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Future-Proof Your B2C Commerce

A Guide to Composable Storefronts on Salesforce

Contents

Executive summary

Businesses are increasingly adopting composable solutions to future-proof their B2C commerce operations amidst rising competition and evolving consumer expectations. This whitepaper offers a comprehensive guide to implementing composable storefronts on Salesforce, addressing challenges like complex builds and delayed ROI inherent in B2C commerce. It introduces key concepts such as Progressive Web Apps (PWAs) and Composable Commerce, setting the stage for understanding their transformative potential.

The Salesforce Composable Storefront framework is detailed, highlighting its ability to modernize e-commerce experiences through a PWA-based approach, delivering improved page load speed and SEO benefits. The rationale for adopting or migrating to a composable solution is explored, emphasizing organizational readiness, migration strategies, and the benefits of enhanced user experience and efficiency.

For businesses already using Salesforce Commerce solutions like SiteGenesis or SFRA, a phased transition to a Composable Storefront is recommended, leveraging a hybrid deployment strategy. In conclusion, embracing composable solutions is essential for businesses aiming to remain competitive and meet evolving customer demands.

This whitepaper serves as a valuable resource for informed decision-making, providing insights and practical guidance to navigate the transition effectively. Additionally, accelerators and expertise from trusted partners like LTIMindtree expedite the migration process, ensuring swift and successful deployment of e-commerce businesses in the digital landscape.

Introduction

As competition intensifies and consumers demand more personalized and cohesive online experiences (as they switch between apps and sites), a composable solution becomes paramount. It allows retailers to stay ahead with increased flexibility and agility. Traditional e-commerce solutions consist of fixed, slow-to-upgrade, and hard-to-customize software blocks, often known as "legacy" or "monolithic" platforms. They lack agility and adaptability, which hinders innovation. Additionally, running a monolithic architecture comes with high maintenance costs due to additional fees for integration, upgrades, and so on. Moving to a composable solution reduces the upfront cost of the transition since flexible APIs are used to achieve customizations. The development cycle can be accelerated by having developers concentrate on building the front end

while modular structures take advantage of pre-existing backend functionality.

Also, brands can use customized best-of-breed components to meet their unique needs and build a solution rather than creating every element from scratch. This provides customizable customer experiences, flexibility, and increased adaptability, which ultimately help prepare for future goals-oriented and economic measures.

Moving to a newer platform and launching a Minimum Viable Product (MVP) helps realize investments faster than a high-cost monolithic architecture.

According to the latest Salesforce State of Commerce Report, retailers are investing in headless commerce to drive growth.

77% of commerce organizations that have implemented headless architecture say it gives them increased agility by allowing them to make changes to their storefront quickly.

80% of businesses that don't currently have headless commerce technology plan to implement it in the next two years.

Commerce teams are under increasing pressure to adapt to changing needs and expectations but have inflexible architecture and strained IT teams. IT teams increasingly incorporate composable architectures—applications or services built on modular and reusable components like APIs—to offer better experiences. This

growing strategy involves reusable components, like building blocks for creating new applications. The strategy has the potential to ease the ongoing pain points around inflexible digital storefronts, but time will tell if the projected surge in adoption will become a reality.

Teams Turn to Composable Architectures for Much-Needed Flexibility

65% of customers expect companies to adapt to their changing needs and expectations

but

12% of customers say most companies consistently do this

26% of IT teams can support all development requests from the business*

but

46% of IT teams have implemented composable architecture, and **43%** plan to*

Figure 1: Retailers investing in composable solutions

This whitepaper aims to answer all these questions and more. We will dig beneath the many buzzwords and acronyms to simplify the explanation of everything you must know if you're considering moving to a composable storefront.

In the following sections, we will learn some challenges, concepts, and key strategic points. We will also examine why brands want to use composable solutions (and how you can decide if it is right for you).

