



IT - ITeS SSC
NASSCOM



N · S · D · C
National
Skill Development
Corporation

**Functional Analysis
for**

**Entry Level Job Roles
in the IT-BPM**

**Industry- Business
Process Management
(BPM) Sub-sector**

Submitted to:

IT-ITeS SSC NASSCOM

**accenture**

nsulting | technology | outsourcing



Acknowledgements

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

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

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

We would also like to thank Mr. Prabhunandayya Kotur from the IT Services sub-sector, Mr. KNS Acharya, Mr. Ashok G. and Mr. S. Selvan from the ER&D sub-sector council, Mr. Ashish Garg and Ms. Gauri Puri from the BPM sub-sector and Mr. Sanjy Basu from Software Products sub-sector for their continued support.

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

We would also like to thank all NASSCOM member organisations, who provided inputs for preparation of this report.

Last but not the least we want to thank the Accenture team for conducting this exhaustive piece of research and preparing this report

Review and Approval Record

(As per the MoU between Accenture and SSC NASSCOM in Annexure G, page 90)

Reviewers History:

Date	Reviewer	Review details	Version
1 st March	Dr. Sandhya Chintala	First draft	V1

Approval/Sign-off details

Review #	Date	Name and Role of Approver	Signature
		Dr. Sandhya Chintala, Executive Director SSC NASSCOM	

Table of Contents

Acknowledgements	2
Review and Approval Record	3
Table of Contents.....	4
Executive Summary	5
Executive Summary	6
Objective of Functional Analysis and its role in NOS Development	8
Objective of Functional Analysis	9
Objective of Functional Analysis Report	10
Functional Analysis as part of the NOS Development Process	11
Approach and Methodology for Functional Analysis	23
Functional Analysis- Associate: Customer Care (Non Voice)	29
Functional Analysis-Associate: CRM	33
Functional Analysis-Associate: Transactional F&A	37
Functional Analysis-Associate: F&A Complex	41
Functional Analysis-Associate: SCM	45
Functional Analysis-Associate: Analytics	49
Functional Analysis-Associate: Clinical Data Management	53
Functional Analysis-Associate: Medical Transcription.....	57
Functional Analysis-Associate: Recruitment	61
Functional Analysis-Associate: HRO	65
Functional Analysis-Analyst: Research	69
Functional Analysis-Associate: Learning	73
Functional Analysis-Associate: Editorial	77
Functional Analysis Associate: DTP	81
Functional Analysis-Associate: Document Coder/Processor	85
Functional Analysis-Legal Associate	89
Generic Functions	93
Technical Functions for BPM Sub-sector	94
Annexure A: NVEQF level descriptors	96



Executive Summary

Executive Summary

The Indian IT- BPM Industry has made an unparalleled impact on the Indian economy with its far reaching impact on socio - economic spheres including revenue growth, livelihood generation, infrastructure development and social transformation. As the pioneer of IT-BPM services Industry in the world, the impetus is to maintain and sustain this leadership position in the long run. A key initiative in this regard will be the development and up skilling of talent so that the industry is able to uphold its global leadership.

To up skill talent and have a more employable workforce, IT-ITeS SSC NASSCOM has taken on an initiative to develop National Occupational Standards (NOS) for all entry level unique Job-roles in the IT-BPM Industry. These NOS are being developed in close association with the key member companies in the IT-BPM Industry and in the long term, will provide a foundation for skill development training and certification programs.

The first step in the development of NOS is Occupational Analysis. It entails an industry scan and a process of identification of the different occupations in the various sub-sectors. Occupational Analysis was undertaken for the four sub-sectors within IT-BPM Industry. The sub-sectors are:

- IT Services
- Business Process Management
- Engineering and R&D
- Software Products

The Occupational Analysis led to the identification of 67 unique entry level Job-roles across the IT-BPM industry for which Functional Analysis was conducted.

Functional Analysis is the main tool used to develop National Occupational Standards. It involves analyzing areas of work and identifying the outcomes that people should achieve. A detailed functional map allows us to establish the unique contribution of each occupational area - what makes it different from all others. Functional Analysis contributes to the identification and development of possible NOS titles.

The Functional Analysis report covers the Functional Analysis template for all 67 unique Job-roles identified across the four sub-sectors in the IT-BPM Industry. It also includes the following for each of the 67 unique Job-roles-

- Methodology for Functional Analysis
- Functional Mapping Pictorial Representation
- Functional Mapping

Structure of the Functional Analysis report

This document consists of the following sections:

Objective of Functional Analysis and its role in development of NOS: The objective and scope of Functional Analysis and its role in NOS development is presented in this section.

Approach and Methodology: An overview of how the Functional Analysis has been conducted, and links to other parts of the NOS development process is covered in this section.

About Functional Analysis: A brief description of the Functional Analysis – what it is, why it is essential to the development of National Occupational Standards and how the results from functional analysis will lead to the development of the NOS.

Functional Analysis for each of the four sub-sectors:

- IT Services
- Business Process Management
- Engineering and R&D
- Software Products



Objective of Functional Analysis and its role in NOS Development

Objective of Functional Analysis

Objective of the Functional Analysis Report

Functional Analysis as part of the NOS Development Process

Approach and Methodology for Functional Analysis

Objective of Functional Analysis

Functional Analysis is the main tool used to develop OS. NOS describe what individuals in any occupation should be able to do, the standard they should achieve and the knowledge and understanding they need. In order to develop NOS, we need to analyse the area of work and identify the functions that people perform.

Functional Analysis helps in identifying the tasks that an individual needs to perform as part of his/her job. This helps in identifying the standard they should achieve and the knowledge they need – in other words, the content of NOS .

Objective of Functional Analysis Report

The Functional Analysis report aims to map out the functions or unique tasks that exist for the 67 identified unique job-roles available at the Entry Level in the IT- BPM industry.

The Functional Analysis Report does:

- ✓ Give an accurate and detailed separation of the functions which have to be carried out in order to achieve the key purpose of the sub-sector
- ✓ Identify key functions in the four sub-sectors
- ✓ Highlight key functions / tasks for the identified 67 entry level Job-roles across the four sub-sectors
- ✓ Establish the unique contribution of each occupational area in a sub-sector

Limitations

The Functional Analysis does not:

- X Include quantitative analysis around number of professionals in each occupation- This will be performed as part of next set of deliverables
- X List out the typical career paths for identified occupations – Instead, the Occupational Analysis report lists out the career paths for the identified occupations and Job-roles.
- X Describe the Performance Criteria, Knowledge and Skills required for each job-role-These will be defined while writing National Occupational Standards for entry level job-roles

Functional Analysis as part of the NOS Development Process

In the context of the project, the key outcome of the exercise is the identification of functions and tasks for the ~67 unique-entry level job-roles for NOS will be developed. This has been represented in the illustrative below.

