

Managing VMware Costs with OCI

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Mike Jones



Global Product Director, Product Portfolio Management

- Over 30 years working with infrastructure through roles in infrastructure operations, architecture, and consulting, with a focus on building and managing Infrastructure-as-a-Service product offerings for the last 7 years
- Responsible for Syntax Enterprise Cloud offerings, including providing Managed Oracle Cloud VMware Solution services



Syntax History with Oracle



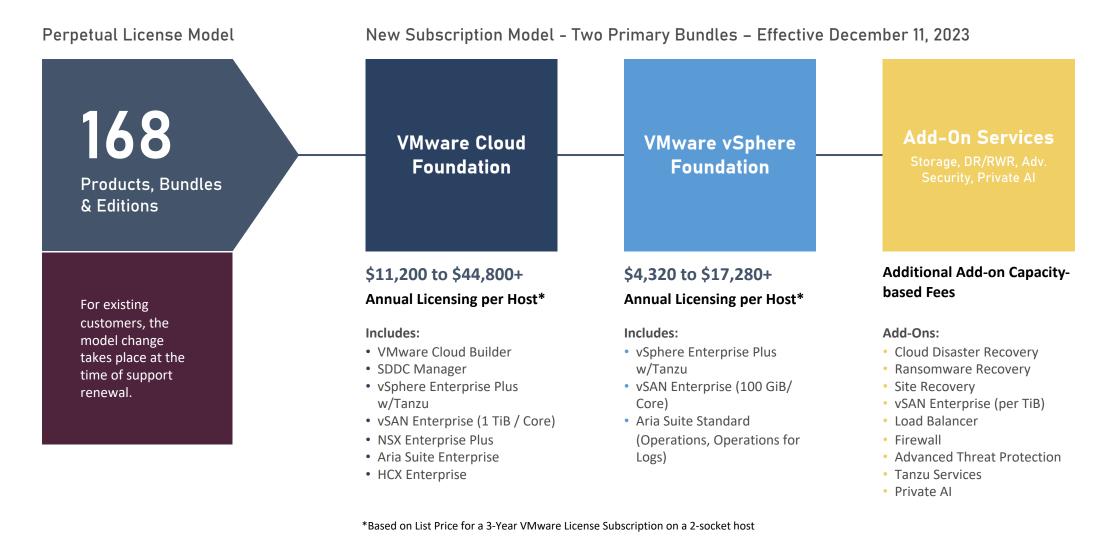
1 of 4 Strategic Managed Services Providers in North America

DRACLE JD EDWARDS	E-BUSINESS SUITE	DRACLE JD EDWARDS	CORE SERVICES		SYNTAX	CRACLE Partner CRACLE Service Partner Di Geards Appleations to Oracle Oracle Service Partner Di Geards Appleations to Note Anenta Service Partner DECACLE Service Partner Decacle Failsments Suite Applications to Oracle Cloud in North America	Creation in Graduat EXP Cloud Universities in Graduate SCM Cloud Universities in Graduate SCM Cloud Universities in Graduate SCM Cloud Universities in Graduate Cloud Platform - Graduate Cloud Platform - In North America	Platform	STELLAR CYBER*
1997		2007	2017	2018	2019	2021	2023		2024
Syntax Signs JD Edwards Strategic Partner Agreement	Core Services begins hosting EBS (Core Services)	Syntax Named #1 JDE Cloud Platinum Partner in North America	Syntax Acquires Market-Leading EBS Cloud Provider Core Services	Syntax Announces Support for OCI Generation 2	Syntax Acquires JDE Cloud Leader Emerald Cube Solutions	Named 1 st Strategic MSP in North America by Oracle with EBS and JDE expertise	Achieved Integration Cloud, Cloud ERP, and Cloud SCM Competencies	Syntax Launches GenAI on OCI, OCI IAM JIT, and Syntax CloudSpan Solutions	Launched OCI Stellar Cyber MSSP Offering



VMware Package and Pricing Changes





ASCEND

VMware Package Requirements



VMware Cloud Foundation

Minimum Requirements:

- VMware Validated Design
- vSphere 7 or higher
- 4+ Hosts for Management Domain
- 3+ Hosts for Workload Domains
- Minimum 16 cores per CPU licensed
- 1 TiB vSAN per core

