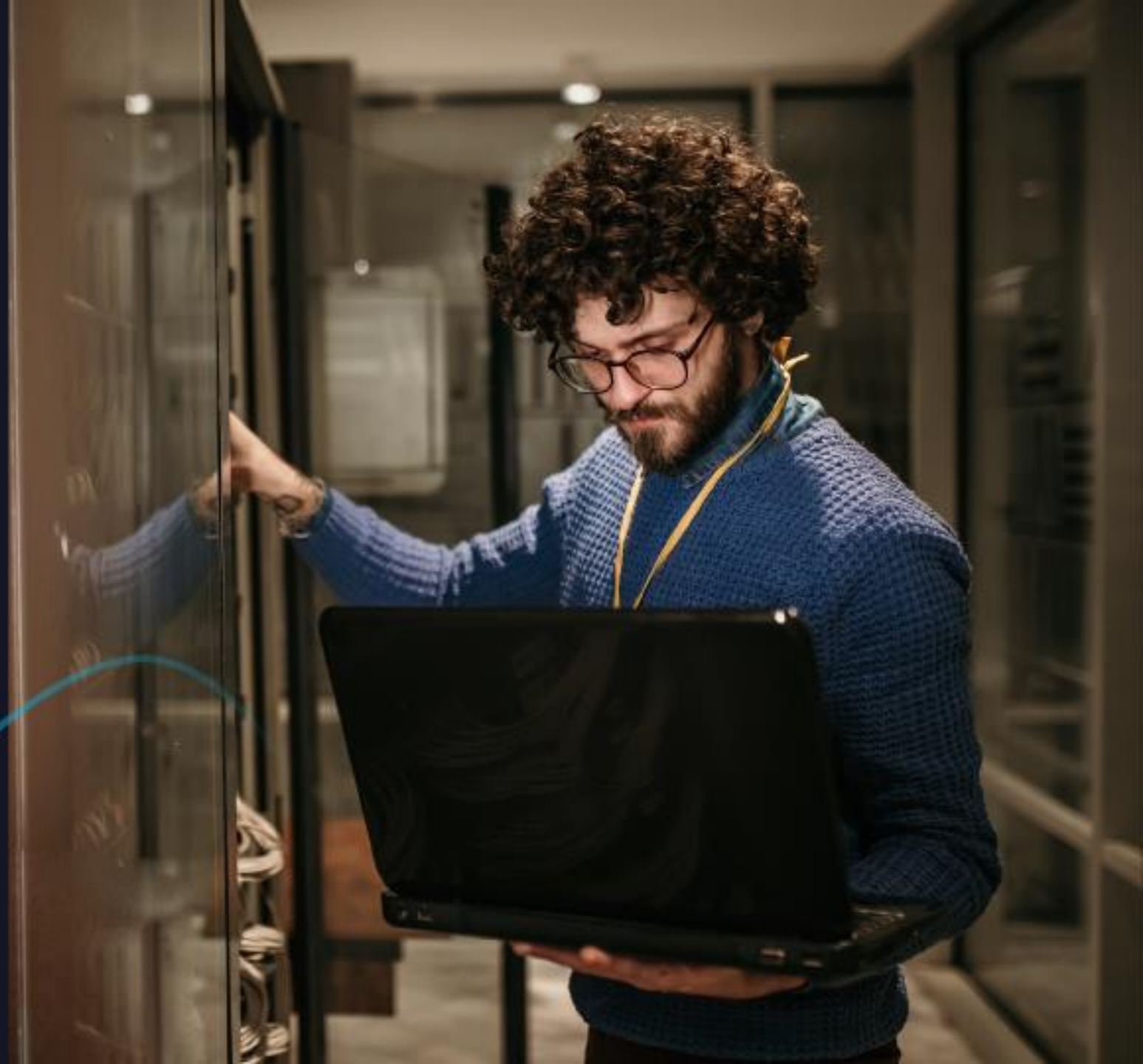