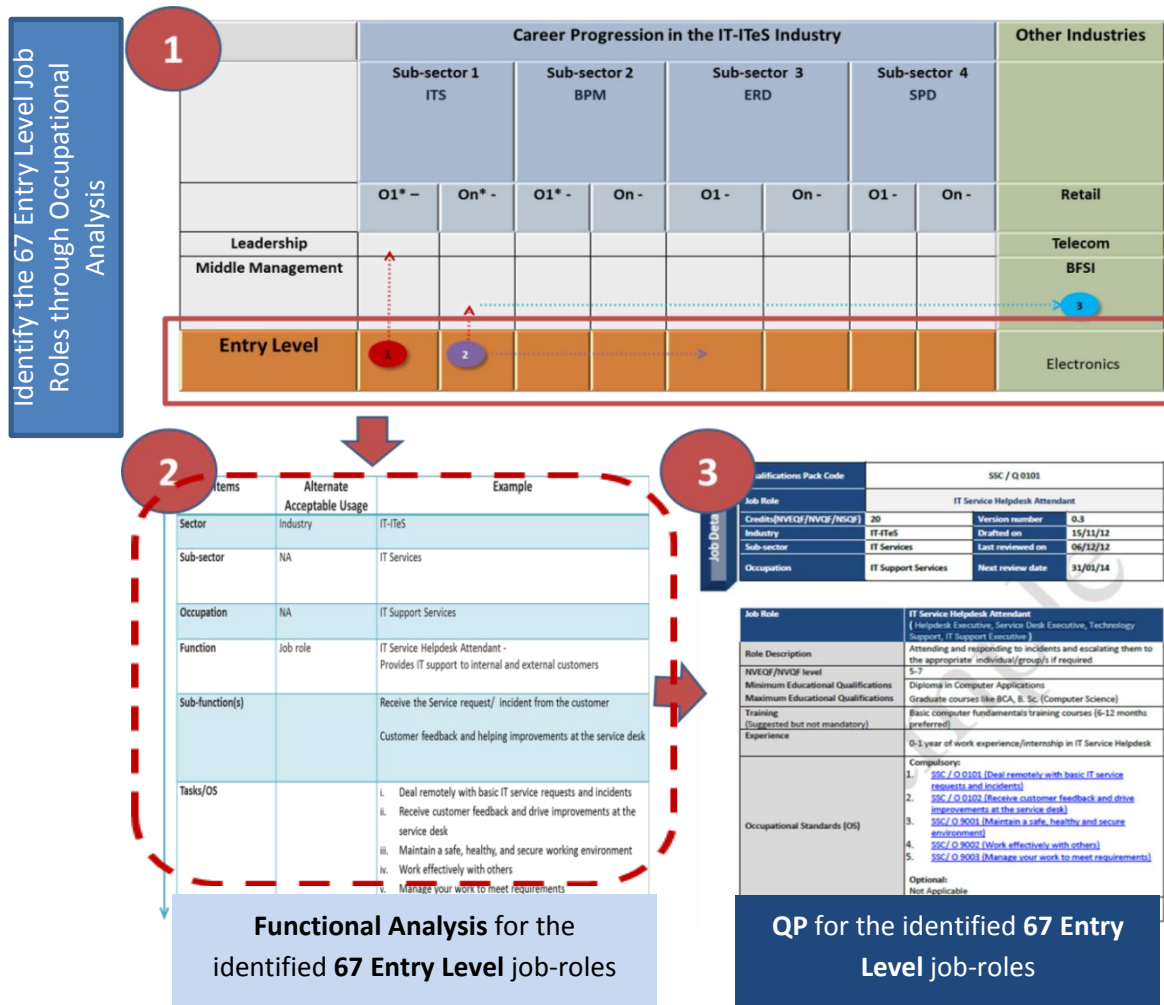


Figure 1: Functional Analysis as Part of NOS Development Process

Using this framework three main stages were identified for the development of the National Occupational Standards –



Figure 2: Stages for Development of National Occupational Standards

Step 1: Occupational Analysis

The development of occupational maps and career paths was a result of the occupational analysis that involved in depth inputs from SMEs across the industry. These inputs were collected through an online survey and through personal interviews with SMEs across the four sub-sectors. This has been explained in detail below. The information collected for occupational analysis was used for developing the functional maps for each of the four sub-sectors.

Occupational Analysis comprises of understanding the Job-roles in each sub-sector, developing occupational maps and career paths with inputs from subject matter experts. Inputs from subject matter experts helped identify the typical job-roles at the entry, middle, and leadership levels and possible vertical and horizontal career paths within or outside the sub-sector.

The following activities were undertaken for Occupational Analysis:

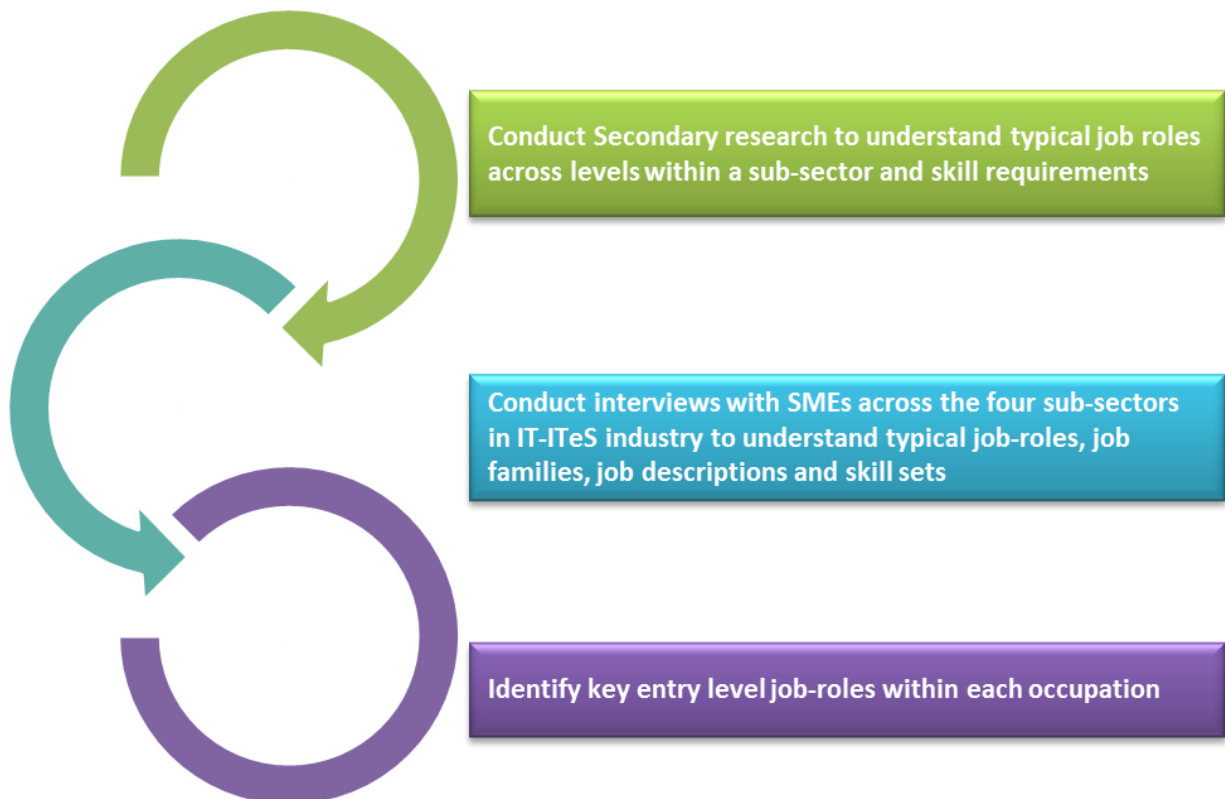


Figure 3: Approach for Primary and Secondary Research for Occupational Analysis

Primary and secondary research was undertaken to understand typical job-roles existing in organisations across the four sub-sectors of the IT-BPM industry. Key Job-roles were identified within each occupation including the entry level Job-roles through a mixed approach involving primary, secondary research and industry inputs and validations.

