The Future of the Digital Operating Model

How to adapt your organisation to deliver Digital excellence

MOZAIC

The future, now

> Mozaic has worked with over 100 complex organisations, designing, and transforming their Operating Models to increase quality, reduce costs and dramatically improve business agility. In this paper we discuss the evolution we have seen, through SIAM to contemporary product-aligned models, and look at the techniques and tooling that are revolutionising technology delivery today and how you should adapt your organisation to achieve Digital excellence.

INTRODUCTION

As a recognised leader in IT and Digital Operating model design and transformation, Mozaic has delivered wholescale change in over a hundred, large complex estates over the past 10 years – possibly more than any other single organisation during that period. Our consulting team includes ex-CIOs and CTOs from across a broad range of industries, giving us a unique perspective on the past, and on the next phase of operating model change that will affect us all.

Our Operating Models describe how technology is delivered and managed, Providing designs for:

- The functional scope of the organisation
- How work flows across the IT/Digital functions and the users that it supports
- How decisions are made
- The organisational size, shape and skills
- How suppliers work within the eco-system
- How tools are used to codify the guiderails for delivery
- The data and measurements that are needed to maximise the value

Understanding and communicating your model is fundamental if your teams are to become happy and healthy high performers - working in a consistent way to optimise the flow of work and provide the right balance between agility and control. This paper provides a short history of the dominant forces driving the models within our clients (typically large and complex estates in both private and public sector) and describes how the latest innovations can be applied.

Each model has contributed to the evolution, initially building back control from large System Integrators, focused on disaggregation and efficiencies, and then delivering in every more agile, iterative ways of working. These agile models initially focused on the delivery of change, before bringing operations and security together with developers, and most recently connecting the technology and business communities together in close alignment.

Within the paper we discuss the history of the Operating Model, and its evolution from monolithic outsourcing to today's customer-focused, product-oriented models. This is followed by a discussion on the steps organisations should take to achieve Digital excellence through Enterprise Product.

The evolution of the Operating Model

> Mozaic is now leading the latest iteration of Operating Model designs, using tooling, automation and data to codify delivery and Operations, removing friction and waste from the system, and ensuring demonstrable control at all times – without impacting the ability of teams to deliver the value that they are built around.

The major themes we have seen in the evolution are described below. It is important to recognise there is not a strict chronological order, progression is not linear; nor are the themes necessarily operating models in themselves.

The Black Box: Back in the dark days of the late twentieth century, much of IT delivery in large, complex organisations was outsourced to large Systems Integrators in monolithic, contracts. Financial engineering secured some benefits for the client organisations, and performance was often stable. However, alignment to customer need, innovation, and transparency of cost was often poor. Organisations became frustrated with the performance of these models.

SIAM and Towers: Organisations regained control of their operational delivery disaggregating the big monolithic contracts into standardised towers of service, which were integrated by a dedicated Service Integration and Management (SIAM) function. Collaboration was enabled through a clear definition of processes.

The SIAM model helped organisations to achieve significant cost efficiencies, as standardised services were open to much stronger competitive tensions. However, through this standardisation, operational delivery often restricted innovation, and the development of new capabilities to meet current business requirements was impacted.

Agile: Whilst the Towers model focused on operations and management processes, the Agile movement focused on engineering; taking a different approach to team organisation, business engagement, planning and delivery. Moving away from waterfall thinking and strict hierarchies, the approach favoured team empowerment, value focus, incremental planning and delivery, and dynamic management of uncertainty.

Agile created a new way to deliver change and develop new Digital systems - quicker, more iteratively and in alignment with the most important needs of the business.

Removing traditional project structures and governance enabled teams to move at this new pace. However, the teams focused on the development and often did not take into account ongoing service and security requirements.

DevOps and DevSecOps: The processes, techniques and tooling that became known as DevOps first started to emerge in parallel with Agile around 1999 (although the term would arrive much later), indeed "DevOps" was the bedrock of eXtreme Programming in the late 90s. However, some of this discipline was lost when Scrum first came to prominence, only to return as the de facto way to engineer code in the late noughties.

DevOps approaches were implemented to drive quality and reduce the cost of change that was inherent in incremental delivery, bringing together the Development, Operational and Security teams, responsible for "total work"; running, maintaining, and improving their systems.

However, the empowerment of disparate teams often led to duplication of effort, with a proliferation of methods and tools, an explosion of cost, and, in the worst cases, a degradation of operational quality, which frustrated the Operational teams.

Product: Traditionally, IT and Digital projects had a limited lifetime, with clear endpoints when newly developed capabilities were handed to Operations to manage and run. In today's digital age, this is no longer the case; digital capabilities must be continually iterated and improved to meet customer needs and outperform competitors' offerings.

Product-oriented operating models emerged to address this challenge, and to provide clear value alignment between Technology and the business strategy. Product-orientation is centred on teams delivering value for their customers, be those internal (in the context of enabling services) or external, whilst balancing the demands of the enterprise for strategic alignment (e.g. architecture), platform, security, service management and people excellence.

Whilst these models have worked extremely well, teams often remain unaligned, with little standardisation little or use of patterns and templates across the Enterprise. Additionally, the rate of innovation and change enabled by this model created challenges for Operations, with a more diverse set of services hosted across a continually changing, disparate, virtual estate.

Enterprise Product: The current evolution of the Operating Model brings templating of enterprise-wide capabilities to the Product Teams. This enables the reuse of patterns to accelerate and de-risk delivery.

Using value-stream management tools across the organisation enables the DevOps and Agile methods to continue whilst invisibly ensuring that delivery is within well-defined and codified guide rails; measuring performance to identify points of friction and enable continual delivery and demonstrating control to auditors and regulators.

