November 15, 2022

The Secretary
BSE Limited
Phiroze Jeejeebhoy Towers
Dalal Street, Mumbai- 400 001
Fax: 022-2272 2037/2039/2041/3121
BSE Scrip Code: 532348

The Secretary
National Stock Exchange of India Limited
Exchange Plaza, 5th Floor, Plot no. C/l
G Block, Bandra-Kurla Complex
Bandra (E), Mumbai - 400 051
Fax: 022-2659 8237/38; 2659 8347/48
NSE Symbol: SUBEXLTD

Dear Sir/Madam,

Sub: Subex Limited "The Company"- Investor Presentation for Q2 FY23 on November 16, 2022

Further to our letter dated November 14, 2022, intimating the details of Earnings call, and pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find enclosed the Investor presentation for Q2 of FY23 for the Earnings Call scheduled to be held on Wednesday, November 16, 2022 at 3.00 P.M. (IST).

Kindly broadcast the same on your website.

Thanking you

Yours truly,
For Subex Limited

G V Krishnakanth
Company Secretary & Compliance Officer

Investor Presentation
Subex Limited

Nov 2022

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Disclaimer

Certain statements in this presentation concerning our future growth prospects are forward looking statements,

which involve a number of risks, and uncertainties that could cause actual results to differ materially from those in such forward looking statements. The risks and uncertainties relating to these statements include, but are not limited to, fluctuations in earnings, our ability to successfully integrate acquisitions, competition in our areas of business, client concentration, liability for damages in our contracts, withdrawal of tax incentives, political instability, unauthorized use of our intellectual property and general economic conditions affecting our industry
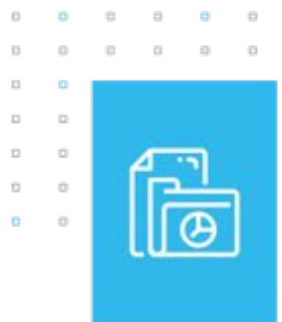
Company Overview

Nature of Business

- Pioneer in enabling Digital Trust for businesses globally

- Focus on six tenets of Digital Trust like privacy, security, risk mitigation, identity and intelligence to enable trust across people, processes & systems

Management

- Managed by handpicked professionals from a cross-section of the industry

- Supported by an experienced second in line management team

Products

- AI Orchestration
- Business Assurance
- Fraud and Security
- Network Analytics
- Partner Ecosystem Mgmt.
- Advanced Analytics
- IoT Security
- Identity Analytics

Subex's evolution as a product company has always reflected our ability to foresee an emerging need or a trend, and then build capabilities to help our customers address the inherent challenges that come with that trend.

Subex Today

1994
Foundation of Company

25+
Foundation of Company

1000+
Employees

300+
Global Installations

90+
Countries
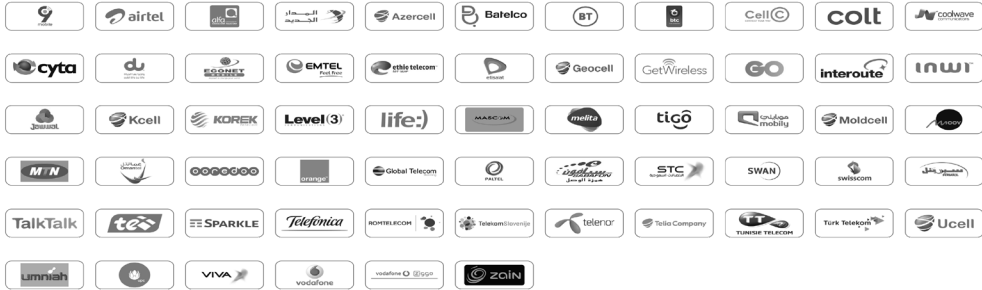
200+
Customers Globally

40+
Industry Awards

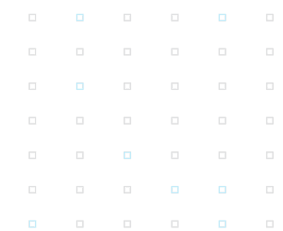**US$ 4 mn**
R&D spend in new areas in FY22

Key Clients

EMEA

ASIA

AMERICAS

200+
Global customers
300+ Installations
90+ Countries
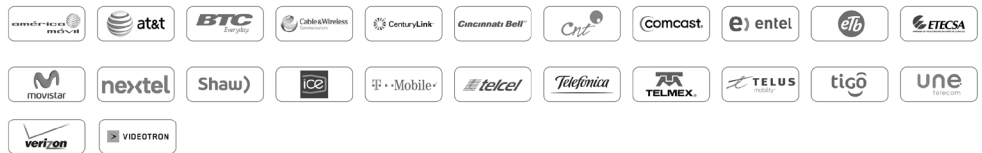
Our Strategic Framework

Our Purpose ——○—— Experience the thrill of unlocking possibilities

Our Vision ——○—— Enriching Lives with AI led Digital Trust

Our Goals ——○—— Vibrant Subex | Revenue Growth

Our Strategy ——○—— 3 Horizon strategy for growth

Enhance the Core
- Revenue Assurance
- Fraud Management
- Network Analytics
- Partner Management