Personal Interviews were conducted with industry leaders and senior professionals in the IT-BPM Industry. These included but were not limited to -

- Industry and Business Leaders

- HR Heads and their teams

- Recruitment Professionals

- Learning and Development Professionals

- Key subject matter experts (SMEs) and business/line managers in the respective sub-sector

Using these inputs and inputs gathered in occupational analysis, the functional analysis was developed.

The following inputs gathered simultaneously while conducting occupational, analysis were also used for functional analysis.

Information Gathered	Occupational Analysis	Functional Analysis
Identify Job-roles across levels	✓	✗
Gather Job Descriptions	✓	✓
Identify entry level Job-roles	✓	✓

Table 1: Summary of Inputs for Occupational and Functional Analysis

The summary of occupations, tracks and roles across the four sub- sectors presented below:

Total Occupations, Tracks and Roles	
Total Occupations / Horizontals	48
Total Tracks	104
Total Unique Entry Level Job-roles	67
Total Unique Middle Level Job-roles	313
Total Unique Leadership Level Job-roles	130

Table 2: Summary of Occupations, tracks and Job-roles across the IT – BPM Industry

Summary of Key Occupations within each Sub-sector

The figure below indicates the key occupations identified in the each sub-sector. These are differentiated on the basis of the unique skill-set requirement for each. Each occupation is further divided into tracks to highlight the specializations that exist. . Details of the tracks and the unique entry level job-roles have been indicated further on in the document.

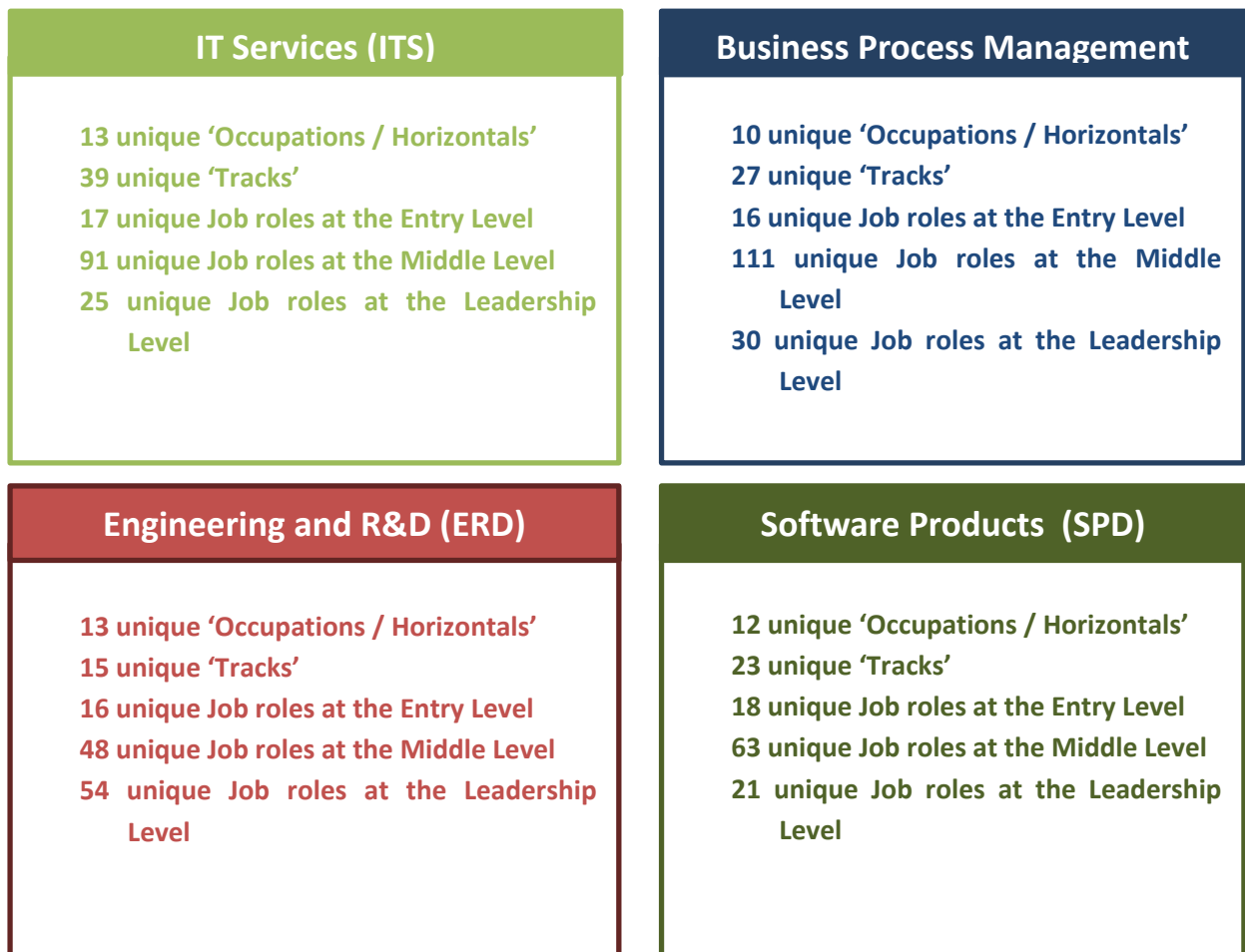
These occupations, tracks, and unique job-roles exist in various organisations under different nomenclature and level of detail. The list tries to establish a balance between detail and brevity while defining these basic ‘distinct’ skill-sets.

IT Services (ITS)	Business Process Management
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 (SCM)
Engineering and R&D (ERD)	Software Products (SPD)
<ul style="list-style-type: none"> Engineering Analysis Hardware Development Software Development Product Engineering Design Product Marketing Product Manufacturing Support Product Lifecycle Management R&D Software Testing Hardware Testing Quality Assurance & Engineering Technical Documentation/Writing Technical Support 	<ul style="list-style-type: none"> Integration & Deployment Legal Product Documentation Product Development and Delivery Project/Program Management Product Lifecycle Management Product Research and Design Product Packaging Product Support Sales & Marketing/ Business Development Testing & Quality Assurance Transition

Summary of Number of Job-roles within each Sub-sector

The figure below indicates the Job-roles identified at the entry level, middle level and the leadership level across each of the four sub-sectors in the IT- BPM Industry. These are differentiated on the basis of the unique skill-set requirement for each.