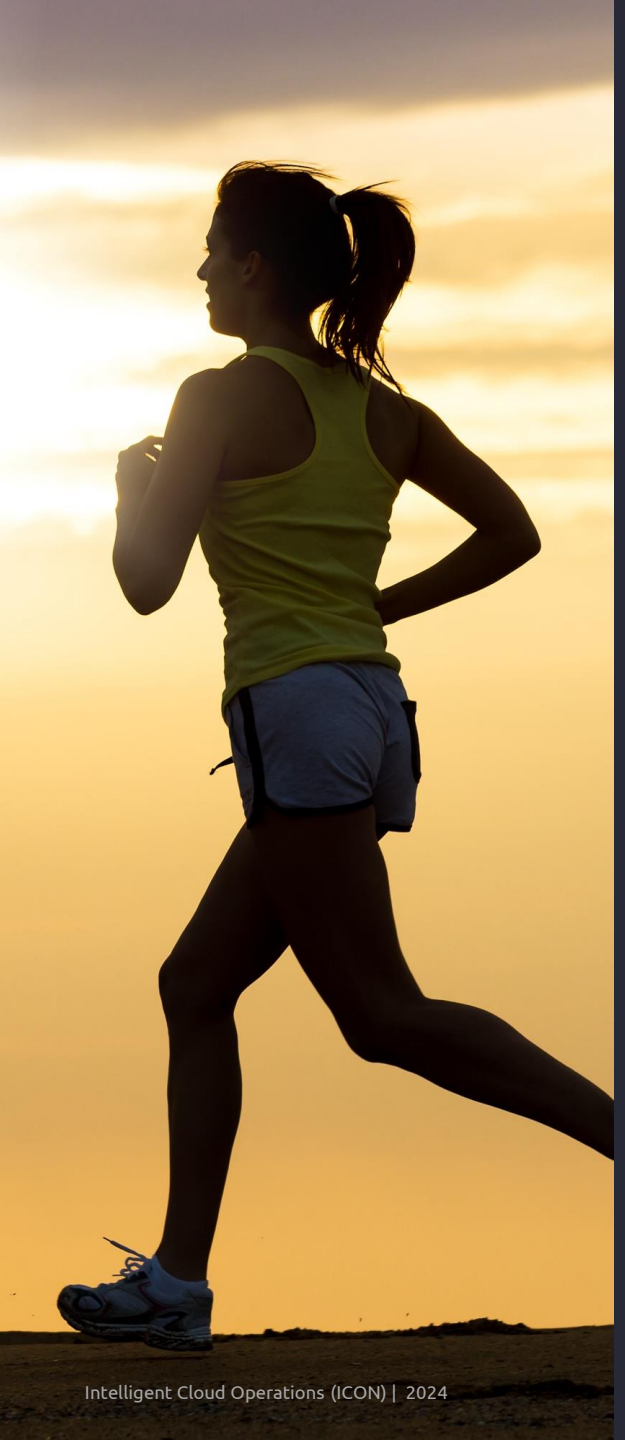
Capgemini | ORACLE

