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Digital Commerce Technologies Primer for 2018

Published 5 January 2018 - ID G00343992 - 14 min read

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Supporting Key Initiative is [Digital Commerce Technologies](#)

Successful digital commerce is increasingly complex now that both customers and businesses are digitally enabled. Application leaders responsible for digital commerce technologies must develop strategies based on future trends and execute tactical projects to deliver a superior customer experience.

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Scope

Digital commerce initiatives should create superior customer experiences and foster customer loyalty by balancing tactical projects with innovation.

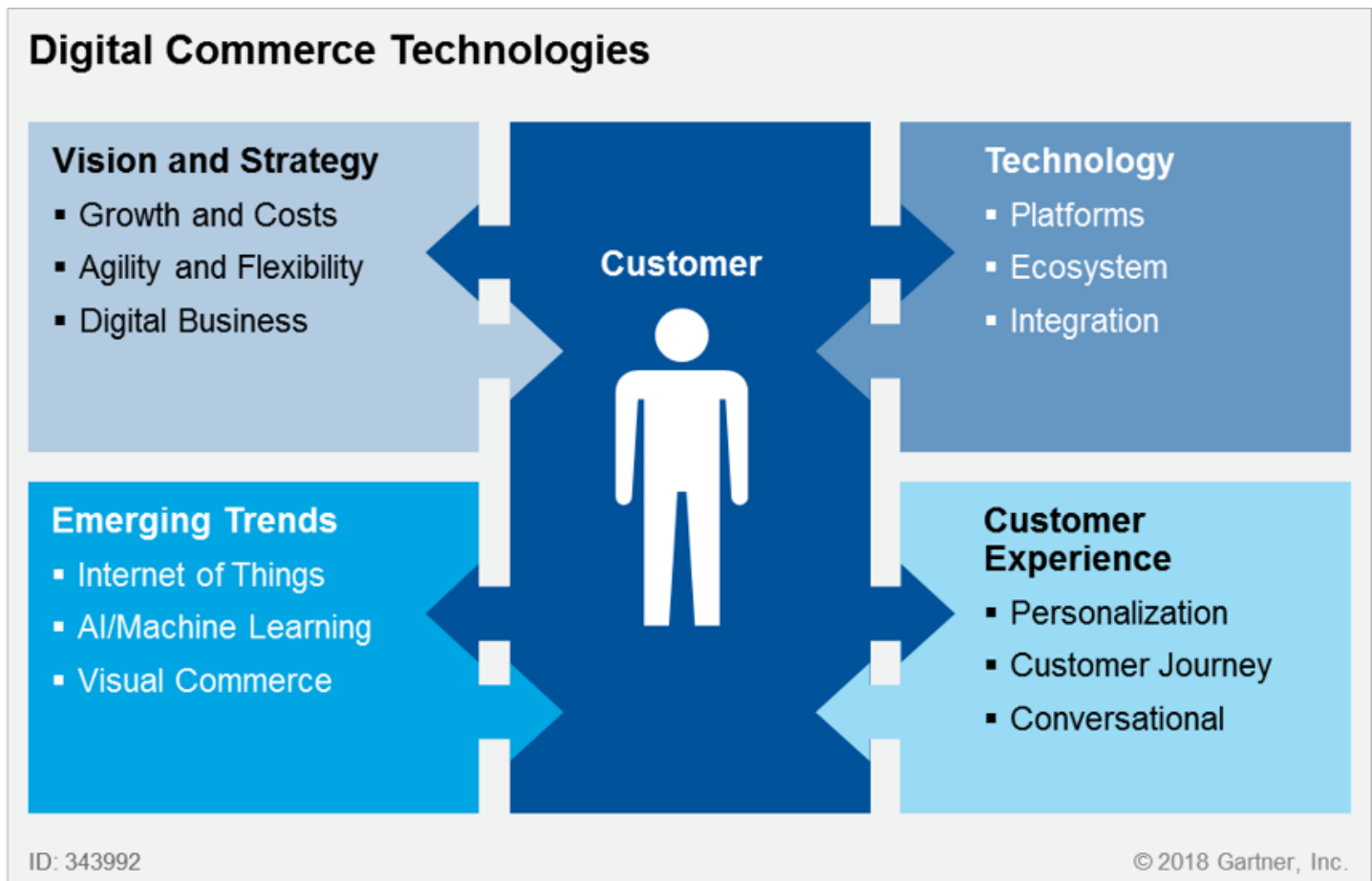
To accomplish this, organizations should:

- Create a customer-focused digital commerce strategy.
- Leverage the digital commerce platform and application ecosystem as a way to scale digital commerce into digital business.
- Improve commerce key performance indicators (KPIs) and deliver a superior customer experience by optimizing vendor selection and developing partner relationships to foster the growth of a technology ecosystem.
- Orchestrate an engaging digital customer experience across many channels.

- Develop strategies and use technology that enables agility and flexibility, recognizing that customer expectations for a superior experience are rapidly changing and that their preferences and desired engagement channels are also evolving.
- Prepare today for the future of digital commerce — "commerce that comes to you."

Analysis

Figure 1. Digital Commerce Technologies Overview



Source: Gartner (January 2018)

Today's customers live in a web of digital connections with more information, devices and interaction channels than ever before. This diversity of potential customer engagement channels challenges application leaders to provide superior customer experiences. Customers expect an intensely personal online buying experience that satisfies their requirements for speed, convenience and simplicity, wherever they are and whenever they need or desire something.

Application leaders responsible for digital commerce must develop a holistic view of the customer and leverage technologies to meet their digital aspirations. Meeting these demands entails continually adding, upgrading and optimizing a range of technologies. Technology must be agile enough to quickly respond to changing customer demands while maintaining the low total cost of ownership (TCO) that modern technology organizations demand. Application leaders must align their customer experience vision and technology solutions with business objectives and growth goals as they move toward digital business.

To keep pace with digital business and digital customers, organizations need technology that is flexible, modular in design, adaptable and scalable. Digital commerce leaders must evaluate a growing and changing landscape of vendors and technical capabilities where differentiation is difficult to discern and integration requirements become more complex as the number of capabilities and vendors rises. Those who can adapt most quickly will gain an early competitive advantage.

Application leaders need to center their decisions on the digital customer in four main areas: vision and strategy, technology, emerging trends, and customer experience. By doing so, a customer-centric approach will guide the organization in discovering, designing and delivering a compelling digital commerce experience. It will also align digital commerce more closely and clearly with overall digital business goals.

Top Challenges and How Gartner Can Help

Successful digital commerce facilitates transactions over a variety of channels and creates and nurtures the online customer relationship. It does so through a modern and flexible technical architecture and infrastructure that digital commerce leaders can adapt to meet changing customer expectations and market conditions. Tactical actions and technology decisions should be guided by the organization embracing a sound digital commerce strategy centered on the customer. Many organizations are beginning to prepare for the future of digital commerce in which technologies like virtual personal assistants, artificial intelligence (AI) and machine learning play a significant role in predicting and executing digital commerce transactions (see "[Industry Vision: Commerce That Comes to You](https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164>)).

How do I develop a digital commerce strategy that aligns with the changing state of commerce and customer expectations?

Digital commerce is evolving rapidly. Each passing year brings new channels, new payment types and new technologies for application leaders to leverage in their quest to provide a superior customer experience. Digital commerce ventures are expanding beyond the original focus on transactions to make customer experience the differentiator for both business-to-customer (B2C) and B2B selling.

Customers possess an increasing amount of information and, therefore, more buying leverage. The benchmark for customers' expectations of their digital experience is their last "great" experience. Organizations need to be capable of adapting to both changing customer expectations and market conditions, including serving customers in new channels and being available whenever, and wherever, they are needed.

Being aware of the dynamic character of customer relationships and of the online customer experience is the starting point for embracing digital commerce. Application leaders also need to develop internal alignment between various business units and the overall growth objectives of the organization when developing a digital commerce strategy and deploying digital commerce solutions. More importantly, they should consider the imperative of digital transformation, a key objective for many digital commerce organizations. These disparate business units will need to calibrate their expected key performance indicators (KPIs) and objectives to ensure success. Companies should:

- Use Gartner's "[How to Develop a Digital Commerce Strategy](https://www.gartner.com/document/code/290525?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/290525?ref=grbody&refval=3843164>) for guidance on how to

align strategy with business objectives, correctly consider the customer experience and prepare for a rapidly changing market.

