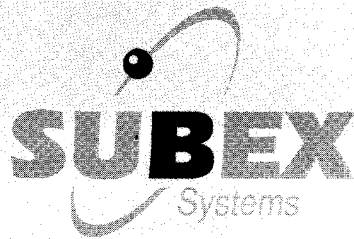


Subex Systems Limited Annual Report 2003-04



Revenue Maximization Solutions

INcharge™
Find. Plug. Get going.

Ranger™
Detect. Alert. Get going.

Revenue Assurance System

- ♦ Audits the entire OSS chain, end-to-end.
- ♦ Helps pinpoint the source of Revenue leakage.
- ♦ Allows drill-down from invoice level to the event record level.

Fraud Management System

- ♦ Combines rule-based, alarm management techniques with AI and neural network technology
- ♦ Provides a complete Fraud management system with flexible work flow.

WWW.SUBEXGROUP.COM

CONTENTS

Board of Directors	3
Financial Highlights	4
Chairman's Letter to Shareholders	6
Managing Human Resources In a Software Product Company	10
Subex Development Process	14
Future Tense! - Fraud in Next Generation Telecoms Environment	18
Financial Statements	21
Directors' Report	22
Report on Corporate Governance	27
Additional Information to Shareholders	31
Auditors' Report	37
Balance Sheet	40
Profit and Loss Account	41
Cash Flow Statement	42
Schedules	43
Balance Sheet Abstract	57
Management Discussion & Analysis	58
Financial Review - Subex Technologies, Inc	63
Consolidated Accounts	67
Shareholders' Information	85

BOARD OF DIRECTORS

Subash Menon	<i>Chairman and Managing Director</i>
Alex J. Puthenchira	<i>Executive Director</i>
Sudeesh Yezhuvath	<i>Wholetime Director</i>
V. Balaji Bhat	<i>Director</i>
K. Bala Chandran	<i>Director</i>
Vinod R. Sethi	<i>Director</i>
S. N. Rajesh	<i>Director</i>
P.P. Prabhu	<i>Director</i>

Company Secretary & Legal Counsel

Rajkumar C.

Bankers

State Bank of India
 ICICI Banking Corporation Limited
 Corporation Bank
 First Union Bank, Piscataway, New Jersey
 Royal Bank of Canada, Ottawa
 Hellinic Bank, Cyprus
 Bank of China

Auditors

M/s. Deloitte Haskins & Sells
 Chartered Accountants

Internal Auditors

M/s. P. Chandrasekar
 Chartered Accountants

Registrars & Transfer Agents

Canbank Computer Services Ltd.,
 R & T Centre, Hotel Broadway Complex,
 No. 19, K.G. Road, Bangalore - 560 009.
 Tel : 2872461, 2872462
 Fax : 2872804
 E-mail : ccslrnt@vsnl.com
 ccslrnt@bgl.vsnl.net.in

Registered Office

721, 7th Main Mahalaxmi Layout,
 Bangalore - 560 086
 Tel : +91-80-349 7531
 Fax : +91-80-349 1490
 E-mail : subex@subexgroup.com

