







Participant Handbook

Sector

IT-ITES

Sub-Sector

Business Process Management

Occupation

Customer Relationship Management

Reference ID: SSC/Q2212, Version 1.0

NSQF Level 4



Domestic Data Entry Operator

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1. Introduction

Unit 1.1 Understand the IT/ITeS Industry

Unit 1.2 – Understanding of Computers

Unit 1.3 – M.S. Office & Data Confidentiality

Unit 1.4 – Enhance Typing Skills



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.

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

Pen down thoughts on:

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

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.

BPM Industry in India - The IT BPM industry has been fueling 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
 - 1. *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).
 - 2. *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
 - 3. 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.
 - 4. *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.

IT Services (ITS) **Business Process Management (BPM)** Custom Application Development (CAD) Customer Interaction and Support (CIS) Hardware Deployment and Support Finance and Accounting (F&A) Software Deployment and Support Human Resource Management (HRM) **IT Consulting** Knowledge Services System Integration Procurement and Logistics Information Systems(IS) Outsourcing **Software Testing Network Consultation and Integration Education and Training IT-BPM Industry Engineering and R&D (ER&D) Software Products (SPD) Embedded Services** Offshore Product Development **Engineering Services**

Fig: 1.1.1: Structure of the IT BPM Industry

-1.1.3: What is the BPM sub-sector

Indian Business Process Management (BPM) sub-sector of Indian IT-BPM industry has crossed significant growth milestones in FY2013 i.e. revenue generation of USD19 Billion and providing direct employment to nearly 1 million people. The Indian BPM sub-sector has not only fuelled Indian economic growth but also helped transform the image of India from a rural agrarian economy to a dynamic knowledge-based economy.

This faith in the Indian BPM sub-sector was reaffirmed through testing times at the end of the last decade, where despite global uncertainties and economic gridlock, the demand for global outsourcing for BPM in India remained strong. The positioning of BPM established as different from business process outsourcing has created a broad client impact. There is a transition from merely being a cost saving option to being a service delivery leader that enhances competitiveness, drives business productivity and impacts outcomes.

Thus the industry is moving away from positioning itself only as cost and labor arbitrage for its customers to providing transformational services and strategic value creation. As a result, it is creating on-demand future-ready solutions by deep-diving to create vertical specific offerings and capabilities and also focusing on standardizing customer delivery excellence.

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 (direct and indirect).



Fig: 1.1.2: What is the BPM sub-sector

Source: The IT –BPM Sector in India – Strategic Review 2013, NASSCOM

-1.1.4 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.

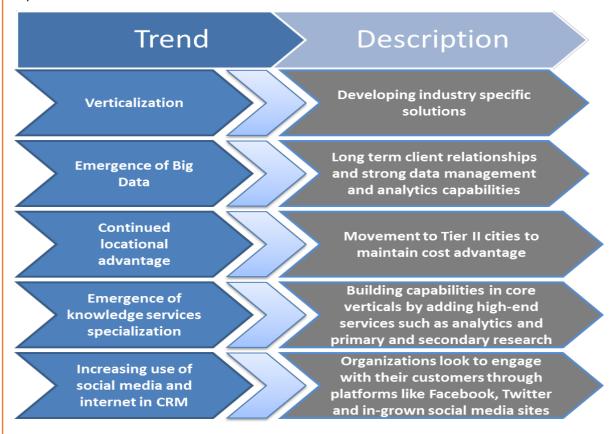


Fig 1.1.3: BPO Strategy Summit, 2012; Delhi

Verticulization: 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.

-1.1.5 Exercise



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. Verticulization
 - b. Knowledge service specialization
 - c. Emergence of big data
 - d. Saturation

-1.1.6 : 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
 - o Geographic spread of operations and
 - o 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
 - o Increasing use of social media and internet for CRM

1.1.7: Glossary of terms

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 organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization 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 knowledgeneeded 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
ВРМ	Business Process Management
ВРО	Business Process Outsourcing
КРО	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 Labor 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-ITeSindustry) QP number (2 numbers) **Q** denoting Qualifications Pack **National Occupational Standard** 9 characters SSC/N0101 SSC denoting **S**oftware &**S**ervices Companies (IT-ITeSindustry) NOS number (2 numbers) N denoting National Occupational Standard **Occupational Standard** 9 characters SSC/N0101 SSC denoting **S**oftware &**S**ervices Companies (IT-ITeSindustry) OS number (2 numbers) 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/**O**0101.
- 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	1	/
Next letter	Whether Q P or N OS	N
Next two numbers	Occupation Code	01
Next two numbers	OS number	01

1.2 Understanding of Computers

Unit Objectives 🎯



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

- 1. Expain the history and Generation of Computer
- 2. Know about the basic terminologies of Computer
- 3. Explain the Architecture of computer
- 4. Types of Computer
- 5. Advantages & Disadvantages of Computer

1.2.1 History of Computers

The word 'computer' is an old word that has changed its meaning several times in the last few centuries. Originating from the Latin, by the mid-17th century it meant 'someone who computes'. The American Heritage Dictionary (1980) gives its first computer definition as "a person who computes." The computer remained associated with human activity until about the middle of the 20th century when it became applied to "a programmable electronic device that can store, retrieve, and process data.

Functions of Computer

A computer has four functions:

- **a.** Accepts data -Input
- b. Processes data Processing
- c. Produces output Output
- d. Stores results Storage

Input (Data):

Input is the raw information entered into a computer from the input devices. It is the collection of letters, numbers, images etc.

Process:

Process is the operation of data as per given instruction. It is totally internal process of the computer system.







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