



IT - ITeS SSC
NASSCOM

Participant Handbook

Sector

IT-ITeS

Sub-Sector

IT Services

Occupation

IT Support Services/Helpdesk

Reference ID: **SSC/Q0110, Version 1.0**

NSQF Level 4



**Domestic IT
Helpdesk Attendant**

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1. Introduction

- Unit 1.1 Understand the IT/ITeS Industry
- Unit 1.2 –IT Services Sub Sector
- Unit 1.3 – Introduction to Information Technology
- Unit 1.4 – M.S. Office & Data Confidentiality
- Unit 1.5 – Understanding Computer Networks
- Unit 1.6 –Understand Wireless Computing
- Unit 1.7 –Domestic IT Helpdesk Attendant – Job Role & Careers



Key Learning Outcomes



At the end of the Introduction you will be able to:

1. Know about information technology enabled services (ITeS).
2. Explain growth of IT/ITeS industry in India.
3. Identify government initiatives in India.
4. Learn about the fundamentals of computer systems.
5. Demonstrate MS-office and data confidentiality.
6. Examine your typing skills.

Unit 1.1: IT-ITeS Industry an introduction

Unit Objectives



At the end of this unit, you will be able to:

1. Explain the evolution of the BPM Industry
2. Understand the structure of the IT-BPM industry
3. Resonate with the key trends in the BPM sector 4

1.1.1 Evolution and history of outsourcing

Provide a brief overview of the session.

Open up the discussion for the session and ask participants to share their thoughts on:

- Their understanding of the concept of outsourcing
- What enabled the organizations to outsource

Suggested discussion:

The concept of outsourcing started with the automobile industry, which outsourced component manufacturing to a number of suppliers and concentrated on in-house manufacturing for only a few high-value products and components. Since then, a number of other industries have started depending on vendors for various products.

Another trend that emerged in the late 1980s was that of corporate outsourcing. A number of noncore business processes, such as accounts, Human Resources (HR), and finance, were outsourced to vendors. This resulted in the emergence of the BPO or the IT-Enabled Services (ITeS) industry.



Fig 1.1.1



Fig 1.1.2

BPM Industry in India

The IT BPM industry has been fuelling India's growth story. In addition to contributing to the country's Gross domestic Product (GDP) and exports, the growth of the IT BPM industry has provided India with a wide range of economic and social benefits which includes creating employment, raising income levels, promoting exports. It has placed India on the world map with an image of a technological advanced and knowledge based economy. This sector attracts amongst the largest investments by venture capitalist and has been credited with enabling the entrepreneurial ventures of many in the country. The IT-BPM industry has almost doubled in terms of revenue and contribution to India's GDP over the last six years (2008-2013).

1.1.2 Structure of the IT BPM Industry

The organizations within the IT-BPM Industry are categorized along the following parameters

- Sector the organization is serving
- Type as well as range of offering the organization provides
- Geographic spread of operations and
- Revenues and size of operations

Multi-national Companies (MNCs): MNCs organizations have their headquarters outside India but operate in multiple locations worldwide including those in India. They cater to external clients (both domestic and/or global).

