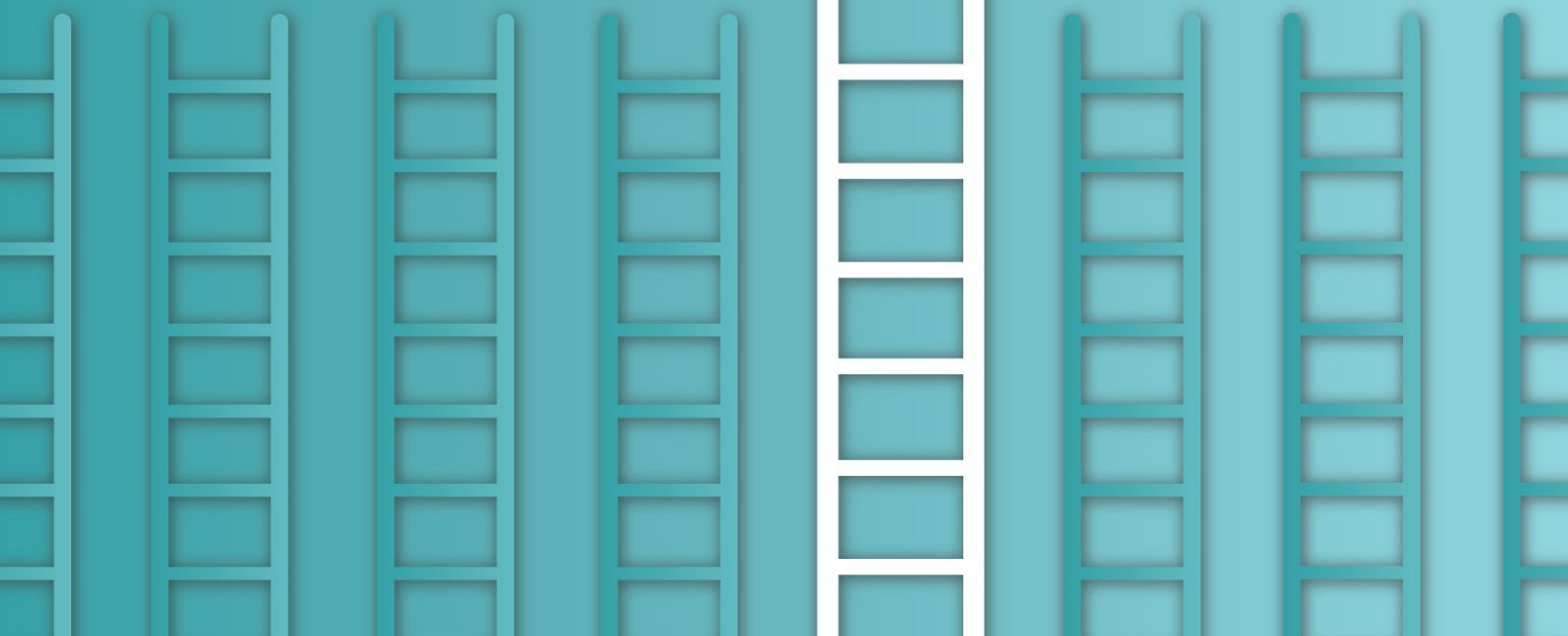# Headless Commerce 101

A Complete Guide For Fast Growing Brands

INTRODUCTION: WHY HEADLESS COMMERCE

Digital business models are evolving and disrupting the market like never before. Driven by customer expectations and changed buying behaviour the whole ecommerce ecosystem has undergone a paradigm shift.

A few years ago, future-proofing your ecommerce business meant building a mobile-ready online store along with mobile apps for your brand. By 2019, online shopping was no longer limited to a few channels or devices. Customers started connecting with brands on multiple touchpoints like offline stores, brand websites, mobile apps, marketplaces, social platforms, blog pages etc.
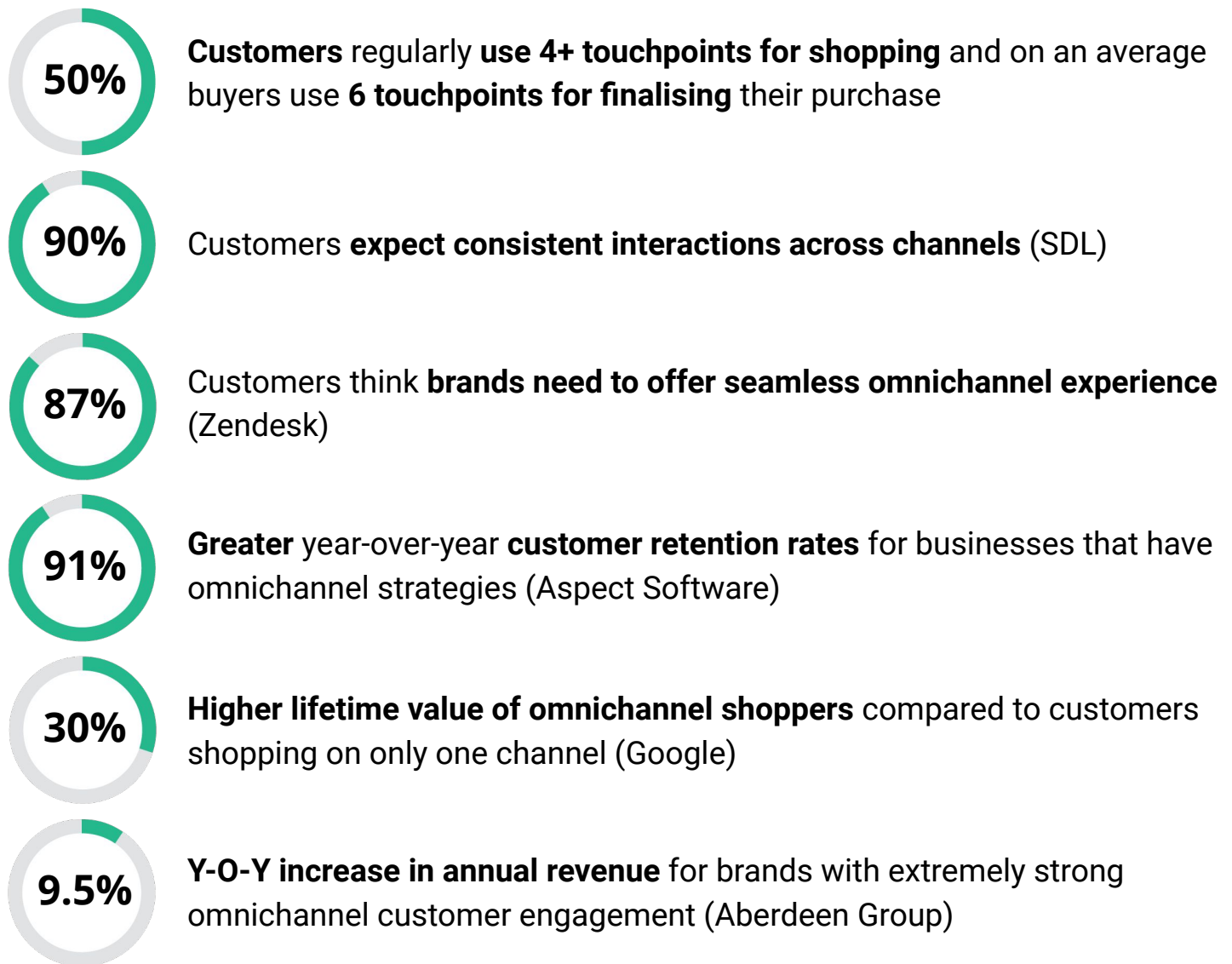
Traditional monolithic ecommerce software systems needed to evolve rapidly to offer the customers a uniform, seamless, flexible and memorable buying experience across new emerging touchpoints and devices.

