Exploration of DC & Cloud Engagement

HON

DA

September 2019



S1

CONTEXT SETTING





Current DC and DR hosting contract is up for renewal/ re-evaluation in Feb 2020



Some critical infrastructures are up for technology refresh

TRENDS AND POSSIBILITIES









Data center hosting decisions are being clubbed with cloud adoption strategies Customers are increasingly evaluating multi-cloud/hybrid cloud

Technology refresh decisions are also triggering evaluation of choice of clouds

Basics are relevant as Minimum criteria!

- Enterprise Experience for specific workloads
- Carrier Neutral
- Tier 3 or Equivalent as per Uptime Institute or TIA-942
- Multiple sites and their seismic Zone rating (Among other environmental factors)
- Back up and DR Capabilities
- SLA of 99.92% or greater (minimum T3 capability)
- Overall Customer Feedback



New Differentiating Criteria!

- Cloud Vision and Strategy
- Hyperscale Partnerships: AWS, MS, GCP
- Managed Services
 - In a single and multi-cloud environment
- Cloud Experience and Depth
 - Cloud Mgmt, Cloud Economics (In-house IP or partnerships)
- Provides Network Connectivity to Major Cloud providers
 - AWS/Direct Connect, MS Azure/Express Route
- Interconnect services to other sites or partner ecosystems.



KEY ATTRIBUTES OF A CLOUD TRANSFORMATION PROVIDER



Migration best practices for minimal services disruption



Provide a well-architected design for multi-cloud solution



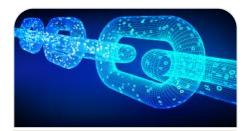
Comprehensive security frameworkpreventive, corrective & detective



Multi cloud management platform on a single pane of glass



Resiliency and data protection planning and services



Cloud enhanced services AI, IOT, Blockchain, Analytics etc.

OUR UNDERSTANDING - HONDA GROUP INDIA



- Honda group companies in India (Honda Cars, HMSI, Honda Motors, Honda Power) have synergized their IT infrastructure and decision making
 - One DC (combined data center in Noida)
 - DR (combined DR in Bangalore)
 - Flat network (combined Network management provider)
 - Common infrastructure services provider
- The ERP, CRM and Analytics application are as below

	Honda Cars	HMSI
ERP	SAP	SAP
CRM	Oracle Siebel	Oracle Siebel
Analytics (BI)	QlikView / OBIEE	OBIEE

- The Honda group companies have a number of applications besides the above
 - Honda cars 60 (approx.)
 - HMSI 20 (approx.)

CURRENT STATE PRODUCTION LANDSCAPE



		Workload/Apps	Infrastructure	OS/ DB	DC	DR	L1/L2/L3
SAP							
HMSI	ERP	ECC 6 EHP 5	P Series/AIX	AIX 7.1 / DB2	Noida	Bangalore	TTL/TTL/IBM/SAP
HMSI	BI	Netviewer 7.3	P Series/AIX	AIX 7.1 / DB2	Noida	Bangalore	TTL/TTL/IBM/SAP
HMSI	PI	Netviewer 7.4	P Series/AIX	AIX 7.1 / DB2	Noida	Bangalore	TTL/TTL/IBM/SAP
HMSI	GRC	GRC 10	P Series/AIX	AIX 7.1 / DB2	Noida	Bangalore	TTL/TTL/IBM/SAP
HMSI	Solman	Solution manager 7.1	P Series/AIX	AIX 7.1 / DB2	Noida	Bangalore	TTL/TTL/IBM/SAP
Oracle Sieb	el and OBI	EE					
HMSI, Cars	CRM	Siebel Production	P Series/AIX	AIX 7.2/Oracle DB 12c	Noida	Bangalore	TTL/TTL/Oracle ACS
HMSI, Cars	CRM	Siebel Non-Production	P Series/AIX	AIX 7.2/Oracle DB 12c	Noida	Bangalore	TTL/TTL/Oracle ACS
		OBIEE/ ODI (ETL)					
HMSI, Cars	Analytics	Production	P Series/AIX	AIX 7.2/Oracle DB 12c	Noida	Bangalore	TTL/TTL/Oracle ACS
		OBIEE/ ODI (ETL) Non-					
HMSI, Cars	Analytics	Production	P Series/AIX	AIX 7.2/Oracle DB 12c	Noida	Bangalore	TTL/TTL/Oracle ACS
Custom bui	Custom built application and Analytics solutions			AIX / Windows	Noida		

