

Technical Guide on Internal Audit of IT Software Industry



The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)
New Delhi

Technical Guide on Internal Audit of IT Software Industry

DISCLAIMER:

The views expressed in this Guide are those of author(s). The Institute of Chartered Accountants of India may not necessarily subscribe to the views expressed by the author(s).



Internal Audit Standards Board
The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)
New Delhi

© The Institute of Chartered Accountants of India

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic mechanical, photocopying, recording, or otherwise, without prior permission, in writing, from the publisher.

Edition : February, 2014

Committee/Department : Internal Audit Standards Board

E-mail : cia@icai.in

Website : www.icai.org/ www.internalaudit.icai.org

Price : ₹ 165/- (*including CD*)

ISBN : 978-81-8441-681-7

Published by : The Publication Department on behalf of the Institute of Chartered Accountants of India, ICAI Bhawan, Post Box No. 7100, Indraprastha Marg, New Delhi - 110 002.

Printed by : Sahitya Bhawan Publications, Hospital Road, Agra - 282 003.

August/2014/1,000 Copies

Foreword

Over the last decade, the information technology sector has played a crucial role in placing India on the global map. The sector has crossed significant milestones in terms of revenue growth, employment generation and value creation, in addition to becoming the global brand ambassador for India. Trends in service delivery like, cloud computing, platform BPO, etc., are remodeling the industry and driving tremendous changes which involve high degree of research and scientific sophistication, and specialist analytical methodology. The software industry faces multiple risks like, strategic risk, economic risk, operational risk, compliance risk, disaster risk, political risk, human capital risk, reputational risk, etc.

In this challenging environment, chartered accountants armed with sound domain knowledge, good analytical skills and in depth process understanding play an important role. As internal auditors, they can assist organizations operating in software industry in ensuring that objectives are achieved, risks are managed appropriately, organizational resources are used responsibly and governance systems are strengthened. I am happy that the Internal Audit Standards Board of the Institute of Chartered Accountants of India (ICAI) has brought out this "*Technical Guide on Internal Audit of IT Software Industry*" which is aimed to equip the internal auditors with deeper understanding of this unique and complex industry. I congratulate CA. S.B. Zaware, Chairman, Internal Audit Standards Board and other members of the Board on issuance of this Technical Guide.

It is my sincere hope that this publication would further strengthen the skills of our members as internal auditors of software industry.

February 6, 2014
New Delhi

CA. Subodh K. Agrawal
President, ICAI

Preface

As one of the key growth drivers of engines of the economy, the Indian software industry has been contributing notably to the economic growth and providing direct and indirect employment to a large number of people. The phenomenal success of this industry can be attributed to availability of strong qualified human resources, favourable government policies, burgeoning demand conditions and competitive environment. Emerging technologies such as, social media, mobility, analytics and cloud computing, etc., are driving the growth in this segment and helping it to escalate to the next level. Challenges faced by the industry are poor infra structure, high competition, small domestic market, defusing industry environment, brain drain, etc.

Keeping this in view, the Internal Audit Standards Board of the Institute has issued this "***Technical Guide on Internal Audit of IT Software Industry***" which deals with operational areas of entities operating in this industry, with emphasis on compliance as mandated as per various regulations as applicable to software industry. It provides detailed guidance on business processes controls, risk management, legal and regulatory compliance, etc., related to software industry. This Guide specifically does not covers entities working in Information Technology Enabled Services (ITeS), Knowledge Process Outsourcing and Business Process Outsourcing. This Guide provides a brief about the IT Software companies covering evolution of IT industry, growth trajectory, initiatives taken by the government, major challenges faced, industry segmentation, project lifecycle, revenue model, etc. Salient features of legal framework and regulations governing Software Industry have been discussed in the Guide. The guide also throws light on major areas of external and internal risks being faced by the software industry. Major areas of internal audit significance like, contracts, fixed assets, government grants, loans and borrowings, foreign currency transactions, related party transactions, information security and privacy of data, patents and copyrights, etc., have also been explained. The Guide also contains an Annexure listing out major compliances applicable to software industry under various governing laws and regulations.

At this juncture, I am grateful to CA. Arun Kumar Natha and study group members Shri Ganesh S. Kumar, Shri Sawnya Acharya and Shri Shon Sunny George for sharing their experience and knowledge with us and preparing the draft of the publications and CA. Anil Patwardhan for reviewing the draft Technical Guide.

I also wish to thank CA. Subodh Kumar Agrawal, President and CA. K. Raghu, Vice President for their continuous support and encouragement to the initiatives of the Board. I must also thank my colleagues from the Council at the Internal Audit Standards Board, viz., CA. Babu Abraham Kallivayalil, Vice-Chairman, IASB, CA. Rajkumar S. Adukia, CA. Jay Ajit Chhaira, CA. Tarun Jamnadas Ghia, CA. Pankaj Inderchand Jain, CA. Nihar Niranjana Jambusaria, CA. Dhinal Ashvinbhai Shah, CA. S. Santhanakrishnan, CA. J. Venkateswarlu, CA. Abhijit Bandyopadhyay, CA. Anuj Goyal, CA. Naveen N.D. Gupta, Shri Gautam Guha and Shri Manoj Kumar. I also wish to place on record my gratitude for the co-opted members on the Board viz., CA. Ashok Patil Pundlik, CA. Chandrakant Raghunath Karode, CA. Rakesh Dhody, CA. Saurabh Mukund Chitale and CA. Sanjeeb Kumar Agarwal and special Invitee, CA. Sanjay Arora for their invaluable guidance as also their dedication and support to the various initiatives of the Board. I would also like to place on record appreciation to CA. Jyoti Singh, Secretary, Internal Audit Standards Board and her team of officers for their efforts in giving the Guide its final shape.

I am confident that this publication would prove to be immensely useful for the members.

February 7, 2014
Pune

CA. Shiwaji Bhikaji Zaware
Chairman
Internal Audit Standards Board

Abbreviations

AMC	Annual Maintenance Contract
CAGR	Compounded Annual Growth Rate
CCTV	Closed Circuit Television
CMM	Capability Maturity Model
DGFT	Directorate General of Foreign Trade
DTA	Domestic Tariff Area
DTAA	Double Taxation Avoidance Agreement
ESI	Employees State Insurance
FCNR	Foreign Currency Non-Repatriable
FEMA	Foreign Exchange Management Act
FIRC	Foreign Inward Remittance Certificate
HRD	Human Resources Department
IPR	Intellectual Property Rights
ISO	International Standards Organisation
ISP	Internet Service Provider
ITeS	Information Technology Enabled Services
MSA	Master Service Agreements
NASSCOM	National Association of Software and Services Companies
NSDL	National Securities Depository Limited
NSR	National Skills Registry

PF	Provident Fund
RBI	Reserve Bank of India
RFP	Request for Proposal
RFQ	Request for Quote
SBU	Strategic Business Units
SEZ	Special Economic Zone
SIA	Standards on Internal Audit
SME	Small and Medium Enterprises
SMS	Short Messaging Service
STPI	Software Technology Parks of India
T & M	Time & Material Billing
TDS	Tax Deducted at Source
TRPS	Trade Related Aspects of Intellectual Property Rights
VAR	Value Added Resellers
WCT	WIPO Copyrights Treaty
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organisation

Glossary

Annual Maintenance Contracts (AMC)		It is the legal agreement entered between two companies wherein the latter agrees to render the maintenance service annually to the former at an exchange of a fixed amount.
Closed Circuit Television (CCTV)		It is the use of video cameras to transmit signal to a specific place, on a limited set of monitors.
Cloud Computing		Cloud computing is a expression used to describe a variety of different computing concepts that involve a large number of computers that are connected through a real-time communication network (typically, the Internet).
Cloud Storage		Cloud storage is a model of networked enterprise storage where data is stored not only in the user's computer, but in virtualized pools of storage which are generally hosted by third parties.
Directorate General of Foreign Trade (DGFT)		It is the agency of the Ministry of Commerce and Industry of the Government of India responsible for administering laws regarding foreign trade and foreign investment in India.
Domestic Tariff Area (DTA)		It means an area within India that is outside the Special Economic Zone and other specified areas.
Double Taxation Avoidance Agreement (DTAA)		It is a tax treaty formally concluded and ratified agreement between two independent nations (bilateral treaty) or more than two nations (multi lateral treaty) on matters concerning taxation, normally, in written form.

Employees State Insurance (ESI)	It s a self-financing social security and health insurance scheme for Indian workers
Foreign Currency Non-Repatriable Account Deposits (FCNR)	FCNR deposits stands for Foreign Currency Non-Repatriable Account Deposits. This is a Fixed Deposit Foreign Currency account and not a savings account. Deposits in this account can be made in any of the major currencies like, US Dollar, UK Pound, Canadian Dollar, Deutsche Mark, Japanese Yen and Euro.
Foreign Exchange Management Act (FEMA)	It consolidates and amends the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.
Foreign Inward Remittance Certificate (FIRC)	It is a document that provides proof of inward remittance to India.
Firewall	It is software or hardware-based network security system that controls the incoming and outgoing network traffic by analyzing the data packets and determining whether they should be allowed through or not, based on a rule set.
Global Delivery Model	It is a methodology used by IT companies by using a model of executing technology project using a team that is distributed globally.
Intellectual Property Rights (IPR)	It is a legal concept which refers to creations of the mind for which exclusive rights are recognized.
Information Technology (IT)	Companies dealing in information technology are referred to as IT Companies.

Information Technology Enabled Services (ITeS)	It is that sector of IT Industry which aims at providing various services through the use of IT.
National Association of Software and Services Companies (NASSCOM)	It is the premier organisation that represents and sets the tone for public policy for the Indian software industry.
Offshoring	Relocation by a company of a business process from one country to another.
Employee Provident Fund Organization	Employee Provident Fund Organisation is a statutory body of the Government of India under the Ministry of Labor and Employment. It administers a compulsory contributory Provident Fund Scheme, Pension Scheme and an Insurance Scheme.
Reserve Bank of India (RBI)	It is the apex bank of India. The RBI uses monetary policy to create financial stability in India and is charged with regulating the country's currency and credit systems.
Special Economic Zone (SEZ)	It is a geographical region that is designed to export goods and provide employment.
Small and Medium Enterprises (SME)	They are enterprises where the investment does not exceed specified limits.
Software Ecosystem	A Software ecosystem consists of sets of software solutions that enable, support and automate the activities in a social or business ecosystem.
Statement of Work(SOW)	It is a formal document that captures and defines the work activities, deliverables, and timeline a vendor must execute in performance of specified work for a client.

Software Technology Parks of India (STPI)	It is an export oriented scheme for the development and export of computer software, including export of professional services.
Tax Deducted at Source (TDS)	It is a means of collecting income tax in India, governed under the Indian Income Tax Act of 1961.
Value Added Resellers (VAR)	It is a business process that adds features or services to existing product and later resells it.
Y2K	YEAR 2000 was a problem for both digital and non-digital documentation and data storage solutions that resulted in from the practice of abbreviating 4-digit year to 2-digit.

Contents

<i>Foreword</i>	<i>iii</i>
<i>Preface</i>	<i>v</i>
<i>Abbreviations</i>	<i>vii</i>
<i>Glossary</i>	<i>ix</i>
CHAPTER 1: Introduction	1-2
Objective and Scope of Technical Guide	1
Chapter 2: About IT Software Companies	3-27
Eco-system	3
Evolution of IT Industry	4
Growth Trajectory	7
Initiatives taken by the Government	7
Software Technology Parks	10
Competition and Differentiators	11
Major Challenges Faced by the Industry	12
Factors Contributing To Industry Growth	14
Quality Accreditations	15
Operating Model	16
Business Model.....	16
Service Offerings	18
Customer Industry Orientation	19
Industry Segmentation	20
Typical Organization Structure	20
Human Resources Development.....	21
Revenue Model.....	23
Project Lifecycle.....	24
Service Delivery Commitment and Compliance	25
Governance Model.....	25
Sustainability	26
Chapter 3: Special Feature of Software Industry	28-31
Working from Home	28
Time Sheet Management for Work from Home.....	28
Geographic spread of Software Industry	29
Cloud Computing and Central Servers	29

Accounting of Software Tools.....	30
Project wise Costing	30
Legal Software.....	30
Confidentiality of Source Code.....	31
Software used for Internal Use.....	31
Chapter 4: Legal Framework	32-43
Governing Regulations.....	32
National Association of Software and Services Companies (NASSCOM).....	32
NASSCOM Initiative.....	33
Software Technology Parks of India (STPI).....	37
Ministry of Communications and Information Technology, Government of India	40
A Gist of Important Regulations that may be Applicable to Software Industry	43
Chapter 5: Need for Internal Audit	44-58
Factors Contributing to the Evolution of Internal Audit.....	45
Standards on Internal Audit:.....	46
Importance of Internal Audit	48
Importance of Audit Documentation	49
Use of Analytical Procedures	49
Terms of Internal Audit Engagement.....	50
Internal Audit Evidence	51
Internal Control Evaluation:.....	53
Internal Audit in an Information Technology Environment:.....	54
Knowledge of Business.....	55
Overview of Compliance	56
Chapter 6: Major Areas of Internal Audit Significance.....	59-91
Business Areas.....	59
Business Risks	61
Contracts:	64
Fixed Assets:	66
Government Grants:.....	67
Loans and Borrowings:	68
Foreign Currency Transactions:	69
Related Party Transactions:.....	69
Legal & Statutory Compliance:.....	71
Information Security and Privacy of Data:	73
Books of Accounts:	74

Operating Costs	75
Software Development Cost and R&D Cost	76
Business Continuity Plans.....	77
Analysis, Reporting & Financial Control	78
Patents and Copyright.....	80
Internal Controls (SOX).....	81
Computer Assisted Audit Techniques (CAATs)	83
Business Enabling Functions	84
Revenue Earned by the Company.....	87
Value of Brand	89
Accounting for recharges to the clients	90
Hedging	90
Annexure I: Compliances	92-104
References	105

Chapter 1

Introduction

Objective and Scope of Technical Guide

1.1 This Technical Guide is intended to assist Internal Auditors in carrying out Internal Audit of entities operating in the Software (Information Technology) Industry. The management in concurrence with the internal auditor, in accordance with the various pronouncements of ICAI and other regulatory requirements, assessments of control environment and business domain knowledge primarily decides the scope of the internal audit. The technical guide deals with operational areas of entities operating in this Industry with emphasis on compliance as mandated as per various regulations as applicable to the specific entity.

Indian IT industry is growing steadily despite the global meltdown from the year 2008. In spite of global gloom across industries, Indian IT industry still managed to register a growth of 5.5%. The Domestic Market is also slotted to witness 12% growth, this year. Potential size of India's offshoring industry is estimated at US \$ 120 to 180 billion by 2015. The Industry currently employs around 1 million people and provides indirect employment to around 2.5 million people. It is expected to add another 150,000 jobs in another fiscal according to NASSCOM.

1.2 Indian IT/ ITeS sector is growing substantially with its:

- Expansion into varied verticals
- Well differentiated service offerings
- Increasing geographic penetration

The phenomenal success of Indian IT- ITeS industry can be attributed to availability of strong qualified human resources, favourable government policies, burgeoning demand conditions, healthy growth of related industries and competitive environment prevalent in the industry and the focus on innovation by the IT Industry. The interplay of these forces has led to putting the industry on the global map.

Technical Guide on Internal Audit of Software Industry

1.3 The Software industry is a giant industry embracing large range of segments. To elaborate further, this sector can be categorised into:

- (a) Software solutions
- (b) IT Services

Scope

1.4 The Technical Guide does not covers following:

(a) **IT enabled Services (ITeS)** – In this Guide on *Internal Audit of IT Software Industry*, the services relating to Information Technology enabled services (ITeS) have been excluded.

(b) **Knowledge Process Outsourcing (KPO) and Business Process Outsourcing (BPO)** – Internal audit processes relating to KPO and BPO have also been excluded. There is a separate drafted Guide by ICAI for BPO areas. The 'Technical Guide on Internal Audit of BPO Industry' covers following:

- Evolution and history of BPO industry in India
- Reasons for outsourcing and initiatives taken by the government
- Special features of the BPO Industry
- Types of services provided by the BPO industry
- Major Challenges faced by the BPO industry
- Legal framework and a Gist of all the applicable regulations to BPO industry
- Statutory laws applicable to Indian BPO industry
- Need for internal audit and factors contributing to the evolution of internal audit.
- Standards on Internal Audit
- Major areas of internal audit significance like, invoicing, SLA adherence, Payroll, Operating Costs, Fixed Assets, Related party transactions, Data security.
- Risks faced by the BPO industry.
- Maintenance of books of accounts and documents.

Chapter 2

About IT Software Companies

Eco-System

2.1 The software industry is one of the most promising industries in India. Software companies make widespread use of partner business models like, resell. Some software companies create and manage partner ecosystems around them. Each software ecosystem is created for a purpose and often one finds network effects in a software ecosystem.

Today, there are only a few sources in the literature on the form of cooperation between software companies and on the objectives, structure and forms of cooperation in so-called software ecosystems (e.g., referral). For software companies, this is a crucial problem, since the decision to join or to create a software ecosystem or to partner is not easy. All issues around business models, software ecosystem leverage and software partnerships are roughly summarized in the term "Software Economics".

2.2 A software vendor sells software to its customers. The companies in the ecosystem interact with the software vendor or its customers or partners in the following ways:

- They sell products or services to the software vendor's customers. These products or services might be related to or integrated with the software vendor's products or services;
- They sell the software vendor's products, e.g. as Value Added Resellers (VAR);
- They sell services to the software vendor, to the customers or to the software vendor's partners;
- They purchase or license the software vendor's products;
- They sell or license software to the software vendor (suppliers);
- They align on standards with the software vendor to create bigger markets based on standardized products or services; and
- Last but not the least, companies are potential candidates for acquisition by the software vendor.

Evolution of IT Industry

2.3 The evolution of IT industry can be studied in 5 phases which have been discussed in the paragraphs given below:

Phase I: Prior to 1980

2.4 The Software industry was literally non-existent in India until 1960. Software used in the computers till that time, were in-built with the systems. Government protected the hardware industry through high tariff barriers and licensing. However, in the west, the need for software development was gradually being felt as the software in-built in the system was not sufficient to perform all the operations. The government of India therefore, realised the potential for earning foreign exchange.

In 1972, the government formulated the Software Export Scheme. This scheme made the provision of hardware imports in exchange of software exports. Tata Consultancy Services Limited (TCS) became the first firm to agree to this condition. The year 1974 marked the beginning of software exports from India.

Phase II: 1980-1990

2.5 Despite the government initiatives, the software exports were not picking up because of two reasons mainly:

- The exports of software, was heavily dependent on the imports of hardware, which was costly as well as the procedure for obtaining the same was very cumbersome.
- Secondly, there was a lack of infrastructural facilities for software development.

To counter these, the government formulated a new computer policy in 1984, which simplified import procedure and also reduced the import duty on hardware for software developers. In an attempt to make software industry independent of hardware industry, the government in 1986 formulated Software policy which further liberalised the IT industry. According to this policy, the hardware imports were de-licensed and were also made duty free for the exporters. This along with the world wide crash in the hardware prices reduced the entry barriers substantially.

In 1990, government established Software Technology Park of India. This scheme was formulated to increase the export of software and services.

Phase III: 1990-2000

2.6 This decade made several significant changes in the economy, including trade liberalisation, opening up of Indian economy to foreign investment, devaluation of rupee, and relaxation of entry barriers. These changes attracted many foreign entities to our nation. These MNC's in India, introduced 'Offshore Model' for software services, according to which the companies used to service their clients from India itself. This model further graduated itself to 'Global Delivery Model', It is the combination of Onsite and Offshore Model. In this Model Offshore Development Centre is located in various locations across the globe.

