

IT-ITeS Sector Skills Council NASSCOM

4E, Vandana Building (4th Floor)
11, Tolstoy Marg, Connaught Place
New Delhi 110 001, India
T 91 11 4151 9230 F 91 11 4151 9240
ssc@nasscom.in
www.nasscom.in







Business Process Management

Occupational Analysis

Business Process Management





Foreword

2013 is an important year for the Indian IT-BPM Industry as global markets struggle to emerge from their economic instabilities and environmental challenges. The situation, though challenging, also presents new opportunities to tap for the Indian IT-BPM Industry. One of the key imperatives for the industry is to continuously seek and develop the 'right' talent to drive its growth.

As per the National Skills Mission, 500 million professionals would need to be skilled by 2022 to make them employable. The Indian IT-BPM Industry currently employs about 3 million people directly and about 9 million indirectly. As per the NASSCOM Perspective 2020 report, the industry has a potential to contribute to, as much as, 30 million employment opportunities (direct and indirect) by 2020.

The need is to focus on developing ready-to-deploy talent by laying standards for skill requirements in the IT-BPM Industry. These requirements merit defining consistent standards of performance and quality and standardising recruitment procedures. With this in mind, NASSCOM has come up with the Occupational Analysis report for the IT-BPM Industry.

Occupational Analysis report identifies job roles across the IT-BPM industry at the Entry, Middle and Leadership levels. Career Paths for entry-level job roles have been identified for the benefit of the students and academia to facilitate the clear understanding of the career opportunities provided by the industry. Several case studies of successful people have been included to make careers in our industry more attractive.

This Occupational Analysis report is one of the ways in which NASSCOM aims to streamline job roles across the IT-BPM industry and is the first step in the development of Occupational Standards for the industry.

We reaffirm our commitment to facilitate the growth of the industry and trust you will find the report useful.

Som Mittal

President



Acknowledgements

We would like to thank the entire NASSCOM Leadership: Mr Som Mittal, President; Mr Lakshmi Narayanan, Chairman, IT-BPM Sector Skills Council NASSCOM and CEO Cognizant; Ms Sangeeta Gupta, Sr VP; KS Vishwanathan, VP and Head of Industry Relations; Ameet Nivsarkar, VP; Rajiv Vaishnav, VP; Rama Vedashree, VP, for their strategic leadership and support to this important project.

We would like to particularly thank Dr Sandhya Chintala, Executive Director, IT-ITeS Sector Skills Council NASSCOM, VP NASSCOM for her invaluable Leadership and guidance throughout the project.

We are grateful to the officers of Ministry of HRD (MHRD), Ministry of Communications and Information Technology, Ministry of Labor and Employment (MoLE), Prime Minister's Office (PMO), and National Skills Development Corporation (NSDC), for willingly providing us with relevant information and support required for this report.

We are grateful to the members of the Project Board, namely, Mr Srikantan Moorthy-Infosys, Mr Kothandaraman Karunagaran-CSC, Mr Sameer Kohli-CSC, Mr Manjunatha Hebbar-HCL, Mr Vidyut Navelkar-TCS, Mr Arjun R-HCL, and Mr Anil Menon-IBM, for their continued support.

We want to acknowledge the continuous support received from other members of SSC NASSCOM team and NASSCOM Research Team, providing us with guidance on undertaking the quantitative and qualitative research required for this report.

We would also like to thank all NASSCOM member organisations that provided inputs for the preparation of this report. We are thankful to the teams of Accenture for carrying out this research work and putting together this document.





Table of Contents

Foreword	3
Acknowledgements	5
Executive Summary	11
Summary of Key Occupations, Job Roles and Tracks within Each Sub-sector	14
Background	19
Sector Skill Councils	19
Occupational Standards	20
Occupational Mapping as Part of OS Development Process	21
Approach and Methodology	22
OS Development Framework	23
Structure of the IT-BPM Industry	27
Impact of the IT-BPM Industry in India	28
Sub-sectors within the IT-BPM Industry	32
Chapter 1 - Overview of the BPM Sub-sector	35
Introduction to the BPM Sub-sector	37
Evolution of the BPM Sub-sector	38
Profile of the BPM Sub-sector	40
Key Trends in the BPM Sub-sector	42
Chapter 2 - Talent in the BPM Sub-sector	45
Emerging Talent Trends	47
Qualifications, Knowledge and Understanding	49
Skills	50
Learning Opportunities	51
Chapter 3 - Entry-level Job Roles - BPM	53
Entry-level Job Roles	55
Entry-level Job Roles in the BPM Sub-sector	56
BPM Sub-sector - Occupations, Tracks, Verticals and Entry-level Job Roles	57
Chapter 4 - Middle-level Job Roles - BPM	59
Middle-level Job Roles	61
Middle-level Job Roles in the BPM Sub-sector	62
BPM Sub-sector - Occupations, Tracks, Verticals and Middle-level Job Roles	65
Chapter 5 - Leadership-level Job Roles - BPM	67
Leadership-level Job Roles	69
Leadership-level Job Roles in the BPM Sub-sector	70
RPM Sub-sector - Occupations Tracks Verticals and Leadership-level Job Poles	71

Chapter 6 - Occupations and Roles in the BPM Sub-sector	73
In Summary	75
Occupations within the BPM Sub-sector	76
Analytics	80
Analytics - Occupational Map	81
Analytics - Typical Career Paths	82
Customer Relationship Management (CRM)	83
CRM - Occupational Map	85
CRM - Typical Career Paths	86
Editorial and Desktop Publishing	88
Editorial and Desktop Publishing - Occupational Map	89
Editorial and Desktop Publishing - Typical Career Paths	90
Finance and Accounting (F&A)	91
F&A - Occupational Map	93
F&A - Typical Career Paths	94
Health Services	95
Health Services - Occupational Map	96
Health Services - Typical Career Paths	97
Human Resource Outsourcing (HRO)	98
Human Resource Outsourcing - Occupational Map	99
Human Resource Outsourcing - Typical Career Paths	100
Knowledge Services - Research	101
Knowledge Services - Research - Occupational Map	102
Knowledge Services - Research - Typical Career Paths	103
Learning	104
Learning - Occupational Map	105
Learning - Typical Career Paths	106
Legal Services	107
Legal Services -Occupational Map	108
Legal Services - Typical Career Paths	109
Supply Chain Management (SCM)	110
Supply Chain Management - Occupational Map	111
Supply Chain Management - Typical Career Paths	112
Movement to Other Occupations, Sub-sectors and Industries	113
Annexures	115
Annexure A: Glossary of Terms and Abbreviations	116
Annexure B: Case Studies of Career Paths	117



EXECUTIVE SUMMARY

- Executive Summary
- Summary of Occupations Within Each Sub-sector

EXECUTIVE SUMMARY

Executive Summary

The IT-BPM industry has received global recognition as the growth engine for India and the sectors it services across the world. It has established itself as a pioneer with the range of services it offers, the global customer base it serves and the numerous employment opportunities it has provided to the workforce in India.

As per NASSCOM's **Strategic Review 2013**, the industry aggregated revenues exceeding USD 108 billion and employed more than 3 million people. The industry accounts for almost 25 percent of the total exports and 11 percent of the total service revenues. In order to drive the acquisition of right talent and to ensure the development of an employable workforce for the industry, IT-ITeS Sector Skills Council NASSCOM (SSC NASSCOM) has taken up an initiative to develop Occupational Standards (OS) for all Entry-level (unique) job roles in the IT-BPM Industry. These OS are being developed in close association with the key member companies in the IT-BPM Industry. In the long term, they will provide a foundation for the skill development training and certification programme.

There are four sub-sectors within the IT-BPM Industry. The sub-sectors are as follows:

IT Services (ITS)
Business Process Management (BPM)
Engineering and R&D (ER&D)
Software Products (SPD)

The current report shall focus on the BPM sub-sector within the IT-BPM industry.

Occupational Analysis (OA) is the first step in the development of the OS for any industry or sector. It entails an industry scan and a process of identifying different occupations in the various sub-sectors.

Objective

The objective of this document is to describe the main features and characteristics of an occupation, within the IT-BPM industry, specifically the BPM sub-sector. It provides a high-level overview of an occupation in terms of the types of job roles that exist, workforce characteristics, key talent trends and a review of available education and training. OA, therefore, provides information on the opportunities that exist for progression through a career in a specific occupation.

The OA for IT-BPM industry contributes to the context and background for the development of the OS for the BPM sub-sector.

EXECUTIVE SUMMARY



12

EXECUTIVE SUMMARY

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Structure of the Occupational Analysis Report

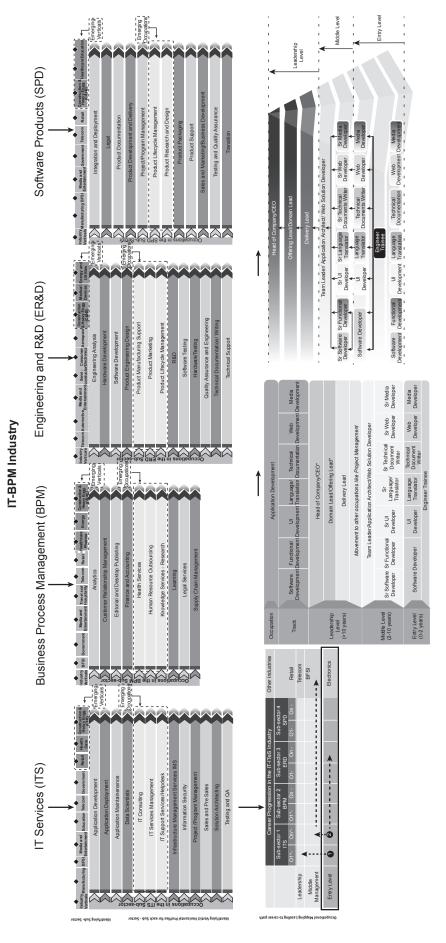
This report consists of the following sections:

- Background to the Project: A brief description of the National Skills Mission, Sector Skills Councils and their objectives leading to the process of the development of the OS is given in this section
- About the IT-BPM Industry: This section covers the structure of the IT-BPM Industry in terms of the types of organisations within the ecosystem
- Occupational Mapping and Career Paths for the BPM sub-sector

The BPM sub-sector is structured in the following chapters:

- Chapter 1: About the sub-sector: A brief description of the structure, evolution and profile of
 the sub-sector is given in this chapter. It covers information on the size of the sub-sector, the
 workforce employed therein, and so on
- Chapter 2: Talent trends within the sub-sector: This chapter provides an overview of the key drivers of change that have an influence on the workforce and talent within the sub-sector
- Chapter 3: Entry-level roles BPM: This chapter provides an overview of the Entry-level roles within the sub-sector
- Chapter 4: Middle-level roles BPM: This chapter provides an overview of the Middle-level roles within the sub-sector
- Chapter 5: Leadership-level roles BPM: This chapter provides an overview of the Leadership-level roles within the sub-sector
- Chapter 6: Occupations and job roles in the sub-sector: Details of the types of occupational
 activity included in the scope of the sub-sector, associated occupations, job roles and typical
 career paths are addressed in this chapter

The steps undertaken to develop Occupation Mapping leading to 'Career Path' are summarised



This figure does not depict any hierarchy

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

EXECUTIVE SUMMARY

Summary of Key Occupations, Job Roles and Tracks within Each Sub-sector

Figure 2 indicates the key occupations identified in each sub-sector. These occupations are differentiated on the basis of the unique skill-sets required for each occupation. Each occupation is further divided into tracks to highlight the specialisations that exist. Details of the tracks and the unique Entry-level job roles have been indicated further on in the document. These occupations, tracks and unique job roles exist in various organisations under different classifications and level of detail. The list tries to establish a balance between the level of detail and brevity while defining these basic 'distinct' skill-sets

IT Services (ITS)

Application Development
Application Deployment
Application Maintenance
Data Scientists
IT Consulting
IT Support Services/Help Desk
Infrastructure Management Services (IMS)
Information Security
IT Services Management
Project/Program Management
Sales and Pre-sales
Solution Architecting
Testing and QA

Business Process Management (BPM)

Analytics
Customer Relationship Management
Editorial and Desktop Publishing
Finance and Accounting
Health Services
Human Resource Outsourcing
Knowledge Services - Research
Learning
Legal Services
Supply Chain Management

Engineering and R&D (ER&D)

Product Engineering Design
Product Marketing
Product Manufacturing Support
Product Lifecycle Management
R&D
Software Testing
Hardware Testing
Quality Assurance and Engineering
Technical Documentation/Writing
Technical Support

Engineering Analysis

Hardware Development

Software Development

Software Products (SPD)

Integration and Deployment
Legal
Product Documentation
Product Development and Delivery
Project/Program Management
Product Lifecycle Management
Product Research and Design
Product Packaging
Product Support
Sales and Marketing/Business Development
Testing and Quality Assurance
Transition

Figure 1: Occupational Mapping Summary

In each of the four sub-sectors, unique occupations were identified as listed earlier in the section. In each of these occupations, based on the specificity of the skill requirements, skill-based demarcations or tracks have been identified. These tracks define the specific skills that are required to perform a job role within an occupation. In each of these occupations and tracks, Entry, Middle and Leadership level roles have been identified. These job roles identify the unique positions that exist in an organisation for fulfilling the functions defined under an occupation. These job roles differ from each other with respect to the competencies, knowledge, skill, attitude and performance criteria requirements for the fulfilment of a role.

Based on our research, we have identified 13 unique occupations in the ITS sub-sector, which are further segregated into 39 tracks with 17, 91 and 25 unique job roles at the Entry, Middle and Leadership levels, respectively. Similarly, we have identified 10 unique occupations in the BPM sub-sector, which are further segregated into 27 tracks with 16, 111 and 30 unique job roles at the Entry, Middle and Leadership levels, respectively. For the ER&D sub-sector, we have 13 unique occupations, which are further segregated into 15 tracks with 16, 48 and 54 unique job roles at the Entry, Middle and Leadership levels, respectively, while for SPD, we have 12 unique occupations, further segregated into 23 tracks with 18, 63 and 21 unique job roles at the Entry, Middle and Leadership levels, respectively.

IT Services (ITS)

- 13 unique 'Occupations/Horizontals'
- 39 unique 'Tracks'
- 17 unique Job roles at the Entry Level
- 91 unique Job roles at the Middle Level
- 25 unique Job roles at the Leadership Level

Business Process Management (BPM)

- 10 unique 'Occupations/Horizontals'
- 27 unique 'Tracks'
- 16 unique Job roles at the Entry Level
- 111 unique Job roles at the Middle Level
- 30 unique Job roles at the Leadership Level

Engineering and R&D (ER&D)

- 13 unique 'Occupations/Horizontals'
- 15 unique 'Tracks'
- 16 unique Job roles at the Entry Level
- 48 unique Job roles at the Middle
- 54 unique Job roles at the Leadership Level

Software Products (SPD)

- 12 unique 'Occupations/Horizontals'
- 23 unique 'Tracks'
- 18 unique Job roles at the Entry Level
- 63 unique Job roles at the Middle Level
- 21 unique Job roles at the Leadership Level

Figure 2: Summary of Findings During Occupational Analysis



EXECUTIVE SUMMARY

BACKGROUND

- Sector Skill Councils
- Occupational Standards
- Occupational Mapping as Part of OS development
- OS Development Framework

BACKGROUND

Background

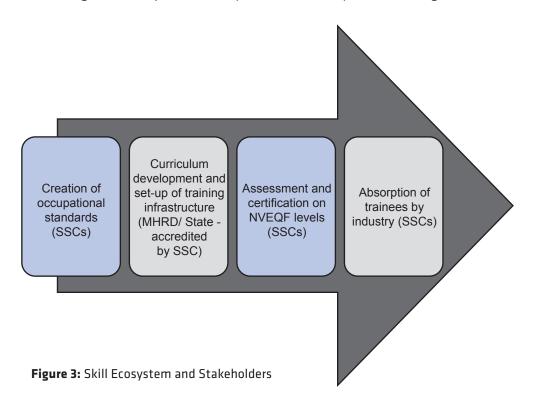
Sector Skill Councils

The Sector Skill Councils (SSCs) have been established based on the mandate of the National Skill Development Policy (2009). The aim of the SSCs is to complement the existing vocational education system for the industry in meeting the entire value chain's requirements. This includes developing appropriately trained manpower in quantity and quality across all levels on a sustained and evolving basis.

It is important to note that the SSCs in India have been envisaged taking into account the ground realities in India as well as international best practices.

SSCs are national partnership organisations that bring together all the stakeholders – Industry, Labour, and the Academia - for the common purpose of workforce development of particular industry sectors.

The SSC is envisaged to develop the skill ecosystem in the country, as shown in Figure 3.



Each SSC will create a repository of Occupational Standards (OS) for its respective sectors, which will be an input to develop the relevant content, training infrastructure and other related needs for imparting the training. The SSCs are also responsible for the assessment and certification at all the NVEQF levels as described in the next section. It is envisaged that the SSC for a particular sector would be the supreme certification body for that sector. The SSC as an industry/sector body can link the skilling ecosystem to the demands of the industry/sector, to ensure that the content, assessment, certification and so on are relevant to the industry. With people trained under this framework, it can be visualised that there would be industry absorption and retention.



BACKGROUND

Occupational Standards

OS are the statements of the standards of performance individuals must achieve when carrying out functions in the workplace, along with the specifications of the underpinning knowledge and understanding required. OS describe what an individual needs to do, know and understand to carry out a particular job role or function. The OS serve a number of purposes as shown in Figure 4.

Once the OS are developed, it is easy to define a focused training and development ecosystem based on it. The OS will be also helpful in defining a job description for a job role, providing measurable performance outcomes for individual performance appraisals, devising appropriate recognition programmes, defining competency frameworks and providing support for career planning and progression.

