

# How to Develop a Digital Commerce Strategy

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Digital commerce is a continual and strategic endeavor. Neglecting it places organizations at risk of failing to meet changing customer expectations. Application leaders for digital commerce should follow a three-level cyclic process that incorporates product management practices.



## FOUNDATIONAL DOCUMENT

This research is reviewed periodically for accuracy. Last reviewed on **4 April 2023**.

## Key Findings

- Organizations often treat digital commerce as one-time project, and leave the application architecture out of sync with business requirements. This makes the platform unable to respond to competitive pressures, deliver new customer experiences, or support new business models.
- Organizations tend to blame their technology platforms when digital commerce fails to meet expectations, without realizing that customer experience needs to be continuously optimized to improve performance and maintain a competitive edge.
- Application leaders tend to spend a long time building and perfecting functions before releasing them, causing delays in fixing problems or responding to fast-evolving customer expectations.

## Recommendations

Application leaders supporting digital commerce technologies should:

- Develop and continuously refine the digital commerce strategy using Gartner's three-level cyclic approach for overall business strategy, customer experience improvement and continuous delivery.
- Champion product management practices in digital commerce development and operations, and embrace DevOps to rapidly develop and release changes to respond to customer expectations on a continuous basis.

- Deliver superior customer experience by designing a unified experience that is based on customer journeys and life cycles, and leveraging an enterprisewide data analytics infrastructure for customer intelligence.

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## Strategic Planning Assumptions

By 2022, 25% of organizations will be able to show a positive relationship between improving the customer experience and the ROI measured as a financial value.

Through 2022, 75% of DevOps initiatives will fail to fully meet expectations due to failure to ground the initiative in business value, cultural change, and essential practices and principles.

By 2022, 80% of companies will have incorporated lean startup techniques into product planning to create more-dynamic and responsive product roadmaps, up from 20% in 2018.

## Analysis

### Introduction

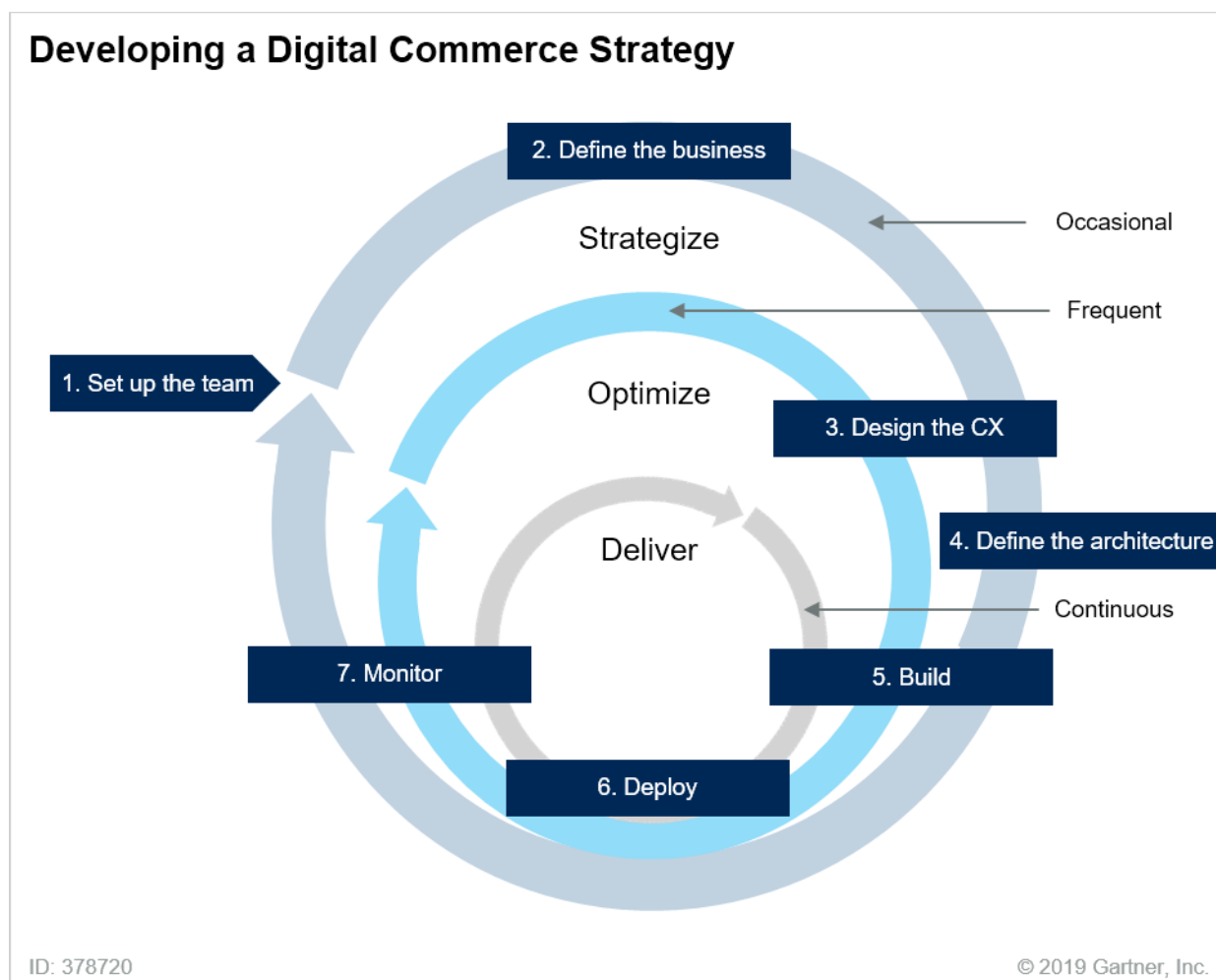
Digital commerce is gaining strategic importance as it is viewed by many organizations as a natural progression to digital business. Yet many organizations don't have a systemic approach to digital commerce and often deploy platforms due to competitive pressures.

