Oracle GBU Cloud Transformation Review

Series 1.3 / Assessing the Portfolio

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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 colocation data centers, onto Oracle Cloud Infrastructure (OCI). This paper continues the review of transition planning that began in 1.2 Defining Pathways for Transformation to focus on the portfolio analysis and segmentation needed to drive transition priority.

Applications vary in technical features and in their value to the business and the processes involved in operating them. As a result, no single assumption, path, architecture, or services stack can ever be universally applicable. Each application's migration must be assessed on its own terms. However, using standard frameworks for assessing both technical readiness and business contribution can help determine when an application should move and how it should evolve after its migration.

EVALUATING TECHNICAL READINESS FOR THE CLOUD

A technical understanding of the application portfolio is vital to understanding requirements and dependencies for the migration that will drive the relative timing of migration activities and help identify key areas of focus. At this stage, the key area of focus should be on identifying the capabilities required by each application and version. Assessment of the frequency of occurrence of these capabilities in deployment will become a question for subsequent stages.

A standardized Application Evaluation Template can help at this stage, by breaking down the types of resources and capabilities that will be required to complete the migration. This assessment should address three critical dimensions:

- **Infrastructure Requirements:** Cloud decouples software from its underlying hardware or operating environments. High maturity applications are essentially independent of their environment, relying only on a general infrastructure resource like CPU that scales easily in the cloud. Low maturity applications depend on specific equipment, components, or environments provided as managed infrastructure or other dedicated systems. The extent to which your application will have hard dependencies on infrastructure components and configurations in the cloud must be documented.

- **Services Components:** Cloud delivers supporting capabilities as standalone services, operated and delivered independently from the application. High maturity applications are architected around discrete components with minimal dependencies across the stack, allowing targeted changes and upgrades and maximizing uptime. Low maturity applications are architected with large, tightly coupled components, which become highly interdependent and must be managed as a single entity. These services relationships must be documented for each application.

- **Operational Readiness:** Cloud changes not just technical architectures, but working processes, skill sets, available tools, and operating models. High maturity applications already run like cloud applications and use processes, standards, and toolsets that will work well in the cloud. Low maturity applications will find critical support services missing from the cloud, have unsuitable skillsets for cloud work, or use processes that would be disrupted by a move to the cloud.

Starting a migration by evaluating each application's maturity with respect to these factors permits an organization to plan appropriately and avoid downstream surprises that create delays, increase costs, and lead to missed targets.

It is difficult to understate the complexity of a migration, as current production environments, suites of supporting services, and the targeted cloud environment will continue evolving throughout the process. Uncovering these linkages between services and applications not only allows intelligent planning upfront, but enables that planning to flexibly respond to the changes that will inevitably occur during migration. When documented effectively, this evaluation should result in a clear "To Do" list for the migration process. This will help ensure projected migration schedules continue to align with ever-changing roadmaps.

EVALUATING BUSINESS CONTRIBUTION

In addition to technical assessments, each application must be weighed with respect to its importance to the business. The work required to migrate the portfolio to the cloud carries a cost, which needs to be balanced against short-term and long-term contributions to the overall success of the business. This includes several business factors that relate to the on-going business posture of the application:

- **Strategic Value**: Evaluating the overall potential for the market supported by the application, as well as long-term plans for growth in that market, illustrates the value of a cloud transformation. In particular, it is important to evaluate whether – and how – the market will value the cloud-based architecture and the features that it enables.

- **Financial Objectives:** Cloud enables not just new features, but new financial models. The degree to which a cloud migration will affect the cost of operating an application, as well as the margin derived as a result, must be considered.
- **Cost to Move:** The migration itself carries costs, depending on the new capabilities needed to complete the move, including the cost of transforming the application itself. In particular, this includes the costs and risks of maintaining and updating two versions of the same product through a migration.

Where the technical analysis identifies the scope of work to be completed, the business evaluation provides key insight into the priority of each application's migration.

ORACLE GBU STORY: PRIORITIZING AND ALLOCATING RESOURCES

Focus on Cross-GBU Portfolio Management

The Oracle GBU portfolio includes over 60 applications addressing a myriad of industry use cases. This portfolio included over 12,000 application instances, each of which needed to be replicated on Oracle Cloud Infrastructure, decommissioned in the legacy environment, or replaced by a new service. The GBU portfolio includes products at all levels of the cloud maturity model, migration technical complexity and relative levels revenue contribution.