OS Key Outcomes, Performance Criteria, Underpinning Knowledge

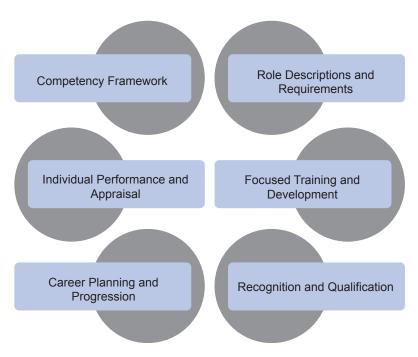


Figure 4: Uses of Occupational Standards

Occupational Mapping as Part of OS Development Process

Occupational mapping is the first step towards the development of OS. It leads to the identification of unique job roles that exist in the industry/sub-sector. In the context of the project, the key outcome of this exercise is the identification of ~67 unique Entry-level job roles for which Functional Analysis and OS are currently being developed. This is represented in Figure 5.

nctional	An	alys	sis a	ınd	05	are	CL	ırre	ntly	beir	ıg	deve	elo	ped	d. T	his is	rep	rese	ented	l in F	igure	5.
vels					int	0.32	15/11/12	06/12/12	31/01/14			them to				months	Desk	a)	rives	(I)	ents	
Outcome Identification of Unique job roles at the Entry ,Middle and Leadership Levels Identification of tasks/OS titles for ~67 Entry Level job-roles	ntry-level job roles		level job roles	SSC/Q 0101	Service Help Desk Attendent	Version number	Drafted on	Last received on	Next review date	it Jesk Executive,	Executive)	Attending and responding to incidents and escalating them to the appropriate individual/groups/ if required		Ø	Graduate courses like BCA_BSc (Computer Science)	Page 20 Computer fundamentals training courses (6-12 months	o-1 year of work experience/internship in IT Service Help Desk	Compulsory: 1. SSC / O 0101 (Deals remotely with basic IT service	requests and incidents) SSC / O Olto2 (Receives customer feedback and drives improvements at the certifical deck)	missionements at the service desk) SSC / Ogold (Maintains a safe, healthy and secure	SSC/ O 9002 (Works effectively with others) SSC/ O 9003 Manages the work to meet requirements	nits
Outcome Identification of Unique job roles at the Entry ,Middle and Le Identification of tasks/OS titles for ~67 Entry Level job-roles	Development of Qualification Packs (QP) for ~ 67 Entry-level job roles		QP for the identified 67 Entry-level job roles		IT Service	20	IT-BPM	IT Services	Services	IT Service Help Desk Attendent (Help Desk Executive, Service Desk Executive,	Fechnology Support, IT Support Executive)	Attending and responding to incidents and e the appropriate individual/groups/ if required		Diploma in Computer Applications	rses like BCA BSc	er fundamentals tra	rk experience/interns	101 (Deals remotely	requests and incidents) SSC / 0 0102 (Receives customer improvements at the cervice deck)	01 (Maintains a safe	02 (Works effectivel) 03 Manages the wo	Optional: Not Applicable As described in the relevant OS units
Inique job roles asks/OS titles fo	Qualification Pa		QP for the i	Qualifications Pack Code		Credits (NVEQF/NVQF/NSQF)		_	C	IT Service H (Help Desk E	Technology 8	Attending and the appropriate	2-2	Diploma in Co	Graduate cou	Basic comput	0-1 year of wor	Compulsory: 1. SSC / O 01	2. SSC / O 01	3. SSC / 09001	4. SSC/ O 90 5. SSC/ O 90	Optional: Not Applicable As described in the relev
dentification of U dentification of ta	Development of (Qualification	a Job Role	Credits (NVEQF/N	P Industry	ንቦ	Occupation			cription	NVEQF/NVQF level	Minimum Educational	Minimum Educational	Qualifications Fraining (Suggested but	å akory		900	onal Stan- s)		Performance Criteria
			Other Industries	:	Retail	BFSI	*	Electronics	ľ	Job Role		Role Description	NVEQF/N	Minimum Edu	Minimum	Qualifications Training (Sugg	Experience		-	Occupational Standards (OS)		Performar
Project Step 1. Occupational Analysis 2. Functional Analysis for identified Entry-level job roles	upational Standards(OS)	Occupational Analysis of the four sub-sectors	=-	sector Sub-sector Sub-se	On - O1- On - O1- On -		- <mark></mark>	*	-	Functional Analysis for the identified 67 Entry-level job roles		Example	IT-BPM	IT-BPM	IT Support Services	IT Service Help Desk Attendant - Provides IT support to internal and external customers	Receives the service request/	Customer feedback and helping improvements at the service desk	Deals remotely with basic IT service request and incidents	and drives improvements at the	Maintains a safe, healthy and secure working environment	Works ellectively will billers Manages the work to meet requirements
Project Step 1. Occupational Analysis 2. Functional Analysis for	3. Development of Occupation	ocupational A	Caree	ector S	01*- On*- 01*-	4	. *	0		al Analysis for the id Entry-level job roles	Alternate	Acceptable Usage	Industry	Industry	NA A	Job role Provi	■ Rec	Cus	Dea requ	and	Mai	Mar
1. Occul	3. Devel	0		S	_	Middle	Management	Entry Level		Function	Ā	Items Acc	Sector In	Sub-sector In	Occupation	Function Jo	disc	function(s)		30/oylocT	000000000000000000000000000000000000000	

Figure 5: Occupational Mapping as Part of OS Development Process

BACKGROUND

BACKGROUND

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Approach and Methodology

A step-by-step approach was followed to undertake the Occupational Analysis for the IT-BPM Industry which is presented in Figure 6.

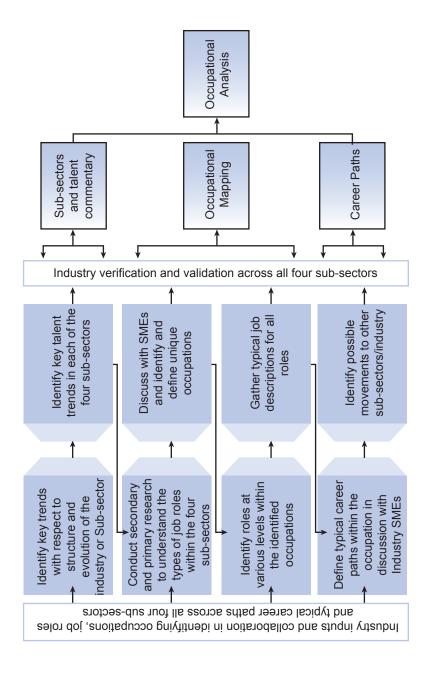


Figure 6: Occupational Analysis: Approach and Methodology

OS Development Framework

The following framework¹ has been used for OS development.

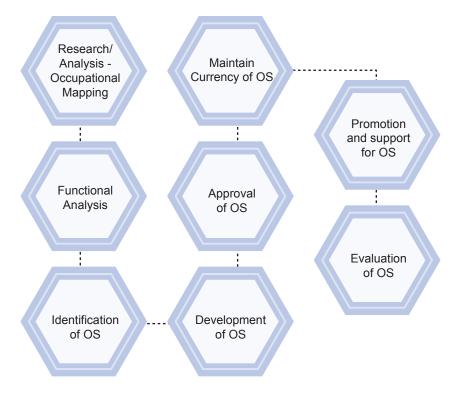


Figure 7: OS Development Framework

As indicated in the OS Development Framework in Figure 7, the outcome of Occupational Mapping will feed into the next steps namely. Functional Analysis and OS Development.

BACKGROUND

 $^{^{\}rm 1}\,\mbox{Source}$ INSSO framework followed globally as a benchmark for OS development

BACKGROUND

ABOUT THE IT-BPM INDUSTRY

- Structure of the IT-BPM Industry
- Impact of the IT-BPM industry in India
- Sub-sectors Within the IT-BPM Industry

ABOUT THE IT- BPM INDUSTRY

Structure of the IT-BPM Industry

The organisations within the IT-BPM Industry are categorised along the following parameters.

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

A broad structure of the industry based on the parameters identified in the Indian context is represented in Figure 82.

Multinational Companies (MNCs): MNC organisations 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 (ISPs): ISPs are the organisations that have started with their operations in India. Most of these organisations would have their headquarters in India while having offices at many international locations

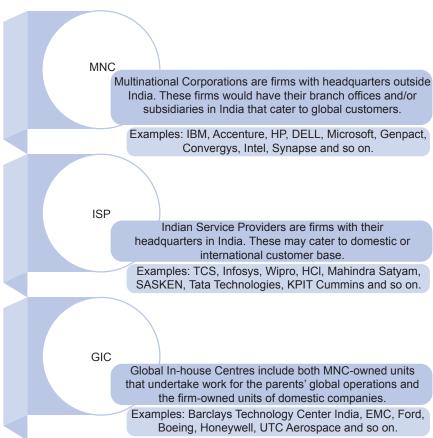


Figure 8: IT-BPM Industry Structure

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 Centres (GICs): GIC organisations cater to the needs of their parent company only and do not serve external clients. This model allows the organisation 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.

ABOUT THE IT-BPM INDUSTRY



²Source: NASSCOM Research

ABOUT THE IT- BPM INDUSTRY

Impact of the IT-BPM Industry in India

The IT-BPM industry has been significant in fuelling India's growth story. In addition to contributing to the country's gross domestic product (GDP) and exports, the industry has played a big role in influencing the socio-economic parameters across the country. The industry has helped in providing employment and a good standard of living to millions. It has placed India on the world map with an image of a technologically advanced and knowledge-based economy³.

The following illustration summarises the contribution and impact of the sector to the Indian economy and employment.

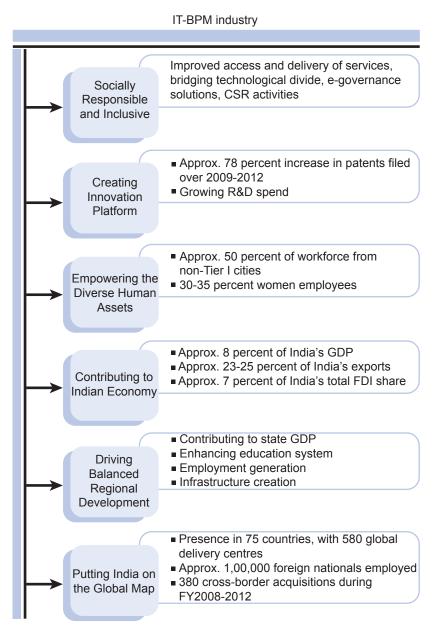


Figure 9: Impact of IT-BPM Industry

Growth of the IT-BPM industry has provided India with a wide range of economic and social benefits, which include creating employment, raising income levels, promoting exports and significantly contributing to the GDP of the country. This sector attracts amongst the largest investments by venture capitalists and has been credited with enabling the entrepreneurial ventures of many in the country.

³The IT-ITES sector in India Strategic Review 2012 by NASSCOM

Revenue Growth

The IT-BPM industry has almost doubled in terms of revenue and contribution to India's GDP over the last six years (2008-2013). This growth has been presented in the Figure 10⁴.

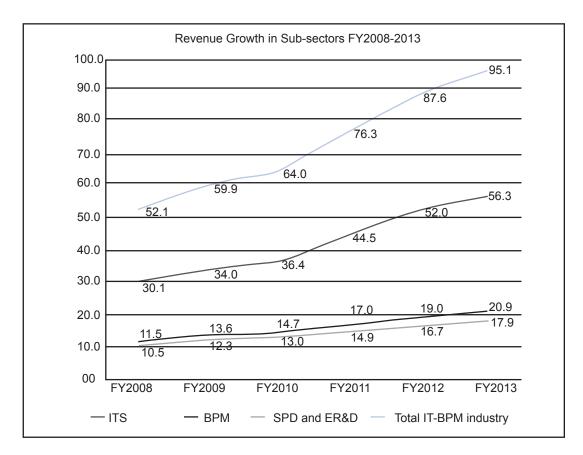


Figure 10: Revenue Growth across the IT-BPM industry, 2008-2013

ABOUT THE IT-BPM INDUSTRY



⁴The IT-BPM sector in India Strategic Review 2013 by NASSCOM

ABOUT THE IT- BPM INDUSTRY

Contribution of Different Sub-sectors

The contribution of ITS sub-sector is close to 59 percent of the total revenue for the industry followed by BPM at 22 percent. The contribution of the various sub-sectors has been presented in Figure 11⁵.

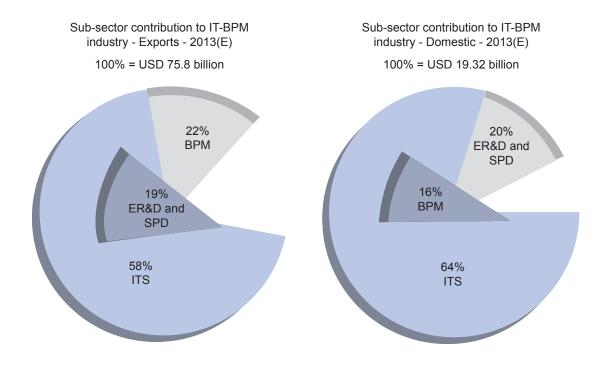


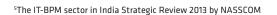
Figure 11: Contribution of Sub-sectors to IT-BPM Industry

Direct Employment Generated

The IT-BPM industry has contributed significantly towards the direct employment generation for the youth. The growth has been presented in Table 1.

Indirect Employment

While, the IT-BPM industry employs about 3 million people directly, it also provides indirect employment opportunities to another 9 million in industries like construction, catering, security services, retail and transport. The increased earnings and employment further drive the spending in services like food, entertainment, telecommunication and healthcare apart from contributing to tax coffers of the country.



The indirect-direct employment ratio multiplier has reduced from 3.6 in 2010 to 3.2 in 2012⁶.

Table 1: Employment Generation in the IT-BPM Industry

Description	FY2010	FY2012	FY2013
Direct Employment	2.3	2.8	3.0
Indirect Employment	8.2	8.9	9.0
Ratio (Indirect: Direct)	3.6	3.2	3

~3 million workforce contributing to industry growth

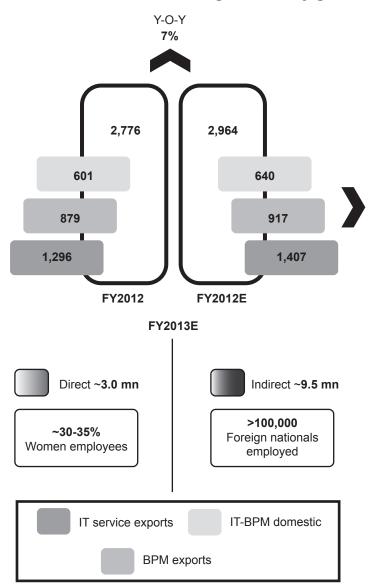


Figure 12: Employment Trends in the IT-BPM Industry

ABOUT THE IT-BPM INDUSTRY



⁶The IT-BPM sector in India Strategic Review 2013 by NASSCOM

ABOUT THE IT- BPM INDUSTRY

Sub-sectors within the IT-BPM Industry

The IT-BPM industry has four sub-sectors. The subsequent sections of the report describe Occupational Analysis conducted separately for the BPM sub-sector.

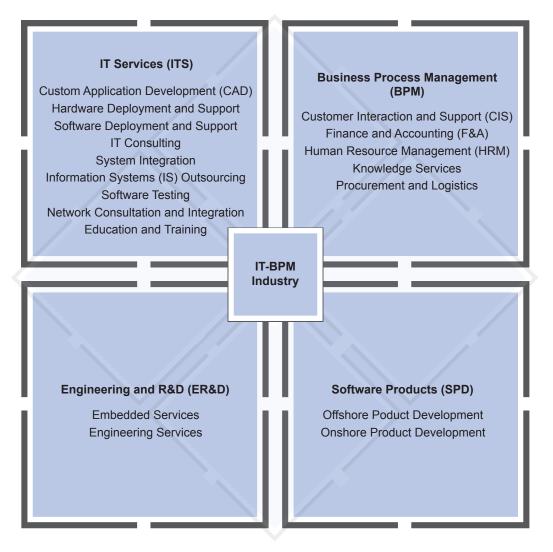


Figure 13: Sub-sectors within the IT-BPM Industry

Each of the four sub-sectors has been defined in detail subsequently. These terms/definitions have been used in discussion with NASSCOM and have been found to be consistent with the definitions used in the industry.

- IT Services (ITS): ITS involves a range of engagement types that include consulting, systems integration, IT outsourcing/managed services/hosting services, training and support/ maintenance.
 - Custom Application Development (CAD): CAD services focus on delivering customised (as per the client requirements) development of software applications and interface as well as enhancements to existing packaged applications or pre-engineered templates and support and provision of custom applications.
 - Hardware Deployment and Support: The Hardware Deployment and Support services pertain to the installation and support of a specific hardware device. The service is focused on the device and its components rather than on software that is running on the device. Installation activities can include hardware staging, configuration, testing and debugging, deployment site preparation and physical installation of the device.



- c) Software Deployment and Support: The Software Deployment and Support services are activities, expertise and systems providing the customer with proper installation and configuration of all packaged software products, custom applications as well as appropriate ongoing support, access to resources and distribution of software product releases, updates and upgrades.
- d) Information Systems (IS) Outsourcing: IS Outsourcing services involve a long-term, contractual arrangement in which a service provider takes the ownership of and responsibility for managing all or part of a client's information systems operations or department, based on a service-level agreement. An IS Outsourcing contract usually includes data centre operations and may also include services such as desktop management, local and wide area network operations management, help desk support, application development and maintenance, disaster recovery services and related consulting and systems integration activities.
- e) Infrastructure Management Services (IMS): IMS encompass all the services that relate to monitoring, managing and enhancing performance of a client's IT infrastructure. These include help desk services, server management, data centre management, network management, asset management, desktop support, IT security services, maintenance services and applications operations.
- f) **IT Consulting:** IT Consulting includes IS Strategy, IT and network planning, architectural assessments, IS operational analysis, system and network designs, product-specific consulting, supplier assessment and maintenance planning.
- 2. Business Process Management (BPM): BPM is the management of one or more business processes by an external organisation that, in turn, owns and manages the selected processes based on defined and measurable performance metrics. The evolution of this subsector marks the shift in the delivery of business processes from high-cost destinations to low-cost ones. This shift is enabled by advancements in information and communication technologies.

BPM sub-sector includes the following types of organisations with different horizontal offerings (those that can be leveraged across specific industries):

- a) Business Process Management (BPM): Traditional BPM offerings can be categorised into major categories and vertical-specific offerings (those that demand specific Industry vertical process knowledge):
 - Customer Interaction and Support (CIS): CIS includes all forms of IT-enabled customer contact; inbound or outbound, voice or non-voice based support used to provide customer services, sales and marketing, technical support and help desk services.
 - Finance and Accounting (FGA): FGA includes activities such as general accounting, transaction management (account receivables and payables management), corporate finance (for example, treasury and risk management and tax management); compliance management and statutory reporting and so on.
 - Human Resource Management (HRM): HRM services include payroll and benefits administration, travel and expense processing, talent acquisition and talent management services, employee and manager self-service delivery services, employee communication design, and administration.
 - Supply Chain Management (SCM): SCM services include the transfer of the ownership of some or all procurement, sales and fulfilment processes or functions to providers, such as an outsourcing agency. These could include administrative, delivery or management-related processes or functions.
- b) **Knowledge Services:** Knowledge Services include services such as business research, market research, data management and analytics.
- c) Legal Services: Legal Services include legal and intellectual property services.

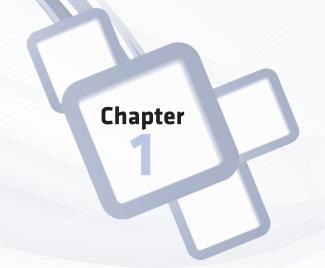
ABOUT THE IT-BPM INDUSTRY



34

ABOUT THE IT- BPM INDUSTRY

- 3. **Software Products (SPD):** SPD are programmes or code sets of any type, commercially available through sale, lease, rental or as a service. Packaged software revenues typically include fees for initial and continued right-to-use packaged software licenses.
 - a) Offshore Product Development: This involves offshore development of the customer's product, thereby taking up the responsibility of all aspects of the product lifecycle -R&D, prototyping, development, testing, maintenance and support and development of next generation of the products.
- 4. Engineering and R&D (ER&D): Engineering services are those that augment or manage processes. These processes are associated with the creation of a product or service, as well as those associated with maximising the life span and optimising the yield associated with a product or asset. This not only includes design elements of the product or service itself, but also encompasses the infrastructure, equipment and processes engaged in manufacturing/delivering them.
 - a) Research and Development (R&D) Services: R&D services involve providing research and development for hardware and software technologies, as well as development of software running on embedded systems.