This leads to three levels of challenges:

1. **Strategic level:** Organizations fail to recognize that digital commerce is a team sport that requires cross-organizational efforts to deliver business outcomes. As a result, they don't establish a long-term roadmap for business model evolution or continual architecture changes.
2. **Operational level:** Organizations fail to identify the root cause of underperformance at the operational level, which can involve lack of operational expertise or poorly designed customer experience. Gartner estimates that operations (including marketing, merchandising, customer service and logistics) and customer experience account for over 70% of digital commerce business outcomes.
3. **Development level:** Digital commerce platforms involve an ecosystem of integrated applications and are complex to develop. Without using product management and agile approaches, application leaders might disappoint on the time it takes to get a project up and running, or could deploy something that does not meet expectations.

This research advises application leaders on a framework to develop the digital commerce strategy using a cyclical approach that addresses the above three challenges (see Figure 1).

Figure 1. Developing a Digital Commerce Strategy



Source: Gartner (March 2019)

The process begins by setting up a cross-functional team (Step 1) that includes business (sales, marketing and merchandising, for example), IT and operations (including customer service, store operation, supply chain and logistics). For organizations with mature IT development and operational capabilities, a key part of this step is to establish a mechanism for digital product management that underpins the entire strategy process. Organizations with digital ambitions need to change from the “project” mindset to “product management” approach where they enable ongoing management of digital products to meet changing customer expectations.

The cyclical approach includes three nested cycles as shown in Figure 1:

1. **Strategize:** Covers the complete cycle from Step 2 through to Step 7. This applies to cases when organizations are doing digital commerce for the first time, as well as when they are revisiting the strategy. This cycle happens occasionally, say every six to 12 months, when strategic changes are needed (such as a change of business model or architecture).

2. **Optimize:** Covers Steps 3, 5, 6 and 7. This cycle enables organizations to improve operational practices and customer experience on an ongoing basis. It identifies ideas and areas for customer experience improvement, leading to refinement of operational processes, the development of new features, and allows the monitoring and testing of such new capabilities. This cycle takes place frequently, as often as every two to four weeks, when operational improvement is needed.
3. **Deliver:** Covers the cycle from Steps 5, 6 and 7, and incorporates DevOps into the development process to enable fast and high-quality product delivery using agile methodologies. It links development and operations, and automates processes such as releases, integration and testing. This cycle takes place continuously on a daily or weekly basis.

Application leaders can use this framework to develop and refine their digital commerce strategies. It makes sense to formalize the strategy with a written document during this exercise, or after completing the initial cycle. This would outline the organization, the business model roadmap, KPIs and customer experience, and would describe the three cycles and the mechanisms that trigger each cycle. Having a formalized strategy document provides a clear, referenceable record of the agreed way toward digital business.

## Step 1: Establish a Cross-Functional Team That Embraces Product Management Practices

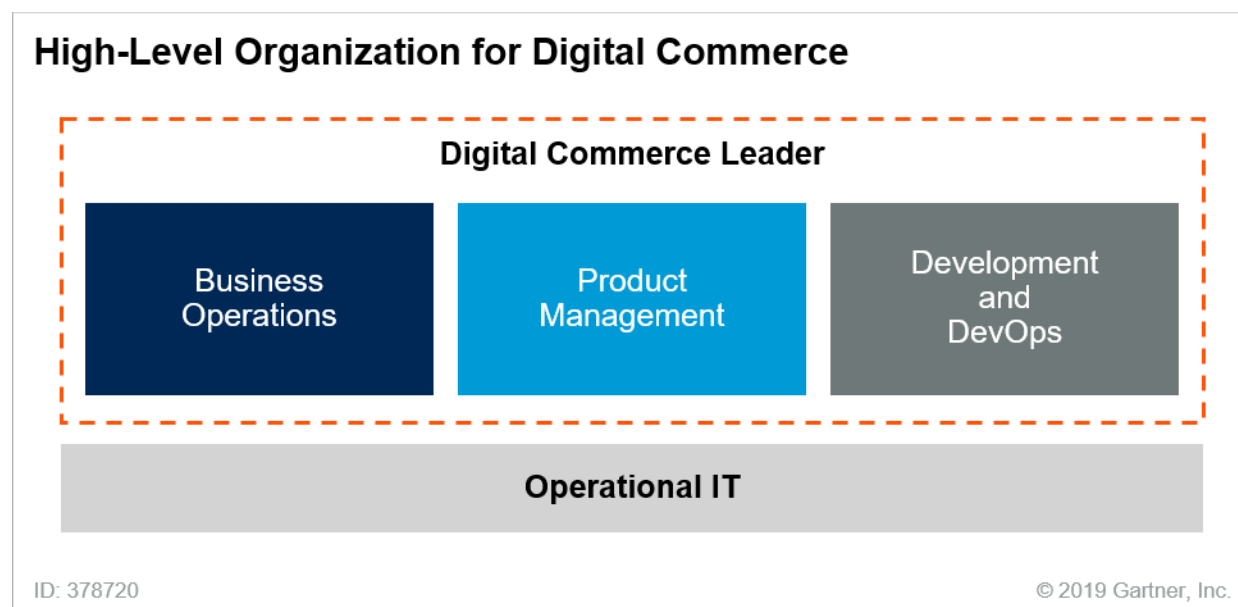
Digital Commerce can be led from several parts of an organization, including marketing, IT, sales, a specific line of business, or top-down from a senior role such as CEO. A key to success is to have a cross-functional commerce team of business and technical stakeholders, which can sometimes be managed via a new role such as chief digital officer (CDO) or VP of digital.

