Modern MACH Commerce:
Compose & Conquer

uniform | KLEVU | commercelayer
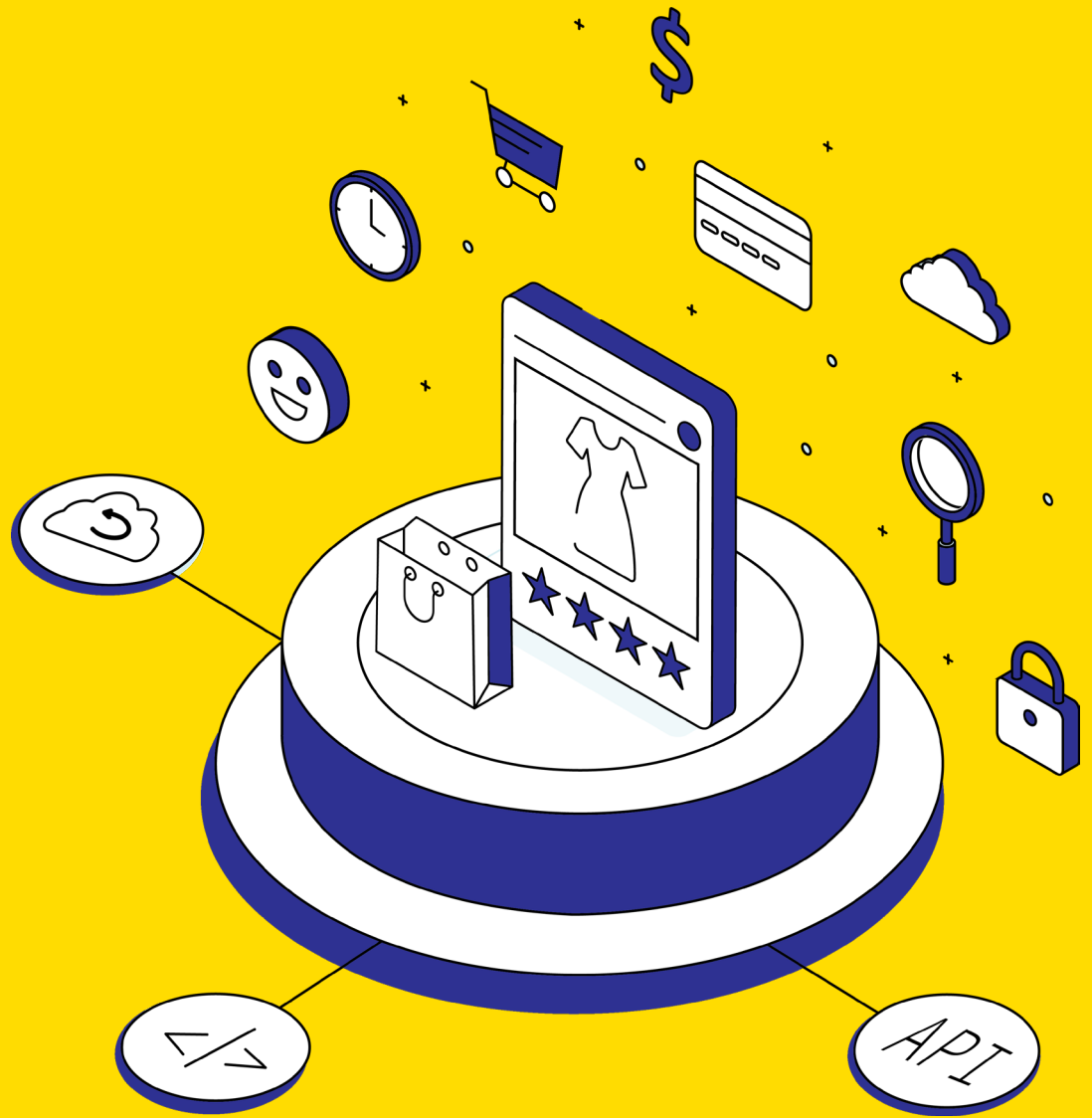
Intro:

Introducing Modern MACH Commerce

Imagine that you are a technology buyer. You want to build the best digital experience for your brand.