It is in scenarios like these that headless commerce solutions became the gamechanger. The decoupled headless commerce architecture gives brands greater creative freedom, agility, speed, scope to scale rapidly and go to market in record time.

HEADLESS COMMERCE: USHERING THE NEW ERA OF OMNICHANNEL ECOMMERCE

Digital buying trends have changed to an extent where brands need to offer a wide range of omnichannel scenarios to their customers. Every touchpoint where the customers interact with a brand needs to be commerce-enabled and personalised to engage and convert the potential buyers.

Here is a sneak-peek into the omnichannel buying behaviour of the new-age online shoppers:

50%   **Customers** regularly **use 4+ touchpoints for shopping** and on an average buyers use **6 touchpoints for finalising** their purchase

90%   Customers **expect consistent interactions across channels** (SDL)

87%   Customers think **brands need to offer seamless omnichannel experience** (Zendesk)

91%   **Greater** year-over-year **customer retention rates** for businesses that have omnichannel strategies (Aspect Software)

30%   **Higher lifetime value of omnichannel shoppers** compared to customers shopping on only one channel (Google)

9.5%   **Y-O-Y increase in annual revenue** for brands with extremely strong omnichannel customer engagement (Aberdeen Group)

To meet the changed customer demands businesses need to add new customer touchpoints, quickly while maintaining the business-critical backend flows. This was possible only if the backend and frontend were decoupled using the headless architecture

HEADLESS COMMERCE: HELPING BRANDS BEAT THE CHALLENGES OF OMNICHANNEL SELLING

Headless commerce empowered brands to sell omnichannel and build extremely personalised buyer journeys across every channel and device. Brands could now easily add a new customer touchpoint and checkout to any channel or device what their customers prefer, be it mobile, voice-assisted purchases or any other futuristic touchpoint made possible through augmented reality.

What's even better is that businesses don't need to spend ages to build a custom solution for each of these channels. With headless ecommerce platforms, they can easily build powerful and user-friendly front ends that use the same backend logic and offer a seamless buyer journey on all channels and devices.

EXECUTIVE SUMMARY

In this whitepaper, we will discuss, what necessitated a new decoupled architecture, what is headless commerce, how it is different from traditional ecommerce, what are the benefits of headless commerce for modern businesses, how the API-driven architecture helps in building innovative solutions and why this is the right time for businesses to adopt this technology.

You will also learn how prominent FMCG, Fashion, Grocery, Footwear, Beauty and wellness and other brands have used headless commerce to offer the most amazing, personalized "me-tail" experiences to their customers. Also, you would learn how brands can leverage microservices-based turnkey headless commerce platforms to take advantage of the changing market dynamics.

Businesses that delay the switch to headless commerce will lag behind competitors who have had a head start. StoreHippo, the leading headless commerce platform has been offering complete omnichannel solutions for B2B, B2C, D2C and enterprise brands planning to take the leap and solidify their cross-channel presence.

WHAT WE WILL COVER

Point-wise topics that are covered in this whitepaper
- What is Headless Commerce
- How Does Headless Architecture Work
- How Is Headless Commerce Different from Traditional Commerce
- Business Benefits Of Headless Commerce For Fast-Growing Brands
- Headless Commerce: Helping Brands Build Disruptive Solutions
- Headless Commerce: Why It Is The Tool To Future Proof Your Business

AUTHOR BIO

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" Rajiv Kumar Aggarwal is the CEO & Co-Founder of StoreHippo® an enterprise-grade SaaS-based e-commerce platform that offers headless commerce solutions to B2B, B2C businesses of all sizes. Kumar is an industry veteran and highly skilled technologist with 20+ years of strong experience in Internet Technologies and E-Commerce. A keen observer of the ecommerce landscape Rajiv has been quoted in leading digital and print media on topics like changing ecommerce dynamics, latest technology trends, improving omnichannel and D2C customer experiences. "