SaaS Applications

SIFY AS DC AND CLOUD PARTNER FOR HONDA GROUP





Sify as a transformation partner



Workload migration service

- Move from on-premise to Public and/or Private cloud
- On-premise DCs to Sify's world class Datacenters



Cloud assessment service

 Recommend the to-be architecture and approach for a least disruptive and reliable migration

Multi cloud managed service

Multi-cloud infrastructure and applications

Managed security services

- **(**
- Implement consistent set of controls to prevent security threats
- Continuously monitor to detect security breaches
- Tactical threat containment and automated response



Sify's cloud expertise extends over

- All aspects of building cloud infrastructure
- Managing public and hybrid cloud services
- CloudInfinit CMP to provide multi cloud operational best practices
- AWS/Azure/Oracle/Google cloud implementation
- Delivering SaaS ForumNXT, I-test, Safescrypt and E-learning



Leverage our network services to strengthen your cloud and digital pursuit

- Cloud connect services
- SD-WAN
- EdgeConnect services for IT + OT + People
- Network transformation services
- Cloud enabled unified communication services
- Network security services like clean connect & DDOS protect



Investments in cloud infrastructure:

- CloudInfinit (Enterprise multi tenant and private)
- SAP Grid/ Exadata/ Azurestack Infrastructure
- CloudInfint CMP
 - Orchestration platform/ Service Now/ CA UIM
- Datacenter fabric
- High performance storage
- High performance compute
- Security platform
- WAN Infrastructure such as metro rings
- SD-WAN services
- EdgeConnect services

KEY ASSETS



SIFY ASSETS	RELEVANCE TO DIGITAL ENTERPRISE
 9 Pan-India DCs with 45MW capacity 8 more DCs in progress, doubling capacity 	Hosting for hyperscale operatorsCenterpiece of the hybrid cloud
 Largest MPLS network (by connections) 3000 PoPs across 1600 towns in India 	Internet growth from non-metrosPlatform to move content to "edge"
 "Cloud Connect" data superhighway 48 on-net data centers 	Cost-effective terabit network scaleInterconnect public and private clouds
 Remote Operations Centers NOC, SOC, managed services 	Global and domestic IT outsourcingSupports outcome-based services model
 Applications and solutions iTest, Forum, eLearning, SAP, Oracle, Microsoft 	IT-enablement for distributed businessesSupports digital transformation initiatives
 Cloudinfinit Enterprise cloud grid fabric 	Public / Private / Hybrid CloudsCost effective and "Pay as you use" model



cloud@core ™

ALIGNED TO OUR CUSTOMERS' CLOUD TRANSFORMATION PURSUIT

CLOUD ENABLING

- Cloud DC
- Hyper reach/Hyper scale transport Oracle RistConnect | ExpressRoute | DirectConnect | Rartner Interconnect
- Software Defined Network services
- Cloud build Private | Hyperconverged | Enterprise
- · Security services for cloud
- Migration and Implementation services

CLOUD INSPIRED

- Sify CloudInfinit
 - Enterprise Multi-Tenant
 - Dedicated
 - Hosted_SAP/S4 HANA
 - Azure Stack as a Service
- Edge Connect Services
- SD-WAN
- Collaboration services on Cloud

CLOUD PURE

- AWS
- Azure
- ICI
- GCP
- Multi Cloud Management platform & services

CLOUD ENHANCED

- Modern Applications
- Kubernetes-as-a-Service
- AI/ML
- Forum DIGITAL
- HCM Digital (iTest)
- Learning Management
- Internet-of-Things (IOT)
- Industry Solution-as-a-Service