OVERVIEW OF THE BPM SUB-SECTOR

- Introduction to the BPM Sub-sector
- Evolution of the BPM Sub-sector
- Profile of the BPM Sub-sector
- Key Trends in the BPM Sub-sector

OVERVIEW OF THE BPM SUB-SECTOR

Introduction to the BPM Sub-sector

Indian Business Process Management (BPM) sub-sector of the Indian IT-BPM industry has crossed significant growth milestones i.e., revenue generation of USD 19 billion, and providing direct employment to 1 million people¹.

The Indian BPM sub-sector has not only fuelled economic growth, but also helped transform the image of India from a rural agrarian economy to a dynamic knowledge-based economy. The BPM sub-sector has contributed immensely to build India's position as a global player in providing world class technology solutions and business services.

This faith in the Indian BPM sub-sector was reaffirmed through testing times at the end of the last decade, when 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 labour 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 standardising customer delivery excellence.

NASSCOM estimates that the BPM sub-sector, which is potentially pegged as a USD 65 billion industry by 2020, will contribute up to 9 percent of India's GDP, and 30 million employment opportunities (direct and indirect)².

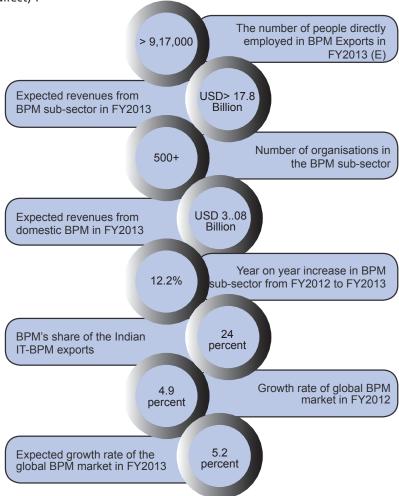


Figure 1: BPM Sub-sector Overview

OVERVIEW OF THE BPM SUB-SECTOR

¹The IT-BPM sector in India Strategic Review 2013 by NASSCOM

²Perspective 2020: Transform Business, Transform India; NASSCOM Report, 2009

OVERVIEW OF THE BPM SUB-SECTOR

Evolution of the BPM Sub-sector

The evolution of the BPM sub-sector in India³ has been captured in the figure below, and explained in detail subsequently.

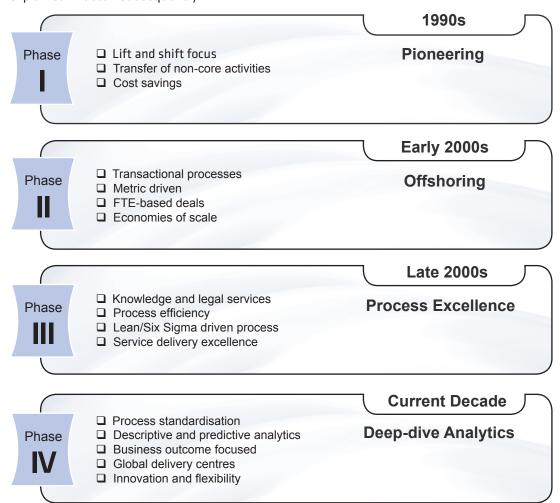


Figure 2: Evolution of the BPM Sub-sector

The story of the BPM sub-sector in India started in the early 1990s with Amex and GE, who pioneered the trend of outsourcing to India by setting up facilities in Gurgaon. Others, like British Airways, soon followed suit, and set up back offices in India in the mid-1990s. Since then, several other organisations, including banks, insurance companies, airlines, and manufacturing companies, have set up back office service centres in India.

This first phase of growth was focused on driving cost-efficiencies, and organisations outsourced what they saw as non-core operations - most often HR, finance and accounting, and other financial services specific processes - to derive value from cost savings following an offshore model of delivery. This wave was followed by a second phase in the early 2000s, when the lift and shift model took hold, and labour and cost arbitrage firmly established itself as a value proposition. MNCs that dealt with higher-end work in finance and accounting, supply chain management, insurance support, all kinds of IT and software services, and medical support services started opening business support centres in India. The third phase of growth witnessed an emphasis on process efficiency and delivery excellence across the broad set of processes and activities that clients increasingly outsourced to the sector. This was done with an extensive focus on process excellence methodologies of lean manufacturing, Six Sigma/green belt projects, ISO, COPC and so on, so as to standardise and homogenise large-scale process operations across clients.

³Accenture Research

Realising the magnitude of this opportunity and witnessing the synchronous activities with IT service companies, many software services players also entered this sector to get a share of the pie by leveraging on their IT infrastructure and management expertise. The period also saw market consolidation with the smaller players that either underwent mergers with each other, or got acquired by large companies to maximise economies of scale.

The fourth phase, which is the current generation of BPM transformation, has emerged out of effective use of analytics paired with deep industry expertise that the BPM sub-sector gathered over the years during long-term client engagements. Using descriptive and predictive analytics, insights have created unexpected value outcomes for C-suite executives, right from enhanced competitiveness to top line growth so as to strategise better, and in turn create value for their own stakeholders.

This standardisation of processes across the sector led to the establishment of global delivery centres – centres of excellence delivering value outcomes to the client from multiple locations across the world, and then localising the content to multiple languages.

As BPM players focus on competencies and structures for each vertical, many niche players specialising in these industry verticals or specific business processes are emerging to capture the potential in this untapped market.

In the future, more complex work will be outsourced to this sub-sector, such as Knowledge Services, and this in turn will lead to increased specialised talent hiring across professions as diverse as doctors, lawyers, engineers, and actuaries, among others.

Clients are looking to BPM organisations as extension of their own organisations D Swaminathan, Ex- MD and CEO, Infosys BPO

OVERVIEW OF THE BPM SUB-SECTOR

OVERVIEW OF THE

BPM SUB-SECTOR

Profile of the BPM Sub-sector

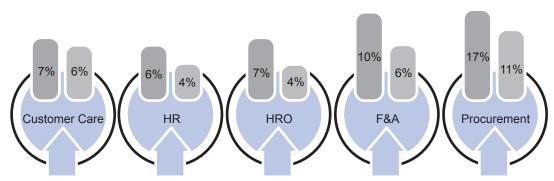
The growth of the BPM sub-sector in India is driven by accelerated and widespread customer adoption, and rapidly evolving service delivery excellence. Today, India proudly stands as the leader in global outsourcing landscape with over 500 organisations as a part of this growth opportunity. This growth is reflected in its ever widening service portfolio, greater market penetration, and development of world-class delivery capabilities across the industry.

Vertical Profile: 14 percent of BPM export revenues is now driven by vertical-specific BPM services. Banking, Financial Services and Insurance (BFSI), Telecom and Manufacturing continue to be the biggest verticals. While the traditional verticals like BFSI and Telecom continue to dominate the landscape, with BFSI and Manufacturing alone contributing to over 50 percent of total Indian BPM exports, Retail, Healthcare, Pharmaceuticals, and Utilities are also growing at a much faster rate than the industry average.

Horizontal Profile: With the maturing of the sub-sector, most of the initial services like customer interaction (14 percent), Finance and Accounting (22 percent), and Knowledge Services (18 percent) continue to be the largest segments in BPM, and together account for more than 70 percent of the market revenues. The contribution of key horizontals across the BPM sub-sector has been highlighted below. HR and supply chain management are amongst the most promising and upcoming verticals in the BPM industry.

Many traditional occupations such as customer care will be phased out as process maturity is enabling automation and IVRs

Kannan Sundaresan, CEO, Accenture BPO



Growth areas remained more profund in procurement and F&A where there has been a strong platform play

Figure 3: Global BPM Market Growth

Emerging Horizontals: As a result of verticalisation, the contribution of CRM to the BPM subsector continues to decline, and the growth rate declined from 7 percent in FY2011 to 6 percent in 2012. With the focus on higher-end services increasing, F&A and Knowledge Services continue to be on the rise. The share of Procurement as an industry offering has also risen with a growth rate of 11 percent in 2012⁴.

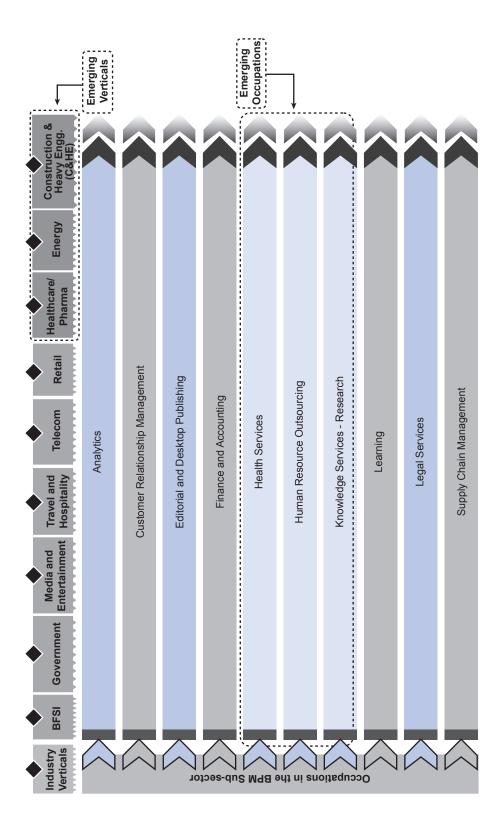
Customer Profile: US was the first country to outsource to India, but over the years, customers have been added from across UK, Continental Europe, and Asia-Pacific. US and UK together accounted for over 80 percent of BPM exports in FY2012. Given the English speaking capability of the Indian population, diversity in terms of geographies has been a key focus area for ISPs.

The year was characterised by healthy growth in Europe (including UK) and APAC. US, the biggest market for BPM exports, also continued its growth momentum, albeit at a slower pace. As the European market is becoming more amenable to offshoring, growth in this region is expected to firm up further.

⁴The IT-BPM Sector in India, Strategic Review 2013, NASSCOM

Verticals and Occupations in the BPM sub-sector





OVERVIEW OF THE BPM SUB-SECTOR

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

Key Trends in the BPM Sub-sector

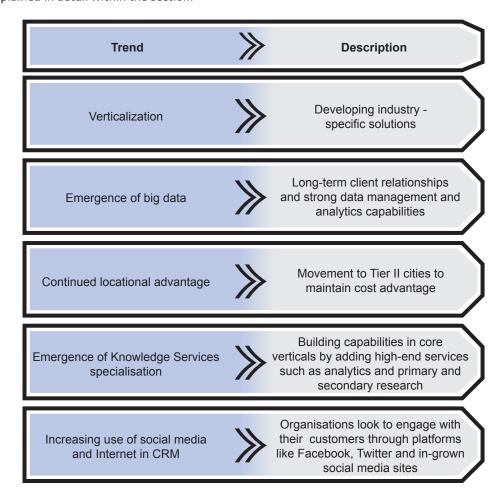


Figure 4: Trends in the BPM Sub-sector

Verticalisation: With the maturity of the BPM sub-sector, the focus of organisations has now shifted to verticalised offerings with end-to-end solutions across standardised platforms in major industries. As a result of this, there is a lot of mergers and acquisition (M&A) activity in the industry, where organisations are aiming to acquire these verticalised skills and integrate them into their own offerings. This way, they aim to offer on-demand customisable solutions to their customers.

Emergence of big data⁵: The emergence of big data is characterised by technological advancements, large number of M&A, 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. India's big data outsourcing opportunity has grown by ~110-115 percent in 2012 to USD 200-205 million. Big data/analytics presents a USD 25 billion opportunity by 2015, a CAGR of 45 percent⁶.

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. ⁷ While traditionally, 70 percent of the industry is located in Tier I cities, focus on controlling costs has created a gradual move of centres to Tier II cities as well, thus widening the talent pool and spread.

⁵BPO Strategy Summit, 2012; Delhi ⁶The IT -BPM Sector in India - Strategic Review 2013, NASSCOM ⁷A. T. Kearney Global Services Location IndexTM, 2011

Emergence of Knowledge Services specialisation: Knowledge Services is seen as the next big thing in the BPM sub-sector, based on its revenue contribution to the sub-sector. It is the fastest growing domain area, and accounts for about 18 percent share of BPM exports, which is close to USD 3.2 billion. As worldwide markets become more knowledge-intensive, India is becoming a preferred destination to outsource these core elements, based on its abundance of talent pool. Legal Services, data analytics, and risk management are some of the fastest growing Knowledge Service segments. There is also a growing recognition of Indian service providers (ISPs) being able to provide such services, and add value to the client.

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 emerging in the industry. Rules of communicating with the customers are changing, especially with the emergence of channels like e-mail, Web chats, and social media sites. Engaging customers through assisted service or Web-based conversation platforms is one of the major opportunity areas for Web-based customer engagement and retention. Social media interactions are gaining importance as many organisations look to engage with their customers through platforms like Facebook, Twitter and in-grown social media sites.

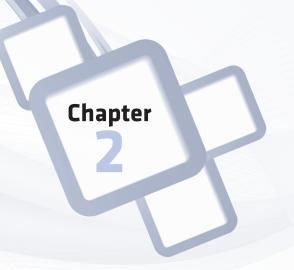
We are setting up centres not only in Tier II and III cities, but also in rural areas Ayaskant Sarangi, HR Head, Wipro BPO

Occupations like KPO and Analytics will drive future growth.
All occupations that involve analysis and presentation will remain in India
Monica Trehan, AVP, GENPACT

OVERVIEW OF THE BPM SUB-SECTOR



OVERVIEW OF THE BPM SUB-SECTOR



TALENT IN THE BPM SUB-SECTOR

- Emerging Talent Trends
- Qualifications, Knowledge and Understanding
- Skills
- Learning Opportunities

TALENT IN THE BPM SUB-SECTOR

Emerging Talent Trends

The key trends in BPM talent are:

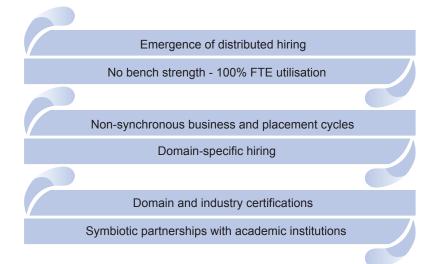


Figure 5: Emerging Talent Trends within the BPM Sub-sector

Emergence of distributed hiring: This means that hiring is happening across the spectrum as many companies have started realising that some of the work they have been doing can be moved to lowercost locations. An advantage of a strategy that leverages Tier II, Tier III cities is that these cities, though low in infrastructure, are significant contributors to the talent pool. This means that there is a lot of employable entry-level talent geographically distributed throughout the country, although it is little difficult to access in terms of socio-economic and technological infrastructure. And by virtue of that, high-end processes are being concentrated in the metro cities, while the mature processes are moving to Tier II cities. It is estimated that in the coming few years, Tier II/III cities in India will have to meet approximately 50 percent of the additional talent requirements in quality.

No bench strength – 100% FTE utilisation: Many of the industry players are now moving towards a 100% FTE utilisation, which means that they effectively have no bench. With the increasing competitiveness of the industry as well as narrowing margins, this trend is expected to continue towards building a leaner organisation. The large players hire the bulk of talent involving graduates straight out of colleges. While compensation package plays a part of it, the brand pull significantly influences the decision to join an organisation. Most of the lateral hiring happens from within the industry, although domain specialists like lawyers, doctors, actuaries, media managers, chartered accountants, and many other professionals may be hired from other industries as well.

Non-synchronous business and placement cycles: Domestic hiring is the norm in the industry, with hiring for on-site forming a smaller proportion. The supply often falls short of the annual hiring demand. This is also because of the fact that for most of the larger organisations, the business hiring cycles and college placement cycles do not coincide.

Increased talent pool: The talent pool from which the industry used to hire has increased significantly. Two factors are driving this trend:

- (i) Domain-specific hiring: A key industry requirement that has emerged is the need to provide industry specific solutions required by the clients. As organisations gear up to meet the needs of clients across a variety of domains and the importance of industry and specialisation address these concerns, it is important to have more domain experts. As a result, there is an increased spurt of hiring subject matter experts (SMEs) across domains such as lawyers, doctors, actuaries, media managers, chartered accountants, and many other professionals.
- (ii) **Process maturity:** The process maturity and trainings enabled by technology have reduced the need to have human interventions and judgment, and hence, undergraduates and high school pass-outs can also serve customers, aided by manuals and scripts. Figure 6 summarises the point.

TALENT IN THE BPM SUB-SECTOR

TALENT IN THE BPM SUB-SECTOR

Domain and industry certifications: The changing business landscape, growth of the BPM subsector, as well as industry focus on global service delivery and process excellence have put pressure on organisations to scale up their training and development initiatives. Organisations are now providing their employees with a host of industry- and domain-specific certifications across industries and functionalities in an effort to meet the global demand for specialised talent.

Symbiotic partnerships with academic institutions: Sensing the need to increase 'ready to deploy' talent, organisations are now increasingly partnering with academia to collaboratively devise a way to increase the pool in the market. Collaborations with educational and training institutes are being undertaken by organisations individually as well as through Industry bodies.

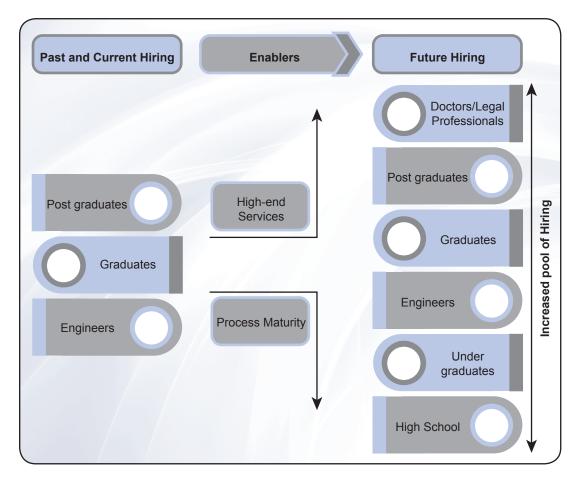


Figure 6: Talent Pool Within the BPM Sub-sector

Qualifications, Knowledge and Understanding

The forces of change sweeping through the BPM sub-sector have also changed the talent dynamics of the industry. With focus on standardisation and customer delivery excellence, organisations are now focusing on building the deep domain skills of their people to be scaled up to match the increasing demand, so that employees not only need to have the right technical competence, but also a penchant for being 'ahead of the curve'. Towards this end, organisations are now empowering their people with skills across fast growing industry verticals and specific domains.

The BPM sub-sector is no longer seen as a stop-gap arrangement. People now find this sub-sector as a serious career option where they want to stay, given the right kind of growth opportunities and rewards. Generally, BPM companies hire fresh graduates from different streams. Hence, one can work in a BPM company with a graduation degree in any stream. However, openings in the occupations like Human Resource Outsourcing, Technical Support, Knowledge Services - Research, and Finance and Accounting (F&A) would require professional qualifications such as MBA, MCA, CA, Law, BE or BTech and so on.

