Expert Insights

What's next for the evolution of the e-commerce market?

Industry veteran, Andrej Maihorn shares his insights
on the past, present, and future of e-commerce

Andrej Maihorn has been in the e-commerce industry for almost 25 years, with experience spanning multiple business models and geographies including North America, Europe, and APAC. He's a recognized B2B luminary, a digital product strategist, and Spryker's Vice President US Go-to-Market & Industry Solutions. Therefore, it's fair to say that he's witnessed first-hand the world of digital commerce develop and transform into the massive industry that it is today.

We decided to interview Andrej on the evolution of the e-commerce market and share his valuable insights in this handout. Read about his exclusive perspective on the following important topics:

- How did e-commerce look in the beginning?
- The huge shift in the software market
- How did smartphones change the market?
- What does headless mean and why is it important?
- What's the next big thing in e-commerce?
- How to build the e-commerce solution you want
- My advice: aim for the stars, start with the moon
- What's special about Spryker Cloud Commerce OS?

How did e-commerce look in the beginning?

I think that the history of e-commerce is a fascinating topic, and I've seen so many facets change in the last couple of decades. When I started back in the e-com space over 24 years ago, we were just at the beginning of packaged e-commerce solutions, and almost all business was done via fax - if you can believe it!
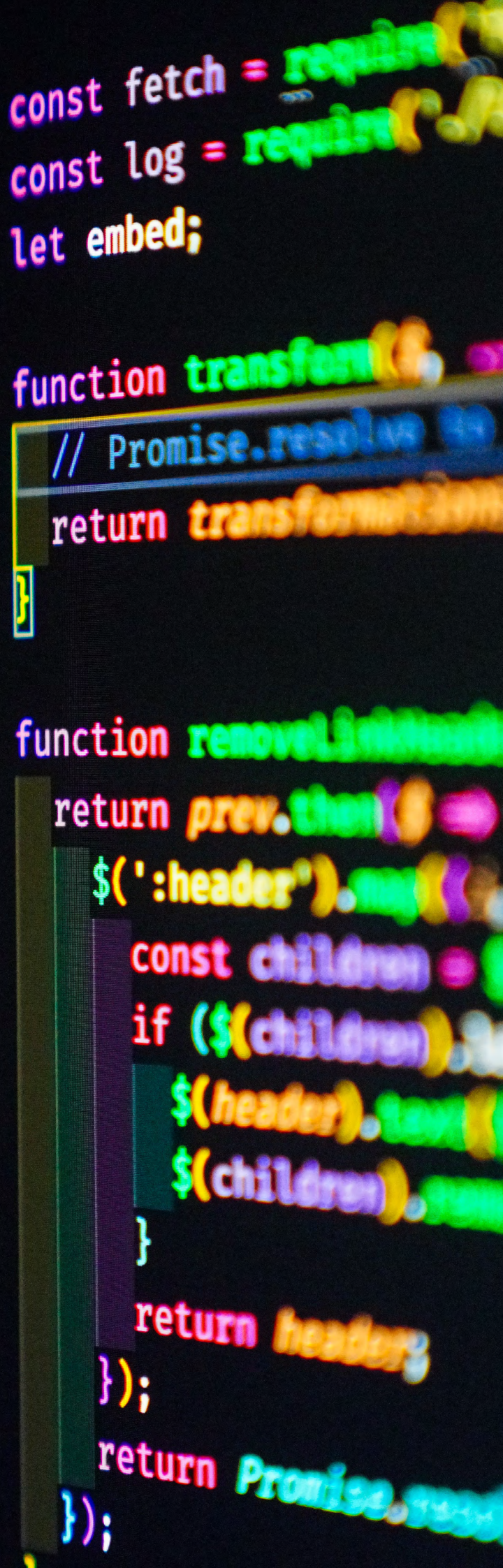
For a long time, all solutions were on-premise, with some DIY options available. This meant that merchants had to maintain and control their own environment, while providing appropriate servers to handle the traffic and scalability. Businesses needed to apply software and have experienced developers in-house who could customize the front-end and provide basic integrations to payment, for example.

