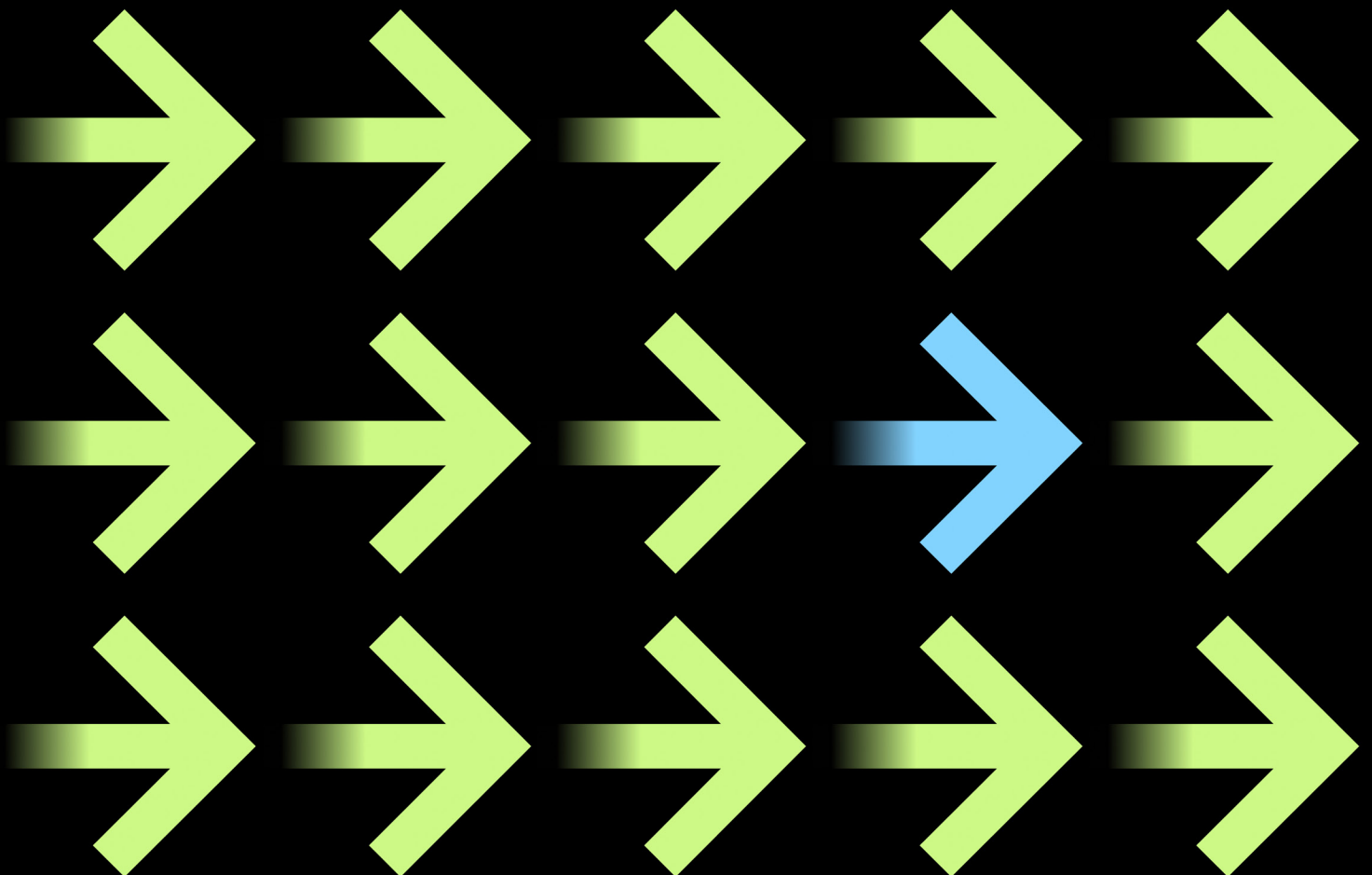


Salesforce Commerce Cloud to Shopify

A proven migration framework for
technical decision makers moving
from Salesforce to Shopify.



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Introduction

As a digital agency with 30 years of commerce experience, CQL has deep technical expertise that sets them apart from other agencies. Through their work with Salesforce clients like PetSmart, Woodland Direct, Paula's Choice, Wolverine Worldwide, e.l.f. Cosmetics, Shoe Show Inc, and more; CQL is uniquely positioned to support SFCC to Shopify migrations—even the most complex and customized ecosystems.

12+

years of SFCC
Experience

7+

years of Shopify
Experience

22+

years of experience
in ecommerce

30+

years of experience
in software

Why migrate to Shopify?

Most businesses that migrate from SFCC to Shopify do so to increase conversion rates, reduce total cost of ownership (TCO), and get better usability and innovation. In fact, according to a study completed in April 2023 in partnership with a Big Three global management consulting company, Shopify checkout converts up to 36% better than SFCC's. What's more, Shopify offers operational leverage and flexibility without accumulating technical debt, empowering both technical teams and business users to focus on innovation rather than relying on developers for most tasks. And because Shopify is committed to building the commerce solutions brands need for sustainable growth, this rapid innovation keeps businesses on the leading edge of commerce.

Supported by analyst recognition, including Leader designation in the Gartner Magic Quadrant, the move to Shopify not only enhances operational efficiency and customer experiences—it also positions businesses for continuous revenue growth. And with validation from brands like Bauer Hockey and Stride Rite, which have seen significant boosts to revenue and conversion rates after moving to Shopify, the end results of a migration to Shopify speak for themselves.

Learn more about why brands migrate from SFCC to Shopify.

[GET DETAILS](#)

Browse the Shopify library of businesses that have made the move to Shopify.

[VIEW THE BRANDS](#)

Check out the CQL resource hub for migrations from SFCC to Shopify.

[GO TO THE HUB](#)

Overview of migration considerations

When evaluating a migration from Salesforce Commerce Cloud (SFCC) to Shopify, there are a few key technological considerations for CTOs to weigh. CTOs are responsible for a successful migration: from setting goals and long-term strategy, to designing a new digital ecosystem with feature parity, to aligning teams and staying on time and on budget.

A platform migration from SFCC to Shopify is a big decision, where all migration scenarios need to be accounted for upfront. However, it's hard to find a comprehensive guide for CTOs with this level of technical detail and information on what to expect when migrating. Based on a large number of brands evaluating if a migration from SFCC to Shopify was possible, CQL developed a [Platform Validation](#) service offering to help brands determine their best platform match based on in-depth strategy workshops. After completing more than a dozen of these evaluations, 80% of brands that participated ended up replatforming to Shopify, and CQL helped these brands migrate (even when a migration did not seem possible due to technical concerns).

This playbook, a collaboration between Shopify and CQL's most senior technical experts, addresses top SFCC to Shopify migration concerns, based on experience with brands like TOMS, Guthy|Renker (JLo Beauty[®], Westmore Beauty[®], Principal Secret[®], Kind Science[®], Meaningful Beauty[®]), Stride Rite, Bauer Hockey, Cue & Case, and more.