Digital commerce operational teams should not be siloed from the teams responsible for developing and operating the commerce platform (if in-house). A proven discipline that bridges the gaps between operational business and IT is the concept of product management. Digital platforms should be thought of as “products” and, like any other product sold by an organization, the goal is to provide technology and experiences for customers to grow the business. There are several ways to organize the operational, product, and delivery teams within a commerce organization, and how they relate to operational IT. A recommended approach for delivery teams is to embrace the concept of DevOps, and make sure the DevOps team is part of (or very closely aligned to) the development team.

DevOps fundamentally changes the relationship between product delivery and operational IT. Instead of IT being a “wall” that code is thrown over, DevOps processes work alongside delivery and product management processes.

Operational IT then becomes a horizontal support system underlying and supporting all parts of the commerce organization (see Figure 2).

Figure 2. High-Level Organization for Digital Commerce



Source: Gartner (March 2019)

Product managers should have both business and technical skill sets. They are responsible for the digital product roadmap, and managing a core component of modern delivery: the “backlog” of work to be done, most often using incremental or agile delivery processes (see Step 5: Build the Solution). Organizations should understand that developing and managing digital commerce is not a single project and requires ongoing innovation and improvement.

This is the core reason for the nested cyclical strategy approach Gartner recommends, which incorporates three processes:

1. Product management (strategize)
2. Agile development (optimize)
3. DevOps/continuous delivery (deliver)

See “From Projects to Products — Three Essential Actions for Every CIO Aiming to Transform Their Digital Organizations” and “Design an Effective Organization for Digital Commerce” for more information.

## Step 2: Define the Business

### Define Business Objectives and Measurement

Organizations launch digital commerce for various reasons, and typical motivations include:

- Improving customer experience

- Increasing digital revenue
- Reaching new customers or markets
- Reducing costs by shifting to digital channels
- Optimizing or transforming the business

Business objectives influence the selection of top-level KPIs. For example, to improve customer experience, Net Promoter Score or other customer satisfaction metrics are often used. To increase digital revenue, data from digital sales or the contributions of the digital channel is often tapped. It is important to set milestone targets for measurement, and track digital commerce performance accordingly.

Application leaders should translate KPIs for different levels of employees that include senior management, middle management and operational and technical staff so that everyone is clear about the metrics that matter the most.

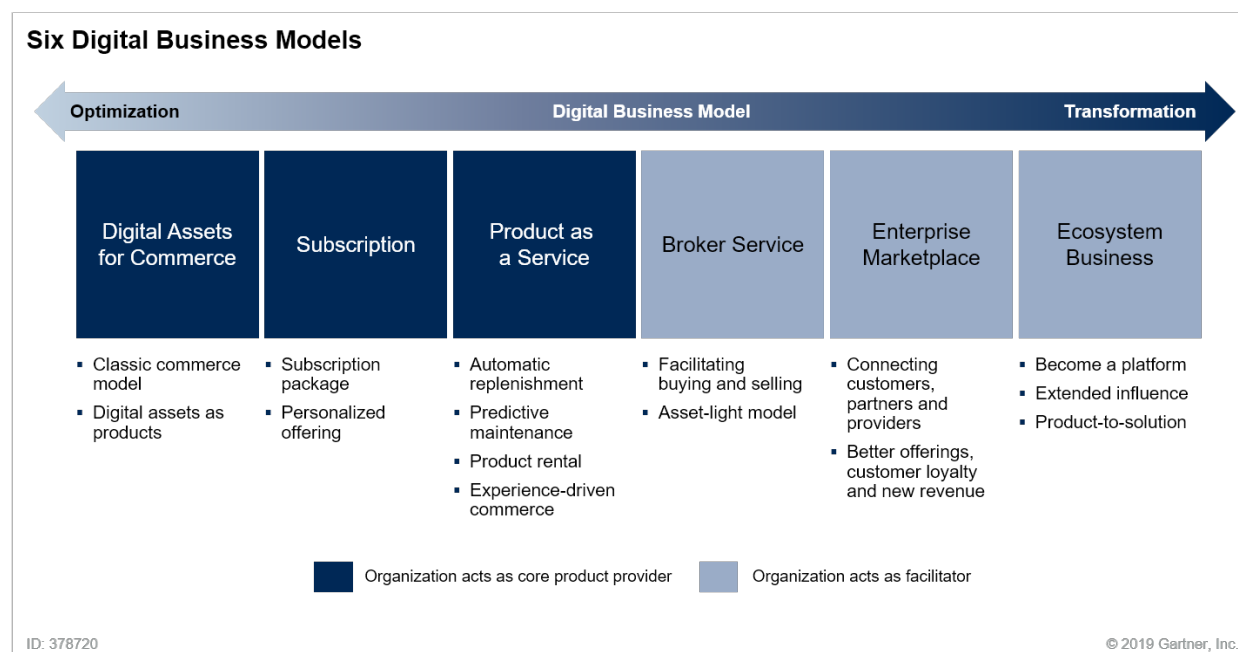
It is essential to be careful when selecting KPIs so that they are not rewarding behaviors that can have unintended or negative consequences. For example, organizations wanting to increase digital revenue might still use total sales placed through salespeople as their key metric, on which sales commission is calculated. This will lead to salespeople swaying customers to placing orders through them instead of online, causing the digital channel to underperform. Instead, organizations should align salespeople's incentives and reward them for helping customers to register and place orders online.