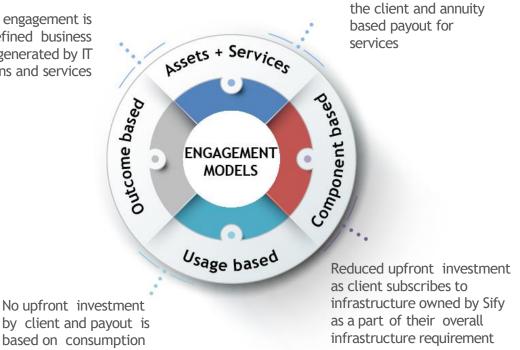
OUR ENGAGEMENT MODELS



Systems are owned by

Client engagement is based on defined business outcome generated by IT solutions and services

Hardware People Licenses

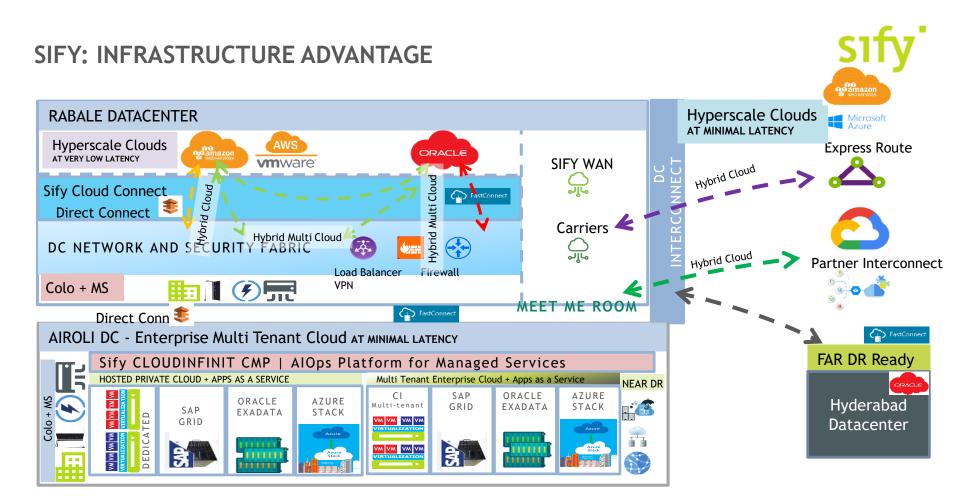


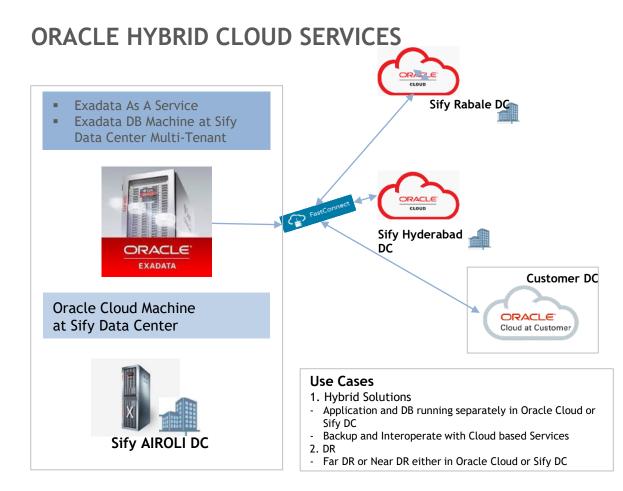
CLOUD ENABLED DIGITAL TRANSFORMATION





DIGITAL TRANSFORMATION FRAMEWORK S1fy						
SIFY SKILLS & EXPERIENCE	 ASSESS End-2-end DC & Cloud migration assessment Compute, Storage, OS , Virtualization, DB, Backup, DR, Network, Security, IT Operations Experience on tools like Cloudamize, Device 42, TSO Logic, RISC Cloud Scape etc. 	 MIGRATE On-prem to private, hybrid, public cloud AWS, Azure, Oracle, Sify CloudInfinit-MC Network capabilities (SD-WAN) Cloud SI & Program Management experience Experience on tools like Cloud Endure, Carbonite, ASR etc. 	SECURE • 15+ years old Security Practice • 70+ trained and certified resources on 30+ OEM solutions • Built 25+ captive SOCs • Cert-In empaneled	 MANAGE End-2-end managed services Certified resources :550+ in DC and Cloud MS, 1800+ NMS and 250+ AMS 1200+ man years of tools and process experience Supporting 1 mn+ tickets Supporting 100,000+ business application users 	 INNOVATE 15+ years of experience in applications practice Skills in LAMP stack, SAP, Microsoft and Oracle apps Skills in mobility, analytics, app modernization and AI/ML 250+ resources AMS 	
SIFY ASSETS	 Assessment Framework Templates 	 Own Network Assets Own Data Centers Direct Connect, Express Route, Fast Connect 	 Shared SOC serving 300+ customers Security controls as a service 	 RIM centers @ Chennai & Hyd NOC with own IPs (Beacon, Akash, iONI etc) DRaaS Investment in monitoring & management tools : CA Investment in ITSM Tools : Service Now BCP @ Hyderabad and Noida 	 Own digital IP like Forum, iTest Multi cloud management framework Own IP on Multi Cloud Management Platform Continual pursuit to automate predictable operations and evolve into AlOps for managing defects 	