Growth in New Areas
- Sectrio (IoT Security)
- Analytics

Investment in Emerging Areas (Multi-vertical SaaS)
- IDcentral
- HyperSense

Our Values ——○—— Customer Obsession | Commit & Make it Happen | Create Impact | Be Agile | Win Together | Continuous Learning
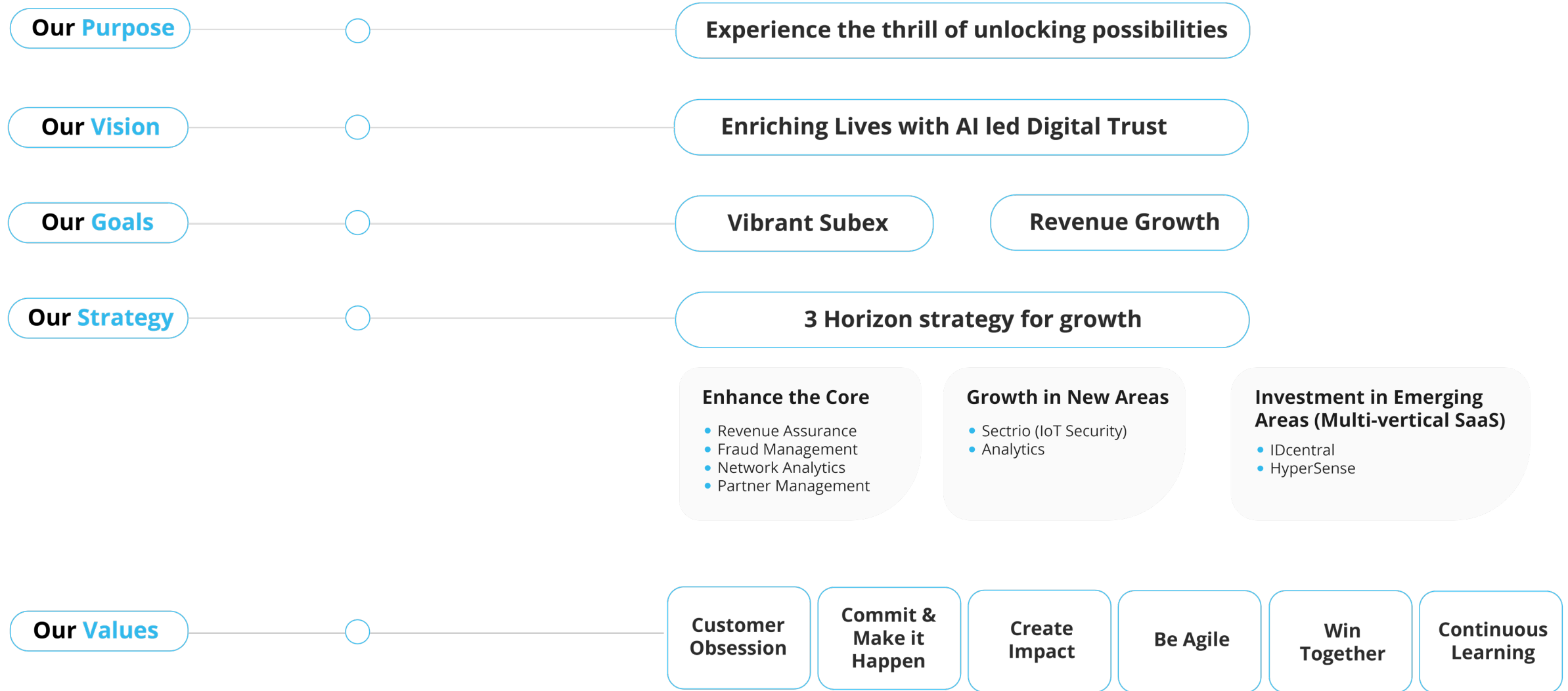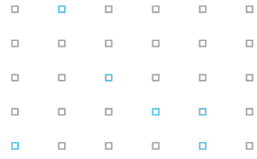
About Subex

Vision:

Enriching Lives with AI led Digital Trust

25+
Years in the Industry

90+
Countries

300+
Installations

1000+
Employees

35+
Industry Awards

Digital Trust

Strategic   **Insights**

Ecosystem   **Identity, Security**

Transactional   **Risk Mitigation**
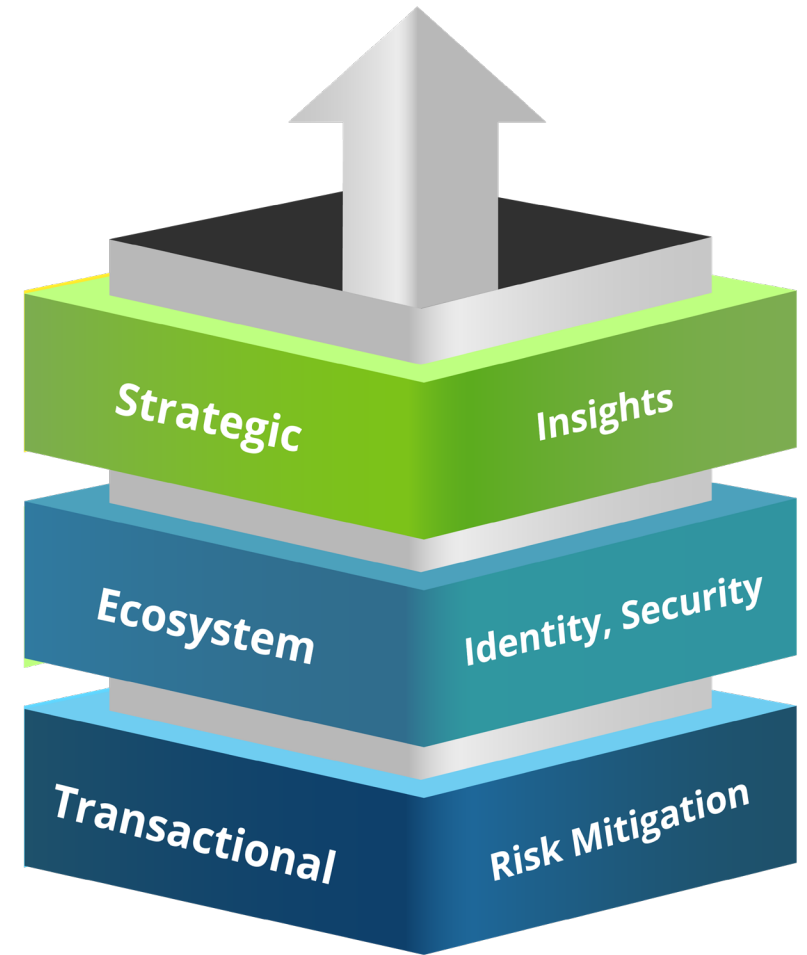
Our AI-led Portfolio