In addition to KPIs for the business unit and employees, application leaders also need to establish a dashboard for technical performance to ensure that the digital commerce platform is functioning as intended, and that metrics you cannot afford to damage are protected. For example, you should check that pages are loaded quickly and properly, that links from search results or campaigns can direct visitors to the correct content, and that mobile apps can be installed on major OS and phone models and can work with limited bandwidth. See "How to Manage Digital Commerce Metrics" and "How to Manage Customer Experience Metrics" for more information.

### Build a Digital Business Model Roadmap

Business objectives and target measurement can both impact the choice of business models. For example, if the goal is to "grow digital sales contribution to 20% of total revenue in five years," organizations may continue with existing product offerings and business model, and achieve the target by continuously improving operations and customer experience. In this case, they are optimizing the business by selling through digital channels. But if the organization wants to grow that contribution to 50% in the same time frame, this will likely require launching new products or adopting new business models that are underpinned by digital technologies. This is closer to digital transformation. Gartner has identified six types of new business models beyond those commonly seen for digital commerce that move digital commerce toward digital businesses (see Figure 3 and "Scaling Digital Commerce Into a Digital Platform Business").

Figure 3. Business Models Moving Digital Commerce Toward Digital Business



Source: Gartner (March 2019)

Application leaders need to consider which of these models can be applied to their products, and how they can complement any existing business model.

Organizations can use multiple business models for various markets or product offerings. They can maintain the existing business model and add new ones for selective product offerings or new digital business ambitions.

At this stage it is important to build a roadmap of digital business models and understand how each business model maps to your offerings and digital business blueprint. Part of the business model exercise is to define the products and services to be offered, customer segments and geographic markets to target, and channels to support.

To support this exercise, you need to ask the following questions:

- **Products and services:** What product categories shall we include? Do we want to have products that are exclusively available through the online channel? Shall we bundle solutions? How do we identify product correlation for recommendations?
- **Geographies:** Which regions/markets shall we cover? Shall we use digital channels to further penetrate existing markets, or to reach new markets?



- **Customer segments:** What customer/industry segments shall we target? What's the target size (in terms of revenue, number of products, brands and employees) of our customers?
- **Channels:** Which channels shall we cover (for example, online, mobile, store, kiosks, social, IoT devices or chatbots) and how should those channels integrate with each other? Do we rely on stand-alone sites or sell through marketplaces as well?
- **Time to market:** When will we launch the pilot? When will we go live?

### Step 3: Design the Customer Experience

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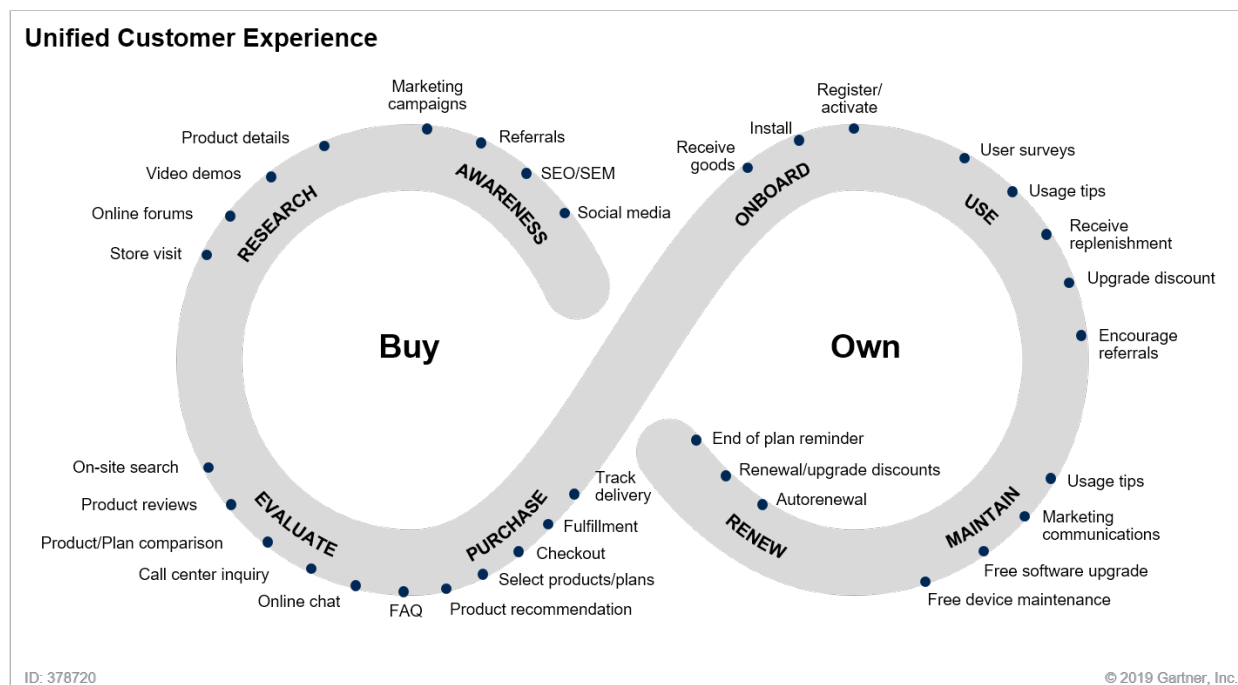
Once the business has been defined, the digital commerce team should work on designing the customer experience supporting the business model.

