Case Study Playbook- Data Center Colo Services in Banking, Financial Services, and Insurance

Sify Data Centers- Overview

The Data Center Colo Services establishes the foundation of digital transformation for enterprises. Sify has **14** state-of-the-art PAN India data centers with **227+ MW** IT power, **231 MW** Green power and a roadmap to add **407+ MW** IT Power by 2025. The campuses are scalable to **970+** MW with BTS capabilities. Sify data centers are AI-ready with hybrid liquid cooling, hyperscale, hyperconnected, green with AI-driven operational excellence.

As India's first commercial Tier 3 data center provider, we ensure resilience and business continuity for over 600 premier enterprises across industries including top manufacturing companies, leading banks, digital wallets, global OTTs, social media, and hyperscalers.

Sify data centers are designed on Reliability, Availability, and Serviceability (RAS) methodology. **Reliability** represents the ability of equipment to prevent or correct errors, **Availability** represents the probability of a system operating normally and indicates the continuity of services, and **Serviceability** represents the ability of the data center to maintain operations without failure and repair itself without intervention.

Reliability, Availability, and Serviceability (RAS) are the key factors in the operation and management of data centers. Together, they ensure the continuous, efficient and reliable operation of critical infrastructure, with minimal downtime and quick recovery in case of issues.

1. Reliability

Reliability refers to the ability of a data center to function without failure. In a reliable data center-Systems are resilient to failures and are designed to prevent faults from causing outages. Redundancy (like electrical line-ups, cooling systems, monitoring system, security and network paths) is built into the infrastructure to handle component failures without affecting operations. Regular testing and maintenance ensure that systems can handle both anticipated and unanticipated loads.

Examples of Reliability Strategies:

- Fault-tolerant design with backup power (UPS systems, generators).
- Redundant network connections (multi-homed).

2. Availability

Availability is a measure of the data center's ability to remain operational and accessible to users. High availability means that services provided by the data center are always up and running with minimal downtime. It is typically expressed in terms of uptime percentages; Sify data centers are certified for RATED 3 topology with "Five Nines" (99.999% uptime) being a common goal.

Factors Contributing to High Availability:

• **Redundant Systems:** Multiple instances of critical systems (power, cooling, network, security systems etc.) ensure that if one fails, another takes over.

 Geographic Redundancy: Data centers are mirrored in geographically distant locations across PAN INDIA to ensure availability through DC and DR set-up in case of a regional disaster.

3. Serviceability

Serviceability refers to how easily and quickly issues in the data center can be diagnosed, repaired, and returned to full operation. Efficient serviceability means minimizing the Mean Time to Repair (MTTR), which in turn minimizes downtime.

Key Aspects of Serviceability:

- Hot-Swappable Components: Critical parts like power supplies, or network switches
 can be replaced without shutting down systems.
- Monitoring and Alerts: Proactive monitoring systems can detect and alert operators to potential issues before they cause failures.
- **Modular Design:** Components can be replaced or upgraded easily, reducing the time spent on maintenance and repair.
- **Remote Management:** Enables operators to diagnose and solve problems without needing to be physically present.
- **Automation:** Al / ML based automation for analytical approach towards predictive maintenance, uptime management, etc.

Importance of RAS in Data Center Operations

Reliability ensures minimal faults and uninterrupted performance. Availability guarantees that the services are accessible to users when needed. Serviceability enables quick recovery from any faults or outages, reducing downtime and maintaining operational efficiency.

By focusing on these three pillars, data centers can provide continuous service, meet service level agreements (SLAs), and reduce the risks of financial loss or reputational damage due to downtime.

Key Locations and Capabilities

Mumbai: In 2000, Sify launched the first commercial Tier 3 data center in India- Mumbai 01 at Vashi. Expanded to Mumbai 02 at Airoli, and in 2014, launched our largest hyperscale data campus- Mumbai 03 at Rabale. **Mumbai 03** is designed for 12 towers, 5 towers are operational, 4 are in development, and 3 are in the planning phase. The campus offers **377+ MW IT** power. Tower 5 of Mumbai 03 is (and all future towers in the campus will be) ready to host 130KW NVIDIA racks with liquid cooling.

