

CIN : L72100HR1999PLC103911 PAN NO AABCN4805A GST NO 06AABCN4805A1Z3

Date: 14.06.2024

To, To,

BSE Limited The National Stock Exchange of India Limited Phiroze Jeejeebhoy Towers, "Exchange Plaza", Bandra - Kurla Complex,

Bandra (EAST), Mumbai – 400 051 Dalal Street, Fort,

NSE SYMBOL: NETWEB Mumbai - 400 001.

SUBJECT: STRATEGY PRESENTATION

Dear Sir/ Madam,

BSE Scrip Code: 543945

Please find enclosed herewith the updated Strategy Presentation.

Kindly take the same on record.

Thanking you,

For Netweb Technologies India Limited

Digitally signed Lohit by Lohit Chhabra Chhabra Date: 2024.00.17 Date: 2024.06.14

Lohit Chhabra Company Secretary & Compliance Officer M.No A36610

Website: www.netwebindia.com E-mail: complianceofficer@netwebindia.com



Netweb TECHNOLOGIES

India's Leading High-end Computing Solutions (HCS) Provider



May 2024

BSE: 543945

NSE: NETWEB

Bloomberg: NETWEB:IN

Safe Harbour Statement



This presentation may contain certain "forward-looking statements" within the meaning of applicable securities laws and regulations, which may include those describing the Company's strategies, strategic direction, objectives, future projects and/or prospects, estimates etc. Investors are cautioned that "forward looking statements" are based on certain assumptions of future events over which the Company exercises no control. Therefore, there can be no guarantee as to their accuracy and readers are advised not to place any undue reliance on these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise. These statements involve a number of risks, uncertainties and other factors that could cause actual results or positions to differ materially from those that may be projected or implied by these forward-looking statements. Such risks and uncertainties include, but are not limited to; growth, competition, acquisitions, domestic and international economic conditions affecting demand, supply and price conditions in the various business's verticals in the Company's portfolio, changes in Government regulations, laws, statutes, judicial pronouncement, tax regimes, and the ability to attract and retain high quality human resource.

Agenda



- 1 About Netweb Technologies
- 2 Key Investment Highlights
- 3 Growth Strategies
- 4 Annexures

About Netweb Technologies



India's leading Indian origin, owned and controlled OEM in the space of High-end Computing Solutions (HCS)



Offers a **full stack of product and solution suite** with comprehensive capabilities in designing, developing, implementing and integrating **high performance computing solutions**

- Collaborates with various technology partners such as Intel Americas, Inc, AMD,
 Samsung India Electronics Private Ltd, Nvidia & Seagate India Private Ltd
- Develops homegrown compute and storage technologies, deploys supercomputing infrastructure to meet the rising computational demands of businesses, academia, and research organizations
- Compliant with the "Make in India" policy of the Government of India
- One of the few OEMs in India eligible to participate in and seek incentives in terms of both the IT Hardware PLI and Telecom and Networking PLI schemes
- Established in 1999 with manufacturing facility located in Faridabad, NCR and
 17 offices located across India

Business Tailwinds ▶ ▶

'Make in India' Policy & 'PLI Scheme' of the GOI

Increasing investments in the Industrial Internet of Things, AI, & Engineering

'Make AI in India & Make AI work for India' initiative of the GOI

Growing demand for cloud-based services and network switches

Upgrading network to 5G technology driving 5G ORAN

GOI's approval of over ₹1,03,000 Mn for the IndiaAl Mission³ to catalyse India's Al ecosystem

500+ Supercomputing systems installed

Accelerator / GPU

based Al systems & enterprise workstations

70+ Private cloud & HCI installations

Supercomputers listed eleven times in the world's top 500 supercomputers

FY24 Financial Metrics



Revenue from Operation: ₹7,241 Million **Customers**: Govt. (47.3%) vs Non-Govt. (52.7%)



Op EBITDA Margin: 14.2%



PAT Margin: 10.3%



ROCE: 38.5%



ROE: 29.4%



Dividend*: ₹2/share

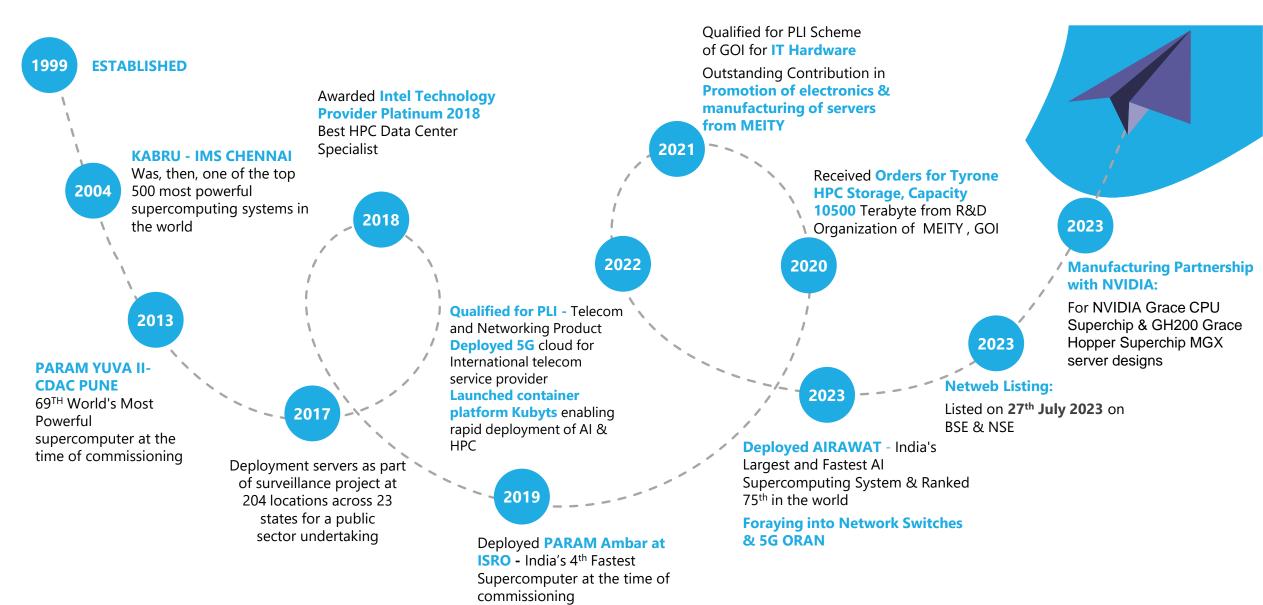


Dividend Pay-out Ratio*: 14.9%

Note:: pib.gov.in; * Proposed Dividend subject to Shareholders' approval.

