

MACH MATURITY ASSESSMENT



MACH
ALLIANCE

Are you ready to bring the power of MACH to your Organization?

What benefits can you expect from MACH?

Growth Enablement

Improve your agility, allowing delivery of change at speed by breaking down larger, complex business systems into smaller, more manageable components

Unlock your team's ability to deliver innovative experience and advanced business paradigms such as Dynamic Pricing and Inventory Sourcing Optimization

Improve agility and knowledge sharing with teams focused on specific domains and services

Cost Optimization

Optimize spending on custom development through a blend of SaaS products and in-house components composed into a consistent experience

Reduces the overheads and hidden costs of technical debt and restrictive and manual development and deployment processes

Risk Reductions

Enable greater consistency through automation in the deployment of software and the provisioning of infrastructure

Reduce risk when introducing new capability by moving from 'big bang' deliveries with long implementation timelines to the incremental delivery of new capability deployed at a higher frequency

Avoid employee attrition related to technology and solution stagnation, allowing your people to stay engaged and excited to work with modern technology

WHAT DO WE MEAN BY MACH?

The MACH (Microservices-based, API-first, Cloud native SaaS, Headless) architectural pattern is an effective way to implement a composable architecture. Businesses can integrate a collection of flexible cloud native technologies using an ecosystem of independent components that deliver packaged business capabilities. Flexibility is then realized through an experience layer that is decoupled from the application layer through the consistent use of APIs.



Microservices

Individual pieces of business functionality that are independently developed, deployed, and managed.



API-First

Built with APIs from the ground up. All functionality is exposed through an API.



Cloud-Native SaaS

Software-as-a-Service that leverages the full capabilities of the cloud, beyond storage and hosting, including elastic scaling of highly available resources. Functionality is updated automatically, no manual effort required.



Headless

Front-end presentation is completely decoupled from backend logic. Designed to be channel, programming language, and framework agnostic.

OBJECTIVES OF THIS MATURITY ASSESSMENT

The objective of this maturity assessment is to evaluate your organization's readiness to make the transition to adopt MACH. The quiz is designed to be high-level and quick focusing on your business as a whole rather than just on your technical landscape.

Questions are focused on 6 pillars of Strategy and Transformation, Organization and Governance, Process and Metrics, People and Culture, Technology and Architecture and Business Intelligence as a broad measure to assess the organizational readiness to make the shift.



Strategy & Transformation

Digital transformation, powered by MACH



People & Culture

Digital hearts & minds



Organization & Governance

Customer centric business



Processes & Metrics

Defined, measured & optimized



Business Intelligence

Intelligent, data-driven enterprise



Technology & Architecture

MACH Technology as a value driver

Strategy and Transformation

As an organization considering MACH, having a clear idea of what success looks like across both business ambition and digital capability is a fundamental starting point. Business and technology are intrinsically linked and an understanding of how they enable each other is one of the primary expectations of a mature MACH mindset. An organization looking to engage in a MACH transformation should have a clear understanding of its business objectives and the key areas of transformation required to achieve those goals. This part of the assessment will seek to highlight where a MACH approach may be applicable based on your organization's current view of transformation across domains and as a whole.

To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Digital transformation, powered by MACH

- Journey towards MACH is seen as a digital transformation initiative, aligned with business goals and objectives
- Broad understanding that a shift towards MACH has people at the core (it's not just a technology play)
- Clear, cross-functional and comprehensive MACH strategy and roadmap exists – sponsored by C-suite
- Digital first thinking: understanding that all revenue is impacted by digital
- Transformative investments supported by business cases & ROI models
- See ROI not just as Return on Investment, but also Rate of Innovation
- Baby steps: you don't need to jump start, but the right partner can get you started

Organization and Governance

As part of a transition to MACH you will need to understand how your organization currently takes technology decisions. This includes understanding whether the decision-making process you currently employ can support rapid change cycles and could integrate with multiple external suppliers.

You may have to adapt your operating model and/or augment to be more focused around digital products. You will need to be able to delegate governance and decision-making processes while ensuring they are underpinned by an agreed set of principles. Along with adopting a 'solution first' mindset these practices should be viewed as foundational to supporting an effective transition to MACH.

To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Customer centric business

- Customer-centric operating model throughout the enterprise
- Teams organized around the customer journey, converging online & offline (from P&L to operations)
- Centralized governance with localized autonomy: freedom within a framework but shared incentives
- Consistency in operations with functional independency to innovate
- Agencies & partners deliver on business outcomes

Process and Metrics

Any approach to adopting MACH will have knock-on effects to process and metrics. For example, some fundamental requirements to successfully support a distributed system of smaller components include:

- An Agile project management framework to support the software development life cycle
- Metrics and reporting that expose the health and performance of processes that span business domains
- Define value streams and measure Time-to-Value (from idea to commitment to execution)
- Measure your DORA (DevOps) metrics to understand how you stack up against other enterprises
- Business processes for the procurement, provisioning, and onboarding of a variety of external systems

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There are three drivers generally for companies adopting this architecture, either you have a need for speed to react to the market, you need greater channel and GTM flexibility, or you need better and more integrated omni-channel business processes. If you're looking to adopt a composable architecture, the MACH Alliance established certification standards that help identify vendors and integrators that embrace MACH philosophies and offer MACH-certified services. It's a good place to start!