You enter a superstore that has all the available options available on the market. The possibilities are endless. You see an abundance of products. The first few aisles are dedicated to all-in-one commerce solutions, like Shopify, Salesforce, and SAP. As you move through the store, now you see rows and rows of individual vendors in a massive section of the store called the MACH section. Wow, there are a lot of them! CMSes, commerce engines, search providers, PIMs, DAMs, CRMs, CDPs. Endless aisle, but not in a good way.. You're overwhelmed at where to start. Paradox of choice paralysis. Where to begin?
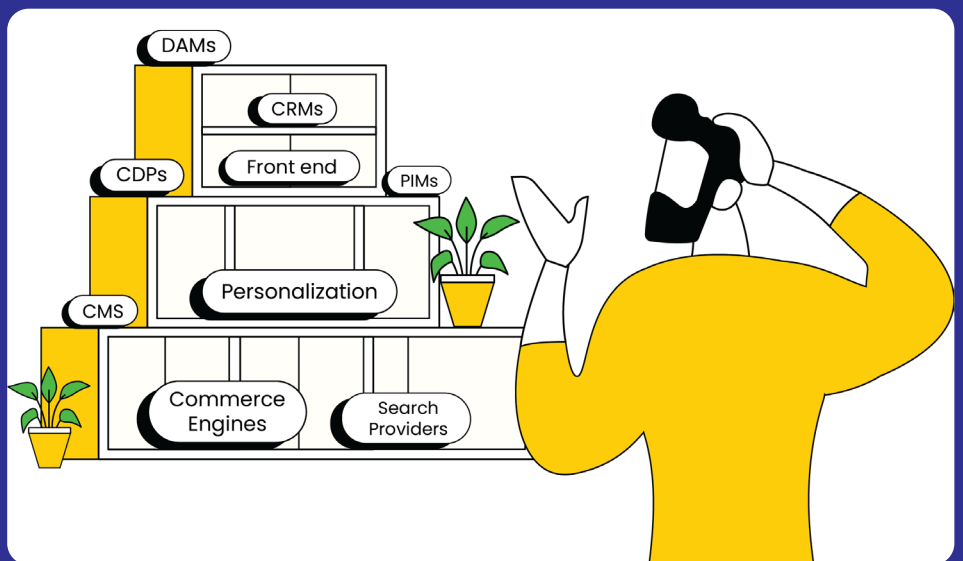
This eBook is an attempt to help you and your team simplify your shortlist of technologies, and identify an achievable and manageable starting point for MACH commerce projects.

First, what is MACH Commerce?

MACH is an acronym that stands for Microservices, API-first, Cloud-native, and Headless. It represents a set of technology principles that are increasingly being adopted in the development of digital commerce and business applications. By embracing this kind of composable approach, businesses can be better positioned to respond to customer expectations, integrate new technologies, and operate more efficiently.

But a paradigm shift is underway, even within the MACH space.

Now, what is Modern MACH Commerce?

Modern MACH is a strategic evolution. This approach to commerce technology transcends the complexity of traditional MACH builds, offering flexibility, personalization, and scalability for ecommerce teams with limited resources for legacy MACH builds. Think configuration, rather than hard coded. Innovation rather than maintenance.

To help you bypass the overwhelming number of choices in the market today, Klevu, Commerce Layer and Uniform have built an agile accelerator. As we explore deeper into the nuances of Modern MACH Commerce in this eBook, the advantages of this approach – in meeting customer expectations, embracing technological change, and driving operational efficiency – will become increasingly clear.

This is the future of ecommerce, a future where complexity goes underground, allowing growth and agility to bloom.

Chapter 01:

Why should ecommerce teams care about composable?

At the annual National Retail Federation (NRF) held in New York, leaders from Klevu, Commerce Layer, and Uniform came together to discuss why ecommerce teams should consider a composable approach now. They discussed the need for specialized tools, personalization, and embracing the pace of change in today's market. Let's dive into the insights.