#### Design for a Unified Experience Throughout the Customer Journey and Life cycle

A common mistake organizations make is to look at customer experience in a piecemeal fashion, and deploy trendy but tactical technologies without taking into account the entire customer journey. Customers go through multiple steps during the online purchase journey that may involve multiple processes (such as research, evaluation, online check-out, arranging pick-up from a store, calling a service center for installation, and order returns). Organizations should design for a unified and continuous experience throughout the customer journey as they move between channels and across processes.

The full customer life cycle spans both the “buy” and “own” stages, and a positive experience here will increase loyalty, which leads to the further purchases, and helps spread via word of mouth to other potential customers. Giving customers easy access to services helps to maintain the communication and feedback loop, and keeps customers engaged and interested in product offerings. For example, a consumer goods company might plan to offer automatic product replenishment via connected devices as part of a “product as a service” business model. Figure 4 shows these functions and services during the eight processes of the customer journey.

Figure 4. Design a Unified Customer Experience Example: Automatic Product Replenishment



FAQ = frequently asked questions; SOE = search engine optimization; SEM = search engine marketing

Source: Gartner (March 2019)

Each dot on Figure 3 represents a function or service that helps customers achieve a task during the journey, and there are multiple tasks in this example such as online purchase, device installation and activation. Many of these functions are not handled by the digital commerce platform, and some are covered by functions such as marketing, merchandising, customer service and fulfillment. Application leaders need to see the whole customer journey and life cycle to design the interactions between digital commerce and adjacent applications and processes, and to offer a unified experience that enables customers to transact and complete tasks with minimal effort.

### Prioritize Improvement Initiatives Based on Business Outcomes and Customer Benefits

Customer experience improvement is an ongoing process, and it can be overwhelming to work on all the above eight processes at the same time. Organizations should prioritize initiatives based on impact to digital commerce performance and customer benefits. For example, organizations that are suffering from low conversion or high bounce rates can focus on the “evaluate” and “purchase” steps that directly impact those metrics. In the case of product replenishment, where customer experience hinges on ongoing service and maintenance, the “onboard” and “use” processes should have high priority.

Start by fixing anything that is broken. Then focus on the top processes that impact most (such as more than 80%) of the digital commerce experience throughout the customer life cycle. Select different processes to work on each year, and rotate between them depending on their priority.

Operationalize this practice within the organization as this often requires collaboration from other functional departments such as marketing and customer service (see “How to Prioritize Customer Experience Projects”).

### Leverage the Data Analytics Infrastructure for Superior Customer Experience

Making the customer experience effortless helps to improve customer loyalty, and relies on deep customer insight. It means that customers don't have to identify themselves or repeat their stories at every touchpoint. Leading organizations are working on a “single view of the customer” by connecting data from various sources to enrich the customer profile and interaction history. This is an ongoing effort that requires cross-functional collaboration, a modern data analytics infrastructure (to consolidate scattered data), and data governance (to ensure data quality and consistency). Additional data sources — such as marketing and customer service — and third-party data — such as those from data exchange services and online marketplaces — (depending on the marketplace and data arrangement) may help to further improve customer intelligence. They can also help to enrich the customer data.

More importantly, application leaders should use corporate-level data analytics to gather valuable customer insight. Working with business leaders, they should identify datasets that are of higher value, have less “noise,” and that correlate closely with performance. They should consider using deep learning techniques, either in-house or from vendors, to uncover knowledge about customers so that they can allocate resources more effectively. Such insights will feed into the customer experience redesign efforts for continuous improvement.

### Monitor Innovation, Competition and Business Performance for Improvement Ideas

Application leaders need to keep abreast of the latest innovations in customer-facing technologies, and what the competition is doing to improve customer experience. Select those that make sense for your business and that bring benefits to customers. Work with the testing team to understand the impact on existing customer experience before rolling out to the wider customer base.

A key criteria is whether the technology helps reduce customer efforts. Don't deploy new technologies just for innovation's sake, as sometimes they can make the customer experience more cumbersome.

Operations should continuously monitor digital commerce performance from both the business and technical aspects. This is another source of improvement ideas. For example, when conversion rates remain low, it calls for investigation into multiple areas such as UI design, check-out flow, pricing strategy, product description, search relevancy, payment acceptance and online help. Customer experience design and improvement is an ongoing process and needs to be reviewed frequently by looking into the above-mentioned areas.