There are several courses offered these days for building skills required for the BPM sub-sector.

Diploma in Finance and Accounting

Diploma in BPM Management

Certificate Course on BPM Management

BPM Training Certificate Course

MBA in BPM Management

PGP (BPM Operations Management)

The industry is now hiring not only graduates and engineers but also lawyers, doctors, actuaries, media managers, chartered accountants, and professionals with different kinds of specialisations. However, at an entry level, a graduate degree in any subject is most often sufficient. Professionals like doctors, chartered accountants, and lawyers are hired for functional and domain expertise.

Apart from academic qualifications, one has to be proficient in English language (both written and oral skills), and should possess other skills like customer handling, call handling, and negotiation and persuasion skills. Often, BPM organisations also provide in-house training to their newly recruited staff to hone their soft skills, and to increase their computer proficiency.

We are facing gaps in Technical skills. People with formal educational qualifications do not possess the required knowledge and hence, we encourage certifications

Raghavendra, HR Head, Infosys BPO

TALENT IN THE BPM SUB-SECTOR

50

TALENT IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Skills

With growing process maturity and an increased foray into specialisation of service offerings, people with domain knowledge, in addition to design and engineering knowledge, will certainly see a fast growth.

All organisations have their own hiring processes; most of the organisations will test candidates for the following skills: aptitude, language, computer knowledge, and basic domain knowledge. These tests can either be written or online. These tests are followed by face-to-face interviews. The interviewer assesses the attitude, communication skills, and interpersonal skills.

Most players in the BPM sub-sector administer an aptitude test as part of their selection process. These aptitude tests comprise multiple-choice questions on analytical reasoning, numerical reasoning, basic grammar, and computer proficiency. There are also verbal tests wherein the candidate is assessed for language proficiency, rate of speech, clarity of speech, listening, and comprehension skills.

For Transactions or Knowledge Services profiles and related jobs, the selection process may be slightly different, and can cover a written functional test, panel interviews for assessing domain expertise, and an HR interview.

Thus, to work in a BPM organisation, you need to have generic and functional skills.

Key Generic Skills:

Proficiency in English or other foreign languages

Good communication skills - written and oral

Analytical skills

Problem solving

Managerial and operational skills

Basic computer skills with knowledge of MS Office and Web

Key Functional Skills: Domain-specific knowledge like banking, insurance, law, retail media, energy, and so on is required to cater to industry-specific requirements. Jobs that require value-added functions catering to specialised roles would require an MBA, an MCA, a CA or CFA, an LLB, a research degree holder, and so on.

We need people who can interact with clients as their peers.

Managers in BPM need to be as good as client team managers.

Communication skills become the challenge

Kannan Sundaresan, Lead, BPO Operations, Accenture BPO

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Learning Opportunities

Increasing sector focus is leading to many IT services organisations up-skilling their employees with domain-specific knowledge. This means that organisations are now providing employees with trainings in areas like life sciences, retail, banking, insurance, and so on to enable them to have an indepth knowledge of the vertical they are working with. They help their employees to get certified in specific domain areas, or to scale up their managerial skills through part-time management courses or diplomas.

Similarly, many organisations now have tie-ups with training institutes or external vendors to provide training to employees for specific technical or domain skills. This not only provides for up-skilling of employees to meet business needs across domains and verticals, but also helps to position the organisation as a preferred employer.

Most entry-level employees join the BPM sub-sector armed with basic college degrees. As their careers progress, they need to get domain-based certifications and specialisations. Many BPM organisations, therefore, offer their employees professional courses from globally recognised, premier educational institutions.

Courses offered can be broken down into the following three streams:

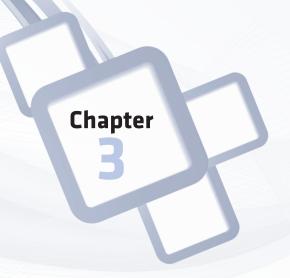
Continuing education: Executive MBA programme from reputed management colleges or foreign
language programme

- ☐ **Professional courses:** Certifications in Six Sigma or project management
- **Domain-specific courses:** C++, Java, UNIX, or CCNA certifications

One of the key objectives of the IT-ITeS SSC NASSCOM is to develop avenues for learning and skill development in the IT-BPM Industry. In pursuit of this, the SSC is planning to set up accreditation process for training providers and tailor courses on Occupational Standards that are currently being developed for the industry.

Certified training courses based on Occupational Standards will ensure standardised formal and nonformal learning opportunities that are accepted and endorsed by the industry. TALENT IN THE BPM SUB-SECTOR

TALENT IN THE BPM SUB-SECTOR



ENTRY-LEVEL JOB ROLES - BPM

- Entry-level Job Roles
- Entry-level Job Roles in the BPM Sub-sector
- BPM Sub-sector: Occupations, Tracks, Verticals and Entry-level Job Roles

Entry-level Job Roles

Across the IT-BPM industry, there are three levels of management:

Entry Level
Middle Level

Leadership Level

An entry-level job role is the first step to a career in the IT-BPM industry. It is the first level of employment in an organisation, and typically employs candidates with about 0-2 years of experience. The purpose of an entry-level job role is to give the candidate an understanding of the occupation, an opportunity to learn and enhance his experience, and to serve as a stepping stone to middle-level management.

With an increasing wave of domain and vertical specialisation across the IT-BPM industry, many people are now focusing on acquiring experience through entry-level job roles in the industry. Some of the functions of an entry-level job role are shown in Figure 7.

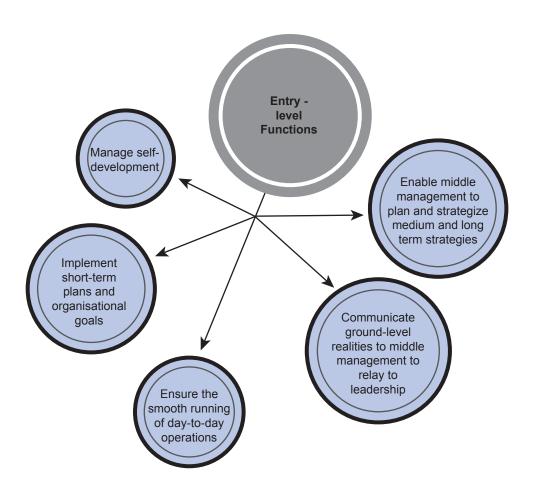


Figure 7: Functions of the Entry-level Job Roles

ENTRY-LEVEL JOB ROLES - BPM

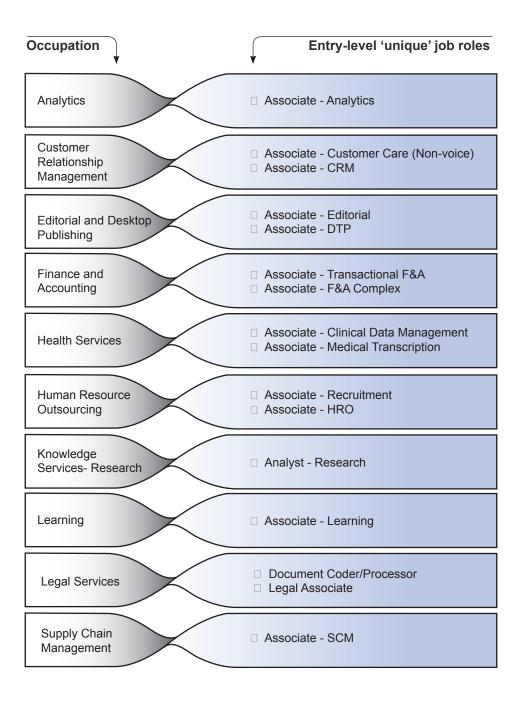


ENTRY-LEVEL JOB ROLES - BPM

Entry-level Job Roles in the BPM Sub-sector

Entry-level job roles in the BPM sub-sector exist across almost all occupations. For most of these job roles, the basic qualification remains graduates in any field – science, commerce or arts. These graduates can be seen employed in almost all job roles, including Associate - Customer Care (Nonvoice), Associate - CRM, Associate - Learning, Associate - DTP, Associate - HRO, and so on.

The following table gives a list of different entry-level job roles that exist across each occupation in the BPM sub-sector.



BPM Sub-sector - Occupations, Tracks, Verticals and Entry-level Job Roles

The IT-BPM industry in India is one of the ever expanding industries in the country, and offers myriad opportunities to fresh graduates for employment. According to NASSCOM estimates, the industry is estimated to aggregate revenues of USD 108 billion in FY2013. During this period, direct employment is expected to reach nearly three million, an addition of 188,300 employees, while indirect job creation is estimated at 9.5 million. About 95 percent of this hiring is of fresh graduates.

The BPM sub-sector offers a variety of opportunities across occupations like Finance and Accounting, Customer Relationship Management, Supply Chain Management, Human Resource Outsourcing, Editorial and Desktop Publishing, among others, to fresh graduates entering the industry. Based on their skills and choice, they can decide which option they want to explore.

In total, there are about 16 unique job roles at the entry level across different occupations, tracks, and verticals in the BPM sub-sector.

The subsequent table shows how each of these job roles is mapped to different tracks and occupations in this sub-sector

Key Definitions

Occupation is a set of job roles, which perform similar/related set of functions in an industry.

Tracks are a sub-set of occupations having similar set of functions under the larger gamut of the occupation they belong to.

Unique Job Roles defines a set of functions that together form a unique employment opportunity in an organisation.

Entry Level: 0-2 years Middle Level: 2-10 years Leadership Level: >10 years ENTRY-LEVEL JOB ROLES - BPM



ENTRY-LEVEL JOB ROLES - BPM

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

BPM Sub-sector - Occupations, Tracks and Verticals

For most entry-level job roles, there is a possibility of a vertical or horizontal movement in their tracks, and also into other occupations.

	oon & Conggg.	Γ			oice)												nent											
	Construction & rgy Heavy Engg. (C&HE)	Entry-level Job Roles	Associate - Analytics	ate - Allaiyiles	Associate - Customer Care (Non-voice)		Associate - CRM			Associate - Editorial	Associate - DTP	Associate - Transactional F&A		Associate - F&A Complex			Associate - Clinical Data Management	Associate - Medical Transcription	Associate - Recruitment	001	Associate - TIRO	Analyst - Research		Associate - Learning		Document Coder/Processor Legal Associate	, o	Associate - ocivi
•	Healthcare/ Energy Pharma	Entry-le	OSSA		Associate - Cus	Assoc				Associa	Asso	Associate -	Associate -			Associate - Clir	Associate - N	Associat	Asso		Analys		Associa		Document Lega	•	Door L	
\	Retail			/tics	voice)	ice)		lp Desk	Sustomer)		and Design	sing ions)		ng		Analysis orecasting)	ement	ion		oment	ns ns	rket Research	Research	ent	gn		tions urcing)	ent agement)
•	Telecom	Tracks	MIS - Reporting	Modelling and Analytics	Customer Care (Non-voice)	Customer Care (Voice)	Sales/Telesales	echnical Support/IT Help Desk	Collections (Business to Customer)	Editorial	Desktop Publishing (DTP) and Design	Transaction Processing (includes B2B collections)	Credit Analysis	udit and Accoun	Reporting	Financial Planning and Analysis (includes Budgeting and Forecasting)	Clinical Data Management	Medical Transcription	Recruitment	earning and Development	Employee Relations	Secondary Research and Market Research	Investment Banking (IB) Research	Content Management	Instructional Design	Legal Services	Procurement Operations (including Strategic Sourcing)	Sales and Fulfilment (including Inventory)
•	Travel and the Hospitality		1	Mod	Custor	Cust		Technica	Collections		Desktop Pu	Tran (inclu		And		Financia (includes Bi	Clinica	Me		Learni	En	Secondary Re	Investmer	Cor	lns		Proct (includir	Sa (including
•	Media and Entertainment	tions					tionship	1			bulusliana d			counting				seo		utsourcing		vices -	ا:			ses	nagement	
•	Government	Occupation	, it (lock	Allalylics		Customer Realationship Management			- in the second	Editorial and Desktop Publishing		Finance and Accounting				4 1 1 1	Health Services		Human Resource Outsourcing		Knowledge Services -			Learning	Legal Services	Supply Chain Management		
•	BFSI			7		ſ	\wedge	1	_		Edill						6	Z:		Hu	1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		7	\Diamond	S	7
																	Emerging	Occupations										

The table does not depict any hierarchy

Chapter 4

MIDDLE-LEVEL JOB ROLES - BPM

- Middle-level Job Roles
- Middle-level Job Roles in the BPM Sub-sector
- BPM Sub-sector: Occupations, Tracks, Verticals and Middle-level Job Roles

MIDDLE-LEVEL JOB ROLES - BPM

Middle-level Job Roles

Across the IT-BPM industry, there are three levels of management:

Entry Level Middle Level

Leadership Level

A middle-level job role is the first step to a management career in the IT-BPM industry. It ranges from first level supervisors to managers who manage supervisors, and sometimes even managers of managers. They are responsible for carrying out and implementing the goals set out by the top management. Often they assist and motivate the entry-level employees to achieve business objectives. Their role also includes acting as a liaison between the top level and entry level by offering suggestions and feedback to both the groups.

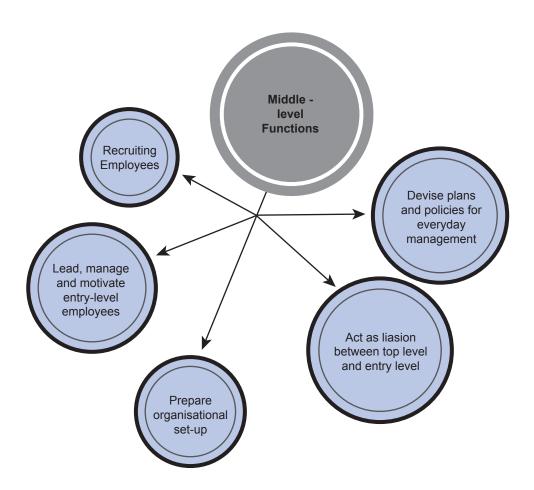


Figure 8: Functions of the Middle-level Management

MIDDLE-LEVEL JOB ROLES - BPM

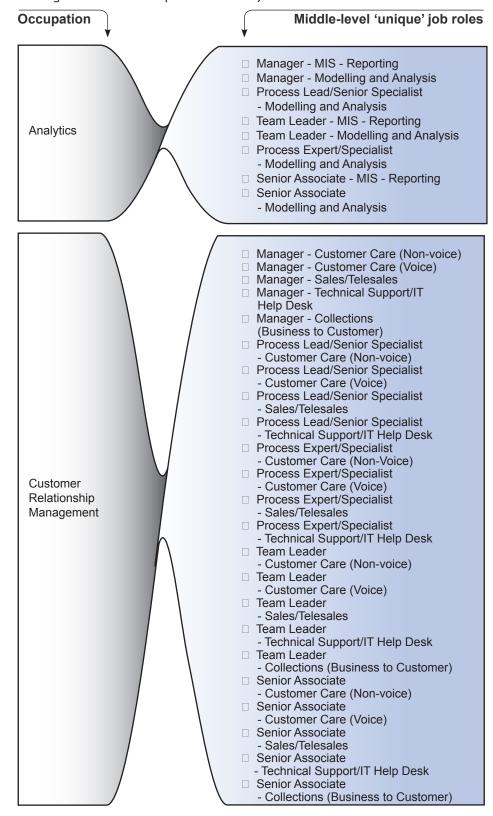


MIDDLE-LEVEL JOB ROLES - BPM

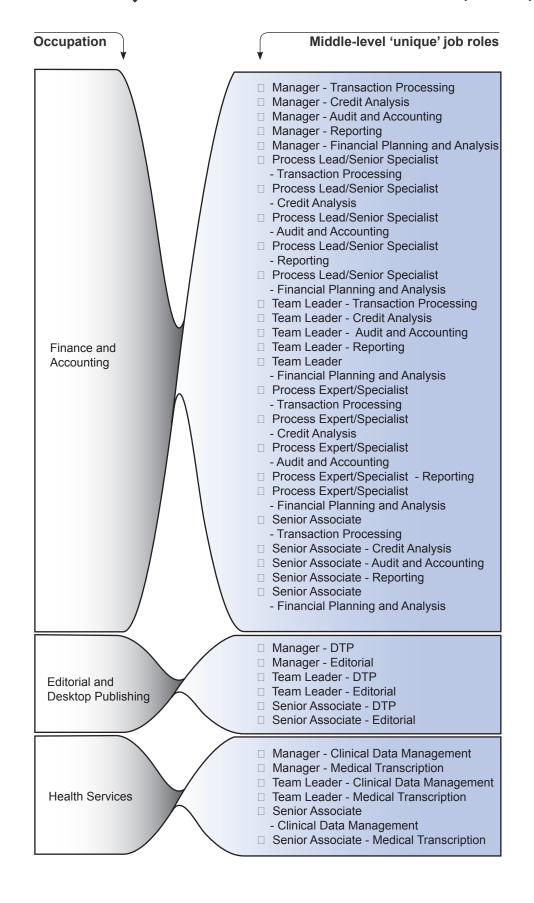
Middle-level Job Roles in the BPM Sub-sector

Middle-level job roles in the BPM sub-sector include technical and specialist roles like process experts/specialists, first-level supervisors such as team leaders, and also employees in the managerial domain with specific occupational specialisations.

The following table lists the unique middle-level job roles in the BPM sub-sector.



Middle-level Job Roles in the BPM Sub-sector (Contd)



MIDDLE-LEVEL **JOB ROLES - BPM**

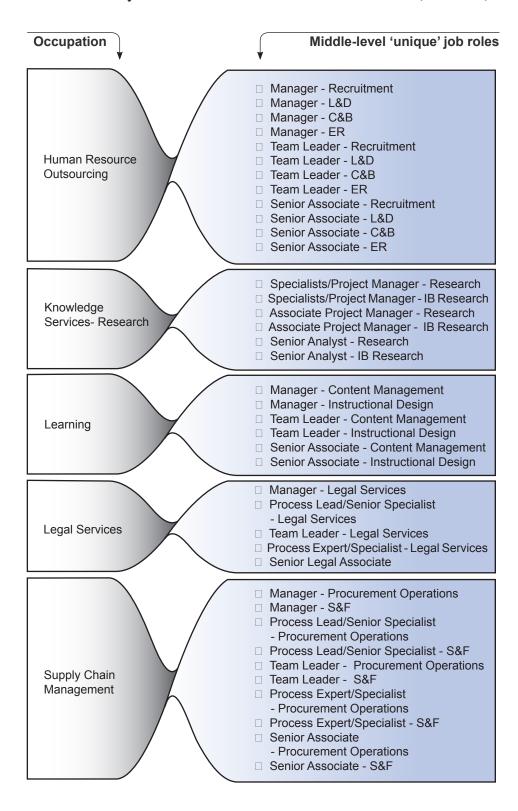
Occupational Analysis of the IT-BPM Industry: BPM

MIDDLE-LEVEL

JOB ROLES - BPM

Occupational Analysis of the IT-BPM Industry: BPM Sub-secto

Middle-level Job Roles in BPM Sub-sector (Contd)



BPM Sub-sector - Occupations, Tracks, Verticals and Middle-level Job Roles

The IT-BPM industry in India offers unparalleled employment opportunities across the entire spectrum of its service offerings. Middle-level management has the maximum number of job roles as it encompasses people with 2-10 years of work experience. In smaller organisations, there may be only one layer of middle-level management, but in larger enterprises, there may be multiple layers of middle-level management. This includes first-level supervisors, managers of supervisors, and managers of managers as well.