Key Milestones





Snapshot of Our HCS Offerings (1/2)



India's leading HCS provider with fully integrated design and manufacturing capabilities

HCS

Offerings

(A) High performance computing (Supercomputing / HPC) systems

- Bespoke, and tailored with specialized hardware designs and architecture
- Cater to varied customer specifications





Management

(C) Al systems and enterprise workstations

 Address standalone parallel compute-intensive applications, machine learning, deep learning, and support CF-CAD-CMD Applications



Machine Learning







(B) Private cloud and hyperconverged infrastructure (HCI)

 Private cloud and HCI offers hyper-converged capabilities i.e., combining compute, storage, and network' to build:



Hybrid Cloud HCI





(D) High performance storage (HPS/Enterprise Storage) solutions

Centralized repository for business-critical information that provides data sharing, data protection across multiple computer systems



Storage





Scalable to Exabytes

Parallel File System Storage

(F) Software and services for HCS offerings

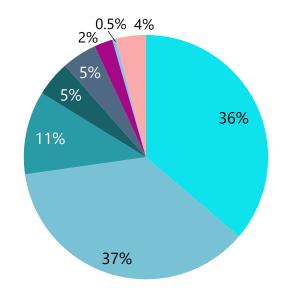
 Cloud Managed Services – These are the partial or complete management and control of a client's cloud platform, including migration, maintenance, and optimization





deep learning

FY24 - Revenue Breakdown by offerings^



- Supercomputing / HPC Systems
- Private cloud & HCI
- Al & Enterprise Workstations
- HPS solutions
- Data Centre Server
- Software & Service for HCS offerings
- Network Switches
- Spares & Others



- Designed to reduce the complexity of managing critical and heavy workloads
- Servers are advanced Al powered that allow intelligent and efficient data processing and storage High in-built



High energy



Wide accelerator/



Snapshot of Our HCS Offerings (2/2)

High-End Computing Solutions (HCS) Offerings Suite





High Performance Computing (HPC) Systems



Private cloud and hyperconverged infrastructure (HCI)



Al systems and Enterprise workstations



High performance storage (HPS) solutions







Make your HPC Clusters Reliable, Agile, and Responsive.





Set up a **Private Cloud Quickly** and **Accelerate** your Cloud First **Strategy**.







Accelerate your Enterprise efficiency with **Tyrone Al System** & Enterprise workstation.







Unified Block



Archival & Surveillance



Parallel file system
ParallelStor



Reimagine your **Data center strategies** for running modern workload.

Netweb has designed, developed and deployed some of India's most powerful supercomputers



Supercomputer	Year of Deployment	User	Speed in teraflops (Rpeak)	Speed in teraflops (Rmax)	Particulars	
AIRAWAT	2023	Centre for Development of Advanced 13,169.86 Computing, India (CDAC)		8,500.00	India's largest and fastest AI supercomputing system. Ranked 75th in the world and has been included in the 61st edition of Top 500 Global Supercomputing List released in June 2023	
Agastya	2020	IIT Jammu	256.00	161.00	India's 27th fastest supercomputer	
PARAM Ambar	2019	Indian Space Research Organisation (ISRO), Government of India	1,384.85	919.61	India's 4th fastest supercomputer	
Hartree	2018	National Institute of Science Education and Research (NISER), Bhubaneshwar	51.90	38.87	India's 29th fastest supercomputer	

Supercomputer	Year of Deployment	User	Speed in teraflops (Rpeak)	Speed in teraflops (Rmax)	Particulars	
Kalinga upgrade	2016 & 2020	NISER, Bhubaneshwar	249.37	161.42	India's 26th fastest supercomputer	
Kohinoor 3	2016	TIFR-TCIS Hyderabad	70.85	43.59	India's 20th fastest supercomputer	
PARAM YUVA-II	2013	Centre for Development of Advanced Computing, India (CDAC)	529.38	386.71	the 69th most powerful supercomputer in the world	
Kabru	2004	The Institute of Mathematical Sciences, Chennai	1.38	1.00	Our first Supercomputing system, which was then one of the top 500 most powerful supercomputing system in the world	

Netweb's Diversified Application Industry Base



Catering to the end-to-end needs of customers that enable the company to attract new customers and diversify its customer base



*Other enterprises includes IT&ITeS, media & entertainment, telecom, cloud services etc.

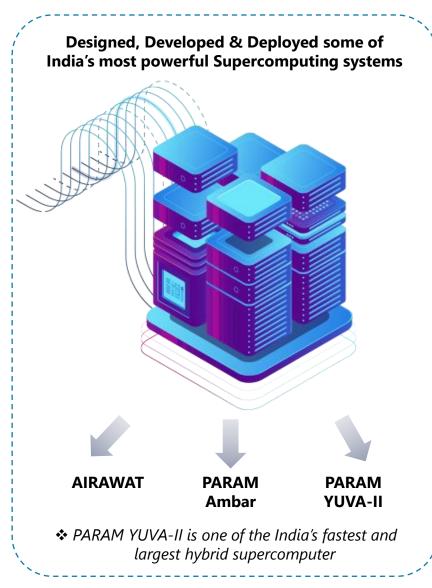
HCS Offerings Portfolio



High Performance Computing (HPC)