During this period due to the entry of many players in Indian market, the competition got intensified. Therefore the players started investing in research and development to distinguish their services from others.

Phase IV: 2000 - 2007

2.7 The Global problems like, Y2K, the dotcom crash and recession in the US economy, proved to be a boon to Indian IT Industry. The Y2K problem demanded the existing software to be compatible to the year 2000. Due to the shortage of US based programmers during this period, many mid – sized firms were forced to utilise the services of Indian Firms. This had placed the Indian IT industry on the global Map.

Post 2002-03, the industry had registered a robust growth rate because of increase in the number of clients, large sized contracts and a strong global delivery model.

Phase V: Post 2007

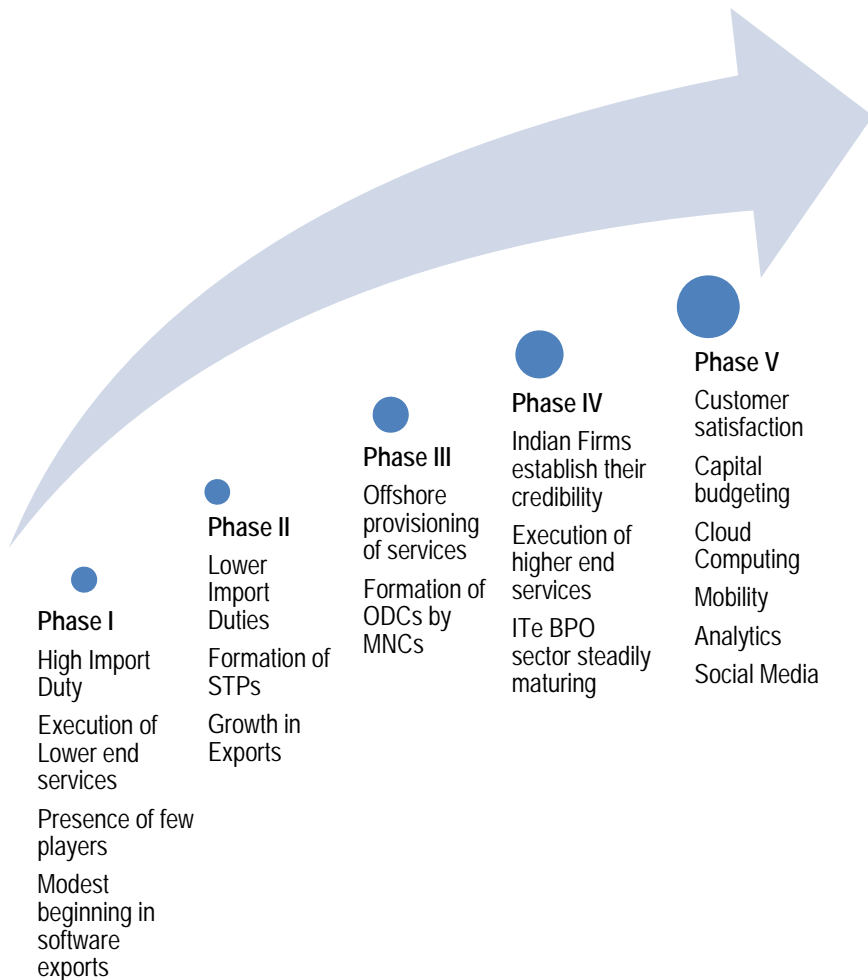
2.8 Economies faced a downward trend during the 2007-10 due to recession in the United States of America and the snowball effect to the European and the Asian countries. This situation got even more aggravated with the uncertainties in the global political and economic environment. This affected economy at large with rising unemployment rates, political instabilities, general uncertainty and large scale cost reduction initiatives by both private and public sector organizations. This has resulted in huge budget cuts on IT investment by large corporations. It leads to stiffer competition for software companies to grab their market share to sustain their growth rates.

Technical Guide on Internal Audit of Software Industry

Since 2010, the recession impact smoothened and there have been signs of recovery. However, the markets and the corporates are cautious in their approach especially on any long-term strategic investment decisions. This stage evolved into a lot of phenomenal changes in the industry. The key changes post 2010 phase are:

- Early capital budgeting was performed by the companies in order to avoid last minute funds shortage.
- The software industry approach changed towards outcomes based solutions for their clients. The prime motive of the big-players of the industry was to blend their services and products specific to customer requirements and serve their needs efficiently in an Operating Expenditure (Opex) based model rather than the traditional Capital Expenditure (Capex) based model.
- Companies came out with different strategies to adopt with client and to gain customer base. Some of these are gain sharing, investment sharing, etc.
- The most prominent change that emerged after the phase of 2010 was Cloud Computing. Mass storage of data on cloud has not been very commonly used pre-2010. This trend saw a huge change. 90% of today's data of an enterprise or individual users are stored on cloud, with or without our knowledge.
- Mobile had just been a device for calling, SMS and some entertainment like music, videos. Nowadays, the industry is not the same though. Usage of mobiles has come to such a large extent that the same is used for enterprise mobility, decision-making, social media, banking, analytics, etc.

Growth Trajectory



Initiatives Taken by the Government

2.9 Although the story of the Indian software industry is a story of private initiative, the government played a supporting role with public funding of a large, well trained pool of engineers and management personnel who could forge the Indian IT industry into a world class treasure in a short time. Early government support came from a few visionary civil servants who championed the cause and helped the industry find its way through a labyrinth of regulations, making exemptions wherever possible. Later,

Technical Guide on Internal Audit of Software Industry

policies that encouraged local firms and direct foreign investments were introduced.

2.10 Government targeted software exports once the market identified the industry's potential and created the necessary institutions. As early as 1972, the Department of Electronics introduced a policy to permit duty-free imports of computer systems, if importers would promise to export software and services worth twice the value of the imported computers within a specified time. This policy helped a number of leading companies in their inception stage. In the 1980s the Department gave software developers a further boost by initiating software export friendly policies. It formed a software export promotion council and liberalized import rules for materials needed for the industry. Software was explicitly targeted as a key sector for export promotion. In the late 1990s, the government created four major taskforces comprising chief executives of leading software companies to study the sector and recommend actions, and then acted on most of the recommendations. At that time the Department of Electronics became the Ministry of Communication and Information Technology. This was followed by the IT Act to address a large number of issues. In addition to these federal interventions, many states promoted local software industry by improving infrastructure, IT education, and provision of more facilitating environments.

With the beginning of economic reforms in the early 1990s, efforts were made to attract foreign as well as domestic investment. Foreign companies were permitted to establish fully owned subsidiaries in the electronics export processing zones. Within the Ministry of Finance there was greater recognition of India's comparative advantage in the sector, as it abolished entry barriers for foreign companies, made available fast, low-cost data connection facilities, and reduced and rationalized duties, taxes, and tariffs.

2.11 The Reserve Bank of India adopted several measures to support the IT industry. These included: simplification of the filing of Software Export Declaration Form (SOFTEX); acquisition of overseas parent company shares by employees of the Indian company; companies whose software sales were over 80 percent could grant stock options to non-resident and permanent resident employees; foreign exchange could be freely remitted for buying services; and companies which executed contracts in "computer software" abroad could use income up to 70 percent of contract value to meet contract-related expenses abroad.

Tax holidays were given on company profits, although the government is progressively phasing out these deductions. Tax breaks from corporate

income and tax on profits was available to units in any free trade zone, any software technology park, or any special economic zone to the extent of 100 percent of the profits derived from the business. These deductions were not available from Financial Year 2009–2010 onwards.

Indian direct investment in joint venture (JV)/wholly owned subsidiaries (WOS) abroad was simplified and a fast track window is available for large investments. IT software and services companies in India can acquire companies overseas through American Depositary Receipt/ Global Depositary Receipt stock swaps without prior approval for up to \$100 million or ten times the export earnings of the previous year.

2.12 While the government has enacted significant reforms in the area of intellectual property rights (IPRs), and has joined the World Trade Organization and Trade-Related Aspects of IPRs, the reforms have so far not led to a surge in patents in the Indian software industry, nor have IPRs been perceived as effective in protecting innovations in the Indian software industry.

Several policy reforms in the telecom sector helped accelerate the domestic and export industry. In 1998, a national telecom policy was announced to clarify the role of the regulator, transition from license fee to a revenue sharing model and open domestic long distance to private operators. The ISP gateway monopoly ended in 2000 and permitted private companies to set up international gateways. In 2002, international long distance was liberalized two years ahead of WTO commitments and competition increased in cellular markets. As a result, India's teledensity, the number of phones per 100 people, increased to five and cellular penetration overtook the land line penetration.

2.13 Recognizing the growing need for manpower in the software industry, the Ministry of Human Resources Development took the following actions:

- Helped create and expand computer science departments in existing engineering colleges.
- Eased policies in order to enable private sectors to open educational institutions without public funding. A large number of engineering colleges were opened in the private sector.
- Introduced quality control systems for engineering colleges and other IT training institutions, such as the All India Council for Technical Education and an accreditation system run by

Technical Guide on Internal Audit of Software Industry

professional bodies such as the Computer Society of India to monitor private training institutions.

- Encouraged the private sector to open training institutions. At its peak nearly one million Indians were being trained in a year with the IT training industry earning over nearly 10 billion rupees in 1998 with no government subsidy.

Software Technology Parks

2.14 Creation of NASSCOM in 1988 and later establishment of STPs in 1990 represented a fundamental approach to policy making for the software industry. An important institutional intervention was the establishment of STPs to provide infrastructure for private companies to export software. Established in 39 locations, including most major towns, they provided ready-to-plug IT and telecom infrastructure. STPs also allowed single-window clearance for all regulatory matters. The benefits and approvals for STPs are similar to those of Export Oriented Units. Incentives provided in the Export-Import Policy are also applicable to STP members.

The companies registered with these parks account for about 68 percent of software exporters. Many of these companies have not benefited from the actual STP infrastructure in any significant way. Perhaps, the major contribution of these STPs was to enable new enterprises to launch, and small and medium enterprises to grow. Already established companies merely registered with these parks but did not use the infrastructure that was created.

The performance of STPs has been variable. Where the environment was right the STPs enabled small and medium enterprises (SMEs) to set up and grow. On the other hand in Gujarat, total sales from 60–70 SMEs was Indian Rs. 1,000 million (US\$22 million), miniscule in comparison with industry norms. The Gandhinagar STP had a membership of 300 companies, many of which may have been attracted because of the incentives. However, only 60–70 are active. Out of the 5 Mbps (megabits per second) bandwidth available for use, hardly 2 Mbps was being utilized.

One of the STPs' key contributions is providing high-speed data communication services to the industry. The Software Technology Parks of India (STPI) had international gateways at 39 locations (2003). For the last mile users can connect through point-to-point and point-to-multipoint microwave links, and terrestrial fibre/copper cables were used (where

feasible). The up time of STPI connections is 99.9 percent. STPI works with major international telecom operators such as AT&T, Sprint, MCI, Intelsat and British Telecom. STPI offers two main services: softpoint service, secure and exclusive digital circuits for data and voice transmission; and SoftLink, Internet access on a shared basis.

Competition and Differentiators

Talent availability	Outsouricng	Pyramidal structure	Foreign Investment	Labour arbitrage
------------------------	-------------	------------------------	-----------------------	------------------

2.15 Indian software industry thrives significantly based on the clients from the US market. Although there are a number of clients across other continents, viz., Europe, Middle-East, Asia, Australia, US still has the lion share of market for the Indian software industry.

The key areas which would differentiate Indian Software industry from others are as under:

- The Indian comparative advantage is based on cost and availability of software talent. The ability to offer the services of a large number of software professionals at costs substantially lower than those in the U.S. U.S. firms do not outsource requirement analysis, specification, and high-level design, nor do they outsource larger scale system integration types of activities to India. However, the leading Indian software firms do have the ability to provide these high-end services.
- The option of outsourcing has been of great value to U.S. firms. Virtually, all the U.S. managers noted that outsourcing to Indian firms allowed them to use in-house staff for more valuable and creative activities, such as the development of new business applications with a greater potential for influencing the firm. They greatly value the flexibility inherent in outsourcing – the firm does not take on a long-term obligation when it is uncertain about the future, both about the evolution of information technology and about its own specific uses of the technology.

Technical Guide on Internal Audit of Software Industry

- Indian software firms do not pose serious competitive challenge to U.S. software firms. Indeed, for the most part, they complement the U.S. industry, with the possible exception of those U.S. firms that provide staff augmentation and software services.
- The Indian software industry has a pyramidal structure with large corporates ruling the sector. The top players in the industry have more than \$1 billion in annual sales.
- Multinational Companies (MNCs) are setting up their branches in India to conduct sophisticated software development activities and as a captive source of R&D, utilising India's abundant man-power.

Major Challenges Faced by the Industry

2.16 The Indian software services industry has been spectacularly successful, growing at over 50% annually for several years. However, the nature of markets and technology is changing. Other changes include rising salaries in India, fast growing higher end markets, talent shortage worldwide, and need for faster implementation of projects. However, for Indian companies a key change could be the growth of market segments that are not so price sensitive, and price based competition from China, Mexico, Philippines and other countries. Challenges arising from sustained high growth, operating as a low cost service provider, challenge of overseas development, managing multiple agencies in a single project, cultural challenges of operating in overseas markets and entry barriers to higher end value added work.

Challenges
faced by
industry

Less expensive Labour

Poor infrastructure

Small domestic market

High competition

Brain Drain

Defusing industry environment

2.17 The major challenges faced by the IT Industry in India are as under:

- Though initially India provided less expensive and highly skilled manpower; currently it has ran out of that “skilled” manpower and whatever manpower is available is either not “skilled enough” or very expensive.
- Indian education system is not able to deliver substantial skilled manpower in terms of skill level in the numbers required. The quality is sore point when comes to the education. There are only a few Indian universities and institutions which can be regarded of international quality. The better educational institutions are highly subsidized by the government and hence the development of the same has not been as good as it could have been. There are some good institutions in the private sector as well but they are as expensive as any in the developed nations.
- Infrastructure in India has not been able to keep pace with the sustained development needs in the software industry. e.g., the rental in the housing markets have increased nearly 4 fold in last 5 years, however the incomes for these software professionals have not increased in the same proportion. Further added is the traffic levels in the software dominated cities is another example of the bottlenecks in the infrastructure.
- Due to the high Dollar inflows into the county due to its lucrative stock market return the Indian Rupee has become very strong compared to the Dollar. The government is also not keen to improve the situation due to the high prices of crude petroleum in the international markets since the petroleum products are highly subsidized in India and any weakening of Indian Rupee will add to the subsidy burden. The high volatility in the foreign currency rates have further worsened the challenge for IT Industry.
- The Eastern European countries provide as much cost benefit as Indians do and they currently are as competitive as Indians are in cost. Similarly, other Asian countries are exhibiting better cost benefit advantage compared to Indian Software Industry.
- The advantage for the Indian software industry has been its early beginning, and a large English Speaking population – the highest in the world. But due to the globalization of economy that advantage is not significant anymore. We have Indian software professionals

Technical Guide on Internal Audit of Software Industry

working in non-English speaking countries. Similarly, now manpower from less expensive non-English speaking countries is trying to compete for the big bucks of Software Services Industry.

2.18 Some of the other challenges faced by the Indian Software Industry are that the Indian software industry specializes in the export of low-end software development services, competing primarily on cost and availability of software talent.

- The industry is diffusing geographically. Although Bangalore is still home to many of the leading firms, the industry is not confined to Bangalore and is diffusing to regions other than Bangalore and Mumbai, with a substantial presence in Hyderabad, Chennai, and Delhi, and a growing presence in Calcutta and Pune.
- The domestic market is still small. Although PCs are diffusing more rapidly, communication bandwidth is still limited. The bandwidth problem is compounded because of the intransigent attitude of the department of telecommunications as it tries to retain control over telecommunications in India. The result is that Internet access in India is still slow and expensive. In addition, various infrastructure constraints have combined to slow the adoption of IT for business and government operations.
- Project management expertise is scarce. It is because the industry is still young in India and large-scale projects where project managers are trained are still relatively rare. This problem is exacerbated by a large number of experienced professionals who emigrate to the U.S.
- Management capability is weak. It is likely that many of the existing firms will fail the challenge of moving beyond low-end services. However, this should not be a major problem for the industry as a whole because some Indian firms are already looking outside of their boundaries and even outside India to get the managers they need.

Factors Contributing to Industry Growth

2.19 Software Industry registered a massive expansion in the last 10 years. This industry signifies India's position as the knowledge based economy with a Compounded Annual Growth Rate (CAGR) of 42.3%. In the year 2008, the industry grew by 7% as compared to 0.59% in 1994-95.

India has emerged as a major global exporter of software services in the international economy. Despite predictions that the industry would fail in the midst of global financial crisis, growth of software industry in India continues. Professionals and private consumers are increasingly reliant on computing for smooth day-to-day living. Companies seek to optimize profit through efficient software use, while private consumers use software for many reasons including work, organization and entertainment.

Other market segments, such as professional service automation, cloud computing and content management software are increasingly popular with businesses seeking to optimize their activities. The global software market is expected to continue recording strong growth across all major segments.

Quality Accreditations

2.20 Quality accreditations are most important for a company serving under the software industry. Client satisfaction and quality assured products and services would be guaranteed using the quality accreditations. Quality accreditations will ensure that the process flow in the company does not have a hindrance, even if such drawback exist, the accreditation systems will ensure that the process is put back to place.

The accreditation process also ensures that their certification practises are acceptable and behave ethically and employ suitable quality assurance.

One of the good accreditation systems around the world is ISO 9001. The ISO 9001 standard is related to quality management systems and designed to help organisations ensure that they meet the needs of customer and other stakeholders, while meeting the statutory and regulatory requirements related to product or service.

2.21 A quality accreditation service is not a one-time award or certificate. It has to be renewed by conducting quality assurance audit at regular intervals as recommended by certifying body. The most common interval would be once in three years. Apart from ISO 9001, there are ISO 27001, ISO 14001 which are popular quality accreditations used by companies in the software industry.

Other popular quality certifications used by the industry include SEI CMM which stands for *Capability Maturity Model* issued by the Software Engineering Institute. Under this certification Level 5 is the highest grade of certification where the uppermost 5th Level is a state where processes would

Technical Guide on Internal Audit of Software Industry

be systematically managed by a combination of optimum process utilisation as well as process improvement.

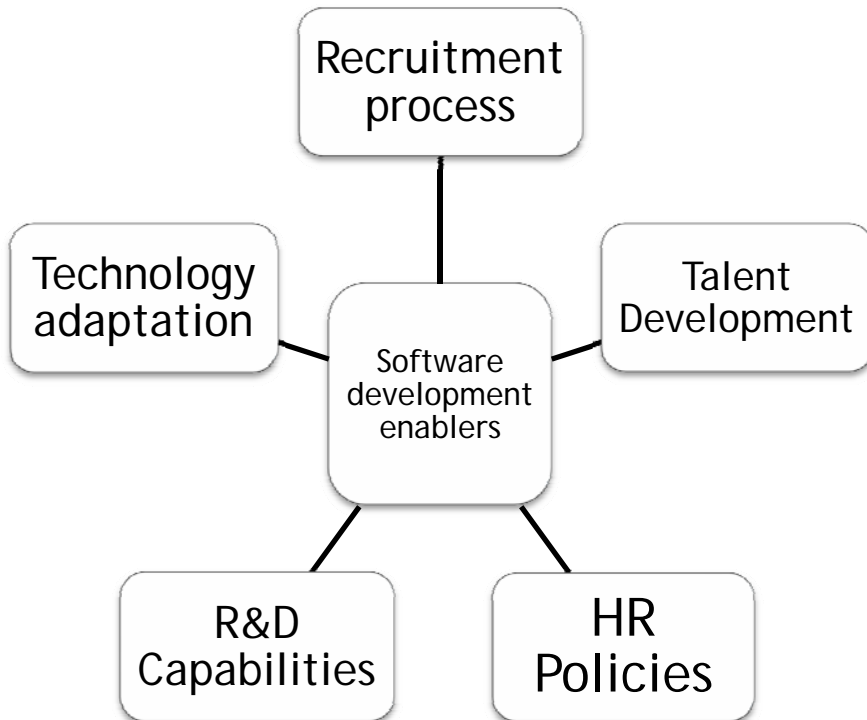
Operating Model

2.22 The IT industry has unique operating model due to the macro economic factors influencing the industry. The global environment and the various industries in which the customers are operating play an important role in the way the IT companies are structured to provide meaningful services. In the Indian market context, these IT companies are focused on providing the services to the global companies at a lower cost with most innovative solutions in a global delivery model. While the origin of the business model began with providing service at a lower cost, it has gradually evolved in to providing more value to the clients through the intellectual capital accumulated over the past several decades. Let us understand the various elements of their operating model.