VMware vSphere Foundation

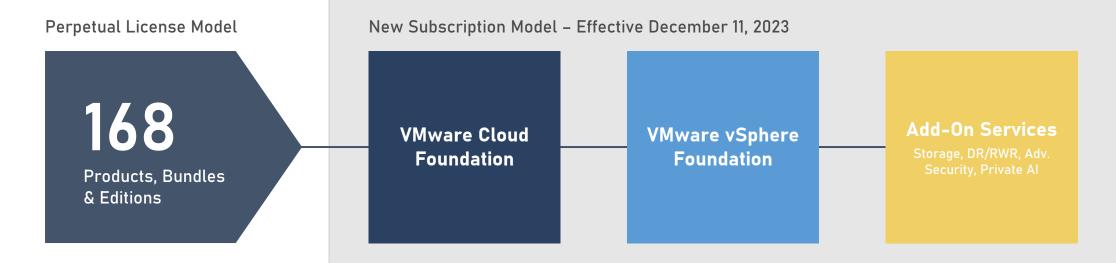
Minimum Requirements:

- vSphere 7 or higher
- 3+ Hosts for Workload Domains
- Minimum 16 cores per CPU licensed
- 100 GiB vSAN per core



New Bundle Requirements





Consolidation of Product Options

Bundles Only (Pay even if you don't use all features)

Subscription Licensing

Redeployment Often Required

Consolidation and Upgrade of Hosts for Compliance and Optimization

+100%-300% License Price Increase Common



Effect of new license model



Old Model - Per CPU Socket

1-32 Cores	33-64 Cores	65-96 Cores	97-128 Cores		
1 License	2 Licenses	3 Licenses	4 Licenses		
Low Core Co		– Cores/Socket Highe	er Core Count Hosts		
Licensed (Cores per CPU	Licens	ed Cores per CPU		
Physical Cores	Physical Cores Non-existent Cores		Physical Cores		
8-Cores 8-Cores		32-Cores			
0-C0165					





At Syntax, we have analyzed environments that due to legacy hardware would cost that company upwards of more than **50% additional subscription fees for non-existent cores** to meet the 16-core minimums without upgrading their infrastructure.

With no capital expense changes, 1/3rd of their VMware license fees would be for compute that does not exist.







Audit your environment

- When does your support renew?
- Is your infrastructure current?
- Do you have CPU's with less than 16-cores?
- Do you have clusters with less than 3 hosts?
- Are your workloads relatively static?

Review your strategy

- How strategic is your infrastructure architecture?
- How established and capable is your infrastructure team?
- How difficult is it to acquire and retain talent?



Review the Options



Accept Subscription Model and Upgrade in Place

- Embrace the Subscription Model: Transition to a subscription model to stay current with upgrades, but be aware of potential price increases.
- Familiar Technology: Continue using technology that your team is already comfortable with.
- **Capital Expenses**: Be prepared for potential capital expenditures to optimize licensing.
- Migration Requirements: Transition to new Vmware architecture models.
- **Staff Management**: Your team retains control over infrastructure and facilities management.
- Unused Licensing: May require licensing of services you will not use, leading to potential inefficiencies.

Migrate to an Alternative Hypervisor

- Avoid VMware Increases: Move away from VMware to avoid their pricing increases, though other vendors may also increase prices.
- **Migration Efforts**: Be ready for significant migration efforts.
- Training and Processes: Expect considerable retraining, process changes, and updates to automation.
- Market Leadership: Keep in mind that VMware remains the market leader in private cloud virtualization.

Migrate to a Hosted VMware Solution

- Familiar Technology: Continue using the technology your team knows well.
- Subscription Model: Transition your infrastructure to a subscription-based model.
- Staff Optimization: Free up your staff for strategic projects and reduce or eliminate data center costs.
- **Migration Options**: Leverage replication and live migration options for a smooth transition.