- Use Gartner's "[How to Manage Digital Commerce Metrics](https://www.gartner.com/document/code/318620?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/318620?ref=grbody&refval=3843164>) to develop a cohesive set of digital commerce metrics that will allow everyone to focus on the most important initiatives.
- For organization changes or considerations on the structure of digital commerce teams, leverage Gartner's "[Design an Effective Organization for Digital Commerce](https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164)." (<https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164>)
- Optimize commerce releases and ongoing operations with Gartner's "[Build an Agility-Based Commerce Release Practice to Deliver Business Outcomes](https://www.gartner.com/document/code/337889?ref=grbody&refval=3843164)." (<https://www.gartner.com/document/code/337889?ref=grbody&refval=3843164>)
- Select a digital commerce service provider based on the guidelines in Gartner's "[10 Key Attributes for Selecting a Digital Commerce Service Provider](https://www.gartner.com/document/code/328896?ref=grbody&refval=3843164)." (<https://www.gartner.com/document/code/328896?ref=grbody&refval=3843164>)

Planned Research

- Research on using digital commerce platforms and initiatives as a starting point for digital business and digital business platforms
- Research on optimizing commerce based on a future vision of the customer experience
- Research on best practices for digital commerce retailers
- Research about the convergence of multiple order entry points within B2B commerce

How do I select a digital commerce platform or architecture that will help me meet my business goals, maintain flexibility and position me to adapt to trends?

Commerce platform projects vary significantly in their architectural and strategic approaches. They include:

- Moving from a homegrown e-commerce system to a modern digital commerce platform
- Upgrading an existing platform
- Deploying a new platform for the first time
- Moving from a large, monolithic platform to a more modular, API-based approach
- Integrating commerce services with external-, content- and experience-focused platforms

Regardless of the approach, commerce platform initiatives are highly visible inside the organization and carry strategic significance, with noteworthy financial implications. Choosing an approach, and

subsequently a vendor, are complicated by the fact that it's often hard to differentiate one platform from another or to grasp the implications of differences for the organization's selling strategy and for the customer's experience.

The technology-related decisions about features and vendors are easier to discern and prioritize if digital commerce leaders take a strategic view when choosing a platform. What are the desired business outcomes? How do your customers make their buying decisions, and how can you facilitate that process? How well do you understand your customers' journeys on their path to purchasing? How can you make it easier for your customers to engage with you and purchase services or products from you?

To select or build a platform that fits the market/industry and the organization's size, application leaders supporting digital commerce need to understand the different deployment models, hosting options, pricing models and features that are inherent in digital commerce platforms. Additionally, they must understand their internal development capabilities and form strategic partnerships with solution integrators to deliver quality integrations. They should:

- Choose an applicable approach for digital commerce architecture, based on the organization's customer experience goals, development capabilities and vision for strategic evolution of their commerce initiatives. Use "[The Three Approaches to Digital Commerce Platform Architecture and How to Choose Among Them](https://www.gartner.com/document/code/319165?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/319165?ref=grbody&refval=3843164>) to develop an understanding of the different approaches.
- Recognize the implications of different deployment methods and their associated pricing models. Use "[Digital Commerce Platforms Moving to the Cloud: The Steps to Take and the Benefits You Can Expect](https://www.gartner.com/document/code/311136?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/311136?ref=grbody&refval=3843164>) to facilitate platform selection.
- Understand which digital commerce platforms offer features that are consistent with the organization's current commerce goals while maintaining a view of what the digital commerce platform and site will become in the future.
- Use the 2017 "[Magic Quadrant for Digital Commerce](https://www.gartner.com/document/code/303191?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/303191?ref=grbody&refval=3843164>) and "[Critical Capabilities for Digital Commerce](https://www.gartner.com/document/code/312924?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/312924?ref=grbody&refval=3843164>) to evaluate vendors' offerings and understand the strengths and weaknesses of each. Look for new versions to be published in 2018.
- Use the 2017 update to the "[Toolkit: RFP for Digital Commerce Platforms](https://www.gartner.com/document/code/280297?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/280297?ref=grbody&refval=3843164>) to develop internal requirements and construct an RFP.
- For platforms that do not provide everything needed for a modern customer experience, ask vendors about missing features and/or consider integration with web content management (WCM) or digital experience platform (DXP) applications.