The next few pages will explain the unique entry level Job-roles for each identified occupation across the four sub-sectors that we used for functional analysis.



IT Services Sub-sector: Summary of Occupations, Tracks and Entry Level Job-roles

Based on Industry research, the following Job-roles have been identified as unique Job-roles at the entry level:

Industry Verticals	BFSI	Manufacturing	Media and Entertainment	Education	Telecom	Government	Retail	Health Care	Construction & Heavy Engg. (C&HE)	Emerging Verticals	
Occupation	Tracks						Entry Level Job Roles				
Application Development	Software Development						Software Developer				Engineer Trainee
	Functional Development						UI Developer				
	UI Development						Web Developer				
	Web Development						Media Developer				
	Media Development						Technical Writer				
	Technical Documentation						Language Translator				
Application Deployment	Application Deployment						Deployment Engineer				Engineer Trainee
Application Maintenance	Application Maintenance						Application Maintenance Engineer				
Data Scientists	Data Scientist						Junior Data Associate				
IT Consulting	Technical						Analyst				
	Functional										
IT Services Management	IT Services Management						No Entry-level job role				
IT Support Services/Help Desk	IT Support Services/Help Desk						Engineer-Technical support (Level1)				
Infrastructure Management Services (IMS)	Storage Management						Infrastructure Engineer				System Trainee/ Engineer Trainee
	Network Management										
	Server Management										
	Messaging and Collaboration										
	Security Management										
	End-user Devices Management										
	Infrastructure Applications Management										
	Infrastructure Tools Management										
	Services Management										
	Database Management										
	Field Support										
	Application Security										
	Information Security	Risk Management, Audit and Compliance									
Security Testing											
Incident Management											
BCP/DR											
Network Security Management											
IT Forensics											
Project / Program Management	Project / Program Management						No Entry-level job role				
Sales and Pre-sales	Business Development						Sales & Pre-sales Analyst				
	Relationship Management/										
Solution Architecting	Solution Architecting						No Entry-level job role				
Testing and QA	Manual testing						Test Engineer				Engineer Trainee
	Automated Testing						QA Engineer				
	QA										

Figure 4: IT Services Sub-sector: Summary of Occupations, Tracks and Entry Level Job Roles

BPM Sub-sector: Summary of Occupations, Tracks and Entry Level Job-roles

Based on Industry research, the following job-roles have been identified as unique Job-roles at the entry level:

	BFSI	Government	Media and Entertainment	Travel and Hospitality	Telecom	Retail	Healthcare/ Pharma	Energy	Construction & Heavy Engg. (C&HE)	Emerging Verticals
	Occupations			Tracks			Entry-level Job Roles			
			Analytics		MIS - Reporting				Associate - Analytics	
					Modelling and Analytics					
			Customer Relationship Management		Customer Care (Non-voice)				Associate - Customer Care (Non-voice)	
					Customer Care (Voice)					
					Sales/Telesales				Associate - CRM	
					Technical Support/IT Help Desk					
					Collections (Business to Customer)					
			Editorial and Desktop Publishing		Editorial				Associate - Editorial	
					Desktop Publishing (DTP) and Design				Associate - DTP	
			Finance and Accounting		Transaction Processing (includes B2B collections)				Associate - Transactional F&A	
					Credit Analysis					
					Audit and Accounting				Associate - F&A Complex	
					Reporting					
					Financial Planning and Analysis (includes Budgeting and Forecasting)					
Emerging Occupations			Health Services		Clinical Data Management				Associate - Clinical Data Management	
					Medical Transcription				Associate - Medical Transcription	
			Human Resource Outsourcing		Recruitment				Associate - Recruitment	
					Learning and Development					
					Compensation and Benefits Management				Associate - HRO	
				Employee Relations						
			Knowledge Services - Research		Secondary Research and Market Research				Analyst - Research	
					Investment Banking (IB) Research					
			Learning		Content Management				Associate - Learning	
					Instructional Design					
			Legal Services		Legal Services				Document Coder/Processor	
									Legal Associate	
			Supply Chain Management		Procurement Operations (including Strategic Sourcing)					
					Sales and Fulfilment (including Inventory Management)				Associate - SCM	

Figure 5: BPM Sub-sector: Summary of Occupations, Tracks and Entry Level Job-roles

SPD Sub-sector: Summary of Occupations, Tracks and Entry Level Job-roles

Based on Industry research, the following Job-roles have been identified as Unique Job-roles at the entry level:

Industry Verticals	Manufacturing	BFSI	Media and Entertainment	Government	Telecom	Retail	Construction & Heavy Engg. (C&HE)	Healthcare	Education
	Occupation			Tracks			Entry-level Job Roles		
	Integration and Deployment			Integration (Software and Hardware)			Support Engineer	Engineer Trainee	
				Product Deployment					
	Legal			Legal			IP Executive		
	Product Documentation			Technical Writing/Documentation			Technical Writer		
				Language/Translation			Language Translator		
	Product Development and Delivery			Software Development			Software Developer	Engineer Trainee	
				Functional Development					
				UI Development					
				Media Development			Media Developer		
				Web Development					
	Project/Program Management			Project/Program Management			No entry-level job role		
	Product Lifecycle Management			Product Lifecycle Management			Product Executive	Engineer Trainee	
	Product Research and Design			Product Research and Design			Design Engineer	Engineer Trainee	
	Product Packaging			Product Packaging			Engineer Packaging		
	Product Support			Product Support			Technical Support Executive - Non-voice	Technical Support Executive - Voice	
	Sales and Marketing/ Business Development			Product Marketing			Market Research Associate	Management Trainee	
				Product Pre-sales/Sales (includes inside sales)			Sales/Pre-sales Executive		
				Relationship Management/Alliance					
	Testing and Quality Assurance			Automated Testing			Test Engineer	Engineer Trainee	
				Manual Testing					
				QA			QA Engineer		
	Transition			Software Transition			Engineer - Software Transition	Engineer Trainee	
				Transition Communication			Communication Analyst		

Figure 8: SPD Sub-sector: Summary of Occupations, Tracks and Entry Level Job Roles

Step 2: Functional Analysis

Functional Analysis helps in identifying the tasks that an individual needs to perform as part of his/her job. This helps in identifying the standard they should achieve and the knowledge they need – in other words, the content of NOS . In the Occupational Analysis, key occupations were identified in each of the four sub-sectors. These were differentiated on the basis of the unique skill-set requirement for each. Each occupation was further divided into tracks to highlight the specializations that exist. For each of these occupations unique entry level roles were identified. Using these unique 67 entry level Job-roles across the four sub-sectors, functional analysis was conducted.