Modernize to Cloud Native

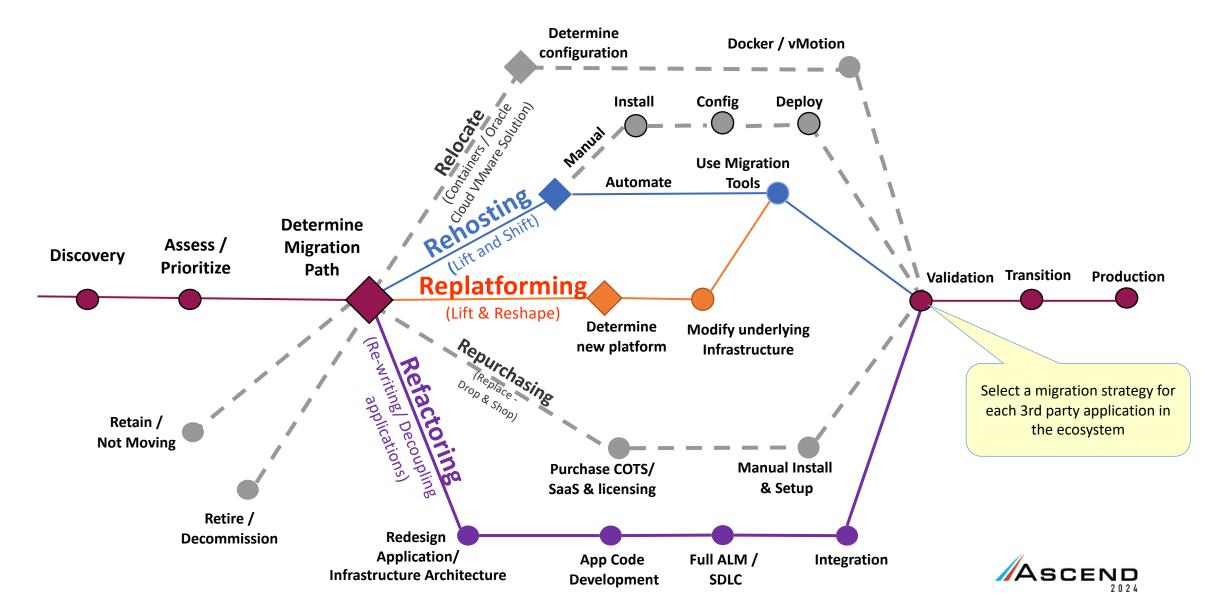
- Redesign Requirements: Be prepared for potentially significant redesigns.
- **Portability**: Maximize portability of your applications and infrastructure.
- Latest Technologies: Leverage the latest technologies for improved performance and capabilities.
- Legacy Application Support: May not support legacy applications well, necessitating additional considerations.

Focusing on these options today



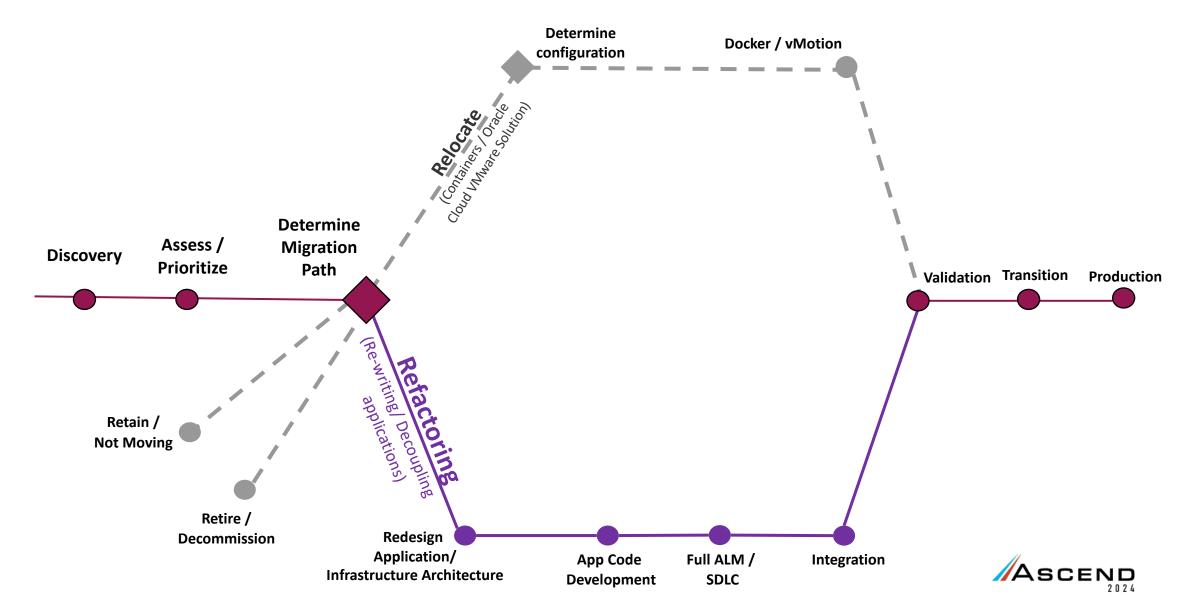
How are you moving to the Public Cloud?