INTELLIGENT CLOUD OPERATIONS (ICON)





THE SITUATION

High-Performance Computing (HPC) is an established key enabler in Science, Technology and Engineering, and is increasingly important in the fields of Manufacturing, Entertainment and more. HPC platforms traditionally require large capital outlay and a commitment to operate and maintain the platform for 5 years or more before another cycle of hardware refresh. The relentless evolution of CPU/GPU, Storage and Networking technologies, allied to the complexity of delivering physical HPC solutions means that there is an inevitable degree of inbuilt obsolescence.

An additional complex dimension impinges on any business case for HPC, in that demand volume can be unpredictable. This can result in an underutilized HPC investment or an oversubscribed one with long job queues and contention for resources between different projects and consumers.

Cloud HPC changes the game, lowering the entry price for HPC, or augmenting existing platforms with burstable capacity on-demand.

Solving complex problems faster means fewer physical prototypes, accelerated development and testing, and decreased time to market. Cloud HPC brings these benefits within the reach of more Enterprises than ever before.

HIGH PERFORMANCE COMPUTE

OUR OFFER

- **Requirements Analysis** to identify the right solution for your HPC needs, including assessment of the security posture of the workload
- **Conceptual Design** of the OCI HPC platform, which can include architectural views for Data, Business, Security, Applications and Technology
- **High Level** and **Detailed Design** of the platform, including identity integration, monitoring and SOC integration or provision
- **Availability and continuity** provision as required
- **Performance testing** definition, management and execution
- Detailed implementation planning and execution
- Support for **custom image** creation
- **Image lifecycle management** to patch, upgrade and maintain images
- **HPC** Scheduler integration using skills from Capgemini engineers and our partners, or the customer's preferred vendor
- Support for the **accreditation** process in regulated environments
- Transition into support, or into a fully managed Capgemini service
- Can host workloads at OFFICIAL SENSITIVE or SECRET

VALUE PROPOSITION

- On-demand access to HPC resources for Computational Fluid Dynamics, Weather Forecasting, Molecular Modelling, 3D Rendering and more
- Run performance-intensive HPC workloads requiring millions of IOPs and microsecond latency within a cluster, and many GB/s of bandwidth, while experiencing on-premise levels of HPC performance.
- The most advanced Cloud High Performance Compute, Storage & Networking capabilities
- A range of CPUs and GPUs with RoCE v2 networking
- An evergreen HPC platform
- Shift from Capex and hardware refresh to OpEx and pay for consumption
- Reduction of Oracle Support and Maintenance costs in the wider estate via Oracle Support Rewards
- Ability to burst into cloud or operate in the cloud as the norm
- Per second billing
- Deep pan-sector expertise
- Capgemini can take accountability end to end, from design to implementation

THE SITUATION

Oracle's multimodel database continues to lead the industry for Enterprise capability, performance and security. With a raft of hosting models available from Public Cloud to Data Centre, including Oracle Database At Azure and Oracle Interconnect for Google Cloud, the data management pillar of any digital strategy can unlock high value from Capgemini's ICON sub-offer for database modernization. Furthermore, with Autonomous Database, Oracle has the industry's only self-tuning, self-healing, self-securing database, found by IDC to offer a 417% ROI.
https://www.oracle.com/in/autonomous-database/business-value-of-autonomous-data-warehouse/

Oracle has continued to develop the Database Server product's cloud capabilities, which scored highest in all four Use Cases in the Gartners latest *Critical Capabilities for Cloud Database Management Systems for Operational Use Cases* Report.

Database 23ai builds on Oracle's multimodel database paradigm with the Vector datatype and Vector Search. Bring the model to your live data in ONNX format to generate vector embeddings, instead of moving stale data between single-use databases for vectorization.

ICON accelerates Oracle database transformation to cloud with blueprint architectures, a proven migration approach and operational best practices.

DATABASE MODERNIZATION

OUR OFFER

- **Requirements Analysis** to identify the right solution for your Database needs, including assessment of the security posture of the workloads to design the right hosting solution
- **Conceptual Design** of the Database platform and migration approach, which can include architectural views for Data, Security, Applications and Technology
- **High Level** and **Detailed Design** of the platform, including Identity Integration, Monitoring and SOC integration/provision, HA & DR
- **Analysis of source databases** to map target treatments based on characteristics including size, feature usage, criticality, availability
- **Performance testing** definition, management and execution
- Detailed implementation planning and execution
- Database upgrades to take advantage of new features, bug fixes and enhancements
- Migration to **pluggable database** architecture, which can reduce memory consumption by 30% and greatly simplify operational procedures
- Migration to **Oracle Autonomous Database** which frees DBAs from mundane and repetitive operational tasks to focus on higher value and more strategic work
- Support for the **accreditation** process in regulated environments
- Transition into support, or into a fully managed Capgemini service
- Can host workloads at OFFICIAL SENSITIVE or SECRET

VALUE PROPOSITION

- Access to the latest features of Oracle Database delivered in the most performant and cost-effective platform for your requirement
- Oracle Database Cloud Service (DBCS) can be hosted on VMs, Bare Metal, Exadata Cloud Service, Exadata Cloud@Customer, Oracle Database At Azure, and using Oracle Interconnect for Google Cloud, and offers the most efficient database performance at the most attractive price point
- Use your existing Oracle licences or have the right to use the software included in the service
- Per second billing for database services
- Modernised Oracle Database operating model
- Oracle multi-tenant to reduce resource consumption compared to traditional database architecture
- Shift from Capex and hardware refresh to OpEx and pay for consumption
- Offset at least 25% of your OCI spend against your Support & Maintenance of Oracle Licences using Oracle Support Rewards
- Click-to-patch database upgrades
- Autonomous database frees your teams of the operational burdens of patching, scaling, upgrades, diagnosing and repairing incidents and tuning

THE SITUATION

Modern applications are expected to be secure, performant and scalable, but traditional infrastructure hosting inevitably means overengineering platforms or accepting compromises on performance and scalability. Security patching can be onerous and perilously slow.