Noida: In 2013, Sify launched Noida 01- the first commercial hyperscale data center in the region. Today, it hosts over 100 mission critical customers and has ensured 100 % uptime since inception. **Noida 02** our largest hyperscale, Al-ready campus in North India is designed for 3 towers, 1 tower with 28MW capacity scalable to 46MW is operational and 2 towers are in the

planning phase. At scale, the campus has potential of **130+ MW** IT power. Noida 02 is AI ready with ability to host 130KW racks.

Chennai: In 2001, Sify launched- Chennai 01 to serve incoming demand from the Southern region. **Chennai 02-** our largest hyperscale, Al-ready campus, is designed for 3 towers, 1 tower with 28MW capacity scalable to 46MW is operational and 2 towers are in the planning phase. At scale, the campus has potential of **130+ MW** IT power. Chennai 02 is Al ready with ability to host 130KW racks.

Bengaluru: In 2006, Sify launched-Bengaluru 01 to empower the IT/ITeS sector to take advantage of a professionally managed data center. **Bengaluru 02** campus is designed for 2 towers, 1 tower is in planning with a go-live date TBD. The planned campus capacity is **40+ MW** IT power. The Tower 1 of the campus can be accelerated to be ready for services by December 2025 with a sizeable customer demand and pipeline.

Hyderabad: In 2019, Sify launched- Hyderabad 01 located in the financial district with **14.4 MW** IT power, the presence of hyperscale cloud nodes and is the first Nvidia DGX AI-ready data center in India. The Hyderabad 02 campus is in the planning stage.

Kolkata: In 2019, Sify launched- Kolkata 01, a major network node for OTT players and telco providers, strategically positioned to serve BFSI, Manufacturing, Government, PSU, and IT/ITeS sectors.

Edge Data Centers: Sify plans to establish edge data centers in tier 2 cities that will enable low latency, easy access, and faster content delivery at edge locations, ensuring seamless data processing and superior customer experience. We are targeting to deliver a 3.6MW data center in Lucknow by Q2-2025. We are also assessing feasibility of a similar sized data center in Chandigarh by 2025.

We are driving innovation across 5 key pillars:

1. Scalable Infrastructure & Building:

Discovering the best of reliability, availability, and serviceability (RAS) to maximize uptime, ensure business continuity, hyperconnectivity, security, sustainability, and streamline IT management with AI/ML-powered operations.

- Multi-tower campuses to meet all scalability requirements, both in terms of vertical and horizontal expansion.
- Campuses scalable to 970+ MW with BTS capabilities to support future growth- with years
 of experience in designing, building, and operating hyperscale data centers, we are
 equipped to deliver bespoke AI/ML-enabled data centers.
- Infrastructure designed to host Al-workloads with hybrid liquid cooling
- Global Command Control Center powered by AI/ML to monitor critical DC parameters

2. DC Network:

Bringing digital infrastructure closer to users by revolutionizing DC networks for secure, anytime access, and a rich end user experience. Sify's integrated DC architecture is optimized for AI deployments and supports all types and capacities of network.

- High performance Network fabric connecting branches, head offices, and remote locations.
- Hyperconnected, carrier-neutral, and rich interconnect ecosystem with 66+ Data centers, 4 Hyperscalers, 5 Internet Exchanges, 3 Cable Landing Stations, and 8 International PoPs.
- Ensuring business continuity with seamless deployment to DR, NDR, and Far DR sites.
- Multiple Fiber paths to the campuses/building with MMRs at each tower of the DCs to ensure network stability.
- Multi-tier Fiber and Copper Cross Connects, cluster-based rack placement, high capacity intra rack & inter rack network, and access via high capacity 200 Gbps.

3. Automation-AI/ML:

Sify data centers are powered by automation through AI/ML, enabling enterprises to gain insights into their critical operations, measure performance, metrics with precision, predict future trends with accuracy, and maximize efficiency across capacity utilization, service, and support.