Planned Research

- Magic Quadrant for Digital Commerce
- Critical Capabilities for Digital Commerce
- Research on B2B commerce relative to procurement systems and marketplaces
- Additional research about API-based commerce approaches
- Research about the intersection of content and commerce relative to DXPs
- Research about reference architectures for digital commerce

Which digital commerce ecosystem components should I pursue?

The modern digital commerce experience combines an array of externally and internally facing components. The technology and vendor options available are also numerous. Sorting out these options is both a tactical and technical issue, but it's also critical to relate these options, their implications and trade-offs to an organizationwide digital commerce strategy.

A digital commerce experience blends numerous applications and systems to create an online buying experience for digital customers, but experiences are often the result of ad hoc technology decisions. Deciding what to add or upgrade is already a complex process and is further complicated by each component (often) being available from several different vendors. Technology decisions made by digital commerce leaders – and increasingly by business unit leaders – should be guided by a wider perspective: deciding to add or improve each component of the digital buying experience based on customer-centered business objectives.

Application leaders responsible for digital commerce technologies should take the following initial steps:

- Work with constituents from across the organization to develop a sound understanding of existing customer experiences and customer expectations for the future.
- Study what your competitors, as well as the innovators outside your industry, are doing. Understand that customer expectations are formed by their last great experience, whether it was within your industry or not.
- Use Gartner research to understand the maturity level of digital commerce ecosystem technologies and balance this against the organization's appetite for risk and innovation (see "[Leverage the Digital Commerce Technology Ecosystem to Optimize IT Decisions](https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164>)).
- Use Gartner research to understand which technology applications are most appropriate for the organization's size, market and business model.
- Develop a holistic roadmap that balances the need for a solid digital commerce foundation with the desire for innovation. Use Gartner's pace-layered approach (see "[Toolkit: Developing a Pace-Layered Application Strategy for Digital Commerce](https://www.gartner.com/document/code/333615?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/333615?ref=grbody&refval=3843164>)) while leveraging Gartner analysts for an understanding of future trends.

- Map out the lines of authority for digital commerce decision making with stakeholders (see "[Design an Effective Organization for Digital Commerce](https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164>)).
- Develop shortlists of vendors by speaking to analysts from the digital commerce team about the vendors included in Gartner's "[The Gartner Digital Commerce Vendor Guide, 2017.](https://www.gartner.com/document/code/326514?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/326514?ref=grbody&refval=3843164>)

Planned Research

- Hype Cycle for Digital Commerce, 2018
- The Gartner Digital Commerce Vendor Guide, 2018
- What's Hot in Digital Commerce, 2018
- Research about integration between commerce platforms and other components of the commerce ecosystem

Which digital commerce trends do I need to prepare for in the short term? Long term?

The rapid evolution of the digital commerce market shows itself in specific trends affecting both B2C and B2B commerce sellers. In the B2C market, the increasing number of devices and channels — both digital and physical — has given ultimate power to consumers. They can now research and evaluate products more thoroughly than ever before. Today's consumers engage with companies in more ways and through more channels, and they expect a more personalized experience. These requirements make a comprehensive view of the customer journey far more complex to understand and construct, but without this level of understanding, organizations will fail to engage customers in a consistent and compelling manner.

In B2B digital commerce, the ongoing consumerization of B2B buyers results in the desire for best-in-class, B2C-like experiences from B2B sellers. Despite this, digital commerce leaders must maintain a clear understanding of what makes B2B commerce different from B2C commerce — such as the size and complexity of product lines and organizational hierarchy support requirements. They must also consider the organizational changes that need to occur internally when deploying B2B commerce for the first time. Companies that fail to make internal adaptations risk losing their previously loyal customers to more innovative competitors. B2B sellers must also consider the range of selling models available to them, including commerce sites, digitally enabled sales teams, procurement systems and marketplaces.

Gartner's future vision for digital commerce is best represented in "[Industry Vision: Commerce That Comes to You.](https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164>) Application leaders should evaluate their long-term roadmaps and plan to develop commerce strategies where commercial transactions happen on new channels and devices, are humanistic, and where a machine is often the buyer instead of (or on behalf of) a human.

