

# BROADENING THE HORIZON

PIONEERING DIGITAL TRUST



## CONTENTS



### Forward-looking statement

In this Annual Report we have disclosed forward-looking information to enable investors to comprehend our prospects and take informed investment decisions. This report and other statements - written and oral - that we periodically make, contain forward-looking statements that set out anticipated results based on the management's plans and assumptions. We have tried, wherever possible, to identify such statements by using words such as 'anticipates', 'estimates', 'expects', 'projects', 'intends', 'plans', 'believes' and words of similar substance in connection with any discussion of future performance. We cannot guarantee that these forward-looking statements will be realised, although we believe we have been prudent in assumptions. The achievement of results is subject to risks, uncertainties and even inaccurate assumptions. Should known or unknown risks or uncertainties materialise, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Readers should bear this in mind. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

<b>001</b>	<b>Overview</b>
002	Strategic Framework
002	Investor Fact sheet
004	A Note to Shareholders
<b>006</b>	<b>Strategic Report</b>
006	Our Business at glance
007	Financial Highlights
008	Products & Services
010	Chief Executive's Strategic View
012	Focusing on Consistent Growth and Shareholder Value
013	Winning in Newer Horizons
014	IoT Security: Poised for Exponential Growth
015	Where We Operate
016	Subex – Making a Difference Together
<b>017</b>	<b>Governance</b>
017	Board of Directors
018	Leadership Team
<b>019</b>	<b>Board's Report</b>
<b>043</b>	<b>Corporate Governance Report</b>
<b>059</b>	<b>Management Discussion and Analysis</b>
<b>076</b>	<b>Standalone Financial Statements</b>
<b>129</b>	<b>Consolidated Financial Statements</b>
<b>180</b>	<b>Shareholder Information</b>

## BROADENING THE HORIZON

WITH AN EXPERIENCE SPANNING OVER A QUARTER-CENTURY, SUBEX HAS ESTABLISHED ITSELF AS THE GLOBAL LEADER IN TELECOM ANALYTICS.

During this period, we have worked with the world's largest telcos, helping them save billions of Dollars. In the process, we recognised how multiple other verticals faced similar challenges we could help alleviate, and this marked the beginning of our foray into newer areas, essentially broadening our horizon.

Through our extensive experience of handling massive volumes of data, we have been successful in building a robust platform that can meet the demanding nature of the digital era. This has allowed us to develop capabilities towards being the pioneers of Digital Trust, to meet the emerging needs of the digital business ecosystem. As we move into our next phase, we will leverage these capabilities to meet the growing needs of businesses across multiple verticals such as IoT, Fintech and Retail to name a few. With the need for Digital Trust increasing across multiple industries, Subex is poised to address their requirements, paving the way for our next wave of sustainable growth. This multi-vertical strategy will enable us to build upon our decades of experience to make Digital Trust as a key enabler, helping businesses to succeed and grow.



# STRATEGIC FRAMEWORK



# INVESTOR FACT SHEET

Subex is a pioneer in enabling Digital Trust for businesses across the globe. Founded in 1994, Subex has spent 25 years in helping Global Communications Service Providers maximise their revenues and profitability. Having served the market over the last 2 decades by providing world-class solutions for business optimisation and analytics, Subex is now leading the way by enabling all-round Digital Trust in the business ecosystems of its customers. Focusing on privacy, security, risk mitigation, predictability and confidence in data, Subex helps businesses embrace the disruptive changes in the business landscape, and succeed with Digital Trust.

## Stock Profile

Sector	IT Software Products
BSE	SUBEX   532348
NSE	SUBEX
Incorporated	December 06, 1994
Issued Shares (Cr)	56.20
Share Price* (₹)	6.99
Market Cap* (₹ Cr)	391.72
52-week H/L Range (₹)	8.01 - 4.40
Float as % of O/S Shares	90%

\*Share price and market cap (BSE) as on May 14, 2019

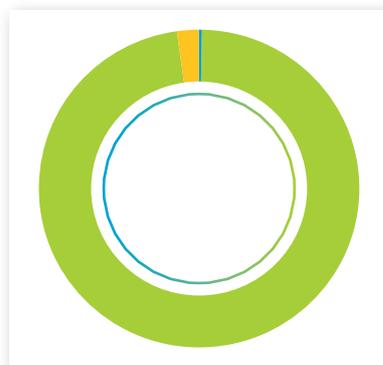
## Valuation Mar '19

Price /Earnings (x)	14.0
EV/Sales (x)	1.1
EV/ EBITDA (x)	9.3

\*Source: Thomson One

## Shareholding Pattern (%)

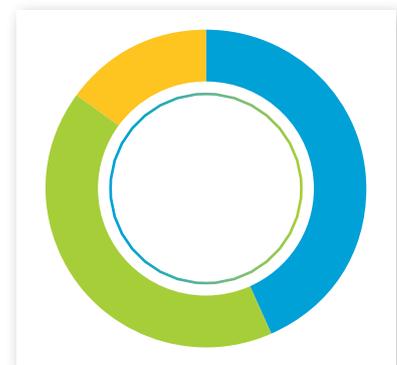
Mar'19



■ Promoters - 0.08%  
 ■ Public - 97.02%  
 ■ Non Promoter-Non Public - 1.99%

## Top shareholders >1 (%)

Mar'19



■ UNO Metals Ltd. - 3.46%  
 ■ AKG Finvest Ltd. - 3.30%  
 ■ Stock Holding Corporation of India Ltd. - 1.19%



