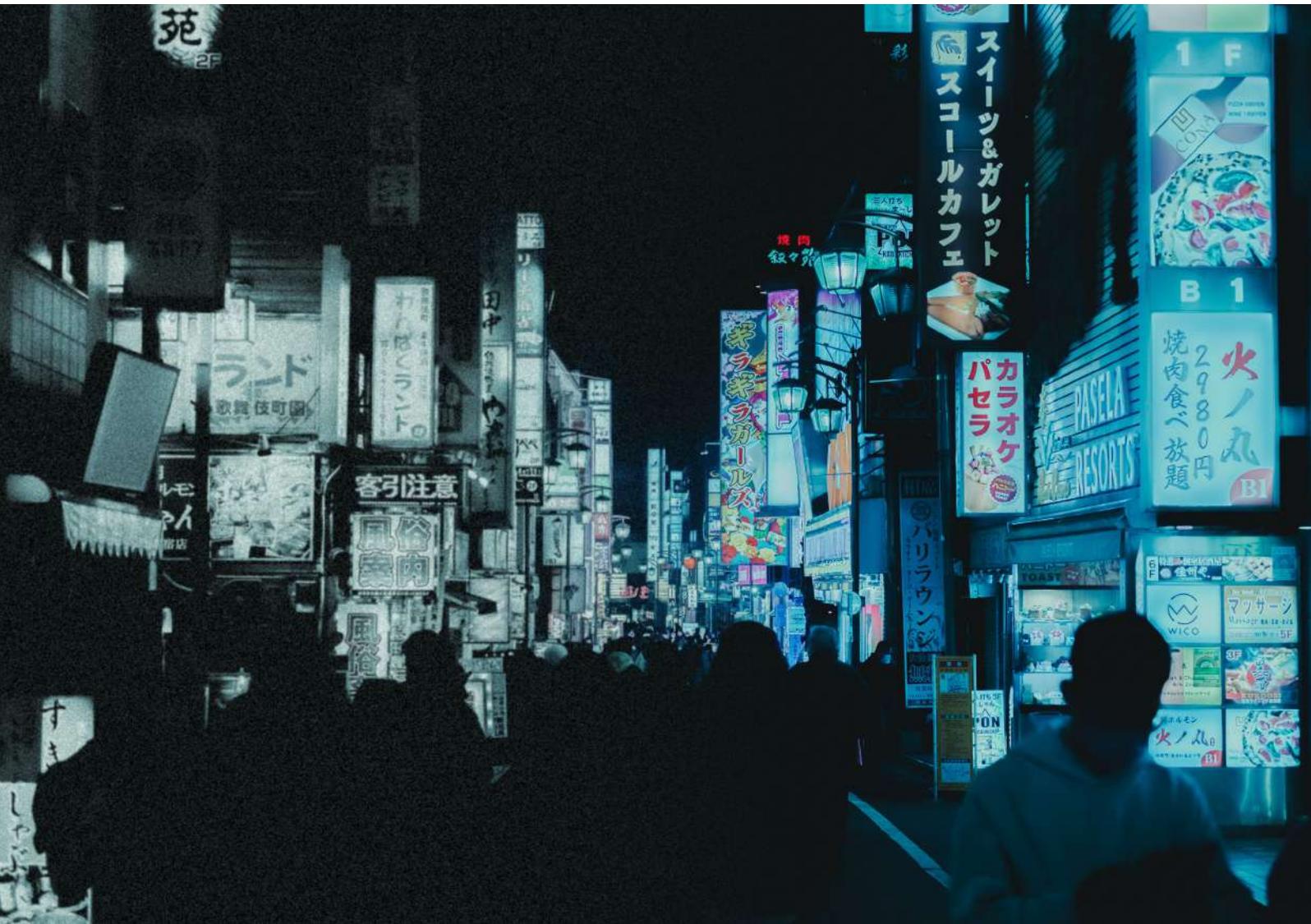**Onport**

FARFETCH GROUP

THE RISE OF MACH-ORIENTED ENTERPRISE MARKETPLACES
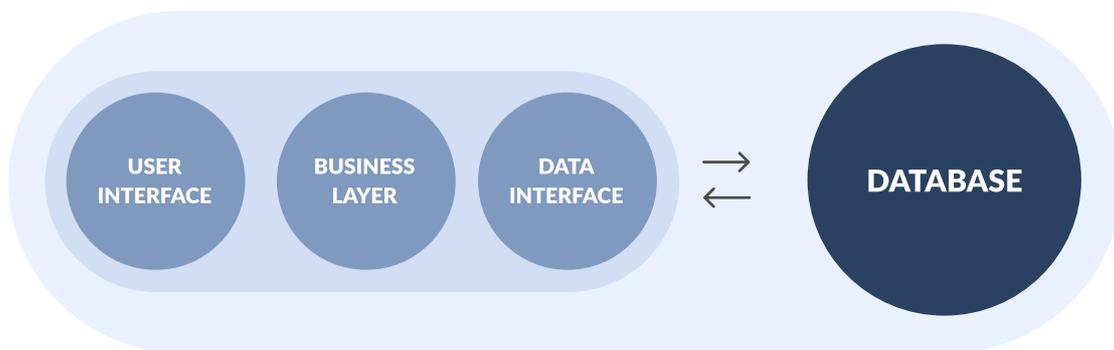
New challenges require disruptive solutions.

THE RISE OF MACH-ORIENTED ENTERPRISE MARKETPLACES

"If it ain't broke, don't fix it." This is a classic adage we have all heard countless times; however, such a mindset can mislead, and past successes can overshadow current events. The reality is that new challenges require disruptive solutions.

Legacy Systems in New Industries

One such example is the issue of persisting with a **legacy software system** that conforms to performing operations in a predetermined manner, with no room for growth or 3rd party integrations. Some of these solutions may not have been designed to support the development and execution of modern e-commerce operations and, therefore, lack the flexibility to enable increasingly more complex business logic functions.

Inefficiencies and restrictions simply become an accepted feature. It is simply not enough to rely on a system that "gets the job done" - a software system must allow its users to maintain **clear flexibility** to tackle incoming challenges and leverage new opportunities.

Change can be daunting for an organization, and companies often make the mistake of only seeing the immediate cost of replacing their system rather than the long-term benefit, choosing to remain in vendor-lock-in situations, despite the high costs of continual maintenance, lost efficiency, and the looming threat of **losing market share**.

The Changing Marketplace Environment

Over the past ten years, the marketplace business model has grown exponentially. Market research commissioned by OC&C Strategy Consultants predicts that by 2025, the online marketplace model will surpass the majority of established retail outlets in terms of spend. (OC&C, 2022)

This rise is driven by the growing number of companies embracing the marketplace business model, expanding across new markets, increasing product ranges, and improving logistics and supply chain operations.

Uncertain Times in the E-Commerce Industry

As the last few years have demonstrated, monumental market shocks often occur without warning and have forced organizations to evaluate their processes fully.

Regarding the marketplace business model, recent global events created an unprecedented opportunity for the industry. Many brick-and-mortar stores had to shut down in 2020, and a large proportion of retail commerce moved online. Amazon recorded net sales of $125.56 billion at the end of Q4 2020, for a YoY increase of 43.6%. (Davis, 2021)

> '*Shocks often occur without warning*,

In January 2021, 35.2% of all UK retail sales were conducted online, the highest on record (ONS.Gov, 2021). Such a tectonic shift in consumer behavior should have been a gift to many online marketplaces, but this wasn't necessarily the case as many companies found themselves stretching their **legacy-based systems to breaking point**, attempting to accommodate the sharp increase in traffic and order volume.