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Migration and Implementation Services

- Oracle Apps (EBS) Upgrade
- Technology Platform Upgrade (DB/SOA)
- Infrastructure Migration to Cloud
- SaaS Implementation (HCM/SCM/EPM)
- On-Premise Implementations

Managed Services

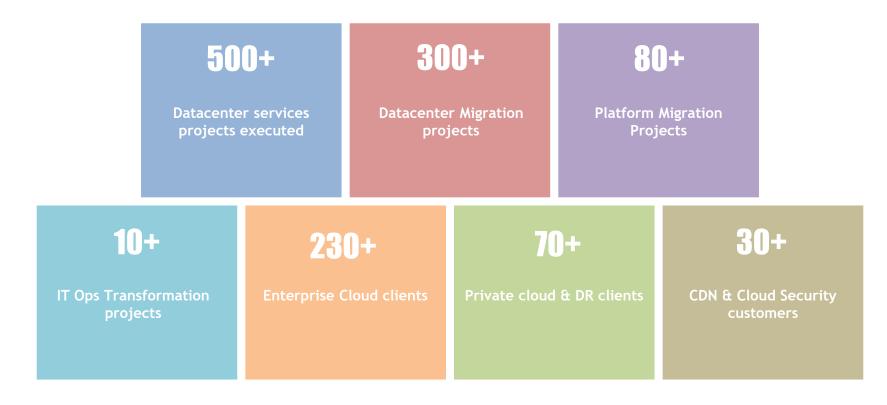
- Oracle EBS Managed Services
 - Functional Support
 - Technical Support
 - Apps and DBA Support
- Infrastructure Managed Services
 - Exadata DB Machine, Oracle Cloud Machine, Engineered Systems
 - Backup and DR

Other Services

- Licenses
 - Oracle Apps / Technology
 - On Premise / Cloud
- Incubation Services
 - SaaS Cloud Implementation

SIFY: EXPERIENCE ADVANTAGE





SIFY: ENGAGEMENT ADVANTAGE





SIFY: PARTNERSHIP ADVANTAGE





Advanced Consulting Partner



Cloud Standard Gold Partner



SAP Gold Partner

- Hosting Services
- Cloud Services
- HANA Services
- AMS



Infrastructure Partner



Cloud Services Gold Partner Hewlett Packard Enterprise

Infrastructure Partner

INDUSTRY RECOGNITIONS



Sify moves up to the challenger position in the Gartner MQ for Managed Hybrid Cloud Hosting - Asia Pacific (2017)