A sample functional map for an IT Services Helpdesk Attendant is shown below -

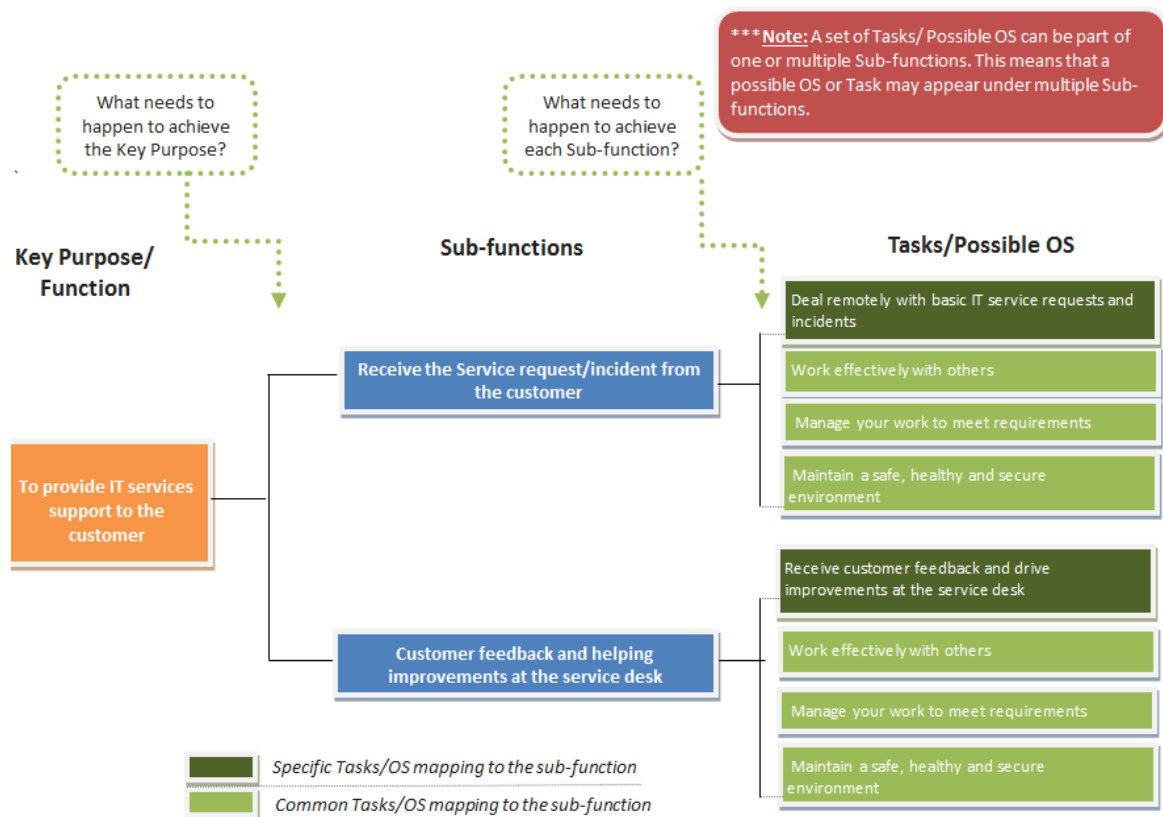


Figure 9: sample functional map for an IT Services Helpdesk Attendant

Step 3: Development of National Occupational Standards

National Occupational Standards specify the standard of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Essentially NOS are benchmarks of good practice.

The outcome of Functional Analysis will feed into the next step viz. NOS development. For each OS, Performance (skills) and Knowledge criteria are identified by asking-

- What are the activities in each NOS which are to be performed?' (Performance/Skills)
- What are the underpinning knowledge attributes which are to be understood to perform each of above activities?' (Knowledge Criteria)

These performance and skills will form a part of the Qualifications Pack (QP). A Qualifications Pack contains a set of OS, educational qualifications, trainings and other requirements required for that particular Job Role.

Approach and Methodology for Functional Analysis

Approach and Methodology followed for Functional Analysis is highlighted in the figure below:

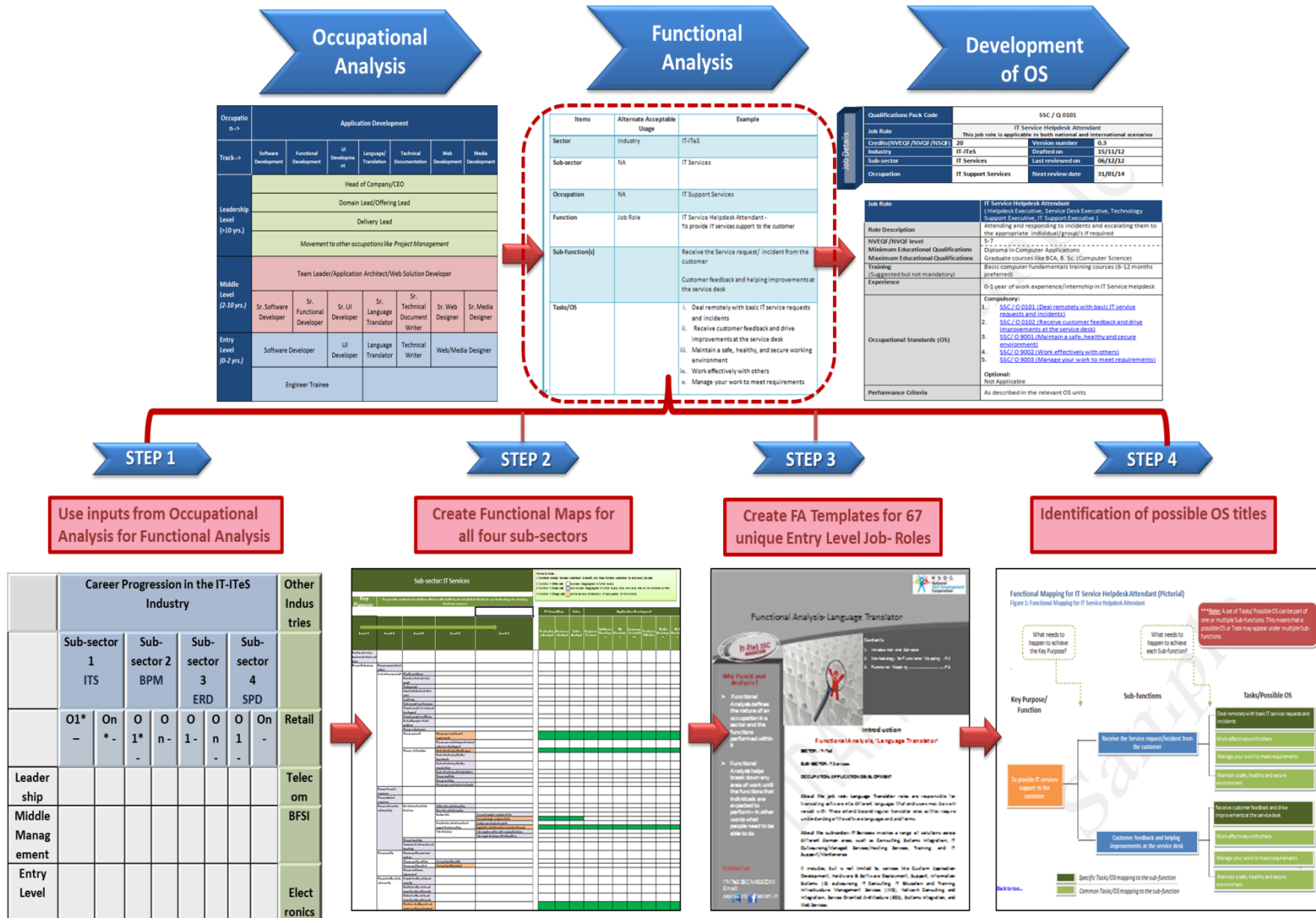


Figure 10: Approach and Methodology for Functional Analysis

Step 1: Use Inputs from Occupational Analysis

The Indian IT-BPM industry has established itself as the 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. It has received global recognition for its contribution as the growth engine for the country and the sectors it services.