As well as migrating to public cloud to address some of these challenges, organizations are increasingly containerizing applications to gain lifecycle agility and workload efficiency. Adoption of Kubernetes has spawned a raft of Container Orchestration platforms, but some of these fork the Kubernetes code or provide managed services which remove degrees of control from the customer. Operating proprietary container orchestration platforms can quickly become expensive.

Capgemini 50/50 accelerates the migration of Oracle ERP to OCI, and for WebLogic and Java applications, the WLS Marketplace images plus the WLS Kubernetes Operator mean you can run WebLogic apps as VMs or Containers..

Migrated applications can leverage PaaS for extensions and innovation using Capgemini's *Agile Innovation Platform*.

APPS MIGRATION

OUR OFFER

- **Requirements Analysis** to identify the right migration treatment for your applications, drawing on Capgemini's economic Application **Portfolio Management (eAPM)** solution for portfolio assessment and decision support
- **Conceptual Design** of the target platform and migration approach, which can include architectural views for Data, Security, Applications and Technology
- **High Level** and **Detailed Design** of the platform, including Identity Integration, Monitoring and SOC integration/provision, HA & DR
- **Performance testing** definition, management and execution
- Detailed implementation planning and execution
- Support to build a business case that demonstrates achievable TCO improvement
- Application Containerisation and deployment to **Oracle Kubernetes Engine (OKE)** in OCI
- Support for the **accreditation** process in regulated environments
- Transition into support, or into a fully managed Capgemini service
- Blueprint architectures and accelerators
- Innovation and extension using Oracle PaaS and Capgemini's ***Agile Innovation Platform***

VALUE PROPOSITION

- From containers and small VMs right up to bare metal for BYOI (Bring Your Own Image) and BYOH (Bring Your Own Hypervisor), you get the right host for each service
- No more 't-shirt' sizing. Flexible compute shapes allow the workload to be matched to the exact amount of CPU and RAM required
- Run any x86 or Arm workload and reap the benefit of offsetting at least 25% of your OCI spend against your Support & Maintenance of your existing Oracle Licences using Oracle Support Rewards
- 70-80% savings on bandwidth intensive workloads compared to AWS[1]
- 95% savings on I/O intensive workloads compared to AWS[1]
- 40-60% saving on general purpose workloads compared to AWS[1]
- *Oracle Database At Azure and Oracle Interconnect for Google Cloud*
- 20-30% improved performance for OLTP apps including Oracle ERP
- 2-10X faster reporting speed for Oracle ERP
- With Capgemini 50-50, migrate Oracle ERP in as little as 50 days, and reduce operational effort by 50%

[1] https://www.oracle.com/cloud/economics

THE SITUATION

Enterprises have long used virtualization platforms for hardware abstraction to better utilize infrastructure and gain deployment, operation, resilience, certification and capacity advantages. With approximately 80% of the on-premise VM software market, VMware has a mature and well supported product suite with good availability of skilled resources in the market.

Enterprises are under pressure to modernize their existing workloads and extend application portfolios, but also to unlock the benefits of public cloud: elastic capacity, accelerated operational and business velocity, and infrastructure cost optimization. For many, VMware estates represent a significant part of the workload.

Cloud migration of VMware ecosystems typically demands alterations in systems and application architecture, unplanned updates to operating systems and databases, and changes to long standing operational practices, all of which adds to risk and cost. There is a paradigm shift when moving to a VMware Managed Service, with a relinquishing of control on the underlying stack and its operation, which often forces technology and software change upwards through the stack to the applications.

What customers really need is the exact same on-premise VMware experience, but in the cloud; Uniquely, that is exactly what Oracle Cloud VMware Service offers. This difference also enables hybrid VMware environments to seamlessly span datacenter and cloud.