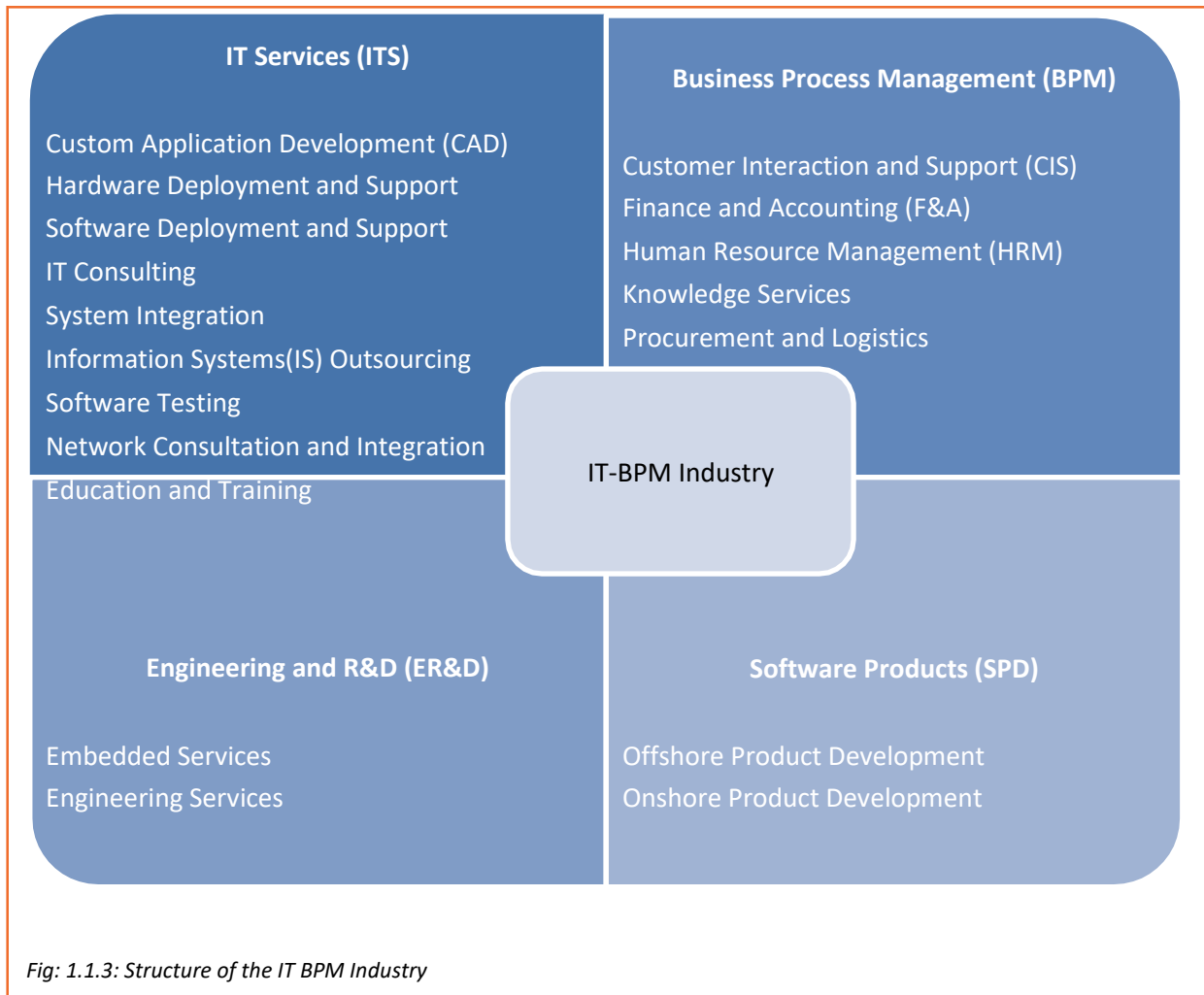
Indian Service Providers (ISP): ISPs are organizations that have started with their operations in India. Most of these organizations would have their headquarters in India while having offices at many international locations

While most have a client base, which is global as well as domestic, there are some that have focused on serving only the Indian clients.

Global In-house Centers (GIC): GIC organizations cater to the needs of their parent company only and do not serve external clients. This model allows the organization the option to keep IT Operations in - house and at the same time take advantage of expanding their global footprint and offering opportunities for innovation in a cost effective manner.

Sub-sectors within the IT-BPM Industry

The IT-BPM industry has four sub-sectors. The subsequent sections provide information and insights for a career in the Business Process Management sub-sector.



1.1.3 Key Trends in the BPM sub-sector

The key trends observed in the BPM sub sector are summarized in the figure below and then explained in detail within the section.