Business Model

2.23 Global customers especially look for support from India IT players in terms of providing high quality people who could help in their technological requirements. This could be around maintaining their existing technologies, creating new technologies to support their business processes, new platforms, global infrastructure, helpdesk and so on. The primary resources for IT industry are the human resources and technology. These two drive a significant influence on providing value to the customers. Hence, the IT companies operate around where the human resources are available and the environment where new technologies can be generated.

Strength and competitiveness of the IT companies lays in their ability to attract high quality talent who can develop state-of-the-art technologies. This requires high standards of recruitment process, talent development, HR policies, research and development capabilities of the service provider. A professional sales force required at the customer locations that should be building solutions to their requirements. This would also require a number of onsite employees with delivery experience to demonstrate the delivery capabilities.

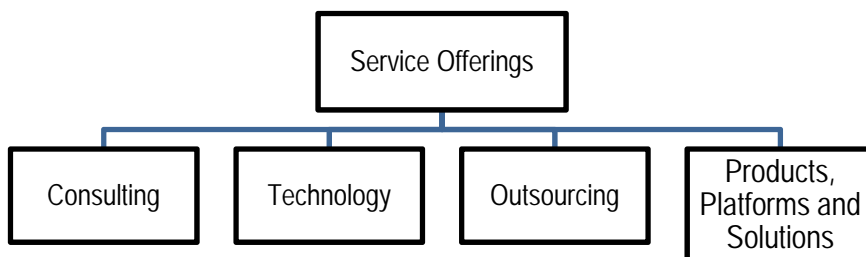


2.24 Depending on the customer requirements, they usually invite service provider by sending out Request for Proposal (RFP) or Request for Quotation (RFQ). This RFP will have all the necessary requirements of the customer that they expect from the service provider. The service provider will have to respond to the RFP by filling in the necessary details and the proposed solution including the pricing. Depending on the solution and the other parameters, the customer evaluates the entire service provider and then finally selects the service provider to award the contract.

The type of contract varies from one-time projects with limited timeframe to long-term Master Service Agreements (MSAs) which covers a suite of services offered by the service provider. This depends on the strategy of the customer and their confidence in working with the service provider as a strategic partner. The contract contains a number of legal requirements which will be binding on both the parties obligated to a number of commitments.

Service Offerings

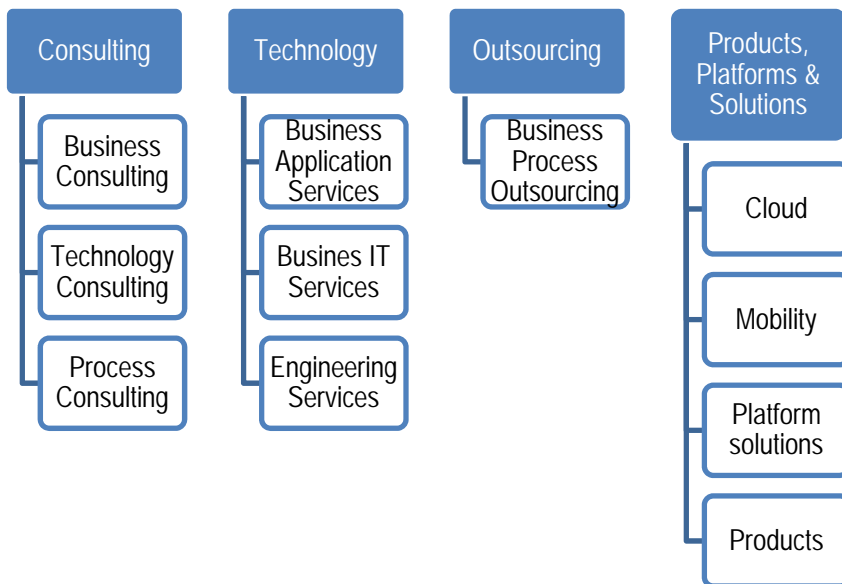
2.25 The services offerings of IT companies include the below 4 categories with specific areas:



- (i) Consulting
 - (a) Business Consulting
 - (b) Technology Consulting
 - (c) Process Consulting
- (ii) Technology
 - (a) Business Application services, across SAP, Oracle, IBM, TIBCO, Microsoft Dynamics, Salesfore.com, etc.
 - (b) Business IT Services
 - (i) Application Outsourcing Services
 - (ii) Application Services
 - (iii) Independent Validation and Testing Services
 - (iv) Infrastructure Management Services
 - (v) Infrastructure Outsourcing Services
 - (c) Engineering services
- (iii) Outsourcing
 - (a) Business Process Outsourcing (BPO)

(iv) Products, Platforms and Solutions

- (a) Cloud
- (b) Mobility
- (c) Sustainability
- (d) Platform solutions
- (e) Products

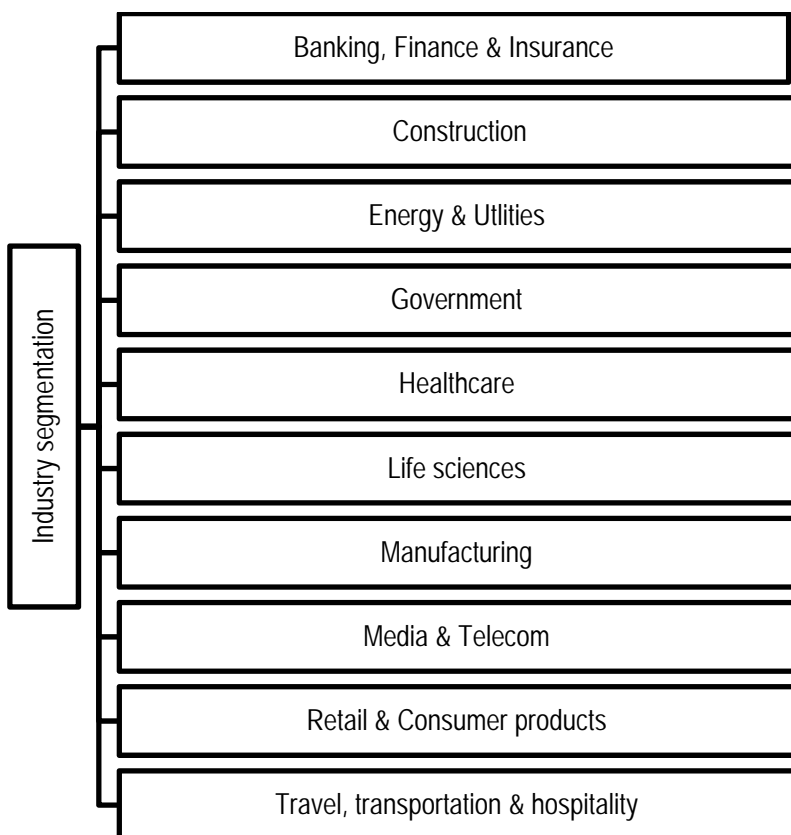


Customer Industry Orientation

2.26 While there are number of service offerings offered by the IT companies, the significant value-add is provided by tailoring these services based on the industry in which their customer's operate. This is to make their services relevant to their customer and also to ensure that their workforce is groomed to build expertise that matches their customer business environment. This is one of the most important leverage for the customer to approach IT service providers as they get access to multi-varied experienced talent which otherwise would not be possible in-house. Therefore, the Industry segmentation organized by the IT companies is in the following Industry verticals as discussed below.

Industry Segmentation

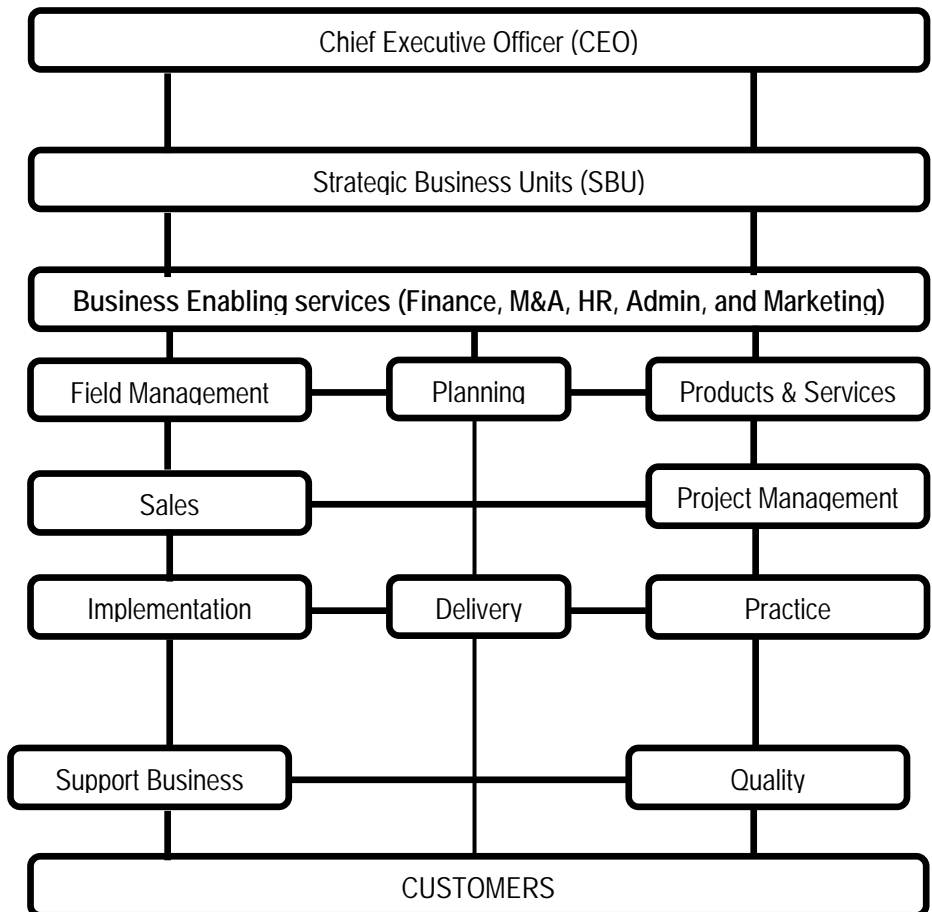
2.27 Industry segmentation refers to the major industries in which Software Industry plays a vital role. The software companies in the industry render services and products to the following industries that fall as part of majority of revenue:



Typical Organization Structure

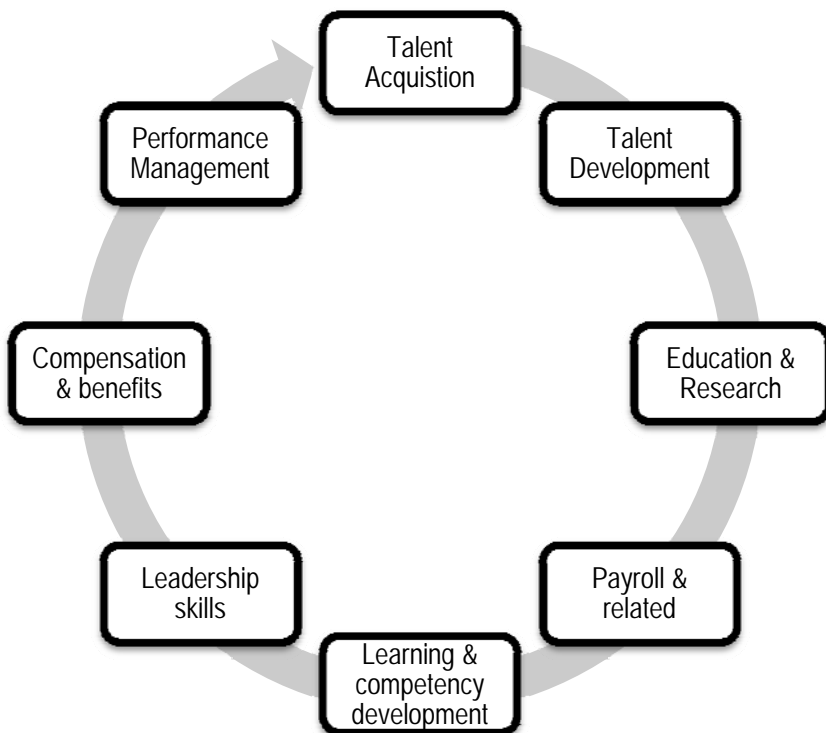
2.28 The typical organizational structure of a software company is depicted below. This is illustrative to visualize the organization structure normally followed explaining the inter-connectivity of variety of functions within the organization.

About IT Software Companies



Human Resources Development

2.29 Human Resources Development (HRD) plays a backbone for an IT company, as the dependence on people is significantly high. Therefore, every IT company takes a number of efforts to ensure world class HR practices in their businesses. The broad activities / departments within HRD include:



All these functions work in tandem to ensure they hire, retain, and groom best of the breed people within the organization. There are a number of accreditations and certifications provided by organizations for the best in the industry. Such accreditations demonstrate the organization practices around people as this becomes the basis on which customers rely on the services provided by the IT companies. There is a huge competition among the IT companies to differentiate themselves based on the HR practices in order to attract talent as well as to provide confidence to their customers for sustainable service offering.

Revenue Model

2.30 Revenues generated by IT companies vary depending on the nature of service and the arrangement with the customer. The typical billing models are:

Billing Models					
Time & Material based - (T&M)	Milestone based	License-based	Annual Maintenance Contracts - (AMC)	Outcome based	Transaction based

Time & Material (T&M) billing involves billing which could be on hourly rates, daily rates, weekly rates, fortnightly rates, monthly rates or bimonthly rates or quarterly rates, etc. In T&M, billing is done on the basis of the time spent by the people involved in the project. This is being tracked by the time sheets maintained by the employees and approved by the project managers. It is also known as Full Time Equivalent (FTE) method of billing.

Milestone billings is charged on the basis of achievement of a Milestone which could be Feasibility Study/ Business Analysis/ Development/ Implementation/ Go Live. The completion of the phase has to be signed by both the parties. Milestone contracts are also called Fixed Price Contracts.

Product License sales could be for examples like, SAP, JDE, Tally MS office, etc. wherein the customer is charged for the number of users using the product of the service provider. This model is usually adopted wherein the product is developed by a service provider and it is installed at the customer location. Typically, this product will require use by multitude of people and, therefore, the customer pays based on the number of users. A typical example would be a banking software, airline software, operating system, etc.

Annual Maintenance Contracts (AMC's) could be installation of Patches and Upgrades. AMCs may also involve change management of the software.

Outcome based pricing, wherein the service provider charges based on the outcomes realized by the customer. This is typically used in Products, Platforms and Solutions service offerings. This is becoming more popular

Technical Guide on Internal Audit of Software Industry

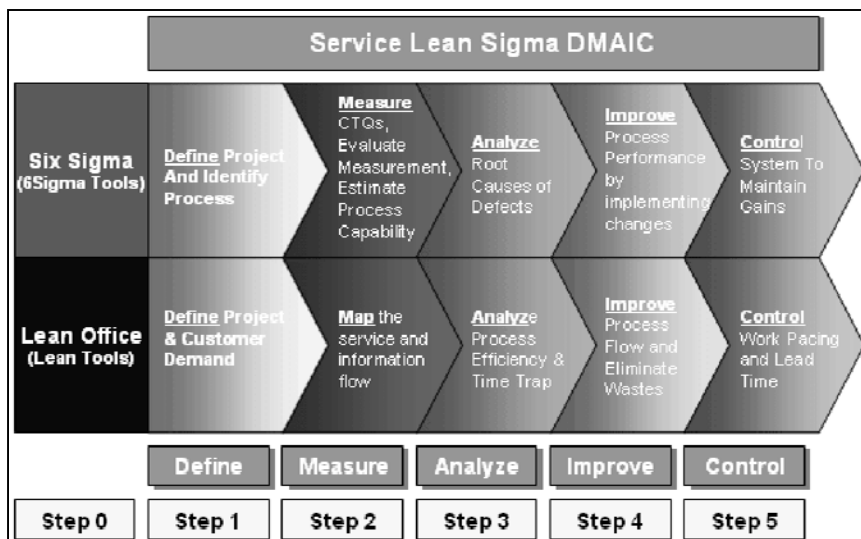
model as the customers want to pay for outcomes than the efforts of the software company.

Transaction/ volume based pricing, wherein the customer pays based on the volumes or transactions delivered by the service provider, irrespective of the number of people or effort put in by them.

Project Lifecycle

2.31 The project spans in an IT industry typically spans anywhere from months to several years depending upon the nature of projects. The lifecycle of project would typically follow six sigma DMAIC steps of:

1. Define
2. Measure
3. Analyse
4. Improve
5. Control



Project Management plays a very significant role in the IT companies as this becomes key enabler to fulfil the customer requirements. Therefore, a number of training and coaching programs are conducted for the people to be fully equipped in managing projects. This is especially essential in a

milestone based billing projects. This also helps in projects where there will be multiple stakeholders involved across both service provider and the customer organizations.

Service Delivery Commitment and Compliance

2.32 The service provider typically commits a minimum service level when it comes to the services offered. This is to provide assurance for the customer as well as to ensure continuity of business operations of the customer. There are many measurement criteria's being used to measure the minimum service levels which are converted into service commitment and built into the contract. The service provider is expected to fulfil this service commitment, failing which, they will be liable to penalties or even consequences of termination of contract. Therefore, in a typical IT project, the delivery commitment paramount becomes guiding factor to be ensured by the service provider. All the key people in the project are expected to be fully familiar with such commitments and ensure that they provide the necessary contribution to ensure it is met.

Governance Model

2.33 As there are number of stakeholders involved across both customer and the service provider across multiple locations, it is indeed essential to have a proper governance model which ensures the communication across levels happens as per agreed frequency. There will be multi-layered governance structure established with specific focus on various topics involved in the engagement between customer and the service provider.