How are you moving to the Public Cloud?





Oracle Cloud VMware Solution



Feature	Oracle Cloud VMware Solution		VMware Cloud on AWS*	V	Azure Mware Solution		Google Cloud VMware Engine
Same as on-premises	Customer or Partner Managed ESXi root access Customer owns update policy	٠	Managed by Broadcom No ESXi admin access Broadcom own update policy		Managed by Microsoft No ESXi admin access Skip update requires escalation	•	Customer or Partner Managed ESXi root access Customer owns update policy
Scalability	64 hosts per cluster True Multi-AD Support	\bullet	16 hosts per cluster	\bullet	16 hosts per cluster		32 hosts per cluster
Pricing	Lowest per-CPU core Lowest per-TB storage Lowest per-GB mem	٠	Low per-CPU core Highest per-GB mem Highest per-TB storage	٠	High per-CPU core High per-GB mem High per-TB storage	٠	High per-CPU core High per-GB mem High per-TB storage
Security & Privacy	Customer owns security policy User activities not tracked		Broadcom retains security credentials User activities recorded		MSFT retains security credentials User activities not tracked		GCP retains security credentials User activities not tracked
Global Availability	48 regions total 25 outside of N.A. 7 Gov regions Dedicated Regions		18 regions total 12 outside of N.A. 1 Gov regions	٠	16 regions total 6 outside of N.A. 2 Gov regions	•	16 regions total 11 outside of N.A. Zero Gov regions
Bring Your Own Licenses	Not an MS Listed Provider Leverage Oracle licenses in the cloud		An MS Listed Provider with restrictions An Oracle Authorized Cloud		An MS Listed Provider with restrictions An Oracle Authorized Cloud	٠	An MS Listed Provider with restrictions Not an Oracle Authorized Cloud
Shape Options	Intel/AMD Shapes Intel GPU Shapes 6 Shapes (14 variations)		Intel Dense Shapes 3 Shapes		Intel Dense Shapes 3 Shapes	\bullet	Intel Dense Shape 1 Shape
Layer 2 Networking	Layer 2 with off-box network virtualization	0	NSX required/Layer 3 only	0	NSX required/Layer 3 only	0	NSX required/Layer 3 only

*VMware Cloud on AWS is no longer sold by AWS, only Broadcom and Broadcom authorized partners. It is also now only available with a minimum term of 1-year.



Dense Shapes



Processor Type	Shape	OCPU	Available Core Configurations	Memory (GB)	NVMe Storage Per Host
Intel	BM.DenselO2.52	52	52	768	51.2 TB
AMD	BM.Standard.E4.128	128	32, 64, 128	2048	54.4 TB

Starting at \$11k per month for 3-node cluster / 96 OCPU, 6144 GB RAM, 163 TB Storage

- Dense shapes provide local NVMe storage and don't require block volume storage.
- vSAN converged storage technology replicates data across all the
 ESXi hosts in the SDDC.
- All pricing commitment types and HCX license types are available for Dense shapes.
- Dense shapes can be deployed across several Availability domains.
- No memory limit, network bandwidth limit or VNIC count limit.
- You can use a dense shape to create a single-node SDDC.





Standard Shapes



Processor Type	Shape	OCPU	Available Core Configurations	Memory (GB)	Network Bandwidth Limit (Gbps)	Max VNIC Limit
Intel	BM.Standard2.52	52	52	768	50	200
Intel	BM.Standard3.64	64	16, 32, 48, 64	1024	100	256
AMD	BM.Standard.E4.128	128	32, 64, 96, 128	2048	100	256

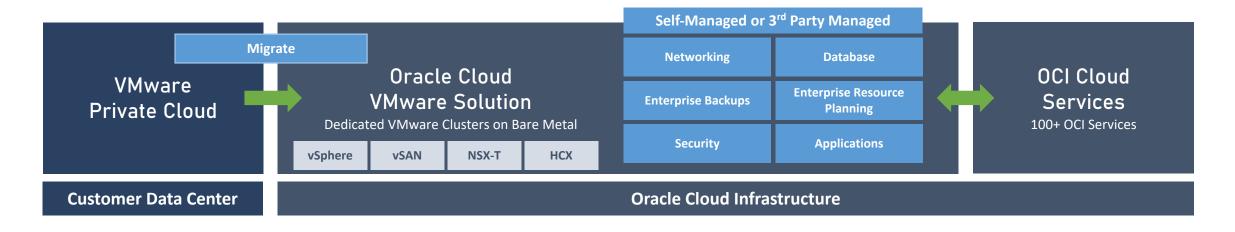
Starting at \$7k per month for 3-node cluster / 32 OCPU, 2304 GB RAM (Storage extra – \$44/TB or less for balanced)