The only commerce solutions that existed in the beginning were very basic, with rigid capabilities that only served traditional web stores - with a digital catalog, some search and browse and the ability to order, for instance.

Systems were built as full-stack platforms and digital was still just a silo as part of the overall strategy. Online business depended entirely on the technology that the platform provided.

The total cost of ownership in the entire investment was quite high, with expensive maintenance and upgrades. Platforms were typically selected for only a number of years knowing that replatforming would be necessary down the road. Most solutions were simply out of reach for some of the smaller companies due to the cost and resource involvement.

The huge shift in the software market

Somewhere around 2006 - 2012, we saw a massive shift in the software market overall. In the e-commerce space, one of the earliest adopters of this shift was Stephan Schambach with Demandware. Schambach recognized the need to move towards a lower cost of ownership model, and he was a founder of one of the first packaged e-commerce software solutions (Intershop). During that time, he actually witnessed a shift from licensed software to SaaS platforms. While it was still a full-stack solution, the infrastructure and operational aspects were managed by the vendor, which allowed merchants to focus more on the business side of things.

The upgrade path then became easier, but extensibility and flexibility were still very limited in this model. In order to make this work you had to control what and how changes could be made, typically limiting you to certain JavaScript functions outside the core. Nevertheless, this new model allowed smaller businesses to embrace e-commerce more easily and compete with larger brands.

How did smartphones change the market?

Around 2007, the first iteration of the Apple iPhone was launched, and that led to a huge shift in digital commerce. Before that, it was sufficient to just have a simple web store, as consumers couldn't buy online from anywhere but a desktop.

With the iPhone and evolution of smartphones in general, mobile experiences started to emerge. Information began to be available anywhere, at any time. We were no longer bound to our desktops or workplace anymore.

The biggest challenge then became, how do I provide the right customer experience while rendering the pages in a somewhat meaningful way - considering the limited screen resolution, especially back in the day when smartphones just started out.

Businesses essentially had to set up a separate site for the mobile experience, since the front-end was so tightly interwoven with the rest of the platform. That meant that, in order to have different pages or different experiences, you needed a kind of disjointed site with two silos that did not communicate, leading to disjointed data and all kinds of other misalignment issues.

The fascinating thing was then watching how the front-end experience evolved so rapidly. Especially in the last decade where digital has exploded, we've witnessed customer touch points increasing and increasing, to the point where a digital shop has become a central piece of the ecosystem. We have seen that new devices and technology were and are still driving the evolution of digital and digital experiences.

For instance, around 2011, Apple introduced Siri - this was the first example of using voice as an input. Then in 2012, Google tested their Google Glasses to provide a different kind of customer experience. 2014 saw the birth of the Amazon Echo which is now widely adopted - my own kids use it for all kinds of things!