- Real time Visibility into Operations, Assets, People and Process. Better resource utilization across Rack space, Power, RE, Cooling, Security, and Cross-connects.
- Measurability in Operations on the basis of predefined conditions or SOPs. Resource capacity utilization and trend analysis. KPI based service contract renewals. Usage based Infra resource planning.
- Predictability in Failure and Downtime. Preventive Maintenance of assets, AMC Contract realization. Demand forecasting and capacity planning.
- Enhanced Efficiency in Capacity Utilization, PUE, WUE, DG Power fuel, UPS power, DC Carbon footprint.
- PUE is the best in the industry.

4. Sustainability:

We are making formidable strides in sustainability through the integration of RE sources like solar and wind power. Our advanced power management technologies ensure efficient energy consumption tracking and optimization. We prioritize eco-friendly products and processes in our design phase, minimizing environmental impact and delivering a greener future for all.

- **DC Equipment:** Achieving peak efficiency with high-performance equipment, energy-saving selections, and optimal redundancy levels.
- Sustainable Processes: We adhere to ASHRAE and ISO 14001. With a robust carbon abatement policy and a focus on low PUE and WUE, we prioritize environmental sustainability at every level.
- Contracted 231 MW of green power through Power Purchase Agreements, commissioned
 99 MW in Mumbai with plans to expand to 500 MW nationwide.

• **Roadmap** to become RE 100/Carbon Neutral by 2030. 29% reduction in GHG emissions by 2025. Significant RE penetration by 2025.

5. Operational Excellence:

Ensuring accountability and excellence through our comprehensive and innovative design frameworks. By blending automation strategies with rigorous audits, Sify ensures consistent performance that surpasses industry standards while setting new benchmarks for ecoconscious practices.

- Safety: Incorporating EHS policy, training, and rigorous safety audits into our daily operations fosters a culture of safety and accountability.
- **Security:** Enhanced 10 layered security, K8 rated boundary wall, Electro-Magnetic Interference Protection, policy enforcement, robust physical and electronic security protocols, bolstered by AI led continuous assessment.
- Availability: Committed to the proverbial five 9s (99.999%), we have been ensuring SOP, EOP, and BCP for over 25 years. Utilizing Rated 3 designs, ITIL framework, and centralized operations for reliability and efficiency.
- **Excellence:** Continuous improvement, leveraging automation, AI/ML, proactive measures, and rigorous performance tracking to set and surpass benchmarks.
- **Sustainability**: Incorporating environmental protection into core operations with costefficiency, reduced PUE/WUE, RE procurement, and sustainable water practices, including recycling and zero discharge.
- Compliance & Certifications: Adherence to global and national regulatory requirements. MeitY empanelled, NVIDIA DGX AI Ready, ISO certifications for (DC, Cloud, Managed Services, IT service mgmt.), PCI DSS, SOC 1, SOC 2, Business Continuity and Environmental Management System, IGBC Green Building certified.

Top Competitors

NTT: A major player in the global data center market offering high-density, carrier-neutral data center solutions across India. As the country's leading managed hosting and multi-cloud hybrid IT solution provider, NTT has operated data centers in India for over 20 years. Headquartered in Mumbai, the organization supports the demanding ICT requirements of hyperscalers, enterprises, and more.

DC location: Mumbai, Bengaluru, Chennai, Noida

No. of DCs: 18 DCs, Live Capacity: 268 MW, Planned: 80 MW

Website: <a href="https://services.global.ntt/en-us/services-and-products/global-data-centers/global-data-

<u>locations/india</u>

ST Telemedia Global Data Centers: One of the fastest-growing data center providers. Their end-to-end data center solutions are designed to help enterprises respond dynamically to change and

adapt to ever-growing business needs. With global reach and local expertise, the company builds the strongest foundation you can trust in today's digital economy.

DC location: Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Noida,

Pune, Jaipur

No. of DCs: 28 DCs, Live Capacity: 200 MW, Planned: 100+ MW

Website: https://www.sttelemediagdc.com/

Nxtra by Airtel Business: The company offers India's largest network of secure, scalable, and sustainable data centers in India to leading enterprises, hyperscalers, startups, SMEs, and governments. It provides a platform of hyperscale, core, and edge data centers across 120+ locations, and enables businesses to accelerate their digital journey.