Business Assurance
Move from assurance to creating impact

Fraud and Security
Combat traditional and new-age frauds

Partner Ecosystem Management
Leverage partnerships for digital success

Network Analytics
Empower your Network to Ensure Business Excellence

IoT/OT Security
Secure your credibility, revenue and brand

Identity Analytics
Leverage data for identity verification

HyperSense AI
End to end AI Orchestration platform

AI Services
Custom-built AI Solutions for telcos

Analytics Market Size

Manufacturing

$ 28B
Market Size

16.5%
CAGR

$ 206B
Market Size

12%
CAGR

BFSI

Healthcare

$ 65B
Market Size

28%
CAGR

$500B

$ 122B
Market Size

35%
CAGR

Oil & Gas

Telecom

$ 10B
Market Size

13%
CAGR

$15B
Market Size

20%
CAGR

E-commerce
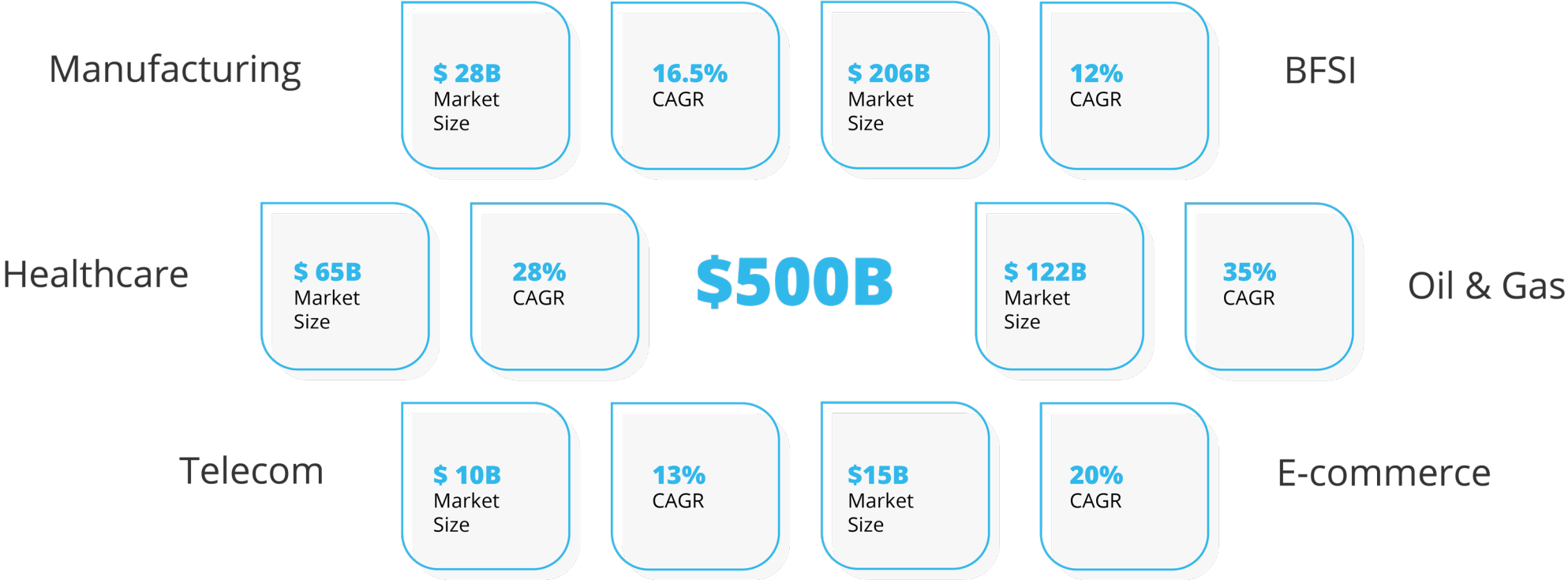
Democratizing AI at scale

Subex aims to bring about AI adoption at scale by enabling **Access, Automation, and Acceleration of AI.**

Access

Expand the group of users that use AI/ML for analytics in an organization

Automation

Automate activities across the Data Science & Machine Learning lifecycle

Acceleration

Accelerate the time to value for Data Science and Machine Learning projects

> *Our aim is to help enterprises realize the full potential of AI by democratizing it at scale. We intend to create over* **100k Citizen Data Scientists** *over the next 2 years.*

Advantages of HyperSense Platform

Elastic and Scalable

Cloud-native and SaaS-based solution.
Support on Premise, Cloud and
Hypbrid deployments

05

04

Streaming Data Analytics

Support hot, warm, and cold data
analytics and its ability to react
in real-time.

03

Fully composable

Achieve modularity and plug-and-play
capabilities via APIs, files, databases,
and streaming options.

02

Unified single platform

Harness the full potential of the business through
automated cohesive platform consisting of
next-gen data analytics capabilities.