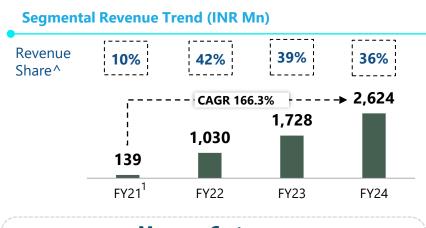
Netweb TECHNOLOGIES

India's largest manufacturer of Supercomputing systems

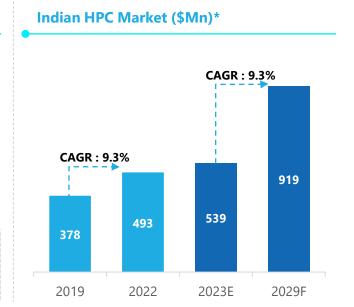


HPC Systems Overview

- In terms of the number of HPC installations, Netweb is one of the most significant OEMs in India amongst others*
- Equipped with 'Tyrone' cluster management suite
- Deployed diverse Supercomputing systems ranging from 10 nodes to 400 nodes & scalable up to 1,000 nodes, to cater to different customers' requirements
- 300+ HPC Installations to various government institutions and private enterprises such as IITs, JNU, NMDC Data Centre, etc



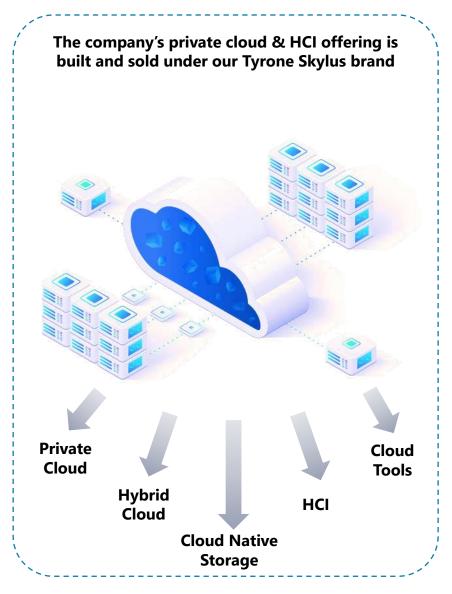




Private Cloud and Hyperconverged Infrastructure (HCI)

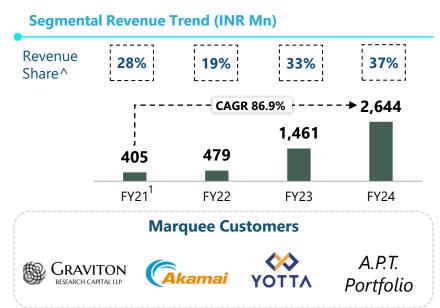


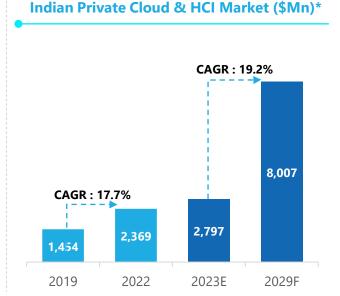
Offers hyper-converged capabilities i.e. combining compute, storage, and network



Private Cloud & HCI Overview

- Provide a bespoke hardware and curated software stack
- Tyrone Skylus has enabled the company to compete with foreign HCI OEMs, virtualization ISVs, private cloud platforms, and general computing rigs
- Installations of **50+ private cloud and HCI** to marquee customers such as Graviton, Akamai, A.P.T. Portfolio, and Yotta Data.

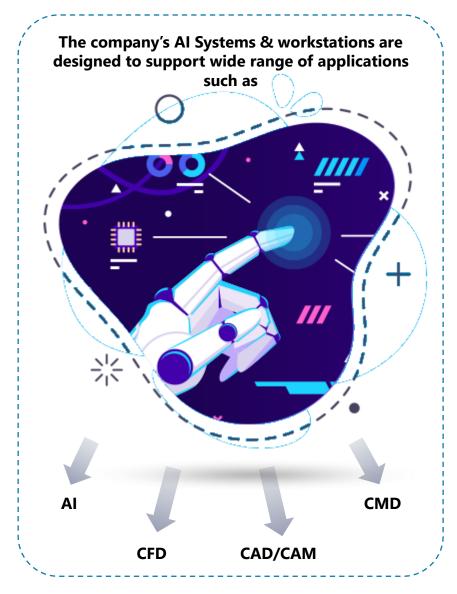




Al Systems and Enterprise Workstations (Al & EW)

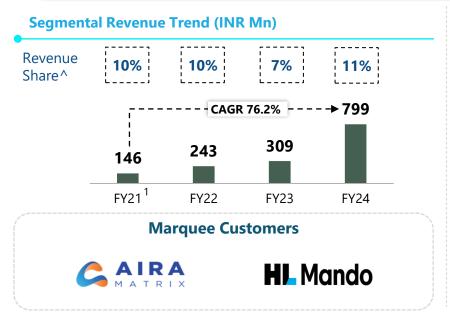


Address requirements of Supercomputing systems, machine learning and deep learning

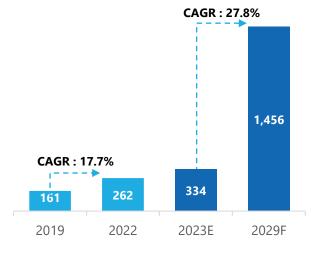


Al Systems & Enterprise Workstations Overview

- Equipped with proprietary containerised application solution (viz., Tyrone Kubyts)
- Designed and developed a wide range of **over 50 workstation models** to customers such as Airamatrix & HL Mando
- Undertaken installations of over 4,000 accelerator / GPU-based AI systems and enterprise
 workstations for marquee customers such as IIT Jammu, IIT Kanpur, IIIT Naya Raipur, JNU, HL
 Mando, Hemvati University, and Airamatrix.



Indian AI Systems & Enterprise Workstations Market (\$Mn)*



^{*}Source: F&S Report; Note: 1: FY21 was impacted due to COVID related disruptions; ^% share of revenue from operation excludes other operating revenue

High Performance Storage (HPS/Enterprise Storage) Solutions



HPS Solutions provide high throughput and high IOPs# storage for enterprise computation users

The company's hardware, software have been developed in-house and are compliant with the 'Make in India' policy*.