Digital commerce is often the first digital business platform for a business. As companies become more digitalized and new forms of business model arise, commerce capabilities will become less of a stand-

alone platform and will need to fit within a wider business technology platform.

Application leaders responsible for digital commerce should also consider the various channels where commerce can take place, along with emerging technologies that enable commerce that comes to you, as represented in the following research:

- Use "Thing Commerce: IoT-Enabled Digital Commerce" (<https://www.gartner.com/document/code/300289?ref=grbody&refval=3843164>) to understand the role physical devices and IoT will play in commerce in the future and "Create New Opportunities by Exploiting Thing Commerce Data" (<https://www.gartner.com/document/code/326553?ref=grbody&refval=3843164>) to understand new business opportunities based on the data that IoT-based commerce produces.
- Use "Innovation Insight for Conversational Commerce" (<https://www.gartner.com/document/code/319111?ref=grbody&refval=3843164>) to understand how conversational interfaces will reduce customer friction in the buying process.
- Use "How to Apply Artificial Intelligence to Digital Commerce" (<https://www.gartner.com/document/code/300290?ref=grbody&refval=3843164>) to understand how AI will impact both the digital commerce customer experience and the manner in which commerce organizations operate.
- Use "Develop an Online Marketplace for Increased Traffic, Assortment and Revenue" (<https://www.gartner.com/document/code/319880?ref=grbody&refval=3843164>) to understand an emerging business model in which commerce sites become online marketplaces.
- Leverage the insights in "Use Personalization to Enrich Customer Experience and Drive Revenue" (<https://www.gartner.com/document/code/331880?ref=grbody&refval=3843164>) to understand the principles of personalization and use personalization engines to develop a superior customer experience and improve digital commerce metrics.
- See an updated version of the commerce-that-comes-to-you vision in the webinar "Digital Commerce 2025: Commerce That Comes to You." (<https://www.gartner.com/webinar/3724718>)
- Develop an understanding of current hot topics with "What's Hot in Digital Commerce in 2017" (<https://www.gartner.com/document/code/313832?ref=grbody&refval=3843164>) and "Hype Cycle for Digital Commerce, 2017." (<https://www.gartner.com/document/code/313885?ref=grbody&refval=3843164>) Look for updated versions of both documents in 2018. Look at future trend predictions with "Predicts 2018: New Channels, AI and IoT Shape Future Digital Commerce Strategies." (<https://www.gartner.com/document/code/341873?ref=grbody&refval=3843164>)

Planned Research

- Cool Vendors in Digital Commerce, 2018
- Hype Cycle for Digital Commerce, 2018
- What's Hot in Digital Commerce, 2018

- Research about strategies for dealing with the growing competitive pressure from online marketplaces
- Research about how digital commerce can scale to digital business
- Research about visual commerce
- Additional research about commerce that comes to you
- Additional research about the use of IoT in digital commerce
- Additional research about conversational commerce
- Additional research about the use of AI in digital commerce
- Research predictions for 2020 and beyond

Related Priorities

Table 1: Related Priorities

Priority ↓	Focus ↓
Customer Relationship Management and Customer Experience	CRM and customer experience are business strategies that optimize profitability, operational efficiency, customer satisfaction and loyalty through the implementation of customer-centric processes.

Source: Gartner

Suggested First Steps

- Read the foundational research on developing a digital commerce strategy, identifying key digital commerce KPIs and designing an effective digital commerce team. See ["How to Develop a Digital Commerce Strategy,"](https://www.gartner.com/document/code/290525?ref=grbody&refval=3843164) (<https://www.gartner.com/document/code/290525?ref=grbody&refval=3843164>) ["How to Manage Digital Commerce Metrics"](https://www.gartner.com/document/code/318620?ref=grbody&refval=3843164) (<https://www.gartner.com/document/code/318620?ref=grbody&refval=3843164>) and ["Design an Effective Organization for Digital Commerce,"](https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164) (<https://www.gartner.com/document/code/319108?ref=grbody&refval=3843164>) respectively.
- Develop an understanding of the digital commerce framework and ecosystem by reading ["Leverage the Digital Commerce Technology Ecosystem to Optimize IT Decisions."](https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164) (<https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164>)
- Consider a future vision for digital commerce by reading ["Industry Vision: Commerce That Comes to You"](https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164) (<https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164>) and viewing the webinar ["Digital Commerce 2025: Commerce That Comes to You."](https://www.gartner.com/webinar/3724718) (<https://www.gartner.com/webinar/3724718>)