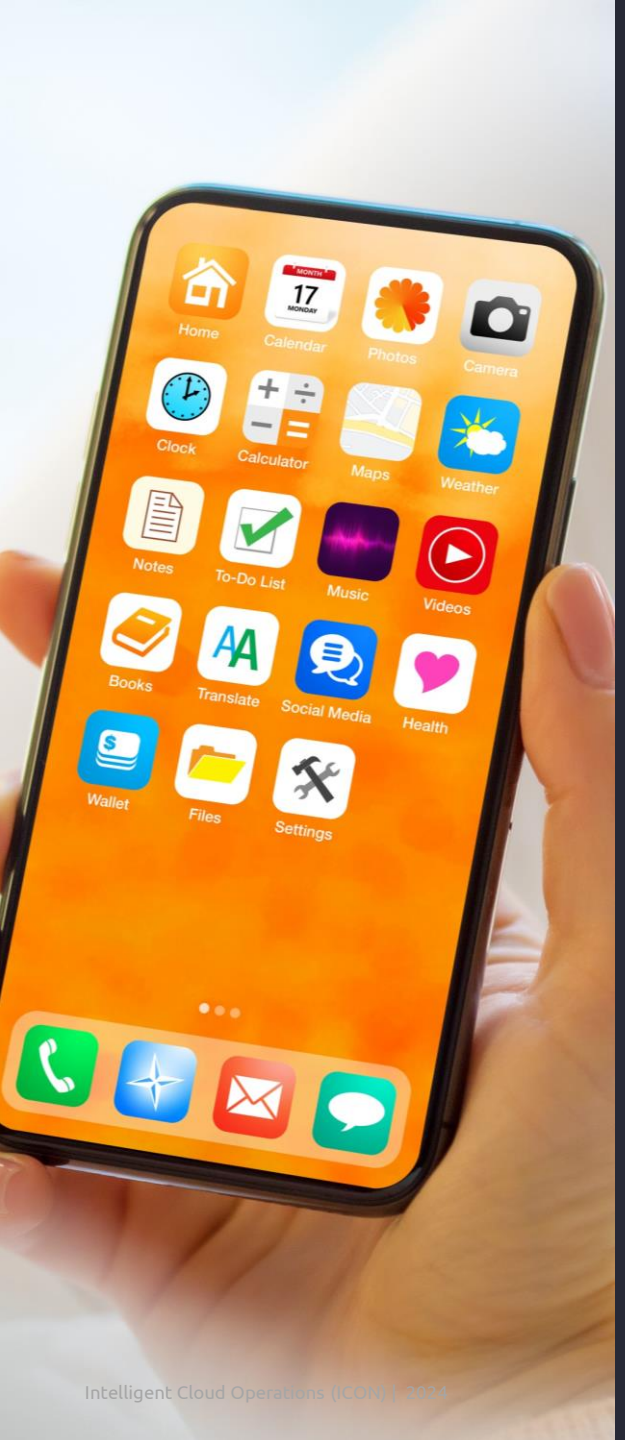
VMWARE TO CLOUD

OUR OFFER

- **Requirements Analysis** to identify the right migration treatment for your VMware hosted applications, to identify opportunities to leverage Oracle PaaS alongside VMware where appropriate, for services such as Oracle DBaaS, Exadata Cloud Service or Autonomous Database
- **Conceptual Design** of the target platform and migration approach, incorporating consideration of hybrid deployment where applicable, and architectural views for Data, Security, Applications and Technology
- **High Level** and **Detailed Design** of the VMware platform and any optional OCI services, including Identity Integration, Monitoring and SOC integration/provision, HA & DR
- Configuration of FastConnect and VMware services to support vMotion of workloads to the cloud, or for expansion into a hybrid model, or for DR provision
- **Performance testing** definition, management and execution
- Detailed implementation planning and execution
- Support to build a Business Case that demonstrates achievable TCO improvement
- Support for the **accreditation** process in regulated environments
- Transition into support, or into a fully managed Capgemini service
- Blueprint architectures and accelerators
- Innovation and extension using Oracle PaaS and Capgemini's **Agile Innovation Platform**