Occupational Analysis is the first step in the development of National Occupational Standards (NOS) for any Industry or sector. It entails an industry scan and a process of identification of the different occupations in the various Sub-sectors.

The objective of Occupational Analysis is to describe the main features and characteristics of an occupation, sector, or 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. This way, Occupational Analysis enables information on opportunities that exist for progression through a career in a specific occupation.

As the first step for developing OS, Occupational Analysis was undertaken for the four Sub-sectors within IT-BPM industry.

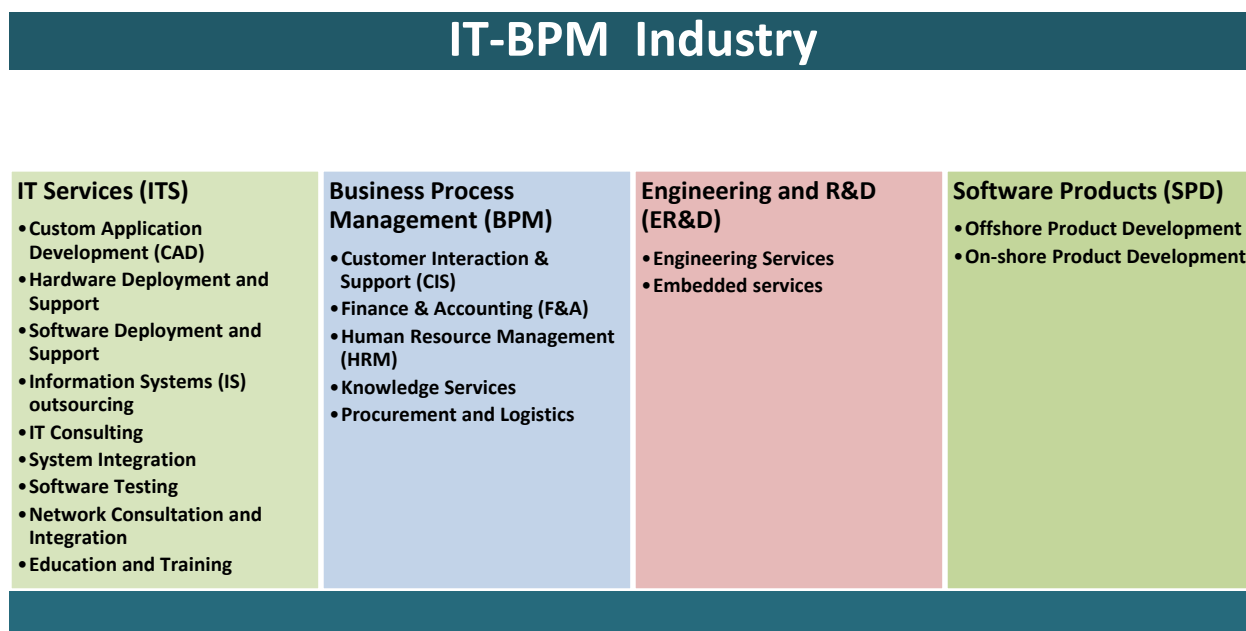


Figure 11: IT -BPM Industry - Four Sub-sectors

Step 2: Create Functional Maps for all four Sub-sectors

Using the information collected and processed during the Occupational Analysis of the IT-BPM industry, the project team conducted the Functional Analysis of each of the four sub-sectors in the IT- BPM Industry.

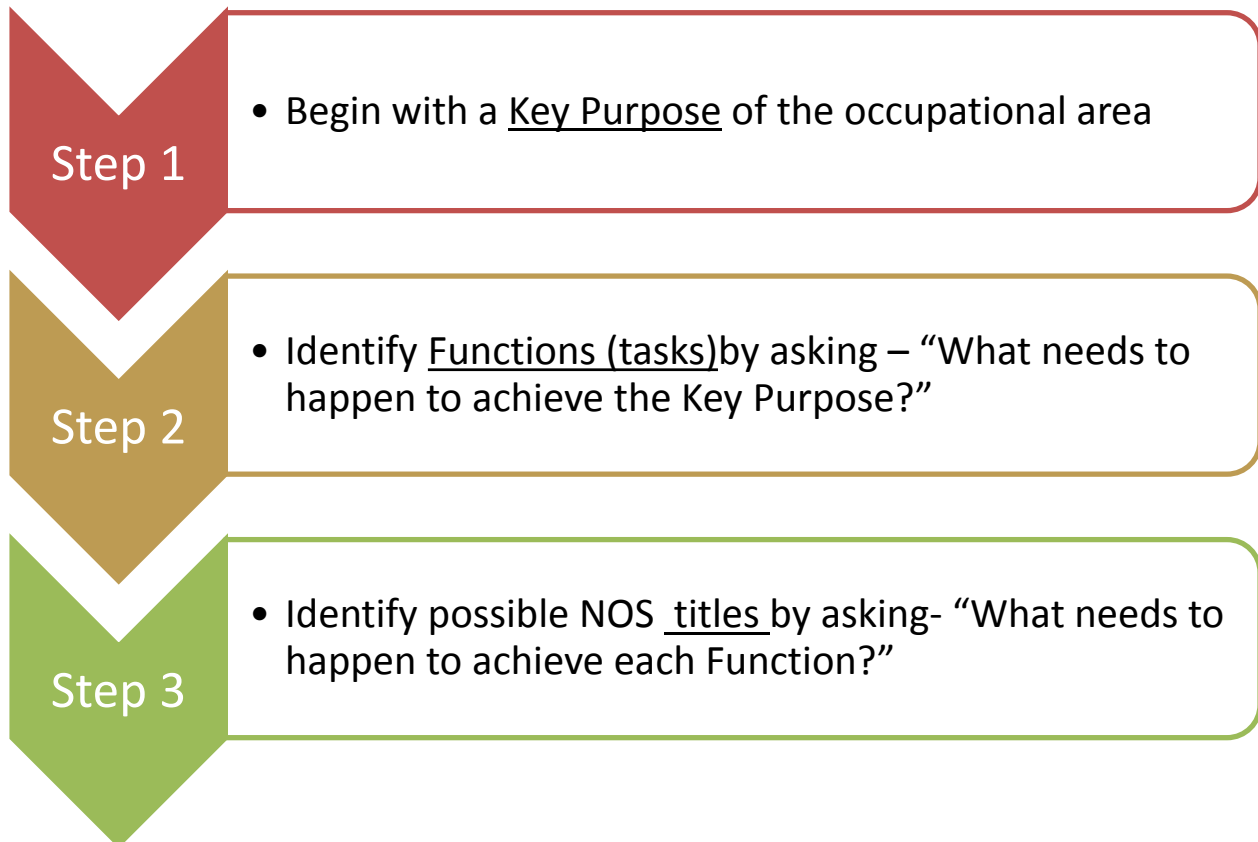


Figure 12: Key Stages of Functional Analysis,

Creating Functional Maps involves analysing areas of work and identifying the outcomes that people should achieve. Functions mean the activities a person is expected to do as part of their job. They must have a clear purpose and outcome. Thinking about the outcomes of work activities, as well as the processes that go into achieving such outcomes, is a key principle of functional analysis.