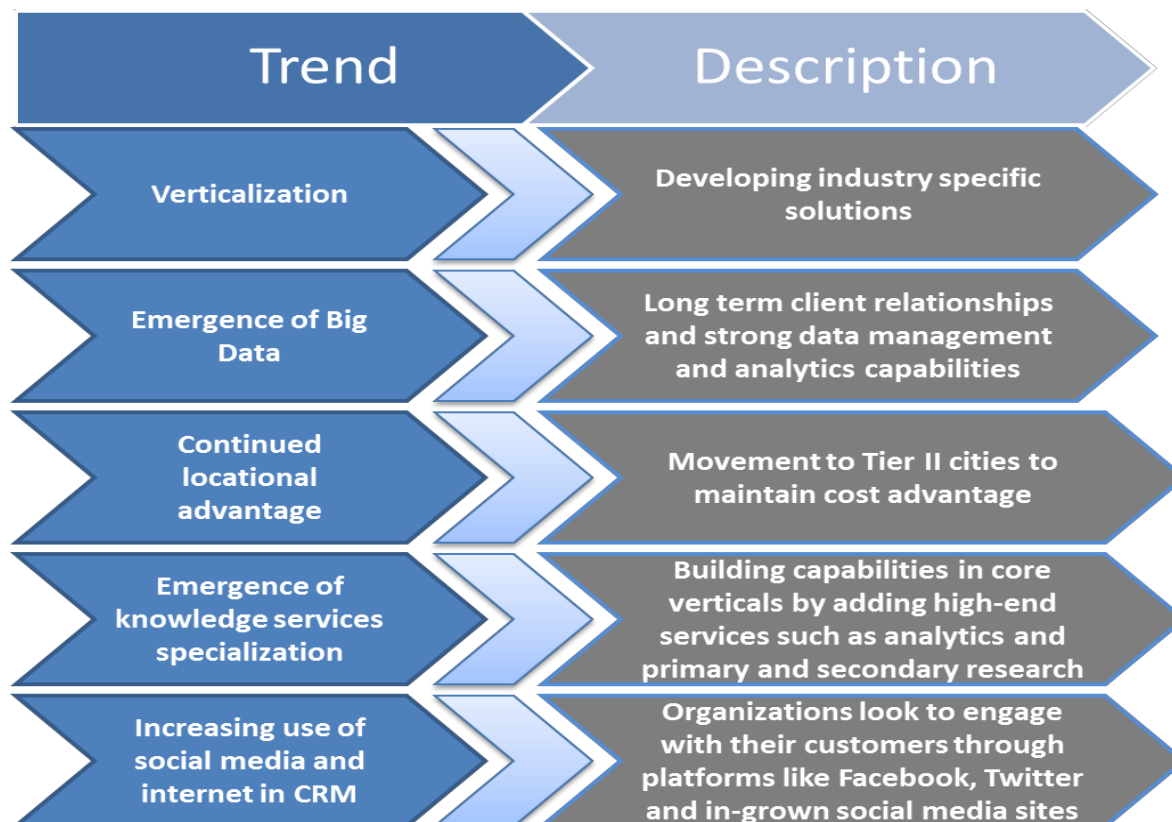


Fig 1.1.4: BPO Strategy Summit, 2012; Delhi

Verticalization: With the maturity of the BPM sub-sector, the focus of organizations has now shifted to verticalized offerings with end to end solutions across standardized platforms in major industries. As a result of this, there is a lot of Mergers and Acquisition (M&A) activity in the industry, where organizations are aiming to acquire these verticalized skills and integrate them into their own offerings.

Emergence of Big Data: The emergence of big data is characterized by technological advancements, large number of mergers and acquisitions and firms venturing into integrated solutions including IT and analytics. Therefore value creating business driven offerings, is seen as a major emerging trend in the BPM sub-sector. Armed with long term client relationships and transactional data warehouses coupled with talent expertise, these service providers are embarking on creating sustainable value addition for their clients. Big data/analytics presents a USD 25 billion opportunity by 2015, a CAGR of 45 per cent (2011-2015).