VALUE PROPOSITION

- VMware NSX-T, vSphere, VSAN, vCenter and HCX in the public cloud
- The only public cloud to provide layer-2 networking, vastly simplifying the migration process
- Workloads run on dedicated Bare Metal Clusters
- The only hyperscaler VMware service where the customer retains full administrative control, including root access
- Full control over when, and whether, to upgrade VMware
- Simple Cloud Networking - Oracle Cloud VMware Service (OCVS) can be colocated in the same Virtual Cloud Network (VCN) as the customer's other cloud services, instead of the near-location model offered by other hyperscalers
- Continue to leverage your existing tools, skills and operational processes
- Offset at least 25% of your OCI spend against your Support & Maintenance of your existing Oracle Licences using Oracle Support Rewards
- Oracle Tier 1 and Tier 2 support for Oracle-provided versions of VMware VCF components on OCI
- Tier 3 support routed to VMware with warm handoff from Oracle



THE SITUATION

Many organisations have invested heavily in systems that provide core functionality in a stable and well-understood manner, but which lack the flexibility afforded by modern applications. The architecture of such systems can make migration from data centres expensive, especially if proprietary technologies are in use. These applications frequently lack mobile channels, have aging UIs and a provide a poor user experience compared to modern, intuitive, responsive applications.

Whether your applications have moved to Cloud using ICON, or remain on premise, our sister offer of *Agile Innovation Platform* unlocks a pathway to application modernisation through intelligent architecture, cloud services and agile development.

Capgemini can deliver application extensions based on modern UIs and integration with legacy or SaaS, allowing you to benefit from cloud whilst reducing development and operational costs.

Agile Innovation Platform includes an approach for strangulation patterns to modernise legacy monolithic applications and move to discrete sets of autonomous microservices. Application modernisation can be used to move customisations out of ERP systems and simplify the core in readiness for SaaS migration, or to build multichannel UI extensions to expose key business functions embedded in legacy applications, creating value and enhancing supply chains.