Enjoy the playbook and get ready to master the migration from SFCC to Shopify.

“This migration guide is a must-have for any CTO thinking about switching from Salesforce Commerce Cloud to Shopify. It provides a deep dive into the complexities involved and includes detailed technical content that’s essential for any CTO and technical leader, making the transition smoother and more informed. This guide offers critical insights that help navigate the intricacies of such an important undertaking.”

— Peyman Naeini, Field CTO, Shopify

Disclaimers

This guide is released in partnership with Shopify, meant to be a complement to the guide [previously released by CQL](#). Whereas the prior migration guide was designed to explore in detail all the technical concerns businesses have when migrating from Salesforce Commerce Cloud (SFCC) to Shopify, this parallel guide—with added insight from Shopify—focuses more on the value and corresponding benefits Shopify offers.

While Shopify is bullish on AI and uses it for many purposes, this particular guide was not written by ChatGPT or any other AI model. For a topic this nuanced and specific, we felt it was important to have it authored by experts with real, hands-on experience—61 combined years at that. These experts have replatformed hundreds of brands, and have extensive proficiency in both Shopify and Salesforce Commerce Cloud.

This document contains best practice advice and a perspective for CTOs to understand different aspects of a replatform from SFCC to Shopify. As with any technology, there are many ways to implement a solution. Patterns, approaches, techniques, or architectures described in this document will change depending on any given brand's requirements, internal resources, timeline and budget, and existing technology ecosystem.

CQL recommends a team-based [Platform Validation](#) to properly scope, estimate, architect, and solution a platform migration to any platform.

As you read this guide, please be aware of the following parameters:

- Both Shopify and SFCC platforms are always under active development and ever changing. Platform features and implementation approaches described in this document may change as platform capabilities change and evolve.
- While every platform migration is beholden to fundamentals of the destination platform, each migration situation is different. Business A may be able to alter its practices while Business B cannot, resulting in different prescribed approaches.
- Generalities must be used within this document, as describing each alternative approach, nuance, and variation would inflate this document to unmanageable levels.

Consideration

01

Checkout

Complexity

HIGH



LOW

Overview

The most important piece of a successful ecommerce business is their checkout solution. Besides making checkout easy, Shopify offers the highest-converting checkout across today's ecommerce platforms, based on an April 2023 study completed in partnership with a Big Three global management consulting company. The checkout is highly structured with extensible, but limited, modification pathways to maintain performance, stability, and compatibility. While SFCC's checkout can be nearly fully customized with developer managed code, CQL generally advises against taking on the technical debt of managing a custom checkout process whenever possible. The most common customizations can be easily achieved on Shopify including third-party integrations, shipping restrictions, custom messaging, and more. Checkout is a common consideration for replatform, and it's the number-one reason to migrate to Shopify.

At a glance

01

Shopify Checkout is a highly performant, native feature—tread lightly with customizations, as the goal is to actualize the power of Shopify Checkout.

02

Checkout is customizable through Checkout App Extensions, UI extensions, and Shopify Functions.

03

Document your current customizations: which are required, which are optional, and which definitively drive revenue?

04

Integration and setup of payment gateways, accelerated payment methods, and tax providers are shockingly simple.

Approach

During the strategy phase of a migration from SFCC, it is critical to define the various checkout customizations and the business driver behind each, so features and expectations can be aligned appropriately to the implementation approach. Shopify's native high-converting checkout can extend and be customized further with [Checkout App Extensions](#), [UI Extensions](#), and [Shopify Functions](#).

- **Third-party and custom apps** use APIs to create new functionality, such as targeted estimated delivery dates, third-party shipping rates or carriers, upsells, and cross-sell logic based on cart contents and other criteria.
- **UI extensions** control the visual layer of any extensibility and customizations needed to ensure a consistent unified checkout experience is created (banners and message, show/hide elements, dropdowns, and other UI elements).
- **Shopify Functions** lets users customize back-end logic, such as cart line items to create bundles, pricing changes, discounts, and more.

Technical guide

The proven conversion efficiency of Shopify's checkout is one of the most compelling reasons many brands look to the platform. Unlike SFCC, where you can make any modification to checkout, Shopify's implementation is highly opinionated, and the pathways to modification are tightly controlled to maintain that conversion advantage. As with the other considerations in this playbook, this doesn't mean you're up against rigid limitations—it just means you may need to shift your perception of implementing requirements.

Take a look at the customizations in place today and determine which ones move the key performance indicator (KPI) needle and are differentiators for your brand. If you have custom for the sake of custom, or someone had an idea years ago that was built because it was possible, consider sunseting or roadmapping it. If the APIs and third-party apps don't make it an easy customization, or it's not possible to build, ask

yourself why the millions of brands using Shopify have felt it wasn't that critical. You can bend the rules that Shopify puts in place to do just about anything, but you really need to examine if you should. Only dig into real bespoke customization when the feature is actually at the core of what makes your brand.

Most checkout functionality is straightforward. The tax providers like Avalara and Vertex are a few clicks to implement. Gateway setup requires a form to be filled out, or copy and pasting a couple credentials. From there, accelerated payment methods like Shop Pay, Apple Pay, and Google Pay are native and work immediately: just check the box to turn it on. Yes, it's really that simple.

Shopify converts up to 36% better* than Salesforce. CQL Clients migrating from SFCC to Shopify have seen revenue increases up to 60%, conversion increases up to 80%, and saved up to \$2,000,000 per year in total cost of ownership.

It's a far cry from the three-month integration projects with hundreds of hours of cartridge development for every payment provider that many SFCC customers are sadly familiar with. Shipping carriers and even advanced shipping partner implementations, like ShipperHQ, are unlocked by adding their prebuilt app and configuration within the third-party platform.

Customizations in checkout are a combination of Checkout Extensibility apps and Shopify Functions, or more commonly third-party apps that use those extensibility mechanisms. Using these tools, you can

implement discount logic far beyond the limitations of the native discounting engine, add complicated restrictions on who can buy what under various conditions, implement BOPIS pickup points, and more.

The shift required is that these tools must be self contained, small, and performant. There are limits on how complex the Shopify application programming interface (API) calls you perform can be, and access to make calls to APIs outside of Shopify is currently restricted to enterprise plans. This isn't a problem—in fact, the opposite is true. It's the reason Shopify checkout remains fast, stable, and the highest-converting checkout in the industry.*

Shop Pay

Shop Pay is the internet's best-converting accelerated checkout,* allowing customers to sign in seamlessly on a business's online store, check out in a tap, and earn 1% Shop Cash back on their orders.‡ A study completed in partnership with a Big Three global management consulting firm in April 2023 found that Shop Pay outperforms other accelerated checkout options by at least 10%, and its mere presence can drive a 5% increase in lower-funnel conversion rates.

What's more, Shop Pay Installments increases flexibility for eligible customers in the United States and Canada, allowing payments to be made in convenient, interest-free repayments. This approach not only makes larger purchases more accessible but also helps reduce cart abandonment by up to 28%, ultimately increasing average order values by up to 50%. Notably, businesses receive full payment upfront while customers enjoy the flexibility of managing their expenses. This trusted and secure checkout experience not only simplifies transactions but also fosters long-term customer loyalty.