01

No-code AI

Widens accessibility to AI and data science
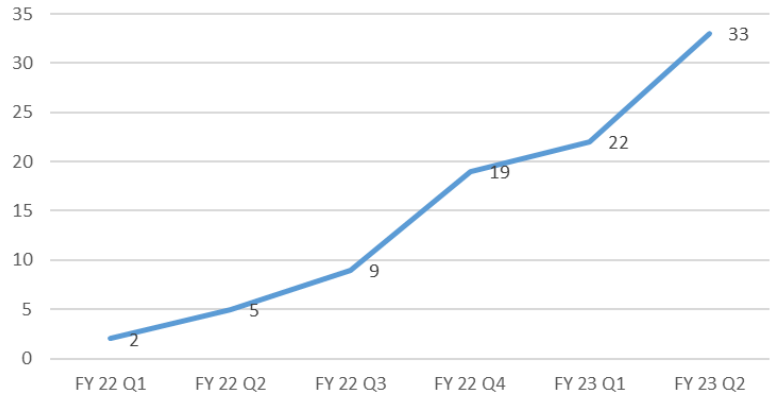to anyone in the organization with codeless AI
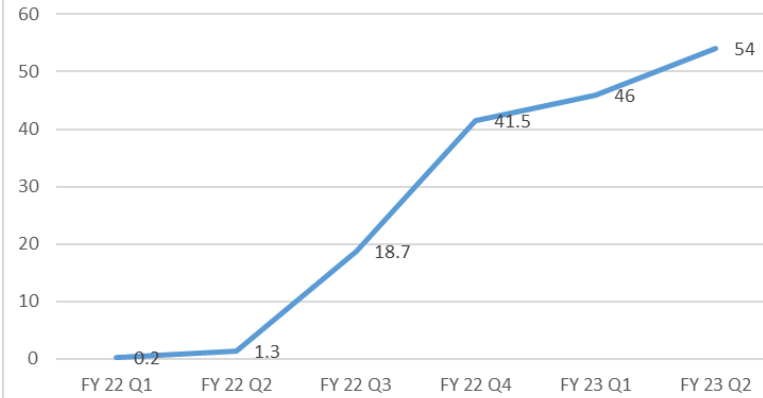
Investment Rationale

- Leader in Digital Trust space and helping businesses thrive by leveraging Digital Trust as a competitive advantage

- Making strong inroads in the multi vertical IoT Security space; IoT Security Market is expected to touch US$ 4.5 billion by 2022

- Incubating virtual startups within the organization to diversify into new areas and verticals

- Sticky Revenue Model – about 60% of revenue is annuity / recurring and >98% customer retention

- Investing heavily in newer areas like Digital Trust and AI/ML, Augmented Analytics and Deep learning-based anomaly detection

- With launch of HyperSense and progress on IOT-Security and ID Central company transitioning towards a Platform based SaaS business model

- Passionate and committed team led by CEO Vinod Kumar with clear focus to put the company on growth track

- Received significant industry validation, notably being mentions within 2 Gartner Market Guide for Hypersense
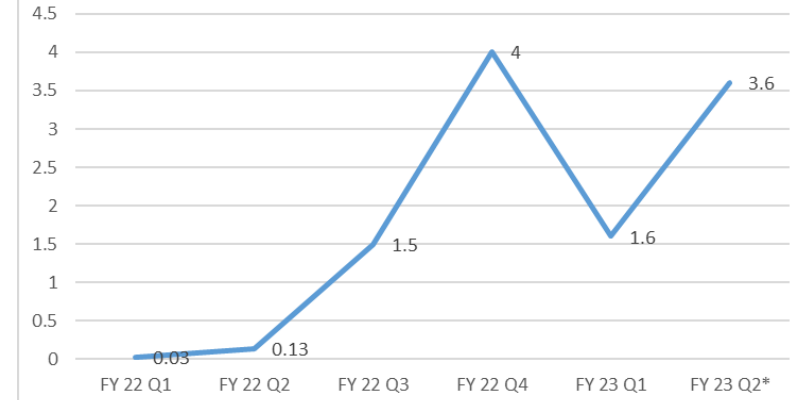
IDcentral Updates

Logos cumulative

2	5	9	19	22	33

Axis values: 0, 5, 10, 15, 20, 25, 30, 35

X-axis: FY 22 Q1, FY 22 Q2, FY 22 Q3, FY 22 Q4, FY 23 Q1, FY 23 Q2

Revenue ('000 USD)

Values: 0.2, 1.3, 18.7, 41.5, 46, 54

Axis values: 0, 10, 20, 30, 40, 50, 60

X-axis: FY 22 Q1, FY 22 Q2, FY 22 Q3, FY 22 Q4, FY 23 Q1, FY 23 Q2

API pulls (in millions)

Values: 0.03, 0.13, 1.5, 4, 1.6, 3.6

Axis values: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5

X-axis: FY 22 Q1, FY 22 Q2, FY 22 Q3, FY 22 Q4, FY 23 Q1, FY 23 Q2*
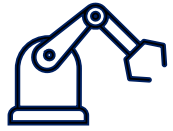
- Onboarded 11 SAAS logos.
- Crossed cumulative 10M API pulls
- Launched Aadhaar+ to reduce Aadhaar availability by more than 20%
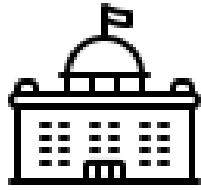
Sectrio **Customers**
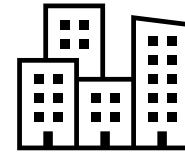
| Manufacturing | Public Sector | Telecom | Smart Cities | Transportation | Oil & Gas |