So, smartphones and other emerging touchpoints provided many opportunities, but also created many challenges specifically in regards to traditional full-stack commerce solutions. This was the impetus that drove "headless" into existence and became the next evolution for commerce platforms.
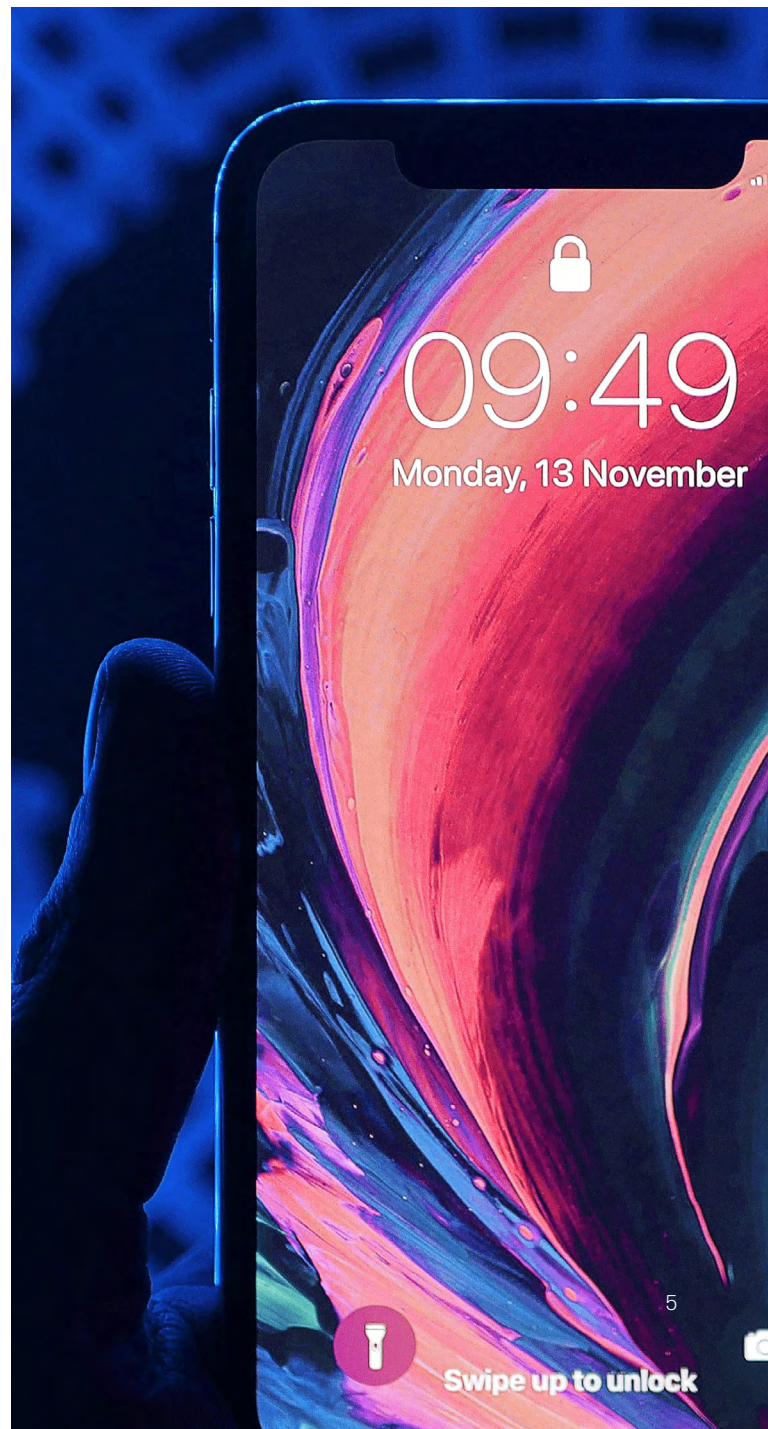
What does headless mean and why is it important?

I'm often asked about why headless is important from the merchant perspective, and why companies should consider it when evaluating vendors. Headless is an interesting and important topic, and the first thing to note is that there is quite a lot of confusion around what headless actually means and what its benefits are, as there are a lot of perceived complexities.

First and foremost, the term headless is kind of a misnomer - we all know that you do in fact need a head! Certainly, you need a front-end experience, which in this case is actually the head that we're talking about. So, headless doesn't mean e-commerce without a head or a front-end. More accurately, it means that the front-end is completely decoupled from the commerce functions and the business logic.

Like the shopping cart or the product catalog, the platform can actually serve various heads, not just one that's tightly intertwined. In a pure headless solution, the front-end carries no business logic which means it can be easily modified, swapped out or moved entirely.

Typically all business and commerce functions are exposed via API and that's why we also talk about API-first solutions. But even today many commerce platforms' architecture has been designed to be full stack with API as an afterthought.

In this case it's somewhat hard to achieve full separation of the front-end customer experiences and the commerce function. Within those types of platforms, you still see that a lot of the business logic lives in the front-end where it really doesn't belong, meaning that you cannot deliver all of the benefits of a true headless platform.

When we look at headless, the amazing thing is that you can essentially commerce-enable any customer experience. You can change and flip your thinking to consider the customer, the user, first. How do you need to interact with them? How do they need to interact with you? How can you enable those customer experiences? The platform then becomes the enabler, putting the customer and the user front and center. You can really begin with the experience that you need to provide as a starting point and then choose the right technology to support that.