The Economic Times Iconic Cloud player 2018





Network Transformation Services 2018





Microsoft Hosting Partner of the Year 2016



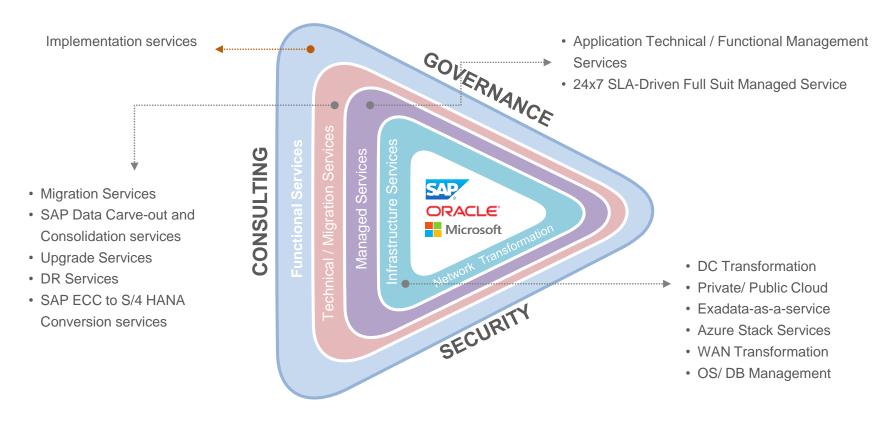
Partner of the year 2017



Data Center Transformation Services 2018

SIFY: APPLICATION SERVICES





SIFY: APPLICATION SUPPORT EXPERIENCE



Driving digital journey for Enterprises



DIGITAL SERVICES

- Digital Supply chain transformation (ForumNXT)
- Used for Secondary Sales Management by Manufacturing/FMCG customers
- Solution has DMS modules and Field Sales mobility modules
- SaaS offering ported on AWS

MARQUEE CUSTOMERS

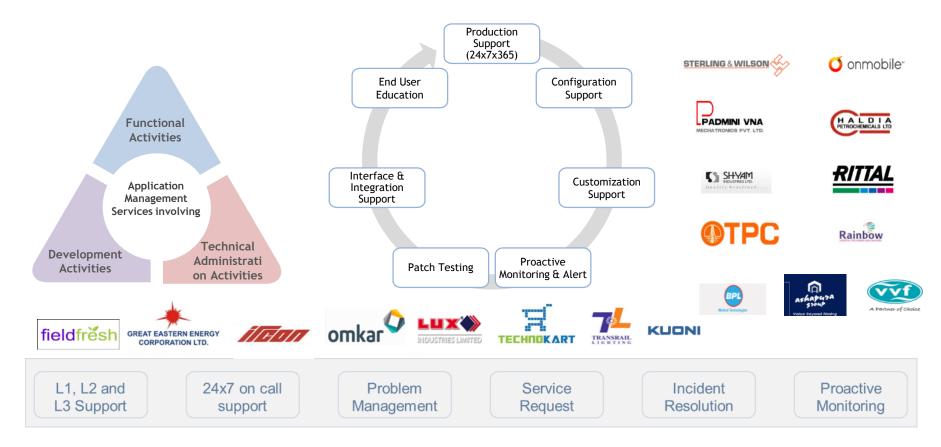


SUPPORT METHODOLOGY

- L1/L2 support through Central Helpdesk
- L3 support by Product Development team
- Support extended through Toll Free number, Self care Portal (ServiceNow) and Email
- Multi-lingual support (English, Hindi, Tamil, Telegu and Malayalam)
- Regional Champions as QRT deployed at customer locations for quicker response (on request)
- SLAs for Response and Resolution
- 100+ team located in multiple cities for training and roll-out activities (new implementation/ new dealers)

SIFY: APPLICATION MANAGED SERVICES (SAP, ORACLE)







IMSI				
Apps	Current Hosted Facility	Environment	Proposed	Environment
Siebel	_			
OBIEE	IBM/Nxtra DC	AIX/Oracle	Oracle Cloud (OCI+Exa CS)@ Rabale	OEL/Oracle DE
SAP	IBM/Nxtra DC	AIX/DB2	AWS @ Rabale	Suse Linux/DB
		OR		
SAP	IBM/Nxtra DC	AIX/DB2	CI @ Airoli	Suse Linux/DB
		OR		
SAP	IBM/Nxtra DC	AIX/DB2	Collocation @ Rabale	AIX/DB2
Othor Apps	IBM/Nxtra DC		Based on SAP decision	
Other Apps			Daseu UII SAF UECISIUII	



Honda Cars				
Apps	Current Hosted Facility	Environment	Proposed	Environment
Siebel	— IBM/Nxtra DC	AIX/Oracle	Oracle Cloud (OCI+Exa CS)@ Rabale	OEL/Oracle DB
OBIEE		AIN/ OF dele		
SAP	HEC	Linux/HANA	HEC	Linux/HANA
Other Apps	IBM/Nxtra DC		AWS / Collocation	

NEXT STEPS: Discovery Workshop