DC location: Noida, Manesar, Pune, Bengaluru, Chennai, Hyderabad, Kolkata, Bhubaneswar

No. of DCs:12 DCs, Live Capacity: 140 MW, Planned: 200+ MW

Website: https://www.nxtra.in/

CtrlS: One of the world's fastest growing networks of Rated-4 data centers. By offering access to a robust, secure environment to store, manage, and protect valuable data, CtrlS empowers enterprises' digital journey with best-in-class expertise and enables them to stay ahead in their industry.

DC location: Mumbai, Chennai, Hyderabad, Noida, Bengaluru, Kolkata

No. of DCs:15 DCs, Live Capacity: 234 MW, Planned: 350 MW

Website: https://www.ctrls.in/

Yotta: Powered by Hiranandini group, Yotta designs, builds and operates infinitely scalable data center parks. Yotta offers a gamut of cutting-edge solutions for every enterprise need for today or the future including hyperscale DC, Cloud, IT Managed services, global connectivity, security, and more.

DC location: Mumbai, Delhi, Gujarat

No. of DCs: 3 DCs, Live Capacity: 61.2 MW, Planned: 150.8 MW

Website: https://yotta.com/

Equinix: Leading world's digital infrastructure company interconnecting industry-leading organizations across finance, manufacturing, retail, transportation, government, healthcare, and more across a digital-first world. The company connects places, partners, and possibilities to power innovation for today and tomorrow.

DC Location: Mumbai, Global-55 locations

No. of DCs: 2 DCs, Live capacity: 8 MW, Planned: 4.2 MW (Mumbai)

Website: https://www.equinix.com/data-centers

Adani Connex: Adani group, India's largest private Infra and energy provider along with EdgeConneX's global expertise in DC solutions together enables businesses and consumers with cloud, content, and data through a resilient, scalable, sustainable, and automated infrastructure platform. They offer end-to-end data center solutions to unlock digital potential and empower a digital India.

DC Location: Chennai, Hyderabad, Mumbai, Noida, Pune, Vizag

No. of DCs: 1 DC, Live capacity: 17 MW, Planned: 486 MW

Website: https://www.adaniconnex.com/

Growing Hyperscale Data Centers in India

Princeton Digital Group (PDG):

A leading digital infrastructure provider, develops and operates data centers in six key and dynamic digital economies of Asia, including China, Singapore, India, Indonesia, Malaysia, and Japan. With 20+ data centers globally, PDG accelerates the growth of cloud and AI for global hyperscalers

and

enterprises.

In India, PDG has strategically chosen Mumbai for its flagship AI-ready campus in India. The facility is located within a planned 50-acre IT/ITES park in Airoli, Navi Mumbai. The Mumbai MU1 data center in India offers a total of **125 MW** across 4 buildings. PDG plans to expand to Bengaluru, Chennai, Delhi, Hyderabad, and Pune with **48 MW** capacity each.

Lumina Cloud Infra:

Blackstone-backed Lumina Cloud Infra with a collective experience of 175+ years focuses on disrupting India's current CloudInfra standards for the long haul. Lumina aims to build data centers in five key cities with a total capacity of 600 MW by 2030.

Their first data center campus in Airoli, Navi Mumbai, India is set to launch in 2025. Spanning across 6.3 acres, the campus will have a **60 MW** capacity in two phases. Lumina plans to expand to other cities including Pune, Mumbai(Mahape), Hyderabad, and Chennai.

BAM Digital Realty:

A joint venture between Brookfield Infrastructure and Digital Realty, aims to deliver innovative, reliable and sustainable data center solutions that meet the evolving needs of local and global customers. Recently, BAM Digital Realty partnered with Reliance Industries Limited (RIL) and formed a new venture- **Digital Connexion**, aimed at developing high-quality, scalable data centers in India.

The first flagship data center **MAA10** in Chennai is a greenfield development and offers **20 MW** capacity. The Chennai campus is built on a 10-acre land which will comprise 4 buildings with a total capacity of **100 MW**. Addition to it, the company has purchased 2.15 acres of land in Mumbai to develop a **40 MW** facility.

Digital Edge DC:

Digital Edge (Singapore) Holding Pte Ltd. (Digital Edge), National Investment and Infrastructure Fund (NIIF) and AGP DC InvestCo (AGP) have entered into a partnership to create a pan-India portfolio of hyperscale data centers. The facilities will operate under the brand name Digital Edge DC. The partnership's first project is a Greenfield **300 MW** hyperscale data center facility built on a 47-acre site in Navi Mumbai with an investment of \$2 billion.