In total, there are about 111 unique job roles at the middle level across different occupations, tracks, and verticals in the BPM sub-sector.

The subsequent table shows how each of these job roles is mapped to different tracks and occupations in this sub-sector.

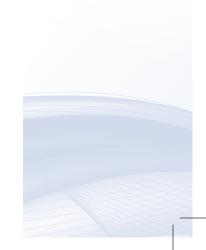
Key Definitions

Occupation is a set of job roles, which perform similar/related set of functions in an industry.

Tracks are a sub-set of occupations having similar set of functions under the larger gamut of the occupation they belong to.

Unique Job Roles defines a set of functions that together form a unique employment opportunity in an organisation.

Entry Level: 0-2 years Middle Level: 2-10 years Leadership Level: >10 years MIDDLE-LEVEL JOB ROLES - BPM

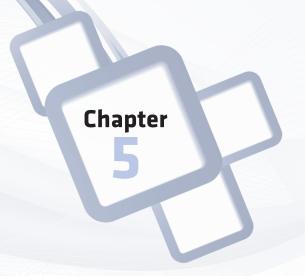


MIDDLE-LEVEL JOB ROLES - BPM

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

BPM Sub-sector - Occupations, Tracks and Verticals

cals			(e)												H								ļ				
Eng. (C&HE) Emerging Verticals	Sr Associate - MIS - Reporting	Sr Associate - Modelling and Analysis	Sr Associate - Customer Care (Non-Voice)	Sr Associate - Customer Care (Voice)	Sr Associate - Sales/Telesales	Sr Associate - Technical Support/ IT Help Desk	Sr Associate - Collections (Business to Customer)	Senior Associate - Editorial	Senior Associate - DTP	Senior Associate - Transaction Processing	Senior Associate - Credit Analysis	Senior Associate - Audit & Accounting	Senior Associate - Reporting	Senior Associate - Financial Planning and Analysis	Sr Associate - Clinical Data Management	Sr Associate - Medical Transcription	Sr Associate - Recruitment	Sr Associate - L&D	Sr Associate - C&B	Sr Associate - ER	Sr Analyst - Research	Sr Analyst - IB Research	Sr Associate - Content Management	Sr Associate - Instructional Design	Senior Legal Associate	Sr Associate - Procurement Operations	
	Team Leader - MIS - Reporting	Process Expert/Specialist- Modeling and Analysis	Process Expert/Specialist - Customer Care (Non-voice)	Process Expert/Specialist - Customer Care (Voice)	Process Expert/Specialist - Sales/Telesales	Process Expert/Specialist - Technical Support/IT Help Desk	Team Leader - Collections (Business to Customer)	Team Leader - Editorial	Team Leader - DTP	Process Expert/Specialist - Transaction Processing	Process Expert/Specialist - Credit Analysis	Process Expert/Specialist - Audit & Accounting	Process Expert/Specialist - Reporting	Process Expert/Specialist - Financial Planning and Analysis	Team Leader - Clinical Data Management	Team Leader - Medical Transcription	Team Leader - Recruitment	Team Leader - L&D	Team Leader - C&B	Team Leader - ER	Associate Project Manager - Research	Associate Project Manager - IB Research	Team Leader - Content Management	Team Leader - Instructional Design	Process Expert/Specialist - Legal Services	Process Expert/Specialist - Procurement Operations	
Middle Level Job Roles	Team Leader	Team Leader- Modeling and Analysis	Team Leader - Customer Care (Non-voice)	Team Leader - Customer Care (Voice)	Team Leader - Sales/ Telesales	Team L Supp	Team Leader - Collecti	Team Le	Team Le	Transaction Processing	Team Leader - Credit Analysis	Team Leader - Audit & Accounting	Team Leader - Reporting	Team Leader - Financial Planning and Analysis	Team Leader - Clinic	Team Leader - N	Team Lead	Team L	Team L	Team	Associate Projec	Associate Project	Team Leader - (Team Leader - Legal Services	Team Leader - Procurement Operations	
	Manager - MIS - Reporting	Process Lead/Sr Specialist - Modeling & Analysis	Process Lead/Sr Specialist - Customer Care (Non-Voice)	Process Lead/Sr Specialist- Customer Care (Voice)	Process Lead/Sr Specialist- Sales/Telesales	Manager-Technical Process Lead/Sr Specialist- Support/IT Help Desk Technical Support/IT Help Desk	Manager - Collections (Business to Customer)	Manager - Editorial	Manager - DTP	Manager - Transaction Process Lead/Sr Specialist - Processing Transaction Processing	Process Lead/Sr Specialist - Credit Analysis	Process Lead/Sr Specialist -	Process Lead/Sr Specialist - Reporting	rager - Financial Process Lead/Sr Specialist - ning & Analysis Financial Planning & Analysis	Manager - Clinical Data Management	Manager - Medical Transcription	Manager - Recruitment	Manager - L&D	Manager - C&B	Manager - ER	Specialist/Project Manager - Research	Specialist/Project Manager - IB Research	Manager - Content Management	Manager - Instructional Design	Manager - Legal Services Specialist - Legal Services	Specialist - Procurement	ı
	Manager-	Manager - Modeling and Analysis	Manager - Customer Care (Non-voice)	Manager-Customer Care (Voice)	Manager- Sales/Telesales		Manager - Collectio	Mana	Man	Manager -Transaction F	adit	∞ ~	Manager - Reporting	Mar Plar						Ma	Specialist/Proje	Specialist/Project	Manager - C	Manager - I	Manager - Legal Servi	Manager - Procurement Operation	
Tracks	MIS - Reporting	Modeling and Analysis	Customer Care (Non-voice)	Customer Care (Voice)	Sales/Telesales	Technical Support/IT Help Desk	Collections (Business to Customer)	Editorial	Desktop Publishing (DTP) and Design	(includes B2B collections)	Credit Analysis	Audit and Accounting	Reporting	Financial Planning and Analysis (includes Budgeting and Forecasting)	Clinical Data Management	Medical Transcription	Recruitment	Learning and Development	Human Resource Compensation and Benefits Outsourcing Management	Employee Relations	Secondary Research & Market Research	Investment Banking (IB) Research	Content Management	Instructional Design	Legal Services	Procurement Operations (including Strategic Sourcing) Procurement Operations	, L
Occupations		Analytics		Customer	Realationship Management			Editorial and	Publishing			Finance and	Accounting		Hooling O dalloom	ווכמוווו טפועוכפא			Human Resource Outsourcing		Knowledge Services -	Research	o consider	Lealing	Legal Services	Supply Chain	Ī
		ot do	pict ai	av bio	rarel	21/			^					Occupations		^		1	\Diamond						\Diamond		^ ^



LEADERSHIP-LEVEL JOB ROLES - BPM

- Leadership-level Job Roles
- Leadership-level Job Roles in the BPM Sub-sector
- BPM Sub-sector: Occupations, Tracks, Verticals and Leadership-level Job Roles

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

LEADERSHIP

Leadership-level Job Roles

Across the IT-BPM industry, there are three levels of management:

Entry Level
Middle Level
Leadership Level

A leadership-level job role is one of the top-level job roles in the BPM sub-sector. The top-level management generally consists of occupation leads as well as Assistant Vice-President (AVP), Vice-President (VP), and Senior Vice-President (SVP) level roles. The top-level management determines the objectives, policies, and plans of the organisation. They devise long-term strategy, organisational objectives and goals, and are also involved in mobilising resources. The top-level management has the final authority in the organisation. They are directly responsible to the major stakeholders.

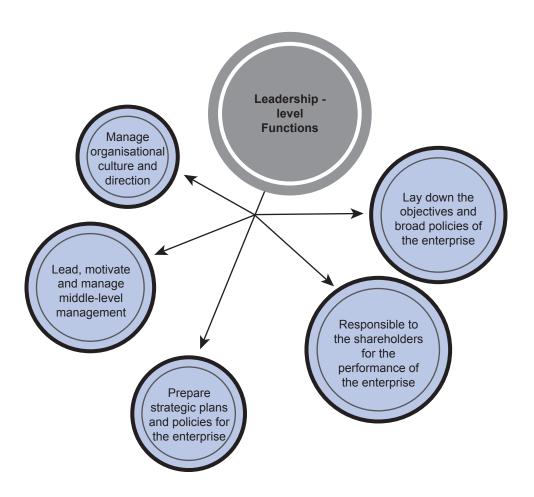


Figure 9: Functions of the Leadership-level Management

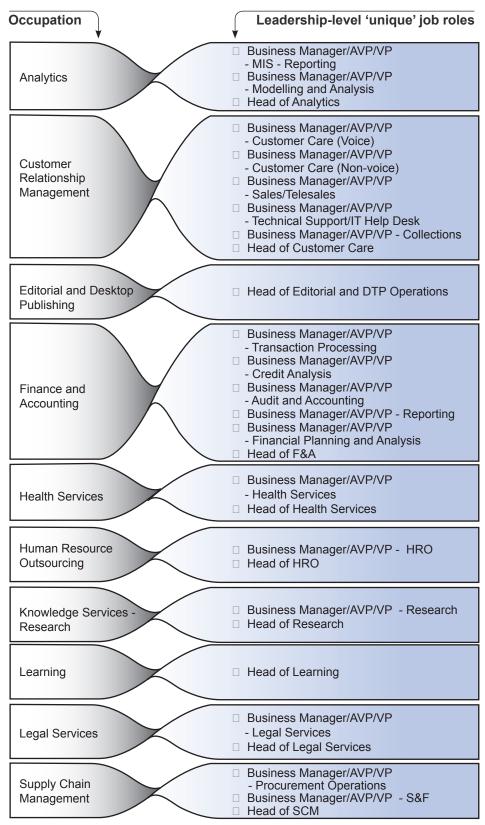
LEADERSHIP-LEVEL JOB ROLES - BPM



LEADERSHIP-LEVEL JOB ROLES - BPM

Leadership-level Job Roles in the BPM Sub-sector

Leadership-level job roles in the BPM sub-sector include head of department roles such as Head of Analytics, Head of F&A, Head of Research, and so on as well as AVP, VP and SVP level roles like AVP/VP/SVP HRO, AVP/VP/SVP collections, AVP/VP/SVP customer care, and so on. The table below lists the unique leadership-level job roles in the BPM sub-sector.



The table does not depict any hierarchy

BPM Sub-sector - Occupations, Tracks, Verticals and Leadership-level Job Roles

The IT-BPM industry in India offers unparalleled employment opportunities across the entire spectrum of its service offerings. The leadership-level job roles are the top-level roles in any organisation, and require managerial and strategic decision-making along with expertise and domain knowledge of the industry. Employees may move up the ranks in the same organisation to reach these levels, or may move from one organisation to another, sometimes even from outside the industry at these levels.

In total, there are about 30 unique job roles at the leadership level across different occupations, tracks and verticals in the BPM sub-sector.

The subsequent table shows how each of these job roles is mapped to different tracks and occupations in this sub-sector.

Key Definitions

Occupation is a set of job roles, which perform similar/related set of functions in an industry.

Tracks are a sub-set of occupations having similar set of functions under the larger gamut of the occupation they belong to.

Unique Job Roles defines a set of functions that together form a unique employment opportunity in an organisation.

Entry Level: 0-2 years Middle Level: 2-10 years Leadership Level: >10 years LEADERSHIP-LEVEL JOB ROLES - BPM

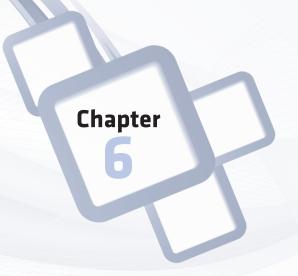


LEADERSHIP-LEVEL JOB ROLES - BPM

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

BPM Sub-sector - Occupations, Tracks and Verticals

Construction & Energing; Energy Heavy Engg. (Verticals)	Leadership-level Job Roles	Business Manager/AVP/VP - MIS - Reporting	Business Manager/AVP/VP - Modelling and Analysis	Business Manager/AVP/VP - Customer Care (Non-voice)	Business Manager/AVP/VP - Customer Care (Voice)	Business Manager/AVP/VP - Sales/Telesales	Business Manager/AVP/VP - Technical Support/ IT Help Desk	Business Manager/AVP/VP - Collections			Business Manager/AVP/VP - Transaction Processing	Business Manager/AVP/VP - Credit Analysis	Business Manager/AVP/VP/ - Audit and Accounting	Business Manager/AVP/VP - Reporting	Business Manager/AVP/VP - Financial Planning and Analysis	Business Manager/AVP/VP - Health Services		Business Manager/AVP/VP - HRO	Business Manager/AVP/VP - Research		Business Manager/AVP/VP - Legal Services	Business Manager/AVP/VP/ - Procurement Operations Susiness Manager/AVP/VP - S&F
Healthcare/ Enc	Leadership	Business M	Business Mana	3usiness Manag	Business Mana	Business N	Business Ma	Business			Business Mana	Business N	Business Man	Busines	Bu Fina	Business N		Busin	Busines		Business N	Business Mana
Retail Hee			read of Ariarytics			Head of Customer	Care		Head of Editorial	DTP Operations			Head of F&A			Head of Health Services	200	Head of HRO	Head of Research	Head of Learning	Head of Legal Services	Head of SCM
l and Telecom	Tracks	MIS - Reporting	Analytics - Modelling and Analysis	Customer Care (Non-voice)	Customer Care (Voice)	Sales/Telesales H	Technical Support/IT Help Desk	Collections (Business to Customer)	Editorial	Desktop Publishing (DTP) and Design	Transaction Processing (includes B2B collections)	Credit Analysis	Audit and Accounting	Reporting	Financial Planning and Analysis (includes Budgeting & Forecasting)	Clinical Data Management	alisciipuoli	Recruitment Learning and Development Compensation and Benefits Management Employee Relations	arket		ervices	Procurement Operations (including Strategic Sourcing) Sales and Fulfilment (including Inventory Management)
Media and Travel and tretainment Hospitality	Л	MIS - F	Analytics - Mod	Customer Ca	Customer	Sales/	Technical Supp	Collections (Busi	Edi	Desktop Publishin	Transaction (includes B2	Credit	Audit and	Rep	Financial Planr (includes Budget	Clinical Data	INICAICAI	Recruitment Learning and Develop Compensation and Be Management Employee Relations	Secondary Res Res Investment Banl	Content N Instruction	Legal Services	Procureme (including Stra Sales and Fulf Inventory M
Government Enterta	Occupation		Analytics			Customer Relationship	Management		Editorial and Desktop	Publishing		:	Finance and Accounting			Health Services		Human Resource Outsourcing	Knowledge Services - Research	Learning	Legal Services	Supply Chain Management
BFSI Go	ŏ					Custom			Editoria	ш.		i	Finance			Hes		EŌ H	Knowle) Pec	Supply Ch
The table o	doe	s not	t de	pict a	any	hier	rarch	У		7)		Emerging :	Occupations	\Diamond	\Diamond			\Diamond



- In Summary
- Occupations within the BPM Sub-sector
- Description of each Occupation
- Occupational Map for each Occupation

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

OCCUPATIONS

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

In Summary

Based on the industry research as part of the occupational analysis, the occupations in the subsector have been classified as follows:

- 10 unique 'Occupations'
- 27 unique 'Tracks'
- 16 unique Job roles at the Entry Level
- 111 unique Job roles at the Middle Level
- 30 unique Job roles at the Leadership Level

Occupation is a set of job roles, which perform similar/related set of functions in an industry.

Track is an independent unique activity under an occupation.

Unique Job Roles defines a set of functions that together form a unique employment opportunity in an organisation.

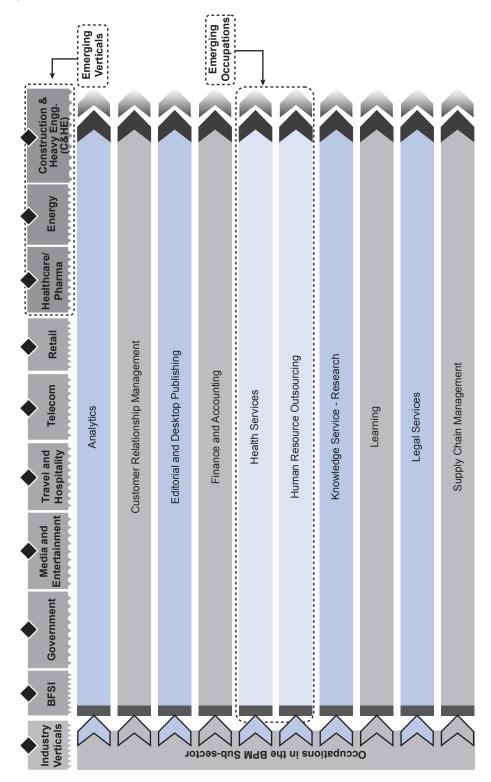
Entry Level: 0-2 years Middle Level: 2-10 years Leadership Level: >10 years



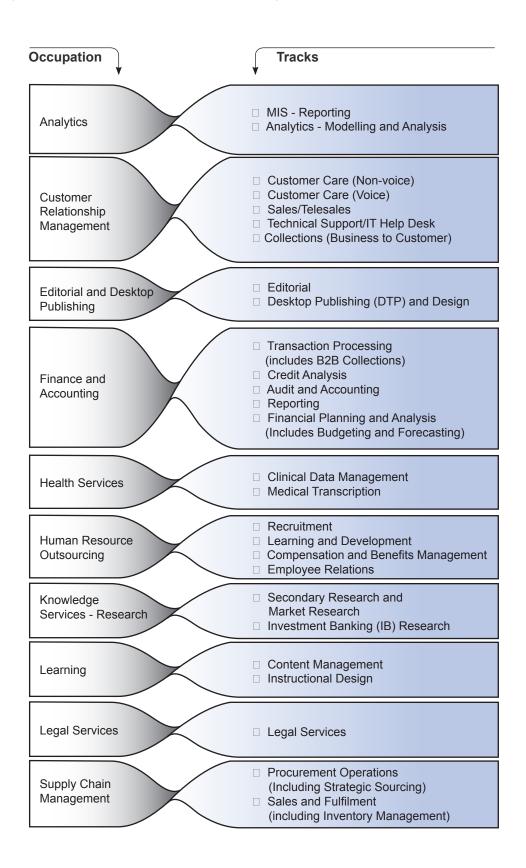
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Occupations within the BPM Sub-sector

Occupations identified have been classified further to indicate 'tracks'. These detailed tracks within each occupation have been represented in the table below. Some occupations, like Legal Services, did not require a further split, and hence they have a single track (same as the occupation name).