Challenges to B2C commerce implementation

Implementing B2C commerce comes with its own set of challenges, including:

Complex build	Inconsistent practices across e-commerce sites Limited reusability
Time and cost	Longer implementation time More effort & resource consumption Increased enablement cost
Missing features	Building features like payments, integration with CMS, EPR, etc. is required Limited or no support for process like in-store pickup
Delayed ROI	Higher upfront costs leading to longer ROI realization time
High Maintenance	Higher customizations cause high-tech debt Inflexible system & complex changes

Basic Concepts

Before we proceed, let us understand a couple of key concepts.

4.1 Progressive web apps (PWAs)

A progressive web application (PWA) is a contemporary technology framework that leverages modern web browser technologies to provide end users with a mobile-friendly experience that emulates a native application when the web application is accessed.

In contrast to native iOS and Android applications, PWAs can be viewed immediately through a web browser and do not require downloading to a smartphone or tablet. They are typically developed using contemporary front-end JavaScript library like ReactJs or frameworks like VueJs.

4.2 Composable commerce

Composable commerce involves building e-commerce solutions that combine the best available components. These solutions use the platform's in-built business capabilities to aggregate key functions together for ease of deployment and integration.

Composable commerce solutions follow a modular approach, allowing businesses to choose from native or third-party best-of-breed functionality. They have a headless architecture, separating the front-end customer experience layer from the backend commerce functionality using API's.

The front-end layer is the focal point of a composable commerce solution, delivering personalized experiences across various channels. These solutions offer the freedom to select and integrate specific features and capabilities that align with unique business requirements.

An overview of the Salesforce Composable Storefront

Salesforce created the Composable Storefront for Commerce Cloud, composed of a development framework (formerly the PWA Kit) and Managed Runtime. It offers a contemporary PWA-based substitute for website-based stores created using Storefront Reference Architecture (SFRA) and SiteGenesis. Code libraries and pre-built commerce components (page, basket, product grids, checkout, etc.) available in the PWA Kit speed up the creation of complex e-commerce storefronts that can leverage features in contemporary web browsers.

The Composable Storefront allows Salesforce Commerce Cloud (SFCC) customers to go headless with their present solution. This provides stability to the core commerce functions provided by SFCC and enhances the performance and experience of a modern, fully customizable web storefront. Composable Storefront offers many advantages over older SFCC storefront frameworks like SiteGenesis and SFRA, such as enhanced experience on mobile devices, improved page load speed, SEO, and accessibility support.

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The key elements of a composable storefront

Frontend as a Service platform: It paves the way for headless commerce and the delivery of Progressive Web Application (PWA) experiences.

Hosting Infrastructure—Managed Runtime: This solution addresses the security, scalability, and maintainability concerns of a traditional headless architecture. It enables application

deployment and monitoring and does not require an additional license or incur further costs.

Salesforce Commerce APIs: Built on a new API-first platform, they offer multi-tenant support with an embedded CDN layer in front of the APIs.

Why should you develop or migrate your current solution to a composable solution?

These days, the most frequent question businesses ask is whether it is smart to go headless and move to a Composable Storefront. If this is accurate, what are the consequences? There is much to think about.

We have attempted to analyze whether a headless and composable storefront is the optimal approach for your business. If this is the right approach, we will also see how you should tactically execute that decision, considering the outcome, by investigating the feasible options you currently have. We will also try to figure out "why now?"

Many firms with successful e-commerce businesses might find it difficult to decide

whether to go headless or composable. It is easier for those working on an old-fashioned retail experience. They should weigh the options against customer experience strategy and the supporting digital business transformation program to determine whether, how, and when to use a composable solution.

It is crucial to clearly understand the direction you want to take with the user experience and the necessary changes in technology, business, and culture to support it. Once you have it, choosing a composable solution becomes more of a question of when rather than if.

6.1 Key considerations

- **Organizational readiness:** Enterprise teams must assess their cultural readiness before implementing a composable methodology. They must accept that everything should be flexible and modular, acknowledging the importance of change and its function in the retail sector.