## Step 4: Define the Architecture

Business model and customer experience decisions impact the choice of the architecture, which is closely related to customer experience — especially UI design. Architectural choices and UI design often happen at the same time.

### Identify the Technology Environment Supporting the Commerce Experience

Customer experience design defines the touchpoints and processes required for specific use cases. Application leaders should understand where their digital commerce platform will sit, and how it will integrate with front-end customer touchpoints, back-end applications, and external services.

Answer each of the questions below to identify the optimal architecture for your commerce platform.

- Which of the following enterprise applications will you need to integrate with the commerce platform?
  - Web content management (WCM)/Digital experience platform (DXP)
  - Product information management (PIM)
  - Master data management (MDM)
  - Digital asset management (DAM)
  - Customer relationship management (CRM)
  - Digital marketing hub
  - Order management system (OMS)?
- Which of external applications and services will the commerce platform need to integrate with? Choices might include: logistics, payment gateways, financing, identity management, ratings and reviews, e-procurement, online marketplaces, content delivery networks, A/B testing services or industry-specific systems.
- Which user interfaces and endpoints will you need to support? Choices might include: online, mobile, store, chatbot, conversational interface, augmented reality/virtual reality, visual recognition, QR code, near-field communication (NFC), Internet of Things (IoT) and social networks.
- Which channels need to be integrated with digital commerce to offer a unified experience? How will they be integrated? (see Step 3: Design the Customer Experience). How will digital commerce integrate with the data models for customer, products, inventory and orders? How can digital commerce leverage and feed into the existing analytics infrastructure and tools? What regulatory compliance needs to be followed regarding customer data?
- What are the capital and operating budgets for development, implementation and ongoing operations? This is a cross-functional budget rather than IT budget as resources need to be allocated across departments.

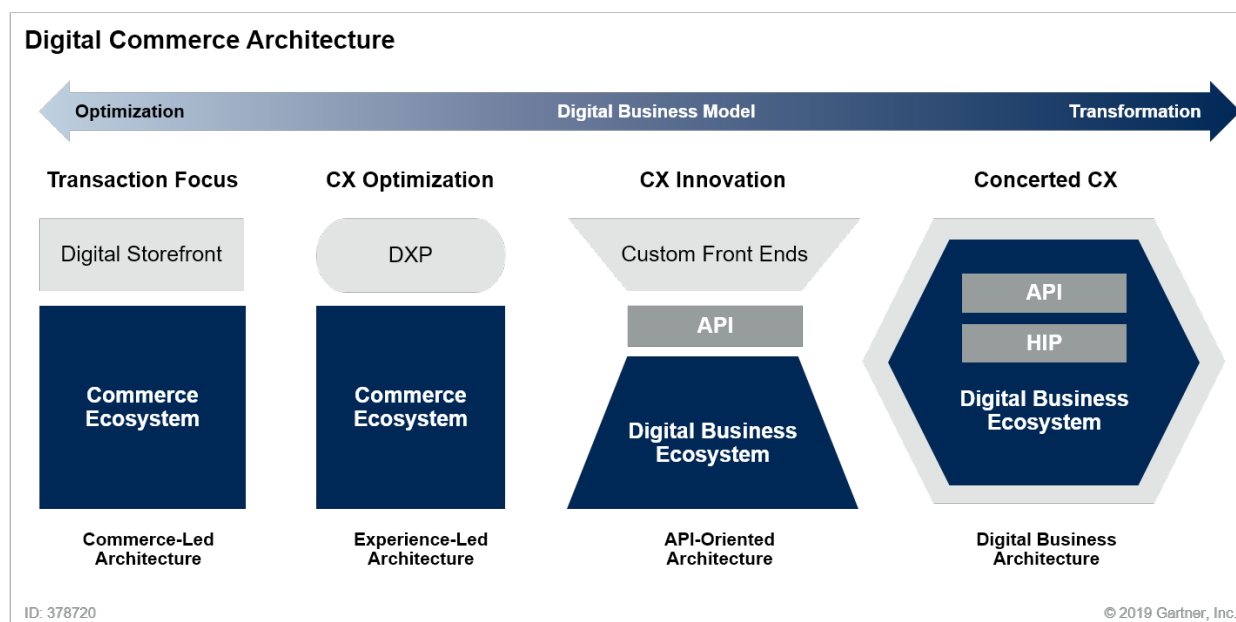
- How much in-house staffing can be allocated for architecture design/planning, application development, implementation and maintenance? What are the external resources (for example, the service providers and digital agencies you can tap into) and how much will they cost?

See “Leverage the Digital Commerce Technology Ecosystem to Optimize IT Decisions” for more information.

## Develop the Architecture Roadmap

The business model, customer experience and technology environment all influence the choice of digital commerce architecture (see Figure 5). For example, if you plan to offer innovative user interfaces through a number of customer touchpoints, an API-oriented architecture will give you the flexibility to integrate the front end as well as multiple back-end systems. Or if you are in the fashion industry, and want to offer rich, marketing-driven content, and interactive and personalized experience, an experience-led architecture will give you a strong start. See “The Three Approaches to Digital Commerce Platform Architecture and How to Choose Among Them” for more information.