	Governing body	Agenda	Members of Customer	Members of Service Provider	Frequency
1	Strategic: Steering committee	1.Engagement plan 2. Contractual 3.Performance 4 Future plans	Key stakeholders viz. CIO, relationship manager	Business Unit Head, Engagement manager	Quarterly
2	Operational:	1. Portfolio	Project	Engagemen	Monthly

Technical Guide on Internal Audit of Software Industry

	Project portfolio review committee	review 2. Milestone updates 3. Key issues / challenges 4. New opportunities / improvements	Management officer, Business stakeholders	Project manager, Delivery Leaders	
3.	Tactical: Project review board	1. Individual project review 2. Issues / challenges 3. Agreements on performance	Project leader Project team members	Engagement leader Project Leader Project team	Weekly
4	Contract board	1. Contract review 2. MSA review 3. Legal 4. Performance compliance	Legal representative, Relationship manager	Engagement Manager, Legal representative	Monthly

Sustainability

2.34 As the IT service company is high-dense with people and infrastructure requirements, there is a significant need to ensure they follow sustainable practices which takes care of environment and society at large. There are number of stakeholders involved when it comes to the operational functions of the IT company. It is the responsibility of the IT company to ensure that their needs are addressed and met on a sustainable manner. Some of the key stakeholders are:

1. Investors
2. Customers
3. Vendors / Suppliers

4. Employees
5. Society
6. Regulators
7. Environment, Health and Safety
8. Governments / local legislators

The IT Company is accountable to ensure that all such stakeholders' interests are addressed in the operations of the organization. This is typically reported as part of the **Sustainability Report**, popularly known as **Business Responsibility Report**

The previous trend of losing or backward sustained development in the industry has been replaced. Currently, we can see a number of top corporate bodies serving under the Software industry contributed a lot towards Corporate Social Responsibility (CSR) and society as a whole.

Chapter 3

Special Features of Software Industry

3.1 There are certain special features which are applicable to IT Industry; it might not be applicable to other industries. Some of those features are discussed below in the following paragraphs:

Working from Home

3.2 It is an option increasingly being offered by companies to their employees to better manage their work-life balance by providing them flexibility to work from home. Work from Home (WFH) is now an accepted norm in many companies, especially in the IT sector. As the IT companies work for their clients across the globe in different time zones, their employees are expected to interact with their clients and associates in different locations. A critical point taken into account by a number of companies is that most working people complain of not having enough time to spend with their families. The WFH option offers them the opportunity to gain that much-needed work-life balance, and motivates them to put in their best effort at work in return. While employees are happy, employers feel that in these times of high attrition rates, such an option helps in retention. Along with a good pay package and growth opportunity, employees these days are increasingly looking at work culture of a place before deciding on a job.

Time Sheet Management for Work from Home

3.3 The work from home option is not feasible for all sectors. Only those in which there is minimum personal interaction required, like in some departments of the IT sector, does it work. And in even those, one has to work closely with a supervisor, on a set of deliverables. In such a situation it becomes very important to maintain a time sheet.

The method used to maintain the time sheet should monitor and generate timesheets for each employee which includes a start and end time for each task. A detailed breakdown of tasks as well as the cost incurred for each task should be available. They should report to a supervisor who will monitor the

work done by the employees and will approve the time sheet for further processing.

Geographic Spread of Software Industry

3.4 Recent years have seen the increasing geographic distribution of software development. The software industry now tends to relocate its production units in decentralized zones in which a skilled workforce is more readily available, thus taking advantage of political and economic factors. The main objective of this is to optimize resources in order to develop higher quality products at a lower cost. The distance between the different teams can vary from a few meters (when the teams work in adjacent buildings) to different continents. The situation in which the teams are distributed beyond the limits of a nation is called Global Software Development (GSD). This kind of scenario is interesting for several reasons, mainly because it enables organizations to abstract themselves from geographical distance, whilst having qualified human resources and minimizing cost, thus increasing the market area by producing software for remote clients and obtaining a longer workday by taking advantage of time differences. In this context, "offshoring" refers to the transfer of an organizational function to another country, usually one in which human resources are cheaper. "Nearshoring" is when jobs are transferred to geographically closer countries, thus, avoiding cultural and time differences between members and saving travel and communication costs.

Cloud Computing and Central Servers

3.5 Cloud computing is a colloquial expression used to describe a variety of different computing concepts that involve a large number of computers that are connected through a real-time communication network (typically the Internet). In science, cloud computing is a synonym for distributed computing over a network and means the ability to run a program on many connected computers at the same time. Some of the benefits of cloud computing and central servers are:

- Increase in volume output or productivity with fewer people. Cost per unit, project or product plummets.
- Reduced spending on technology infrastructure.
- People worldwide can access the cloud, provided they have an Internet connection.

Technical Guide on Internal Audit of Software Industry

- The process will be streamlined.
- It will reduce capital costs as there is no need to spend on hardware, software and licenses.
- It will improve accessibility.
- Projects can be monitored more effectively.
- It will improve flexibility.

Accounting of Software Tools

3.6 A software company will be utilizing a lot of softwares to run its own business. Few of the softwares might be purchased and the rest developed by the company itself. Such softwares will be of high cost and it has to be verified that such expenses are capitalised. The provisions relating to intangibles as per Accounting Standard (AS) 26 have to be followed. If the software is purchased then it has to be entirely capitalised but if the same is internally generated then it has to be verified if the treatment of the expenses in the research stage and the development stage are in accordance with AS 26.

Project wise Costing

3.7 The software companies will be serving many clients and usually maintain accounts in such a way as to ascertain the project wise costing of all the projects in hand. If the books of accounts are maintained for the company on an overall basis and not bifurcating the projects the management should be in a position to identify the costs to be allocated and be in a position to determine the profitability of the individual projects.

Legal Software

3.8 Software piracy is copying and use of software without proper license from the developer. Similarly, simultaneous use of single user license software by multiple users or loading of single user license software at multiple sites also amounts to software piracy. Using trial version software for commercial gains is also piracy. Piracy is punishable offence. By using legal licensed software, it is ensured that critical updates are available when needed, the products are fully supported, reliable and above all it is legal. Any person or company who indulges in unauthorized copying, sale, downloading or loading of software is punishable by imprisonment or by fine. Hence, the software companies should use legal versions of the softwares.

Confidentiality of Source Code

3.9 IT companies should have a secure network complete with firewall, anti-spyware and ant-virus mechanisms to guard itself against threats from outside. But often the threat is more from inside than from outside and this is what companies often ignore. Perpetrators of information theft often resort to social engineering methods than hacking to gain access to confidential information. Software companies should opt for employee surveillance measures like monitoring of e-mails and IMs to be informed of any possible information theft. Cyber criminals often target smaller companies which handle confidential information. In order to protect such confidential information and source codes the company has to restrict the access of source codes. It also has to enter into a non-disclosure agreement with the employees to safeguard its source code.

Software Used for Internal Use

3.10 Due to the advent of technology most of the software companies use softwares for internal use like, leave management, payroll management, HR records, performance appraisal, and intranet for communication of policies. Due to such softwares, there might not be any manual record maintained for such purposes. Hence, the internal auditor has to verify the data maintained in the softwares and satisfy himself that it is appropriate for the size of the company. He has to run some test checks in such softwares and check if there are any discrepancies. If there are any, he has to verify with the management how such discrepancies have been dealt with and suggest methods to avoid and control such discrepancies.

Chapter 4

Legal Framework

Governing Regulations

4.1 In recent times, software development and technical competence, domain knowledge, information technology enabled services experience and expertise for offering quality IT (ITES) including business process outsourcing services and their exposure to working on BPO knowledge process outsourcing various platforms and systems services industry in India has emerged as one of the most dynamic and vibrant sectors in India's economy.

The Government of India has announced promotion of IT as one of the top priorities of the country. India has embarked on a policy agenda which aims to restructure its economy with enhanced global participation. The FDI to supplement domestic investment in for achieving a quantum jump in growth rate is now an integral part of Government of India policy initiative impairing the greater transparency to business procedure and integration with the global market place are seen as the hallmark of new industrial, trade and fiscal policies.

National Association of Software and Services Companies (NASSCOM)

4.2 The National Association of Software and Services Companies (NASSCOM) is a trade association of Indian Information Technology (IT) and Business Process Outsourcing (BPO) industry. Established in 1988, NASSCOM is a non-profit organization.

NASSCOM is a global trade body with over 1200 members, of which over 250 are global companies from the US, UK, EU, Japan and China. NASSCOM's member companies are in the business of software development, software services, software products, IT-enabled/BPO services and e-commerce. NASSCOM has been a proponent of global free trade in India.

NASSCOM was set up in 1988 to facilitate business and trade in software and services and to encourage advancement of research in software technology. It is a not-for-profit organization, registered under the Indian Societies Act, 1860.

Currently, NASSCOM is headquartered in New Delhi, India with regional offices in the cities of Mumbai, Chennai, Hyderabad, Bangalore, Pune and Kolkata.

NASSCOM Initiatives

Global Trade Development

4.3 The focus of the Global Trade Initiative at NASSCOM is to engage with a wide variety of domestic and international stakeholders, such as Governments, customers and associations, to collaborate on issues related to international policy, visa/ work permits and business partnerships. Since the regulatory environments continuously change the world over and compliance issues are becoming important across the globe, NASSCOM is helping the Indian IT-BPO industry remain abreast of these developments, and participate in these markets while conforming to their new laws and modified policies. Indian companies are beginning to expand across the world, with the largest organisations becoming significant players in the global marketplace and the countries where they are present. India has in many ways ceased to be a competitor and has become an enabler for industry growth in these nations.

NASSCOM is advising member companies to build stronger and deeper relationships with overseas clients and other stakeholders by maintaining absolute transparency, exhibiting corporate ethics and establishing themselves, as well as India, as “trusted, secure sourcing” destinations. Besides continuing to nurture existing markets,

NASSCOM has also stepped up its focus on developing opportunities in newer areas—geographies, verticals and customer segments. Several high growth and under-penetrated regions such as, Continental Europe, Latin America, Africa, the Middle East and Japan are looking promising for the IT-BPO business.

These regions are increasingly beginning to embrace Indian IT in order to optimise costs, improve operational efficiency and productivity and gain access to specialised talent.

National Skills Registry for IT/ITES Professional (NSR-ITP)

4.4 Human resources are the key assets for IT-BPO industry in India and the industry has focused on developing and implementing best practices in human capital management, safety and security that span across employees, clients and other stakeholders. NASSCOM in partnership with the industry has developed a unique initiative – National Skills Registry –a national database of registered and verified knowledge workers in the industry. This database is managed and run by NDML - a fully owned subsidiary of National Securities Depository Limited (NSDL). National Skills Registry (NSR) aims to build a robust and credible information repository on the knowledge professionals in the sector. The data fields include permanent fact sheet of information on the professional along-with photograph & appropriate background checks (where undertaken), thus providing identity security for the organisation and its clients. Biometrics is also included in this repository to ensure unique identification. The benefits of NSR flow across to clients, service providers and employees. The data is owned by the employee who can authorise prospective employers to validate details and avoid duplication of background checks. The industry benefits by having credible data on current and prospective employees eliminate issues of potential frauds and avoid repetitive background checks. Clients who deal with sensitive data are assured of proper verification checks of employees who are dealing with this data. NSR has enhanced the value proposition of Indian IT-BPO industry, as one that has raised the bars on security standards in pursuit of excellence and client satisfaction.

Sector Skills Council

4.5 Sector Skills Councils are tasked with developing an enabling environment for skills development, including support for (i) clarification of sector-specific competencies/skills (ii) capacity development for skills development institutions/ such as curriculum and standards, faculty development, and so forth; (iii) trainee placement mechanisms, and (iv) monitoring and evaluation, supporting systematic collection and analysis of data about skills development, including employer feedback regarding the quality of trainees (v) quality assurance of independent third-party providers, etc.

Diversity and Inclusivity

4.6 Recognizing the need for shared Child Care facilities that are vital for the professional growth and retention of employees, NASSCOM, as part of its Diversity and Inclusion Initiative, had entered into an understanding with ESPERANZA, to provide quality 24 hours child care facility for our members at a concise fee, in the year 2009.

Membership

4.7 NASSCOM's members are primarily companies run by Indian nationals in the business of software development, software services, and IT-enabled/ BPO services. The consortium was set up to facilitate Indian business and trade in software and services and to encourage advancement of research in software technology by Indians. It is a non-profit organization, funded entirely by its members. NASSCOM has played a role in ensuring quality of service, and the enforcement of Intellectual Property Rights in the Indian Software and BPO industry. As on June 2007, more than 1,110 information technology companies in India were members of NASSCOM. Membership includes domestic software/ ITES companies as well as multinationals operating in India. The wide range of member companies gives NASSCOM the ability to represent the interests of the Indian software industry with authority. NASSCOM also has a Mentorship Programme for the mid-sized companies. This is a six month engagement, which will help the organization to develop a better assessment of their strengths and weaknesses.

(a) NASSCOM Membership provides a unique opportunity for an organisation and its professionals to engage and drive thought leadership in activities, forums and industry groups. NASSCOM members address current challenges, build strategies for the future and share best practices, with the overall objective of building a growth-led competitive and sustainable industry.

(b) Insights on Industry Trends

- Access to NASSCOM research and intelligence that tracks industry trends, growth opportunities and best practices
- Access to a repository of industry presentations, blogs, discussions and articles
- An opportunity to engage with the NASSCOM research team and share case studies or transformational stories.

Technical Guide on Internal Audit of Software Industry

(c) Opportunities to enhance visibility

- Visibility through features and interviews on the NASSCOM website, as well as the monthly newsletter, NASSCOM News line
- Speak, sponsor or participant opportunities at NASSCOM events
- Chance to contribute to blogs and newsletters as thought leaders
- Brand building through NASSCOM awards and recognitions
 - Innovation
 - Emerge 50
 - Healthcare IT
 - Social Innovation
 - Excellence in IT Security
 - Gender Diversity
 - DSCI Security and Privacy
 - Talent Innovation
 - Nominate your customer in India for the IT User Awards

(d) Opportunity to network, build and share best practices

- Chance to leverage the Member database on NASSCOM's website to post a trade lead, or participate in one
- Chance to share or learn best practices through city level networking sessions on human capital development, data security, contract management, quality, diversity and more.

(e) Global Trade Development

- Members can participate in opportunities for global networking and build business at NASSCOM's global events, and through delegations and road shows
- Network with companies in other countries through their delegations to India
- Receive information regularly about policy updates in different countries.

- Understand issues related to visas, immigration through NASSCOM's mobility best practices sessions
- Learn about trends and opportunities in different markets through country reports

Software Technology Parks of India (STPI)

4.8 Software Technology Parks of India' (STPI) is a government agency in India, established in 1991 under the Ministry of Communications and Information Technology, that manages the Software Technology Park scheme. It is an export oriented scheme for the development and export of computer software, including export of professional services. The STP Scheme provides various benefits to the registered units, which includes 100% foreign equity, tax incentives, duty free import, duty free indigenous procurement, CST reimbursement, DTA entitlement, deemed export etc.

STPI has played a seminal role in India having earned a reputation as an information technology superpower. STP units exported software and information technology worth Rs. 2,15,264 crore in FY 2010-11. The state with the largest export contribution was Karnataka (see Bangalore) followed by Maharashtra, Tamil Nadu and Andhra Pradesh. STPI has a presence in many of the major cities of India including the cities of Bangalore, Mysore, Trivandrum, Bhilai, Bhubaneswar, Chennai, Coimbatore, Hyderabad, Gurgaon, Pune, Guwahati, Noida, Mumbai, Kolkata, Kanpur, Lucknow, Dehradun, Patna, Rourkela, Ranchi, Gandhinagar, Imphal, Shillong, Nashik, etc.

Besides, regulating the STP scheme, STPI centres also provide variety of services, which includes High Speed Data Communication, Incubation facility, Consultancy, Network Monitoring, Data Centre, Data Hosting, etc. STPI provides physical hosting for the National Internet Exchange of India.

The tax benefits under the Income Tax Act Section 10A applicable to STP units has expired since March, 2011. While the Government has chosen not to extend the Sec 10A benefits against the demand by the IT units, most of the STP registered SME units shall be affected, who now will have to pay Income Tax on profits earned from exports.

A new incentive scheme for IT & ITES companies is under discussion. It will help dispersal of IT industry in smaller cities and also support STPI-registered units which have not come under SEZs as well as other units which are not covered under any incentive scheme. This incentive scheme is

seen as an alternate scheme to compensate the STPI units, but the same would be restricted to those units located in tier II and III cities. However, proposal is still under consideration and no announcement has been made.

Functions of STPI

4.9 The following are functions of STPI:

- (i) To establish Software Technology Parks/ Centres at various locations in the country
- (a) to perform all functions in the capacity of the successor to the erstwhile Software Technology Park Complex which were taken over by the STPI
- (b) to establish and manage the infrastructural resources such as integrated infrastructure including International communication / Data centre/ Incubating facilities, etc. for 100% export oriented units and to render similar services to the users other than exporters.
- (c) to undertake other export promotional activities such as, technology assessments, market analysis, market segmentation as also to organize workshops/exhibitions/seminars/ conferences etc.
- (d) to facilitate specialized training in the niche areas to meet the above objectives.
- (e) to work closely with respective State Government and act as an interface between Industry and Government.
- (f) to promote secondary and tertiary locations by establishing STPI presence to promote STP/ EHTP Scheme, and promotional schemes announced by Government.
- (g) to promote entrepreneurship through incubation programmes / seed funds / IP development and other awareness programmes.
- (h) to assist State Governments in formulating IT policies and liaison for promoting the IT industries in respective states to achieve an exponential growth of exports.
- (i) to promote quality and security standards in the IT industries.
- (j) to work jointly with venture capitalists for providing financial assistance to the IT industries.

- (k) to provide Project Management and Consultancy services both at national and international level in the areas of expertise of STPI.
- (ii) To perform financial management functions which comprise inter alia the following activities
 - (a) to obtain or accept grants, subscription, donations, gifts, bequests from Government, Corporations, Trusts, Organizations or any person for fulfilling the objectives of the STPI.
 - (b) to maintain a fund to which shall be credited :
 - all money provided by the Central Government, State Governments, Corporations, Universities, etc.,
 - all fees and other charges received by the STPI,
 - all money received by the STPI by way of grants, gifts, donations, benefactions, bequests or transfers; and
 - all money received by the STPI in any other manner or from any other source.
 - (c) to deposit all money credited to the Fund in Scheduled Banks/ Nationalized Banks or to invest in such a manner for the benefit of the STPI as may be prescribed. At least 60% of the funds shall be placed with the Public Sector Banks or in such a manner as may be prescribed by the Government from time to time.
 - (d) to draw, make, accept, endorse and discount cheques, notes or other negotiable instruments and for this purpose, to sign, execute and deliver such assurance and deeds as may be necessary for the purposes of the STPI.
 - (e) to pay out of the funds maintained by STPI or part thereof, the expenses incurred by the STPI from time to time including all expenses incidental to the formation and reorganization of the STPI and management and administration of any of the foregoing activities including all rents, rates, taxes, outgoings and the salaries of the employees.
 - (f) to acquire, hold and dispose of the property in any manner whatsoever for the purposes of the STPI, with the prior approval of Governing Council as per the procedure laid down by Government.

Technical Guide on Internal Audit of Software Industry

(iii) To do all such acts and things as may be required in order to fulfil the objectives of the STPI

- (a) Strive for the up gradation of the technology to meet customer requirements in ever changing market
- (b) Up gradation of the technical knowledge of STPI personnel through seminars/ conferences/ trainings
- (c) State-of-Art data communication services as per acceptable international standards
- (d) Comprehensive service including project approvals, import attestation, software export certification etc., in a time bound manner
- (e) Achieving customer satisfaction through the combined efforts of planning and execution of the projects through dedicated workforce.

Ministry of Communications and Information Technology, Government of India

4.10 The Ministry of Communication and Information Technology is an Indian government ministry. It contains three departments:

- Department of Telecommunications
- Department of Electronics and Information Technology
- Department of Posts

The following cadre controlling authority of the Civil Services (including Indian Telecommunication Service, Indian Postal Service, Telegraph Traffic Service and Indian Posts and Telegraphs Accounts and Finance Service) are under the administration and supervision of the Ministry of Communications and Information Technology.