- **Migration and integration strategies:** Project planning and execution include inherent risks if your tech stack is closed and monolithic. Replacing all elements with a composable infrastructure can often take years to accomplish. It is a useful first step toward a completely composable solution. You may reuse existing assets and connect essential components by severing the front-end customer experience layer from the monolithic platform.

- **Flexibility for business and increased efficiency/profitability:** A composable solution allows you to choose the components of your e-commerce system that best meet your needs and requirements. With a modular approach to software components, you can select and configure the components per your strategy and goals, reducing time and resources spent on irrelevant elements.

- **Enhanced user experience:** With composable commerce, you may select the best-in-class components, such as content management systems and marketing automation tools, to enable more focused and personalized touchpoints, including personalized product recommendations and content.

- **Automation and upgrades will happen regularly:** To address evolving needs and process-specific requirements, composable applications can be developed, deployed, and upgraded several times daily.

- **Testing:** It is critical to ensure testing and QA procedures are consistent and thoroughly documented for the benefit of different teams working on various aspects of the system's development.

- **Security:** Composable solutions rely on multiple microservices and data sources with different security requirements and vulnerabilities. Therefore, monitoring and auditing the entire system for security breaches and potential threats is critical.

![LTIMindtree logo] ![salesforce logo]

Is "going composable" right for your organization?

A drawback of change is that it is generally costly and time-consuming. However, it would be best to consider the price of maintaining the status quo. Composable commerce allows businesses to adapt gradually while providing the best of both worlds.

So, ask yourself these questions to determine whether composable commerce makes sense for your company now or in the future.

- Does your business operate in a competitive, fast-changing industry that demands new, person-centered experiences that can be implemented quickly?

- Does your business need new channels to engage audiences with different interests?

- Does your business use a complicated program suite that requires months to update?

- Is there an open-source software ecosystem and easy integrations in your expanding firm that you might want to modify in the future?

If you answered yes to any of these, it's time to consider composable commerce.

What if you already have a Salesforce Commerce SiteGenesis or SFRA storefront?

If you already have any of these storefront solutions, you may delay migration to a Composable Storefront. However, SiteGenesis and SFRA users can now implement headless technologies gradually. For instance, Composable Storefront can be used to roll out a new product page experience while maintaining the checkout process on SFRA until the next stage of the headless transition. This tiered method speeds up the beginning process and reduces roadblocks to a fully headless solution.

So, how do you do that?

We have developed a standard process that facilitates this transition using a well-thought-out strategy, planning, and effective execution, as outlined in the sections below.

8.1 Strategy

Business owners using SFCC SiteGenesis/SFRA can opt for a hybrid deployment strategy. It entails moving the most important browsing pages, like the homepage, PLP, and PDP, to PWA first, leaving the rest, like the Checkout and Account pages, with the SFCC core application, i.e., SFRA/SiteGenesis.

With this strategy, a business can begin its migration process at a point where it can maximize the benefits while minimizing the risks. This approach also helps avoid the need for new complex checkout integrations at the beginning, which can further reduce the potential risks.
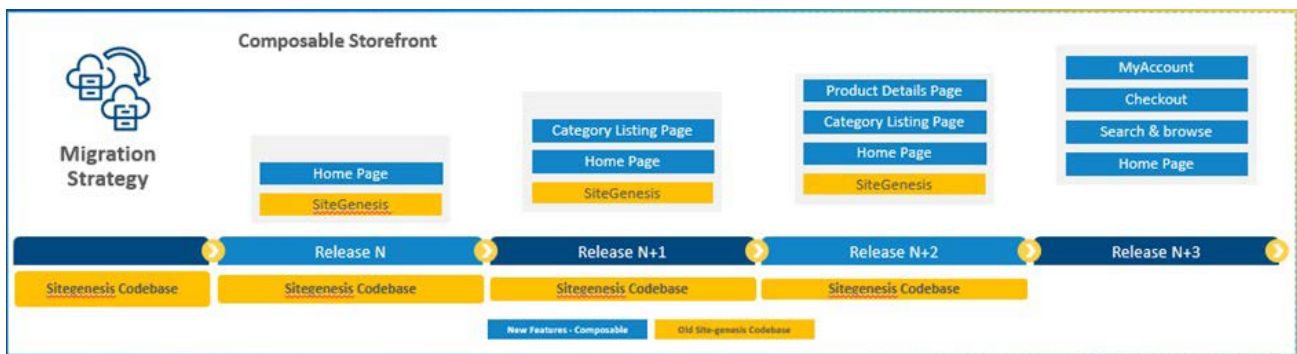