### Investment Highlights

- Pioneers in the space of Digital Trust
- Leading player in the telecommunication space focusing on products to communications service providers (CSPs) globally to drive digital transformation and competitive differentiation
- 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 organisation to diversify into new areas and verticals
- Sticky Revenue Model with long client relationship
- Investing heavily in newer areas like Digital Trust and AI/ML, Deep learning based anomaly detection
- Passionate and committed team led by new CEO Vinod Kumar Padmanabhan with clear focus to put the Company on growth track
- Zero debt with operating cash flow of ₹55 Crore
- New initiatives expected to impact revenue growth starting FY20



## A NOTE TO SHAREHOLDERS

# DEAR SHAREHOLDERS,

It gives me great pleasure to address and update you on the progress made by Subex in the last financial year.

The two areas of focus that were of primary importance to me since I took over the role of CEO in last year was revenue growth and a vibrant Subex. And to do this, we rediscovered our purpose, values and set our vision to be the largest player globally in the space of Digital Trust. This vision further dovetailed into our three-horizon strategy wherein horizon 1 consisted of our core areas; horizon 2 consisted of high-growth areas of IoT security and analytics; and horizon 3 consisted of aspirational areas of automated multi-vertical anomaly detection and digital identity.

I am happy to announce that both from a strategy and execution perspective, we did well during the course of last year. We closed the year with revenue of ₹348 cr which was a growth of 7.3% over the corresponding number of ₹324 cr in the last fiscal year. The Profit After Tax also saw a jump of 21.7% to finish the year at ₹25.2 cr. While we do understand that these are small beginnings, what gives us confidence is the fact that our outlined strategy is definitely taking shape and we see a strong traction for growth going into the next fiscal year.

Let me provide you a brief view of how we did in each of these horizons. The market segment of telecom BSS i.e. Business Support Systems software that predominantly covers horizon 1 areas is expected to remain flat. As a global leader in most of the areas that we operate in this segment, our effort was to perform better by increasing our market share with differentiated offerings. We embedded purpose-built AI/ML into our products, leveraged technology to



# 7.3%

growth over the corresponding number of ₹324 cr in the last fiscal.

However, the proof of the pudding is the fact that we have met the internal target of US\$5 million contracted business in the very first year of operation on horizon 2 products.

effectively manage huge data volumes, compute requirements, and thereby created significant competitive advantage during the course of last year. We are competing very well with a strong pipeline of new opportunities further strengthened by a phenomenal last quarter that resulted in a 30% increase in new business bookings over the previous year. The Q4 FY19 results reflect the impact of these higher new business bookings.

**Horizon 2** is our key growth area at the moment. With this target, our intent was not only build on the initial advantage that we have from a technology perspective but also increase the coverage of as many segments as possible. Towards this end, we have secured customers in a diverse range of verticals like smart cities, oil and gas, connected cars, manufacturing and IoT connectivity providers to name a few. Our honeypot lab has been enhanced and we have also carefully extended it to top research facilities in Singapore, Dubai and Europe. This proactive approach of generating threat signature is becoming a key differentiator of our digital security solution. ACT our Analytics Center of Trust, the other product offering in the horizon 2 portfolio has now been extended to two customers and both are being driven very strategically at this point.

However, the proof of the pudding is the fact that we have met the internal target of US\$5 million contracted business in the very first year of operation on horizon 2 products.

**On horizon 3**, which is the aspirational areas, we are working on much larger use cases and have launched CrunchMetrics, an AI/ML based multi-vertical anomaly detection in January this year. After successful completion of PoCs, we have now started engagement with two Tier 1 telcos in Europe and APAC. We have also started POC with a large Fintech player in India and are confident of showing good results soon. The second product in horizon 3 addresses digital identity management, and this product will be ready for launch in the first quarter of FY 20.

Subexians, our people continue to be the greatest asset to Subex. I am pleased to announce that we have added some exceptional talent during the course of this year. We brought a new COO, CFO and a Company Secretary. We also strengthened the domain and business consulting side by bringing heavyweights in the industry with over 20 years of hands-on experience. We now have a well-oiled team that is committed to drive the growth strategy. We have also executed the first phase of ESOP allocation and have all key Subexians covered.

So, what does the future hold for us? Based on the market reaction and general feedback, our growth strategy seems to be right and on mark. Our focus going forward will be on execution of this growth strategy. There are three key global trends that we are tracking and intent to leverage for our growth. The first is increasing importance of Digital Trust;

second, the onset of 5G and mobile-edge computing and finally digital identity becoming central to digital economy. With access to state-of-the-art technology and also the biggest bank of digital threat signature and extensive coverage, we believe we are well positioned in our pursuit of being the leader in Digital Trust. We intend to invest heavily to scale the coverage, both on the technology and market coverage factor to drive value not only to our customers but also to our associates and shareholders.