Sify- Tried. Tested. Trusted Your Digital Infrastructure partner for over 25 years

Sify Technologies, leading digital ICT service providers has been delivering transformative business value to enterprises across the globe for over 2 decades. As the digital bridge for enterprise transformation, Sify empowers industries with AI powered digital platforms and infrastructure encompassing Network Infra, Network Digital Managed Services, Data Center Colo, CloudInfinit – AI Cloud Infra, IT Managed Services, Security Managed Services, Digital and Industry

Apps

Managed

Services.

Sify is committed to innovating and investing to ensure their customers' competitiveness in an ever-changing landscape. Over 10,000 enterprises including India's top 5 banks, Top 4 manufacturing companies, 3 major hyperscalers, global social media, and OTT players trust Sify.

To know more, visit: https://sifytechnologies.com/

DC Locations: Mumbai, Noida, Hyderabad, Chennai, Bengaluru, Kolkata

No. of DCs: 14 DCs, Capacity Live: 227+ MW, Planned: 407+ MW

Website: https://sifytechnologies.com/

Summary Table

Table 1:

Section	SIFY	NTT	STT	Nxtra
Years Exp.	25+	20+	10+	20+
DC Locations	Mumbai, Noida, Hyderabad, Bengaluru, Kolkata	Mumbai, Bengaluru, Chennai, Noida	Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Noida, Pune, Jaipur	Noida, Manesar, Pune, Bengaluru, Hyderabad, Chennai, Kolkata, Bhubaneshwar
Capacity Live	227+ MW	268 MW	200 MW	140 MW
No. of DCs	14 DCs	18 DCs	28 DCs	12 DC

Section	SIFY	NTT	STT	Nxtra
Planned Capacity	407+ MW	80+ MW	100+ MW	200+ MW
Key Differentiators	Infra: RAS design Host AI/ML apps, Alternate cooling BTS- up to 970+ MW	Infra: Rated 3, TIA 942 NAVI 1A: 1st DC in India to deploy Liquid Immersion Cooling, Direct Contact Liquid Cooling First in India to deploy seismic dampers- Noida DC	Infra: Rated 3/4 design Rest Standard	Infra: Rated 3 Planning on Liquid Cooling & to host Al apps
	Network: 66 Interconnected DCs, CLS- 3, Pan India NW Hyperconnected, Hyperscale, Edge DCs.	Network: Interconnection btw all DCs globally via submarine fiber. In India- Chennai (MIST)	Network: CLS available at Mumbai Cross Connect, Campus Connect, Cloud Connect	Network: 120+ edge DCs 200+ India & Global POPs. 65 Cities. 3 Lk RKMs fiber NW & 2.5 Lk RKMs for submarine
	Sustainability: Contracted 231 MW Commissioned 99 MW 100% RE by 2030	Sustainability: Net-zero emissions across operations by 2030, and across value chain by 2040	Sustainability: IGBC, LEED Gold 60% carbon-free energy by 2026 & 100% carbon-free by 2030	Sustainability: IGBC. LEED certified Net Zero by 2031 58% increase in RE use in FY23 vs FY22
	Automation, AI/ML: 8-10% savings on PUE 20% improvement in equipment uptime Operational	Automation Al/ML: Automation for better monitoring in Ops, PUE, WUE Operational	Automation AI/ML: NA Operational	Automation, AI/ML: NA Operational
	Efficiency: Safety, Security, Availability Excellence, Sustainability	Efficiency: Standard	Efficiency: 18% reduction in WUE since 2020 7% reduction in PUE	Efficiency: <1.5 designed PUE
	Other Key Services: Hybrid/Multi Cloud, FSO, NOC, SDWAN, MSS, SOC	Other Key Services: Cloud and IT Managed Services Edge as a service: Edge compute, Private 5G, IoT	Other Key Services: Bare Metal as a Service	Other Key Services: NA

Table 2:

Section	SIFY	CTRLS	Yotta	Equinix	Adani
Years Exp	25+	17+	5	25 Years- Global, India 3+ yrs	1+ yr
DC location	Mumbai, Noida, Hyderabad, Bengaluru, Kolkata	Mumbai, Bengaluru, Kolkata, Noida, Hyderabad, Chennai	Mumbai, Noida, Gujarat	Mumbai, Global- 55 locations	Chennai, Hyderabad, Mumbai, Noida, Pune, Vizag
Capacity live	227+ MW	234 MW	61 MW	8 MW	17 MW
No. Of DCs	14 DCs	15 DCs	3 DCs	2 DCs- India.	1 DC
Planned capacity	407+ MW	350 MW	150 MW	4.2 MW	486 MW
Key Differentiators	Infra: RAS design Host Al/ML apps, Alternate cooling BTS- up to 970+ MW	Infra: Tier 4 Modern Cooling Tech	Infra: Tier 4, fault tolerant Hyper density green power–50 MW IT power with 48 hour back up	Infra: 99.9999% uptime Liquid, geothermal cooling	Infra: TIA 942B Rated 3 & 4 compliant design BTS
	Network: 66 Interconnected DCs, CLS- 3, Pan India NW Hyperconnected, Hyperscale, Edge DCs	Network: Metro Connect Campus Connect SDWAN Cloud Connect	Network: Internet leased line, Cross Connects, Global Cloud Konnect, DCI	Network: Equinix Fabric, Internet Exchange, Internet Access Only one in India with the presence of 8 CSPs 6 on-ramps to major CSPs Only one in India to host 5 IEs	Network: Dedicated NOC
	Sustainability: Contracted 231 MW Commissioned 99 MW 100% RE by 2030	Sustainability: 100% RE by 2030 152 MWp in solar across MH, KA, UP By 2025- 250 MW LEED Platinum	Sustainability: Captive Solar Plant Captive Gas based power (planned)	Sustainability: 96% Renewable Coverage Committed to 100% renewable coverage by 2030	Sustainability: RE power from day 1. Water resource management. Green Hydrogen as backup power. IGBC LEED - Platinum standard
	Automation, AI/ML: 8-10% savings on PUE 20% improvement in equipment uptime	Automation, AI/ML: Al enabled surveillance In future deploy AI/ML, RPA for sustainability	Automation, AI/ML: NA	Automation, AI/ML: Real time monitoring of infra online Monitoring and automation to optimize distribution of power across DCs	Automation, AI/ML: Propriety Edge OS DCIM platform that monitors 1.5 Mn datapoints every 15 ms to deliver smarter operations
	Operational Efficiency: Safety, Security, Availability Excellence, Sustainability	Operational Efficiency: 1.38 PUE EHS RPA driven Operation efficiency	Operational Efficiency: 1.40 design PUE	Operational Efficiency: Excellence across Power, cooling, redundancy, interconnection, security, certifications	Operational Efficiency: <1.5 designed PUE. Focus on HSE

Other	Key	Other	Key	Other	Key	Other	Key	Other	Key
Services		Services	s:	services:		Services:		Services:	
Hybrid/Multi		DRaaS,	BaaS, IT	Shakti	Cloud-	Equinix	Bare	Bare Meta	ıl as a
Cloud, FSO, N	OC.	MS		NVIDIA		Metal,	Equinix	Service	
	1SS.	Cloud	services-	Yotta	Power	Fabric,	Equnix		
SOC	100,	Cloud4C		Cloud-IBM		Network	Edge,		
300				Security,	OTT	Multi/Hybi	rid		
				platform	as a	Cloud			
				services et	C.C				

BFSI Business Priorities

- ➤ Diverse Product Portfolio: Innovative products and services for evolving customer needs. Savings accounts, loans, insurance, investment options, digital payment solutions, and complimentary financial services
- Customer Centric Services: Seamless and delightful experience, exceptional customer service, addressing customer queries promptly, continuously improving services based on feedback.
- Personalized Services: Tailored products & services for individual customer needs. Address specific customer requirements, preferences, and financial goals.
- ➤ **Digital Security:** Fraud Detection & Prevention, Information & Cyber Security protocols, and Data Privacy measures. Safeguard customer information and maintain the integrity of core business systems.
- Multi-Channel Accessibility: Seamless experience across multiple channels. Flexibility to access services through various channels, including branches, ATMs, online banking, mobile apps, and phone banking.
- Financial Inclusion: Financial inclusion serves the unserved and underserved segments of society. Reach out to rural and low-income communities.
- ➤ **Neo Banking**: Digital first banking experience. Operate completely online through web/phone without investing in physical branches. It enables customers with simplified processes and enhanced banking experience.
- ➤ Compliance with Regulations: Regulatory and compliance requirements with RBI. Strengthening compliance frameworks, enhancing risk management practices, and ensuring governance transparency.