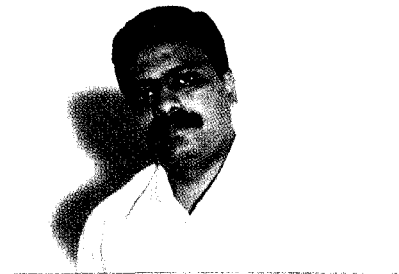
BOARD OF DIRECTORS



Subash Menon



Alex J. Puthenchira



Sudeesh Vethuvath



V. Balaji Bhat



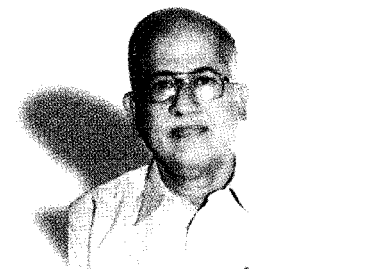
K. Bala Chandran



Vinod R. Sethi

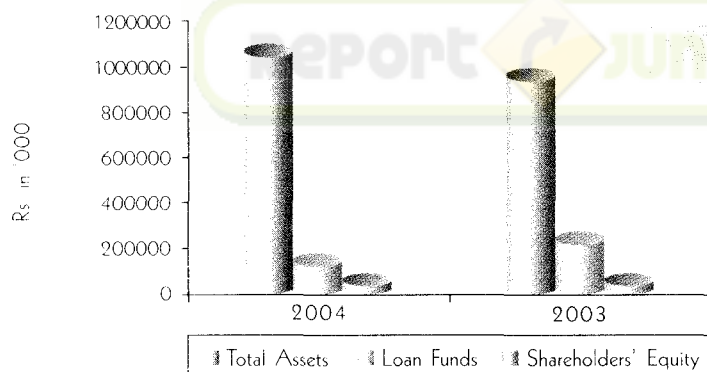
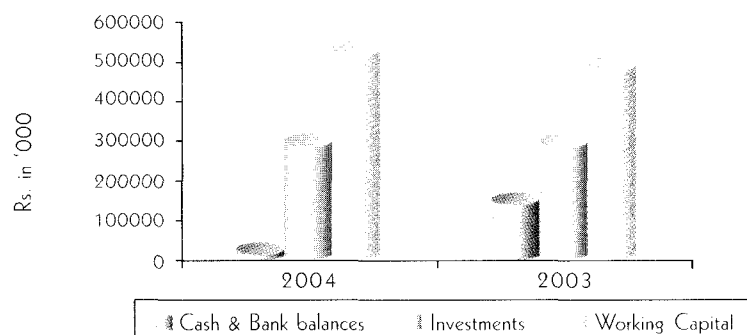
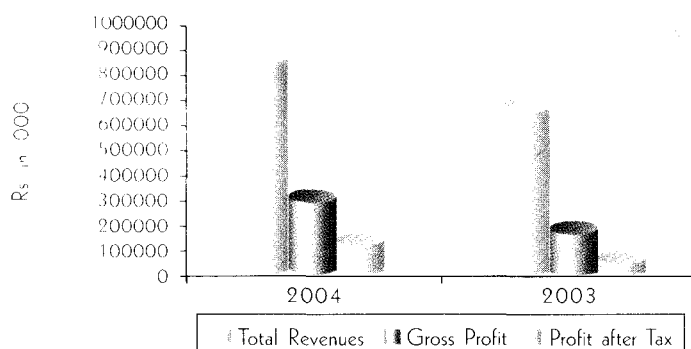


S. N. Rajesh



P. P. Prabhu

FINANCIAL HIGHLIGHTS



Year ended March 31

Particulars (Rs. '000)	2004	2003
Total Revenues	891,936	706,414
Gross profit	348,112	226,506
Profit after tax	177,501	96,120
Basic earnings per share (Rs.)	20.68	13.12
Cash and bank balances	33,607	162,355
Investments	326,902	328,686
Working capital	550,667	505,640
Total assets	1,085,759	997,674
Loan funds	167,835	283,320
Shareholders' Equity	73,538	73,438



Subex has the world's 2nd largest installed base for telecom Fraud Management System (Ranger™), within a span of four years, since its launch in 2000.

REPORTJUNCTION.COM

Client speak

"We found considerable advantage in opting for a future-proof suite like RevMax™, as against stand-alone solutions for each function. Moreover, local market experience was also a key factor that led us to choose Subex, since they have done successful implementations in this region, in the past"

Mr. Tank Al-Haidary
CEO
SabaFon

CHAIRMAN'S LETTER TO SHAREHOLDERS

Dear Shareholder,

One more year has gone by since I last addressed you. One more year of hectic activity, one more year of extensive consolidation in the telecom industry and one more year of climb towards leadership for your company. First, a few words on the telecom industry - an industry that has been hogging the limelight for several wrong reasons. The industry that had soaring growth in the heady years from 1998 to 2001, slid into a deep depression since then. Capital expenditure, as a proportion of industry revenue, had ballooned to 30% - a level that was found to be quite unsustainable. The last three years witnessed a steady fall of this key measure and it now stands at around 15%. The industry, it is believed, has finally settled down and can look forward to reasonable levels of growth in the future. While the industry is no more euphoric, cautious optimism abounds. The weaker players have been weeded out and the stronger ones are emerging with renewed strength. It is against this background that we will now analyse the performance of your company during FY04.