WHAT IS HEADLESS COMMERCE

Headless Commerce can be a confusing term if one is not aware that any software can be divided into two parts: the frontend as the "head" and the backend logic as the "body" of the software. In ecommerce terms, the "head" is the user interface of your online store where the customer searches for products, adds them to the cart, applies discount coupons etc. The "body" is the backend that encapsulates and executes all the logic to get the products added to the cart, apply the discount and finally complete the order process through a successful payment and checkout.
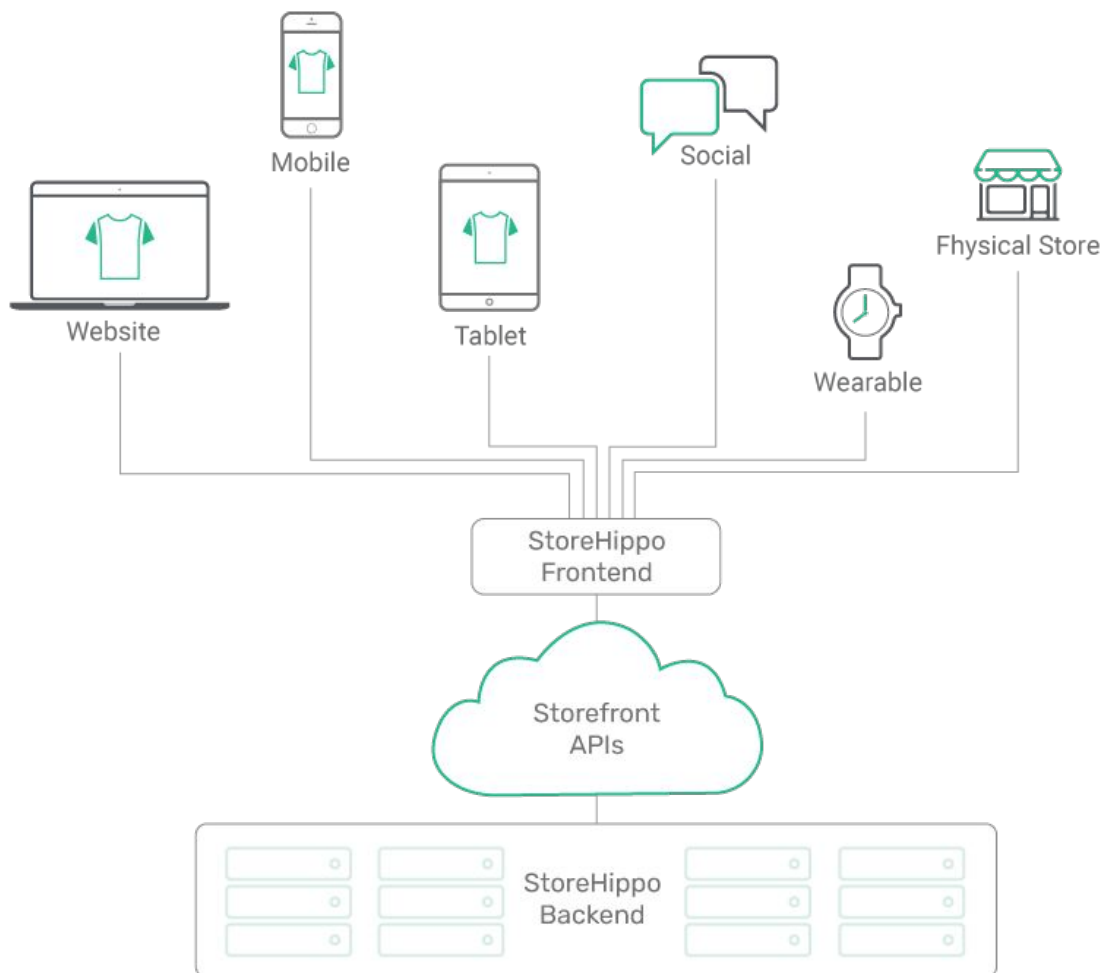
Traditionally, both the head and the body (i.e; the frontend and the backend) were tightly coupled. To put it simply, the frontend and backend were linked in a manner that changes to one would require changes to the other to keep up with the new flows or the processes. This approach hampered quick adaptation to changing customer expectations, which in turn, made it difficult for brands to offer the best omnichannel buying experiences to their customers.

Headless commerce was a departure from this traditional software architecture and it

decoupled the backend from the frontend. It gave brands the flexibility to add new customer touchpoints or frontends, functionalities, features etc. while keeping the backend logic the same as before.

With the decoupled headless architecture brands get better creative control to build agile and nimble solutions. By adopting headless commerce they could offer personalized customer experiences and cater to the expectations of their buyers.

In a nutshell, the headless architecture allows businesses to add multiple heads(frontends/customer touchpoints) to the body(backend) of their ecommerce software without much ado.

HOW DOES HEADLESS ARCHITECTURE WORK

In the decoupled headless commerce architecture the backend and the frontend communicate using simple commerce APIs and make your data or content available to multiple heads or customer touchpoints.

The primary focus of this decoupled architecture is on background processes. The backend functionalities (like fetching product details, displaying different prices or discounts, security validation etc.) for various frontends run in the background. Different customer touchpoints or front-ends use REST API calls to connect and fetch relevant data/result from the backend.

For example, a customer is browsing a fashion app. She searches for "a little black dress" and opens the related product page. She clicks the "Buy" button on the product page to add the dress to her cart. Now the front end(or the head) of the headless setup sends an API call to the backend or the body to start the order processing. The front end and the backend communicate through API calls to complete the transaction.

