibabas-app-suite), URL: [https://www.yicaiglobal.com/news/qwen-transforms-ai-that-responds-into-action-ai-across-alibabas-app-suite].

## About the Autor:



**Prof. Dr. Roland Frank** is an expert in digital transformation and a scientist with over 15 years of experience at the intersection of media, technology, and management.

His research focuses on digital transformation, disruption of consumer markets and trend and future research. He currently holds workshops and seminars on the question of how AI can be integrated into companies' workflows and innovation processes to create new digital products.

Before taking up the professorship for "Digital Leadership", Roland Frank was responsible for the banking regulation section of the Börsen-Zeitung in Frankfurt.

## About Riverty:

Riverty, the Fintech company of **Bertelsmann**, supports thousands of merchants and over 28 million consumers by processing more than 80 million transactions monthly. Offering flexible payments, debt collection, and smart accounting solutions, Riverty empowers businesses and consumers with cutting-edge financial services. With a dedicated team of over 4,000 employees across 11 countries in Europe and North America, Riverty is a leader in delivering comprehensive financial solutions.

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