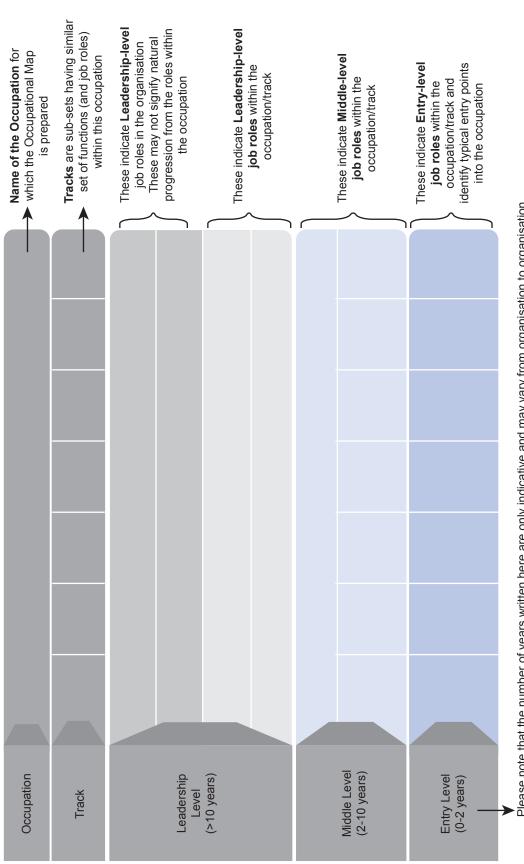


Occupations have been classified into 'Tracks' to capture further skill-based specialisations



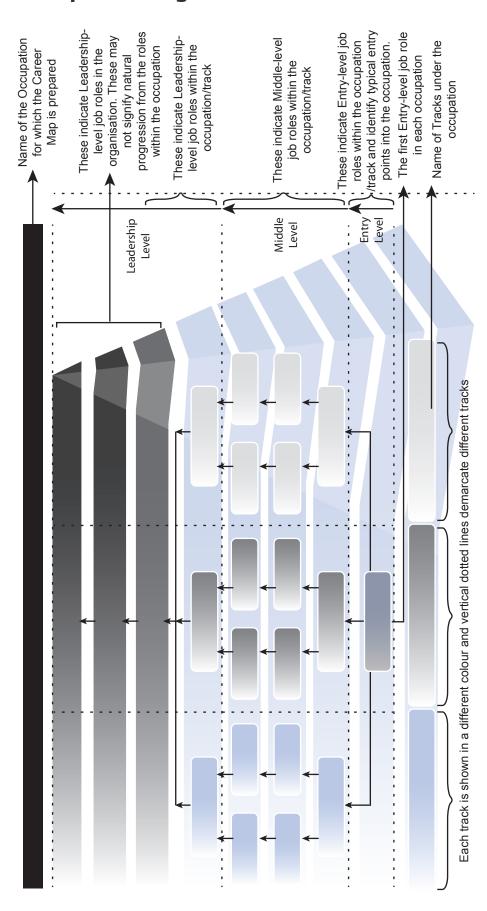
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Occupational Map - Reading Guide



Pease note that the number of years written here are only indicative and may vary from organisation to organisation

Career Map - Reading Guide



OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

80

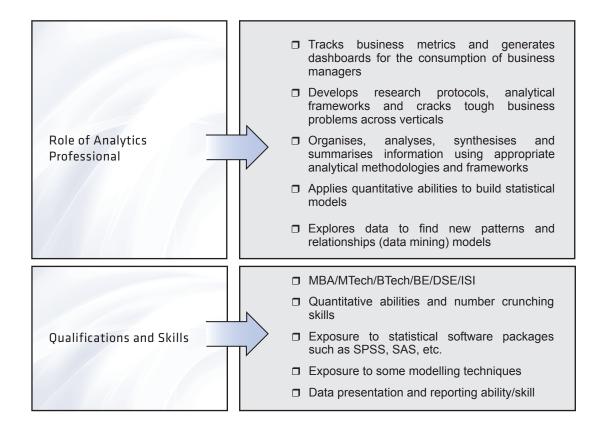
OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-secto

Analytics

Analytics includes the study of business data using statistical analysis to find trends and historical evidence to take informed decisions. The objective is to assist clients to predict and improve business performance in the future.

Associates in this domain primarily use mathematics, operational research, statistics, and probability tools for statistical analysis and data mining for extensive computations. Some fields within the area of Analytics are enterprise decision management, marketing analytics, predictive science, strategy science, credit risk analysis and fraud analytics.



Analytics - Occupational Map

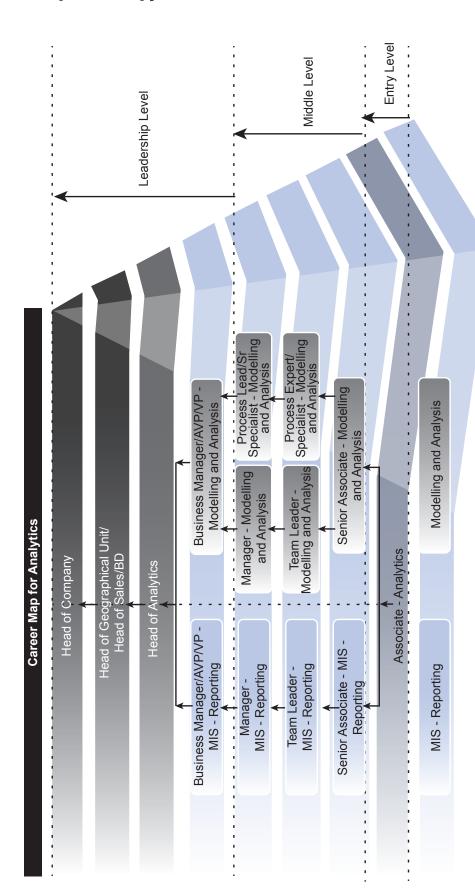
Occupation			Analytics					
Track		MIS - Reporting	Modelling and Analysis					
		Head of Company*						
Laadarahia		Head o	f Geographical Unit/H	lead of Sales/BD*				
Leadership Level (~10+ years)		Head of Analytics						
	7	Business Manager/AVP/VP - MIS - Reporting	Business Manager/AVP/VP - Modelling and Analysis					
		Manager - MIS - Reporting	Manager - Modelling and Analysis	Process Lead/Senior Specialist - Modelling and Analysis				
Middle Level (2-10 years)		Team Leader - MIS - Reporting	Team Leader - Modelling and Analysis	Process Expert/ Specialist - Modelling and Analysis				
		Sr Associate - MIS - Reporting	Sr Associate - Modelling and Analysis					
Entry Level (0-2 years)			Associate - Anal	lytics				

^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.



Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Analytics - Typical Career Paths



Customer Relationship Management (CRM)

CRM entails all aspects of interaction that a company has with its customer, whether it is sales or service-related, through any media. It is primarily the process of managing and resolving all client queries and issues. The CRM/CIS professionals form the primary level of contact with the customer. They are required to have a broad understanding of the industry and domain as well as the product and services portfolio to aid and enable quick and effective resolution of queries.

CRM/CIS includes the following tracks:

Customer Care (Non-voice): The professionals engaged in this occupation are responsible for resolving queries and customer cases over Web-chat or e-mail. Responses may be made on either pre-existing email templates or customised mails as per the query requirement. For slightly complex queries/situations, this may require greater interaction.

Customer Care (Voice): This activity involves managing and resolving client queries/issues primarily through telephonic calls. They are required to resolve the queries or direct unresolved queries to the appropriate groups. These professionals are required to have a broad understanding of all the products/services portfolio of the organisation that aids them in responding to queries. An illustrative list of this process may include, but is not confined to, the following: customer care units in companies across sectors like banking, financial institutions, insurance firms, hardware/software vendors, utilities, travel and tourism, automotive and so on.

Sales/Telesales: The associates in this function undertake selling of products/services and converting leads into clients. The process requires selling/upgrading/upselling of products/services to existing and new customers. These professionals are required to convert the calls/enquiries into sales or bring the lead to the point of sale.

IT Services and Help Desk: These professionals provide support on technology products/systems to customers remotely. They are responsible for effectively responding to customer queries, which can be simple (L1) to complex in nature, and also diagnosing, and thereby, resolving customer issues/bug fixing.

Collections (Business to Customers): These professionals contact customers who have defaulted on their payments, by telephone and/or by e-mail. They also review customer accounts, call on delinquent accounts, and keep records updated with payment status. They handle customer queries, resolve customer issues, and follow-up on payments.



84

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

□ Voice • Receives and makes telephone calls that are primarily scripted, basic and routine with the assistance of a computerised system; non-technical query resolution done over calls, web or e-mail Answers inquiries, resolves problems, records complaints and/or receives feedback □ Non-voice • Responds on either pre-existing e-mail templates or through customised e-mails. Role of a CRM Handles complex queries/situations Professional through chat or web-interface Makes major modifications in the data and adds value to the data before sending it Escalates complex queries to relevant team as per guidelines □ IT Services Help Desk Provides application support Understands specific client needs or technical requirements to resolve or escalate technical problems ☐ IT Services Help Desk - engineer/graduate in science ☐ Undergraduate/graduate/postgraduate in any subject □ Excellent communication skills (mostly English language, but many organisations could specialise in regional languages such as Hindi □ Basic computer proficiency Qualifications and Skills Empathetic nature and ability to handle irate customers ☐ Ability to navigate a computerised data entry system or other relevant applications ☐ Ability to handle clients and communicate with

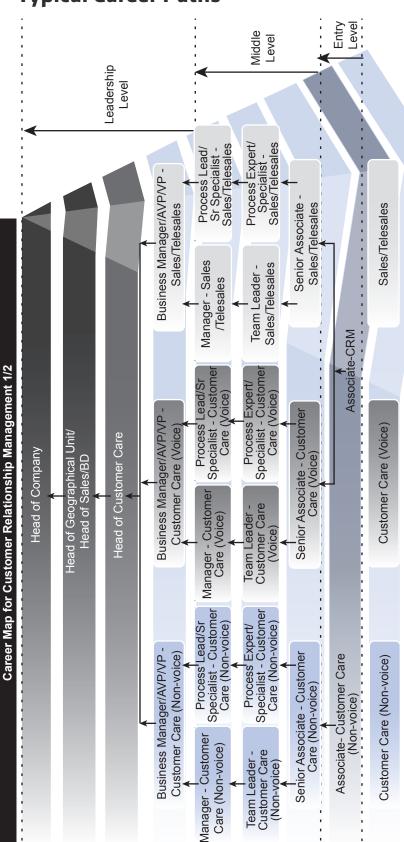
☐ Ability to communicate by chat/e-mail or other

CRM - Occupational Map

	s stomer)				Business Manager/AVP/ VP - Collections	Manager - Collections Business to Customer)	Team Leader - Collections (Business to Customer)	Sr Associate - Collections (Business to Customer)	
	Collections (Business to Customer)				Busi Manag VP - Co	Mana Colle (Busir Cust	Team L Colle (Busir Cust	_	
					Manager/ Fechnical Help Desk	Process Lead/Sr Specialist - Technical Support/IT Help Desk	Process Expert 'Specialist Technical Support/IT Help Desk	- Technica Help Desk	
nt	Technical Support/IT Help Desk		es/BD*		Business Manager/ AVP/VP - Technical Support/IT Help Desk	Manager -Technical Support/IT Help Desk	Team Leader- Technical Support/IT Help Desk	Sr Associate - Technica Support/IT Help Desk	- CRM
Customer Relationship Management		any*	Head of Geographical Unit/Head of Sales/BD*	er Care	Business Manager/AVP/VP - Sales/Telesales	Process Lead/ Sr Specialist - Sales/ Telesales	Process Expert /Specialist - Sales/ Telesales	Sr Associate - Sales/Telesales	Associate - CRM
Relationship	Sales/Telesales	Head of Company*	phical Unit/	Head of Customer Care	Bus Manager Sales/T	Manager - Sales/ Telesales	Team Leader - Sales/ Telesales	Sr Ass Sales/T	
Customer F		He	He d of Geogra		less 4VP/VP - are (Voice)	Process/ Lead Sr Specialist - Customer Care (Voice)	Process Expert /Specialist - Customer Care (Voice)	ciate - are (Voice)	
	Customer Care (Voice)		Hea		Business Manager/AVP/VP - Customer Care (Voice)	Manager - Customer Care (Voice)	Team Leader - Customer Care (Voice)	Sr Associate - Customer Care (Voice)	
					Susiness ger/AVP/VP - Care (Non-voice)	Process Lead/ Sr Specialist - Customer Care (Non-voice)	Process Expert /Specialist - Customer Care (Non - voice)	- Customer 1-voice)	stomer Care oice)
	Customer Care (Non-voice)				Business Manager/AVP/VP - Customer Care (Non-vo	Manager - Customer Care (Non-voice)	Team Leader- Customer Care (Non - voice)	Sr Associate - Customer Care (Non-voice)	Associate- Customer Care (Non-voice)
Occupation	Track		Leadership	Level	(~10+		Middle Level (2-10 years)		Entry Level (0-2 years)

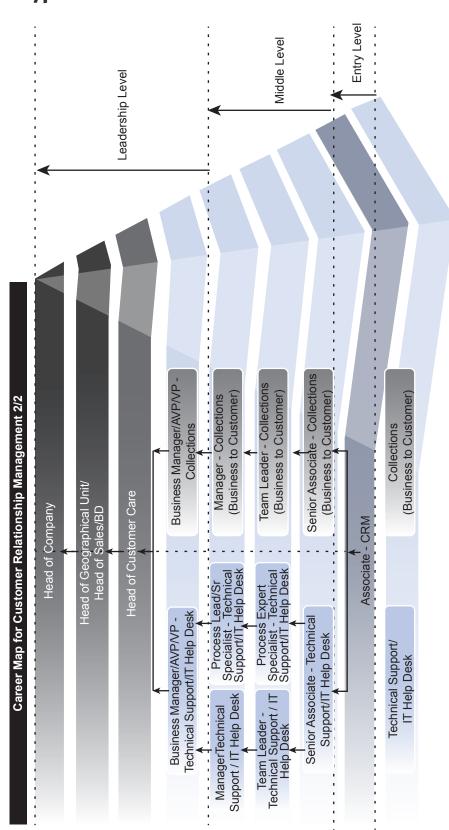
^{*}Job roles such as 'Head of Company' and Head of Geographical Unit/Head of Sales/BD ' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills, and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

CRM - Typical Career Paths



^{*}Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

CRM - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

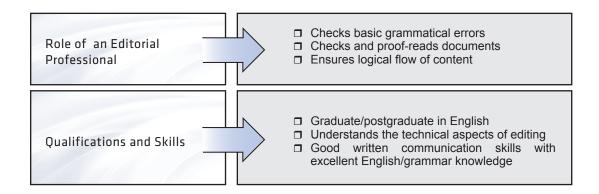
OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational AnalyOscisuop fattiroen a T-AB MP a Mylsniot uosftrtyh:e BIFIN 18 BWb hoselootetry: BPM Sub-sector

Editorial and Desktop Publishing

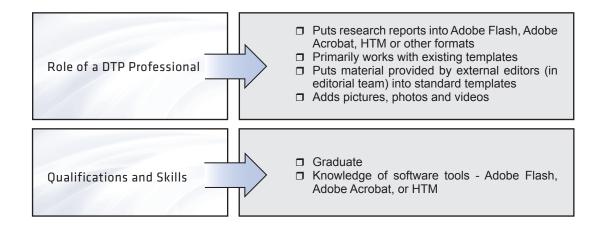
Editorial activities broadly include checking grammatical errors, and editing the research reports. They conform to the language standards, and also the language style.

Professionals in this occupation may work on content/reports created by someone else. The reports could be research reports, statistical analysis, brochures, presentation material, etc.



Desktop publishing involves putting research reports into Adobe Flash, Adobe Acrobat, or HTM formats, and prepare for publishing.

Professionals in this occupation work with existing templates, or create and design new templates and formats. Their work is to put material provided by external editors (in editorial team) into standard templates.

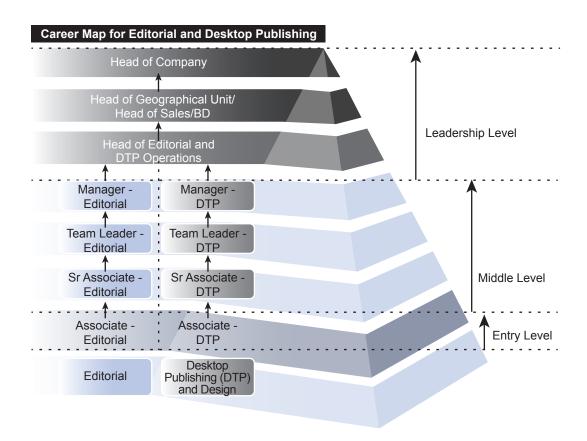


Editorial and Desktop Publishing - Occupational Map

Occupation	Editorial and Desktop Publishing					
Track	Editorial	Desktop Publishing (DTP) and Design				
		Head of Company*				
Leadership Level	Head of 0	Geographical Unit/Head of Sales/BD*				
(~10+ years)	Head	d of Editorial and DTP Operations				
	Manager - Edite	torial Manager - DTP				
Middle Level (2-10 years)	Team Leader - Ed	ditorial Team Leader - DTP				
	Sr Associate - Ec	ditorial Sr Associate - DTP				
Entry Level (0-2 years)	Associate - Edit	itorial Associate - DTP				

^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills, and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

Editorial and Desktop Publishing - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

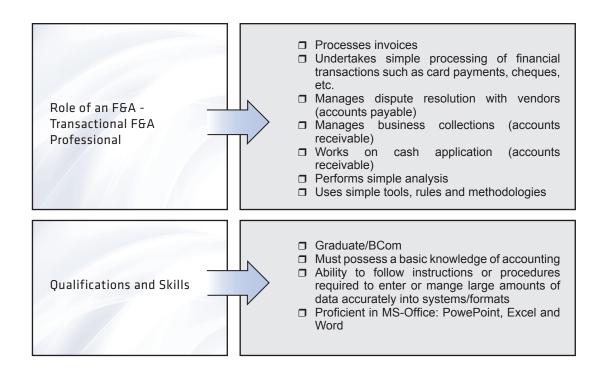
Finance and Accounting (F&A)

This process involves systematic and timely recording, reporting, and analysis of financial transactions of a business. Professionals are required to possess knowledge of book-keeping methods with the objective of recording business transactions. This process may include but is not limited to month-end accounting, foreign remittances, book-keeping, account reconciliation and financial assignment, daily general ledger control checks, general ledger balance substantiation and reconciliation, resolution of ad hoc issues and queries for the general ledger, help-desk support, and query resolution for financial systems.

FGA includes activities such as general accounting, transaction management (account receivables and payables management), corporate finance (e.g. treasury and risk management and tax management), compliance management and statutory reporting, and so on.

F&A includes the following tracks:

Transactional F&A: These activities are simple and transactional in nature. The process involves systematic and timely recording, reporting, and analysis of financial transactions of a business. Professionals should have knowledge of bookkeeping methods to record business transactions. It could involve some complex activities such as collection, analysis, summarisation, and presentation of the financial performance of a business.



