subex
powering the ROC

Optimising Global Telecom Business

Subex Limited

Annual Report 2015-16

2015-16 highlights (consolidated)

324.52
(₹ crore)
Revenue

65.42
(₹ crore)
EBIDTA

200+
Customer base

900+
Employees

Subex Today

Financial strength

- More than US$ 49M in Revenue
- EBITDA higher than most BSS vendors

Global presence

- Development centres in India, US and UK
- 200+ customers and 300+ installations in over 70 countries
- Customers include 39 of top 50 operators* and seven of the world's 10 largest # telecom companies worldwide

**Telecom Operators 500 2015 ; #Forbes' – The World's Largest Telecom Companies 2015*

Intellectual capital

- Prudent combination of global and local professionals
- 900+ Subexians delivering market-leading software products

Award-winning innovation

- Featured as one of the '10 companies to watch out for in 2015', Frost & Sullivan, March 2015
- Awarded GTB Innovation Award 2016 with BTC Botswana, for 2015 with Mobily and for 2014 with Telstra
- Carriers World Award 2015 for Best Security/Fraud Solution; Telecoms Award 2015
- Conferred Market Leader in Financial Assurance 2012 by Frost & Sullivan
- Pipeline Innovation Award 2016 and 2013

Rapid and far-reaching changes in the telecommunications landscape are increasing the risk of revenue leakage. Today's operators need to cope with complex network systems, converged service offerings, multiple third party partners and a rise in outsourcing, all of which creates the potential for inaccurate data capture and billing, and increased fraud. .

(Source: KPMG Global Revenue Assurance Survey)

The number of connected objects, representing the IoT ecosystem, is expected to reach 50 billion by 2020.

(Source: Cisco)

The implication is that communication service providers will need to continuously invest - 18-20% of revenues annually - in their networks.

(Source: Ovum - Communications Service Provider (CSP) Revenue & Capex Forecast: 2014-19)

The conclusion is evident. Communication service companies will need to increasingly turn to focused solution providers like Subex.

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.

- Subex is a preferred telecom solutions provider
- Enjoying focused and specialized domain knowledge
- Mining rich data resident with telcos
- Providing Big Data analytic solutions
- Empowering telcos to embark on informed strategy
- Helping customers reduce subscriber churn and enhance user experience
- Enhancing competitiveness and taking the customer's business ahead

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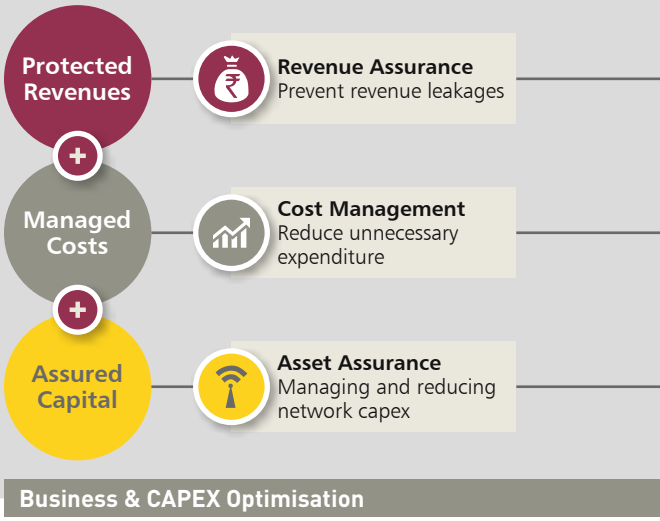
Background

Subex is among the leading global providers of Business and Operations Support Systems (B/OSS) that empower communications service providers (CSPs) to achieve competitive advantage through business and capex optimisation.

The distinctive Subex value proposition



Presence

Subex is headquartered in Bengaluru with global delivery centres in India, US and UK. The Company has subsidiaries at US, UK, Singapore and Sharjah apart from branches in Italy and Dubai.

Offerings

Subex provides industry-leading B/OSS solutions to leading global telecom service providers. Subex's ground-breaking ROC® (Revenue Operations Centre®) is globally respected as a sectoral game-changer.

Subex is respected for its ability to provide integrated infrastructure services under one roof. The ROC® consolidates disparate operations, empowering service providers to monitor revenue chains, identify risks, enhance returns, strengthen hands-on management and minimize capital expenditure.

Listings

The Company's equity shares are listed on the Bombay Stock Exchange Limited (BSE Ltd), National Stock Exchange, London Stock Exchange and Singapore Stock Exchange. The market capitalization of the company as on March 31st 2016 was ₹ 447.50 crore.