▶ Watch the 30-min video   🎤 Listen to the podcast

We've entered the age of agility

Composable commerce is, at its core, an answer to ever more sophisticated requirements of modern brands. *"Especially for certain types of brands, when the complexity becomes bigger, you need to address each aspect of the customer experience with specialized tools. This is why composable is the answer to that need of flexibility and personalization to the customer experience," says Filippo Conforti of Commerce Layer.* He also mentions that flexibility and personalization are important. Let's dive into some of the reasons why.

Today's shoppers are time-constrained yet demand relevance and speed in their shopping experiences. *Speed, relevance and curation are all necessary to personalize experiences in modern commerce. Nilay Oza, Co-Founder of Klevu, highlights this shift: "Shoppers don't have time. They want things fast, but they also want that experience to be relevant."* By leveraging MACH architecture, businesses can assimilate various technologies, simplifying the shopper's journey while maintaining a high degree of control and curation. Assimilating technologies sounds hard. But it doesn't have to be. It starts by looking at the bigger picture.

Modern ecommerce teams must embrace change

and embed it into their product roadmaps. The digital commerce landscape is continuously changing, with new technologies emerging at an unprecedented pace. *"In 2022, was anybody talking about ChatGPT? And what's going to happen next year?" says Darren Guarnaccia, President of Uniform.* This unpredictability makes composable commerce invaluable. It provides businesses with the flexibility to quickly integrate new technologies and adapt to market changes. "Composable gives commerce businesses that foundation to add business value incrementally."

This adaptability is crucial in meeting ever-increasing customer expectations and ensuring that businesses are not locked into obsolete or ill-fitting technologies.

Ecommerce is growing up. And with that, growing pains. The challenges facing today's ecommerce teams are multifaceted. *Customers expect fast, curated, and anticipatory experiences.* Digital teams, including merchandisers, marketers, content operators, and developers, require tools that can keep pace with these demands, without adding workload to ecommerce teams.

The traditional monolithic platforms often fall short, being slow, complex, and expensive. Modern MACH commerce, by contrast, offers a more nimble and cost-effective approach. It allows for the quick launching of products and campaigns and provides a platform where personalization rules are configured by business teams, not hardcoded by developers, and can evolve with the shopper. Though all-in-one monolithic platforms sound great in theory, CFOs often grapple with the cost of these suites offering numerous capabilities, of which only a handful are utilized. With a composable approach, businesses only invest in the tools they need.

Composable commerce not only provides a toolkit to meet customer expectations, but also aligns with the economic and operational realities of businesses. A modern MACH approach reduces the dependency on extensive upgrades and development efforts, allowing for more innovation in marketing and product launches.

Sounds good, right? But what do we need to consider when embarking on a MACH journey?
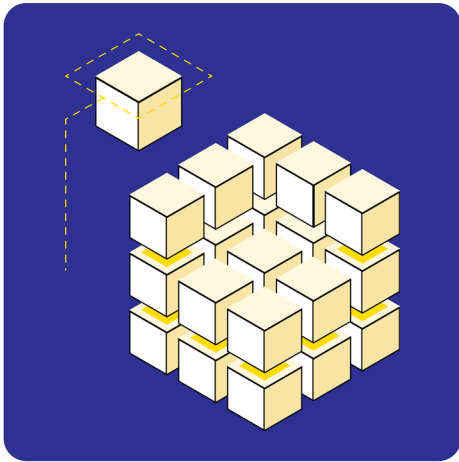
Overcoming the fear of the unknown

Nilay from Klevu points out another significant challenge: the fear of the unknown. Retailers investing in MACH architecture often grapple with uncertainty. "There are several applications that I'm going to use. Would they really work in harmony?" This concern is not unfounded, as integrating multiple components from different vendors can raise questions about compatibility, stability, and support.