92

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

F&A - Audit, Accounting, and Financial Planning: F&A accounting professionals are engaged in activities that range from month-end accounting, foreign remittances, book-keeping, account reconciliation and financial assignment, daily general ledger control checks, general ledger balance substantiation and reconciliation, ad hoc issues resolution and queries for the general ledger, and help-desk support to query resolution for financial systems.

F&A audit professionals need to address financial risks throughout the company and evaluate, monitor and improve the effectiveness of controls and governance processes in support of corporate objectives. A professional in internal audit performs financial and operational reviews across the company. A professional in financial audits does yearly audit planning, risk assessment for all/defined business unit's team covering financial process reviews, business process reviews, and anti-fraud programme.

F&A reporting professionals are required to provide analysis around the profitability of a business, and the short- and long-term financial condition. This also includes preparation and consolidation of financial reporting, month-end reporting, regulatory reporting as per country-specific GAAP/ management information reporting and analysis, inter-entity reconciliation, and ad hoc issues resolution and queries.

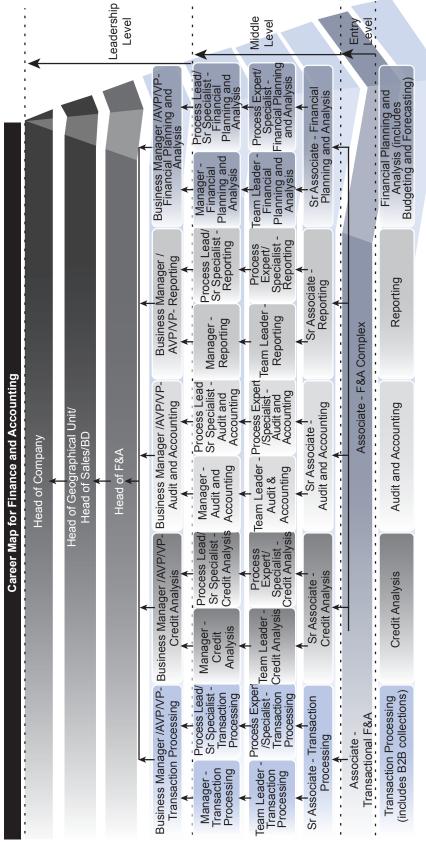
Financial planning and analysis professionals are responsible for undertaking routine financial planning and budgeting, and providing periodic analysis reports. These reports could range from sales/margin reports, sensitivity analysis, income statement to profit statement. They could also look at different metrics and measurements, KPI analysis, expense reporting, utilisation reporting and so on.

F&A - Occupational Map

Occupation					F&A - Occupational Map	ational Map				
Track	Transaction Processing (Includes B2E Collections)	tion sing B2B ons)	Credit Analysis		Audit and Accounting	ounting	Reporting		Financial Planning and Analysis (Includes Budgeting and Forecasting)	nning and sis geting and ting)
					Head of Company*	ompany*				
cidaro Con				Head of Ge	Head of Geographical Unit/Head of Sales/BD*	nit/Head of §	Sales/BD*			
Level					Head of F&A	F&A				
(~10+ years)	Bus Managei Transaction	Business Manager/AVP/VP - Transaction Processing	Bus Manage - Credit	Business Manager/AVP/VP - Credit Analysis	Busi Manager/ Audit and A	Business Manager/AVP/VP - Audit and Accounting	Business AVP/VP -	Business Manager/ AVP/VP - Reporting	Business Manager/AVP/ VP - Financial Planning and Analysis	ess Manager/AVP/ Financial Planning and Analysis
	Manager - Transaction Processing	Process Lead/ Manager Sr Specialist - Credit - Transaction Analysis Processing	Manager - Credit Analysis	Process Lead/Sr Specialist - Credit Analysis	Manager Audit and Accounting	Process Lead/Sr Specialist - Audit and Accounting	Manager - Reporting	Process Lead/Sr Specialist - Reporting	Manager - Financial Planning and Analysis	Process Lead/Sr Specialist - Financial Planning and Analysis
Middle Level (2-10 years)	Team Leader- Transaction Processing	Process Expert /Specialist - Transaction Processing	Team Leader - Credit Analysis	Process Expert /Specialist Credit Analysis	Team Leader - Audit and '	Process Expert /Specialist - Audit and Accounting	Team Leader - Reporting	Process Expert/ Specialist - Reporting	Team Leader - Financial Planning and Analysis	Process Expert/ Specialist - Financial Planning and Analysis
	Sr Ass Transaction	Sr Associate - Transaction Processing	Sr Ass Credit	Sr Associate - Credit Analysis	Sr Asson	Sr Associate - Audit and Accounting	Sr Associate Reporting	Associate - Reporting	Sr Associate - Financial Planning and Analysis	e - Financial nd Analysis
Entry Level (0-2 years)	Asso Transac	Associate - Transactional F&A			4	Associate - F&A Complex	F&A Comp	lex		

^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

F&A - Typical Career Paths



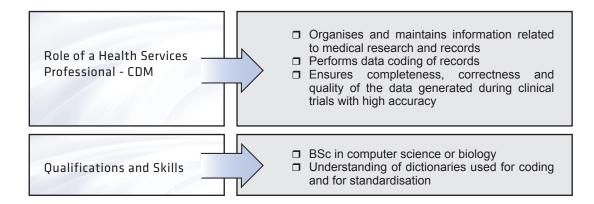
^{*}Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

Health Services

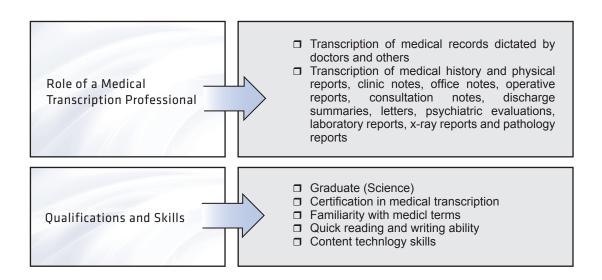
Health Services support processes, and capture and process data from research houses, laboratories and hospitals.

Health Services are of two types - Clinical Data Management (CDM) and Medical Transcription.

CDM involves organisation and maintenance of information relating to medical research and records. Professionals are required to ensure completeness, correctness and quality of the data generated during clinical trials with high accuracy.



Medical Transcription involves documentation of medical records dictated and authored by medical professionals. This involves basic documentation, verification and validation of the documents. It could include transcription of medical records dictated by doctors and others, including history and physical reports, clinic notes, office notes, operative reports, consultation notes, discharge summaries, letters, psychiatric evaluations, laboratory reports, x-ray reports, and pathology reports.



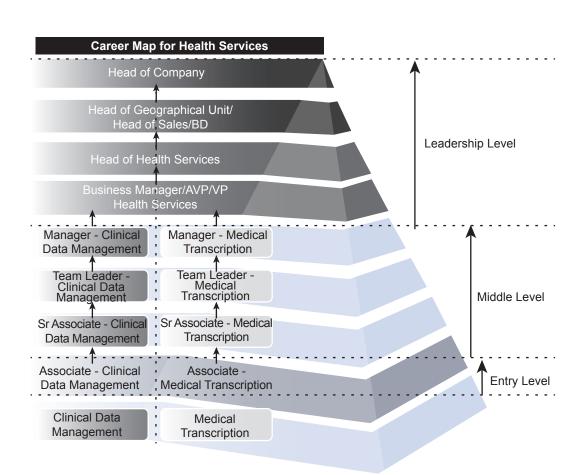
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Health Services - Occupational Map

Occupation	Health Services
Track	Clinical Data Management Medical Transcription
	Head of Company*
Leadership Level	Head of Geographical Unit/Head of Sales/BD*
(~10+ years)	Head of Health Services
	Business Manager/AVP/VP Health Services
	Manager - Clinical Data Management Manager - Medical Transcription
Middle Level (2-10 years)	Team Leader - Team Leader - Clinical Data Management Medical Transcription
	Sr Associate - Sr Associate - Clinical Data Management Medical Transcription
Entry Level (0-2 years)	Associate - Associate - Clinical Data Management Medical Transcription

^{*}Job roles such as 'Head of company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

Health Services - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.



Human Resource Outsourcing

HRO involves support provided to a spectrum of HR functions, which are largely transactional in nature. The professionals in these jobs provide advice and assistance in the area of human resource and personnel policies, practices, and procedures; employee benefits planning, communication and administration; compensation systems planning; and wage and salary administration.

An illustrative list of this process may include, but is not confined to, the following: resume repository management, employee database/ human resource database management, developing training plans and training calendar, training course, communication employee contract management, payroll management, conducting background and reference checks, immigration support and performance management administration.

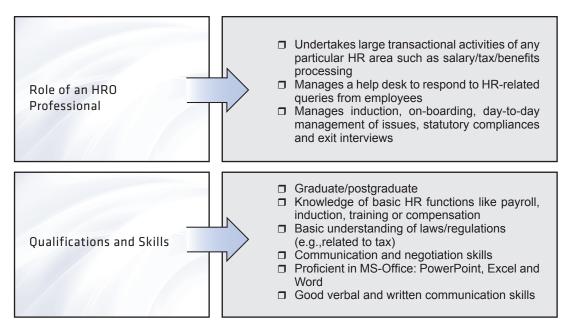
Human resources shared services outsourcing has the following tracks:

HRO - Recruitment: These professionals support the staffing needs of the organisation. These professionals are required to attract and employ the most appropriate candidates from the available prospective employee pool. Some of the activities in this process include resume mining, background checks and reference checks.

HRO - Learning and Development: These professionals assist in the design, development and delivery of training programmes. They understand the training needs of the organisation through training needs analyses, review existing training methods and techniques and its application, establish training goals as required and evaluate third party training programmes.

HRO - Compensation and Benefits: Management professionals in this group support the client teams in managing the rewards practices of the organisation with the overall HR and organisational philosophy. They may be involved in running a help desk to respond to rewards related queries from employees, but such requests are usually directed through HR business partners. A significant work is salary/tax/benefits processing.

HRO - Employee Relations: These professionals are involved in induction, on-boarding, handling and resolution of day-to-day issues, statutory compliances, exit interviews, and so on. They assist in administration of contracts, and other contractual agreements. They are also responsible for preparing materials for consultants and managers, updating records and maintaining proper filing systems and completing transactional-level statutory compliances.





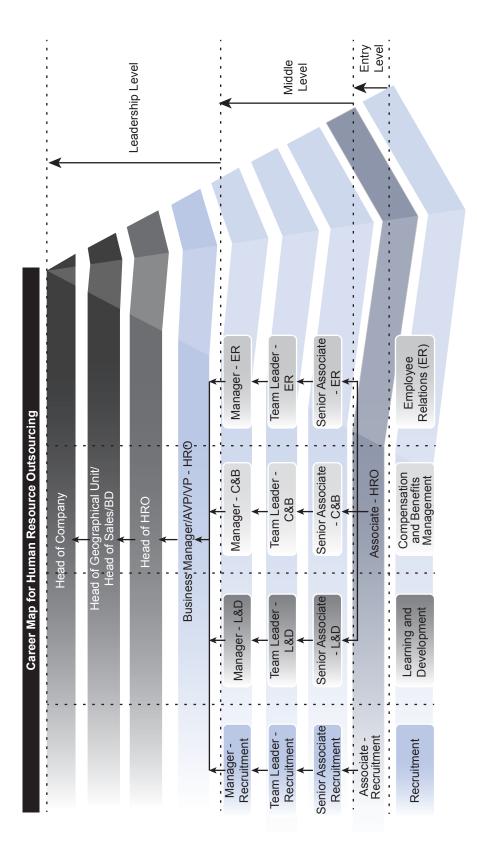
Human Resource Outsourcing - Occupational Map

Occupation		Human Reso	Human Resource Outsourcing					
Track	Recruitment	Learning and Development						
		Head o	of Co	ompany*				
Leadership Level	H€	ead of Geographic	al U	nit/Head of Sales/I	BD*			
(~10+ years)	Head of HRO							
		Business Mana	Business Manager/AVP/VP - HRO					
	Manager- Recruitment	Manager- L&D		Manager- C&B	Manager- ER			
Middle Level (2-10 years)	Team Leader - Recruitment	Team Leader L&D	٠_	Team Leader - C&B	Team Leader - ER			
	Senior Associate Recruitment	- Senior Associa L&D	Senior Associate - Senior Associate C&B		- Senior Associate - ER			
Entry Level (0-2 years)	Associate - Recruitment		Associate - HRO					

^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Human Resource Outsourcing - Typical Career Paths



^{*}Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

Knowledge Services - Research

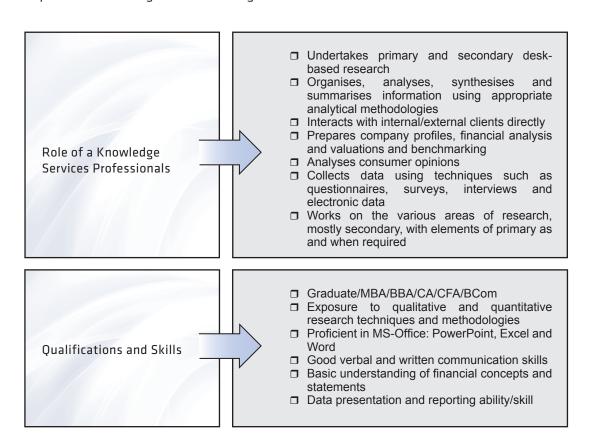
Professionals in this group undertake activities catering to specialised research across sectors. They are generally involved in researching, analysing and reporting information related to organisations / institutions, industry sectors or economic conditions. There exists an element of domain expertise for some of these roles.

This occupation may involve analysing consumer opinions, and collecting data using techniques such as questionnaires and electronic data to enable organisations to make informed decisions. This occupation has the following tracks:

Secondary Research and Market Research: This group of professionals undertakes activities that cater to specialised research across sectors. Professionals in this group generally research, analyse, and report information related to organisations/institutions, industry sectors and economic conditions. Professionals from these teams may move from these support roles to the front end as soon as they develop and display the requisite abilities. There is some emphasis on domain expertise in organisations that contain these roles.

The market research function could involve a lot of primary research activities. The professional group in this occupation collects and analyses information on behalf of organisations such as businesses, governments and charities. Market researchers analyse consumer opinions, and collect data using techniques such as questionnaires and electronic data to enable organisations to make informed decisions. Incumbents often specialise in one sector. They may also work with clients, advising how to use the information provided. Qualitative market research focuses on people's attitudes and motivation, using methods such as focus groups and in-depth interviews.

Investment Banking Research: Investment banking operations is a dynamic business that supports mergers and acquisitions transactions from first-level extensive market and industry research, and will culminate with financial analysis, including discounted cash flows analysis and valuation metrics. These roles are complex as they require the professionals executing them to have the requisite knowledge, and operate within a large set of rules. The completion of the transaction requires medium to high decision-making abilities.



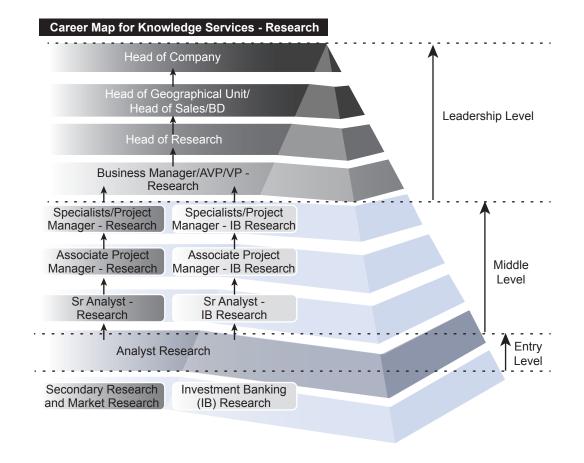
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Knowledge Services - Research - Occupational Map

Occupation		Knowledge Services - Research					
Track		Secondary Research and Market Research	Investment Banking (IB) Research				
		Head of C	Head of Company*				
Leadership Level		Head of Geographical	Unit/Head of Sales/BD*				
(~10+ years)		Head of Research					
		Business Manager/AVP/VP - Research					
		Specialists/Project Manager - Research	Specialists/Project Manager - IB Research				
Middle Level (2-10 years		Associate Project Manager - Research	Associate Project Manager - IB Research				
		Senior Analyst - Research	Senior Analyst - IB Research				
Entry Level (0-2 years)		Analyst - Research					

^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

Knowledge Services - Research - Typical Career Paths



^{*}Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

104

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

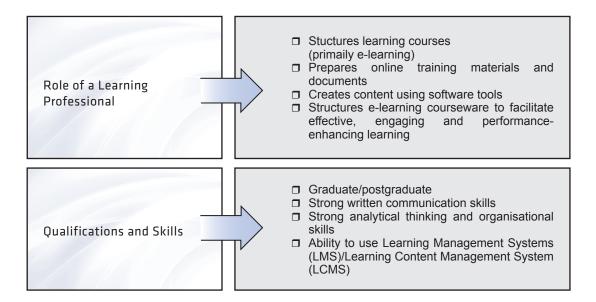
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Learning

This process will basically include content management and industrial design.

Content management activities include researching, conceptualising, writing and structuring e-learning course to facilitate effective, engaging and performance-enhancing learning.

Instructional design activities include writing/repurposing content for online training courses. Activities include structuring of e-learning course to facilitate effective, engaging, and performance-enhancing learning.



Learning - Occupational Map

Occupation	Learning					
Track	Content Management	Instructional Design				
Leadership	Head of C	Company*				
Level	Head of Geographical	Unit/Head of Sales/BD*				
(~10+ years)	Head of Learning					
	Manager - Content Management	Manager - Instructional Design				
Middle Level (2-10 years)	Team Leader - Content Management	Team Leader - Instructional Design				
	Senior Associate - Content Management	Senior Associate - Instructional Design				
Entry Level (0-2 years)	Associate - Learning					

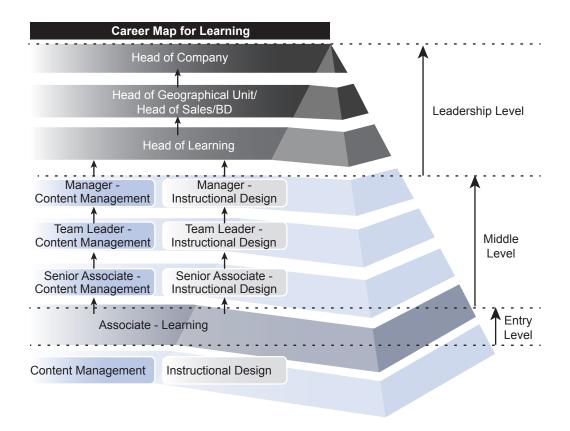
^{*}Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

106

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

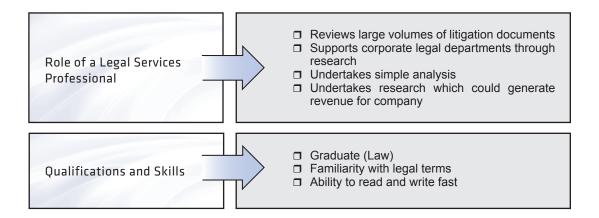
Learning - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

Legal Services

There are many legal processes where personal presence or contact is not required, and such work can be undertaken in back-end. Such activities are undertaken in Legal Services, which could include delivery of legal services, review of large volumes of litigation documents for international law firms and corporate legal departments. The most commonly offered services have been agency work, document review, legal research, and writing and drafting of pleadings and briefs and patent services.