The objective of the Ministry with respect to the Information Technology is as under:

- Promotion of Information Technology education and Information Technology-based education
- Matters relating to Cyber Laws, administration of the Information Technology Act, 2000 (21 of 2000) and other IT-related laws
- Matters relating to promotion and manufacturing of semiconductor devices in the country excluding all matters relating to Semiconductor

Complex Limited Mohali; the Semiconductor Integrated Circuits Layout Design Act, 2000 (37 of 2000)

- Interaction in IT-related matters with international agencies and bodies, e. g., Internet for Business Limited, Institute for Education in Information Society and International Code Council-on line
- Initiative on bridging the Digital Divide: matters relating to Media Lab Asia
- Promotion of standardization, testing and quality in IT and standardization of procedures for IT applications and tasks
- Electronics Export and Computer Software Promotion Council
- National Informatics Centre
- Initiatives for development of hardware and software industries including knowledge-based enterprises, measures for promoting IT exports and competitiveness of the industry
- Efforts for increasing the acceptance of FOSS at a national level (NRCFOSS)
- Centre for Development of Advanced Computing (C-DAC)

Key Functions of the Ministry are as under:

- Policy matters relating to Information Technology; Electronics; and Internet (all matters other than licensing of Internet Service Provider).
- Promotion of Internet, IT and IT enabled services.
- Assistance to other departments in the promotion of e-Governance.
- Promotion of Information Technology education and Information Technology-based education.
- Matters relating to Cyber Laws, administration of the Information Technology Act, 2000 (21 of 2000) and other IT related laws.
- Matters relating to promotion and manufacturing of Semiconductor Devices in the country excluding all matters relating to Semiconductor Complex Limited (SCL), Mohali; The Semiconductor Integrated Circuits layout Design Act, 2000 (37 of 2000).
- Interaction in IT related matters with international agencies and bodies e.g., Internet for Business Limited (IFB), Institute for Education in

Technical Guide on Internal Audit of Software Industry

Information Society (IBI) and International Code Council – on line (ICC).

- Initiative on bridging the Digital Divide: Matters relating to Media Lab Asia.
- Promotion of Standardization, Testing and Quality in IT and standardization of procedure for IT application and Tasks.
- Electronics Export and Computer Software Promotion Council (ESC).
- National Informatics Centre (NIC).
- Initiatives for development of Hardware/ Software industry including knowledge-based enterprises, measures for promoting IT exports and competitiveness of the industry.
- All matters relating to personnel under the control of the Department.

Indian Copyright Act, 1957

4.11 The Copyright Act, 1957 (Act No. 14 of 1957) governs the laws & applicable rules related to the subject of copyrights in India. Copyright Law in the country was governed by the Copyright Act of 1914, was essentially the extension of the British Copyright Act, 1911 to India, and borrowed extensively from the new Copyright Act of the United Kingdom of 1956. All copyright related laws are governed by the Copyright Act, 1957.

The Copyright Act today is compliant with most international conventions and treaties in the field of copyrights. India is a member of the Berne Convention of 1886 (as modified at Paris in 1971), the Universal Copyright Convention of 1951 and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement of 1995.

Though India is not a member of the Rome Convention of 1961, WIPO Copyrights Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), the Copyright Act is compliant with it.

Copyright Board

4.12 The Copyright Board, a quasi-judicial body, was constituted in September 1958. The jurisdiction of the Copyright Board extends to the whole of India. The Board is entrusted with the task of adjudication of disputes pertaining to copyright registration, assignment of copyright, grant of licences in respect of works withheld from public, unpublished Indian works, production and publication of translations and works for certain specified

purposes. It also hears cases in other miscellaneous matters instituted before it under the Copyright Act, 1957. The meetings of the Board are held in five different zones of the country. This facilitates administration of justice to authors, creators and owners of intellectual property including IP attorney's near their place of location or occupation.

A Gist of Important Regulations that may be Applicable to Software Industry

4.13 The important regulations that may be applicable to Software Industry are as follows:

- The Companies Act, 2013
- Partnership Act, 1932 / Limited Liability Partnership Act, 2008
- Shops and Establishments Act of respective states.
- The Sale of Goods Act, 1930
- The Negotiable Instruments Act, 1881
- The Income tax Act, 1961
- Service Tax under the Finance Act, 1994
- The Indian Contract Act, 1872
- Sales tax Act of respective states
- Foreign Exchange Management Act 1999
- Information Technology Act 2000
- State Specific Shops and Establishment enactments.
- Central Excise and Customs Act

Chapter 5

Need for Internal Audit

5.1 Effective Internal Audit provides a tool to ease out all complexities, ensures that systems and processes are adequate to support the growth and are adapted to the changes in various regulations, thereby ensuring sustained growth and development.

Preface to the Standards on Internal Audit, issued by the Institute of Chartered Accountants of India defines the term Internal Audit as:

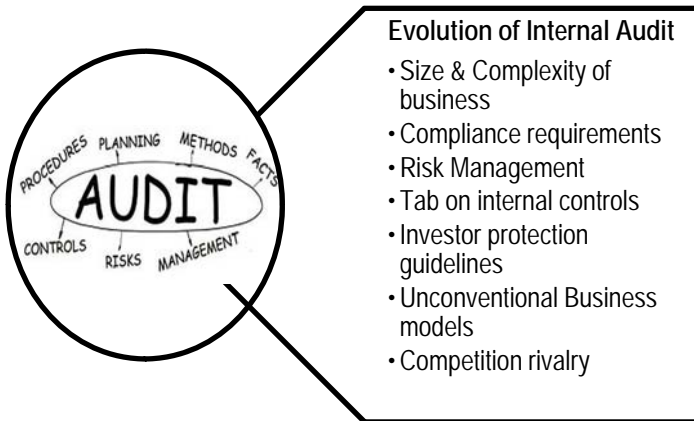
"Internal Audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system."

The Definition highlights the following facets of an Internal Audit:

- Internal auditor should be independent of the activities they audit. The internal audit function is in general considered independent when it can carry out its work freely and objectively. Independence permits internal auditors to render impartial and unbiased judgment essential to the proper conduct of audits.
- Internal audit is a management function, thus, it has the high-level objective of serving management's needs through constructive recommendations in areas such as, internal control, risk, utilization of resources, compliance with laws, management information system, etc.
- Internal audit's role should be a dynamic one, continually changing to meet the needs of the organization. There is often a need to change audit plans as circumstances warrant. These changes may include coverage of new areas, assistance to management in solving problems, and the development of new internal audit techniques.
- An effective internal audit function plays a key role in assisting the board to discharge its governance responsibilities. Thus, it contributes in accomplishment of objectives and goals of the organization through ethical and effective governance.

- Risk management enables management to effectively deal with risk, associated uncertainty and enhancing the capacity to build value to the entity or enterprise and its stakeholders. Internal auditor plays an important role in providing assurance to management on the effectiveness of risk management.
- Internal audit function constitutes a separate component of internal control with the objective of determining whether other internal controls are well designed and properly operated. Thus, the examination and appraisal of controls are normally components, either directly or indirectly, of every type of internal auditing assignment.

Factors Contributing To Evolution Of Internal Audit



5.2 *General Guidelines on Internal Audit* issued by the Institute of Chartered Accountants of India describes the factors contributing to the evolution of Internal Audit in India. A few such factors are:-

(i) Increased size and complexity of businesses

Increased size and business spread dilutes direct management oversight on various functions, necessitating the need for a full time, independent and dedicated team to review and appraise operations. Complexity of operations results in requirement of specialists in the field to guide the management.

Technical Guide on Internal Audit of Software Industry

(ii) Enhanced compliance requirements

Increase in the geographical spread of the businesses has also led to crossing of political frontiers by businesses in a bid to tap global capital for improving the technology. This has thrown up compliance with the laws of the home country as well as the laws of that land as a critical factor for existence of businesses abroad.

(iii) Focus on risk management and internal controls to manage them

Internal auditors can carry out their job in a more focused manner by directing their efforts in the areas where there is a greater risk, thereby enhancing the overall efficiency of the process and adding greater value with the same set of resources.

(iv) Stringent norms mandated by regulators to protect investors

The regulators are coming up in a big way to protect the interests of the investors. The focus of the latest regulations being ethical conduct of business enhanced corporate governance and reporting requirements to various boards and committees.

(v) Unconventional business models

Businesses today use unconventional models and practices, for example, outsourcing of non-core areas, such as collection of waste generated to another organization rather than dealing with on its own.

(vi) An increasingly competitive environment

Whereas deregulation and globalization have melted the political as well as other barriers to entry in the markets for goods and services, free flow of capital, technology and know-how among the countries as well as strong infrastructure has helped in better access to the existing best practices globally, and technology and equipment has helped to carry on the business smoothly. This in turn, has lured more and more players in the existing markets, thereby, stiffening the competition.

Standards on Internal Audit

5.3 The Institute of Chartered Accountants of India (ICAI) has, till date, issued eighteen Standards on Internal Audit (SIAs) and the same are as follows:

SIA 1 Planning an Internal Audit

- SIA 2 Basic Principles Governing Internal Audit
- SIA 3 Documentation
- SIA 4 Reporting
- SIA 5 Sampling
- SIA 6 Analytical Procedures
- SIA 7 Quality Assurance in Internal Audit
- SIA 8 Terms of Internal Audit Engagement
- SIA 9 Communication with Management
- SIA 10 Internal Audit Evidence
- SIA 11 Consideration of Fraud in an Internal Audit
- SIA 12 Internal Control Evaluation
- SIA 13 Enterprise Risk Management
- SIA 14 Internal Audit in an Information Technology Environment
- SIA 15 Knowledge of the Entity and its Environment
- SIA 16 Using the Work of an Expert
- SIA 17 Consideration of Laws and Regulations in an Internal Audit
- SIA 18 Related Parties

These Standards are recommendatory in nature and codify the best practices in the field of internal audit. "*Framework for Standards on Internal Audit*" promotes professionalism in the internal audit activity and comprises of four components, viz., the Code of Conduct, the Competence Framework, the Body of Standards and the Technical Guide.

Standards on Internal Audit (SIAs) are important for carrying out internal audit of Software Industry. The internal auditor and the audit team are expected to be updated on the latest pronouncements issued by the Institute in order to conduct an effective internal audit.

5.4 As multinational enterprises have recognized an increasing array of risks facing the organization, it is no surprise that the demand for risk management professionals has risen dramatically. Any disciplined approach to growth and value creation assumes that the organization is managing all manner of significant and likely risks effectively. Risk can be considered both

Technical Guide on Internal Audit of Software Industry

at the macro or portfolio level (enterprise-wide risk management) as well as the micro or departmental level. Risk management is frequently an area in which internal audit can contribute greatly by furnishing analyses and providing wise counsel to top management and the board of directors.

The internal audit function also performs micro level risk assessment for its own purposes to identify those areas which demand the greatest efforts on the part of the internal audit function and for achieving appropriate audit coverage of the audit universe over defined periods of time. Internal auditors can play a significant “partnering” role with management in establishing and monitoring business processes for the assessment, measurement, and reporting of risks in general and in implementing enterprise risk management initiatives.

Modern approaches to risk-based internal auditing allow for the assessment of risks and linking them to business objectives systematically. Indeed, the internal audit function can facilitate the processes by which business units “can develop high quality risk assessments,” and this can in turn be very useful to the internal audit function in planning its own work, primarily by enhancing the quality of decision-relevant information and minimizing duplication of effort.

Importance of Internal Audit

5.5 The following points highlight importance of internal audit:

- Understanding and assessing the risks and evaluate the adequacies of the prevalent internal controls.
- Identifying areas for systems improvement (manual and by automation support) and strengthening controls.
- Ensuring optimum utilization of the resources of the entity, for example, human resources, physical resources, etc.
- Ensuring proper and timely identification of liabilities, including contingent liabilities of the entity and taking a merit based view on contingent liabilities.
- Ensuring compliance with internal and external guidelines and policies of the entity as well as the applicable statutory and regulatory requirements.
- Safeguarding the assets of the entity and adequacy of title to the assets.

- Reviewing and ensuring adequacy of information systems security and control.
- Reviewing and ensuring adequacy, relevance, reliability and timeliness of management information system flowing from common data base.

Importance of Audit Documentation

5.6 "*Internal audit documentation*" means the record of audit procedures performed, including audit planning as discussed in the Standard on Internal Audit (SIA) 1, *Planning an Internal Audit*, relevant audit evidence obtained, and conclusions the auditor reached (terms such as "working papers" or "work papers" are also sometimes used). Thus, documentation refers to the working papers prepared or obtained by the internal auditor and retained by him in connection with the performance of his internal audit.

All the significant matters which require exercise of judgment, together with the internal auditor's conclusion thereon should be included in the internal audit documentation. However, the documentation prepared by the internal auditor should be such that enables an experienced internal auditor (or a reviewer), having no previous connection with the internal audit to understand:

- (a) the nature, timing and extent of the audit procedures performed to comply with SIAs and applicable legal and regulatory requirements;
- (b) the results of the audit procedures and the audit evidence obtained;
- (c) significant matters arising during the audit and the conclusions reached thereon; and
- (d) terms and conditions of an internal audit engagement/ requirements of the internal audit charter, scope of work, reporting requirements, any other special conditions, affecting the internal audit.

Use of Analytical Procedures

5.7 "*Analytical procedures*" means the analysis of significant ratios and trends, including the resulting investigation of fluctuations and relationships in both financial and non-financial data that are inconsistent with other relevant information or which deviate significantly from predicted amounts.

Technical Guide on Internal Audit of Software Industry

Analytical procedures are used for the following purposes:

- to assist the internal auditor as risk assessment procedures to obtain initial understanding of the entity and its environment and thereafter in planning the nature, timing and extent of other internal audit procedures;
- as substantive procedures when their use can be more effective or efficient than tests of details in reducing detection risk for specific financial statement assertions;
- as an overall review of the systems and processes in the final review stage of the internal audit; and
- to evaluate the efficiency of various business/ management systems.

When analytical procedures identify significant fluctuations or relationships that are inconsistent with other relevant information or that deviate from predicted amounts, the internal auditor should investigate and obtain adequate explanations and appropriate corroborative evidence. The examination and evaluation should include inquiries of management and the application of other auditing procedures until the internal auditor is satisfied that the results or relationships are sufficiently explained.

Unexplained results or relationships may be indicative of a significant condition such as a potential error, irregularity, or illegal act. Results or relationships that are not sufficiently explained should be communicated to the appropriate levels of management. The internal auditor may recommend appropriate courses of action, depending on the circumstances.

Terms of Internal Audit Engagement

5.8 The auditee is expected to formally communicate the appointment to the internal auditor. Upon receiving the communication, the internal auditor should send an engagement letter, preferable before the commencement of engagement so as to avoid any misunderstanding. The internal auditor and the auditee should agree on the terms of engagement before commencement. Standard on Internal Audit (SIA) 8, "*Terms of Internal Audit Engagement*" establishes standards and provides guidance in respect of terms of engagement of the internal audit activity whether carried out in house or by an external agency.

The terms of the engagement should contain a statement in respect of the scope of the internal audit engagement. It should clearly delineate the broad areas of function of internal audit like evaluating internal controls, review of business process cycle controls, risk management and governance.

The engagement letter should, generally, include reference to the following:

- Objective of internal audit;
- Management's responsibilities;
- Scope of internal audit (including reference to the applicable legislation, regulation and various pronouncement of ICAI);
- Access to records, documents and information required in connection with the internal audit;
- Expectation to receive management's written confirmation in respect to representation made in connection with the audit;
- Basis on which fees shall be computed and the billing arrangements thereof;
- Industry specific area;
- References received from the parent company, if any; and
- Undertakings and locations to be covered.

Internal auditor have a specific responsibility arising out of a law or a regulation or a professional standard applicable to the internal auditor, to communicate directly, the above mentioned issues to an appropriate authority or someone within the entity or a regulator, the terms of the engagement should contain a clear mention of such responsibility.

Internal Audit Evidence

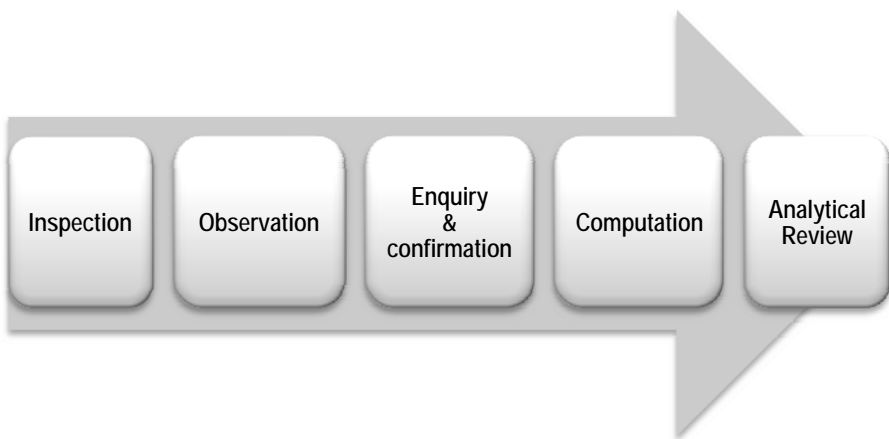
5.9 Paragraph 14 of the SIA 2, "*Basic Principles Governing Internal Audit*", states:

"The internal auditor should, based on his professional judgment, obtain sufficient appropriate evidence to enable him to draw reasonable conclusions there from on which to base his opinion or findings. Factors affecting the professional judgment include the activity under audit, possible errors and their materiality and the risk of occurrence of such errors."

Technical Guide on Internal Audit of Software Industry

The internal auditor obtains evidence by performing one or more of the following procedures:

- **Inspection:** Inspection consists of examining records, documents, or tangible assets. Inspection of records and documents provides evidence of varying degrees of reliability, depending on their nature and source and the effectiveness of internal controls over their processing.
- **Observation:** Observation consists of witnessing a process or procedure being performed by others. For example, the internal auditor may observe the counting of inventories by client personnel.



- **Inquiry and Confirmation:** Inquiry consists of seeking appropriate information from knowledgeable persons inside or outside the entity. Inquiries may range from formal written inquiries addressed to third parties to informal oral inquiries addressed to persons inside the entity. Responses to inquiries may provide the internal auditor with information which he did not previously possess or may provide him with corroborative evidence.
- **Computation:** Computation consists of checking the arithmetical accuracy of source documents and accounting records or performing independent calculations.
- **Analytical Review:** Analytical review consists of studying significant ratios and trends and investigating unusual fluctuations and items.

Internal Control Evaluation

5.10 Standard on Internal Audit (SIA) 12, "Internal Control Evaluation" states that "Internal controls are a system consisting of specific policies and procedures designed to provide management with reasonable assurance that the goals and objectives it believes important to the entity will be met".

"Internal Control System" means all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information. The internal audit function constitutes a separate component of internal control with the objective of determining whether other internal controls are well designed and properly operated.

5.11 The broad areas of review by the internal auditor in evaluating the internal control system include:

- Mission, vision, ethical and organizational value-system of the entity
- Personnel allocation, appraisal system, and development policies
- Accounting and financial reporting policies and compliance with applicable legal and regulatory standards
- Objective of measurement and key performance indicators
- Documentation standards
- Risk management structure
- Operational framework
- Processes and procedures followed
- Degree of management supervision
- Information systems, communication channels
- Business Continuity and Disaster Recovery Procedures

The internal auditor should obtain an understanding of the significant processes and internal control systems sufficient to plan the internal audit engagement and develop an effective audit approach. The internal auditor should use professional judgment to assess and evaluate the maturity of the entity's internal control.

Technical Guide on Internal Audit of Software Industry

The auditor should obtain an understanding of the control environment sufficient to assess management's attitudes, awareness and actions regarding internal controls and their importance in the entity. The internal auditor should examine the continued effectiveness of the internal control system through evaluation and make recommendations, if any, for improving that effectiveness.