We have recorded a revenue of Rs.892 million and a Profit After Tax (PAT) of Rs.178 million. These figures translate to a growth of 26% and 85% respectively. Profitability, has once again grown at a scorching pace to reach 20%. The primary reason for this growth in profitability is the higher proportion of revenue from products, which stood at 45%. In absolute terms, products recorded a growth of 56% beating the global industry average of 28%.

Towards Leadership

Our stated objective is to be the leader in the business of providing software solutions for revenue maximization in the telecom space. In keeping with that, our strategies and activities are well aligned towards the achievement of this objective. While this objective might look quite daunting, I am glad to report that we have had significant progress in this direction. Let us take a look at the statistics.

Ranger™, our fraud management system, today has 68 installations spread over 19 countries in 4 continents. INcharge™, our revenue assurance solution, that was launched only about 14 months ago, today boasts 7 installations. In an industry that has been riddled with failing vendors, our achievements are commendable. While retaining our second position with regard to the number of installations globally for fraud management systems, we have successfully entered the revenue assurance market. Thus, we now have two promising products - one of which is expected to attain the largest installed base globally during FY05 and the other one gathering momentum in its march towards a similar position within the next 2 to 3 years. It is heartening to note that INcharge™ has already been acclaimed as a powerful solution, by globally acknowledged consultants who specialise in the field of telecom revenue assurance.

Achieving leadership in an industry and more importantly, sustaining it, calls for several key components - a well defined product set with continuous innovation, an ever increasing list of satisfied and happy customers, financial strength and a commitment to the business. Supporting these should be a vision, strategy and an ability to execute. Having chosen revenue maximization as its area of operation, your company has been in the process of architecting its business offering in this space. This has resulted in the launch of an integrated platform for revenue maximization. This platform, RevMax™, endeavours to approach revenue maximization in telcos in an "enterprise-wide" manner. The objective is to implement the platform in a seamless manner across the various functional departments of a carrier and to achieve maximization of revenues - through fraud management, revenue assurance, margin management, cost management etc. - in all the operations of the carrier. While this provides an opportunity for your company to be a long term partner to its customers, it also renders our product offering future proof. The integrated platform

consists of separate modules for each aspect of revenue maximization thereby enabling a modularized approach to implementation while ensuring seamless transfer of data and output across the entire platform. This integrated platform will be the launch pad for the future growth and leadership in our chosen space.

Our business generates substantial annuity through additional license revenues, annual maintenance support revenues etc. Given this situation, it is critical to acquire as many customers in as short a span of time as possible. Entry into a carrier through the deployment of one of the modules in our integrated platform paves the way for additional business by penetrating further into the same customers. This is the corner stone of our strategy. We currently have over 35 customers spread across 19 countries and we are in the process of acquiring more customers - both organically and inorganically. Needless to say, those vendors who have the largest number of customers with a possibility to offer multiple solutions to all these customers will emerge as leaders in the years to come. Your company had identified this key aspect and has been strategising and executing over the past few years. The soundness of our strategy coupled with an excellent execution has taken us further in the road to leadership.

We have been constantly leveraging the strong relationships with our customers, in several ways. The first is to gain from the referenceability of these customers in the close and well networked world of telecom service providers. We have been showcasing the gains that have been garnered by these customers, through the deployment and use of our products. Further, we have been using these customers as sounding boards for our innovative product ideas and roadmap. They also provide us with valuable suggestions and insights into their strategies, requirements and future plans.

On the whole, we are confident of emerging as the leader in the revenue maximization space - across several products - within the next 2 to 3 years. Although there is some way to go for the fulfillment of that objective, we have certainly come a long way from where we started.

China - The New Frontier

The land of the dragon is generally viewed with trepidation. Many consider it a constant threat and many others take it is a land of opportunities. We, at Subex, believe that the Chinese market has huge potential, but should be tapped with adequate care. The telecom industry in China has been growing by leaps and bounds and today has the largest number of mobile connections among all the countries in the world. This is expected to grow further in the years to come.