Figure 5. Leverage Digital Commerce Architecture for Digital Business Technology Platforms



Source: Gartner (March 2019)

Organizations with the ambition to move to digital business models from digital commerce should plan to migrate toward a digital business technology platform.

This is a multiyear effort that takes considerable investment and extensive development efforts, as well as advanced technical skills and mature operational capabilities, to pursue.

This process will see development teams undergoing a significant transformation in the way they work. Once you have the product management capabilities established, it will enable your organization to move toward the digital business platform, and give you a strong competitive advantage within and beyond the industry boundary. See “How to Build a Digital Business Technology Platform” and “Move Digital Commerce Architecture Toward a Digital Business Technology Platform” for more information.

## Step 5: Build the Solution

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When organizations are building commerce platforms for the first time, application leaders need to define the technical requirements supporting the above business models and customer experience.

### Functional Requirements

After defining the application and integration environment in Step 4, application leaders can then work out the core functionalities for commerce — such as digital store management, merchandise management, customer care, localization, multichannel, reporting and analytics.

Use the Gartner’s “Toolkit: RFP for Digital Commerce Platforms” as a basis for internal discussion and planning, and to identify the functions relevant to your digital commerce service. The Toolkit includes a vendor questionnaire that will help you to define the functional capabilities of the platform, and compare vendor offerings. The spreadsheet contains a modifiable, detailed list of more than 1,000 product features and functions, including both core functionalities and ecosystem applications. You can add or delete features from the list based on your specific requirements.

### Deployment Models

A digital commerce solution can use one of four deployment models, or hybrids of several of them:

- **Custom development:** An in-house-developed platform where the organization and/or software development partner builds, operates and maintains the solution by itself.
- **Licensed software:** Software bought from a vendor, and hosted on-premises or by a third party.
- **SaaS:** Vendor-managed cloud offering that may be shared with other vendor clients (known as multitenant).
- **Fully outsourced:** The vendor provides the solution and manages all operations, including the website, fulfillment, logistics, digital marketing and customer service.

A SaaS platform may suffice for simple business models and functional requirements. Delivery of the SaaS platform usually involves a product catalog feed, order integration and decisions on configurable features for the storefront. More-complex business models or functional requirements usually call for a “buy and build” approach that integrates products from several vendors, plus a level of extension or customization. For more information on deployment models, see “Use Three Criteria to Evaluate Digital Commerce Cloud Strategies.”

### Use Bimodal to Integrate Commerce With Legacy Applications

Digital commerce initiatives rarely end in a “keeping the lights on” mode, as customer expectations and technology innovation move at a rapid pace. When a commerce platform is the basis for a digital product, the agile methodology should be utilized while maintaining architectural governance of the roadmap developed in Step 4. However, system-of-record IT applications may be managed using waterfall development methodologies.

Bringing together agile and waterfall methodologies requires time from business and technical stakeholders who may need to be educated about the processes, and have the commitment to collaborate with digital commerce application leaders.

“Digital” is often about product management and agility, is often a mix of systems of differentiation and innovation, and is managed using Mode 2. Systems of record, on the other hand, are often managed using Mode 1, and might include ERP, CRM, OMS, warehouse, in-store technologies and production processes depending on the type of organization. The two modes need careful management and coordination to work together. This is because the integration of systems of record are not always compatible with digital development of the commerce platform, therefore a more-sequential (waterfall) process may be required to align resources and timelines. See “Increase Agility With Bimodal IT and a Pace-Layered Application Strategy” for explanation of the two modes.

### Step 6: Deploy Continuously

Going live with a digital commerce platform is the first major step. To achieve improved revenue or customer goals, organizations need to continuously optimize and extend the digital product as part of an ongoing process. Alongside the concept of agile development, agility in deployment, testing and release has emerged under the general title of development operations, or DevOps. The goal of DevOps is to eliminate development and operational “silos” and to enable the continuous release of digital product improvements.