- For B2B companies, understand the nuances of B2B commerce by reading "[Embrace the Possibilities and Distinct Characteristics of B2B Digital Commerce for Optimal Results.](https://www.gartner.com/document/code/300186?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/300186?ref=grbody&refval=3843164>)
- Prepare for commerce platform architecture decisions by reading "[The Three Approaches to Digital Commerce Platform Architecture and How to Choose Among Them.](https://www.gartner.com/document/code/319165?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/319165?ref=grbody&refval=3843164>)
- Filter the hype from reality by reading "[What's Hot in Digital Commerce in 2017](https://www.gartner.com/document/code/313832?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/313832?ref=grbody&refval=3843164>) and "[Hype Cycle for Digital Commerce, 2017.](https://www.gartner.com/document/code/313885?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/313885?ref=grbody&refval=3843164>)
- Attend the Gartner Customer Experience & Technologies Summit (24-25 May, London, U.K.) and Gartner Application Strategies & Solutions Summit (date and location to be decided) to speak with CRM and digital commerce analysts and peers.

Essential Reading

- "[Industry Vision: Commerce That Comes to You](https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/304025?ref=grbody&refval=3843164>)
- "[Magic Quadrant for Digital Commerce](https://www.gartner.com/document/code/347037?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/347037?ref=grbody&refval=3843164>)
- "[Critical Capabilities for Digital Commerce](https://www.gartner.com/document/code/347038?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/347038?ref=grbody&refval=3843164>)
- "[Hype Cycle for Digital Commerce, 2017](https://www.gartner.com/document/code/313885?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/313885?ref=grbody&refval=3843164>)
- "[The Gartner Digital Commerce Vendor Guide, 2017](https://www.gartner.com/document/code/326514?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/326514?ref=grbody&refval=3843164>)
- "[Leverage the Digital Commerce Technology Ecosystem to Optimize IT Decisions](https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/329089?ref=grbody&refval=3843164>)
- "[Thing Commerce: IoT-Enabled Digital Commerce](https://www.gartner.com/document/code/300289?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/300289?ref=grbody&refval=3843164>)
- "[Create New Opportunities by Exploiting Thing Commerce Data](https://www.gartner.com/document/code/326553?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/326553?ref=grbody&refval=3843164>)
- "[Innovation Insight for Conversational Commerce](https://www.gartner.com/document/code/319111?ref=grbody&refval=3843164)" (<https://www.gartner.com/document/code/319111?ref=grbody&refval=3843164>)

- "How to Apply Artificial Intelligence to Digital Commerce"
(<https://www.gartner.com/document/code/300290?ref=grbody&refval=3843164>)
- "Build an Agility-Based Commerce Release Practice to Deliver Business Outcomes"
(<https://www.gartner.com/document/code/337889?ref=grbody&refval=3843164>)
- "Predicts 2018: New Channels, AI and IoT Shape Future Digital Commerce Strategies"
(<https://www.gartner.com/document/code/341873?ref=grbody&refval=3843164>)

Tools and Toolkits

- "Toolkit: Developing a Pace-Layered Application Strategy for Digital Commerce"
(<https://www.gartner.com/document/code/333615?ref=grbody&refval=3843164>)
- "Toolkit: RFP for Digital Commerce Platforms" (<https://www.gartner.com/document/code/280297?ref=grbody&refval=3843164>)

Document Revision History

Digital Commerce Technologies Primer for 2017 - 5 January 2017

(<https://www.gartner.com/document/code/318230?ref=ddrec>)

Digital Commerce Technologies Primer for 2016 - 4 April 2016

(<https://www.gartner.com/document/code/302778?ref=ddrec>)

Recommended For You

How to Manage Digital Commerce Metrics (<https://www.gartner.com/document/3640217?ref=ddrec&refval=3843164>)

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