The creation of strong communities of practice across all Product teams ensures teams share in the best practices and work not only for the specific business value that they are focussed on but for the greater good of the whole organisation.

Embracing the Enterprise Product model

> The emergence of **Enterprise Product** extends the Product approach, bringing previously disparate, unaligned teams together to focus on value. This achieves the right balance between control and agility; enabling team autonomy and empowerment within codified guardrails, which are applied without constraining the product teams in their delivery of value.

The challenge for organisations now is how to embrace Enterprise Product and realise fully the benefits it offers.

When transforming to Enterprise Product, organisations should adapt iteratively. There is a broad set of changes needed to adopt the new model, and these cannot be achieved through the top-down application of a pre-defined blueprint. Teams need to adopt changes iteratively, incrementally developing their own playbooks to achieve sustainability.

The changes can be broadly categorised into the following seven areas, each of which is discussed in detail in separate white papers within this series:

- **Get the Culture right.** Adopting Product thinking across the organisation is a significant change. Empowered teams take full responsibility for delivering value, but they must be empowered and recognise their empowerment.

  Allowing Teams to determine how best to deliver that Value means a change from management being directive and requiring long-term business cases, to clearly describing intent and then helping to remove constraints and roadblocks. Through adopting agile delivery methods, the organisation needs to learn to deliver iteratively and experimentally.
- **Focus on Value.** This will require changes to ways of working. Team shape, working practices and supply contracts will change in an Enterprise Product world. Service communities will focus on enabling tools, patterns, and templates. Development teams will focus on the delivering of value, whether this is identifying the root cause of repeating problems or the rapid delivery of a new feature that will enable the business to meet an immediate opportunity with their users.
- **Measure the things that really matter.** Measurement should enable both teams and leadership to understand how they are performing, and to allow them to make the right choices to improve. These measures should cover Value Delivery, Flow Efficiency.

  There are two main types of measures in business – Metrics and Vectors. The former is often over-used and affiliated with systems and structures, while the latter is often vastly under-utilised and more closely associated with culture and leadership. Often overlooked, feedback mechanisms are important. Feedback is often intangible, and may be as strong as direct loud voices, or as subtle as weak signals which require specific approaches to detect. It is often informally delivered or collected in many cases.

- **Align Sourcing models.** Teams need to be fully integrated as well as multi-disciplinary. For teams to be highly productive, everybody needs to be pulling in the same direction, and that direction will be subject to continual refinement or change. This may challenge current contractual arrangements, requiring a move from lowest cost, labour arbitraged markets or contracting purely for outputs, to models where teams work together to determine how to best deliver the value that they are formed against. Choosing the right partners that know how to work in these models bringing their engineering excellence can significantly increase productivity and delivery of value.
- **Codify guiderails using strong Value Stream Management tooling.** Don't expect teams to follow mandated guiderails if they are written and defined in a language that is not natural to them, or if they are perceived to be an unnecessary overhead, constraining their ability to deliver value.

  Product teams, by definition, are empowered to deliver value in the way that is best for them. To enable repeatability, control, auditability and guiderails need to be "invisible" to them. Patterns and templates should be obvious for them to use. Measurement and governance should happen with minimal effort from the Teams.
- **Maximise automation across delivery, with Data Driven Operations.** Extend the use of automation and tooling from the DevOps pipelines into full operations. New data driven AIOps techniques can enable automatic, intelligent, event correlation and proactive Digital management using big data to attain deep, real-time insight, predictive analysis, and automatic resolution. In this way you can achieve greater stability, security, and resilience across your estate, and achieve significantly faster incident resolution and greater operational resilience.
- **Don't be constrained by Legacy platforms.** Many Operating Model changes stall because organisations feel teams cannot make full use of the new tooling, patterns and ways of working whilst they are held back due to legacy system constraints. In reality, the converse should be true; the implementation of an Enterprise Product model in which teams are empowered to address technical debt within their remit, will enable the transition to the latest ways of working.

  This empowerment achieves the right balance between novel innovation and the removal of technical debt; they will choose to apply techniques to start to iteratively break the capabilities from legacy systems using APIs and microservice architectures, to release value as it is needed.

Time to change

> Product-oriented operating models are increasingly the desired norm, and yet many organisations have been suboptimal in their implementation. This arises from a variety of challenges, which in our experience can be successfully overcome by implementing the techniques described in **Enterprise Product**.

As we have seen, it is essential to start with a model that sufficiently meets enterprise requirements and empowers teams throughout its adoption to ensure it remains dynamic and adaptive. In addition, organisations should strive to automate wherever possible, driving out waste.

Successfully achieving product focus will drive value, increased customer and colleague satisfaction, higher revenues, and greater margins. According to research, 92% of companies that tangibly improve customer experience, increase customer loyalty; 84% increase revenues; and 79% drive profitability improvements.

THE SERIES

This whitepaper provides the introduction to a series that looks at the future of the operating model, and details the specific areas of change that organisations will need to embark upon to transform to Enterprise Product and achieve excellence in technology delivery.

- The future of the technology operating model
- Focusing on value
- The importance of culture in transformation
- Measure the things that really matter
- Aligning sourcing models to support Enterprise Product
- Value stream management - it's time to stop throttling change
- Data driven operations
- Addressing legacy constraints

The full catalogue of papers can be found on the Mozaic website at https://mozaic.net/insights/.

Accompanying the series, Mozaic offers a range of complementary workshops, which look in more detail at the subject areas, and help teams to better understand the challenges and opportunities in their context.

If you would like to know more, please contact us at info@mozaic.net or call us on 0203 709 1625.

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