Due to the wide-ranging scope and complexity of the IT-BPM sector, functional analysis has been carried out independently for its four sub-sectors and all 67 entry level roles within:

- IT Services (ITS)
- Software Products (SPD)

- Engineering and R&D (ER&D)
- Business Process Management (BPM)

The number of levels of disaggregation in the functional map will depend on the size and nature of the sector, occupation or area of work being analysed. Some parts of the functional map are disaggregated to more levels than others to reach discrete functions that define unitized areas of competence required to perform each entry level role.

Step 3: Create Functional Maps for 67 Entry Level Job-roles in the four Sub-sectors

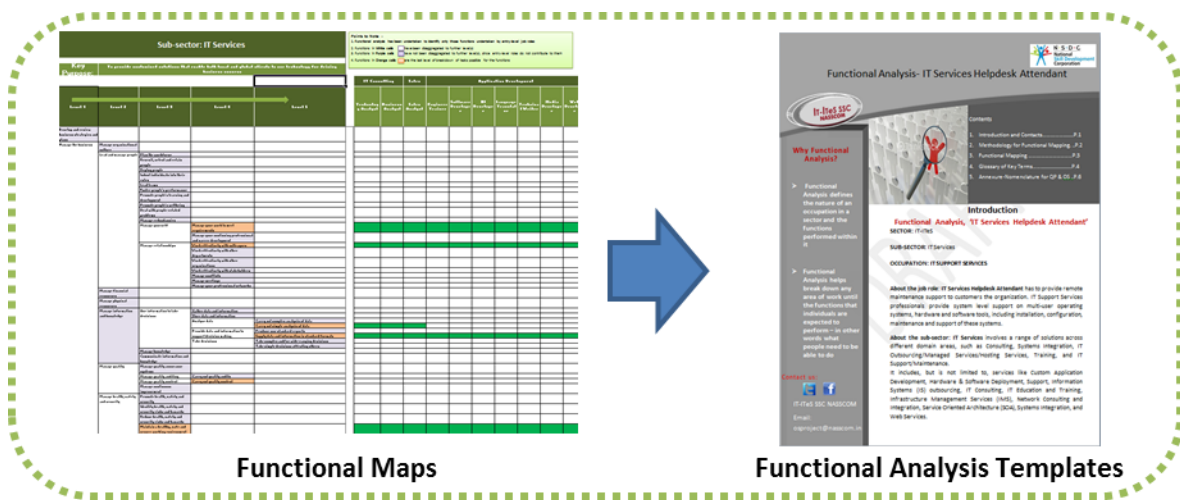


Figure 13: Create Functional Analysis Documents for 67 Entry Level Job-roles in the Four Sub-sectors

The outcome of functional analysis is a 'functional map' which shows all the functions which need to be carried out to achieve the key purpose. Using this functional map which identifies all the unique functions required for each entry level role across the four sub-sectors, the functional analysis templates have been developed for 67 entry level Job-roles.

The template describes in detail about each unique job role and what it entails, along with the sub-sector it is categorized under. It explains the unique functions associated with this job role along with the sub-functions.

These unique functions and sub functions detailing the competency and skill sets required for adequate performance of each job will be further used as possible titles for writing the National Occupational Standards.



IT - ITeS SSC
NASSCOM

Functional Analysis for IT- BPM Industry

Sub-sector - Business Project Management (BPM)



 **accenture**

consulting | technology | outsourcing

Functional Analysis- Associate: Customer Care (Non Voice)

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Customer Care (Non Voice)'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Customer Relationship Management

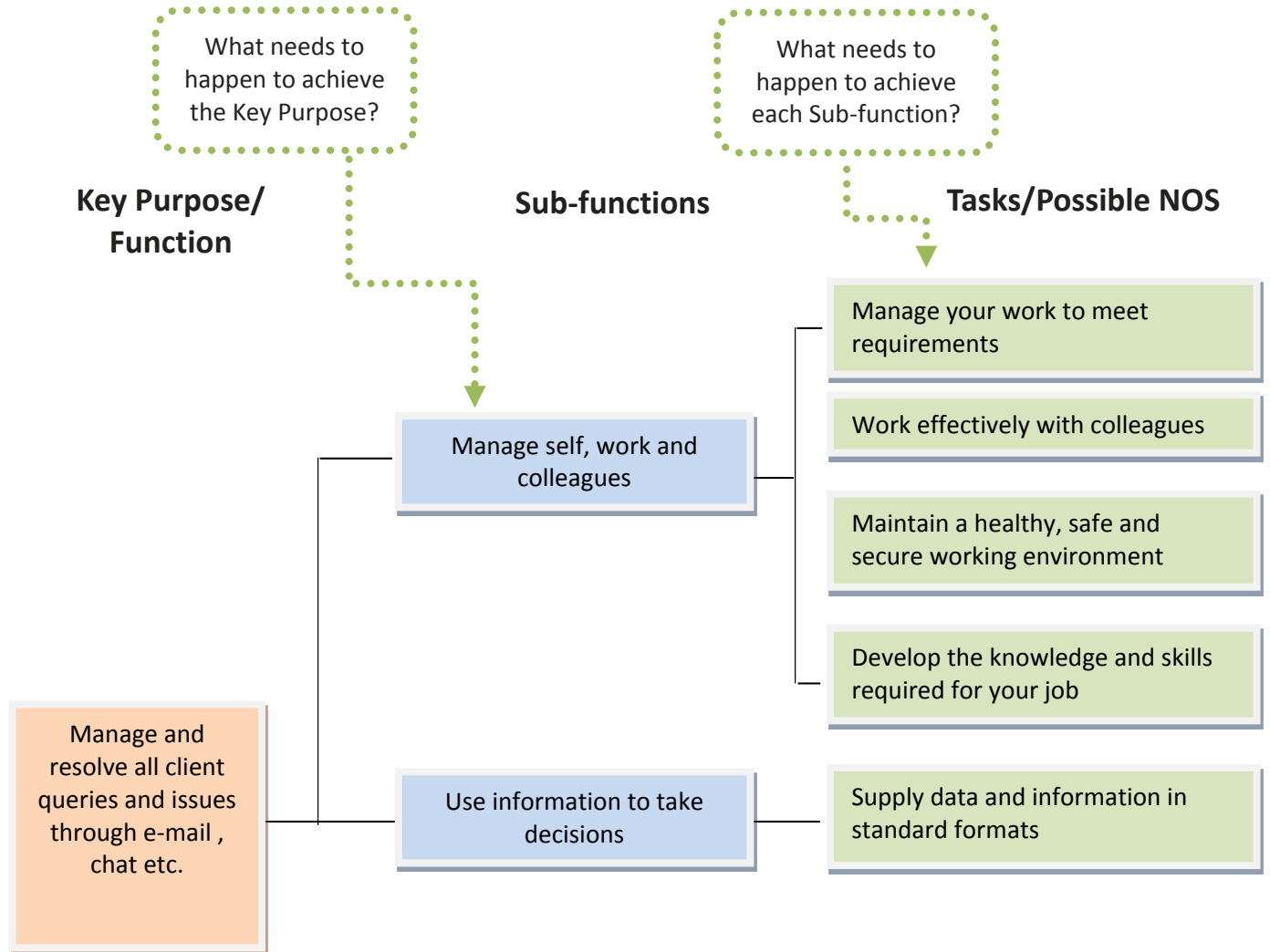
About the job role: Associate- Customer Care (Non Voice) is responsible for resolving queries and customer cases over web-chat or email. Responses may be made on either preexisting email templates or may be customized mails to the query requirement. For slightly complex queries/situations, this may require greater interaction.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: Customer Care (Non Voice)