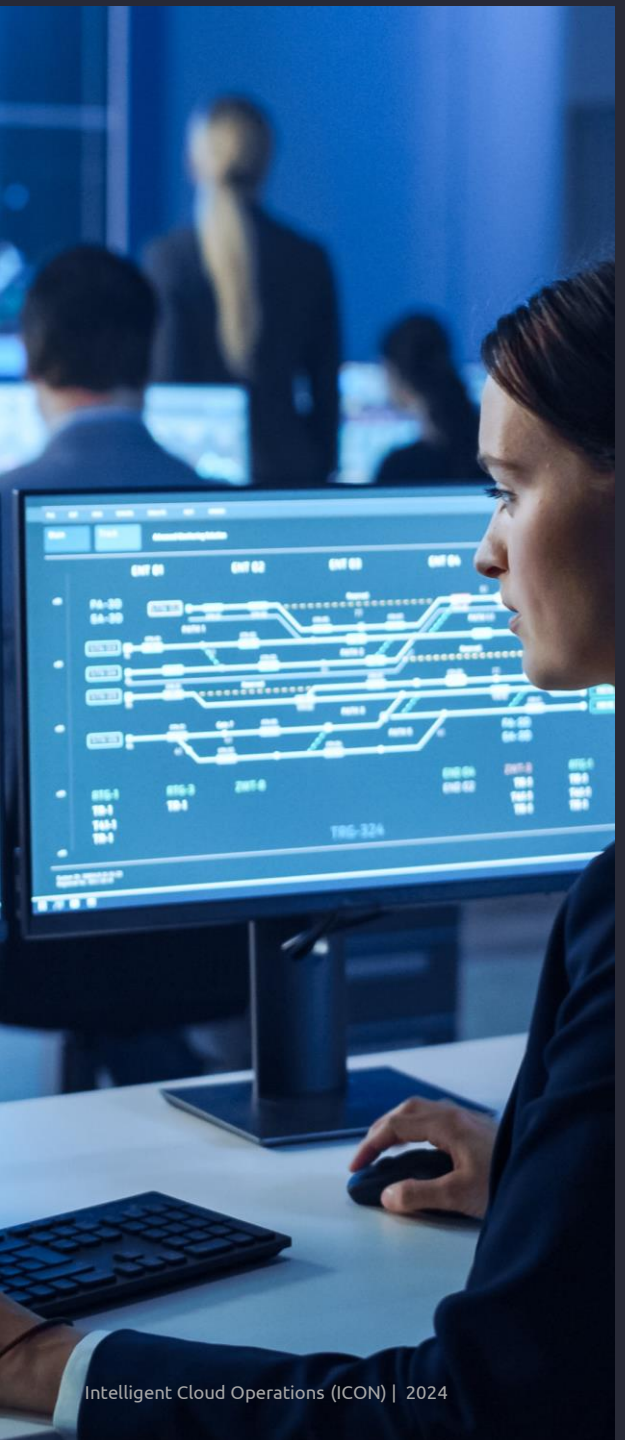
APPLICATION MODERNIZATION

OUR OFFER

- **Requirements analysis** and **strategy definition** for your application modernization challenge
- **Development of new, customer focused UIs and services** using Oracle PaaS and Open Source
- **Microservices development** to augment existing systems or decompose functionality to improve the velocity of change
- Creation of **new mobile or web channels**
- **Improved value and supply chains** by integrating legacy apps with new SaaS products
- A **rapidly deployable**, open-standards based innovation platform with integrated tooling
- For existing WebLogic estates, **Oracle K8s Operator for Weblogic** can be used to deploy to Kubernetes, thus modernising the underlying infrastructure and moving workloads to any cloud
- **Replace/extend Oracle Forms & Reports** with modern web apps
- **API enablement** for existing applications to expose functionality and data to trusted third parties thus improving supply chains.
- **Automation of DevOps** processes to improve organisational efficiencies, reduce lead time and departmental hand-offs
- **Digital Assistant** enablement.
- Project Governance
- Test Management, Execution & Automation
- Early Life Support
- Go-live and transition into managed service

VALUE PROPOSITION

- A fully managed platform allowing you to concentrate on maximising the value chain and delivering new and improved customer experiences
- Cost effective virtual teaming using Capgemini's Rightshore© delivery model
- Reduced capital expenditure and operational costs from the use of public cloud and per second billing.
- Increased velocity of change for existing applications by modernizing the development environment and introducing DevOps capabilities.
- Transition to a Product Centric operating model with high-frequency, low touch releases
- Improved UI experience focusing on the customer and employee.
- Creation of systems of differentiation and innovation, fully integrated with legacy applications
- Leverage intelligent PaaS services to reduce operational burden and allow technicians to focus on more strategic work
- Offset at least 25% of your OCI spend against your Support & Maintenance of your existing Oracle Licences using Oracle Support Rewards



THE SITUATION

In today's business environment, enterprises must rapidly respond to market needs and changing conditions. The High Frequency organisation releases small changes in short cycles to deliver ever evolving customer and employee experience across the value chain.

This capability is underpinned by loosely coupling services, or decomposing monolithic architectures. The resulting independently deployable microservices allow changes to be applied much more quickly, promoting innovation and reducing costs.

Agile Innovation Platform provides approaches and technology to rapidly enable modern software delivery, as well as a fully managed API platform to support the full lifecycle of API development.

APIs enable organisations to offer data, products and services seamlessly through multiple channels. *Agile Innovation Platform* provides full lifecycle support for API management, from API design and development, continuous integration testing, and promotion to different environments through to operational support and retirement.

AIP also delivers Oracle Functions, a fully managed, multi-tenant, highly scalable, on-demand, Functions-as-a-Service platform. It is built on enterprise-grade Oracle Cloud Infrastructure and powered by the Fn Project open-source engine.