Business Priorities Translating to Technology Demands

Digital-first platforms: Enterprises today need robust platforms that offer a seamless and intuitive user experience across devices. This includes mobile apps, internet portals, and IVRs.

^{*}The data presented is current as of 8th August 2024. It may be subject to change until the document's completion.

Implementing technologies like Open API integration, microservices, and cloud enables faster time to market for new digital products and services.

User Experience: CRM systems with AI and data analytics capabilities help personalize customer interactions. Chatbots, Virtual Assistants, and NLP technologies enhance customer support, seamlessly address customer queries, and enhance engagement through omnichannel communication.

Cybersecurity: BFSI enterprises require advanced cybersecurity solutions to protect against threats. This includes next-generation firewalls, intrusion detection systems (IDS), encryption technologies, and multi-factor authentication (MFA) for secure customer authentication. Continuous monitoring, threat intelligence, and security analytics are also critical for early detection and response to cyber threats.

Regulatory Compliance: Compliance management systems powered by technology help enterprises adhere to regulatory requirements such as KYC (Know Your Customer), AML (Anti-Money Laundering), and GDPR (General Data Protection Regulation). Automated compliance tools, blockchain for audit trails, and transparency, and AI-driven regulatory risk assessment tools assist enterprises in maintaining compliance while reducing manual errors and operational costs.

Financial Inclusion: Technology plays a crucial role in driving financial inclusion by enabling mobile banking, digital payments, and branchless banking solutions. Biometric authentication, Aadhaar integration (India's biometric identity system), and mobile wallets empower underserved populations to access banking services conveniently and securely.

Risk Management: Advanced risk management systems powered by data analytics, machine learning, and predictive modeling help businesses assess credit risk, market risk, operational risk, and compliance risk more accurately. Stress testing tools, risk dashboards, and real-time monitoring capabilities enable proactive risk mitigation and decision-making.

Legacy System Modernization: BFSI enterprises require strategies for modernizing legacy systems through technologies like application re-platforming, containerization, and API-enablement. Legacy system integration platforms, data migration tools, and DevOps practices facilitate seamless integration with new digital solutions while ensuring data integrity and system reliability.

Talent acquisition: Al-powered recruitment platforms, virtual interviewing and assessment tools, digital learning and development platforms, performance management systems, and employee engagement and collaboration tools play a significant role in talent acquisition in the BFSI sector.

7 Top Reasons for a BFSI Enterprise to Choose Sify Data Centers

The evolving needs of the BFSI industries are driving significant changes in how data centers are utilized and managed. As the BFSI industry is facing increasing demands for security, compliance, and operational efficiency, the need for digital-ready data centers is paramount.

Here is how Sify's Al-ready data centers are well-positioned to meet the evolving needs of BFSI enterprises:

- Robust security: To protect business & customer data, maintain uninterrupted operations, and secure critical workloads which cannot be moved to a cloud due to security & compliance concerns, Sify offers dedicated secured data centers with stringent physical and electronic security incorporating 10 layered advance security across the facility, K8 rated boundary walls, electromagnetic interference protection, and policy enforcement.
- 2. **Compliance-Ready Infra:** To ensure enterprises meet stringent regulatory standards and industry best practices, Sify adheres to global and national regulatory requirements (GDPR, RBI, IRDAI, SEBI). Automated rigorous audits ensure continuous adherence with regulatory changes to avoid any legal and reputational risks.
- 3. **Efficient design for optimal performance:** To always ensure data availability and reliability, Sify data centers are RAS-designed AI-ready ensuring high availability and reliable operations through redundant systems, backup power supplies, fault-tolerant systems, resource allocation, disaster recovery, and innovative design frameworks. Sify data centers have been running at 100% since 2008.
- 4. **Scalable infrastructure:** As BFSI enterprises grow whether it's opening new branches or expanding to remote geographical locations, Sify data centers can quickly align to changing business requirements accommodating additional servers, storage, and networking capabilities. The campuses have multiple towers supporting both horizontal and vertical expansion.
- 5. **Ensured business continuity:** To ensure seamless continuous operations without fail and data availability in case of disruption, Sify PAN India DC footprint enables BFSI enterprises to host their DR, Far DR, and NDR in different seismic zones.
- 6. **Reliable multi-site connectivity:** To augment reach and interconnectivity to extensively distributed geographical locations, Sify offers a PAN India DC-Network footprint with hyperconnected, carrier-neutral, and a rich interconnected ecosystem. High capacity intra rack, inter data center, and inter-city network connectivity with low latency connecting all facilities and remote locations to our data centers.
- 7. **Supporting cloud and digital innovations:** To ensure rapid deployment and updates of services across all branches, Sify offers cloud adjacent DCs, Managed services, and digital services. 24x7 managed operations and business continuity planning enables BFSI enterprises to meet their digital priorities in an ever-evolving landscape.

CASE STUDIES

The customers highlighted in blue are the accounts for which we are going to create DC specific case studies in all formats- 1 slider, 2 sliders, and a PDF version.

*Columns marked in green are ready for consumption.

BFSI	Customer	SA	Format - 1	Format - 2	Format - PDF
			Slider	Slider	
Pub bank	SBI	Gautam Bakhru	<u>Yes</u>	No	No
	Punjab & Sind Bank		<u>Yes</u>	No	No
	Union Bank of India	Gautam Bakhru + Harshit Jain	No	No	No
Pub Insurance					
	United India Insurance Co Ltd.	Gautam Bakhru + Sri Krishnan	No	No	No
Pub Financial Institution	IDRBT/IFTA S	Rajesh Tirumalaraju	No	No	No
	LIC HFL	Rohit Boralkar	No	No	No
Pvt Banks (Large)	ICICI Bank	Gautam Bakhru	No	No	No
	HDFC Bank	Gautam Bakhru/ Prashant Pereira	No	No	No
	Yes Bank		<u>Yes</u>	No	No
	Kotak Mahindra bank-	Gautam Bakhru	No	No	No
	HSBC bank (Global bank case study)	Gautam Bakhru	No	No	No
Pvt Bank (Small)	CSB Bank (Integrated DR)	Sri Krishnan + Rajeev Jain	<u>Yes</u>	No	No
Co- operative Bank	Saraswat Bank	Gautam Bakhru	No	No	No
Pvt Insurance					
	Max Life Insurance	Gautam Bakhru + Yoginder Pal Taneja	No	No	No
	ICICI Prudential Life Ins.	Gautam Bakhru + Harshit Jain	No	No	No
NBFCs					

	Mahindra Finance	Dheeraj Shrivastava	No	No	No
	Bajaj Finance-	Akash R Sinha	No	No	No
Capital Market (AMC, Securities , Brokers Platforms)					
	Optiver- Netherland stock broking firm	Swaminatha n K	No	No	No

*Appendix

Data Center capacity Build up - September 2024

			Develop	men
Sr#	Location	Operational	t	Planning
1	Mumbai 01	0.9		
2	Mumbai 02	5.4		
3	Mumbai 03	96.4	160	120
4	Bangalore	7.6		
5	Bangalore 02		20	20
6	Chennai 01	3.6		
7	NOIDA 01	10.8		
8	Hyderabad 01	14.4		
9	Hyderabad 02			250
10	Kolkata	2.2		
11	NOIDA 02	43.2		86.4
12	Chennai 02	43.2		86.4
		227.7	180	562.8

Capacity by 2025	
>	407.7
Total expansion>	970.5

Operational- as is ready: 227.7 rounded to 227 (included tower B Noida, Chen 02)

Expanding: operational + development: 407.7 rounded to 407 MW

Scalable to: expanding to, operational + development+ planning: 970.5, 970 MW

^{*}In case of any data discrepancy or updates, please reach out to marketing@sifycorp.com