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INTRODUCTION

Cloud enhances the resilience, scale, and scope of infrastructure services. A successful transformation to cloud delivery requires enterprises to re-examine and adapt their technology, organizational structure, and business practices, impacting everything from long-term product roadmaps to planned technology investments. This series explores Oracle’s experiences consolidating its Global Business Units (GBUs), a set of eight industry-focused software groups that serve over 199,000 customers with 60+ products running in 80 data centers, onto Oracle Cloud Infrastructure (OCI). This paper begins the series by exploring the key drivers for this change across our business.

Organizations beginning a cloud transformation will find themselves confronted by many potential paths. Over the course of their migration, developers, delivery teams, and executives will need to evaluate and make many choices about how to proceed. Successfully navigating these decisions requires each stakeholder to maintain alignment with the core, common business objective behind the migration. Doing so requires that internal objectives aimed at improving product, operations and finances must sit alongside external opportunities to grow market share, keep pace with customers, or prepare for changes in the market. The Oracle GBUs honed these factors into a set of three drivers as it began to plan its migration: Scale, Modernization, and Standardization.
SCALABILITY

Scalability positions a service for rapid growth, at a pace far beyond what is possible for managed infrastructure or on-premises deployments. Cloud services provide availability at scale, enabling a product to grow to meet market opportunities. The Oracle GBUs relied on dedicated Oracle Cloud Infrastructure and service offerings. Moving to Oracle Platform as a Service (PaaS) offerings for key components such as database allowed GBU teams to focus on building scalable architectures and components. Furthermore, migration frees teams from managing and scaling IT operations. As consumers, rather than providers, of cloud services, teams increase focus on tuning and optimizing performance. “Instead of spending 80% of our time on how to deploy a service and 20% on how to leverage it, we can flip that,” said Dave Digiovine, Vice President of Operations in GBU Cloud Services.

MODERNIZATION

Modernizing tool sets, services, and architectures eases integration between components, helping applications realize the full value of the tools and technologies available in the cloud. Such tools range from infrastructure upgrades to automated deployment pipelines to integrating artificial intelligence and machine learning. Modernization is most important where markets are experiencing rapid and consistent change. In some cases, services can be completely re-written and re-branded, leveraging the latest tech stack to offer lower costs or more streamlined service options. Such changes can refresh aging products and disrupt established markets where licensed offerings are the norm. In other cases, products may be overhauled with new approaches, improving service while preserving brand awareness and customer loyalty. This does not necessarily require a complete change to the product suite. The Oracle GBU focused major architectural investments in approximately 27% of its products, while approaching other products with a lift and shift strategy.

Moving to the cloud becomes a trigger for a broad-based modernization push. As cloud provides teams with access to services, technologies and expertise that were not previously available in their organization, it becomes possible to achieve new goals and deliver new capabilities. Teams can move “up the stack” to focus on new, generally applicable products features rather than custom code linked to specific deployments with specific customers. With service provisioning, product updates, and customer support all happening faster than ever, resources can be re-focused on developing new features. In this way, cloud migration sets the stage for a broad wave of modernization activities, transforming everything from the execution of product upgrades to the quality of customer service.

STANDARDIZATION

Standardization on IaaS and PaaS creates a common platform that all teams can use to deliver value, reducing the overhead and making teams more flexible and fungible. As organizations grow, different teams and product lines adopt different tools of various maturity. Consolidating these toolsets within the cloud service abstracts much of the complexity associated with this layer of IT management. It permits the development and use of standard operational practices for tasks that can map across the portfolio. Standardizing also make routine activities simpler and more predictable, reducing labor demand for basic tasks. Resources previously tied up navigating varied, possibly incompatible, processes are freed to focus on more important problems including developing next generation products and services for their customers.