Consideration

02

Data

Complexity

HIGH



LOW

Overview

Migrating your customer, order, and product data is crucial for any replatform. After years of data collection, data migration is not an area that your business can afford to start over, nor is it an area that you can leave critical information behind when migrating. While you may be accustomed to SFCC data storage quotas and hitting external APIs to pull in things like order history, you won't have to worry about that on Shopify. Shopify has APIs for data import and you'll be able to store your data in your ecommerce platform.

At a glance

01

Product migration is handled via PIM, spreadsheets, iPaaS, or CQL migration middleware.

02

Product data models vary across ecommerce platforms; clear documentation and understanding of how your data is stored and displayed or merchandised on the front end will help ensure the best new architecture on Shopify.

03

Customers and orders are migrated in multiple batches to handle predevelopment workflows, the full data set, and a post-launch reconciliation of in-flight order data. Your team's ability to get the XML exports out of SFCC as a key first step.

04

Miscellaneous SFCC Custom Objects are handled with Shopify metafields and metaobjects.

Approach

CQL runs data migration workshops to ensure that all common data objects and their custom attributes are accounted for—including, but not limited to: orders, customers, products, inventory, pricebooks, and stores. For product data, Shopify provides native product fields, as well as the ability to enrich the data with product and variant level metafields and metaobjects similar to SFCC's custom attributes and custom objects. After gaining understanding and alignment on the data model, your SFCC XML is exported and CQL utilizes proprietary data migration tooling and expertise to transform relevant data into Shopify specific formats. Data migration begins right away in a replatform, performed as an independent track with your brand's real data to onboard your team to Shopify faster, make development and testing more realistic, and not impact project timing.

Technical guide

Products

Product data is the primary data migration focus at the start of a migration project, due to how quickly it can block development progress, and it's generally the most complicated data type to migrate.

While there are conceptual common mappings in every migration and SFCC's extensible markup language (XML) format captures its capabilities, SFCC's customizability typically mandates a bespoke approach especially in the area of product data as every SFCC build organizes catalog, product relationships, variation attributes, site-specific attributes, and localization attributes in a nuanced fashion.

Once the SFCC data model is understood, migration and long-term management of the product data can be accomplished through PIM, spreadsheets, or custom tooling.

Historically, Shopify’s variant limit of 100 has been a source of frustration to brands and the partner ecosystem. To address this issue, Shopify launched new GraphQL product APIs that support up to 2048 variants per product as part of the [2024-04 API release](#). Currently, the Shopify admin user interface (UI) supports 250 variants but will increase to 2048 variants later in 2025.

“Speaking specifically from shifting from a Salesforce Commerce Cloud to a Shopify experience, a huge benefit is the cost savings. The transition to Shopify saved us hundreds of thousands of dollars there that we could reinvest into the customer.”

— Todd Dreith, EVP of Ecommerce and Marketing, Footwear Unlimited

Catalogs and taxonomy

Typically, SFCC is architected to use the concept of a “master catalog” that contains the full breadth of products across the enterprise (though some additionally segment it with global considerations). Along with the product’s variants; groups, links, relationships, detailed attributes, etc. are defined. For each SFCC site, a “site catalog” drives the navigational hierarchy and product site mappings for merchandising and availability purposes. Either a PIM system integration or manual processes maintains customer-facing merchandising copy or a content management system (CMS) is used.

In Shopify, there’s a single “catalog” of products per site, which drives the need to duplicitously manage data across sites. However, apps or import processes are used to sync data between sites to keep data in sync, so forethought must be included to avoid data management pitfalls.

Plus, for those using SFCC's built-in search capabilities, hierarchical category arrangement and assignment of product data is used to power the front-end experience. Shopify, on the other hand, uses the concept of collections (groups of products) without the built-in concept of parent-child relationships. Teams wishing to organize products in a similar manner must use tags or metafields to approximate, but this issue isn't generally difficult to overcome.

Customers

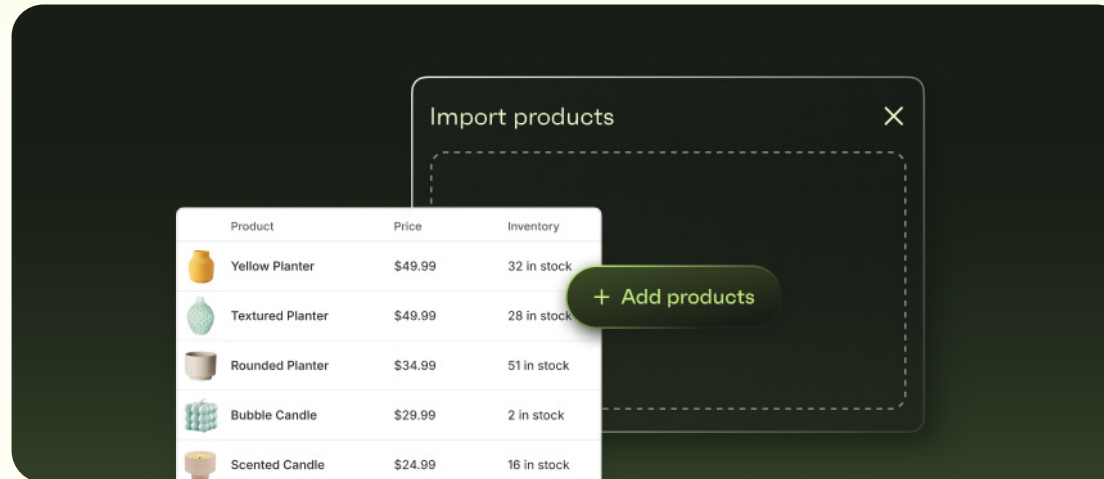
Customers, like orders, are generally imported three times and are a more standard ETL:

- **Import 1:** Early in the project, CQL will import a partial sample set of customers so the implementation team is working with correctly shaped data during design and development.
- **Import 2:** A full data load occurs later, before user acceptance testing.
- **Import 3:** A final delta (or two) is loaded after launch to account for new customers leading up to launch.

Orders

Orders are the most straightforward of the main key migration data points prelaunch. The fieldset between the two systems is strict enough on both platforms that the transform automations generally require only small modifications. The key consideration is the launch day migration of in-flight orders. The exact needs vary around the business logic of each customer, but generally CQL recommends keeping open orders in SFCC until they can be closed/fulfilled and are outside the return window. The orders can be imported in as a delta (typically 30 days) post-launch.

Shopify has modern GraphQL and RESTful APIs—your data can be imported, updated, and augmented efficiently via APIs.



Pricebooks

Product pricing is extracted from explicitly named SFCC pricebooks and folded into the product import. Specialized pricing scenarios have various solution approaches and these scenarios should be discussed and explored during strategy phases to ensure platform to business compatibility.