After a long evaluation and exploration lasting one and a half years, we set up a sales and support office in Beijing in October 2003. Further, we have teamed up with two partners with long years of experience in the Chinese market. We have also taken adequate measures to protect our intellectual property by adopting well thoughtout policies with regard to selection and appointment of partners, implementation and localization methodologies and through the use of leading legal experts in drawing up contracts and agreements. These steps, coupled with the employment of local Chinese personnel, we feel, should help us to tap this market successfully.

China is replete with local vendors for a variety of software solutions. However, the level of sophistication witnessed in the solutions that are being developed and deployed by these local vendors leaves much to be desired. This phenomenon is slowly creating a market opportunity for global vendors and our entry into this market has been timed to take advantage of this phenomenon and the growing awareness among Chinese telcos concerning revenue maximization possibilities. Given the long sales cycles required for our products, we do not expect significant revenues from this market in FY05. The real returns will commence in FY06 and we expect them to be substantial.

Software Services - Onsite Consulting

Building on the gains of FY03, this business grew well in FY04. It recorded a revenue of Rs.482 million resulting in a growth of 8.28%. In keeping with our strategy, this business strengthened its' relationship with the largest customer, AT&T, by penetrating deeper into that organization. We expect this stronger and deeper relationship to yield good results in the future.

Business Outlook

The downturn in the telecom industry has resulted in certain fundamental shifts in the way business is done and in the priorities of the carriers. Enhancing revenues and profits and a strong focus on Average Revenue Per user (ARPU) and even more significantly, on Average Margin Per User (AMPU) has come to stay. I would like to refer to two studies - one each by Deloitte and RHK, Inc. - to elaborate on the market size and what the future portends for this market.

The Deloitte Study : This study, entitled Deloitte Global Telecom Operator Survey, was conducted in the second half of 2003. The study was conducted among CXO level executives of 108 leading carriers of the world. The executives were given 16 areas for improvement and asked to grade them on the basis of significance. Revenue assurance was accorded the highest grade (60% of the executives gave it the highest grade) making it the most significant area for improvement for the carriers. This vote establishes our belief that revenue maximization (of which revenue assurance is a part) is a burning issue in the carrier world today and is attracting considerable investment leading to substantial growth. The RHK study further cements this belief by providing quantitative measures.

The RHK Study : RHK estimates that the world wide market for Operations Support Systems (OSS), of which revenue maximization forms a part, will grow at a CAGR of 7% from 2003 to 2007. It further identifies revenue maximization as one of the six fastest growing areas with a CAGR of 28% leading to a market size of US\$. 800 million in 2007, up from US\$. 300 million in 2003.

Out of the above, which includes hardware, software, professional services and consulting, Subex estimates the market for software solutions to be about US\$. 120 million in 2003, giving us a market share of about 5% in a fragmented market. Consolidation being an established trend in our industry, we expect a few major players to emerge in the coming years and aim to be a leader in this space with significant revenues and a market share of about 10% to 15% for software solutions. The fast growing market and an increasing market share will result in higher revenues and profits in the years ahead. The increasing share of products in the overall business mix will ensure higher profitability.

People have always been the main strength behind all the achievements of Subex. And so, I herewith record my acknowledgement of the support received from all the Subexians in making FY04 a successful year and thank them wholeheartedly for the same. I also thank all the share holders of this company on behalf of the Board of Directors and on my personal behalf. Finally, our sincere thanks to all the customers and partners without whom, nothing could have been achieved. All of us at the company are confident of being able to report another stellar year at the end of the next twelve months.

Subash Menon



All the GSM operators in the private sector in India are Subex's clients.

Report  junction.com

Client speak

"After a thorough evaluation of several products in this space, we chose Ranger from Subex as it offered the widest range of functionalities coupled with a large base of satisfied customers. We are confident of fighting fraud effectively by deploying Ranger™ throughout our network"

Mr. Vivek Sett
CFO
Tata Teleservices