Planning the migration of this portfolio while running the existing business represented a daunting task. Some products remain leading services in their market, generating continued demand, while running on aging infrastructure or with deprecated services, making them high priority candidates for migrations and/or product re-writes.

For example, in the Oracle Health Sciences GBU, these factors feed directly into product strategy, as identified above, resulting in a focus on the development of a new platform, incorporating cloud native characteristics from the bottom up, while transitioning other existing products into a customer sustaining cycle. This sort of planning can accelerate and optimize the process, but requires a re-evaluation and re-commitment of resources. "We absolutely dedicated people and teams to this," said Chidhi Arunachalam, Vice President of Development in the Health Sciences GBU. "Not every application was ready to go, and we have our current business to support, but we were not going to wait to move forward."

In any such situation, businesses will need to make decisions about how to how much effort to invest in which applications. Migration projects compete for funding and personnel with work to modernize existing applications, develop and deploy new features for existing products, and sustain applications nearing the end of their life. Portfolio assessment is required to provide a high level of clarity across these factors to identify the best way to conduct a migration, as well as to prioritize and assign the resources to do the work.

Cloud Services Decision Framework

In planning its transformation, Oracle needed to prioritize migration activities in order to position our applications for success in the next generation cloud environment, while simultaneously as preserving and protecting our established business. To support this balancing act, the Oracle GBUs developed a Cloud Services Decision Framework.

To help divide its portfolio into easily managed groups, Oracle consolidated both technical and business contribution evaluations within this framework, so that each application could be assigned to one of four broad categories:

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Oracle Health Sciences GBU

- **Portfolio Leaders:** This category included services core to the future of the GBU business and with technical, business and service models already aligned with cloud computing best practices.
- **Emerging Services:** Services in this category were targets for development and investment, with features such as a compelling market share that make them priorities for transformation or new technologies poised to replace older offerings.
- **Sustaining Services:** These services may be older services that do not represent the latest strategic direction for cloud services, but still hold business value as with key customers or segments of the market. These services are maintained to allow time to develop new, replacement services and migrate customers into these environments.
- **End-of-Life Products:** These are the services identified for deprecation, which no longer have business value and are phased out over time.

Oracle used these categorizations in connection with the cloud maturity model identified in 1.2 Defining Pathways for Transformation to establish a shorthand for both the scope of technical change required in each migration and the relative priority of those changes.

Optimizing Investments

This exercise helped developers and planners prioritize their work on the needs of a particular application across multiple environments and services. While our ultimate goal was to make every application in our suite fully-cloud native, this objective had to be balanced against organizational priorities emphasizing migration program execution over most other factors. This check became a key component of portfolio assessment, permitting stakeholders to scope their investments based on not just the target maturity level and technical requirements of the transition.

To this end, development teams prioritized cloud services and environments required for Portfolio Leaders, while End-of-Life Products received lowest priority. The greatest challenge came in balancing the needs of Emerging Services and Sustaining Services. Investments in Emerging Services contributed to the future of the company, building products that would sustain Oracle's business in the long term. Work on Sustaining Services contributed to the bottom-line today, supporting on suite of industry leaving services. As a transformative project, the Oracle GBUs tended to prioritize the needs of Emerging Services, but this was a source of constant discussion and fine-tuning.

CONCLUSION: KEY OBSERVATIONS AND TAKEAWAYS

Migrating your portfolio to a new cloud model can be as large an investment as your organization is willing to entertain. Absent labor or time constraints, all applications should transition to true SaaS or cloud native models.

Understanding your pathway is not just a matter of what results in an optimal service, but what can be done to drive value immediately with the resources available. The cloud maturity assessment and mapping described in 1.2 Defining Pathways for Transformation outlines the potential pathways available to bring the Oracle GBU products to the cloud. The Cloud Services Decision Framework described in this paper provides visibility into the business context that informs the selection of each pathway and the relative priority of each product. As such, this is a key step that permits you to organize your migration into manageable components and alignment to business impact.

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Integrated Cloud Applications & Platform Services

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