Mindset shift: From monolith to modular

Returning to our conversation at NRF, Filippo identified a fundamental challenge: the mindset shift required in moving from a monolithic to a modular, composable approach. "You go from thinking of one big solution to a composition of solutions, and that can be intimidating," he observes. This transition is not just about adopting new technologies; it involves a paradigm shift in how ecommerce teams conceptualize and manage their digital infrastructure. However, this perceived complexity can be managed. Modern MACH commerce technologies are designed to handle and even hide this complexity from business users, making the transition smoother than it appears.
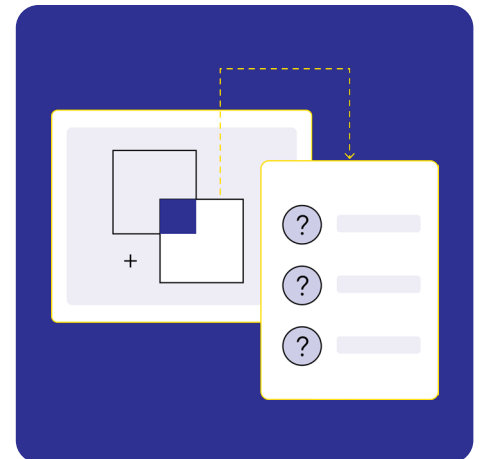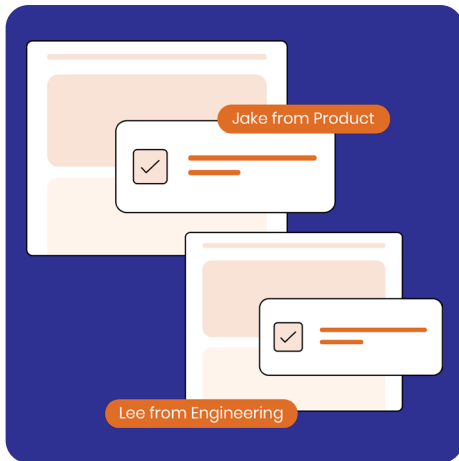
Dealing with developer backlog

Darren brings to light another critical challenge: the developer-centric nature of traditional commerce. "Everything, even sometimes within the MACH community, has become very developer-oriented," he explains. This dependency can be a significant bottleneck, especially for teams accustomed to more autonomy and self-service tools. "Uniform was founded to bring back visual building capabilities to marketers, merchandisers, and content contributors," continues Darren. By empowering non-developers to make changes visually, Uniform plays a crucial role in speeding up the process of experimentation and learning in the MACH environment.

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Filippo Conforti
Commerce Layer

Practical Strategies:
for mitigating risk in modern MACH commerce

Collaborative ecosystem:
Ensuring a collaborative ecosystem where different MACH solutions work cohesively is essential. This helps alleviate concerns about integration and compatibility.

Empowering non-developers:
Providing tools that allow marketers and merchandisers to make changes without developer intervention is crucial. This empowerment accelerates the pace of innovation and adaptation

Education and support:
Educating business users about MACH architecture and providing comprehensive support is key to easing the transition. This involves training, resources, and ongoing assistance.

Contingency planning:
Having robust risk management strategies and contingency plans in place can help address the fear of the unknown. Regular system audits and a clear line of communication with vendors are vital.

Phased implementation:
Implementing MACH architecture in phases can make the transition more manageable and less overwhelming.

Strong partner network:
Choosing vendors with a strong partner network can provide additional layers of support and expertise.

Chapter 2:
Growing up, past the pain points

The power of MACH is vast, but doesn't help you overcome the paradox of choice that we mentioned in the introduction. That's why Klevu, Uniform, and Commerce Layer have built an accelerator that offers a modern approach to MACH Commerce.

- A fast and flexible commerce engine: Commerce Layer

- Visual tools for curated, personalized pages: Uniform

- A conversion engine with search and merchandising: Klevu

Commerce platform essentials

Commerce Layer: Commerce Layer handles all the transactional data that is required to create digital commerce experiences. It manages the entire lifecycle of an order with a flexible approach that allows brands to scale. The order sits as the most atomic object within Commerce Layer. With its API-first strategy, they enable customers to manage orders from all channels, both on and offline. This simplicity breaks a lot of standard conventions for ecommerce today. But, it enables Commerce Layer to truly unify all the channels where brands sell their products. The elusive promise of omnichannel finally becomes a reality.