The reality is that legacy-based systems have long been showing their age. Take retail giant The Schwarz Group, who own the global discounter chain Lidl. In 2018, the group chose to opt for a legacy-based implementation for their inventory management system. Unfortunately, this system failed to deliver on its expected objectives and had to be scrapped entirely at an estimated sunk cost of €500 million.

Logistics company <u>DHL</u> made a similar decision in 2015 when they adopted a similar, monolithic-based implementation for handling their operations. It also failed to deliver results - <u>resulting in a €345 million write-off.</u>

Both examples illustrate the limitations of many long-standing solutions. The sheer number of clunky, moving parts means the ability to respond swiftly is diminished - companies find themselves stuck, having to discuss how to modify their software to minimize disruption and accommodate extra capacity. Often faced with having to extract their data from **silos, restructured, reformatted**, and, hopefully, integrated with external platforms, companies find themselves left with an unreliable system to perform the tasks required.

This is no longer a feasible long-term approach for **enterprise-level companies** that face market dynamics more challenging than those of their less complex counterparts. With all of the unpredictability we all face at the moment, these companies will need to have the resources at hand to respond effectively. Currently, many find themselves burdened with a lack of agility.

MACH Architecture
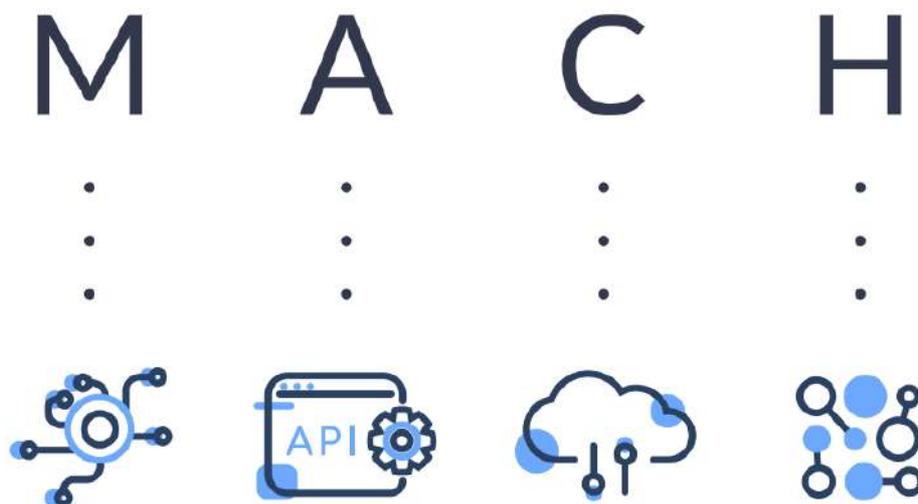
As the last few challenging years have demonstrated, enterprise-level software must be agile enough to respond quickly to any changes in the macro-environment in which they operate. Software that cannot do so will simply be replaced in the e-commerce space by solutions that can. As organizations grow, so do their requirements. As markets expand, so do the number of forces, **both internal and external**, that can affect them. Therefore, a more fluid approach is essential to ensure companies remain competitive.

One such approach is known as **MACH**. Standing for **M**icroservices-based, **A**PI-first, **C**loud-native, and **H**eadless is a concept based on composable e-commerce, using pre-existing infrastructure components to facilitate faster development further, but doing so without imposing strong and inflexible preconditions upon developers and users. Which components they choose to integrate into their stack depends entirely on their particular business goals and technical requirements. Such a modular approach emphasizes flexibility in the development process and replaces rigid, over-complex elements which hamper innovation.

By switching to a MACH approach, organizations can find the best-of-breed solutions for their specific needs. They can choose which particular tools they want to incorporate and which they don't, preventing the formation of a growing stack that isn't **future-proof** and doesn't help achieve the organizational vision.

Onport & MACH

Since Onport was founded by a developer locked into a vision of building a composable product architecture for its **dropshipping automation platform**, the transition to embracing the MACH approach was seamless and always a clear destination.