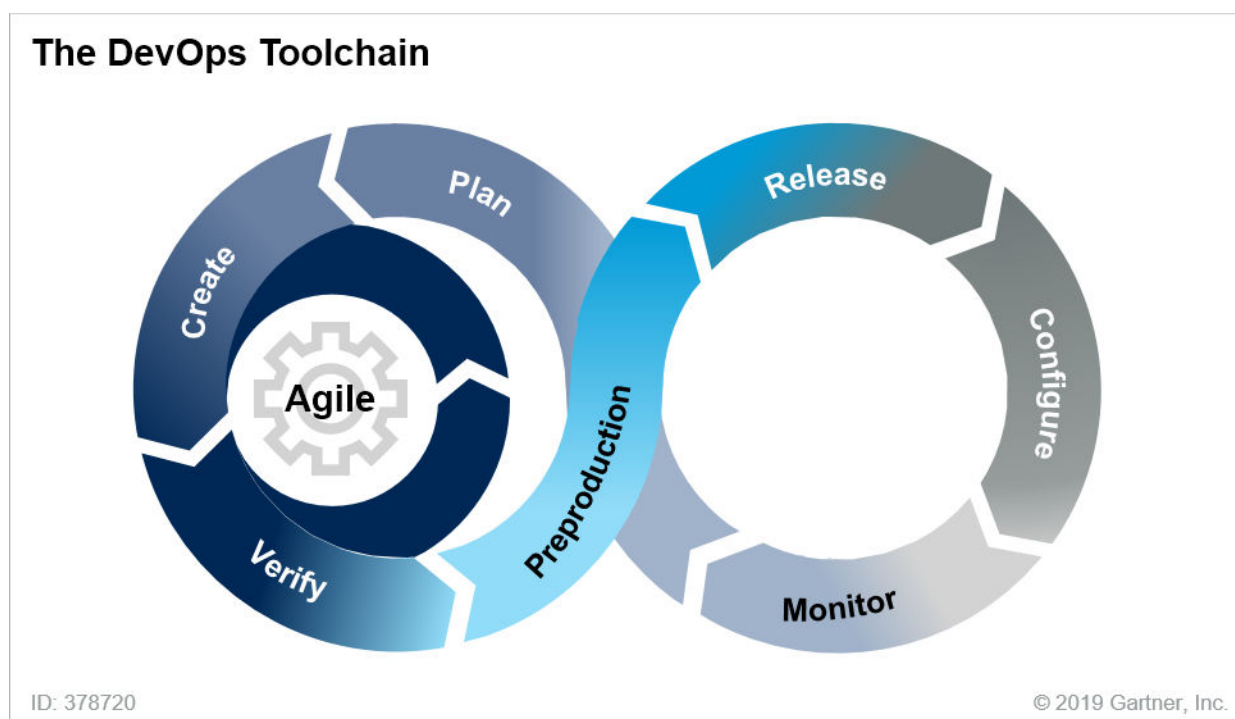
While there are technologies and processes for DevOps, cultural and behavioral changes — and more importantly being



fluent in agile practices — are key to success. No tools can accomplish DevOps if these things are not in place.

The “DevOps toolchain” (see Figure 6) is a set of technologies and processes that make DevOps happen. The main focus of this toolchain is to make new functionality quickly available for production. Fully functional, new code can be integrated, an environment provisioned and configured, the code deployed, applications started, test scripts run and reports generated — all automatically. Deployment is not always to production — the goal of continuous delivery can operate at several levels, and many businesses and platforms chose to “bundle” such deliveries onto less-frequent production deployments (see “How to Navigate Your DevOps Journey”).

Figure 6. The DevOps Toolchain Continuum



Source: Gartner (March 2019)

Continuous integration and deployment is the ideal goal, and most organizations and indeed software companies remain on this journey. A large amount of work needs to be put into getting all of these components working well together. Only then can the benefits be transformational in reducing human workload, error rates and security risks, and therefore improving speed to market in the longer run. However, it is a daunting challenge for an organization to build DevOps internally as part of a digital commerce platform strategy if digital commerce is their first digital initiative.

Application leaders should assess their organizations' IT maturity and long-term confidence in funding such an approach. Those using a development partner should look for pre-existing maturity



in this capability (see “10 Key Attributes for Selecting a Digital Commerce Service Provider”). Those relying on a vendor should see the impact of this approach in regular release cycles and ongoing product improvement. A very slow release cycle reflects a lack of DevOps capabilities, which will bottleneck platform agility and flexibility.

## Step 7: Monitor and Test

There are two uses for monitoring and testing — one for the ongoing digital commerce performance, and the other during the delivery cycle.

Overall performance monitoring deals with both business and technical metrics. Step 2 defines operational metrics linked to business outcomes, and application leaders can further refine those and include those in the dashboard so that operational staff can be alerted when key metrics break thresholds. Operational monitoring includes application performance monitoring (APM), which can monitor the browser and application to detect issues, for instance during peak activities. Regular operational testing can include penetration testing and other forms of security testing, and “smoke” testing of core user journeys. Digital experience monitoring (DEM) can help to detect user experience issues and determine causes, including browser-specific issues.

Other functional departments can also monitor and test applications related to digital commerce. For example, marketing could constantly monitor services and applications for the purposes of retargeting, search engine marketing, social media tracking, personalization engines and campaign management. Customer service can monitor call quality, engage in chat sessions, and conduct customer satisfaction surveys. They can both use customer journey analytics to monitor customer experience.

Application leaders should be aware of the monitoring and testing activities carried out by other teams, and plan for improvements based on the insights garnered from this monitoring into the digital commerce release cycles. These aggregated insights should further feed into the customer experience improvement processes in Step 3.

Delivery cycle monitoring and testing is an essential part of product management where development quickly tests and refines new ideas and prototypes, and moves them toward release.

Step 7 provides quality assurance to development, and is the control point where a new function is released or returned to development. Application performance monitoring, as well as load and stress testing in this stage, is also critical to ensuring the stability and resilience of the platform during peak production activity. This should happen on a continuous basis as development pushes out new functions, patches and upgrades. See “Adopt a Performance Engineering Approach for DevOps” and “Deliver Cross-Domain Analysis and Visibility With AIOps and Digital Experience Monitoring” for more information.

## Gartner Recommended Reading

*Some documents may not be available as part of your current Gartner subscription.*

“Toolkit: The One-Page Digital Commerce Strategy”

“How to Manage Digital Commerce Metrics”

“How to Build an Effective Digital Commerce Organization”

“Hype Cycle for Digital Commerce, 2022”

### More on This Topic

This is part of an in-depth collection of research. See the collection:

- Use 4 Key Criteria to Evaluate Digital Commerce Platforms

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