108

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

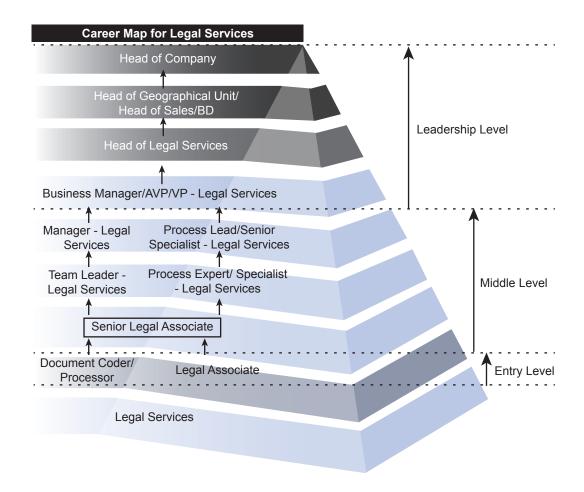
Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Legal Services - Occupational Map

Occupation	Legal Services						
Track		Legal Services					
Leadership Level (~ 10+ years)		Head of Company*					
		Head of Geographical Unit/Head of Sales/BD*					
		Head of Legal Services					
		Business Manager/AVP/VP - Legal Services					
Middle Level (2-10 years)		Manager - Legal Services	Process Lead/Senior Specialist - Legal Services				
		Team Leader - Legal Services	Process Expert/Specialist - Legal Services				
		Senior Legal Associate					
Entry Level (0-2 years)		Document Coder/Processor	Legal Associate				

*Job roles such as 'Head of Company' and 'Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

Legal Services - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

110

OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

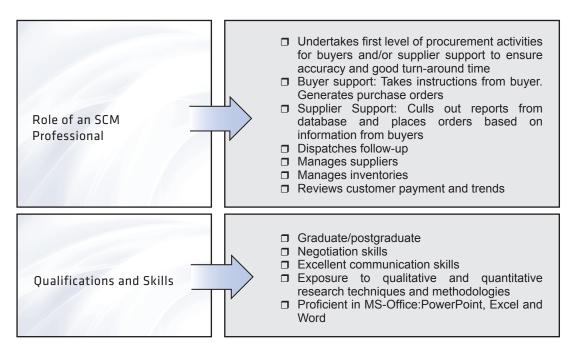
Supply Chain Management

Supply chain management helps clients to optimise their supply chain, generate competitive advantage and set the stage for growth on the path to high performance. BPM organisations are involved in activities, which range from generating orders, taking orders, collecting unpaid bills, reviewing customer/vendor payment and trends, performing dispatch follow-up, managing suppliers and managing inventories to providing procurement/sourcing support.

This process includes the following tracks:

Procurement Operations (Including Strategic Sourcing): This process involves sourcing and logistics activities. It may also involve managing the supply chain for a product. Procurement of both direct as well as indirect products is included. The professionals are required to evaluate the possibilities of cost reduction by price negotiation, and being able to procure a commodity at the best price, best volume, right time and right quality for the client. At the higher end of the value chain, it also involves procurement analytics of a client's spend on the commodity.

Sales and Fulfilment (Including Inventory Management): These activities help revenue enhancement through sales support processes such as on-time supplier deliveries, and expediting or delaying supplier deliveries to align with increases or decreases in product demand. They also improve client profitability by better cost containment in the supply chain through fulfilment operations. This covers pre-sales, sales, and after-sales functions. The fulfilment function involves SCM co-ordination, inventory management, replenishment planning and vendor management.



Supply Chain Management - Occupational Map

Occupation	Supply Chain Management							
Track		Procuremen (including Strat		Sales and Fulfilment (including Inventory Management)				
Leadership Level (~ 10+ years)		Head of Company*						
		Head of Geographical Unit/Head of Sales/BD*						
		Head of SCM						
		Business Man Procuremen	ager/AVP/VP - t Operations	Business Manager/AVP/VP - S&F				
Middle Level (2-10 years)		Manager - Procurement Operations	Process Lead/Senior Specialist - Procurement Operations	Manager - S&F	Process Lead/Senior Specialist - S&F			
		Team Leader- Procurement Operations	Process Expert/ Specialist - Procurement Operations	Team Leader - S&F	Process Expert/ Specialist - S&F			
		Senior Associate Opera		Senior Associate - S&F				
Entry Level (0-2 years)		Associate - SCM						

^{*}Job roles such as 'Head of Company' and Head of Geographical Unit/Head of Sales/Business Development' do not fall under this occupation, but can be a career progression for a person, provided he acquires business knowledge, skills and attributes required for that role through exposure to different occupations. The map does not depict any hierarchy.

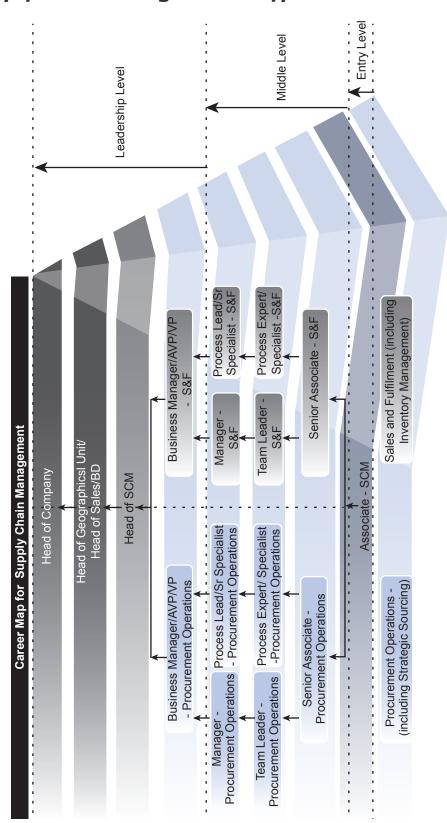
OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR



OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Supply Chain Management - Typical Career Paths



*Note: Career growth across the Leadership Levels is usually governed by cross-functional exposure to other occupations. While a possible movement has been indicated in the map, this is usually highly 'person specific' and should not be generalised. The map does not depict any hierarchy.

Movement to Other Occupations, Sub-sectors and Industries

Given the dynamic range of services that the BPM sub-sector is increasingly offering to its clients in the industry, there are a variety of roles that employees are performing across the entire spectrum of offerings. As such, they become a valuable asset not only to the BPM sub-sector, but also to all the client industries they are associated with.

For example, someone working in SCM occupation in BPM sub-sector would be a valuable asset to manufacturing companies in their procurement operations.

Similarly, an associate working in F&A occupation in BFSI vertical could move to a bank.

Also, most people starting their careers in one occupation look to move to another occupation in BPM sub-sector. For example, associates in customer care can move to technical support with training.

The horizontal career movements from one occupation to another occupation within the sub-sector, to another sub-sector, or to another industry occurs typically at middle or leadership levels after a professional has acquired expertise in one particular occupation, or more than one related occupations at entry level.

People develop deep industry expertise after 8-10 years, which makes them valuable assets to the industry verticals they are working on Ashish Garg, Director and Head of India Recruitment, Convergys

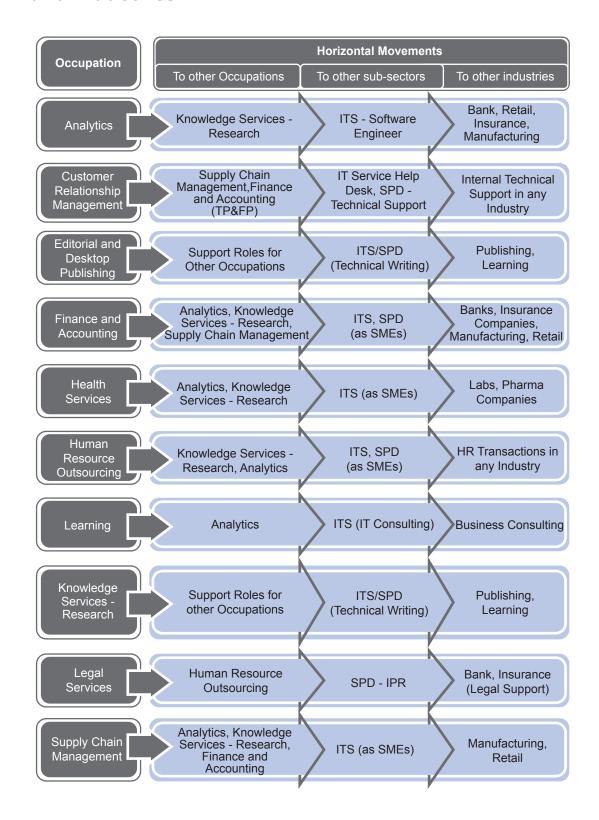
OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR



OCCUPATIONS AND ROLES IN THE BPM SUB-SECTOR

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Movement to other Occupations, Sub-sectors and Industries



ANNEXURE

- Annexure A: Glossary of Terms and Abbreviations
- Annexure B : Case Studies of Career Paths

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

ANNEXURE

Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Annexure A: Glossary of Terms and Abbreviations

ANNEXURE

Keywords / Terms Description

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 Labor and Employment

NVEQF National Vocational Education Qualifications Framework

NVQF National Vocational Qualifications Framework
BFSI Banking Financial Services and Insurance

ITS IT Services

NASSCOM National Association of Software Services Companies

SSC Sector Skills Council

BPM Business Process Management

ER&D Engineering and Research and Development

SPD Software Products

CRM Customer Relationship Management IMS Infrastructure Management Services RIM Remote Infrastructure Management

SCM Supply Chain Management
HRO Human Resource Outsourcing

IP Intellectual Property
QA Quality Assurance
F&A Finance and Accounts

PLM Products Lifecycle Management

B.A. Bachelors in Arts
B. Com. Bachelors in Commerce
B. Tech. Bachelors in Technology
L.L.B Bachelors in Law
M. Tech. Masters in Technology
L. L.M Masters in Law
UI User Interface

CEO Chief Executive Officer

VP Vice President

AVP Associate Vice President
SVP Senior Vice President
GM General Manager
TL Team Leader

ANNEXURE

SAURABH GUPTA

Sr. Business Analyst Computer Sciences Corporation (CSC)

Entry to IT-BPM Industry

How did you start your professional journey? Which organisation, and at which designation?

I started my professional journey way back in July 2000 with Innodata India Pvt. Ltd. (Now known as Innodata Isogen Pvt. Ltd.). At that time, I was pursuing my B.Com (pass) course from Delhi University along with "O-Level" from DOEACC, and to support my studies I started working. Innodata is a leading provider of e-book services to the world's most significant media, publishing, and information services companies, and my role here was to ensure the quality of final material (both text & images) that will be sent to client for verification before it can be published for online libraries.

Certifications/Trainings Undertaken

Did you add to your knowledge base by undertaking any certifications?

□ Cleared LOMA ALMI level (280, 290, 301, 311 & 307)

Career Movement and Growth

How have you moved through your chosen career over the years?

In September 2004, I joined iEnergizer dealing with Massively Multiplayer Online Role Playing Game (MMORPG) Aug 2005. One of my friends referred me for a job in Computer Sciences Corporation (BPO division). Joining such a big brand and working in a true professional environment gave so much to learn and explore. The success story continues with CSC as I became Team leader in 2 years and 11 months' time (fastest grade promotion by any individual). Under guidance from my managers, I utilized my domain expertise in training new hires, and then later on conducting LOMA sessions, which resulted in an increased rate of pass percentage for the BPO division.

After working as TL for 2 years and 5 months, I was again provided opportunity to utilize my knowledge in insurance domain by working as a Business Analyst with CSC IT team, where I am currently working since December 2010.

Learning for people looking forward to enter the IT-BPM Industry

What were the key things that you learnt along the way?

Degrees can only help you at entry level; however, it's the knowledge that works. One should never be satisfied with what has already been achieved, and always start looking for more. As soon as the target is complete, one should lay down road map for the next target and start working.



ANNEXURE

RAJEEV KUMAR

Leader Computer Sciences Corporation (CSC)

Entry to IT-BPM Industry

How did you start your professional journey? Which organisation, and at which designation? I started as a direct sales associate with Spice Telecom, and worked there for 2.5 years. I joined Convergys India Services Pvt. Ltd. in December 2005 as a Customer Care Officer. This was a voice based profile for Citibank credit cards (United States).

Certifications/Trainings Undertaken

Did you add to your knowledge base by undertaking any certifications?

- □ INS 21: Property and Liability Insurance Principles
- □ INS 22: Personal Insurance
- INS 23: Commercial Insurance
- Certified Software Quality Analyst (CSQA)
- Post Graduate Diploma in Management from IIM Lucknow, while at work with CSC

Career Movement and Growth

How have you moved through your chosen career over the years?

In December 2006, I was promoted as a Sr. Customer Care officer, and I got exposure to act as a subject matter expert and coach. October 2008- got promoted as a Team Leader Intern. February 2009 - promoted as a Process Trainer in Citibank Convergys through an internal job posting. I had to go through a rigorous 3 months Professional Facilitation Skills Certification before I started training new hire employees for Citibank project.

February 2010 - I joined Intelenet Global Services Pvt. Ltd. (A Serco Company) as a Team Leader in a pilot group for Apria Healthcare project (United States).

October 2011 - Got a career opportunity to work with Computer Sciences Corporation as a Team Leader for a Life Insurance project in BPO Services.

Learning for people looking forward to enter the IT-BPM Industry

What were the key things that you learnt along the way?

I have gained in-depth knowledge of Insurance/Healthcare/Banking/Telecom sectors and it gives me immense confidence when I apply my knowledge and learning in day to day operations. I have extensive knowledge about sales, compliance, people management, and leadership skills, and I have been able to maintain excellent employee satisfaction indexes throughout my career.



Occupational Analysis of the IT-BPM Industry: BPM Sub-sector

Annexure B: Case Studies of Career Paths

ANNEXURE

PRIYABALA

Assistant Manager Citibank N.A

Entry to IT-BPM Industry

How did you start your professional journey? Which organisation, and at which designation? In 2003, I joined a project with Hindustan Times Ltd. as an associate summer trainee in media marketing. In May 2003, I joined Convergys India Services as a Customer Care Associate. Within a year, I got promoted to Senior Customer Care Associate. I then moved into Quality Team as a Quality Analyst. Within months, I got promoted as a Senior Quality Analyst. With the immeasurable experience and knowledge I had gained through the various roles I played, I decided to venture into the world of varied opportunities. This is when I joined the Citi family in January 2011 as an Assistant Manager in Service Quality.

Certifications/Trainings Undertaken

Did you add to your knowledge base by undertaking any certifications?

Six Sigma Yellow Belt

Career Movement and Growth

How have you moved through your chosen career over the years?
I joined Convergys India Services in May 2003 as a Customer Care Associate.
I got successive promotions ascending through Senior Customer Care Associate,
Quality Analyst till Senior Quality Analyst.

With equal hope and reluctance, I joined Citibank N.A. in January, 2011. This was a different professional world. I did not have the relevant educational or professional background. But I had immense thirst to learn, and expectations from self and Citibank. I have done well ever since. I have been able to merge knowledge I had from my previous experience and implement new ideas. I gained recognition in the very first year of joining Citibank N.A. in the form of Operations and Technology Award in the 3rd Quarter. I yearn more, and wish to imbibe everything I can in my professional journey.

Learning for people looking forward to enter the IT-BPM Industry

What were the key things that you learnt along the way?

- □ Self- motivation, enjoy and appreciate what you do
- □ No journey, including professional career, is smooth and self-structured. There would always be the ones who say 'this cannot be done'.

ANNEXURE

GURUPADA MISHRA

Business Analyst Computer Sciences Corporation (CSC)

Entry to IT-BPM Industry

Entry to IT-ITeS Industry

How did you start your professional journey? Which organisation and at which designation?

I started my professional journey way back in August 1999 with Tata Consultancy Services, Mumbai as an Assistant Systems Engineer. I worked with TCS for close to 2 years in IBM Mainframes technology supporting multiple projects for General Electric Appliances for their Sales function. In the year 2001, I left TCS to undertake my post-graduation diploma in Industrial Engineering from NITIE, Mumbai.

Certifications/Trainings Undertaken

Did you add to your knowledge base by undertaking any certifications? Cleared INS (INS 21, 22,23) and CPCU papers.

Career Movement and Growth

How have you moved through your chosen career over the years?

After two years of pure technology experience at TCS, I took up NITIE's flag ship PGDIE course which provides cross functional skills in all aspects of business and reinforces system engineering concepts to solve business problems. I joined CSC after my post-graduation from NITIE, Mumbai in the year 2003.

I started my career at CSC as a Business Analyst supporting implementation and support of CSC's General Insurance products for the Insurance companies in North America. With now around 10 years with CSC, I have handled roles as a SME BA, Project Manager, growing excellent BA talent in India, managing fairly large team of SME/Business Analysts in providing superior value to the business.

Learning for people looking forward to enter the IT-BPM Industry

What were the key things that you learnt along the way?

Understanding the whole business value chain, knowing how the parts integrate provides tremendous leverage to derive efficiencies. Not only can we move our part quicker, but the other related parts so that we can see things moving faster. The other aspect is we derive more satisfaction as we know what we do counts in adding either to the top line or the bottom line of the company.



ANNEXURE

PARAG

Technical Manager Computer Sciences Corporation (CSC)

Entry to IT-BPM Industry

How did you start your professional journey? Which organisation, and at which designation?

In Dec 2002, I joined Espire Infolabs Pvt. Ltd as a Software Engineer. Espire Infolabs provides end-to-end business solutions to our global clientele - collaborating with them to design, develop, and implement solutions to their business. This company gave me lots of opportunities to enhance my technical skills, and add to my knowledge by getting MCAD.NET certification. It was a 20 months strong and learning tenure with the company before I moved to next organisation.

Certifications/Trainings Undertaken

Did you add to your knowledge base by undertaking any certifications?

□ INS21, MCAD.NET Certification

Career Movement and Growth

How have you moved through your chosen career over the years?

I joined CSC in August 2004 as a Software Engineer. I started working for a P&C Domain Product RISKMASTER. It gave me an entirely new perspective towards Financial Insurance domain. Later on, I cleared INS 21, which enhanced my product knowledge further. With the help of correct guidance from my senior team members, I worked very hard with commitment, and was rewarded everytime. In a year's time, I was promoted to Senior Software Engineer role.

After 2 year & 8 months, I moved to Birlasoft. I worked there on a project called Hollywood Video as a System Analyst.

One of the biggest inspirations to comeback to CSC was its professional yet comfortable work environment. In CSC and in project RISKMASTER, everyday one gets new challenges and new learning opportunities. The best thing about the work force here is the commitment and a helping attitude.

Learning for people looking forward to enter the IT-BPM Industry

What were the key things that you learnt along the way?

Everyone has something interesting and useful to offer which one can learn from. I have not met a single person till now from whom I have not learnt anything.