All too aware of the intricate nature of many of the existing multi-vendor marketplace solutions, the Onport Platform was designed to avoid the common pitfalls of overcomplexity, rigidity, and a lack of experimentation that signals the end of the monolithic architecture age.

Instead of prescribing a view of what developers should be doing, Onport gives them several pre-existing infrastructure components. These range from **SDKs** and our **command-line interface** (CLI) to extensive API documentation and webhooks. For instance, the module allows Onport to be run from the command line without having to use the web interface. This ensures a more granular system management approach, such as for custom reporting.

Onport's software development kits are designed for those who wish to rapidly develop a composable marketplace architecture, allowing for faster time to market and the ability to be uncompromising in bringing their brand vision to life. Each individual element of **MACH** is designed to help developers with flexible and customized solutions with minimal disruption - it is this core value that Onport embodies at every stage of its enterprise product offering.

Real-time access to logs gives a detailed overview of inventory syncing, order routing, shipping workflows, payments automation, and returns management, providing valuable insights into the flow of data between Onport and external systems, browsing status requests, inspecting API calls, and accelerating development.

API access to enable role and context base access and the ability to view the status of orders, inventories, and reports in real-time. **Using Semver**, it enables users to manage releases in a predictable manner, ensuring their integrations are always compatible with updates, reducing the time to market and possible friction between components.

Conclusion
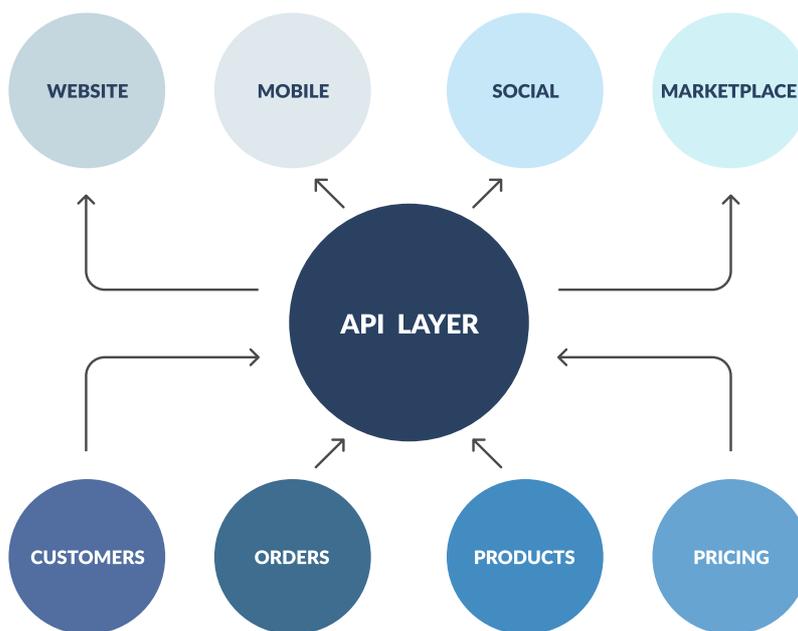
In an industry as rapidly evolving as the online marketplace ecosystem, opting for legacy software places a company at a **distinct disadvantage**. Data flows quickly become complex to manage and highly unreliable, and the ability to scale can be reduced significantly. If companies are to take full control over their ongoing digitalization, they need to focus on solutions that embrace innovation instead of stifling it.

A MACH-based approach to product development also addresses the modern reality of building systems at scale - no single component is an island. Business systems must ensure they are part of dynamic, composable architecture and provide the flexibility to adjust to the demands of modern e-commerce operations.

Onport provides a software solution that gives **complete freedom to its user base** and does not seek to lock them in, forcing them to choose development options that do not fit their needs. Its customers are equipped with a future-proof array of microservice-based architecture tools and solutions to use and customize per their individual requirements.

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Navigate your business with Onport, the multi-vendor marketplace solution to scale your operations.

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