Its HPS Solutions comprise:



Unified storage solution
(Tyrone Verta)



Cloud native storage (Tyrone Collectivo)



Parallel file system storage (Tyrone ParallelStor)

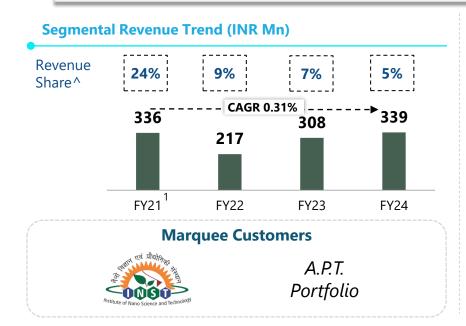


Surveillance and object storage

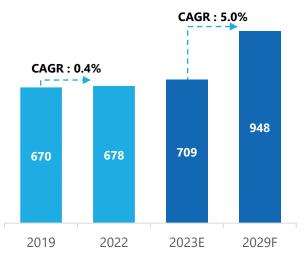
(Tyrone Collectivo with Fluid Input Output)

HPS Solutions Overview

- Capable of being integrated into private & public cloud environments
- Salient features of HPS solutions are no single point of failure, scalable upto Exabytes, and built-in high availability
- Facilitate 10 mn IOPs# & 100 GBps (scalable upto 450GBps) throughput & designs that can be extended up to 1,000 petabytes
- Provide HPS solutions to marquee Customers including Graviton, A.P.T. Portfolio, and INST.







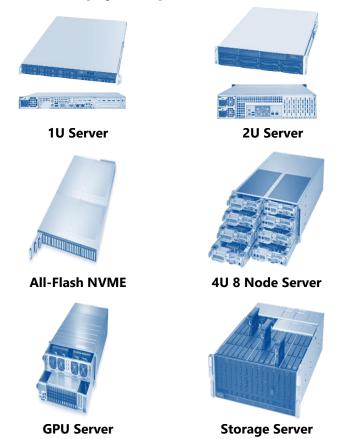
^{*}Source: F&S Report; Note: 1:FY21 was impacted due to COVID related disruptions; #Input/output operations per second; ^% share of revenue from operation excludes other operating revenue

Data Centre Server



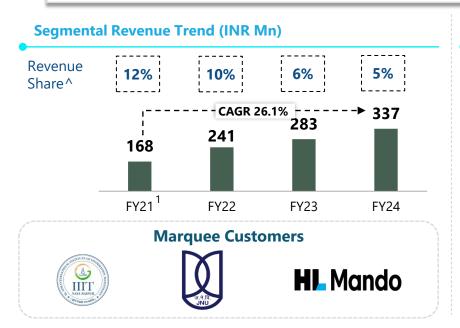
Designing and Manufacturing servers to cater to disparate customer needs from entry-level servers to high-end 'mission-critical' servers

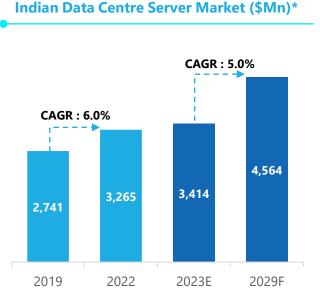
The company's current server models are typically designed and built with the dual processor configuration that enables multiple operations simultaneously, leading to low latency & better physical space utilization.



Data Centre Server Overview

- Designed and built over 200 dual-processor server models under the brand 'Tyrone Camarero"
- Improving and customizing offerings to address specific requirements such as Low Rack Space Consumption, High in-built storage capability (up to 1petabyte (10¹⁵)), High Energy Efficiency etc.
- Design and manufacture servers in compliance with the 'Make in India' policy
- Provide data center servers to marquee Customers including JNU, HL Mando, etc.



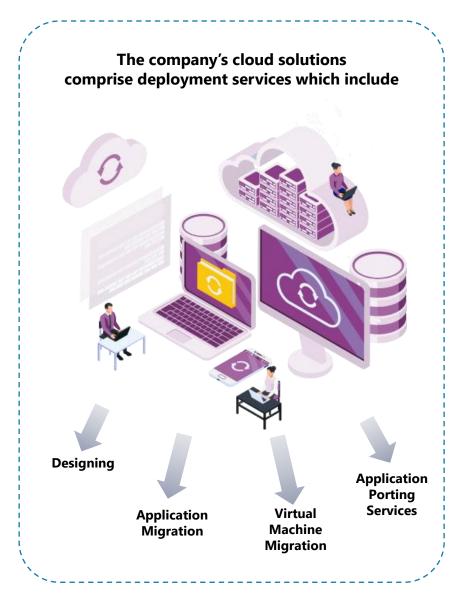


^{*}Source: F&S Report; Note: 1:FY21 was impacted due to COVID related disruptions; ^% share of revenue from operation excludes other operating revenue

Software & Service for HCS

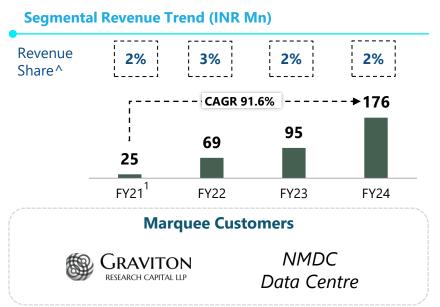
NetwebTECHNOLOGIES

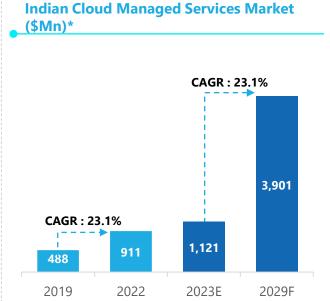
Providing private cloud software stack – Both on-premises and off-premises



Software & Service for HCS Overview

- **Private cloud software stack** to handle **complex workloads** (including 5G enterprise cloud, 5G edge compute, private 5G, and enterprise IT)
- Provide 'Big Data' centric solutions that are designed to cater to data-intensive distributed applications under a single umbrella
- 'Big Data' centric solutions use **Tyrone Camarero dense systems, Tyrone Cluster Management Suite, and Tyrone Collectivo** range of specialized storage systems
- Provide software and services for HCS to marquee Customers including NMDC Data Centre and Graviton.