- Standard shapes provide a lower-cost option than Dense shapes. •
- Standard shapes require block volume storage.
- Standard shapes are only available for a single Availability domain.
- Monthly pricing commitment isn't available for standard shapes (Hourly, 1-Year and 3-Year are)
- Limits for memory, bandwidth, and number of VNICs.
- Single-node SDDCs using standard shapes aren't supported.



Migrate to OCVS and Simplify





- Reduce impact of legacy hardware inefficiencies
- Avoid costly capital investments
- Lower staff impact
- Avoid rushed refactoring
- Utilize familiar toolsets

- Use opportunity to move from capital investments to subscription for infrastructure for increased flexibility
- Gain access to 100's of Oracle services with low latency including: ERP, DB, Container and Al services

- Price protection until 2028+ for Oracle VMware Solution
- Start path to data center exit (focus on business value, not keep the lights on activities)



Modernize to OCI Cloud Native





- Modernize at your pace with cloud native
- Leverage best of both in hybrid model
- Minimize "VMware Tax"
- Scale at will
- Leverage advanced technologies including GPUs for AI/ML
- Deploy services globally in any of 48 regions available
- Pay only for what you need
- Optimize Oracle Licensing



Live Replication

At Syntax, our preferred migration tool is Zerto due to the robustness of the solution, simplicity of setup and the support for Oracle and many other platforms.

Using a product like Zerto allows you to build your OCVS environment and begin replication while your production continues to operate within your existing data center. Once ready to complete migration, cut over of individual groups of services can be done in as little as minutes.

With the use of a cloud gateway, Zerto can be used with your existing Internet connectivity, depending on the bandwidth requirements.

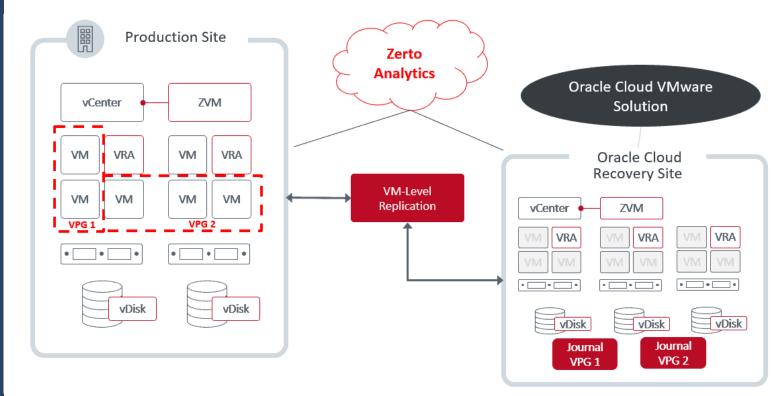


Diagram from "Using Zerto with Oracle Cloud VMware Solution"



Live Migration

VMware HCX is another option for migration but does have higher requirements such as vSphere 7.0 or later and FastConnect connectivity.

There is a detailed blog article describing how to set it up here:

https://blogs.oracle.com/cloudinfrastructure/post/migrate-vmwareworkloads-from-on-premises-datacenters-to-oracle-cloud-vmware-solutionusing-vmware-hcx

VMware HCX is included with Oracle Cloud VMware Solution which may help keep migration costs lower, particularly if FastConnect is something you already have in place.