These elements are foundational components that can be composed and recombined to create a customized ecommerce solution. This flexibility allows businesses to tailor their ecommerce platforms to their specific needs, enhancing backend efficiency.

Launching campaigns and products with ease

Uniform: The ability to launch campaigns and products quickly is essential for fast-paced ecommerce teams. Uniform helps by offering a visual workspace that simplifies content creation. Its platform enables teams to visually assemble and deploy marketing campaigns and product launches from a single interface, streamlining the process significantly. This approach not only saves time but also ensures consistency across various digital touchpoints. Similarly, building informative and engaging landing pages for websites, apps, and mobile platforms is crucial for customer engagement. Uniform's visual workspace enables content creators to design and deploy content efficiently across multiple platforms. This 'one to many' approach ensures consistency and quality, regardless of the device or platform being used by the end consumer.

Commerce Layer: Commerce Layer focuses the core APIs and logic required for ecommerce transactions and order management. They work with alongside powerful tools like Uniform to manage content like product catalog data seamlessly.

Optimizing from visit to checkout

Klevu: Personalization is key. The journey from initial visit to final checkout is critical in ecommerce. Klevu excels in optimizing this path. Klevu leverages advanced AI to present the right products to the right buyers, based on clickstream and segmentation. Klevu's AI search, category merchandising, product recommendations, and conversational commerce tools analyze shopper behavior and preferences, ensuring that each user encounter is personalized and relevant.

Optimizing from visit to checkout

Uniform: Uniform complements this by enabling personalized content experiences. Its platform can digest the shopper intent signals from Klevu, and add that data to its personalization layer, allowing for the creation of dynamic landing pages that adapt to user interactions and preferences across many data sources, providing a tailored browsing experience that resonates with individual customers. This not only enhances the customer experience but also increases the likelihood of conversion.

Managing the lifecycle of an order

Commerce Layer: From order placement to fulfillment, Commerce Layer provides comprehensive tools to manage the entire order lifecycle. Its streamlined approach ensures that orders are processed efficiently, inventory is managed effectively, and customers are kept informed throughout the process, enhancing overall customer satisfaction.

Personalization is key. The journey from initial visit to final checkout

Chapter 03:
Benefitting from composable commerce

One of the primary "ah-ha" moments when you use Modern MACH Accelerator: Klevu, Uniform, and Commerce Layer in your compasable stack is the speed of configuration without writing code or accruing technical debt. This contrasts sharply with traditional MACH setups, which often require extensive coding and can lead to technical overhead, slowing teams down over time.

The operational flexibility offered by Uniform's visual workspace allows merchandisers and marketers to test, learn, iterate, and adjust the customer experience quickly and efficiently.

Adding Klevu equates to multiple integrations in one, offering pre-built multimodal search components for business users to assemble powerful search and product discovery capabilities. As Nilay from Klevu says, "Search is everything in life. We are all searching for something. Klevu's AI system enhances discovery without compromising the logic or relevance." Klevu exposes records as content that can be bound to front-end components using Uniform Canvas. This integration extends to building compelling category and collection experiences with faceted AI search and filtering, enabling personalized experiences and search results based on user patterns, segments, and signals.

"The customer just wants to buy their products and keep going,

says Filippo of Commerce Layer, highlighting the need to wrap complexity in a simple interface, and simplifying what has traditionally been complex in enterprise ecommerce. This approach is crucial in a global market with diverse customer segments and needs.

A coordinated customer experience is key. *"We're honoring who the customers have told us who they are,"* Darren says, describing how Uniform, in conjunction with Klevu and Commerce Layer, creates a cohesive view of the customer, taking into account current intent and past history. This holistic understanding is achievable with these technologies together, ensuring that customer interactions are relevant and personalized.

"Search is everything in life. We are all searching for something".