^{*}Source: F&S Report; Note: 1:FY21 was impacted due to COVID related disruptions; ^% share of revenue from operation excludes other operating revenue

Competitor Landscape



One of the few players in India who offers a full stack of product and solution suite with comprehensive capabilities in designing, developing, implementing, and integrating high end computing solutions

Products and Solutions	Netweb Technologies	IBM Lenovo	DELL	Hewlett Packard Enterprise	ATOS	NVIDIA	NetApp Hitachi Data Systems	Red Hat Nutanix	Vmware Suse	HCL Cognizant	Accenture Tech Mahindra
НРС		√	0	√	1	0	0	0	0	0	0
Data Centre Server		✓	√	1	0	0	0	0	0	0	0
Enterprise Storage Systems		0	1	√	0	0	✓	0	0	0	0
Private Cloud and HCl		0	0	0	0	0	0	√		0	0
AI Systems & Enterprise Workstation	√	0	0	0	0	√	0	0	0	0	0
Cloud Managed Services		0	0	0	0	0	0	0	0	1	\checkmark

Source: F&S Report

Agenda



- 1 About Netweb Technologies
- 2 Key Investment Highlights
- 3 Growth Strategies
- 4 Annexures

Key Investment Highlights

NetwebTECHNOLOGIES

India's leading Indian origin owned and controlled OEM for HCS with integrated design and manufacturing capabilities

Long standing relationship with a marquee and diverse customer base

Operates in a rapidly evolving and technologically advanced industry with high entry barriers

Track record of financial performance and consistent growth

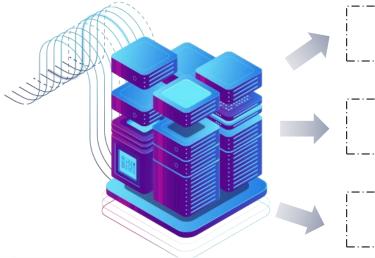
Significant product development and innovation through R&D

Experienced Board & Senior Management Team

1. India's leading Indian origin owned and controlled OEM for HCS with integrated design and manufacturing capabilities (1/2)



Full stack of product and solution suite with comprehensive capabilities in designing, developing, implementing and integrating HPC solutions



Pre-compiled application stack

End user utilities

Proprietary middleware solutions

Deep Expertise in System Design & Architecture



Proprietary designs are cloud native



Proprietary designs are capable of catering to the evolving needs of Customers

Providing End-to-End Solutions with Fully Integrated Design & Manufacturing Capabilities, now compliant with Make in India policy



Design

Design proprietary hardware, middleware stack and related software solutions



Manufacture

Manufacturing facility capable of producing 200+ server models, 50+ workstation models & 15+ storage systems



Deployment

Deploy supercomputing infrastructure to meet the rising computational demands of customers

1. India's leading Indian origin owned and controlled OEM for HCS with integrated design and manufacturing capabilities (2/2)







In-house Expert Design Team



Advance Technology Integration



Quality Control Measures



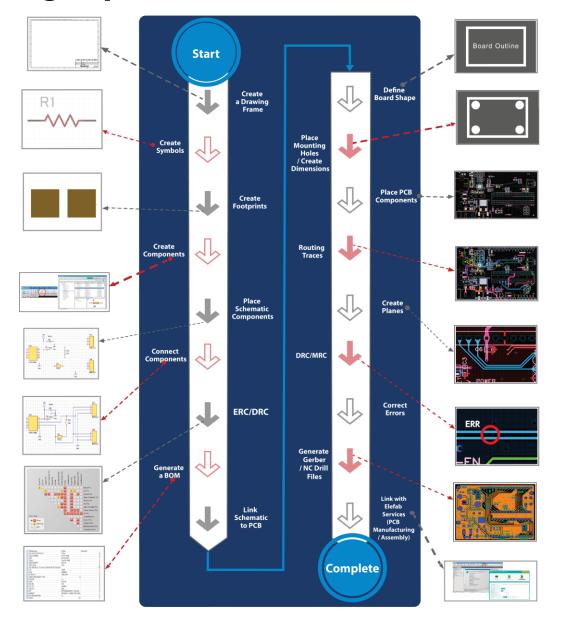
Very Low Failure Rate



Scalable Production Capacity



25 Years of Expertise in the Domain



2. Operates in a rapidly evolving and technologically advanced industry with high entry barriers



Experience of installing 500+ HPC systems, 50+ private cloud & HCI, 5000+ accelerator/GPU based AI systems & enterprise workstations

Experience gained in evolving projects

Setting up AI & deep learning labs at govt. institute, forensic workstation at GOI dept & Big

Data computing lab at a govt.

Installations High-Performance Storage solution for a Fintech Company to deliver 450GBps throughput

Developing building and Supercomputing systems such as AIRAWAT, Agastya, PARAM Ambar, PARAM YUVA-II and Kabru

Our **Capabilities**

Continuous R&D in



institute

Manufacturing servers



Supercomputing systems



Containerized Application Solution

Technical Skillset



Kernel level



Hardware product desians



Fine-tuned PCB layouts



Mix workload capabilities





Dense architectures

Repository of HPC-Al codes

Industry Entry Barriers



Rapidity of technological advancement necessitates:

- Hardware, Middleware & Application-level Innovation
- **Application Optimization**
- Track Record of Customer Service
- Fine tuning of Architectures



Modification of designs and changes in implementation requires

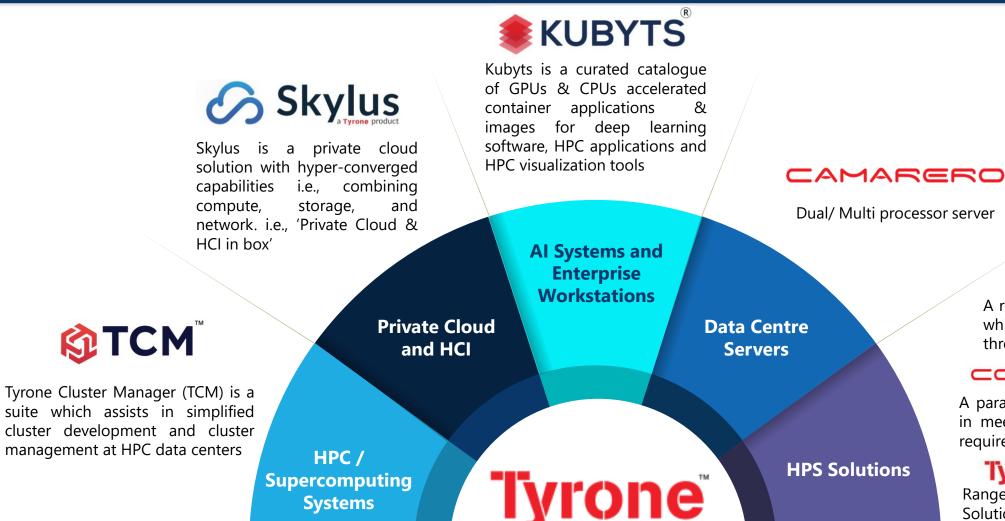
- Deep Expertise in system design & architecture
- Expertise in Hardware & middleware
- Exposure to large problem sets
- Technical skill set & expertise