Other objects

Similar to SFCC, ancillary data such as product ratings and reviews are typically driven by a third-party partner such as Yotpo, BazaarVoice, Reviews.io, and others. These third-party partners regularly help or include data migration as part of their onboarding and help specify their requirements for migration (typically a remapping process of product IDs or SKUs). This third-party approach applies for wishlists or Gift Registries (stored as SFCC Product Lists).

SFCC's Custom Objects are carefully considered for migration as they typically augment or enhance SFCC functionality that is not always needed in Shopify or is implemented in a different fashion. For SFCC Custom Object types deemed as necessary to migrate, Shopify provides an analogous metaobjects apparatus to fill the gap.

Other more structured data, such as blog articles and stores, can be architected in Shopify native content functionality, such as the blog article object or a custom store metaobject.

Consideration

03

Front-end factors

Complexity

HIGH



LOW

Overview

Customers only care about the front end of your website: what they see and what they click. As such, your marketing team will put a large emphasis on ensuring they can easily manage the site on a day-to-day basis and craft an optimized shopping experience. From a technology perspective, this is another area where there is a ton of flexibility in how the experience is implemented. CQL can implement the front end in Shopify's native CMS, a different industry-leading headless CMS, or even a hybrid approach.

At a glance

01

The Shopify front end can be headed, headless, or a hybrid approach, based on your content management needs. Either way, the front end can be as unique, personalized, or customized as your design and brand teams desire.

02

Shopify CMS (Theme Editor) is drag-and-drop and easy to use, and marketers and content teams will find immediate value in using it.

03

Shopify's native capabilities are often extended via third-party integrations for more robust capabilities. A common example is extending search with a third-party search and merchandising solution to power search, carousels, upsells, and cross-sells.

04

A Shopify migration unlocks access to the Shop app, a powerful and exclusive sales channel to reach and connect with new audiences.

Approach

Shopify has a native CMS, referred to as the Theme Editor, which is easy to use and designed to put the power back in the hands of marketers. Once the theme and page templates are established, marketing teams are off to the races building pages and making content changes—fast.

If your team is using Salesforce Page Designer in a more basic way, Shopify's CMS may be a breath of fresh air and feel like an efficiency boost. If your team is using every aspect of Page Designer's more advanced functionality, then CQL will likely recommend a best-in-class headless CMS, such as Builder.io, to achieve feature parity and unlock more advanced functionality.

Technical guide

Shopify's native CMS is a drag-and-drop interface, fast to learn and easy to use, that packages the front-end files into a "Theme." This theme package is a .zip of primarily Liquid, JSON, CSS and Javascript files, which is the front-end experience. The theme is made up of sections, which contain blocks, each able to contain their own level of content configurations, such as color pickers, headline styles, alignment, WYSIWYG, and even HTML. The section's content inputs can also support dynamic data sources, as well as customizable content configurations, allowing a marketer to create more advanced content sections across individual pages or sitewide templates that are shared across object-level pages.

Development perspective

The Shopify Theme Editor sections and blocks methodology are similar to SFCC Page Designer components but are different in a number of critical ways. They are a substantially lighter weight to develop, so rather than needing to make a component that can do everything for all use cases, forking a given section and modifying it for a specific need is a common practice. The blocks within the section are all far more portable than their SFCC counterparts.

The biggest departure between SFCC and Shopify is the content and data promotion system that exists on SFCC.

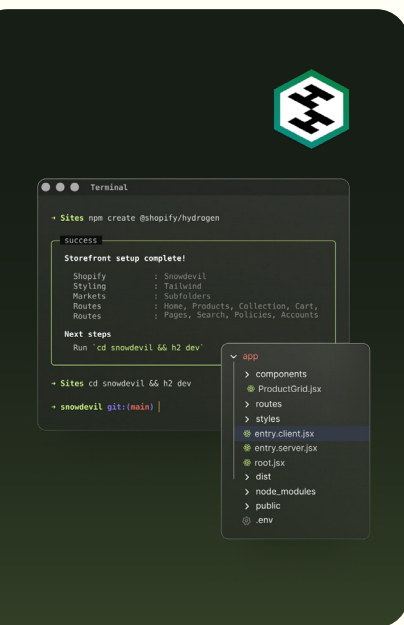
The workflow in Shopify centers around your main production site. For day-to-day content changes within the theme, you can test it by talking to production product data using preview links without any risk of impacting the production theme. New product data is pushed into Shopify in draft mode and toggled when it's tested and ready to go live. Often, a PIM is used to stage large scale product data pushes to go along with marketing calendars, but apps such as Matrixify can also be used to let merchandising teams stage and push data changes after testing on testing or staging environments without use of a PIM.

“Shopify has proven over and over for Escalade Sports that it is not just a platform, it’s a catalyst for our brands’ success. Working with CQL and migrating Cue & Case from Salesforce to Shopify’s multi-site framework, we benefited from a bespoke design, a quick launch timeline, a consistent UX, and the standardization of our backend operations, preparing us for the incredible growth to come!”

— Courtney Marchino, Cue & Case Brand Manager, Escalade Sports

Headless perspective

Shopify has empowered thousands of businesses as they transition to a headless architecture, providing developers and retailers alike with a comprehensive suite of headless development tools. The backbone of the Shopify headless offering is Shopify’s Storefront API, a GraphQL API that requires an access token associated with a specific Shopify store. When businesses use Storefront API, they can create customer buyer experiences more efficiently and at a lower cost.



With the flexibility available through Storefront API's access to essential commerce capabilities like optimized carts, product pages, contextual pricing, and more, businesses can use their preferred frameworks and tools while integrating with third-party systems.

Besides Storefront API, Shopify's headless solutions also include Hydrogen and Oxygen, a powerful development stack designed for dynamic, scalable headless commerce sites. Hydrogen is built on the React-based Remix framework and provides high-quality web development features and preconfigured components optimized for Shopify APIs. With Oxygen, Shopify's globally distributed hosting solution, businesses can deploy their Hydrogen stores quickly and efficiently—with 99.9% historical uptime, 300 points of presence in over 30 countries, and a less than 50-millisecond response time from customers.

From the perspective of getting developers up to speed, SFCC and the headless Hydrogen implementation are designed with JavaScript being prominent and having a higher degree of server-side code control and rendering than a headed Shopify implementation. A technical team with extensive SFCC experience is likely to get more comfortable, familiar, and efficient with Hydrogen vs. classic Shopify more quickly, not to mention they'd likely be more capable of making substantial customizations if required. Hydrogen has an appealing deployment and continuous integration/continuous delivery (CI/CD) scheme baked in out of the box, coupled with a modern architecture that will be familiar with most enterprise brands using SFCC.

A free bonus, the Oxygen hosting environment for Shopify headless is included in the cost of your Shopify license on all plans except Starter, so no additional hosting costs are needed for headless implementations.

Search and merchandising

Shopify has native search and merchandising capabilities, but if you're trying to replace Salesforce's Einstein merchandising and recommendation capabilities and use advanced facet and filtering

capabilities, CQL will recommend implementing a third-party search and merchandising solution. The downside is that it's another platform in the tech stack, but the upside is you're leveraging a best-in-class platform that specializes in search and merchandising.