Clientele

The Company's 200+ client base is spread across 70 countries. Subex's customers include 39 of top 50 telecom operators* and seven of the world's 10 largest# telecom companies worldwide. The company has more than 300 installations across 70 countries.

**Telecom Operators 500, 2015*

#The World's Largest Telecom Companies 2015 – Forbes

Fraud Management
Prevent losses (fraud & defaulted payments)

Credit Risk Mgmt.
Proactive risk reduction

Partner Settlement
Manage inter-carrier, partner expenses

Route Optimization
Manage and forecast network cost information

Capacity Mgmt.
Holistic view of network capacity

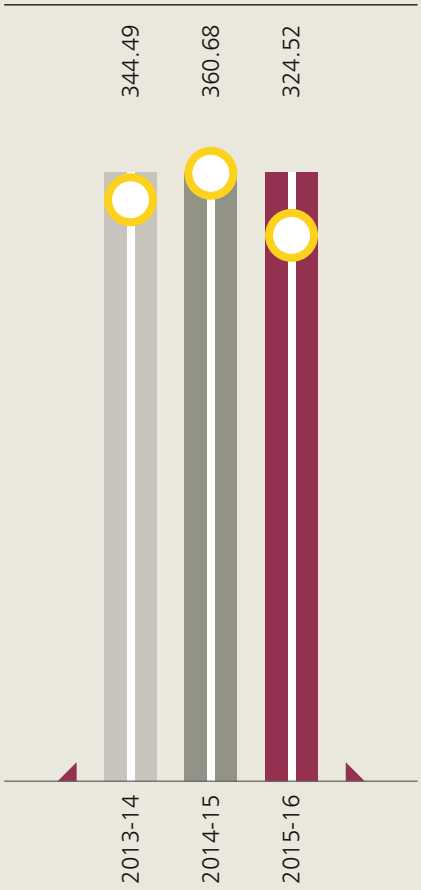
Data Integrity Mgmt.
Network discovery, reconciliation, analytics

Achievements

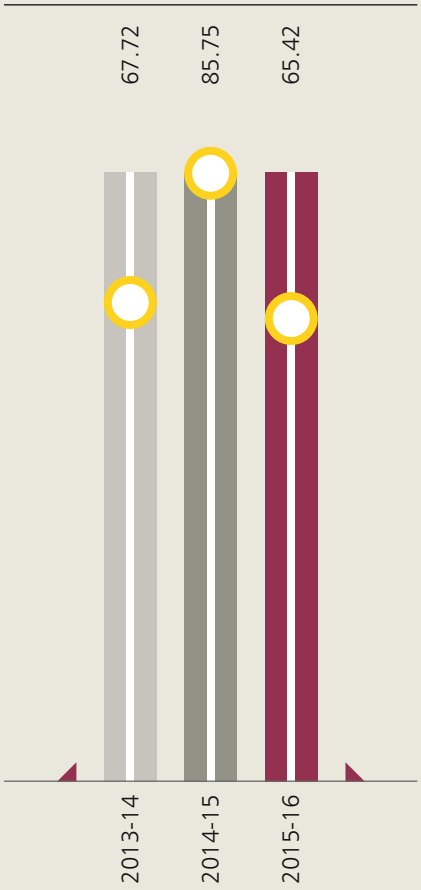
- Subex enjoys a conspicuous presence in industry forums like TM Forum, CANTO, GSC, CFCA and GSMA
- Subex was the first company to offer an integrated solution suite for revenue analytics, cost analytics and network analytics
- Subex enjoys a first-mover's advantage in the asset assurance space, making it possible to substantially moderate a customer's capital expenditure
- Subex was the first to offer a purpose-built data integrity management suite
- Subex's pioneering Revenue Operations Centre® empowers telecom service providers to coordinate operational control
- Subex was the sector's first company (in collaboration with Swisscom) to develop an operator/vendor risk-reward share model for fraud management

Our performance in numbers

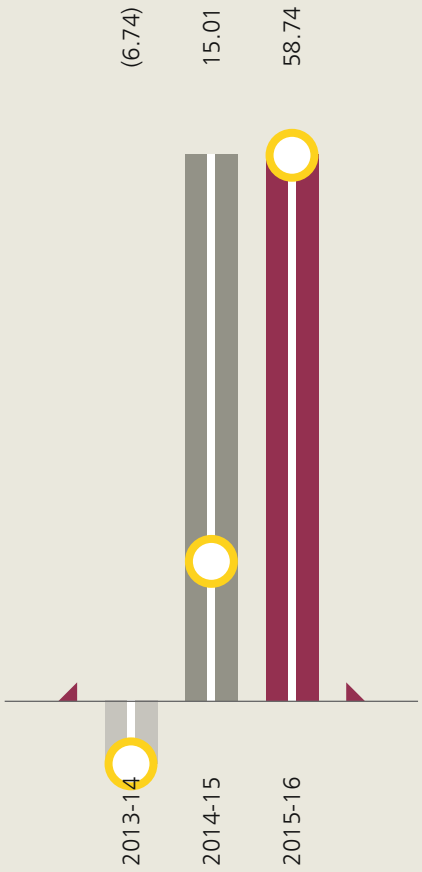
Revenues*
(₹ crore)