3. Significant product development and innovation through R&D



Independently design and innovate products and solutions offerings and provide services tailored to specific customer requirements

The company's R&D Facilities has enabled it to increase its product lines across different HCS offerings



ParallelStor*

A range of storage system which provides high-throughput storage

COLLECTIVO

A parallel file system that assists in meeting archival and storage requirements

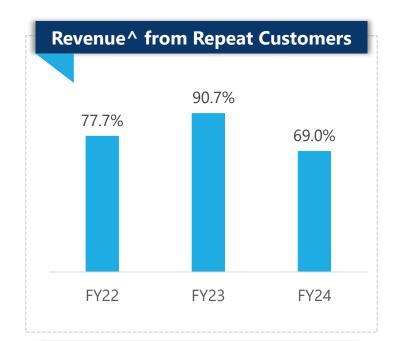
Tyrone VERTA

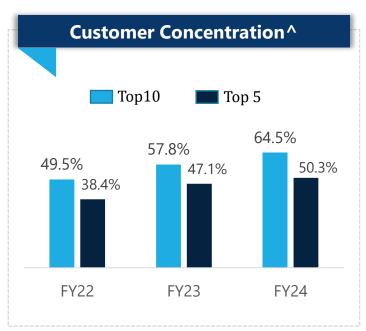
Range of Unified Storage Solutions providing flexibility and high performance

Quarterly Key Highlights (Cont.)









Repeat Customers (FY24)
Associated for over 5.17 years using
Fiscal 2016 as the base

4.47 years

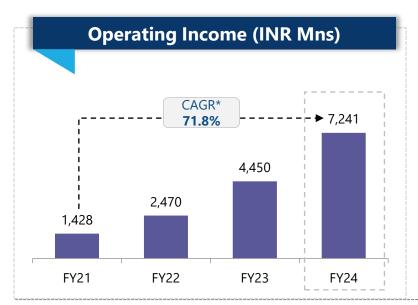
Average top 10 customer age (FY24) using Fiscal 2016 as base

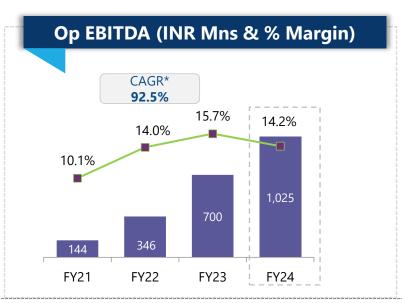
10.57%
Customer Accretion CAGR*

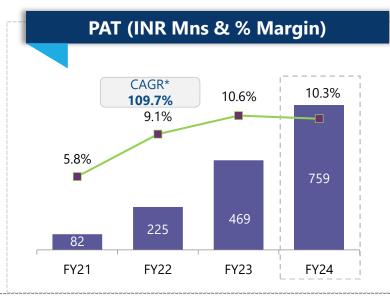
New clients onboarded across diverse industries in FY24

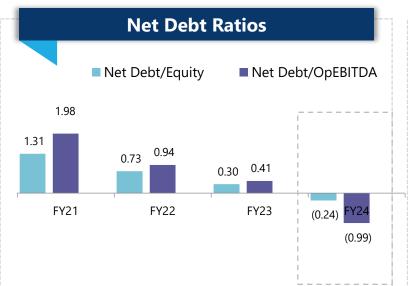
5. Track record of financial performance and consistent growth

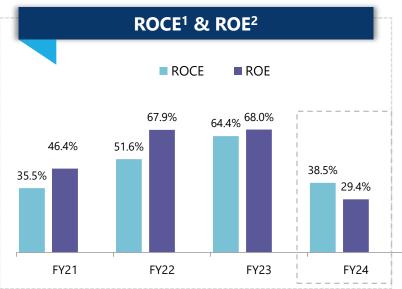


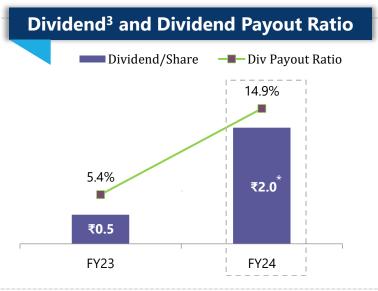












Note: 1 Earnings before interest and taxes expenses (EBIT) for the period/year divided by average capital employed ² Profit for the period/year divided by average Equity; *: CAGR for period FY21-FY24; 2/ Dividend per share in Rupees; * Proposed dividend subject to shareholders' approval.

6. Experienced Board and Senior Management Team (1/2)



Board of Directors



Sanjay Lodha Chairman and Managing Director

- Founded Netweb Technologies in 1996 which was acquired by our Company in August 2016
- Been on Board of Advisors for Intel for the year 2020 and 2022
- BA (hons) in economics & PG diploma in business management



Navin Lodha
Whole Time Director

- Leads West Zone of company's sales and Marketing Dept
- 15 + years of experience in sales and marketing
- Holds bachelors degree in commerce



Vivek Lodha Whole Time Director

- Leads East Zone of company's sales and Marketing Dept
- 15 + years of experience in sales and marketing
- Holds bachelors degree in commerce



Niraj Lodha Whole Time Director

- Leads South Zone of company's sales and Marketing Dept
- 15 + years of experience in sales and marketing
- Holds bachelors degree in commerce



Mrutyunjay Mahapatra Independent Director

- Has served as Deputy MD at SBI & MD and CEO of Syndicate Bank
- 40+ years of experience in Banking and Finance Sector
- Holds Bachelors and Masters Degree in Physics



Jasjeet Singh Bagla Independent Director

- Presently associated with IISER, Mohali
- 23+ years of experience in Research and Academia
- Holds Bachelors and Masters Degree in Science, PhD in Physics



Romi Jatta Independent Director.