The backend is updated by logging the money transfer, inventory update and storing complete details of the customer. The process is completed when the frontend sends another API call to the backend to request the "order status". After getting the details the order status is shown to the customer as "confirmed".
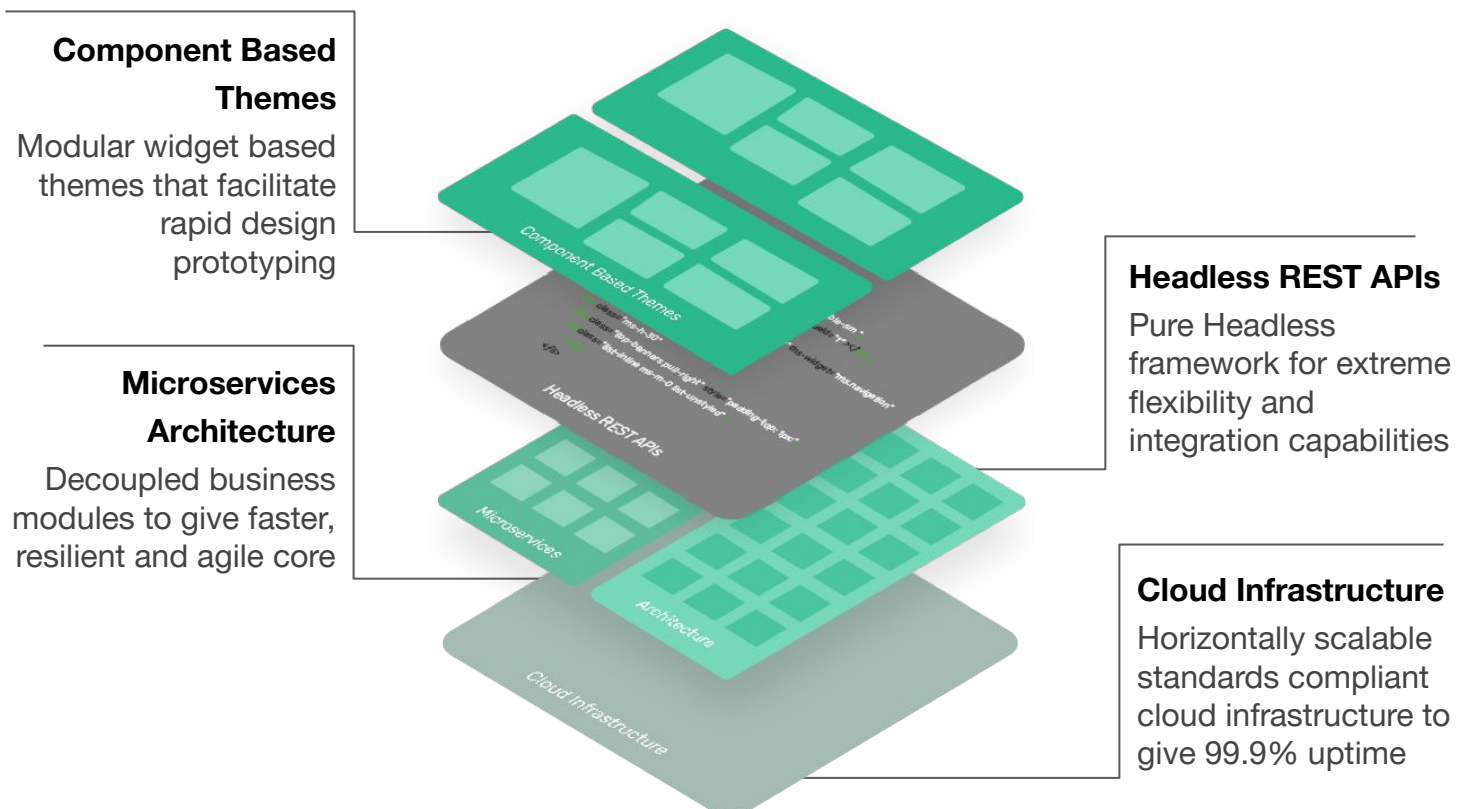
WHAT IS API

API or Application Programming Interface is the connecting software that enables two different software applications to talk to each other without knowing anything about how the other system works. As the name suggests, API is an **interface** that defines the format in which data will be exchanged between the frontend and backend. Basically, **API** is the middle layer that **works as the glue between the frontend and the backend which binds them together while keeping them decoupled.**

For example, you are selling mobile phones on your online store as well as on your brand's mobile apps. Suppose you want to update the product details of the iPhone on both these customer touchpoints. Your online store frontend, as well as your mobile app frontend, just need to know the right APIs to communicate with your application layer(backend) to fetch and update all the details about the iPhone on both these channels.

BENEFITS OF HEADLESS ECOMMERCE API

With APIs in place, the front-ends don't need to know how the backend works and fetches these details. It could be a complex backend process but the decoupled

Component Based Themes

Modular widget based themes that facilitate rapid design prototyping

Microservices Architecture

Decoupled business modules to give faster, resilient and agile core

Headless REST APIs

Pure Headless framework for extreme flexibility and integration capabilities

Cloud Infrastructure

Horizontally scalable standards compliant cloud infrastructure to give 99.9% uptime

Components of StoreHippo® Headless Architecture

frontend communicating via headless ecommerce APIs need not know any of this. In fact, you can completely overhaul or replace your backend without breaking the front-end functionalities on either of the two customer touchpoints, as long as the new backend system is provided with the same headless ecommerce APIs.

Decoupling the frontend and the backend with using the headless architecture enables the brands to experiment with their frontend without the fear of impacting or breaking the backend. Also, they can use the same backend to create any number of "heads" like; PWA stores, mobile apps, marketplaces, social platforms, wearable devices, voice assistants... you name it and you can build it!

HOW IS HEADLESS COMMERCE DIFFERENT FROM TRADITIONAL COMMERCE

Headless commerce is a departure from the rigidity of traditional monolithic ecommerce where the head is tightly coupled with the body. In a monolith ecommerce system, any changes or customizations in the backend could easily break the frontend and vice versa. This constrained development of new-age ecommerce systems driven by customer experiences.

The new-age businesses need a strategy and ecommerce architecture where they can do away with the limitations of monolith ecommerce systems to build unparalleled buying experiences that engage, convert and retain their buyers and at the same time boost their brand value.

HEADLESS COMMERCE VS TRADITIONAL COMMERCE

1	Front End Development

With the traditional approach of building an ecommerce system, making any changes to the front end design is pretty time consuming and requires a thorough overhaul of the platform, database and code. Even after this, there are limits to implementing design changes.

With headless ecommerce, you can just go wild with your design experiments and create the most awesome, interactive immersive experience for your buyers. All you need is an API call to implement what you want. You can use the same database and backend and just build a new frontend or touchpoint from scratch to start engaging your buyers on a completely new channel.