Internal Audit in an Information Technology Environment

5.12 The overall objective and scope of internal audit does not change in a CIS environment. However, the use of computer changes the processing, storage, retrieval and communication of financial information and may affect the accounting and internal control systems employed by the entity. Moreover, the risks involved in an audit may too undergo a change. The internal auditor should have sufficient knowledge of the CIS environment to plan, direct, supervise, control and review the work performed.

The internal auditor should consider the effect of an IT Environment on the internal audit engagement inter alia:

- (i) Consider the extent to which the IT environment is used to record, compile, process and analyse information, and
- (ii) The system of internal control in existence in the entity with regard to:
 - The flow of authorised, correct and complete data to the processing centre;
 - The processing, analysis and reporting tasks undertaken in the installation;
 - The impact of computer-based accounting system on the audit trail that could otherwise be expected to exist in an entirely manual system.

5.13 The internal auditor should review the robustness of the IT environment and consider any weakness or deficiency in the design and operation of any IT control within the entity, by reviewing:

- System Audit reports of the entity conducted by independent Information System auditors;
- Reports of system breaches, unsuccessful login attempts, passwords compromised and other exception reports;

- Reports of network failures, virus attacks and threats to perimeter security, if any;
- General controls like segregation of duties, physical access records, logical access controls;
- Application controls like input, output, processing and run-to-run controls;
- Excerpts from the IT policy of the entity relating to business continuity planning, crisis management and disaster recovery procedures.

Knowledge of Business

5.14 Prior to accepting an engagement, the internal auditor should obtain a preliminary knowledge of the industry and of the nature of ownership, management, regulatory environment and operations of the entity subjected to internal audit, and should consider whether a level of knowledge of the entity's business adequate to perform the internal audit can be obtained.

In case of continuing engagements, the internal auditor should update and re-evaluate information gathered previously, including information in the prior year's working papers. The internal auditor should also perform procedures designed to identify significant changes that have taken place in the operations, control environment, technology and strategic processes since the last internal audit.

Internal auditor should obtain sufficient, appropriate information about the entity, specifically the following aspects:

- Relevant industry, regulatory, and other external factors including the applicable financial reporting framework.
- The nature of the entity to enable the internal auditor to understand the classes of transactions, account balances, and disclosures to be expected in the financial statements.
- Business operations.
- Investments and investment activities
- Financing and financing activities.
- Financial reporting.

Technical Guide on Internal Audit of Software Industry

- The entity's selection and application of accounting policies, including the reasons for changes thereto.
- The entity's objectives and strategies, and those related business risks that may result in risks of material misstatement.
- Business risk may arise from change or complexity. A failure to recognise the need for change may also give rise to business risk. Business risk may arise, for example, from:
 - (a) The development of new products or services that may fail;
 - (b) A market which, even if successfully developed, is inadequate to support a product or service; or
 - (c) Flaws in a product or service that may result in liabilities and reputational risk.
- An understanding of the business risks facing the entity increases the likelihood of identifying risk of material misstatement in the information subject to internal audit.

Overview of Compliance

5.15 Compliance means ensuring conformity and adherence to Acts, Rules, Laws, Regulation, Directives and Circulars.

Standard on Internal Audit (SIA) 17 "*Consideration of Laws and Regulations in an Internal Audit*" issued by the Institute of Chartered Accountants of India requires that when planning and performing audit procedures and in evaluating and reporting the results thereof, the internal auditor should recognize that non compliance by the entity with laws and regulation may materially affect the financial statements. The requirements in this SIA are designed to assist the internal auditor in identifying the significant impact of non-compliance with laws and regulations on the functioning of the entity. However, in view of the inherent limitations on the role of the internal auditor, he is not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

Non-compliance refers to Acts of omission or commission by the entity, either intentional or unintentional, which are contrary to the prevailing laws or regulations. Such acts include transactions entered into by or in the name of the entity, or on its behalf, by those charged with governance, management

or employees. Compliance does not include personal misconduct (unrelated to the business activities of the entity) by those charged with governance, management or employees of the entity.

Non-compliance with laws and regulations may result in fines, litigation or other consequences for the entity that may have a material effect on not only the reporting framework of the financial statements but also on the functioning of the entity and which in extreme cases may impair their ability to continue as a going concern itself.

Compliance with laws and regulations is an inherent part of the functioning of an entity. Since the role of an internal auditor is to carry out a continuous and critical appraisal of the functioning of an entity and suggest improvements thereto, the identification of non-compliance with laws and regulations is also an inherent part of his responsibilities. It will be pertinent to adhere that the scope of an internal audit as described in paragraph 9 of the Standard on Internal Audit (SIA) 1, "*Planning an Internal Audit*", is also affected by the statutory or regulatory framework in which the entity operates.

5.16 The internal auditor should perform procedures to identify instances of non-compliance with those laws and regulations where non-compliance should be considered while preparing financial statements, specifically:

- Inquiring with management as to whether the entity is in compliance with such laws and regulations.
- Inspecting correspondence with the relevant licensing or regulatory authorities.
- The internal auditor should also perform substantive tests of details of classes of transactions, account, balances or disclosures.

5.17 The significance of compliance is as follows:

(i) Benefits to the Industry are:

- Helps in compliance with legal terms and covenants and thereby reduces penalties and charges.
- Increased internal control.
- Reduction of internal frauds and losses.
- More time available for other core activities.
- Increases efficiency in operations.

Technical Guide on Internal Audit of Software Industry

- Customer satisfaction.

(ii) Benefits to the stakeholder are:

- Ensures risk containment and safer market place
- Better investor confidence
- Uniform practices
- Better image, hence, better value for the investor.

Chapter 6

Major Areas of Internal Audit Significance

Business Areas

Business Vision and Strategy

6.1 Most of the IT companies will have a vision and a strategy for their business. A description of what an organization would like to achieve or accomplish in the mid-term or long-term future is known as a vision statement of a company. It is intended to serve as a clear guide for choosing current and future courses of action

Strategy can be defined as a combination of the ends (goals) for which the company is striving and the means by which it is seeking to get there. The most important part of implementing the strategy is ensuring the company is going in the right direction which is towards its vision.

A written declaration of an organization's core purpose and focus that normally remains unchanged over time is called as a mission statement. It serves as filters to separate what is important from what is not and clearly state which markets will be served and how, and communicate a sense of intended direction to the entire organization.

Mission Defines what they have to do, Vision defines what they want to do. The Internal auditor has to first read the vision and mission statement and strategy drafted to achieve the same, in order to get a fair idea of the business of the company.

Market Differentiators of the Company

6.2 Market differentiators or differentiation is the process of distinguishing a product or service from others, to make it more attractive to a particular target market. This involves differentiating it from competitors' products as well as a firm's own products. This is done in order to demonstrate the unique aspects of a firm's product and create a sense of value. The objective of differentiation is to develop a position that potential customers see as unique.

Market capitalization

6.3 Market capitalization (Market Cap) represents the aggregate value of a company or stock. Market capitalization is calculated by multiplying a company's shares outstanding by the current market price of one share. The investment community uses this figure to determine, a company's size, as opposed to sales or total asset figures. For example if a company has 10 Lakh shares outstanding, each with a market value of Rs.100, the company's market capitalization is Rs. 1000 Lakhs (10,00,000 x Rs.100 per share). This can be done in case of listed companies. Observing trends of Market Cap helps to understand the perceived value of the company both in terms of financial as well business fundamentals.

Industry Vs. Company growth

6.4 The growth of a company means the rate at which the company is growing. Industry growth rate means the rate at which the industry as a whole is growing. The growth rate of both the company and the industry need not be the same. If the industry growth rate is abnormally higher than that of the company growth rate, the auditor has to ascertain as to why the growth rate of the company is low in spite of having a high industry growth rate.

Financial Planning, Budgeting and Forecasting Robustness

6.5 A financial plan is an estimate of the total capital requirements of the company. It selects the most economical sources of finance. It also tells us how to use this finance profitably. Financial plan gives a total picture of the future financial activities of the company.

Financial budgeting is used to project future income and expenses. It is done to estimate whether the person/ company can continue to operate with its projected income and expenses.

Financial forecast is a prediction concerning future business conditions that are likely to affect a company. It is important to understand the rigor of financial planning, budgeting and forecasting practices of the company. This demonstrates the organization's ability to predict and influence their business levers to achieve the desired results.

Business Risks



6.6 Business risks can be uncertainty in profits or danger of loss and the events that could pose a risk due to some unforeseen events in future. Business risks may take place in different forms depending upon the nature and size of the business. Business risks can be categorized as, internal risks which arise from the events taking place within the organization and external risks which arise from the events taking place outside the organization. Business risks can be further classified into following

(i) Strategic Risk

These are risks associated with the operations of that particular industry. It can be caused by changes in supply and demand, competitive structures, and introduction of new technologies, mergers and acquisitions. Strategic

risks are also determined by board decisions about the objectives and direction of the organisation. Sometimes strategic risks are often risks that organisations may have to take in order to expand, and even to continue in the long term. An organisation may accept other strategic risks in the short term, but take action to reduce or eliminate those risks over a longer timeframe.

(ii) Economic/ Financial Risk

These are risks associated with the financial structure and transactions of the particular industry. Also the possibility that shareholders will lose money when they invest in a company that has debt, if the company's cash flow proves inadequate to meet its financial obligations. When a company uses debt financing, its creditors will be repaid before its shareholders if the company becomes insolvent.

(iii) Operational Risk

These are risks associated with the operational and administrative procedures of the particular industry. Few of the examples of such risks are, misappropriation of assets, theft of information, fictitious employees, misrepresentation of cash balances, third-party theft and forgery, data entry errors, accounting errors, failed mandatory reporting, negligent loss of client assets, etc.

(iv) Compliance Risk (Legal Risk)

These risks are associated with the need to comply with the rules and regulations of the government. There are various Acts which are applicable to the software companies. The company has to comply with a variety of compliances as per various Acts. Even if the company does not comply with any one of the statutory compliances the respective government department will issue notices and also might levy fine and penalty. Hence the company has to employ well trained staff to follow all the compliance requirements.

(v) Disaster Risk

There would be different risks like, natural disaster (floods) and others depend upon the nature and scale of the industry. It has been dealt with in the Business continuity plan mentioned below.

(vi) Political Risk

It refers to the complications businesses may face as a result of what are commonly referred to as political decisions that alters the expected outcome and value of a given economic action. For example, political decisions by governmental leaders about taxes, currency valuation, trade tariffs or barriers, investment, wage levels, labour laws, environmental regulations and development priorities, can affect the business conditions and profitability. Similarly, non-economic factors like, political disruptions such as, terrorism, riots, coups, civil wars, international wars, and even political elections that may change the ruling government, can dramatically affect businesses' ability to operate. Political risk is extremely difficult to quantify yet the companies and investors must examine and understand the potential for political risks. Companies should have a comprehensive framework for identifying and assessing all the risks they face, and assessing the impact of risk. Such a framework enables development of mitigation strategies that support company operations through crisis and change. The formal process of gathering and assessing data on political developments should be overseen by a risk manager and disseminated at the corporate, operating unit, and regional level. Companies must monitor political risk on an ongoing basis and use this information proactively to inform investment and operating decisions. At the same time companies have to capitalize on opportunities resulting from political change.

(vii) Human Capital Risk

It refers to the gap between the goals of the organization and the skills of the workforce. Indian IT sector has become an HR manager's nightmare. Their biggest challenge is marinating good people in organisation and keeping the attrition rate in control. The demand for good resources is more than the present supply and they are paid premium salaries. The rising cost of people is reducing the profit margins of the companies though the profit has been increasing by leaps and bounds. With many global companies opening up captives in India to reduce their cost of operations the salaries have shot northward and this has augmented the trouble of Indian IT players. The supply and demand of quality engineers who are capable of working in the IT field is having a huge gap. Companies have started looking for additional options of hiring science graduates and providing them adequate training to enable them to work in IT sector, but still the quality of talent is declining which in turn means lack of quality in work. Companies are struggling to hire new resources and salary war is becoming worse every day.

(viii) Brand/ Reputation Risk

Every company, every organization develops a reputation and, while it may take many years to form and is usually quite durable, a company's reputation can be undone in fairly short period. Reputation is more than just a company's good name, it's a composite of those factors affecting how others, particularly those outside of the organization, view the company. Safeguarding a company's reputation has become a key factor in every company's long-term strategic planning. To safeguard the reputation of a company regular investment in the structures, activities, staff, is essential. The company must take steps to measure its reputation in the market by opting for brand valuation. The checklist for brand valuation is given in the relevant section below.

(ix) Technology Risk

The technology risk faced by the companies would be due to loss of value due to the ever changing technology and the lack of ability of the company to cope up with such change. The company has to be constantly updating itself to the latest technology else it will be wiped out by the competition.

6.7 In order to mitigate the above mentioned risks it is necessary for the company to have a proper control of the operations of the business. This can be achieved by having an effective internal audit. The following are the checklists for few of the major areas of internal audit which are illustrative in nature.

Contracts

6.8 Contracts play a vital role in the IT industry. The Revenue model shall be based on the Contracts entered into and the adherence to the contract is the basic requirement of the business. Written contracts provide businesses with a legal document stating the expectations of both parties and how negative situations will be resolved. Contracts also are legally enforceable in a court of law. Contracts often represent a tool that companies use to safeguard their resources. The model checklist is as follows:

Sl.No	Particulars	Remarks
(i)	Review terms and conditions of contract	
(ii)	Income Recognition and the Compensation Clause needs to be clearly examined	

Major Areas of Internal Audit Significance

(iii)	Analyse the impact on the entity on non compliance of terms mentioned there in	
(iv)	Verify non competence agreement, if any in favour/against the company and its compliance.	
(v)	Verify the termination clause, warranties or representations due on company and dispute resolution terms involved.	
(vi)	Verify how contract compliance is monitored and reviewed periodically.	
(vii)	Verify if the terms of the contract are prejudicial to the interests of the company.	
(viii)	Verify if the company has accepted any contracts the business objectives of which are not in the MOA & AOA of the company.	
Statement of Work(SOW)		
(i)	Verify that the SOW has defined the scope of work and the deliverables.	
(ii)	Verify if the SOW has defined the place where the service has to be provided.	
(iii)	Verify if the payments to be received are up front or phased.	
(iv)	If the project requires any special hardware or software or specialized workforce requirements verify as to who will provide the same i.e. the company or the client.	
(v)	Verify if there are any limitations on the number of hours that can be billed per week or month.	
(vi)	Verify if there are any criteria for the buyer or receiver of goods to determine if the product or service is acceptable.	

Fixed Assets

6.9 The entity requires having sufficient control in such cases to ensure that the assets put into proper usage and periodic physical verification might be of paramount importance. There could be instances wherein the entity might lease. The internal auditor might be required to verify whether there is proper control over such leased assets.

If the internal auditor is required to perform fixed asset verification procedures too as part of the scope of his work, the auditor can refer to 'Guidance Note on Audit of Fixed Assets' issued by the ICAI.

The model checklist for verification of fixed assets is as follows:

Sl.No	Particulars	Remarks
(i)	Proper authorisation for acquisition/ disposal/ restoration of Fixed Assets.	
(ii)	Physical verification of assets/ update of fixed assets registers at regular intervals.	
(iii)	Compliance with Accounting Standard 10" Accounting for Fixed Assets" and Compliance with Accounting Standard 19 " Leases" in relation to leased assets, issued by the ICAI.	
(iv)	Revaluation of assets value and useful life at regular intervals by independent professional valuers.	
(v)	Insurance coverage for assets of the entity.	
(vi)	Proper recording/ authorisation for inter/ intra entity transfer of fixed assets.	
(vii)	Segregation of responsibilities among employees handling custodian and verification activities.	
(viii)	Verify calculation of depreciation, amortisation, and capitalisation of expenditure incurred.	

Government Grants

6.10 Government grants are assistance given by government in cash or kind to an enterprise for past or future compliance with certain conditions. They may be either accounted under the 'capital approach', under which a grant is treated as part of shareholders' funds, or the 'income approach', under which a grant is taken as income over one or more periods. The treatment depends upon the type and reason for the grant.

The model checklist for verification of government grants is as follows:

Sl no	Particulars	Remarks
(i)	Verify the grant letter issued by the government and study the conditions specified therein.	
(ii)	Verify whether the grant is in monetary or non-monetary.	
(iii)	If the grant is monetary verify the accounting method followed to record the grant.	
(iv)	Verify if the entity utilising the monetary grant for the purpose stated is by the government.	
(v)	If non-monetary assets are granted verify it is recorded at acquisition cost or nominal cost.	
(vi)	If the grant is relating to a specific asset verify if the grant has been deducted from the gross value of the asset.	
(vii)	Verify if the grant is refundable and if it is, then verify if it is accounted as an extraordinary item	
(viii)	If grants are received as compensation for expenses or losses incurred in a previous accounting period, verify if it has been accounted as per AS 5.	

Loans and Borrowings

6.11 In an industry such as, the IT industry there tends to be borrowing of some sort. It may be short term or long term; it may be taken from banks or financial institutions, from members or directors, etc.

An important feature of such liabilities which has a significant effect on the related audit procedures is that these are represented only by documentary evidence which originates mostly from third parties in their dealings with the entity.

An illustrative list of procedures that an internal auditor might perform would include:

Sl no	Particulars	Remarks
(i)	Verify the credit/ borrowing limits of the board of directors.	
(ii)	Verify if the terms of the borrowing is prejudiced against the interest of the entity.	
(iii)	Verify whether the long term loans are being applied for long term purposes and not for working capital purposes.	
(iv)	Verify if all the statutory compliances have been met by the entity w.r.t borrowings.	
(v)	Verify if interest is paid regularly or a provision for the same has been created.	
(vi)	Verify if the repayment is as per the repayment schedule or is there any variations.	
(vii)	Verify the closing balance with the confirmation letter given by the entity who has provided the loan.	

Foreign Currency Transactions

6.12 The IT Industry has gone beyond the geographical boundaries. As a result of globalisation, a lot of foreign companies have set up their branches all over India. Hence, there will be inflow of foreign currency by way of capital, repatriation, export receivables, etc. The model checklist on foreign currency transactions is as follows:

Sl no	Particulars	Remarks
(i)	Check FCNR and other non resident accounts	
(ii)	Check whether the inward/ outward remittances have been duly accounted	
(iii)	Ensure compliance with RBI/ FEMA compliance in relation to cross border transactions	
(iv)	Review minutes of board meetings pertaining to foreign investments, if any	
(v)	Compliance with Accounting Standard 11 "Effects of Changes in Foreign Exchange Rates".	
(vi)	Compliance with Income tax/ Service tax regulations on payments made to non-residents	
(vii)	Compliance with DTAA/ foreign tax reliefs on taxation of foreign income earned by resident production houses.	
(viii)	Tax issues on Satellite/ Optic fibre Transmission companies/ Foreign companies.	

Related Party Transactions

6.13 As per Accounting Standard (AS) 18, "*Related Party Disclosures*" issued by the Institute of Chartered Accountants of India, related parties are considered to be related if at any time during the reporting period one party

Technical Guide on Internal Audit of Software Industry

has the ability to control the other party or exercise significant influence over the other party in making financial and/ or operating decisions.

As per Section 2(77) of Companies Act, 2013 “relative”, with reference to any person, means any one who is related to another, if

- (i) they are members of a Hindu Undivided Family;
- (ii) they are husband and wife; or
- (iii) one person is related to the other in such manner as may be prescribed.