Continued locational advantage: India leads the way as the most lucrative location for the global IT industry performing well on various parameters like financial attractiveness, skill availability and business environment. While traditionally, 70% of the industry is located in Tier I cities, focus on controlling costs has created a gradual move to have centers in Tier II cities as well, thus widening the talent pool and spread.

Emergence of Knowledge Services specialization: Knowledge Services Outsourcing is seen as the next big thing and the fastest growing domain in the BPM sub-sector based on its revenue contribution. It accounts for about 18% share of BPM exports, close to USD3.2 Billion in FY2013. As worldwide markets become more knowledge intensive, India becomes a preferred destination to outsource these core elements based on its abundance of talent pool. Legal Process Outsourcing (LPO), Data Analytics, and Risk Management are some of the fastest growing KPO segments. There is also a growing recognition of Indian Service Providers (ISPs) being able to provide such value-add services.

Increasing use of Social Media and Internet for Customer Relationship Management (CRM): With the emergence of new technology platforms, unified communications systems, collaboration and social networking, multiple channels of integrated communications are now changing the rules of communicating with the customers, especially with the emergence of channels like email, web chats and social media sites. Social media interactions are gaining importance as many organizations look to engage with their customers through platforms like Facebook, Twitter and Ingrown social media sites.

1.1.4 Check Your Understanding



1. What are the four main sub sectors in the IT BPM industry?
2. Which one of the following is NOT a key trend in the BPM industry?
 - a. Verticalization
 - b. Knowledge service specialization
 - c. Emergence of big data
 - d. Saturation

1.1.5 Summary



- The IT BPM industry has not only contributed to India's GDP and exports but has also provided a wide range of socio-economic benefits such as creating employment, raising income levels and promoting exports, etc.
- Business Process Management (BPM) sub-sector of Indian IT-BPM industry has generated revenues of USD19 Billion in FY2013 and providing direct employment to nearly 1 million people.
- NASSCOM estimates that the BPM sub-sector, which is potentially pegged as a USD65 billion industry by 2020, will contribute up to 9 per cent of India's GDP and 30 million employment opportunities.
- The organizations within the IT-BPM Industry are categorized along the following parameters
 - Sector the organization is serving
 - Type as well as range of offering the organization provides
 - Geographic spread of operations and
 - Revenues and size of operations
- The four main sub-sectors within the IT BPM industry are:
 1. IT Services (ITS)
 2. Business Process Management (BPM)
 3. Engineering and R&D (ER&D)
 4. Software Products (SPD)
- The key trends in the BPM subsector are as below:
 - Verticalization
 - Emergence of big data
 - Continued locational advantage
 - Emergence of knowledge services specialization
 - Increasing use of social media and internet for CRM

1.1.6 Glossary of terms

Definitions

| Keywords /Terms | Description |
|-----------------------------|---|
| Scope | Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required. |
| Knowledge and Understanding | Knowledge and Understanding are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard. |
| Organisational Context | Organisational Context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility. |
| Technical Knowledge | Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities. |
| Core Skills/Generic Skills | Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles. |
| Helpdesk | Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk. |
| IT-ITeS | Information Technology - Information Technology enabled Services |
| BPM | Business Process Management |
| BPO | Business Process Outsourcing |
| KPO | Knowledge Process Outsourcing |
| LPO | Legal Process Outsourcing |
| IPO | Information Process Outsourcing |
| BCA | Bachelor of Computer Applications |
| B.Sc. | Bachelor of Science |
| OS | Occupational Standard(s) |
| NOS | National Occupational Standard(s) |
| QP | Qualifications Pack |
| UGC | University Grants Commission |
| MHRD | Ministry of Human Resource Development |
| MOLE | Ministry of Labour and Employment |

| | |
|-------|--|
| NVEQF | National Vocational Education Qualifications Framework |
| NVQF | National Vocational Qualifications Framework |
| NSQF | National Skill Qualification Framework |