Einstein is great when it works the way you like, but it can be a bit of a black box when you need to start tweaking what it brings to the table. In fact, many of the more sophisticated brands that CQL has supported through migration admit that they don't know how to use Einstein to the fullest and have stated that they're afraid to mess it up or don't understand how it works.

Generally, enterprise brands are looking to third-party search and merchandising tools (there's a reason there are so many great options in this space) and Shopify is no different. The scale, complexity, and features of CQL clients are well served with platforms like Coveo, Algolia, Bloomreach, Searchspring, Nosto, Crownpeak, and others. Regardless of the answer, the actual implementations are solved problems. The work in these areas largely focuses on customizations for client-specific data and other unique features of a brand's business model.

“The move to Shopify [from SFCC] has been so beneficial to our business. We get so much out of the box, plus a huge pipeline of new features dropping regularly. And the Shopify ecosystem of apps and developers helps us move fast. This has let us shift focus from basic ecommerce feature development and maintenance to high-value areas for our consumers, like content creation and loyalty.”

— Chris Cocca, Chief Digital Officer, Bauer

→ **[READ THE FULL STORY](#)**

Promotions

Shopify provides a range of discount options to enhance the shopping experience for customers: Shopify Discounts (native), third-party apps (discount apps using APIs), and Shopify Functions (custom app/back-end code using APIs to extend pricing/discount rules).

For an SFCC to Shopify migration project, CQL recommends documenting all the key promotions your marketing team depends on. This exercise has a few benefits:

1. Aligns internal marketing, ecommerce, and technology teams on what promotions are used
2. Provides one document to determine what promotions matter and act as a checklist for the promotions that need to be migrated
3. Allows CQL to talk through the implementation approach of your brand's promotions

In a comparison exercise of SFCC versus Shopify promotions, the majority of the most common discount and promotions scenarios can be accomplished with Shopify's native discount engine. This includes discount codes or automatic discounts to offer free shipping, fixed amount off, or Buy X, Get Y discounts. Discounts can be applied based on specific collections, customer groups, and sales channels.

Shopify can also apply sale prices at the product or variant level, which ensures the discounted price displays on the storefront and is seamlessly carried through to checkout. Discounts can be configured to be "stackable," so they can be combined (or not) with other discount types.

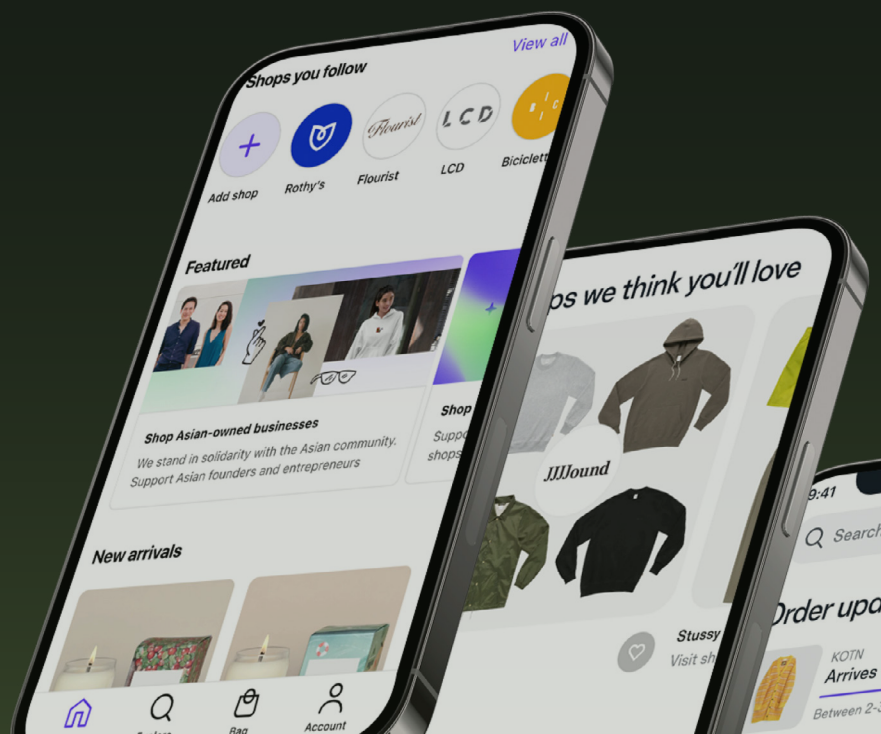
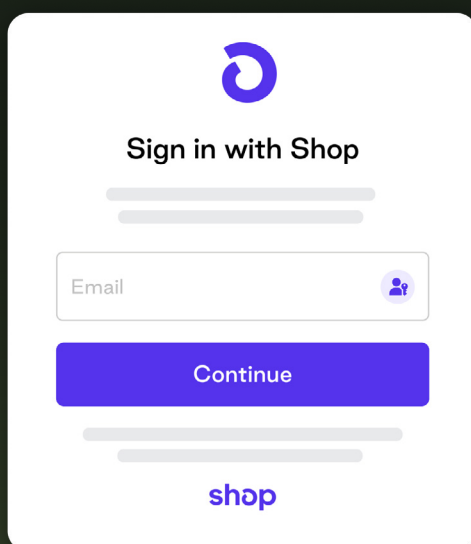
For more complex and bespoke discount scenarios, third-party discount apps or Shopify Functions can be used to modify the back-end logic of Shopify directly. Through either of these approaches, the vast majority of discount scenarios that are possible in SFCC can be replicated in Shopify.

If you have questions about specific discount scenarios, we encourage you to consult with CQL to determine replicability or alternative approaches that may achieve the same result.

Shop app

As a bonus, brands migrating to Shopify will get access to the Shop app, one of the world's most popular shopping apps with more than 200 million shoppers using it to discover new brands, make quick purchases, and track orders. On the business side, the Shop app presents a new channel for discovery, offering access to Shopify's global network of highly engaged shoppers and empowering businesses to connect with them. In short, the Shop app helps brands get their business in front of the right people, driving business growth more efficiently and quickly.

A key reason the Shop app is such a powerful channel for discovery is that it enhances shoppers' experiences by providing reliable, timely notifications about purchases, which encourages them to engage even more with the platform. As they open the app to check on their package tracking, they also see personalized product recommendations and new arrivals, which in turn fosters deeper connections with their favorite brands while also introducing them to new ones.



Consideration

04

Integrations

Overview

Complexity

HIGH



LOW

Shopify and SFCC take very different approaches to third-party integrations. Shopify shifts the responsibility to the third-party provider, reducing the brand's technical burden but limiting flexibility. In contrast, SFCC offers more customizable integrations through their LINK cartridge ecosystem, but they require significant customization and ongoing maintenance. In either case, the integrations, and functionality available in the [Shopify App store](#) generally surpass what is available in the [Salesforce App Exchange](#), so most integrations are considered a low concern during migration. Shopify's approach has changed the industry and has proven to be a more favorable approach for marketers by improving speed to market.*

At a glance

01

Shopify offers a large ecosystem of apps. An app can be integrated with clicks in minutes or hours, while an extension for SFCC is integrated with code and may take weeks or months.