2   Customizations For Personalized User Experiences

In traditional ecommerce systems, the experiences for the end-users as well as the admins are predefined and there is actually very limited scope for change. Remember, any major change can break the flows on either presentation or application layer. But with the decoupled headless architecture, there is endless possibility to create a variety of experiences both for the users and the admins. For example, you can offer your customers different themes and checkout flows while shopping through their desktop or mobile devices. Similarly, your teams can work on the go with your admin mobile app.

3   Flexibility

Flexibility is one of the most desirable attributes of an ecommerce system. However, with the traditional, tightly coupled frontend and backend architecture, customizations of any sort become an arduous task. Any changes to either the frontend or the backend require concurrent changes making the whole process messy.

With the decoupled headless ecommerce API based architecture things become easy breezy. Frontend and backend changes can be executed independent of each other without breaking the code at either end.

4   Adaptability To New Trends

Adapting to new trends is way too cumbersome with the monolithic ecommerce solutions as they need extensive and time-taking changes. With the decoupled headless architecture you can easily gain an edge over the competition by building new solutions or touchpoints.

Traditional Commerce Vs Headless Commerce At A Glance

	TRADITIONAL COMMERCE	HEADLESS COMMERCE
DESIGN CONSTRAINTS	Design limitations	Simple API calls to implement design changes
FRONT END DEVELOPMENT	Considerable time needed to sync the platform, database and code changes	Use the same database and build a new frontend from scratch
PERSONALIZED USER EXPERIENCE THROUGH CUSTOMIZATIONS	Limited scope for personalisation and diverse user experiences	Unlimited possibility to create different experiences with headless CMS
FLEXIBILITY	Difficult to customize due to tightly coupled frontend and backend	Easy customizations with decoupled architecture
	The frontend cannot be changed without disturbing backend logic	Frontend and backend can be tweaked independently
ADAPTABILITY TO NEW TRENDS	Adding multiple customer touchpoints is cumbersome	Add any number of new customer touchpoints easily

BUSINESS BENEFITS OF HEADLESS COMMERCE FOR FAST-GROWING BRANDS

1	Extensive Customization

Your brand no longer needs to be restrained by the limitations of the monolithic systems. With headless architecture, you have full control and you can go beyond the capabilities of your existing tools and templates and create bespoke interfaces that cater to the exact requirements of your customers and give a unique identity to your brand. For example, you can easily personalise buyer journeys by offering your customers personalised discounts, promotions or any other engaging and interactive content.

Business Benefits:
- Better customer engagement, conversion and retention
- Create a niche for the brand

2	Out Of Box Solutions

With headless commerce and APIs at your disposal, you get the freedom to experiment and build the most amazing solutions without risking your existing ecosystem. For example, you can integrate with the best marketing software and switch to a new accounting tool without making major code changes. You can even do A/B testing to find the best-fit solutions and software for your business.

Business Benefits:
- Innovative solutions with best in breed software
- Save on development time and cost

3	Agile and Fast

Headless empowers you to push the envelope and implement new and futuristic customer touchpoints in no time. All you need to build is a new frontend that too

without spending ages syncing/testing the UI changes and backend logic. The same backend can work seamlessly with any number of new touchpoints.

Business Benefits:
- Faster time to market
- Improved development efficiency

4   Scalability

In the monolithic ecommerce systems, you had to plan and scale the backend and the frontend together. With headless commerce solutions, you can easily implement microservices to scale up or down based on your current requirements. Also, the backend and frontend can be scaled independent of each other. It is easier to maintain and upgrade the ecommerce software build on the decoupled architecture.

Business Benefits:
- Reduced operational costs
- Better performance and availability

5   Omnichannel Selling Made Easy

With headless commerce, you do not have to focus on maintaining a pre-set software stack. You can easily mix and match different frameworks to add new selling channels that were practically unheard of just a couple of years back. Headless enables brands to adapt and use new technology to roll out innovative customer touchpoints and reach customers on their preferred channels.

Business Benefits:
- Better brand visibility across channels
- Boost sales with multi-channel presence

HEADLESS COMMERCE: HELPING BRANDS BUILD DISRUPTIVE SOLUTIONS

Headless commerce is a fairly simple concept in which the three layers, namely, frontend (UI), backend (logic) and APIs (connecting layer) work in tandem to build diverse solutions. However, the simple act of decoupling the presentation and application layers gives phenomenal power and potential to build out-of-box ecommerce solutions.

In this section, we will see how businesses can build innovative solutions with headless commerce. Let us take a look at different use-cases. We will see how businesses with diverse requirements can use the same headless ecommerce APIs and create different interfaces for various roles and devices. What's more, there is no need of duplicating the business logic for each of these channels/devices.

USE CASES

Check out the variety of use cases that can be built using the headless architecture:

Use Case 1: Multi Brand Stores

Use Case 2: Mobile Apps For Various Business Uses

Use Case 3: Multi-Country Stores

Use Case 4: B2B Online Marketplace

USE CASE 1: MULTI BRAND STORES

Your business is selling multiple brands, each one of the brands have different target customer personas, design guidelines, and marketing strategies. Using the traditional monolithic architecture, you will have to duplicate the code for multiple brands. With headless commerce, you will be able to use the same backend, APIs and build multiple storefronts for brands. You can also leverage mobile commerce by building your hybrid mobile apps for multiple brands' storefronts. You can create independent mobile apps for each brand using the same backend logic and APIs, there is no need to separately code the apps.
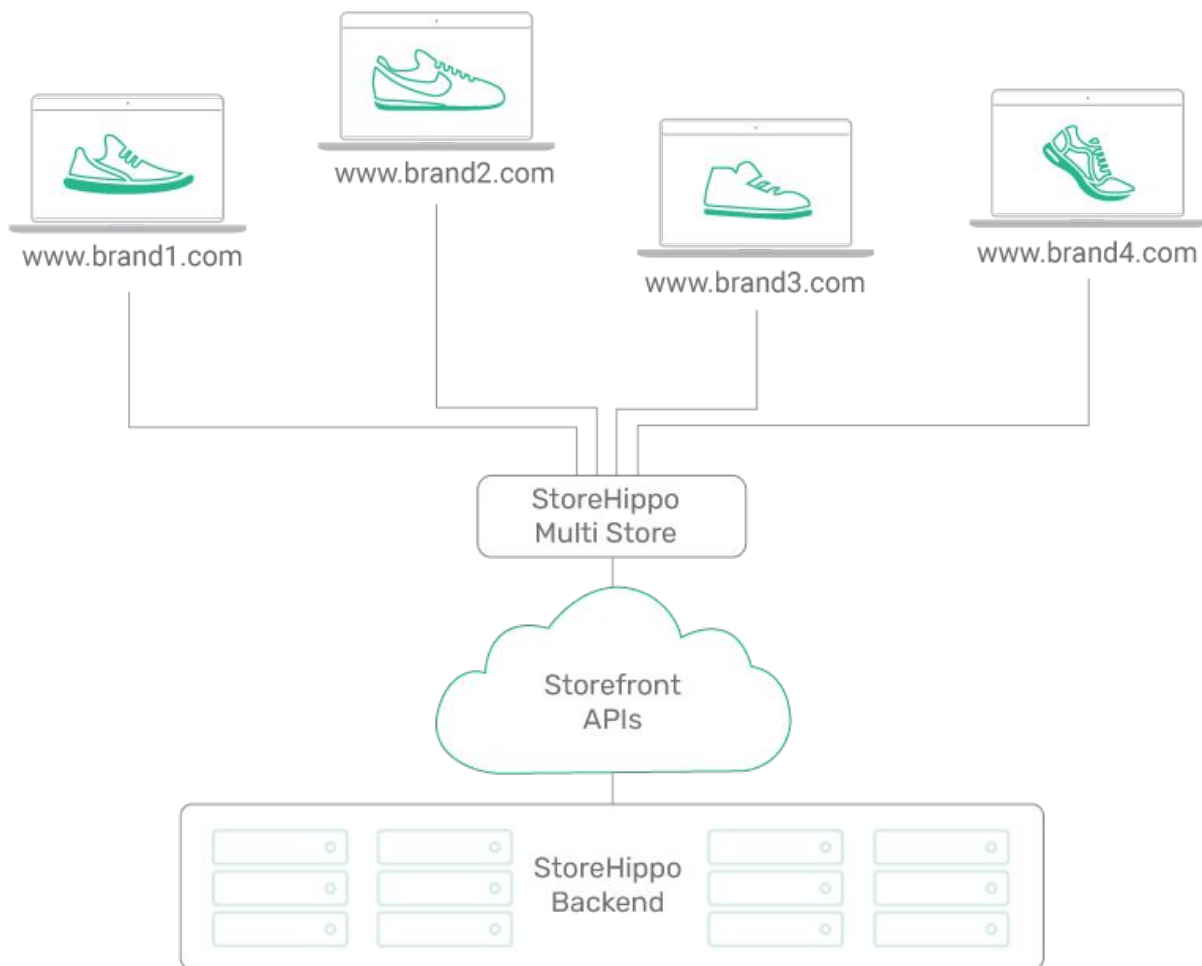
# USE CASE 2: MOBILE APPS FOR VARIOUS BUSINESS USES

You have on boarded sellers/contractors on your online marketplace to sell a variety of products to your customers. You want to reach customers on multiple touchpoints which include mobile-ready online stores and mobile apps. You also want to take your business wherever you go by managing everything with the help of a mobile app for admin. You also want to extend the same ease of doing business to your contractors by offering a separate mobile app to them. To manage your fleet of delivery boys and streamlined deliveries, you need another mobile app for your delivery agents.

If you go with the traditional tightly coupled architecture you will have to develop each of these different mobile apps from scratch. By opting for the decoupled headless commerce architecture you can use the same backend and API to build your PWA online store for customers, mobile apps for the customers, an admin mobile app, a mobile app for your contractors/sellers and yet another mobile app that your delivery boys can use to streamline order deliveries.
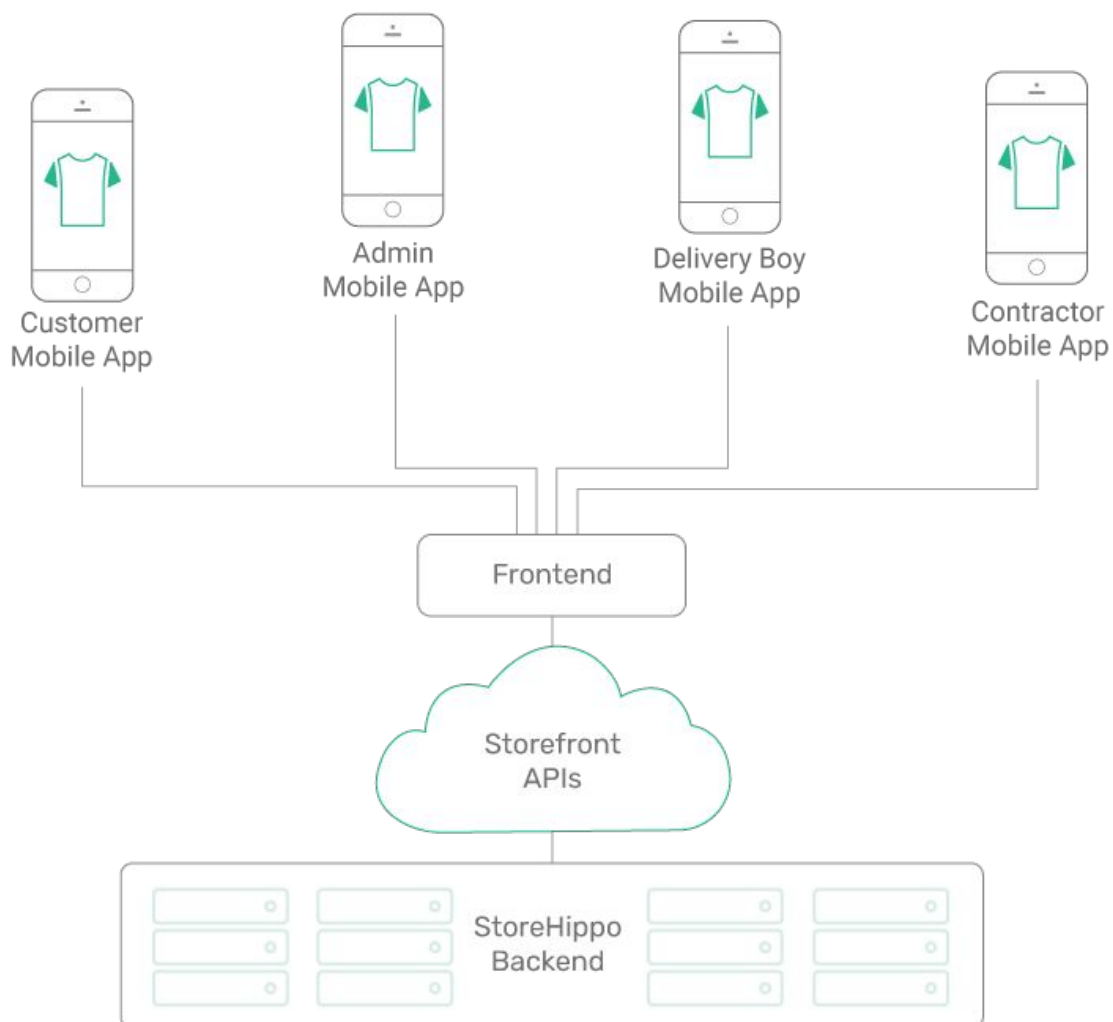
USE CASE 3: MULTI-COUNTRY STORES