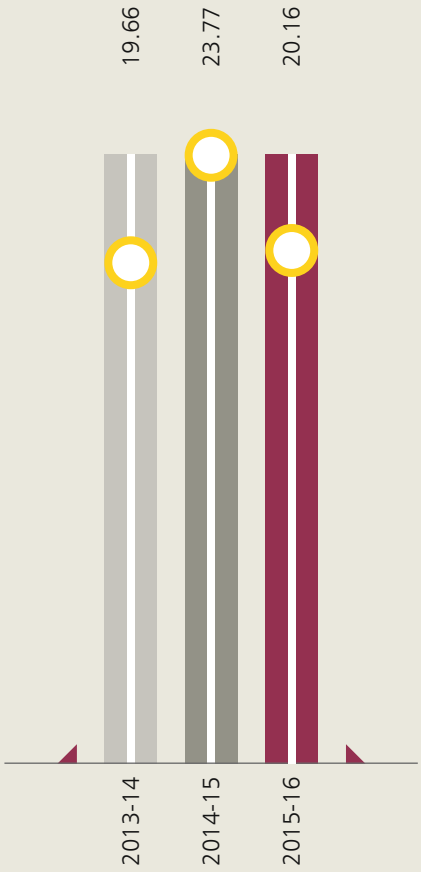
EBIDTA
(₹ crore)



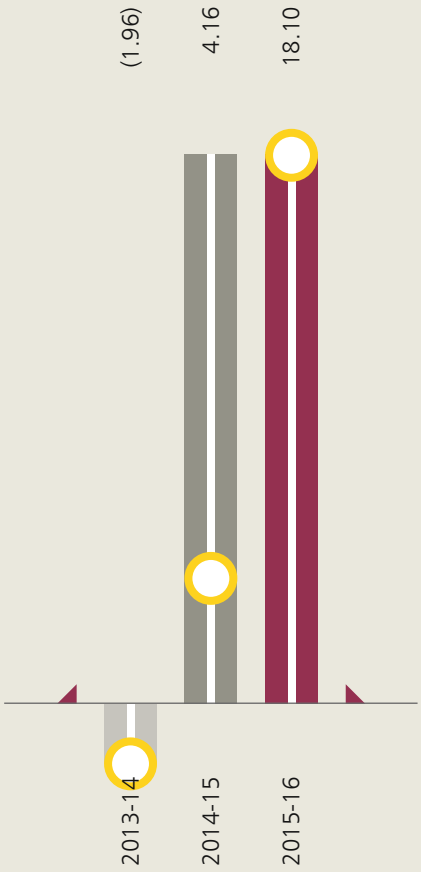
PAT
(₹ crore)



EBIDTA margin
(%)



PAT margin
(%)



* Inclusive of other income

MD and CEO's **message**

Dear Shareowners,

The global telecom industry continues to grow through customer acquisitions and new technology adoption.

The global subscriber penetration is around 63%, with regional penetration rates ranging between 43% in sub-Saharan Africa and 85% in Europe.

The global subscriber base is estimated to reach the 5.6 billion-mark by 2020, by which point over 70% of the world's population could own a mobile phone subscription.

The traction in mobile phone ownership is being catalysed by 4G, the connection base for which exceeded the 1 billion mark in 2015 across 151 countries.

Interestingly, while there has been a significant subscriber increase, there has been a decline in the average revenue per unit on account of increased competition. During the last couple of years, the entry of a number of OTT players eroded voice and text revenues of major telecom companies. There is now a premium on the need among such companies to enhance average margin per user through the optimisation of capital and operating investments.

The growing concern among telecom service providers is related to revenue leakages and the fact that ongoing network capital expenditure is affecting their business returns. Even as these returns are under evident pressure, telecom service providers are required to sustain the launch of new services, reduce time-to-market and enhance customer experience.

There is a growing recognition among telecom service providers that with the ability to pass costs on to customers through higher tariff no longer possible, there is an urgency to seek efficiencies, improvements and margins from within.

This recognition is turning the attention to specialized players like Subex, who enjoy an extensive understanding of how telecom companies work and bring that domain insight to helping clients enhance their competitiveness, share and brand.