- Presently Group Chief Procurement Officer at Minda Corporation Ltd
- 20+ years of Experience
- Holds Bachelors degree in Electronics Engineering



Vikas Modi Independent Director

- Partner in Doogar and Associates, a CA firm Since 2006
- Holds a Bachelors Degree in commerce , CA with membership from ICAI

6. Experienced Board and Senior Management Team (2/2)



Senior Management – led by people with significant experience in HCS Industry



Hemant Agarwal Chief Operating Officer

- 20+ years of experience with the company
- Holds a bachelors' degree in commerce from the University of Calcutta



Other Key Management Personnel

Prawal Jain Chief Financial Officer and Chief Human Resource Officer

- 24+ years of experience in Accountancy and Finance
- Holds a bachelors degree in commerce and is a chartered accountant



Hirdey Vikram Chief Sales and Marketing Officer

- 11+ years of Experience with the company
- Previously associated with HCL Infosystems Limited
- Holds a B.Tech (Information Technology)



Lohit Chhabra *Company Secretary and Compliance Officer*

- 8+ years of experience in secretarial compliance
- Holds a Bachelors degree in commerce and also holds a certificate of membership from the Institute of Company Secretaries of India



Mukesh Golla Chief Research and Development Officer

- 19+ years of Experience with the company
- Holds a B.Tech (Computer Science and Engineering)

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Growth Drivers

NetwebTECHNOLOGIES

Opportunities to realize sustainable growth of the business



Strong Topline Visibility

Pipeline[#] **₹ 34,466** Mn

L1# ₹ **3,142** Mn

Order Book ₹ **4,112** Mn



Enhanced Capabilties

State of the art new manufacturing facility with latest **Surface Mount Technology (SMT)** to be commissioned soon

Partnership with **NVIDIA** as a select manufacturing OEM for **latest Gen Al systems** to unlock potential of Al and High-Performance computing

Launched Intel Sapphire
Rapids & AMD Genoa based
'Make in India' high-end
computing servers



Enhanced Opportunities

Increasing investments in

Generative AI infra by Govt

& Large enterprises to cater
to demand for LLM

oriented solutions

Heavy adoption of Private Cloud across sectors

Huge demand of high-end compute for booming inbound data centers across India

Foray into Europe & Middle East – plan to setup service network in **4 countries** to start with



Expanding Product Portfolio

Forayed into developing new product lines, viz., Network Switches and 5G ORAN Appliances

On-prem Al Sovereign cloud for demand of contemporary data & Al workoads





Thank You



Chief Financial Officer

Prawal Jain

Email: prawal.jain@netwebindia.com



Investor Relations Advisor

Sanjeev Sancheti

Email: <u>ir@uirtus.in</u>

Website: www.uirtus.in











Agenda

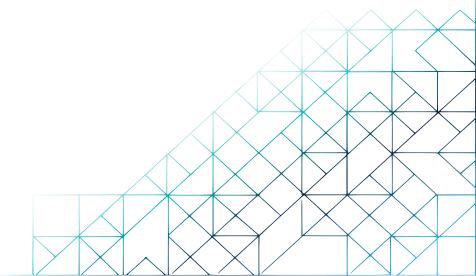


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4 Annexures



Annexure - Key Industry Drivers

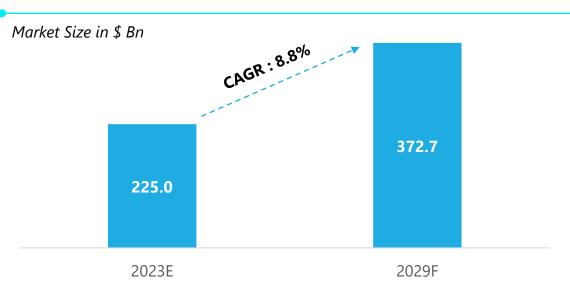


Growth in the Indian IT Industry



Upgrade to 5G, "Make in India" and PLI Schemes are some of the elements that will contribute to the expansion of Indian IT industry

Indian IT Market



India IT market by computation type is segmented into HPC Systems, Workstations, other devices infrastructure, software, IT business services, Emerging tech and telecom services

GOI is expected to make strategic technological investments in the below sectors which is expected to drive the India IT industry



Expected to grow with a CAGR of over 3% by FY 2027, as the GOI plans to invest \$ 102.49 Bn on oil and gas infrastructure; driven by the use of HPC solutions such as supercomputers and AI in the areas like Seismic Data Analysis



Expected to grow at ~8-10% till 2027; driven by the use of HPC solutions such as supercomputers and AI



Expected to grow at a CAGR of 27-30% till 2025; AI helps banks to process large volumes of data and predict the latest market trends, currencies, & stocks



Factors driving IT manufacturing in India



'Make in India' Initiative

'Atmanirbhar Bharat Abhiyan' (Self-reliant India) – To **boost local manufacturing** of mobile phones and electronic components & to **make India a global manufacturing hub**



Production Linked Incentive scheme

Scheme of ₹ 121,950 Mn over 5 years¹ – Incentivise companies who will manufacture specified telecom and networking products – Enterprise Equipment such as Switch & Router



Upgrading network to 5G technology

(Specifical Section 1) Indian telecoms are looking at Open RAN as a potential way to reduce network-related expenses and customize. Open RAN reduces reliance on existing providers



China + 1 Strategy

Tech companies are slowly **shifting production away from China** - In response to growing concerns about the geopolitical tensions & pandemic-induced supply chain disruptions in the last few years