Why **Subex** is the preferred partner for **Digital Trust**

25 years of experience, **200+** customers

All-encompassing portfolio for **Digital Trust**

Flexible **engagement models**

Deep **domain expertise** and **heavy investments on R&D**

Cutting-edge **technology creating value for customers**

Proven ability to handle huge **volumes of transactional data**

SUBEX
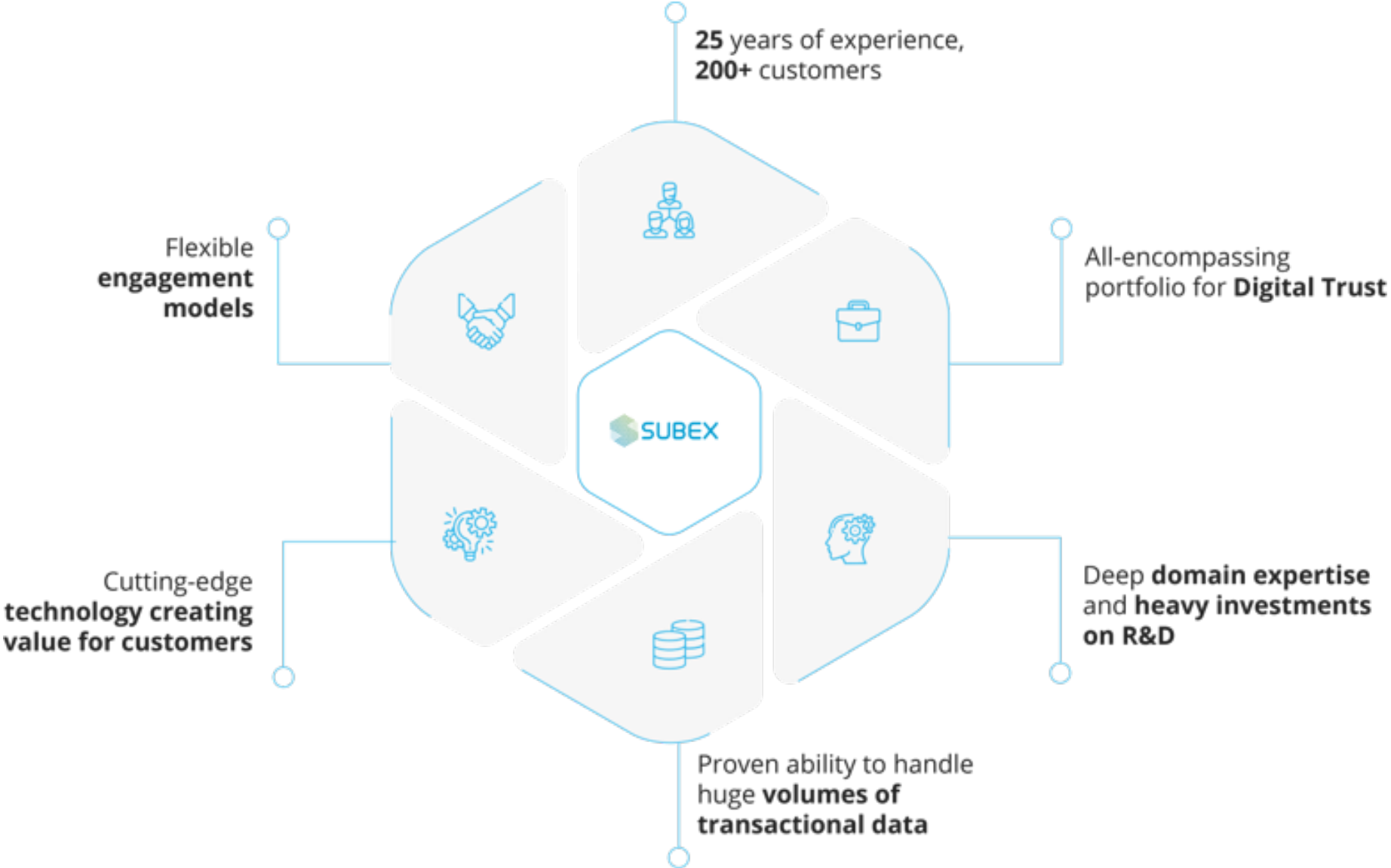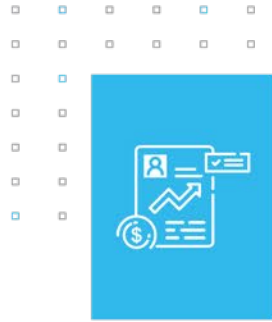
Quarterly Financial Performance
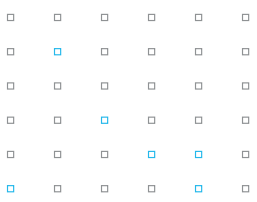
Financial Highlights – Q2 FY23

- Operating Revenue at Rs 745 mn vs Q21FY23 Rs 832.6 mn down by ~ Rs 87.6 mn.

- EBITDA at Rs 3.1 mn vs Q1 FY23 Rs 7.1 mn; EBITDA margin at 0.4% vs 0.9% in Q1 FY 23.

- PBT at Rs (32.8) mn vs Q1 FY23 Rs 4.7 mn;

- PAT at Rs (49.0) mn vs Q1 FY 23 Rs. 55.4 mn.