Your business is selling in international markets in many countries. You want to build glocal solutions for each country by localizing the store design, languages, currencies, marketing strategies, payment and delivery channels as per the preferences of the native customers. With the traditional approach of development, you will have to duplicate the code and localize it afresh for each country. With headless CMS you can easily create unique Glocal ecommerce solutions for each country using the same backend logic, APIs and add local language, currencies, shipping, payment etc.
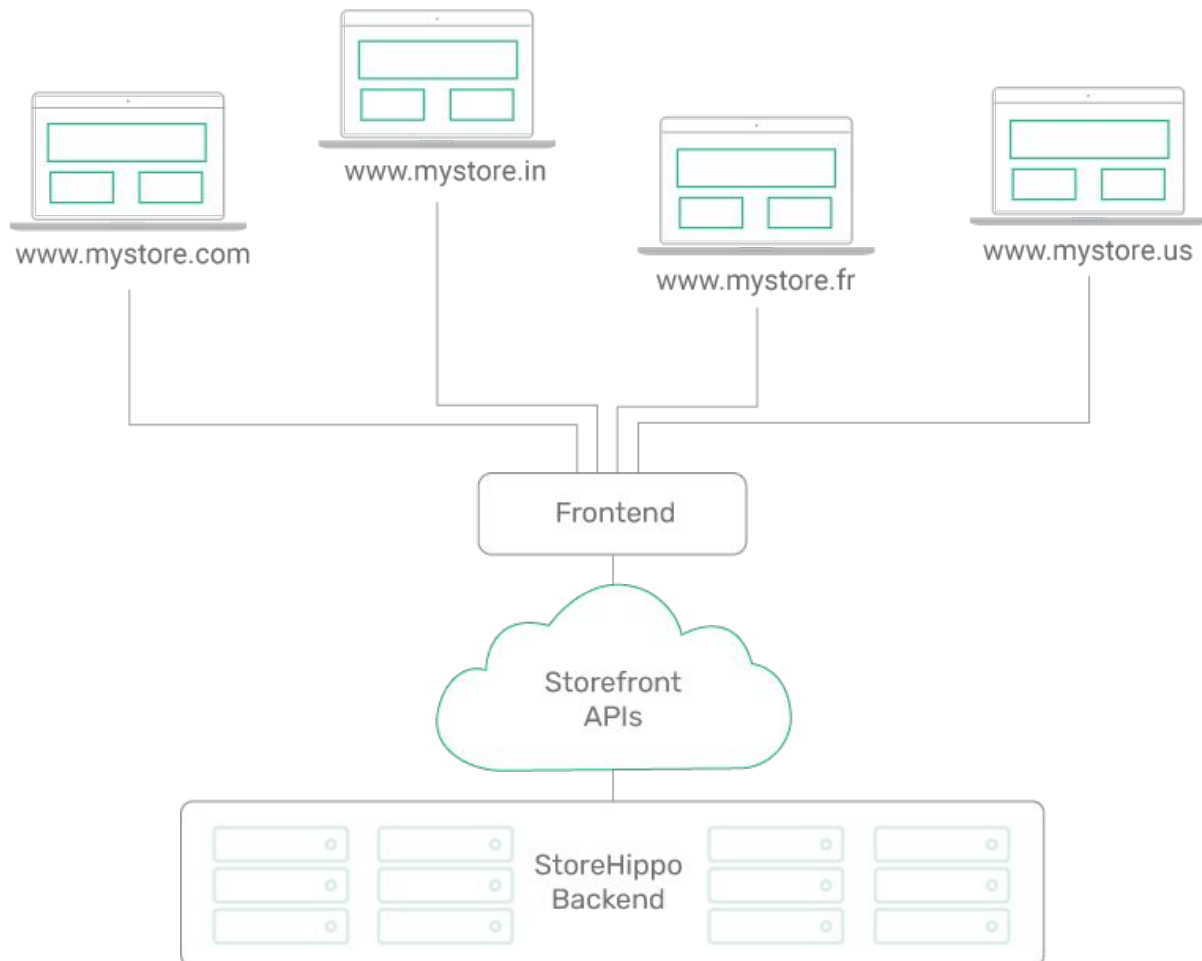
USE CASE 4: B2B ONLINE MARKETPLACE