The Oracle GBUs focused on standardizing infrastructure, services, and operations. Standardizing on Oracle cloud Infrastructure freed the GBU organization from managing its disparate infrastructure environments and core tasks like maintenance, patching, and network monitoring. The GBUs became consumers leveraging a single cloud environment providing consistent services. Using a standard set of services and platforms also provided a common technology baseline across all GBUs, simplifying planning and support for all products. Notably, this made it simpler to enforce global policies and practices around security, risk, compliance, and other operational activities that teams could easily
apply to existing as well as new products, including products acquired through mergers and acquisitions. As compliance with global policies became easier, cloud operations teams could focus on understanding and optimizing the relationships between GBU products, ultimately increasing the resiliency of the overall Oracle product suite. Organizationally, standardization reduced the segregation between development and operations teams, permitting the GBUs to pursue both functions as a single, interrelated stream in contributing to the overall integrity of a product line.

**ORACLE GBU STORY: MANAGING KEY DRIVERS ACROSS THE BUSINESS**

**Focus on Cross-GBU Portfolio Management**

Oracle’s GBUs span diverse industries and use cases. In some industry verticals, keeping up with the market demanded radical technical change, while in others, re-writing software would disrupt the operations of important customers. However, in all cases, the GBU cloud migration required an interplay of Standardization, Scalability, and Modernization. Executing on this across all eight GBU business units required not just technical change, but the evolution of an array of organizational functions, processes, and approaches for developing and delivering Oracle products. The sections that follow describe how Oracle maintained focus on its core drivers across all of these elements of the cloud transformation.

**Supporting Standardization: Creating a Point of Knowledge for Migration**

To help balance competing priorities and to create a common source of requirements, Oracle designated a single team to support each GBU in coordinating needs and new models in the migration. This team created a single point of contact that all GBUs could use to interface with the larger Oracle teams building and managing Oracle’s cloud infrastructure. Creating this common source of interaction and expertise made it simpler to drive standard approaches across multiple application stacks and operating models that would migrate to OCI.

**Ensuring Scalability: Setting Priorities to Drive Decisions**

The team set out to create a set of principles that would guide decisions by the leadership and management team. “The first thing was compatibility” said Dave Digiovine, VP of Operations, “We needed to port over our existing services with very few changes to our processes and ancillary technologies.” As the centralized GBU transformation team began to plan for migration, it worked with various GBU product teams to ask foundational questions, such as which components could be moved to Oracle cloud with minimal changes to the application stack. The resulting dialogue created a vision of what migration could mean and where trade-offs existed between creating Scalability, Modernization, and Standardization. Starting this process early sharpened the overall GBU vision for migration during operational planning and maintained continuity through the execution.

**Driving Modernization: Creating Resources for Re-Engineering in the Cloud**

A sharp vision of migration priorities was not always enough. In some cases, GBU application teams would need to change their products and activities significantly. As the GBU Cloud team gradually assumed responsibility for operations across all GBU product lines, it needed a way to support and partner with the application teams making the transition to cloud.

With this need in mind, the Oracle GBUs created a new team focused on cloud native engineering. It would help application teams adopt a modernized approach to software development rooted in the tools, practices, and operational models delivered in a modern cloud environment. Creating this team ensured GBU teams had a resource they could use to maximize the benefits of their cloud migration. It also helped to ensure that portfolio modernization would not be put off or made a lower priority.

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Dave Digiovine
Vice President of Operations
Oracle GBU Cloud Services
CONCLUSION: KEY OBSERVATIONS AND TAKEAWAYS

Combined, the principles discussed above result in standardized product and service architectures as well as improved speed and quality in deploying products. Fewer resources are engaged to customize, support and operate these models. Scale results from design for repeated patterns, which contributes to revenue optimization and the resulting ability to refocus resources on enhancing the quality and integrity of the service for customers. Subsequent papers in Series 1 will explore how a clear articulation of these factors drove initial planning, including changes to the delivery model, product portfolio evaluations, and mapping to key pathways of cloud transformation.
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Integrated Cloud Applications & Platform Services

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