CLOUD NATIVE DEVELOPMENT

OUR OFFER

- **Requirements analysis** and **strategy definition** for microservice development to support the adoption of microservices architecture and cloud native technology
- **Design and implementation** of microservices using industry best practises that can be managed and scaled independently
- **Fully managed Kubernetes** environment based on either OKE or vanilla Kubernetes, depending on your requirement
- Full support for **event style architectures** for inter service communication using Oracle Streams
- **Oracle Functions** for lightweight serverless functionality
- Fully **integrated observability** solution
- Full lifecycle **API Management**
- **API security, governance and reporting** and operational controls
- Web based **portal** for developers to subscribe to APIs
- API design using **Apiary**, support for API stubs for rapid development
- Development and deployment of API implementations using **CI/CD pipelines**
- Project Governance.
- Test Management, Execution & Automation.
- Early Life Support
- Go-live and transition into managed service

VALUE PROPOSITION

- Respond quickly to market trends, improve quality and reduce implementation costs by breaking down large, monolithic, expensive, brittle, and inflexible applications.
- Adopt modern DevOps and Product based development models.
- Develop and test new business models in response to emerging consumer demands using a rapidly deployable and open-source integration platform.
- Decreased time to market
- Expose and leverage hard to reach Enterprise data across the value chain
- Deliver public facing APIs for the monetization of data and services
- Enable new product offerings, innovation and engagement channels
- Improved Operational efficiency
- Exposure of key business functions and data to trusted third parties to enhance supply chains
- Reduce operational burden through self-service capabilities exposed by APIs
- Drive customer value using innovative webapps for your products and services that employ public facing APIs
- Offset at least 25% of your OCI spend against your Support & Maintenance of your existing Oracle Licences using Oracle Support Rewards

THE SITUATION

Enterprise integration solutions have had to evolve with the rise of cloud, SaaS and increased digitalisation. The additional complexity of hybrid cloud architectures has demanded even more from integration solutions, whilst the explosion of interconnectedness driven by IoT & 5G demands extreme performance and scalability of integration.

Delivering integration at speed in such a context demands a robust integration strategy and a well designed, scalable architecture. ICON's sister offer, *Agile Innovation Platform* provides a fully managed set of cloud capabilities to rapidly implement integration solutions. With iPaaS provided by Oracle Integration Cloud, AIP supports low code SaaS to SaaS and SaaS to on-premise integrations.

API-based access to data that resides in one or more systems of records can also drive complex integration requirements, and without a well designed architecture, performance and manageability can become extremely challenging. AIP enables the delivery of Digital Integration Hubs that provide fast access to copies of legacy data that can be independently scaled, enabling API access for existing systems of record that can't expose modern APIs or do not support access at scale.

AIP supports data, process and application integration patterns as well as event streaming, with full observability and reporting based on open standards, ensuring that any issues are rapidly surfaced and handled before impacting service.

INTEGRATION REVOLUTION

OUR OFFER

- Highly automated and zero touch **fully managed** Enterprise Integration platform
- **Requirements Analysis** to identify your integration needs
- Design and implementation of integrations leveraging the Capgemini RightShore© model to minimise development costs
- **Accelerators** for SaaS integration
- **Cloud and Hybrid** integrations
- Support for open standards and multiple programming languages
- **Low code/no code** integrations
- Pre-packaged adapters allowing rapid connectivity to a host of applications and social platforms
- Development and lifecycle management of integrations including support for DevOps
- Support for **Event Driven Architecture** patterns of integration
- Integrated monitoring solution for observability of integration flows
- **API Management Platform**
- **Data integration hub** design and build leveraging Oracle autonomous database, replication, caching and Oracle streaming to ensure rapid access to a synchronised data cache
- Project Governance
- Test Management, Execution & Automation
- Early Life Support
- Go-live and transition into managed service

VALUE PROPOSITION

- Support for Application, Data, B2B and Process Integration as well as API Management
- AIP allows developers to concentrate on adding value rather than maintaining and provisioning environments, significantly reducing the cost and complexity of integration
- Rapidly integrate new SaaS products with existing on-premise applications to create innovation in value chains
- Reduce development times dramatically using low code integration and accelerators
- Benefit from pre-built adapters allowing backend systems to integrate with social channels
- Fully managed platform allowing teams to focus on value not operations
- Provide fast access to data and information held in systems of records
- Independently scale access to data and prevent backend systems from being swamped
- Increase quality, consistency and velocity of deployments using pre-built DevOps pipelines
- Offset at least 25% of your OCI spend against your Support & Maintenance of your existing Oracle Licences using Oracle

GOT QUESTIONS? CONTACT:

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About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

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