02

Shopify provides extensibility in two main approaches: prebuilt app integration or a custom app integration. Prebuilt apps are vetted and supported by third-party vendors, which reduces a brand's risk and maintenance costs and increases speed to market.

03

Data previously exchanged via OCAPI/SCAPI/XML/Filetransfer on SFCC is now exchanged via GraphQL/RESTful and webhooks on Shopify.

04

Most ERPs, iPaaS and other enterprise solutions now have prebuilt connectors to Shopify (as well as "custom connectors" that can be used) which greatly reduces migration complexity and timeline.

Approach

Whether you are on SFCC or Shopify, your enterprise ecommerce tech stack is going to include numerous third-party solutions to enhance your customer experience. On Shopify, the implementation approach is distilled into two approaches: use a prebuilt integration (an app) or develop a custom integration (a custom app). Most brands can use prebuilt integrations from third-party platforms, which saves time and money, while also reducing ongoing maintenance for that integration. In instances where your brand has a true need for custom integrations, Shopify provides APIs to make them happen.

Technical guide

SFCC cartridge

In SFCC, you run software maintained within your application source code, whether it's in a controller or a job, or within your templates or models. The starting point is either from scratch, a custom integration, or by using a LINK cartridge from the [Salesforce App Exchange](#). While these cartridges are often certified, they are too often underdeveloped and are designed to only seamlessly integrate if you're using stock SFRA (and even then, it often doesn't do what you need). These SFCC cartridges are not tested with your product customizations, checkout, and more, and they could take you a few weeks to even get up and running.

Shopify app

In Shopify, an app is a set of API keys with permissions and maybe some [Liquid](#) code at the display layer, found in the [Shopify App Store](#). Shopify expects apps to interact with your site only via APIs and webhooks. Any code is run outside of the Shopify environment. For third-party apps, this means the third party is responsible for the entire integration from start to finish. The third-party app is reviewed and approved by Shopify, and the more popular partners apply for the "Built for Shopify" badge, which is only awarded when a partner meets Shopify's highest-quality standards for an app.

“We have an amazing ecosystem focused on our core DNA of marketing, focused on products and getting our products to our consumers. Our reliable tech partners including Shopify and Recharge allow us to remain innovative and entrepreneurial. Shopify introduced us to CQL and they’ve been an incredible partner along the way for us in building the solution that we need.”

— Karthik S, SVP of Growth & Strategy, Guthy|Renker

Shopify custom apps

This works very well for the major third parties, but what about when you want to make your own app? In either platform, custom integrations can be created in off-platform middleware (like AWS, Azure, etc.) whether data is ultimately exchanged via Open Commerce API (OCAPI)/Salesforce Commerce API (SCAPI)/XML/Filetransfer on SFCC or exchanged via GraphQL/RESTful and webhooks on Shopify.

Enterprise resource planning (ERP) integrations

CQL specializes in ERP integrations, especially NetSuite, SAP, Microsoft Dynamics 365, and custom ERPs. More often than not, the ERP is used for more than finances. It’s often both a PIM and an OMS, so a two-way data sync of customers, orders, products, and inventory is included whenever the business needs require it. Shopify is integrated into every major ERP in the industry, and there is a path to integration for the rest.

SFCC

ERP integrations in SFCC typically, but not always, are oriented around file exchanges coordinated by jobs running on the SFCC server, with connectivity defined by various services in the Service framework and configured in the Business Manager operations area. Incoming files generally conform to SFCC’s XML specifications, and outgoing file formats widely vary. Of course, API connections are available through

SFCC's Service framework as well. They can be internally triggered by user interactions on the website or scheduled jobs. OCAPI/SCAPI is used to talk directly from external services.

Shopify

Shopify does not have a heavyweight concept of developer-designed jobs that run in the platform's hosting services, but rather leans on external processes or apps that listen for certain data webhook topics (order created, cart created, etc.) or uses API polling to take action.

The strictness of the Shopify APIs provided makes the first 90% of these ERP integrations much more straightforward than on SFCC, but the last 10% can still be a challenge. Because Shopify is either using webhooks or expecting you to hit the APIs to fetch data for your ERP, there is no need for the services and jobs that these integrations center on in SFCC.

CQL has three methods for ERP integrations:

- Prebuilt ERP connector
- An integration platform as a service (iPaaS)
- Custom integration

These options all work for the vast majority of ERP integrations, but what about the few cases that still pose a challenge? The challenges are typically found in post-purchase operations. If your customer service reps (CSRs) are going to be working in the Shopify admin directly, no problem—you can just read the updated orders from the webhook.

“CQL offers a strong blend of expertise in managing the intricacies of SFCC to Shopify migrations, having collaborated with large, complex brands along the way. Their strategy-driven approach, paired with solid technical knowledge, supports a comprehensive transition for businesses looking to navigate this complex landscape effectively.”

— Peyman Naeini, Field CTO, Shopify

Consideration

05

Development environments and workflows

Complexity

HIGH



LOW

Overview

Any platform migration is a big change, and ensuring that your team is productive post-migration is an important consideration. With Shopify, your team will have new, more efficient development workflows. Shopify provides local development in a shared environment that can increase productivity, as well as make it easier for technical and marketing users to test new features. CQL has seen only positive feedback from SFCC developers (CQL and client team members) that have transitioned to Shopify development.

At a glance

01

Developers no longer need their own sandboxes on Shopify.

02

On Shopify, the days of hours-long sandbox data loads and painful cycle time on testing on sandboxes are a thing of the past.

03

Since SFCC replication is a marquee SFCC feature, Shopify development workflow will be different and a key part of change management.

04

Developers will find efficiency on Shopify—they all see the same data and can deploy in seconds, and the staging site performance is the same as production.

Approach

SFCC's developer tools and workflows require each dev to have both a local and server side setup, and the maintenance of those can be taxing. Shopify's approach is different. By enabling local workstation development to safely point to shared non-sandbox environments (i.e., staging or production) in most cases, teams are freed from maintaining additional environments. Both classic theme-based and headless-based development can benefit from sandbox-less development experience for significant portions of the workstream, significantly reducing development startup time. Development teams can establish change control procedures in areas where difficulties or conflicts can arise. CI/CD tools should be added to the workflow to reduce human error and make the onboarding process for new developers streamlined and consistent.

“In the past [with Salesforce Commerce Cloud], my teams have leaned more heavily into programming and site development; but with Shopify, we focus much more on marketing, creative, and acquisition. The platform really helps my team focus more on building enjoyable customer experiences, as opposed to the technical side of it.”

— Todd Dreith, EVP of Ecommerce and Marketing, Footwear Unlimited

Technical guide

Let's start with the best news. All your devs and QAs can have their own theme on the staging site without stepping on each other.

They can all see the same data, they can deploy in seconds, and the staging site performance is the same as production.

To improve time to market and reduce overall cost of ownership, updating your ecommerce site must be straightforward for the development and merchandising teams. SFCC's On-Demand sandboxes were a welcome improvement over the classic sandboxes that helped introduce efficiencies into the SFCC development cycle. However, SFCC enterprise teams still have efficiency challenges providing sandbox environments that reproduce suitable data and configuration to develop fresh features.