- EPS is at Rs (0.09) vs Q1 FY 23 Rs. 0.10.
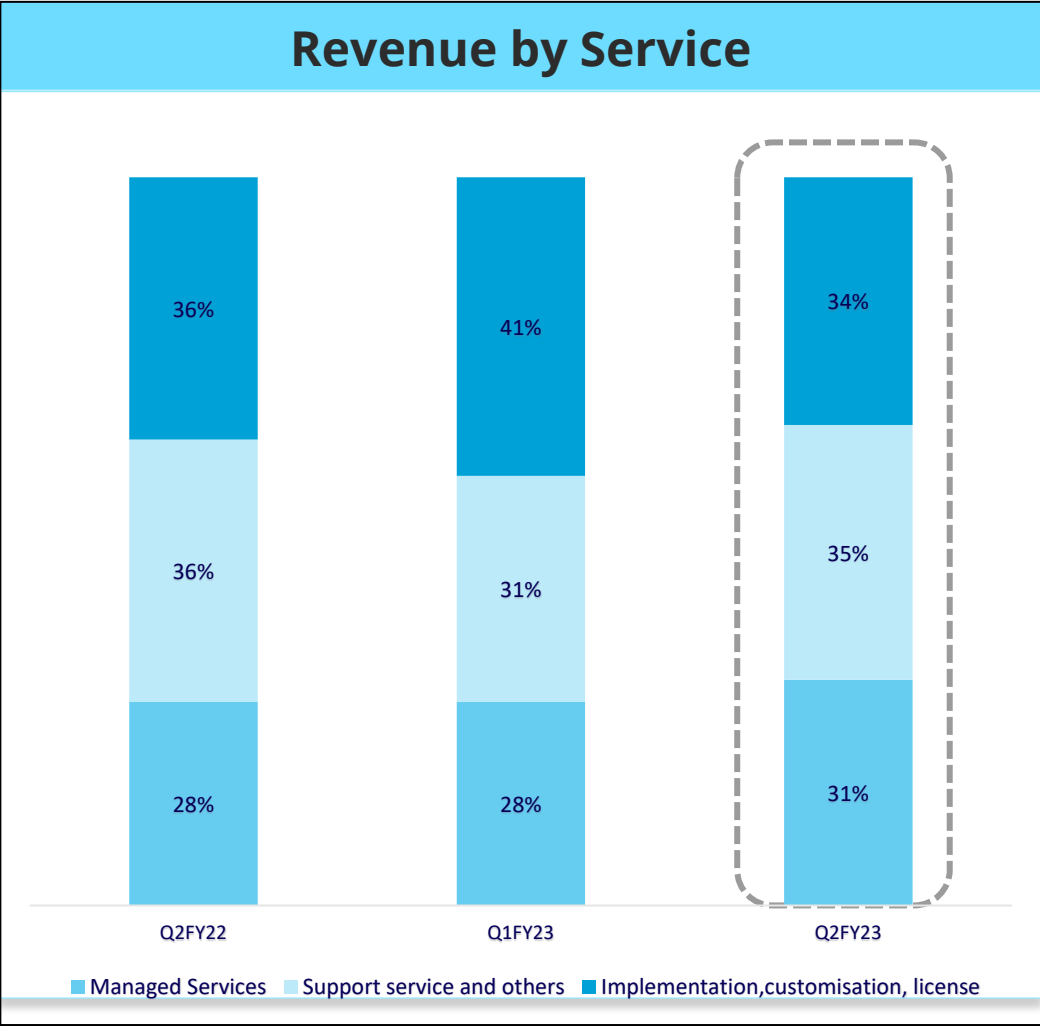
Financial Highlights – H1 FY23

- Operating Revenue at Rs 1577.6 mn.

- EBITDA at Rs 10.2 mn; EBITDA margin stood at 0.6%

- PBT at Rs (28.1) mn;

- PAT at Rs 6.4 mn.

- EPS stood at Rs 0.01.

Other Information

- DSO stood at ~101 days, excluding unbilled trade debtors
- Cash & cash equivalents is Rs 857.2 mn (including term deposits and LMF but excluding margin money deposit).

Revenue Metrices – Q2FY23

Revenue by Region

	Q2FY22	Q1FY23	Q2FY23
APAC and ROW	19%	27%	24%
India	1%	2%	2%
EMEA	62%	56%	59%
Americas	18%	15%	15%

Legend: Americas, EMEA, India, APAC and ROW

Revenue by Service

	Q2FY22	Q1FY23	Q2FY23
Implementation, customisation, license	36%	41%	34%
Support service and others	36%	31%	35%
Managed Services	28%	28%	31%

Legend: Managed Services, Support service and others, Implementation, customisation, license

Consolidated Financial Performance – Q2FY23

Particulars (All Figures in Rs Million)	Q2 FY23 30-Sep-22	Q1 FY23 30-Jun-22	Q-o-Q Growth %	Q2 FY22 30-Sep-21	Y-o-Y Growth %	H1 FY23 30-Sep-22	H1 FY22 30-Sep-21	Y-o-Y Growth %
Income								
Revenue from operations	745.0	832.6	-10.5%	863.0	-13.7%	1,577.6	1,669.0	-5.5%
Other income	9.8	26.5		9.7		36.3	76.8	
Total income	**754.8**	**859.1**	**-12.1%**	**872.7**	**-13.5%**	**1,613.9**	**1,745.8**	**-7.6%**
Employee benefits expense	520.3	515.6		544.2		1,035.9	1,054.9	
Other expenses	221.6	309.9		219.8		531.5	353.1	
EBITDA	**3.1**	**7.1**	**-56.3%**	**99.0**	**-96.9%**	**10.2**	**261.0**	**-96.1%**
EBITDA Margin %	**0.4%**	**0.9%**		**11.5%**		**0.6%**	**15.6%**	
Depreciation	37.5	26.1		24.6		63.6	48.8	
Finance Cost	8.2	2.8		3.3		11.0	7.4	
Profit before tax	**-32.8**	**4.7**		**80.8**		**-28.1**	**281.6**	
Tax Expenses	16.2	-50.7		32.6		-34.5	98.6	
Net Profit / (Loss)	**-49.0**	**55.4**		**48.2**		**6.4**	**183.0**	

Consolidated Annual P&L - Subex

Particulars (All Figures in Rs Million)	FY22 31-Mar-22	FY21 31-Mar-21	FY20 31-Mar-20	FY 19 31-Mar-19	FY 18 31-Mar-18
Income					
Revenue from operations	3334.4	3720.3	3649.8	3481.2	3243.2
Other income	103.7	47.4	56.3	10.1	14.0
Total income	**3438.1**	**3767.7**	**3706.1**	**3491.3**	**3257.2**
Employee benefits expense	2144.9	1972.0	1745.4	1910.5	1747.1
Other expenses	838.1	763.3	962.6	1051.0	1186.7
EBITDA	**351.4**	**985.0**	**941.8**	**519.7**	**309.4**
EBITDA Margin %	*10.5%*	*26.5%*	*25.8%*	*14.9%*	*9.5%*
Depreciation	98.8	137.8	150.8	48.3	51.7
Finance Cost	19.4	29.6	47.7	10.7	44.2
Profit before tax and exceptional items	**336.9**	**865.0**	**799.6**	**470.8**	**227.5**
Exceptional items	0.0	28.7	-3176.6	**0.0**	116.6
Profit Before Tax	**336.9**	**893.7**	**-2377.0**	**470.8**	**344.1**
Tax Expenses	127.0	376.5	314.5	218.6	137.3
Net Profit / (Loss)	**209.9**	**517.2**	**-2691.5**	**252.2**	**206.8**