Figure 2: Hybrid approach

8.2 Planning

Analysis & Design

- Examine the current SiteGenesis UI.

- Determine and redesign the essential UI elements for a composable front end.

Fit-gap analysis

- Compare the user interface components to the pre-built (OOTB) components provided by the Retail React App offered through the Composable Storefront.

- In that case, adjust the component design.

- To make any necessary modifications, compare the user journey provided by the Retail React App.

Integration readiness

- Identify integrations that already exist

- Determine integrations that need modifications

- Specify the type of integration, such as client-side or server-side

- Design technical specifications for software (TSD)

- Determine the necessity for SFCC API customization

8.3 Execution

The implementation phase will begin after the planning is complete. Planning is necessary even though we support iterative implementation (using Agile or any comparable approach).
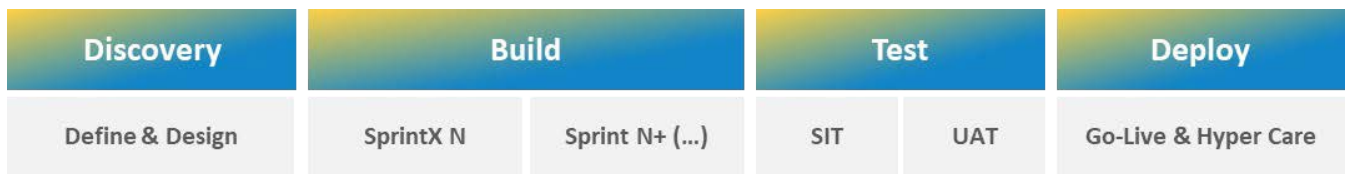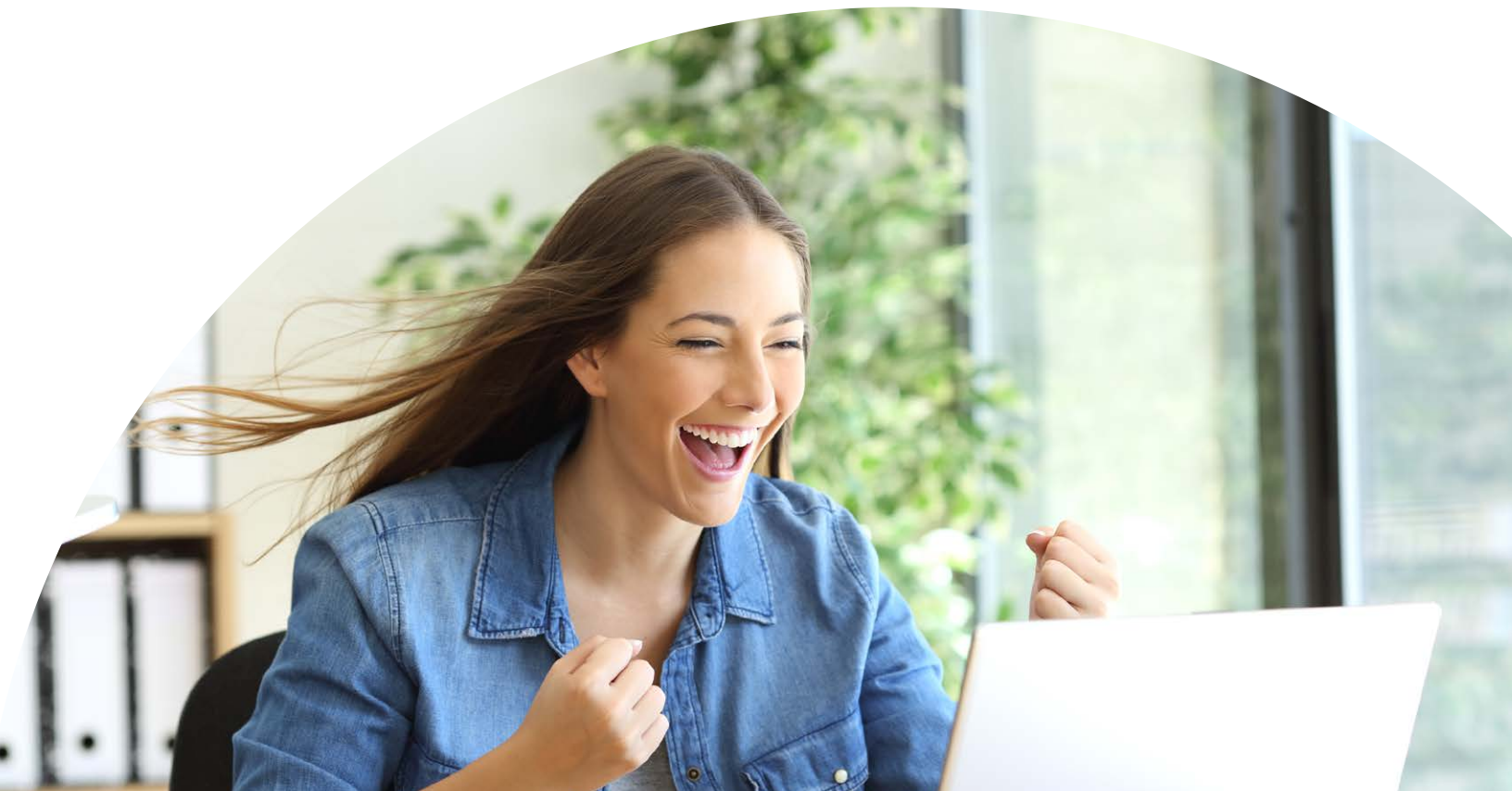