On Shopify, the days of hours-long sandbox data loads and painful cycle time on testing on sandboxes are a thing of the past. You will have to keep the staging data refreshed from time to time. There are backup and sync apps that can take snapshot data to keep a staging environment similar to your production environment, but generally, talking to non-production versions of your third-party apps to move destructive testing can be done without risk to the live site. Developers each have their own dev theme on the staging site which is used for their local development—they don't need to have their own sandbox.

Consideration

06

Internationalization

Complexity

HIGH



LOW

Overview

When it comes to the complications of internationalization, it's clear that a "single language, single currency, single country storefront, looking to add a country for the first time" brand is much different than a "multi-currency, multi-entity, multi-country global" brand. Salesforce and Shopify handle internationalization functionality very differently, and it's a feature category into which Shopify continues to expand functionality. CQL recommends having clear internationalization requirements defined on current and future growth objectives.

At a glance

01

Shopify provides multiple internationalization approaches to meet your businesses needs.

02

Shopify Markets unlocks quick international expansion into new markets from a single platform, providing unique currency, pricing, shipping options as needed.

03

Shopify Managed Markets will be the merchant of record to handle legal, tax, and shipping compliance complexities.

04

Shopify expansion stores can be used to create a more customized experience, from headless CMS, to unique banking per market, to unique catalogs, discounts, checkout rules, and more.

Approach

Internationalization complexity can vary greatly by brand. Depending on your business requirements and where you are in the global expansion plan, Shopify's international features may either be an accelerator into other countries or the largest change management for your brand.

For a brand getting started in international expansion, a headed Shopify approach with Shopify Markets can be an acceleration into global expansion, with features like automatic currency conversion and multilingual support making it easy to manage and customize online stores, streamlining the global shopping experience.

A brand looking for cross-border merchant of record (MOR) solutions can use a Shopify storefront with Shopify Managed Markets (formerly Markets Pro). They can also directly partner with the Global-e platform, but doing so forfeits Shopify functionality.

If your enterprise brand is well established with a global presence, CQL may recommend a headless Shopify expansion store model, which can leverage a combination of International or Managed Markets functionality, while unlocking more flexibility and configurability per market. This approach most closely aligns with SFCC origins and development paradigms.

Technical guide

The Shopify platform offers a robust set of technical features designed to streamline international expansion for businesses of all sizes. Recognizing the rapid growth of cross-border ecommerce and the challenges businesses face in global markets, Shopify has developed a comprehensive suite of tools. Based on current architecture and international functionality, CQL has three main approaches to internationalization on Shopify: Markets, Managed Markets, and headless expansion stores.

Shopify Markets

At the core of Shopify’s internationalization offering is Shopify Markets, a centralized hub for managing all international operations, encompassing cross-border, B2B, and retail sales. Markets empowers businesses to launch, maintain, and tailor online stores for different regions, achieving significant customization with minimal complexity.

Within Shopify Markets, there are a range of technical functionalities that facilitates localized experiences. Businesses can establish custom domains and subfolders for region-specific stores and implement automatic currency conversion through Shopify Payments. Language translation features allow for multilingual storefronts, while product availability and pricing can be managed on a per-market basis.

The platform also supports the customization of store content, global address forms, and the display of duty and import taxes at checkout, ensuring transparency for international buyers. Features like SEO-optimized domain structures and IP-based redirection improve the local browsing experience as well. Plus, with Markets’ smart “inheritance” of settings and customizations, businesses can set up and manage existing customizations across new markets fast and efficiently.

Shopify Payments plays a crucial role in handling international financial transactions. It lets customers shop and check out in over 130 currencies, with businesses having the option to receive payouts in multiple currencies where the feature is available. This multi-currency payout functionality helps optimize payments and reduce foreign exchange costs.

Shopify engineers are constantly evolving international selling tools to keep up with the global markets. To get the latest on what Shopify solutions can do, reach out to an expert today.

GET IN TOUCH

The technical architecture of Shopify's international offerings emphasizes centralized management and efficiency. This approach reduces the overhead associated with managing multiple separate stores. By providing a unified platform for handling diverse international requirements, Shopify saves businesses time and resources, allowing them to focus on growth. The cohesive integration of features like Markets, Shopify Payments, and planned future features aims to simplify the technical complexities of global selling.

Managed Markets

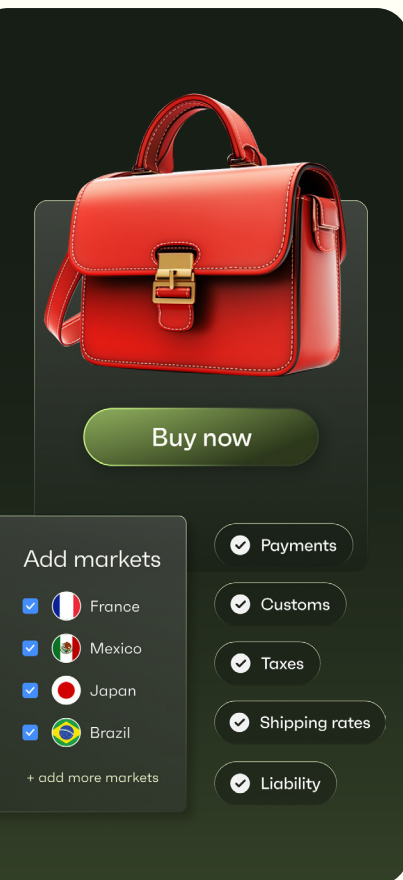
Managed Markets is a specialized offering within Shopify's internationalization solutions, designed to simplify global expansion for US businesses. While the broader Shopify Markets is a native platform functionality that provides tools for brands to independently manage their international storefronts and customize the regional experiences, Managed Markets offers an end-to-end cross-border solution that includes acting as the merchant of record on cross-border transactions. This means that Managed Markets helps address key complexities such as ensuring that products are compliant with local laws and regulations, registering and remitting taxes on behalf of the business. Managed Markets also assists with carrier management, including billing, invoicing, customs documentation and duties remittance.

The key difference between Markets and Managed Markets is really in the level of responsibility and services provided. While Markets allows businesses to create localized shopping experiences by managing aspects like currency, language, pricing, and content across regions, Managed Markets goes a step further by absorbing some of the burden of complex back-end operations related to selling internationally.

Or in other words, Markets is the framework for international selling, while Managed Markets manages crucial operational elements.

Managed Markets provides access to 150 global markets without increasing overhead. Managed Markets also allows brands to engage with customers as if they were local, reducing the complexities associated with cross-border transactions. Businesses can localize languages, content, product catalogs, pricing, currency, and payment methods specific to each market.

Managed Markets is currently only available to US businesses.



Headless expansion stores

For brands with business entities established in different regions of the globe and needing to transact and reconcile funds to different region-specific banks in different currencies, CQL recommends using an expansion store model. In this model, the full international requirements very likely result in CQL recommending a headless architecture with a third-party CMS. The expansion store model can be headed, but the headless architecture approach provides the most flexibility to customize the experience to meet the business requirements per market.