Nilay Oza,
Klevu

# Tips for getting started with modern MACH commerce

Clarify expectations and manage surprises

Nilay from Klevu emphasizes the importance of clarifying expectations when migrating to a MACH or composable architecture. "Businesses coming from non-MACH environments must invest time in understanding how the dots will connect in their new system, ensuring a smooth transition without surprises. This clarity is essential for aligning the new system with the business's goals and customer needs."

Embrace incremental integration

Filippo of Commerce Layer advocates for a gradual approach to adopting MACH architecture, especially for businesses transitioning from monolithic platforms. He suggests starting by separating different domains of the customer experience. "Composable begins with two components. Content, product discovery and editorial content; and commerce, the cart and checkout process," he says. This initial step of domain separation is crucial, allowing businesses to manage the transition without overwhelming their operations
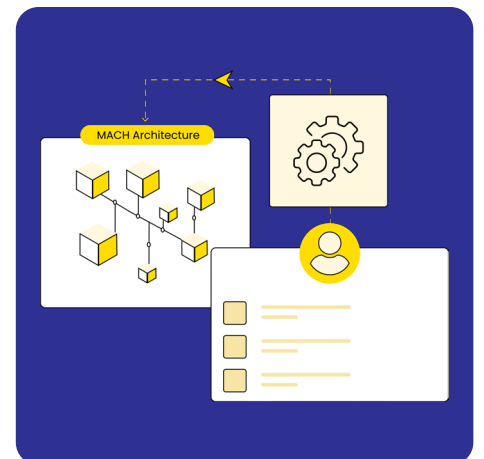
Pace your journey

Darren of Uniform offers advice on assessing a company's risk appetite and pacing the journey to MACH Commerce. "It's about thinking about what's your risk level and how might you slice this by brand, by front end versus back end. Companies can start small, perhaps by modernizing navigation or building a new front end, and progressively weave in more advanced technologies. This incremental approach allows for manageable risk and gradual learning, making the transition more sustainable.
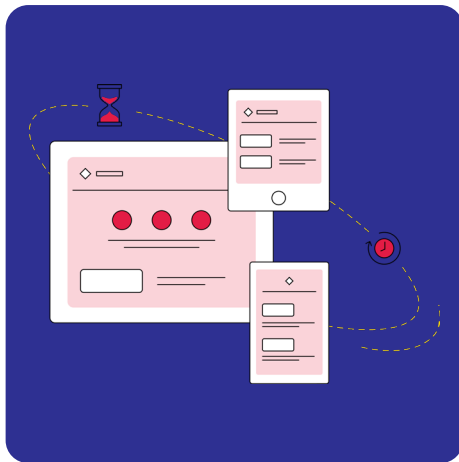
Embrace specialist solutions

Composable allows for choosing best-in-class technologies to create your tech stack. Even better when they are already integrated together. Leaning in to partner collaborations where the integrations are their responsibility to keep up-to-date will ensure your development teams can focus on innovation.

Use a common interface

Uniform facilitates flexible and tailored transitions to MACH Commerce. This capability allows businesses to make decisions that are right for their specific circumstances, enabling both short-term wins and long-term strategic planning.

Conclusion:

So, let's go back to that superstore store. But this time, there's instructions. And all of the components you need are on the same shelf. A modern MACH commerce architecture, with flexibility, personalization, and agility, is a smart strategic move for modern ecommerce businesses.

Adopting MACH architecture, as with any other technology strategy, will present challenges, but with the right partners and support, they can be effectively managed. The empowerment of non-developers, gradual integration, and careful management of the transition are key to unlocking new levels of agility and growth.

The pre-integrated modern MACH commerce collaboration between technologies like Uniform, Klevu, and Commerce Layer offers a springboard for success, demonstrating how different components can come together to create your cohesive, efficient, and powerful ecommerce ecosystem.

The integration between Klevu, Uniform, and Commerce Layer is available now.

Let's navigate the future of ecommerce together, shaping a digital commerce landscape that's agile, customer-centric, and poised for growth.

GET STARTED