Recent Updates
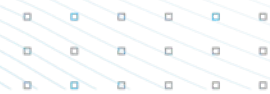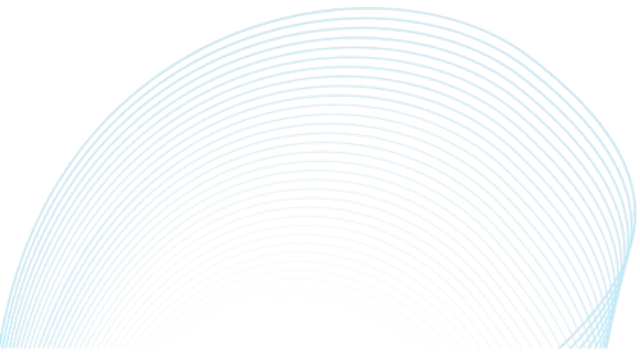
Contribution to Industry Forums

GSMA FASG#24

Rise of the growing threat of cyber-enabled frauds with digital products

GSC Forum – November 2022

5G Roaming, Billing & Settlement: The Age of BCE & Blockchain

RAG New Orleans Conference

Driving effective business decisions with Margin Assurance for CSPs

CFCA Fall Educational Event

The future of Fraud Management with Cloud, AI/ML, and 5G

TM Forum Collaboration

- GB1004B Business Assurance Transformation – Margin Assurance
- GB1004C Business Assurance Transformation – Asset Assurance
- GB1004D Business Assurance 5G Risks & Controls Map
- GB1004E – Dynamic Ecosystem Assurance Framework

Media Coverage

Business Standard
Subex to deploy its fraud management solution for Ethio Telecom

Pipeline
Technology for Service Providers.

Balancing Performance, Profitability, and Cost with Margin Assurance

By: **Suresh Chintada**

PIM
Council Post: Can Supercloud benefit Data Science Industry

The roundtable conference was moderated by Satyajit Nair, Director of Innovations and Architecture at Laerdal along with panellists Anees Merchant, EVP – Global growth and client success at Course5i; Suresh Chintada, CTO at Subex; Ankush Sabharwal, Founder and CEO at Corover and Biswajit Biswas, Chief Data Scientist at Tata Elxsi with the agenda of understanding how supercloud can benefit DS/AI & Analytics.

TSG SundayGuardianLive
India must prepare for AI warfare

A cyber threat report by Sectrio, the cyber security division of IT services firm Subex, shows that in 2021, India not only faced attacks on its critical infrastructure and digital financial systems but also on its numerous small businesses.

Awards

Innovation in Assurance

Innovation in Security

Innovation in AI & Analytics

List of IPs from **AI Labs**

Patents

- Methods and Systems for Correcting Skew in Images, India patent application No: 202241018838).

- Methods and Systems for Advanced Optical Character Recognition, filed under US jurisdiction.

- Methods and systems for secure face liveliness detection, filed under US jurisdiction, India patent application No: 20224103989

- A Template Invariant Systems and Methods for 360-degree Skew Correction in Document Images, to be filed soon under US jurisdiction.

Papers in Conferences

- A Comparative study of Hyper-Parameter Optimization Tools, presented in IEEE Asia Pacific Conference on Computer Science and Data Engineering, Brisbane, Australia, December 2021.

- An Ensemble Model for Face Liveness Detection, presented at Machine Learning Developers Summit, Bangalore, India, January 2022.

- A PSO Based Method to Generate Actionable Counterfactuals for High Dimensional Data, under review in IEEE International Conference on Data Mining.

- Table Detection in the Wild: A Novel Diverse Table Detection Dataset and Method – accepted and presented at ICDAR 2022.

List of IPs from **AI Labs**

Open-Source Contributions

- ExploriPy - a library to do exploratory data analysis.

- Dominance - Analysis – a library for accurate and intuitive relative importance of predictors.

- Datum - A system for TensorFlow Record Dataset Management

- DeepRL - TensorFlow Framework for Deep Reinforcement Learning

- Tefla - Built on top of TensorFlow for fast prototyping of Deep Learning Algorithms.

Talks

- Using Dominance Analysis for Accurate and Intuitive Feature Importance, in PyData Global 2020.

- Leveraging Game Theory for Explainable AI, in Plugin Virtual Conference, 2020

- Counterfactual Analysis for Explainable AI, in PyData Global 2021.

Forum Participations

- Measurement of Trust in AI environment – won sustainability leadership award in TMF Catalyst program, 2021.
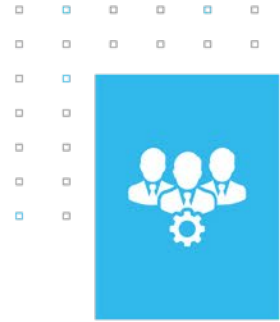
Leadership Team

Board of Directors

Anil Singhvi
**Chairman, Non-Executive,
Non-Independent Director**

Anil is the Chairman of ICAN Investments
Advisors Pvt. Ltd. He has over 30 years of
experience in the corporate sector, out of
which 22 years were with Ambuja Cements
Limited, where he rose from Manager to
Managing Director and CEO. He is also the
Chairman of IDFC Limited and Shree Digvijay
Cement Company Limited.