“During our long-term partnership with CQL, Stride Rite’s wish list of digital features—such as mobile responsiveness, PDP & Checkout optimization, multi-site and internationalization—was growing rapidly, but so was our technical complexity and expenses [on SFCC] to implement the changes. Stride Rite’s newly launched tech stack, designed for future growth and stability, lowers our total cost of ownership significantly and empowers our ecommerce teams to focus on content, marketing, and acquisition to cultivate deeper relationships with our customers.”

— Brian McManus, Executive Vice President, VIDA Shoes International

International expansion isn’t a one-size-fits-all exercise, and success in global markets requires a tailored approach. By partnering with CQL and Shopify, you will develop a customized strategy that matches your specific needs and goals.

Consideration

07

Advanced customisations

Complexity



Varies based on
unique business needs

HIGH



LOW

Overview

Can you do everything and anything in Shopify? Unfortunately, no. You can't do everything on Salesforce Commerce Cloud either, which is why you're most likely spending untold hours every month developing on it. The truth is, a lot of the more advanced customizations your brand wants to have would be customizations on most, if not all, ecommerce platforms. With the Shopify APIs available, the platform can be heavily extended.

The complexity level for this consideration will vary depending on your unique business needs.

At a glance

01

Every ecommerce platform has limits, which is why the good ones provide extensibility capabilities.

02

Shopify provides REST and GraphQL APIs to allow developers to extend the platform and create unique experience and functionality specifically to meet your brand's needs.

03

Shopify Functions is back-end logic, allowing brands to extend pricing, discount, and shipping rules.

03

Shopify Flow is an automation framework that allows store managers to create operational efficiencies through workflows and tasks with clicks in an easy-to-use admin UI.

Approach

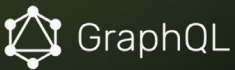
Depending on the use case and feature requirements, CQL or your in-house development team can use third-party apps or APIs directly to build custom functionality. Shopify continues to update and release APIs almost weekly to increase extensibility and customization flexibility. Shopify empowers CQL and brands to continue to create unique experiences and develop customizations when it makes sense for the brand, but still rely heavily on native functionality and prioritize speed to market.

“Some brands should be on SFCC... but it’s unlikely that you are one of them.”

— Ryan Donahue, Shopify Lead, CQL

Technical guide

Shopify provides a versatile platform that merges the advantages of a feature-rich environment with the needed flexibility for crafting custom experiences tailored to unique business requirements. Unlike rigid monolithic platforms, Shopify offers a blend of optionality, composability, and extensibility. This allows brands to respond effectively to their customers’ unique needs and shopping habits. With Shopify, brands get the freedom to design front-end experiences as they see fit, utilizing the full capabilities of the platform or opting for a headless and modular solution through the Storefront API or the Hydrogen and Oxygen development stack specifically designed for commerce.



Shopify combines rich native functionalities with the ability to connect existing third-party systems. The platform is highly extendable through a robust suite of tools, including REST and GraphQL APIs, custom apps, Shopify Functions, metafields, and Shopify Flow. This technical infrastructure ensures a reliable security posture, allowing brands to concentrate on projects that drive growth and improve customer retention.

Shopify Functions are a powerful developer tool, allowing customization of the back-end logic that powers various aspects of the platform. The WebAssembly platform that runs Functions executes code in under five milliseconds, which means Functions can support large sales events such as flash sales with no decrease in performance. Businesses can also use Functions to create tailored solutions for discounts, shipping, and payment methods.

Functions can be installed within an app, allowing for direct configuration in the Shopify admin without necessitating code changes or duplicating code across different stores. Developers can write Functions in any language that compiles to WebAssembly, using AppBridge and React for UI development. They can also use the Shopify CLI to deploy from their local environments.

Shopify Flow is another tool that's often used to create custom workflows—it's an ecommerce automation platform that businesses can use to automate tasks and processes within their store and across their apps. Shopify Flow monitors stores for events and lets brands create a sequence of actions that are taken in response, accomplished by creating workflows using triggers, conditions, and actions.

With all these tools at the ready, a partner like CQL can craft virtually any customization a business might need. Here's just a brief list of real-world business cases CQL was able to solve with advanced customizations on Shopify:

	Different payment and shipment schedules for subscriptions	SOLVED
	Product configuration: CYO product builder	SOLVED
	Over 1,000 product variants	SOLVED
	Single and multi-line item order bundles	SOLVED
	Offline order history from external system(s)	SOLVED
	In-store only coupons, online barcodes from external system(s)	SOLVED
	Multiple brands under a single domain	SOLVED
	Digital lookbooks with tagged products	SOLVED
	Store locator with appointment scheduling per store location	SOLVED
	Eyewear prescription uploads for contacts and glasses	SOLVED

Plan your next migration steps

While there are many considerations as you plan a migration from Salesforce Commerce Cloud (SFCC) to Shopify, the benefits from doing so speak for themselves. Shopify offers brands a significant opportunity to:

- Simplify and modernize your ecommerce tech stack
- Improve speed to market for feature enhancements
- Reduce technical debt while improving scalability and performance
- Empower marketing teams with flexible site management
- Provide a best-in-class experience
- Improve conversions with Shopify's high-converting checkout* and Shop Pay payment options

This guide provides helpful information for navigating the top technical considerations that CTOs must weigh in the face of a replatform. From data migration and ERP integration to internationalization and advanced customizations, this playbook outlines CQL's solutions (from a development perspective) that help brands face the complexity of migration with the information they need to make the replatform to Shopify the obvious choice.

With extensive experience in ecommerce and deep technical solutioning—coupled with the proven success of migrated brands like TOMS, Stride Rite, Guthy|Renker, and Bauer—CQL continues to make seemingly impossible migrations possible for enterprise brands.

[CONTACT SHOPIFY](#)[CONTACT CQL](#)

*Based on a study completed in April 2023 in partnership with a Big Three global management consulting company.

†Available to Shop app users in the United States and Canada on eligible purchases.

*According to research commissioned by Shopify from a leading independent consulting firm to study TCO across major platforms in North America and understand Shopify's relative positioning based on objective research methods.

CTO Playbook Acronym Index

API	Application Programming Interface
B2B	Business to Business
BOPIS	By Online, Pickup In Store
CI/CD	Continuous Innovation/Continuous Development
CMS	Content Management System
CSS	Cascading Style Sheet
CSV	Comma Separated Values
D2C	Direct to Consumer
ETL	Extract, Transform, & Load
ERP	Enterprise Resource Planning
HTML	HyperText Markup Language
iPaaS	Integration Platform as a Service
JSON	Javascript Object Notation
KPI	Key Performance Indicator
OCAPI	Open Commerce API
OMS	Order Management System
PIM	Product Information Management
RFP	Request for Proposal
SCAPI	Salesforce Commerce API
SFCC	Salesforce Commerce Cloud
SFRA	Store Front Reference Architecture
SOAP	Simple Object Access Protocol
TCO	Total Cost of Ownership
WYSIWYG	What You See Is What You Get
XML	Extensible Markup Language