Discovery	Build		Test		Deploy
Define & Design	SprintX N	Sprint N+ (...)	SIT	UAT	Go-Live & Hyper Care

Figure 3: Delivery approach

Conclusion

In a nutshell, new-age businesses must acknowledge the inevitable takeover of commerce by adapting to consumer preferences and seizing the opportune moment to transition online effectively. Embracing composable solutions can help businesses overcome the challenges posed by traditional monolithic platforms, such as limited flexibility, high maintenance costs, and delayed ROI. Furthermore, adopting composable architectures and headless commerce streamlines development cycles, enhances user experiences, and drives growth.

As outlined in this whitepaper, transitioning to a composable storefront on Salesforce offers retailers the opportunity to future-proof their operations, enhance agility, and meet the evolving needs of their customers. With a hosted platform, cost controls, and accelerators, the Salesforce Composable Storefront Solution enables businesses to meet their business goals efficiently and effectively. Whether you are a new business exploring the benefits of composable storefronts or an existing Salesforce Commerce Cloud user

contemplating a transition, the insights provided in this whitepaper can serve as a valuable resource in guiding your decision-making process.

The Salesforce Composable Storefront solution allows you to deliver highly differentiated commerce experiences that match your business case and its requirements. Once these have been determined, the technical aspects must be clarified and evaluated.

We hope you find the content useful and practical for your critical decision-making process. Now that you understand the importance of adopting composable solutions and how to approach them, the next step is assessing your readiness for them. Accelerators with pre-built UI enhancements and features will ensure reduced development time and cost, improved storefront performance and engagement, a reliable and secure platform, and faster time-to-market. To speed up migrating to a composable solution, LTIMindtree, a trusted Salesforce partner, offers the expertise and accelerators for a swift launch of e-commerce businesses.

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About LTIMindtree

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 82,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit https://www.ltimindtree.com/.

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