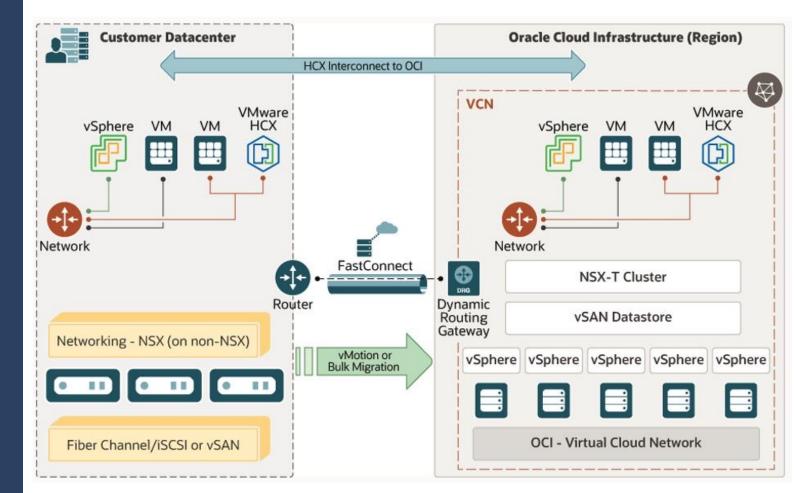


Diagram from Oracle Cloud Infrastructure Blog



TCO Impact – Considerations



On-Premises / Colocation

- Capital Expenses
 - Hardware (servers, storage, networking, security appliances)
 - Data Center/Colocation (Lease, UPS, Racks, Cooling)
- Operational Expenses
 - Utilities (Power, Cooling)
 - Maintenance
 - IT/Facility Staff Salaries
 - Training
 - Software licenses
 - Network bandwidth
 - Physical security
 - Facility compliance

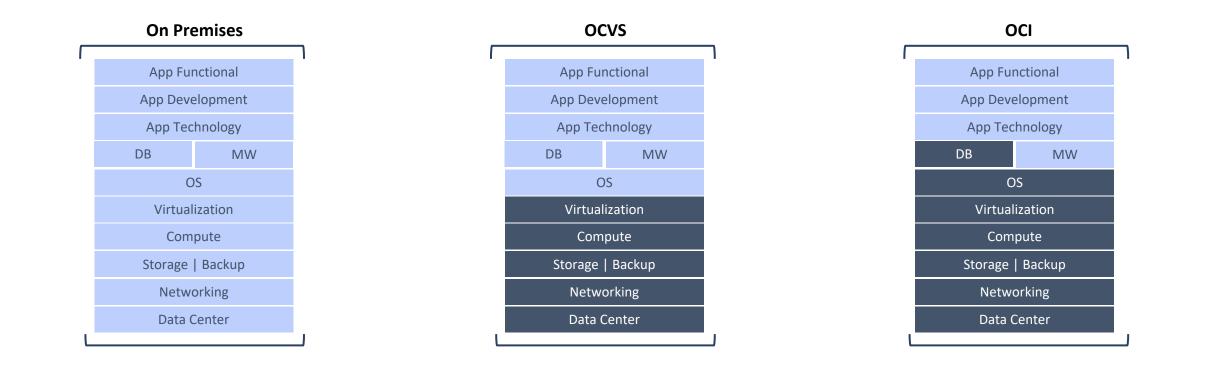
In the Cloud

- Subscription Fees
 - Compute
 - Storage
 - Data Transfer
- Migration Costs
 - Planning
 - Connectivity
 - Tooling
 - Execution/Testing



Outsourcing up the Stack





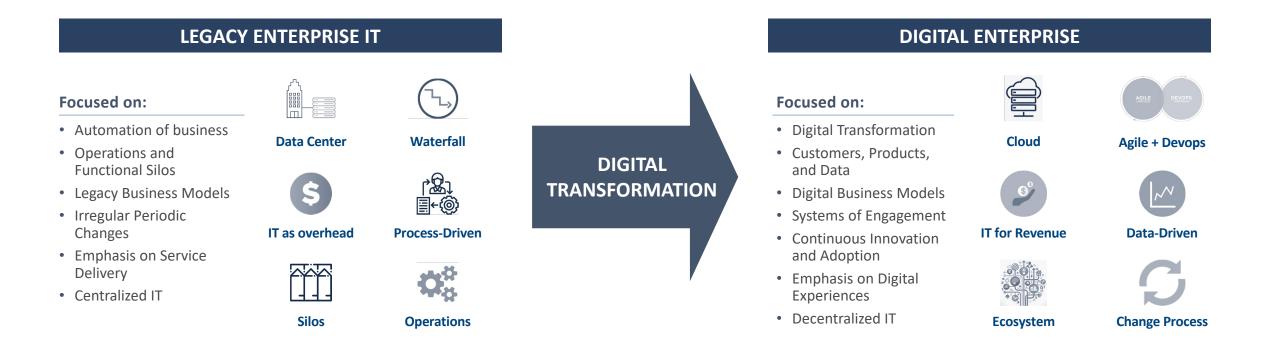
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Cloud Transformation

Cloud is the foundation for the agile business world



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