In this case, the front-end can also change quickly and easily without the business logic knowing about it. It enables businesses to create new experiences without risking existing ones, for instance. It can test out a different experience, or a different touch point, and it doesn't have to affect the other one. Therefore, you can more easily adopt some of the newer merchant touch points, like voice commerce, audio visual, 3D modeling, virtual searches etc. and provide alternative ways to connect.

If you want to learn more about headless, I would recommend this brilliant blog article written by one of my Spryker colleagues:

→ **"Go Headless OR Go Home: Why Going Headless Could Be the Best Thing for Your Business."**

What's the next big thing in e-commerce?

I've already mentioned the shortcomings of full-stack solutions in the context of headless. When we look at market requirements and technology developments nowadays, it's easy to see that headless is not the final answer. There's a necessity to adopt certain functions and individual requirements or to replace components with external, more flexible and powerful offerings - and then bring these cohesively to the front.

We all know that digital commerce doesn't work without the right ecosystem. All companies have their ERP, their CRM solution, and other components they need to integrate with, so it's important to recognize that no vendor can actually do it all.

To this point there are best-of-breed technologies addressing the complexity in specific areas, specializing in the likes of intelligent search, personalization, dynamic pricing, and countless other areas. Scott Brinker's annual marketing technology landscape infographic nicely illustrates that more and more companies are digging into a specific area to provide focused capabilities.

In a perfect world, businesses want to choose and combine components, and extend their ecosystem to satisfy their requirements. This does not need to be limited to the frontend experience only which has been headless' forte. Each business is unique and in today's market they need the flexibility to constantly react to emerging technologies and market trends. They must keep up with customer expectations and differentiate in an increasingly crowded and competitive digital landscape.

So, to make a really long story short, we are now actively driving a modular approach - what's called 'Composable Commerce' - as the next big step.

How to build the e-commerce solution you want

Building your perfect e-commerce solution is like choosing what and how to have dinner at home tonight.

Option A: You can order takeout for dinner. Someone else did all the work to put it together based on what they thought you would like. It gets you a meal quickly on the table, but it is what it is. There are no substitutions here, except maybe a little salt and pepper thrown on top, if you choose. This is what a templated or monolithic platform is like. It provides a quick time to market but lacks the ability to adjust to your companies' specific needs and wants.

Option B: You are your own gourmet chef. You have vast cooking experience to draw from and can create a complex 5-star meal. You know how to source and prep all your ingredients, which also takes an extraordinary amount of time and resources, to make it exactly the way you want. This is what granular microservices platforms offer. They provide great agility and flexibility, but it comes at a cost, namely, time and money. Successfully orchestrating and operating this way is stereotypically very challenging.

Option C: Many believe that this is the best of both worlds. In recent years, companies such as Sunbasket, Blue Apron and the likes have met the demands of people who want to have customizable, complex-ingredient, restaurant-quality meals that they can prepare quickly in their own homes. You can mix and match components to your heart's desire, and even grab something to add from your own fridge if you feel like it. The outcome is a meal exactly when and how you want it, at a fair cost, without requiring hours of prep and a degree from Le Cordon Bleu.

This is what Composable Commerce is all about.

It allows you to pick your own high-quality protein, carbs and ingredients, i.e. intelligent search, product recommendations, personalization engine, taxation and payment, to name a few. It then takes those selected ingredients and customizes a recipe with those components for you to assemble and successfully l(a)unch.

Once you have achieved building your 'meal', as it were, Composable Commerce should also enable you to fine-tune the recipe even further to your liking or evolving taste. Just as you can add or remove a flavor, you should be able to effortlessly trade out different search engines, for example, and test the results.

A truly composable commerce platform should cover all the following aspects:

– The composability of the commerce core platform itself

– The composability in relation to 3rd party (best-of-breed) components

– The composition of front-end experiences and business user tooling

– And the flexibility to add completely custom components to the mix.