Section 2(41) of Income Tax Act, 1961, lays down that ‘Relative’ in relation to an individual, means the husband, wife, brother or sister or any lineal ascendant or descendant of that individual. Further, a person shall be deemed to have a substantial interest in a business or profession if:

- (i) In case of company, the person, at any time during the year, carries not less than 20% of the voting power.
- (ii) In any other case, the person, at any time during the year, is beneficially entitled to not less than 20% of the profits of such business or profession.

6.14 Given the increased linkages between the Indian companies with their counterparts across the globe (coupled with the impressive growth achieved and targeted for the sector), the transactions between Indian players and their related parties overseas have increased manifold. Such related party transactions come under the purview of Transfer Pricing (‘TP’) regulations and require the same to be carried out at an arms-length price.

Sl no	Particulars	Remarks
(i)	Obtain sufficient audit evidence on related party transactions.	
(ii)	Review the procedure followed by the entity to identify a related party.	
(iii)	Obtain information on key management personnel and their substantial interest held by them in companies if any.	
(iv)	Understand the pricing norms followed by the company in relation to transactions with related parties.	

Major Areas of Internal Audit Significance

(v)	Review the methodology followed by the entity in relation to apportionment of cost between related parties.	
(vi)	Review compliance with Transfer pricing regulations.	
(vii)	Review bank transactions and reconcile receivables/ payables if any from/ to related parties.	
(viii)	Review minutes of board meetings and registers maintained under Companies Act, 2013 to understand the transactions entered by the directors.	
(ix)	Obtain explanation for abnormal transactions, if any, among related parties	

Legal and Statutory Compliance

6.15 The internal auditor shall perform the following audit procedures to help identify instances of non-compliance with other laws and regulations that may have a significant impact on the entity's functioning:

- (a) Inquiring of management and, where appropriate, those charged with governance, as to whether the entity is in compliance with such laws and regulations; and
- (b) Inspecting correspondence, if any, with the relevant licensing or regulatory authorities.

The internal auditor is not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations in case of inherent limitations in scope of audit, if any.

Sl no	Particulars	Remarks
(i)	Obtain understanding on legal and regulatory framework applicable to the entity.	
(ii)	Verify compliance with the following regulations: FEMA regulations	

Technical Guide on Internal Audit of Software Industry

	Information Technology Act Compliance with IPR/ copyrights/ patents STPI Ministry of Information Technology.	
(iii)	Obtain sufficient appropriate audit evidence regarding compliance with the provisions of applicable laws and regulations.	
(iv)	Perform specified audit procedures to help identify instances of non-compliance with other laws and regulations.	
(v)	Communication appropriately to non-compliance or suspected non-compliance with laws and regulations identified during the internal audit.	
(vi)	If appropriate obtain written representations from management stating that all known non compliances/ suspected non-compliances have been disclosed to internal auditor.	
(vii)	If the company has a policy of working for 24 hours in shifts, verify if all the labour laws have been complied with.	
(viii)	Verify and obtain sufficient audit evidence that the company has registered with all the statutory authorities like, PF, ESI, Service Tax, Sales Tax etc (if applicable).	
(ix)	Verify if any notices are issued by any of the department and the company has replied the same else has appointed any professional to do the same.	
(x)	Verify that the company is adhering to all statutory compliances like, deduction and remittance of TDS, filing of monthly/quarterly returns, etc	

Information Security and Privacy of Data

6.16 Data security is an important aspect in the IT industry. Any loss or misuse of data will result in huge loss to the entity. At the same time data security is also a major problem in the industry. The following various types of the ways of threat to data security:

(a) Natural Calamity

Fire, flood, earthquake, etc., can cause damage to hardware including server, computers and other physical storage devices.

(b) Theft of Data

Data theft is a growing problem primarily perpetrated by workers with access to technology such as, desktop computers and hand-held devices capable of storing digital information such as, flash drives, iPods and even digital cameras. Since employees often spend a considerable amount of time developing contacts and confidential and copyrighted information for the company they work for, they often feel they have some right to the information and are inclined to copy and/or delete part of it when they leave the company, or misuse it while they are still in employment. A common scenario is where a sales person makes a copy of the contact database for use in their next job.

(c) Hacking

There are chances that the system might be hacked if the security of the systems is not strong enough. Hackers might gain access the data stored in the entity's systems and publish it online or even sell it to the competitors.

The following is the checklist for data security:

Sl no	Particulars	Remarks
(i)	Is there a sound computer/ laptop usage policy formed by the entity?	
(ii)	Does the usage policy covers all possible areas?	

Technical Guide on Internal Audit of Software Industry

(iii)	Are there sufficient firewalls installed in the server to ensure proper security and is it frequently updated?	
(iv)	Is there a frequent systems audit done to ensure in time detection of all irregularities?	
(v)	Does the entity take all possible steps to prevent, detect and punish fraud?	
(vi)	Verify if the company takes back up of the data regularly and stores them at a secure location.	
(vii)	Verify the record of lapses tracked by the company and the nature of action steps taken to pervert recurrence.	

Books of Accounts

6.17 The internal auditor is required to verify the sufficiency of controls related to maintenance of books of accounts by the entity. The internal auditor is also required to verify the controls for allocation of costs between different departments in every location and whether it is adequate and reliable in the light of overall business operations. Model Checklist is as follows:

Sl no	Particulars	Remarks
(i)	Does the entity have proper accounting system commensurate with the regulatory requirements?	
(ii)	Are the control Systems in place in estimating the revenue generated location-wise sufficient to ensure that proper books are maintained for the location?	
(iii)	Does the entity have location wise employee details to ensure proper allocation of payroll cost to the location?	

Major Areas of Internal Audit Significance

(iv)	What is the frequency of closing the books of accounts i.e. monthly, quarterly etc?	
(v)	Are the controls for operating the books proper to ensure that prevention of manipulation?	
(vi)	Are the books maintained in a manner to provide Information to the management for decision making?	

Operating Costs

6.18 They are costs administered by a business on a day to day basis. They may be fixed or variable costs. Model checklist for few of the important operating costs is given below:

Sl no	Particulars	Remarks
Travelling Cost		
(i)	Evaluate the overall internal control environment resulting from the current processes.	
(ii)	Obtain a copy of travel policy of the company, if any.	
(iii)	Verify the travel voucher and the supporting documents.	
(iv)	If amounts are paid in advance and the expenses incurred are less than the advance, verify that the balance amount is received back from the employees.	
(v)	Verify if there are any limits for incurring such expenses.	
(vi)	Verify that the expenses incurred during the year are for official purpose only.	
(vii)	If there is any personal expenses, verify if it is approved by the authorised person.	

Technical Guide on Internal Audit of Software Industry

(viii)	Recalculate the total reimbursable amount to test accuracy.	
Communication Expenses		
(i)	Verify if the company has any contract with any of the telecom service provider.	
(ii)	If there is a contract, verify whether the rates agreed upon is not prejudicial to the interests of the company.	
(iii)	Verify if there are necessary steps to prevent misuse of the telephone and internet service.	
(iv)	Verify if the password of the internet and wi-fi is confidential.	
(v)	If there are no contract with any telecom provider verify the monthly bills.	
(vi)	Verify if there are any huge deviances in the bills.	
(vii)	If there are such deviances verify if the management has take steps to investigate the cause for such deviances.	

Software Development Cost and R&D Cost

(i)	Verify that the costs incurred on the development stage is capitalized.	
(ii)	If there are any interest costs relatable to software development verify if it is capitalised as per AS 16.	
(iii)	Verify that cost of upgrades and enhancements are capitalized only if the upgrades or enhancements provide additional functionality.	
(iv)	If existing software is retired from use, any unamortized costs of the old software shall be expensed.	
(v)	Verify that expenditures on research should be recognised as an expense immediately and	

	expenditure under development phase should be recognised as an intangible asset, if the recognition criteria given in AS 26 are satisfied.	
--	--	--

Business Continuity Plans

6.19 Business continuity plans are processes that help organizations prepare for disruptive events, the event might be a fire, storm or simply a power outage caused by short circuit. Management's involvement in this process can range from overseeing the plan, to providing input and support, to putting the plan into action during an emergency.

Disasters can be classified in two broad categories. The first is natural disasters such as, floods, storm or earthquakes. While preventing a natural disaster is very difficult, measures such as, good planning which includes mitigation measures can help reduce or avoid losses.

The second category is manmade disasters. These include hazardous material spills, infrastructure failure, or terrorism. In these instances surveillance and mitigation planning are invaluable towards avoiding or lessening losses from these events.

In an industry such as the IT industry where data plays a very crucial part, it has to be safeguarded in the event of any such disasters occurring. Following is a model checklist for preventing and dealing with disasters enabling the entity to continue its business:

Sl no	Particulars	Remarks
(i)	Verify if the company has a business continuity plan in place or has outsourced the same to a third party.	
(ii)	If outsourced, verify if the backup is taken in disks or stored through cloud storage.	
(iii)	If stored in cloud storage, verify that only authorised persons have access to such data.	
(iv)	Verify if regular back up of the data is taken from on-site and automatically copied to off-site disk, or back up made directly to off-site disk	
(v)	Verify that only authorised persons have access to the backup data.	

Technical Guide on Internal Audit of Software Industry

(vi)	Verify if the plan encompasses on how the employees will evacuate and communicate during such events.	
(vii)	Verify if sufficient steps are taken to prevent fire in the premises by installing stabilizers and surge protectors.	
(viii)	Verify if fire prevention systems such as, alarms and fire extinguishers are existing in the company.	
(ix)	Verify if CCTV's are installed to prevent any sort of theft.	
(x)	Verify that anti-virus, firewalls and other security measures are taken to safeguard the data	
(xi)	Verify if uninterruptible power supply (UPS) and/or backup generators are maintained in the company to keep systems going in the event of a power failure.	
(xii)	Verify the steps taken by the company to provide key operations even in case of exigencies.	
(xiii)	Verify if the company has identified certain staff to provide services in case of contingencies.	

Analysis, Reporting and Financial Control

6.20 Financial analysis means assessment of the effectiveness with which funds (investment and debt) are employed in a firm and the efficiency and profitability of its operations. Financial control is management control exercised in planning, performance evaluation, and coordination of financial activities aimed at achieving desired return on investment. Financial reporting is consolidating the analysis and to determine the effectiveness of control in the form of a report. Funds management, project accounting, Profitability analysis, Management reporting form part of the analysis and reporting. Following is a model checklist for the same.

Major Areas of Internal Audit Significance

Sl no	Particulars	Remarks
Funds Management		
(i)	Verify if the funds are applied in the assets as approved by the management.	
(ii)	Verify that the disbursement of large amounts is vested only with the top management.	
Project Accounting		
(i)	Verify that the books are maintained in such a way as to know the financial position of every individual project.	
(ii)	Verify that the common costs are apportioned to every individual projects in a proportionate manner.	
Profitability Analysis		
(i)	Verify that if the company is handling multiple projects whether it is maintaining a profitability analysis for each of the projects.	
(ii)	If any of the projects is not profitable, verify if the reasons for the same has been disclosed.	
(iii)	If there are continuous losses in any of the projects verify the steps taken to correct the same.	
Management Reporting		
(i)	Verify if the company has a policy of preparing and sending a MIS for the management monthly.	
(ii)	Verify the frequency and accuracy of the MIS.	
(iii)	Verify if the management has taken any action based on the MIS reports.	

Patents and Copyright

6.21 Copyright is the right given by law to the creators of literary, dramatic, musical, creation of computer software's and databases and their distribution and a variety of other works of mind. It ordinarily means the creator alone has the right to make copies of his or her works or alternatively, prevents all others from making such copies. The basic idea behind such protection is the premise that innovations require incentives. Copyright recognises this need and gives it a legal sanction. Moreover, commercial exploitation of copyright yields income to the creators and, thus, making pecuniary rewards to individuals creativity.

A patent can be defined as a grant of exclusive rights to an inventor over his invention for a limited period of time. The exclusive rights conferred include the right to make, use, exercise, sell or distribute the invention. Patents are granted only after the satisfaction of certain requirements, which include the patentable subject-matter, utility, novelty, obviousness and specification. A patent can be obtained only if an invention is industrially applicable. An invention is said to be industrially applicable, if it can be made and used in an industry.

Infringement of a patent is the violation of the exclusive rights of the patent holder. If any person exercises the exclusive rights of the patent holder without the patent owner's authorization then that person is liable for patent infringement.

Copyright piracy is a phenomenon prevalent worldwide. Piracy means unauthorised reproduction, importing or distribution either of the whole or of a substantial part of works protected by copyright. The author of a copyrighted work, being the owner, enjoys certain exclusive rights with respect to his or her works. These include right to reproduce, to publish, to adopt, to translate and to perform in public. The owner can also sell, assign, license or bequeath the copyright to another party, if he wishes so. If any person other than the copyright owner or his authorised party undertakes any of the above mentioned activities with respect to a copyrighted product, it amounts to infringement of the copyright. The model checklist is as follows:

Major Areas of Internal Audit Significance

Sl no	Particulars	Remarks
(i)	Verify the registrations under the Copyrights and Patents Act	
(ii)	Obtain documentary evidence on registration/renewal of copyrights at regular intervals.	
(iii)	Advise the entity on regulatory compliances in case of infringement of copyrights/patents by third party against the company.	
(iv)	Compute contingent liability, if any, on infringement of copyrights of third party by the entity there by to provide realistic picture of financial statements.	
(v)	Advise the company on sharing of copyrights with domestic or foreign residents and legal issues involved.	
(vi)	Verify if the company is taking serious legal action against those who have infringed their patents/ copyrights.	

Internal Controls

6.22 As many of the software companies in India are subsidiaries of companies of USA or of any other country, it would need to follow the Sarbanes-Oxley (SOX) Act requirements as per the rules prevailing in its parent company's country. As a best practice, a number of Indian IT companies as well started following SOX requirements. The Act requires all financial reports to include an internal control report. This is designed to show that not only are the company's financial data accurate, but the company has confidence in them because adequate controls are in place to safeguard financial data. Year-end financial reports must contain an assessment of the effectiveness of the internal controls. The issuer's auditing firm is required to attest to that assessment. The auditing firm does this after reviewing controls, policies, and procedures during a Section 404 audit, conducted along with a traditional financial audit. It is designed to review

Technical Guide on Internal Audit of Software Industry

audit requirements to protect investors by improving the accuracy and reliability of corporate disclosures. These standards require management to:

- Assess both the design and operating effectiveness of selected internal controls related to significant accounts and relevant assertions, in the context of material misstatement risks;
- Understand the flow of transactions, including IT aspects, in sufficient detail to identify points at which a misstatement could arise;
- Evaluate company-level (entity-level) controls, which correspond to the components of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework;
- Perform a fraud risk assessment;
- Evaluate controls designed to prevent or detect fraud, including management override of controls;
- Evaluate controls over the period-end financial reporting process;
- Scale the assessment based on the size and complexity of the company;
- Rely on management's work based on factors such as competency, objectivity, and risk;
- Conclude on the adequacy of internal control over financial reporting.

The model checklist for internal controls is as follows:

Sl no	Particulars	Remarks
(i)	Verify if the requirements as per SOX are maintained by the company.	
(ii)	Select a set of controls and test it repeatedly	
(iii)	Verify if the company has a sound password policy like instructing the employees not to have usual passwords like their name, date of birth, etc., as passwords.	
(iv)	Verify that the database has a strong authorisation program and does not have any loopholes.	

(v)	Verify the external auditor's report of the previous year and check if any loopholes pointed out by them are complied with by the company.	
-----	--	--

Computer Assisted Audit Techniques (CAATs)

6.23 It is the practice of using computers to enhance the effectiveness and efficiency of audit procedures. They are computer programs and data that the auditor uses as part of the audit procedures to process data of audit significance, contained in an entity's information systems. The internal auditor should select a suitable CAAT keeping in mind the size and nature of business.

Following are few of the audit tools which the auditor can use in his internal audit.

(i) Microsoft Excel

It is a spreadsheet application used for calculation, graphing tools, pivot tables etc. It allows sectioning of data to view its dependencies on various factors for different perspectives.

(ii) Microsoft Access

It is a database management system with a graphical user interface and software-development tools. It stores data in its own format and can also import or link directly to data stored in other applications and databases.

(iii) ERP's like SAP, etc.

It provides easier global integration and real time information. It reduces the possibility of redundancy errors. It maintains a centralized library of electronic work papers, and automates work paper review and approval.

(iv) SaaS

It is a software delivery model in which software and associated data are centrally hosted on the cloud. Access to cloud-based ERP systems allows internal auditors to gather audit information on their own, resulting in less internal time committed to the audit. Audit procedures can be performed throughout the year in real time. One of the major advantages is that all transactions create an 'audit trail' that cannot be manipulated by the company.

(v) Crystal Reports

It is a business intelligence application used to design and generate reports from a wide range of data sources. It allows users to graphically design data connection and report layout.

Business Enabling Functions

6.24 There are various departments which enable a software company business to function smoothly. Few of the important departments are HR, Finance, IT, Facilities, Administration, Quality, Risk management.

The model checklist for the same is as follows.

Sl no	Particulars	Remarks
Human Resources(HR)		
(i)	Verify if the recruitments made are according to the talent acquisition policy of the company.	
(ii)	Verify that an attendance sheet is maintained in case of trainings provided for the employees.	
(iii)	Verify if non-disclosure agreement has been entered into with the employees.	
(iv)	In case of employee leaving the company verify if the company has entered into a Non Competence Agreement with the employees.	
(v)	Verify the appraisal mechanisms in the company and check if the same has been followed or not.	
(vi)	Verify the attrition rate of the employees.	
(vii)	If the employee turnover is higher than that of the industry obtain the reasons for the same and report the same to the top management.	
(viii)	Verify if there are any group or medical insurance policies on the employees taken by the company.	

Major Areas of Internal Audit Significance

(ix)	Verify if there is any policy of human resource valuation in the company.	
(x)	If it is in existence verify the method used to value the same and how it is accounted.	
(xi)	Verify if the value of human resource has been quantified.	
(xii)	If the value of such an asset is very low verify the reasons for the same.	
(xiii)	Verify if the method selected to value the human resource is appropriate to the company.	
(xiv)	Verify if the pay scale of the employees is on par with the industry or there is a very huge deviation.	
(xv)	Verify if the entity maintains a checklist of statutory remittances to be made on account of PF, ESI, Labour Welfare Fund.	
(xvi)	Verify if there are sufficient records maintained by the entity with regard to their recruitment, offer letter, and all other correspondences with the employee.	
(xvii)	Verify if entity maintains separately all complaints and grievances received from the employees.	
(xviii)	Verify In cases of flexible timings and work from home option provided to an employee, has appropriate approval been obtained.	
(xix)	Verify if cheques prepared and signed by two different employees.	
(xx)	If the entity opts for bank transfer then is there sufficient level of authority to issue bank transfer instruction to the bank.	
Finance		
(i)	Verify the various sources of finance of the company.	

Technical Guide on Internal Audit of Software Industry

(ii)	Verify the debt equity ratio of the company to find out the leverage of the company.	
(iii)	If the company has taken a loan verify that the same is utilised for the specific purpose only.	
(iv)	Verify the collection period of the debtors.	
(v)	Verify the payment period of creditors.	
(vi)	Verify if the operations team is sufficiently supported by the Finance department by providing variety of reports, analysis and insights for appropriate decision making	
Information Technology		
(i)	Verify the usage of IT policy of the company and whether the employees adhere to it.	
(ii)	Verify if the company is utilising the software it develops for its internal purpose.	
(iii)	Verify if the IT department circulates the relevant hardware and software usage policy to the employees.	
(iv)	Verify there is a rigorous IT helpdesk in place to ensure the IT requirements of the business are addressed on a timely basis.	
Administration		
(i)	Verify if the company has a separate administration department to adhere to the needs of the company.	
(ii)	Verify that the accounts department and administration department are not related.	
(iii)	Verify the requests received by the administration department and the action taken by them to address the issue.	
(iv)	Verify if the administration department is in charge of all the statutory registrations of the company.	