Nisha Dutt
Independent Director

Nisha is a member on the board of Decodem
Technologies. She has more than 15 years of
experience in consulting across mainstream and
development projects in over a dozen countries.
She has a keen understanding of markets and
consumer behavior at the base of the pyramid,
and works on addressing a range of challenges
for clients across inclusive business divisions,
international foundations and development
finance institutions.

George Zacharias
Independent Director

George has over 30 years of diverse and successful
work experience. He is a graduate from Nagpur
University with a B.Tech in Chemical Engineering and
has a PG Diploma in Business Management from XLRI,
Jamshedpur. He has worked at Grindwell Norton,
Madura Coats Threads, Madura Garments, Sify and
Yahoo! India. He was also the co-founder and CEO of
7Strata Inc and Chief Strategy Officer, Mindtree. He has
been on the Board of Internet Companies including
CricInfo and Refco-Sify Securities. He is presently an
Independent Director on the Board of Matrimony.com.
.

Board of Directors

Poornima Prabhu
Independent Director

Poornima is Legal Head at Lodha Ventures Holdings Private Limited. She has rich experience in corporate law, including mergers and acquisitions, divestment and litigation settlement. Earlier, she was a Counsel at J. Sagar Associates, a law firm. She has also worked with Khaitan & Co., another leading law firm.

Vinod Kumar
CEO & Managing Director

Vinod is responsible for leading the strategic direction for the company and driving its execution by fostering the right culture of leadership and talent development. Prior to becoming the CEO and Managing Director, Vinod served as a COO of Subex where he spearheaded several initiatives that helped the company engage with its customer as a long-term strategic partner. These initiatives, in turn, helped Subex emerge as a global leader in Revenue Management space

Shankar Roddam
Chief Operating Officer & Whole-Time Director

Shankar is the Chief Operating Officer, responsible for Sales, Marketing, Engineering and Delivery. He is management professional with close to two and half decades of experience in Telecommunications, Cloud and PaaS. He holds a Management degree from IMDR Pune, with a specialization in Sales & Marketing with minor in Systems. He is an undergrad in Electronics Telecommunications Engineering and is a graduate in Triple Mathematics.

Management Team

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Suresh Chintada
Chief Technology Officer

Suresh is the CTO of Subex, and brings with him a wide ranging leadership, managerial and technical experience of over 27 years. Prior to Subex, he was worked with companies like Motorola, ARRIS and CommScope, where he built and scaled large global software engineering, professional services and technical support services operations, serving Industry verticals like cable, telecom, mobile and wireless networking. Suresh holds a Bachelor's and Master's Degree in Electronics & Communications Engineering from Osmania University and Post Graduate Diploma in software enterprise management, from IIM, Bangalore.

Management Team

Sumit Agarwal
Chief Financial Officer

Sumit is a seasoned Finance leader having nearly 2 decades of experience in Corporate Finance, Finance Control & Strategy in Healthcare, Education, IT and BPO industries. He has also spent 8 yrs+ as a leader in managing the start-ups and providing thought leadership and facilitating the agile mindset shift. He was previously associated as a CFO with Lead School, a leading EdTech Company, and now a Unicorn, and has participated in a journey of exponential ~10X revenue growth.

Asha Subramanian
Chief Human Resources Officer

As a senior HR leader, Asha is passionate about promoting a people-first, healthy and creative work environment through trust-building and open communication. With extensive experience across many facets of HR, including, but not limited to HR Business Partnering, Leadership Development, Employee Engagement, Performance Metrics, Talent Acquisition, Employer Branding and creating executable HR Strategies, she has helped organizations evangelize their people goals with equal emphasis on employees and external talent. She joins us from Goibibo.

Rohit Maheshwari
Head of Strategy & Products

Rohit is responsible for delivering business growth using innovation and product strategy. He leverages his expertise in artificial intelligence (AI), analytics and digital services to contribute to Subex's solutions and enables its clients to build new offerings, drive business growth and deliver great customer experience. Before joining Subex, Rohit worked with companies like Crompton Greaves and Kirloskar Electric Company. He is a graduate in electrical and electronics engineering from University of Mysore.

Management Team

Kiran Zachariah
Head of IoT security

Kiran is a leader in the field of IoT Security
Solutions. He is responsible for building and
strengthening Subex's presence in IoT Security by
driving revenue growth, setting and executing the
strategic and technology direction of IoT Security
business, building the current team to capitalize
on Subex's investment in IoT space. He has over
17 years of telecom experience in security,
network analytics, machine learning. He also
heads Procurement & IT function of Subex.

Suraj Balachandran
Head of Sales - Sectrio

Suraj is responsible for strategy and direction of
Sectrio's sales organisation. With 23 years of
experience in the ICT industry, he focuses on forging
long term association with customers. With many
landmark wins under his belt, he is an effective
business leader and strategist. Suraj has been
previously associated with Jamcracker Inc., Critical
Path Inc., and Crompton Greaves Ltd. in sales
leadership positions and is a graduate from the IIM,
Kozhikode.

Management Team

Bhavna Singh
General Counsel

Bhavna heads the company's legal functions. Bhavna has over 20 years of legal experience across major IT corporations like Accenture, Wipro and Sun Microsystems, as well as consulting firms like PwC. She has held senior positions in Contracting and Compliance, with rich experience in Software Products and Technology law.

Warren Dumanski
Executive Vice President & General Manager, North America, Subex

Warren heads Subex's North America business, and is responsible for overall P&L for the region. He brings with him over 30 years of experience, spanning across most conceivable areas of wireless and communications technologies.

Prior to joining Subex, Warren was General Manager, Americas at TEOCO Corporation for eight years, where he managed the Sales and Account Management teams. Warren has also played critical, revenue generating roles in other organizations like Celletra, Newfield Wireless, NextG Networks, Spectrian Corporation and Nortel Networks amongst others.