Your business sells to wholesale (B2B) as well as retail customers (B2C). You want to leverage mobile commerce and build different mobile apps for your B2C customers, your wholesale suppliers, your B2B buyers or retailers and your own fleet operators that deliver bulk orders for your business. If you opt for the monolithic architecture, you will have to write different codes from scratch for each of these user segments. With the decoupled headless architecture, you can have a common backend with end-to-end business logic and use it to build a variety of apps for different user segments of your large B2B set-up.
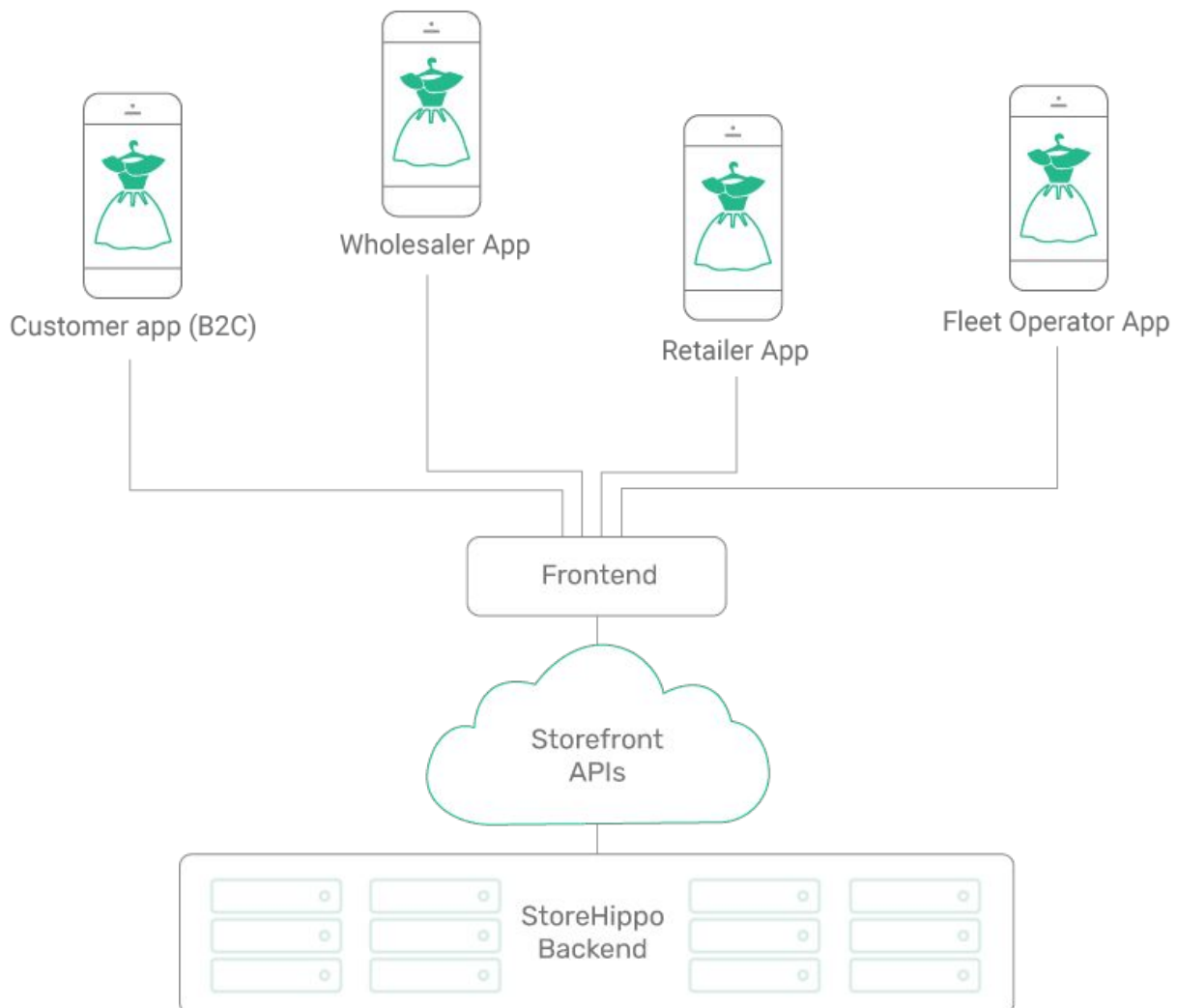
HEADLESS COMMERCE: WHY IT IS THE TOOL TO FUTURE PROOF YOUR BUSINESS

A successful business is all about building a loyal customer base that helps your brand grow. And how to do it? Yes, you got it right! By creating memorable and personalised buying experiences across multiple channels.

Undoubtedly the best way to achieve this is by taking the headless commerce route to unleash your growth. Whether you have just started thinking about the benefits of headless commerce or want to implement it quickly for your business, connect with StoreHippo Headless Ecommerce Experts right away. Our team is happy to understand your unique requirements and help you build out-of-box solutions for your business.

STOREHIPPO: POWERING YOUR TRANSITION TO HEADLESS COMMERCE

StoreHippo® offers a turnkey enterprise-grade SaaS-based e-commerce platform to build innovative e-commerce solutions for B2B, B2C businesses of all sizes. Built on the decoupled headless architecture StoreHippo enables high-volume enterprise businesses to go to market in a fraction of time as compared to monolithic legacy software. StoreHippo has powered enterprise ecommerce solutions for a variety of businesses in 20+ countries and 35+ business verticals.

StoreHippo, the pioneer in mobile commerce and the first SaaS Ecommerce platform to adapt a headless web app architecture comes with a powerful set of 300+ native features. It is designed to give brands a strong Omnichannel presence, better user experience and higher sale conversions across digital touchpoints. StoreHippo's highly flexible service-oriented architecture, powered by AI and automation, gives businesses the ability to implement diverse B2B, B2C and B2B2C business models in no time.

Get Started With Headless Commerce

RESOURCES

[StoreHippo: 360-Degree Ecommerce Solutions](#)

[StoreHippo Solutions](#)

[StoreHippo Technology](#)

[StoreHippo Headless Commerce](#)

[StoreHippo Go Global Solutions](#)

[StoreHippo Multilingual Solutions](#)

[StoreHippo Mobile Apps Solutions](#)

[StoreHippo Enterprise Ecommerce Solutions](#)

[StoreHippo Multi Vendor Marketplace Solutions](#)

[StoreHippo B2B Ecommerce Solutions](#)

[StoreHippo Multi Store Ecommerce Solutions](#)

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