Major Areas of Internal Audit Significance

Quality		
(i)	Verify if the company has a defined set of principles to maintain quality of the products.	
(ii)	Verify if there is a quality control team in the company.	
(iii)	Verify that the employees related to production are not related to the quality control team.	
(iv)	Verify if the quality control team conducts tests on all the products and services and reports the same to the management.	
(v)	In case the quality requirements are not met with verify the procedure to be followed for further processing.	
(vi)	Verify if the company obtains feedback from its customers regarding the products and service of the company.	
(vii)	In case of customer complaints verify if their grievances has been addressed to.	
(viii)	Verify if a record of all the complaints and their details are maintained by the company.	
(ix)	In case the product/ service has to be reworked verify if the cost is borne by the company or it is recovered from the customer.	
(x)	After addressing the grievances of the customer verify if the company has taken the feedback from the customer again.	
(xi)	Verify if there are any steps/plans taken to improve the quality.	

Revenue Earned by the Company

6.25 The revenue earned by IT companies would be by sale of products or by providing services. There are various means of revenue which an IT company can earn and the following is a model checklist for the same.

Technical Guide on Internal Audit of Software Industry

SI no	Particulars	Remarks
(i)	Identify if the company is involved only in exports or even in domestic sales.	
(ii)	If it is into exports verify if the service is provided by the company on site by deputing its employees abroad or from India.	
(iii)	Identify the billing mechanism of the company.	
(iv)	Verify if proper time sheets are maintained by the company if it follows billing on Time and Material basis.	
(v)	Verify if the company is billing under the milestone method, time sheet method or cost plus method.	
(vi)	Verify if there is an escalation clause if the billing is done on progressive basis.	
(vii)	Verify if the company provides warranty and post warranty services.	
(viii)	Verify if the amount charged by the company for post warranty services is different from normal charges.	
(ix)	Verify if the company has entered into an Annual Maintenance Contract (AMC) with its customers	
(x)	Verify the number of services provided under AMC and the prices charged to them.	
(xi)	Verify if there is any price difference in the service provided under AMC and as a standalone basis.	
(xii)	Verify if the company charges for any services not covered under the AMC.	
(xiii)	Verify if the company also provides on demand services to its customers apart from post warranty services and is there any price difference for the same.	
(xiv)	Verify if there are any revenue leakage possibilities due to improper maintenance of time sheets.	
(xv)	If there are any such revenue leakages what are the steps taken by the company to overcome it.	

Major Areas of Internal Audit Significance

(xvi)	Verify if the revenue recognition adopted by the company is as per AS 9.	
-------	--	--

Value of Brand

6.26 Strong brands are necessary in IT industry because technology has increased the number of content providers and made it possible for many more competitors to seek the attention and loyalty of audiences and advertisers. Brands are crucial in separating IT companies and their products from those of competitors, in creating continuity of quality and service across extended product lines, and in helping develop strong bonds with consumers.

The Model checklist is as follows:

Sl no	Particulars	Remarks
(i)	Understand the valuation methodology followed and verify if the method selected is appropriated.	
(ii)	Verify the factors considered in valuing the brand like, growth rate, expected life, weights assigned to various factors, competition, and discount rate adopted.	
(iii)	Obtain brand valuation documents from independent valuers, if any,	
(iv)	Reconcile the value of brand with financial statements.	
(v)	Verify amortization/ impairment provided every year.	
(vi)	Advice the client on importance of brand value and the need to get them registered if they are not registered.	

Accounting for Recharges to the Clients

6.27 Accounting for recharges refers to reimbursement of expenses by the client to the company. Model checklist is as follows:

Sl no	Particulars	Remarks
(i)	Verify the SOW entered into by the company and the client and determine if there is a clause for reimbursement of expenses.	
(ii)	If there is reimbursement clause, verify if there are any limits specified for the same.	
(iii)	Check that such a reimbursement is not recorded as income in the books of the company.	
(iv)	Verify that such reimbursements are received by cheques.	
(v)	Verify that there is adequate supporting documents are maintained for such reimbursement claims.	

Hedging

6.28 Hedging means reducing or controlling risk. This is done by taking a position in the futures market that is opposite to the one in the physical market with the objective of reducing or limiting risks associated with currency price changes. As majority of the income derived by software companies are by way of foreign exchange they have to hedge in order to safeguard themselves against the fluctuating foreign exchange.

Alternatively, the entity can also maintain an Exchange Earner's Foreign Currency (EEFC) account with any of the authorised Dealers. It is a facility provided to the foreign exchange earners, including exporters, to credit 100 per cent of their foreign exchange earnings to the account, so that the account holders do not have to convert foreign exchange into Rupees and vice versa, thereby minimizing the transaction costs. Such accounts are offered without any minimum balance requirements. The EEFC account balances can be hedged. A unit located in a Special Economic Zone can open a Foreign Currency Account with an authorised dealer in India subject to certain conditions as prescribed by the RBI.

Major Areas of Internal Audit Significance

The Model checklist is as follows:

Sl no	Particulars	Remarks
(i)	Verify if the company has safeguarded itself against foreign exchange fluctuations by entering into forward contracts, options etc.	
(ii)	Verify that such hedging is duly authorised by the Board of Directors.	
(iii)	Verify if the profits or losses from such forward contracts or options as recognised as per the AS 11.	
(iv)	If necessary, advice the management of the company on the disclosure requirements as per AS 32.	
(v)	Verify that only the authorised persons are operating the EEFC account.	
(vi)	If the company is located in SEZ, verify if the conditions mentioned by the RBI are followed to open the account.	

Annexure I

Checklist for Compliances

Sl No	Applicable Statute	Requirement	Remarks
1	STPI	Approval for establishing the unit- STP Import Export Licence Application for	The following grants are obtained: Grant of industrial approval Approval of the foreign technology agreement Approval for import of capital goods
2	STPI	Bonding & Debonding	Bonding is done through a prescribed document which is an agreement of the STPI unit with the Development Commissioner of the STPI. This document binds the unit for importing duty free procurement against export. Debonding of a unit is to relieve itself from this liability and pay applicable duty (if required).
3	STPI	Custom Duty Exemption	Necessary license for import of goods. The importer must carry out the development of software and export either all the software so developed or such other percentage. The importer must execute a bond, in the prescribed form. The bond should be for a sum to be prescribed by the customs authority. The goods sought to be imported must be Capital Goods

			<p>Raw Material Components</p> <p>Spares for production machinery</p> <p>Consumables required for manufacture of goods</p> <p>Drawings, blue prints, technical maps and charts, relating to manufacturing activity</p> <p>Office equipment, spares and consumables thereof.</p>
4	STPI	Periodic Statutory Reports	<p><i>Monthly Progress Reports (MPR) & Quarterly Progress Reports (QPR):</i></p> <p>All units are required to submit Monthly Progress Reports & Quarterly Progress Reports by 7th of a month on completion of previous month and by 10th of a month on completion of previous quarter respectively in the prescribed format. It is a mandatory requirement and units which are irregular in submitting MPRs & QPRs can be denied services of STPI.</p> <p><i>Annual Performance Reports (APR):</i></p> <p>Yearly performance report should be submitted as per the prescribed format.</p>
5	STPI	Books of Accounts	<p>Distinct Identity: If an industrial enterprise is operating both as a domestic unit as well as an EHTP/STP unit, it shall have two distinct identities with separate accounts, including separate bank accounts. It is, however, not necessary for it to be a separate legal entity, but it should be possible to distinguish the imports and exports or supplies affected by the EHTP/STP</p>

Technical Guide on Internal Audit of Software Industry

			<p>units from those made by the other units of the enterprise.</p> <p>Maintain the accounts as under:</p> <p>Maintenance of Sales Invoices.</p> <p>Maintenances of Fixed Asset Registers.</p> <p>Maintenance of Foreign Inward Remittance Certificate file (FIRC) & Bank Realization Certificate (BRC) file where the original of the FIRCs and BRCs are kept.</p> <p>Maintenance of contract file, where copies of contracts received from buyers are maintained.</p>
6	STPI	Export Obligation	<p>After completion of the project, the STP units will get the exports attested from STPI in prescribed following forms</p> <p><i>Reporting Requirement</i></p> <p>When export of software is made through data communication, it will be declared on SOFTEX form (which is available for sale to exporters through regional offices of Reserve Bank and STPI centres). The form has to be submitted to the concerned STPI within the stipulated time as per the guidelines of RBI.</p>
7	RBI	On receipt of Foreign Investment	<p><i>Intimation to RBI:</i></p> <p>If your bank receives the money in foreign currency (say it receives US \$) then your bank is supposed to give you a call and tell you that it has received money in so and so currency and ask you when to do the conversion to INR , after this you need to file an intimation with the RBI</p>

			<p>telling them that you received FDI into your company through your bank within 30 days of receiving the funds.</p> <p>While remitting funds ensure the following:</p> <ul style="list-style-type: none"> (a) Funds have to flow only from the investors' bank accounts (b) The purpose of remittance should be stated as "Towards Investment in Share Capital" (c) Know Your Customer information to be transmitted along with remittance.
8	RBI	Issue of Shares	<p>Once this intimation is sent, your next step is to actually issue the shares to the foreign investor within 180 days of receiving the funds, failing which you are bound by law to transfer the money back to your investor.</p> <p><i>Reporting on Issue of Shares:</i></p> <p>FC-GPR (Annexure 8)</p> <p>FIRC Copies</p> <p>A Certificate from the Company secretary for FEMA compliance</p> <p>A Certificate from CA indicating the manner of arriving at the price of shares issued to the persons resident outside India</p> <p>A letter stating the reason for delay in submission of FC-GPR (in case of delay)</p> <p>Debit authority letter</p>
9	RBI	Annual Reporting	<p>Submit Annual Return of Foreign Liabilities & Assets, in Part B of Form FC-GPR, with the Reserve Bank of India, External Liabilities and Assets</p>

Technical Guide on Internal Audit of Software Industry

			<p>Statistics Division, Mumbai, before 15th</p> <p>July of every year, also enclose audited financials of the company.</p>
10	RBI	<p>External Commercial Borrowings</p> <p>Automatic Route</p>	<p>(i) Eligible borrowers (as per RBI master circular issued on 02/07/2012. It will be updated every year)</p> <p>(a) Corporates (registered under the Companies Act except financial intermediaries (such as banks, financial institutions (FIs), housing finance companies and NBFCs) are eligible to raise ECB. Individuals, Trusts and Non-Profit making Organisations are not eligible to raise ECB.</p> <p>(b) Units in Special Economic Zones (SEZ) are allowed to raise ECB for their own requirement. However, they cannot transfer or on-lend ECB funds to sister concerns or any unit in the Domestic Tariff Area.</p> <p>(ii) Recognised lenders</p> <p>Borrowers can raise ECB from internationally recognised sources such as (i) international banks, (ii) international capital markets, (iii) multilateral financial institutions (such as IFC, ADB, CDC, etc.), (iv) export credit agencies, (v) suppliers of equipment, (vi) foreign collaborators and (vii) foreign equity holders (other than erstwhile OCBs). A "foreign equity holder" to be eligible as "recognized lender" under the</p>

			<p>automatic route would require minimum holding of equity in the borrower company as set out below:</p> <ul style="list-style-type: none"> (i) For ECB up to USD 5 million – minimum equity of 25 per cent held directly by the lender. (ii) For ECB more than USD 5 million – minimum equity of 25 per cent held directly by the lender and debt-equity ratio not exceeding 4:1 (i.e., the proposed ECB not exceeding four times the direct foreign equity holding). (iii) Amount and Maturity <ul style="list-style-type: none"> (a) The maximum amount of ECB which can be raised by a corporate is USD 500 million or equivalent during a financial year. (b) ECB up to USD 20 million or equivalent in a financial year with minimum average maturity of three years. (c) ECB above USD 20 million and upto USD 500 million or equivalent with a minimum average maturity average maturity of five years. (d) ECB upto USD 20 million can have call / put option provided the minimum average maturity of three years is complied with before exercising call / put option.
--	--	--	---

			<p>End-use</p> <p>(a) Investment e.g., import of capital goods (as classified by DGFT in the Foreign Trade Policy), by new or existing production units, in real sector-industrial sector including small and medium enterprises (SME) and infrastructure sector – in India. Infrastructure sector is defined as (i) power, (ii) telecommunication, (iii) railways, (iv) road including bridges, (v) sea port and airport, (vi) industrial parks, and (vii) urban infrastructure (water supply, sanitation and sewage projects);</p> <p>(b) Overseas direct investment in Joint Ventures (JV) / Wholly Owned Subsidiaries (WOS) subject to the existing guidelines on Indian Direct Investment in JV/WOS abroad.</p> <p><i>Ends-users not permitted</i></p> <p>(a) Utilisation of ECB proceeds is not permitted for on-lending or investment in capital market or acquiring a company (or a part thereof) in India by a corporate.</p> <p>(b) Utilisation of ECB proceeds is not permitted in real estate.</p> <p>(c) Utilisation of ECB proceeds is not permitted for working capital, general corporate purpose and repayment of existing Rupee loans.</p>
--	--	--	--

			<p><i>Procedures</i></p> <p>Borrowers may enter into loan agreement complying with ECB guidelines with recognised lender for raising ECB under Automatic Route without prior approval of RBI. The borrower must obtain a Loan Registration Number (LRN) from the Reserve Bank of India before drawing down the ECB</p>
11	RBI	External Commercial Borrowings-reporting Requirement	<p>(a) With a view to simplify the procedure, submission of copy of loan agreement is dispensed with.</p> <p>(b) For allotment of loan registration number, borrowers are required to submit Form 83, in duplicate, certified by the Company Secretary (CS) or Chartered Accountant (CA) to the designated AD bank. One copy is to be forwarded by the designated AD bank to the Director, Balance of Payments Statistics Division, Department of Statistics and Information System (DSIM), Reserve Bank of India, Bandra-Kurla Complex, Mumbai – 400 051</p> <p>(c) The borrower can draw-down the loan only after obtaining the loan registration number from DSIM, Reserve Bank of India.</p> <p>(d) Borrowers are required to submit ECB-2 Return certified by the designated AD bank on monthly basis so as to reach DSIM, RBI within seven working</p>

Technical Guide on Internal Audit of Software Industry

			days from the close of month to which it relates.
12	RBI	Conversion of ECB	<p><i>Conversion of ECB into equity is permitted subject to the following conditions:</i></p> <ul style="list-style-type: none"> (a) The activity of the company is covered under the Automatic Route for Foreign Direct investment or Government approval for foreign equity participation has been obtained by the company, (b) The foreign equity holding after such conversion of debt into equity is within the sectoral cap, if any, (c) Pricing of shares is as per SEBI and erstwhile CCI guidelines / regulations in the case listed / unlisted companies as the case may be. <p><i>Conversion of ECB may be reported to the Reserve Bank as follows:</i></p> <ul style="list-style-type: none"> (a) Borrowers are required to report full conversion of outstanding ECB into equity in the form FC-GPR to the concerned Regional Office of the Reserve Bank as well as in form ECB-2 submitted to the DSIM, RBI within seven working days from the close of month to which it relates. The words "ECB wholly converted to equity" should be clearly indicated on top of the ECB-2 form. Once reported, filing of ECB-2 in the subsequent months is not necessary.

			(b) In case of partial conversion of outstanding ECB into equity, borrowers are required to report the converted portion in form FC-GPR to the concerned Regional Office as well as in form ECB-2 clearly differentiating the converted portion from the unconverted portion. The words "ECB partially converted to equity" should be indicated on top of the ECB-2 form. In subsequent months, the outstanding portion of ECB should be reported in ECB-2 form to DSIM.
13	Income Tax	Sec 10 B-100% Export Oriented Unit	Special Incentive is been given to the newly established 100% EOU. Under this section the profits and gains derived from the 100% EOU shall not be included in the total income of the tax payers. This benefit is available for the income earned during a period of five consecutive assessment years falling within a period of eight years from the commencement of production. This exemption is available to all the tax payers including the foreign companies and the Non Resident tax payers.
14	Employee's Provident Fund and Miscellaneous Provisions Act, 1952	Reporting Requirements	Preparation of monthly PF remittance statement. Preparation of PF challan prescribed formats and specified copies Preparation and filing of necessary forms and returns Obtaining Form No.2 from new entrants joined during the month.

Technical Guide on Internal Audit of Software Industry

			Maintenance of a database of all employees giving the details of their names, PF number, transfer/ withdrawal, etc., for future reference and also to follow up with RPFC for transfer /withdrawal till process is complete.
15	The Employee's State Insurance Act, 1948	Reporting Requirements	Preparation of monthly ESI remittance statement. Preparation of ESI challan in Quadruplicate. Preparation of ESI challan prescribed formats and specified copies.
16	Special Economy Zone	Eligibility Criteria	It is not formed by the splitting up, or the reconstruction, of a business already in existence. It is not formed by the transfer to a new business, of machinery or plant previously used for any purpose. Proposal does not involve use of capital goods already used. Other procedural requirements are fulfilled.
17	Special Economy Zone	Reporting Requirements	SEZ units are required to maintain a Positive Net Foreign Exchange earning cumulatively for a period of 5 years from the commencement of operation. Intimate date of commencement. The Unit shall execute a Bond-cum-Legal Undertaking. To submit annual performance report duly certified by CA within specified time from the close of Financial Year, to development commissioner. To undertake not to change name,

			<p>style and location except with approval of development commissioner.</p> <p>To intimate change in Board of directors, etc.</p> <p>Required to maintain proper books of accounts financial year wise which include records in respect of import/export/ procurements/inter unit transfer/ DTA sale/sub-contracting/ destruction, etc.</p> <p>The goods admitted into a Special Economic Zone shall be used by the Unit or the Developer only for carrying out the authorized operations but if the goods admitted are utilized for purposes other than for the authorized operations or if the Unit or Developer fails to account for the goods as provided under these rules, duty shall be chargeable on such goods as if these goods have been cleared for home consumption.</p>
18	Special Economy Zone	Benefits Available	<p>100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.</p> <p>Exempt from paying Service Tax where services are consumed within SEZ. Even otherwise, refund is granted. Service tax is exempted in case of exports also.</p> <p>However, services provided by unit in SEZ to DTA are liable to Service Tax.</p> <p>Exempted from payment of State Sales tax and other levies as</p>

Technical Guide on Internal Audit of Software Industry

			<p>extended by the respective State Governments.</p> <p>Exemption from Central Sales Tax.</p> <p>If any unit in SEZ or STPI purchases any goods from DTA, then the excise duty paid can be claimed as refund.</p> <p>In case of any goods manufactured or produced by unit in SEZ, such goods are exempt from payment of excise duty subject to conditions/ limitations.</p> <p>Exempt from Customs duty if purchased for authorised operations.</p> <p>R&D Cess on import of technology is exempt.</p> <p>If any unit in SEZ procures any goods from outside India there is no customs duty payable by the units.</p> <p>Exempt from Excise duty if purchased for authorised operations.</p> <p>Single window clearance for Central and State level approvals.</p> <p>There is no limit for DTA sales.</p> <p>External commercial borrowing by SEZ units upto US \$ 500 million in a year without any maturity restriction through recognized banking channels.</p> <p>Exempt from Dividend distribution tax.</p>
--	--	--	--

References

<http://www.nasscom.in/>

<http://www.stpi.in/>

<http://www.sezindia.nic.in/>

<http://www.rbi.org.in/>

<http://www.incometaxindia.gov.in/>

<http://www.esic.nic.in/>

<http://www.epfindia.gov.in/>

<http://www.nic.in/>

<http://www.assochem.org/>