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Casper Rasmussen

President
MACH Alliance

Organizations that have been able to benefit most from MACH have consistently been able to use agile planning and development tooling to reduce their cycle times and move to a continuous delivery model. Reporting on the delivery process itself using tools that capture data on metrics such as velocity, burndown, value delivery and throughput can help to optimize the benefits delivered.

To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Defined, measured & optimized

- Continuous integration and continuous delivery (CI/CD) approach is well defined and governed for rapid deployment of new capabilities.
- Shared success metrics (KPIs/OKRs) across teams and business units are defined and tracked
- Data-driven decision making is the norm for continuous improvement
- Buy commodity SaaS and build your unique differentiation as the norm for software procurement

People and Culture

People are the key to any organization's success and consequently so too is the facilities and management surrounding them. Distribution of people in teams, alignment of those teams to business goals and the enabling of frictionless communications between teams are all important factors to consider with the adoption of MACH based technology. The culture and dynamics of your teams and the expertise within them should

empower autonomy and independent delivery aligned to business objectives and key results. When you consider adopting a MACH architecture it is worth considering whether you could do more to establish a culture of personal ownership for decisions within the context of domains paired with shared objectives that drive collaboration. You should also consider whether an appetite for change, the desire to develop new digital skills and a passion for innovation exist in your company's people and culture.

To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Digital hearts & minds

- Digital leaders at all levels in the organization (including C-suite)
- Adaptive & collaborative mindset: change is the only constant, teamwork makes the dream work
- Culture with a freedom to innovate, experiment, fail fast & grow
- Ability to attract & retain the best talent
- Active knowledge sharing with in-house digital academy

Technology and Architecture

Technology is central to a modern digital platform, and your approach to and adoption of technology will play a big part in your transition to MACH. The paradigm shift from larger multi-functional systems into more granular components that sit within bounded contexts drives a need to reconsider several aspects of the technical and architectural landscape.

To this end, we need to consider how comfortable your engineers and architects are with microservices and working within domains or bounded contexts. They will need to be comfortable with the adoption of cloud native technology and the processes involved in building and maintaining these environments and connecting out to other cloud-based systems. In addition, the discovery, usage and management of APIs and event-based integrations to allow for effective decoupling and composition of internal and externally hosted services will play a key role in the speed of adoption of MACH and the future agility of the solution.

While MACH technology can sit alongside more traditional architecture components, understanding how to efficiently integrate to it and evolve with it will be key to success.

To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Technology as a value driver

- Technology is seen as a strategic value driver & differentiator
- Flexible, modular, and scalable technology target architecture, where MACH is the norm to enable business objectives (such as omnichannel)
- Maximize automation, especially around infrastructure & application management
- No technical debt (e.g. version overhead) and vendor lock-in
- Predictable & cost-effective technology spend

Business Intelligence

A mature organization has a keen understanding of its data, the processes around its management and how it serves decision making. Utilizing domain understanding and map data across those domains and into actionable insights across components is key to unlocking value from a MACH Architecture.

Tools for analysis and visualization that aim to enable data-driven decisions are at the heart of a mature digital capability. A good understanding of data across technical, operational, and business metrics is paramount when delivering a successful transition to MACH.

A MACH optimized organization will seek to leverage data-driven decisioning across teams and systems, reviewing performance metrics, trends over time and the aggregation of data across business lines. To this end we will attempt to understand your relationship with your data, how it is collected, how it is distributed and how insights are derived.

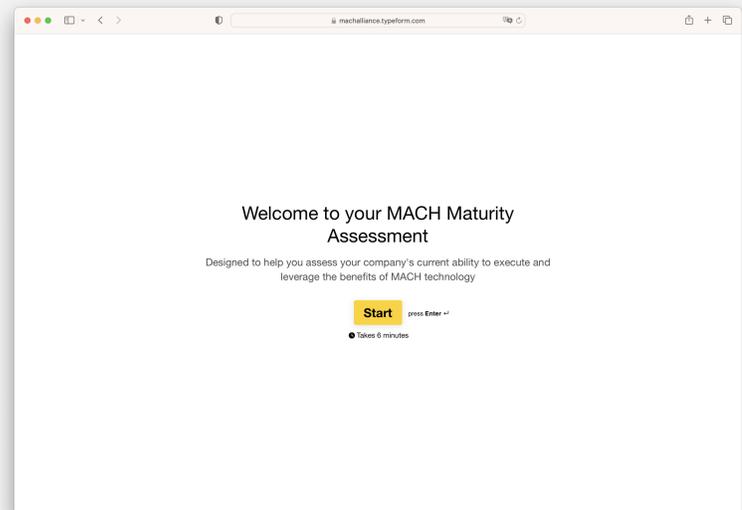
To maximize value enabled by MACH technologies, highly mature companies are following these best practices:

Intelligent enterprise, driven by data

- Data is an asset: governance and visualization is aligned with strategic business objectives
- Data, advanced analytics, AI, and machine learning are leveraged to generate actionable (customer) insights and drive business growth.
- Customer experience powered by near-real time data transparency and customer segmentation

Closing statement

This MACH maturity assessment is a starting point in garnering a greater understanding of your organization's readiness to adapt MACH components or move to a MACH architecture. It is split across the areas we've just talked about identified by a team of MACH Alliance members. The assessment consists of 20 questions and within a few minutes will provide an indication of your organization's maturity in relation to MACH along with insights into key areas that you might look to improve.



**Start your assessment now:
[MACH Maturity Assessment](#)**



This whitepaper and the linked assessment were developed by The MACH Alliance in 2023 with input from a working group of Member companies including:



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