Nomenclature for QP & NOS

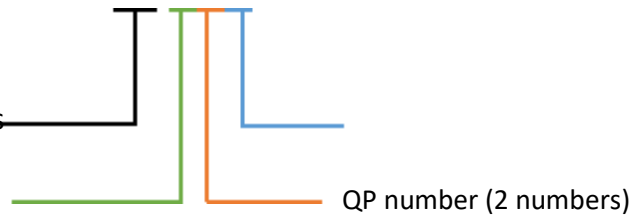
Qualifications Pack

9 characters

SSC/Q0101

SSC denoting **Software & Services Companies (IT-ITeS industry)**

Q denoting Qualifications Pack



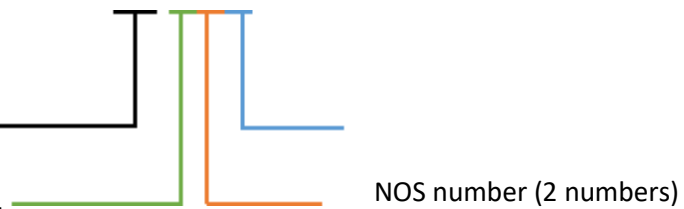
National Occupational Standard

9 characters

SSC/N0101

SSC denoting **Software & Services Companies (IT-ITeS industry)**

N denoting National Occupational Standard



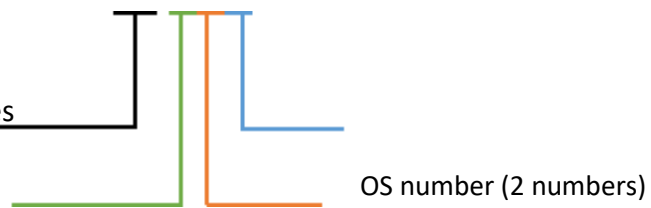
Occupational Standard

9 characters

SSC/N0101

SSC denoting **Software & Services Companies (IT-ITeS industry)**

O denoting Occupational Standard



Nomenclature for QP & NOS UNITS

It is important to note that an OS unit can be denoted with either an 'O' or an 'N'.

- If an OS unit denotes 'O', it is an OS unit that is an international standard. An example of OS unit denoting 'O' is SSC/O0101.
- If an OS unit denotes 'N', it is an OS unit that is a national standard and is applicable only for the Indian IT-ITeS industry. An example of OS unit denoting 'N' is SSC/N0101

The following acronyms/codes have been used in the nomenclature above:

| Sub-Sector | Range of Occupation numbers |
|-----------------------------------|-----------------------------|
| IT Service(ITS) | 01-20 |
| Business Process Management (BPM) | 21-40 |
| Engg. and R&D(ERD) | 41-60 |
| Software Products(SPD) | 61-80 |

| Sequence | Description | Example |
|------------------|--|---------|
| Three letters | Industry name (Software&Service Companies) | SSC |
| Slash | / | / |
| Next letter | Whether QP or NOS | N |
| Next two numbers | Occupation Code | 01 |
| Next two numbers | OS number | 01 |

Notes

Unit 1.2: IT Services Subsector

Unit Objectives



At the end of this unit, you will be able to:

1. Explain the evolution of the BPM Industry
2. Understand the structure of the IT-BPM industry
3. Resonate with the key trends in the BPM sector 4

1.2.1 Introduction to IT Services Sub Sector

IT-BPM market, a USD 118 billion market in India in FY2014, is a leading contributor to the services industry in India with respect to employment and revenue. It accounts for 38 per cent of the country's total services exports and contributes to 8.1 per cent of India's GDP². It also accounts for INR 1,911 billion in FY2014. The IT Services subsector is a major contributor to the overall IT-BPM Industry.

IT Services (ITS) sub-sector offers services to create and manage information for business functions through host of activities that include consulting, systems integration, IT outsourcing/managed services/hosting services, training and support/ maintenance.