To sum it up, using Composable Commerce allows you to take offerings from native capabilities, mix with options from the vast external ecosystem and sprinkle in custom components as needed (which can always be swapped in and out on-demand). This approach allows you the greatest flexibility to meet the ever-changing needs of the market and your customer base.

My advice: Aim for the stars, start with the moon

For me, it's really important to get a clear vision of the big picture, but that can be overwhelming, as it's like charting a course to the farthest star.

Digital is not just one channel or one aspect that runs independently as it did in the past. You need to consider how you can digitally support all your existing and future processes. But digitizing one's business in its entirety and keeping up with the subsequent evolutions is a never-ending journey. So where does one start? First stop: the moon. These are some of the key topics that must first be clearly defined:

– How you go to market(s).

– What kind of business do you support?

– What are your short-term vs. long-term goals and objectives?

My best advice is always to think big, start small, but the gold is in the middle.

Find the right foundation that gets you up and running quickly via a pre-composed solution. That's the small start. The gold comes when you are working with a composable platform that also provides the flexibility to try new things, plug components in and out, and play with new technologies all with minimal effort. It will give you the ability to constantly release exciting updates that provide more and more value to your customers. It allows you to incorporate customer feedback, (tweak the spices, if you will) to exceed customer expectations and thus ultimately garner more market share.

This is where the thinking big comes in, as a composable platform empowers you to constantly innovate, evolve and grow. You can add as many ingredients or courses, change flavors or seasonal offerings as your party grows and your taste buds evolve.

A platform like this is limitless.

What's special about Spryker Cloud Commerce OS?

There's one statement I really love that I quote all the time from evangelist Professor Scott Galloway: "Change is a daily constant. We're expected to use and master tools that simply did not exist a decade ago, or even last year." That's what's great about Spryker.

We enable our customers to constantly access and implement new tools that keep their businesses on the cutting edge. At Spryker we recognize our job is to support you through the evolution that is driven by emerging technologies, changing markets, customer demand, and disruptions that drive how business is done. Spryker is focused on enabling sophisticated, transactional business models that go beyond your traditional retail, e-commerce, and desktop solutions.

Spryker not only provides all the components necessary to support B2C, B2B, marketplaces and unified commerce, it's all within one platform. We give you the capability to pick and choose within the various modules to compose an option that becomes customized to your needs and wants. We also understand the importance of the ecosystem. Our new concept around the app store gives our customers the control to explore hundreds of partners we work with to experiment, extend, and enhance their offering.

We call our cloud-native, headless and API-based Enterprise-ready platform 'Spryker Cloud Commerce OS' because it orchestrates the composition of these end-to-end solutions, through a broad spectrum of out-of-the-box commerce capabilities and 3rd party extensions.

We can get you to market fast with our pre-composed package(s) and then enable rapid and future-proof growth. This, in turn, allows our customers to optimize the Total Cost of Ownership, and Return on Investment while capturing greater market share.

These days, I think we can all agree, a delicious meal delivered quickly and just the way we want it is a good thing indeed. Now I'm headed to the kitchen.

Interested in what Spryker can do for your business?

➡ **Let's talk.**

Spryker

About Spryker

Founded in 2014, Spryker enables companies to build sophisticated transactional business models in unified commerce including B2B, B2C, and Enterprise Marketplaces. It is the most modern platform-as-a-service (PaaS) solution with headless & API-based architecture that is cloud and enterprise-ready and loved by developers and business users worldwide. Spryker customers extend their sales reach and grow revenue with a system that allows them to increase operational efficiency, lower the total cost of ownership, and expand to new markets and business models faster than ever before. Spryker solutions have empowered 150+ companies to manage transactions in more than 200 countries worldwide. Spryker is trusted by brands such as Toyota, Siemens, Hilti, and Ricoh. Spryker was named the most innovative and visionary of all new vendors in the 2020 Gartner Magic Quadrant for Digital Commerce and named a major player in B2B e-Commerce by IDC and is the only commerce platform to provide full B2B, B2C, D2C, and Marketplace capabilities out of one stack. For more information about Spryker please visit Spryker.com.

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