Increasing adoption of AI

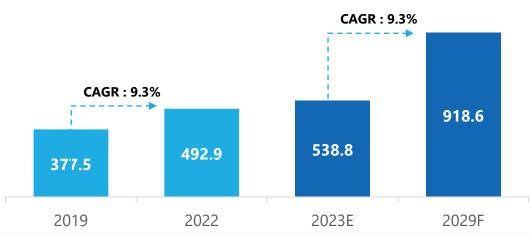
Increasing usage of AI in various industries like telecommunication, BFSI, automobile, oil & gas result in the expansion of Indian IT industry

HPC and Private Cloud & HCI Market



High-Performance Computing Market (HPC)



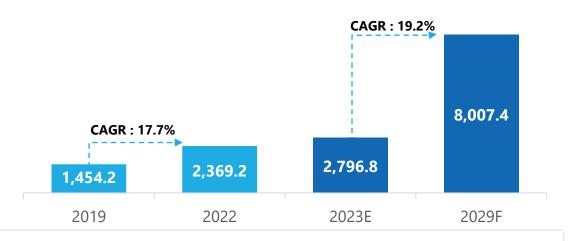


Methodology Key Growth Drivers of HPC Market

- NSM was announced in 2015, to connect national academic and R&D institutions with a grid of more than 70 high-performance computing facilities.
- Only 16.67% of the total budget of ₹4,500 is utilized in 4.5 years for execution of NSM
- In Nov 2022, **EU & India signed** an "Intent of cooperation on High Performance computing and Quantum Technologies"
- Increasing cloud-based monitoring will drive adoption of HPC
- Increased usage of HPC products and services to drug discovery and healthcare; and Increasing investments in the Industrial Internet of Things (IIoT), artificial intelligence (AI), and engineering, which demand electronic design automation (EDA)

Private Cloud and Hyperconverged Infrastructure (HCI) Market

Indian Private Cloud & HCI Market (\$ Mn)



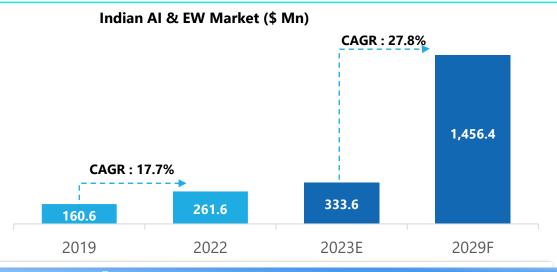
Key Growth Drivers of Private Cloud & HCI Market

- Drop in usage of traditional data centre infrastructure, from 41% to 18% in two years as cloud usage accelerates
- Private clouds offer the same control and security as traditional on-premises infrastructure and makes workload performance predictable
- **Military expects small deployable** communications systems that allows them to take their applications and data into the war field so that they can access them locally.
- HCI and private cloud will witness greater adoption in the India Telecom sector with increasing investment in 5G.
- Unified management, and Automation Unified management promises to reduce the number of tools needed to run IT infrastructure and cuts training requirements, makes HCI easier to scale

Al Systems & Enterprise Workstations and Data Centre Server Market



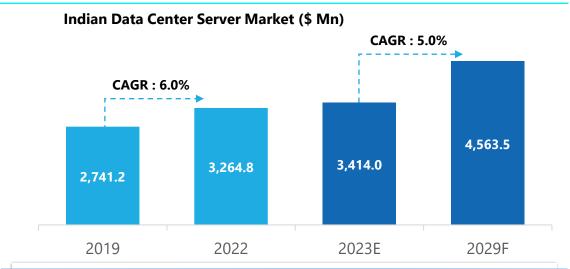
Al systems and Enterprise Workstations (Al & EW)



Key Growth Drivers of AI & EW Market

- GOI in the budget for Fiscal 2024 has announced that "for realizing the vision of "Make AI in India and Make AI work for India", three centres of excellence for Artificial Intelligence will be set-up in top educational institutions
- Growing demand of GPUs in high-end gaming consoles & crypto currency mining market
- Increase in 3D animation, networking and graphics & digital content creation
- Aids in enhancing government payment schemes
- GPU is an integral part of the Al & EW in govt supercomputers
- **BFSI industry generates a lot of data** that needs to be processed and examined with the use of AI & EW.

Data Centre Server



Key Growth Drivers of Data Center Server

- Indian Data Centers to **receive investments up to Rs.1.20 lakh crore**, according to an article from the Economic Times 2022 and a whitepaper from ICRA
- Push for data localization to ensure 75% of the data remains within the country
- The Data Protection Bill, may lead to a significant onshoring of Indian citizen's data from offshore data centers to Indian data centers.
- China plus one Strategy and Make in India Initiatives of GOI promoting growth

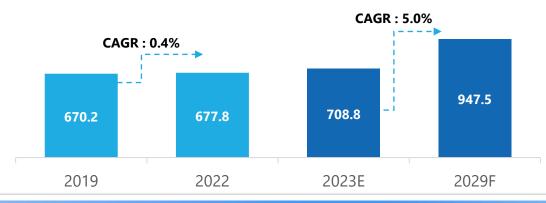
Source: F&S Report

Enterprise Storage and Cloud Managed Services Market



Enterprise Storage System

Indian Enterprise Storage Market (\$ Mn)



Key Growth Drivers of Enterprise Storage Systems Market

- **Rising number of colocation** data centers & increasing unstructured data generated from mobile computing devices
- **Primary workloads for storage deployments in India** that drove the market growth included technology upgrades, ERP upgrades, surveillance, digital transformation & 5G rollouts
- Enterprise storage **has emerged as the most popular** and effective way to store digital data particularly for small and medium-sized businesses.
- The use of SSDs (Solid State Drives) over HDDs (Hard Disk Drives) has grown in popularity across industries due primarily to their superior performance, increased durability, and cost-effective power efficiency

Cloud Managed Services

Indian Cloud Managed Services (CMS) Market (\$ Mn)



Key Growth Drivers of Cloud Managed Services Market

- Rising demand for cloud managed services for business continuity, increase in need for business agility and automation
- Faster and easier deployment of applications with pay-as-you-go model
- Increasing adoption of automated machine systems for e-prescriptions and telemedicine.
- Biotech & pharmaceutical companies are **adopting digital solutions** to optimize drug development process
- National Government Cloud programme known as "MeghRaj" was unveiled by the MeitY in 2020

Source: F&S Report