The sub-sector has evolved as a major contributor to India's GDP and plays a vital role in driving economic growth in terms of employment, export promotion and revenue generation.

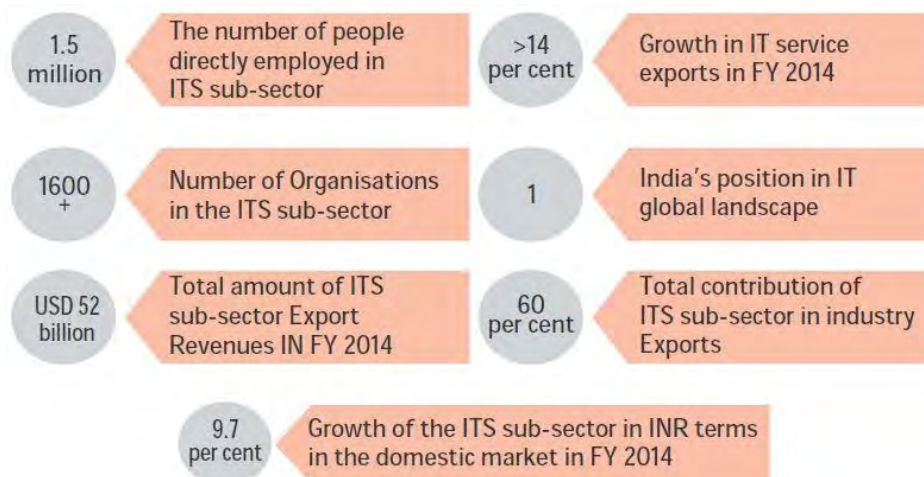


Fig 1.2.1

The worldwide IT Services market stood at USD 655 billion in 2013. The Indian IT Services exports form the largest and fastest growing segment of the IT services with a growth rate of

>14 per cent in FY 2014. IT Services export constituted over half of the entire export of the IT Industry. Even within the domestic market, IT services is the fastest growing segment in the Indian domestic market, growing by 9.7 per cent to reach INR 727 billion, driven by IS outsourcing, cloud services and increasing adoption from all customer segments government, enterprise, consumers and small and medium businesses. There are over 1600 companies providing IT services in the country with the top 5 comprising around 60 per cent of the total revenue from the industry.

The sub-sector has established a record as a major contributor to the country's GDP as well as penetrated into many large sectors - established as well as upcoming like healthcare, media, education and retail. This has ensured that the sub-sector is a field in demand, both in the present and the future. With an increased focus on optimising efficiencies, companies in all the sectors see value in leveraging IT to manage their business better and are increasing their IT investments.

The wide scope of the services in this sub-sector creates a requirement for a large variety of skills. This reflects on the range of opportunities available for building a career in IT Services to a varied group of people and the industry continues to be amongst the most sought, after for many young and aspiring individuals.

1.2.2 Profile of IT Services Sub Sector

Vertical Profile:

BFSI is the largest driver in this space claiming half of the entire IT Services export. Other industry Verticals Like Healthcare, Retail and Media have started making big investments in IT services and are turning into key verticals for the IT Services sub-sector. An illustrative view of the vertical and horizontal profiles is shown below.

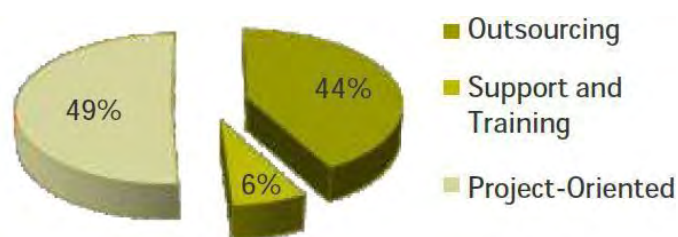


Fig 1.2.2

Horizontal Profile:

The IT Services sub-sector started off in India with a focus on basic application development and maintenance. The sub-sector has now grown and includes significant footprints in traditional segments which include custom application development, application management, IS



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