Sectoral landscape

The overall landscape of the global telecom sector continues to be optimistic for Subex.

For one, total mobile revenues reached more than $1 trillion in 2015, an increase of 1.8% on 2014.

Sub-Saharan Africa has historically been the fastest-growing region, but annual growth there has almost halved. Europe returned to growth in 2015 after two years of decline.

The proliferation of 3G and 4G networks reflects the growing ubiquity of smartphones. Adoption reached 65% of the connection base in the developed world by end of 2015, ranging between 59% in Europe and 74% in North America. Interestingly, the developing world is not too far behind; smartphones accounted for 40% of the user base in these geographies by the end of 2015 (up from 5% in 2010).

At a consolidated level, global connections are expected to grow at an annual rate of 3.9% by 2020. In line

with contemporary subscriber trends, we expect that developing countries will continue driving the growth of the global telecom sector over the next five years: an annual growth of 4.3% till 2020 (down from 7.7% during the last five years), while connections across the developed world could grow by 2% annually over the same period.

Telcos monetised data consumption surge by offering a number of bundled services. The adoption of new technologies to support data surge is expected to drive capital investments, stretching Balance Sheets even further. The result is that telcos need to find ways to improve earnings by optimising operations.

The reality is that most telecom service providers are far from achieving their desired financial targets, with as much as 30% of their costs incurred on account of reworking and over-processing. This is true not only in saturated markets such as North America, but also in emerging markets like Eastern Europe.

The bottomline is that telcos seek to moderate capital investments. Around 80% of the operator's revenues are still derived from legacy OSS/BSS systems, which continue to operate as silos, leading to massive data within the service provider's domain remaining unutilised. Consequently, a number of service providers lack visibility when it comes to enterprise-wide and subscriber-centric revenues, costs and margins. What most need is a real-time mechanism to study the impact of changes in operating parameters on their profitability.

This is where Subex comes in.

We streamline operations, minimise costs, help clients moderate capex and improve customer experience.

Over the years, our various products and solutions have demonstrated significant savings for global clients. Our analytics have helped service providers arrive at a precise understanding of 'what happened', understand 'why it happened' and forecast 'what is likely to happen' leading to enhanced value and viability.

Besides, I am pleased to state that a large proportion of our revenues continue to be derived from longstanding customers, indicating that through the value of our offerings we were able to transform one-off transactions into extended and repeat engagements. We believe that this relationship-driven model, where we acquire a deep insight into the businesses of our customers, makes it possible for us to graduate from projects to solutions and from a position where we deliver what we have been asked towards assuming a larger position of telling clients what would be holistically good for their business.

Outlook

The outlook for our business continues to be optimistic.

China is the world's largest smartphone market, India following closely. India expects to add almost half a billion new connections over five years catalysed by a growing traction for smartphones and data-intensive applications, particularly video streaming on mobile networks. The result is that data traffic is likely to explode, with volumes forecast to grow at a sharp CAGR of 49% over the next five years – a more than seven-fold increase equivalent to a global average of 7 gigabytes per subscriber per month.

In North America and Europe, subscribers on an average consume 4.4 and 1.8 gigabytes per month respectively, compared to around 0.5 gigabytes per subscriber in Africa. By 2020, the average subscriber in North America and Europe is likely to consume around 22 gigabytes and 12 gigabytes of mobile data per month respectively. By contrast, subscribers in sub-Saharan Africa could consume 3 gigabytes per month on average.

In the years ahead, the Asia Pacific and Latin American nations are expected to lead the growth and it is expected that smartphone connections will increase by 2.6 billion by 2020, a significant 90% plus coming from developing regions.

With limited scope for subscriber growth in developed markets, coupled with an increase in competition and a challenging macroeconomic climate in developing markets, growth over the next five years could be relatively modest at best - an annual average rate of just under 2% to 2020.

At Subex, we believe that growth in the telecom markets should strengthen viability and enhance cash flows that could, in turn, strengthen prospects for telecom sector-focused service provider like ours.

The message that I wish to send out is that Subex is adequately prepared. The company has built its business ground-level up and is poised to perform even better.

On behalf of the entire Subex team, I would like to thank each stakeholder for supporting us in our journey.

Regards,

Surjeet Singh,
Managing Director and Chief Executive Officer

Subex. Enriching the customer experience. Optimising network investments.

Following the extensive use of smartphones and mobile internet growth, communication service providers now enjoy access to unprecedented data - customer profiles, device data, network data, customer usage patterns, location data, apps downloaded, clickstream data and more.

The effective management of this data mountain warrants investments. In just the last five years, global mobile operators invested more than US$880