Finally, I want to place my deep appreciation to the Board who stood behind us and supported us in every step of this long and exciting journey in front of us. My thanks are also due to the Subexians, without whose commitment and zeal we will find it hard to accomplish the growth targets in front of us.

*"A journey well begun is half done"*, goes the saying. We believe we are in that spot and I am confident that the remaining part of the journey will be one that we will cherish in the foreseeable future.

Warm regards,

**Vinod Kumar Padmanabhan**

*Managing Director  
& Chief Executive Officer*

STRATEGIC REPORT

## OUR BUSINESS AT A GLANCE

Digitalisation has changed our lives in more ways than we can imagine. What makes it even more interesting is the pace of these changes and their impact on businesses. Today, status quo is transient and does not ensure security or leadership in the market. Businesses face the risk of obsolescence if they fail to innovate or adapt and hence there is a need to be ahead of the curve in every aspect of business – be it technology, business models, strategy or customer engagement.

In this backdrop, the one aspect that lies at the intersection of opportunities, risks and vulnerabilities is Trust. Trust is the centerpiece for every interaction on a personal, societal and business level – in both traditional and digital business models.

With the lines blurring between the digital and physical worlds, multiple disparate elements like people, processes and products come together to work in tandem. Digital Business revolves around agile and ephemeral digital interactions and leverages digital supply chains that are established dynamically to enable each interaction. In such a scenario Digital Trust becomes the key enabler for high-quality digital interactions by measuring and quantifying expectations of an entity – specifically validating who or what it claims to be, and if it will behave in an expected manner within a digital business transaction. Digital Trust is viewed as the

lifeblood or currency of digital business, and it wraps around every aspect of digital business.

As an organisation handling huge volumes of data from different sources, structures and at varying velocities for more than two decades, Subex is well poised to help businesses leverage Digital Trust to succeed in the digital era. Focusing on privacy, security, risk mitigation, predictability and confidence in data, Subex leverages its world-class software suite to help organisations infuse Digital Trust into their ecosystems. Subex helps drive Digital Trust across multiple dimensions addressing Transactional Trust, Competence Trust and Representational Trust across its customers’ businesses, consumers and partners. Addressing each of these dimensions of trust is necessary to create an all-encompassing, robust and fail-proof framework for Digital Trust, and our portfolio of products and solutions is designed to do exactly that.

To summarise, multi-dimensional, multi-directional Digital Trust is the key to succeed in the digital era, and Subex is leading the way by enabling businesses create inspiring digital experiences.



# FINANCIAL HIGHLIGHTS

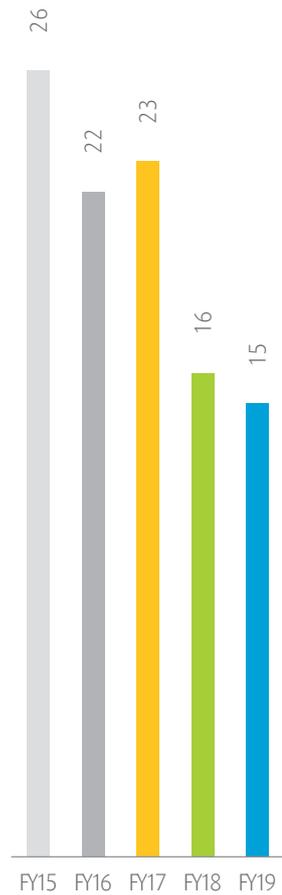
Revenues (₹ Cr)



Gross Margin (%)



EBITDA Margin (%)



## PRODUCTS & SERVICES



### ROC Revenue Assurance

- Provides a comprehensive view of an enterprise by providing better visibility into risks surrounding operations, revenue and margins.
- Built around big data and focused analytics capabilities, the solution addresses the new, complex and critical challenges faced by Revenue Assurance teams globally.



### ROC Fraud Management

- Built to increase fraud prevention by eliminating known frauds, uncovering new fraud patterns, minimising fraud run time, augmenting internal controls, and supporting continuous fraud management process improvements.
- Combines traditional rules engine, advanced AI/ML capabilities and scalable architecture to ensure proactive detection of fraudulent activities on the network
- Ensures that the system can be easily integrated with the ecosystem by utilising readily deployable interfaces



### ACT (Analytics Center of Trust)

- Provides an end-to-end analytics framework to ensure a successful Analytics Journey
- Ensures the right analytics strategy by establishing CSPs current maturity, defining the business vision, and identifying the required road map
- Delivers real-time insights on the shifts in trends across the spectrum through a trusted information infrastructure powered by AI/ML Capabilities
- Provides Analytics as a Service to deliver actionable business intelligence around Product, Customer, Risk and Revenue



### ROC Route Optimisation

- Covers end-to-end processes from dial code/destination operator rate imports to switch updates
- Enhances visibility and control of critical processes
- Helps operators drive effective operations, enables near real-time detection and accelerates leakage recovery cycles