	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Customer Relationship Management
Function	Job role	Associate- Customer Care (Non Voice): Manage and resolve all client queries and issues through e-mail, chat etc.
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Handle and respond to customer queries and feedback
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment

Functional Mapping for Associate: Customer Care – Non Voice (Pictorial)



Functional Mapping for Associate: Customer Care (Non Voice)

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Manage and resolve all client queries and issues through e-mail, chat etc.	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats

Functional Analysis-Associate: CRM

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Customer Relationship Management (CRM)'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Customer Relationship Management (CRM)

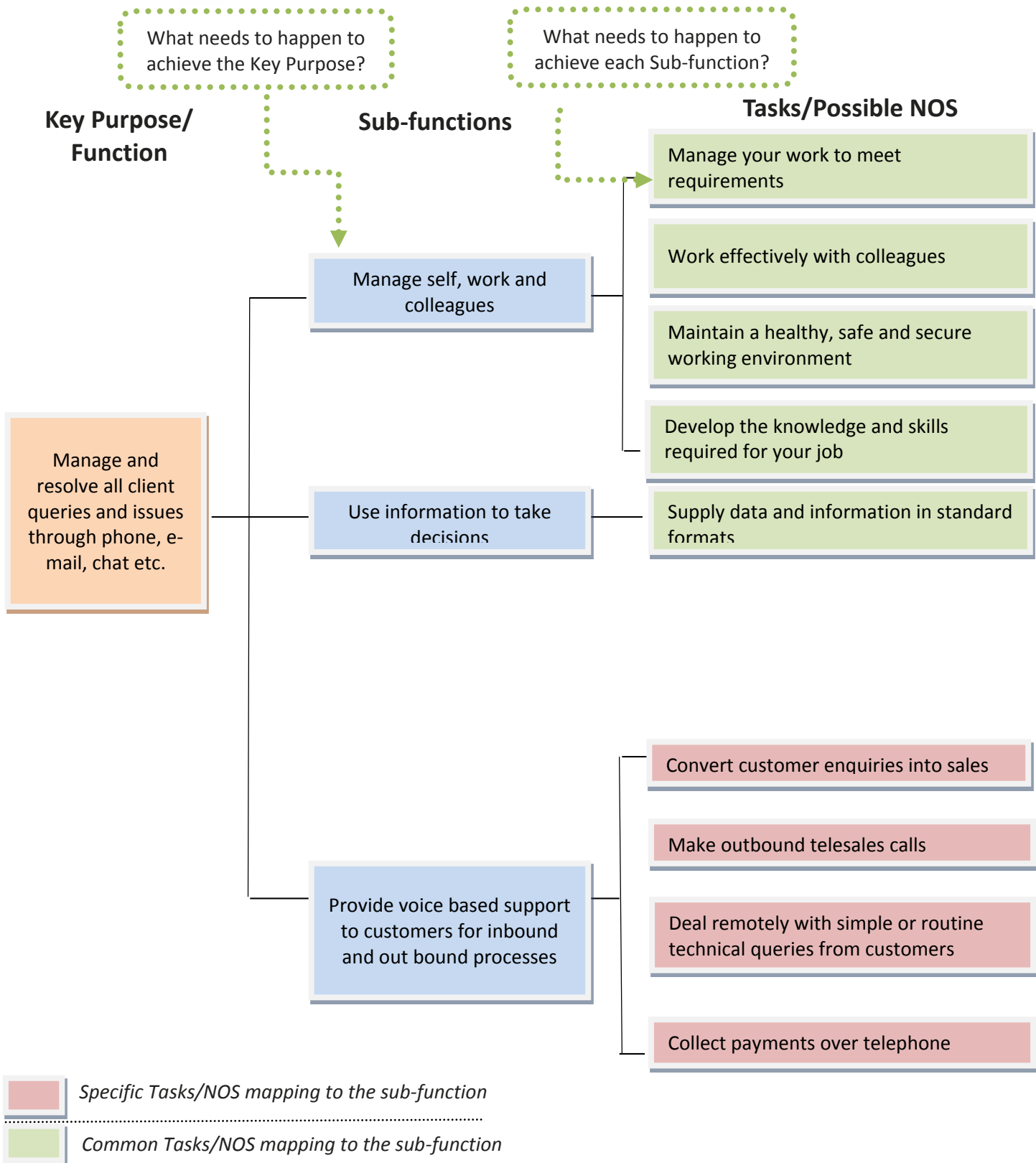
About the job role: Associates: CRM are required to resolve the queries / direct unresolved queries to the appropriate group. These professionals are required to have a broad understanding of all the products / services portfolio of the organization to aid in responding to queries. They may also contact individual as well as corporate customers and vendors, via email or phone for collecting payments from the customers who have defaulted on their payments.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: CRM

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Customer Relationship Management
Function	Job role	Associate- CRM: Manage and resolve all client queries and issues through phone, e-mail, chat etc.
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Provide voice based support to customers for inbound and out bound processes
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Collect payments over the telephone vii. Convert customer enquiries into sales viii. Make outbound telesales calls ix. Deal remotely with simple or routine technical queries from customers

Functional Mapping for Associate: CRM (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: CRM

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Manage and resolve all client queries and issues through phone, e-mail, chat etc.	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Provide voice based support to customers for inbound and out bound processes	i. SSC / N 2308: Collect payments over the telephone
		ii. SSC / N 3001: Convert customer enquiries into sales
		iii. SSC / N 3002: Make outbound telesales calls
		iv. SSC / N 3003: Deal remotely with simple or routine technical queries from customers

Functional Analysis-Associate: Transactional F&A

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate: Transactional Finance & Accounts (F&A)'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Finance and Accounting (F&A)

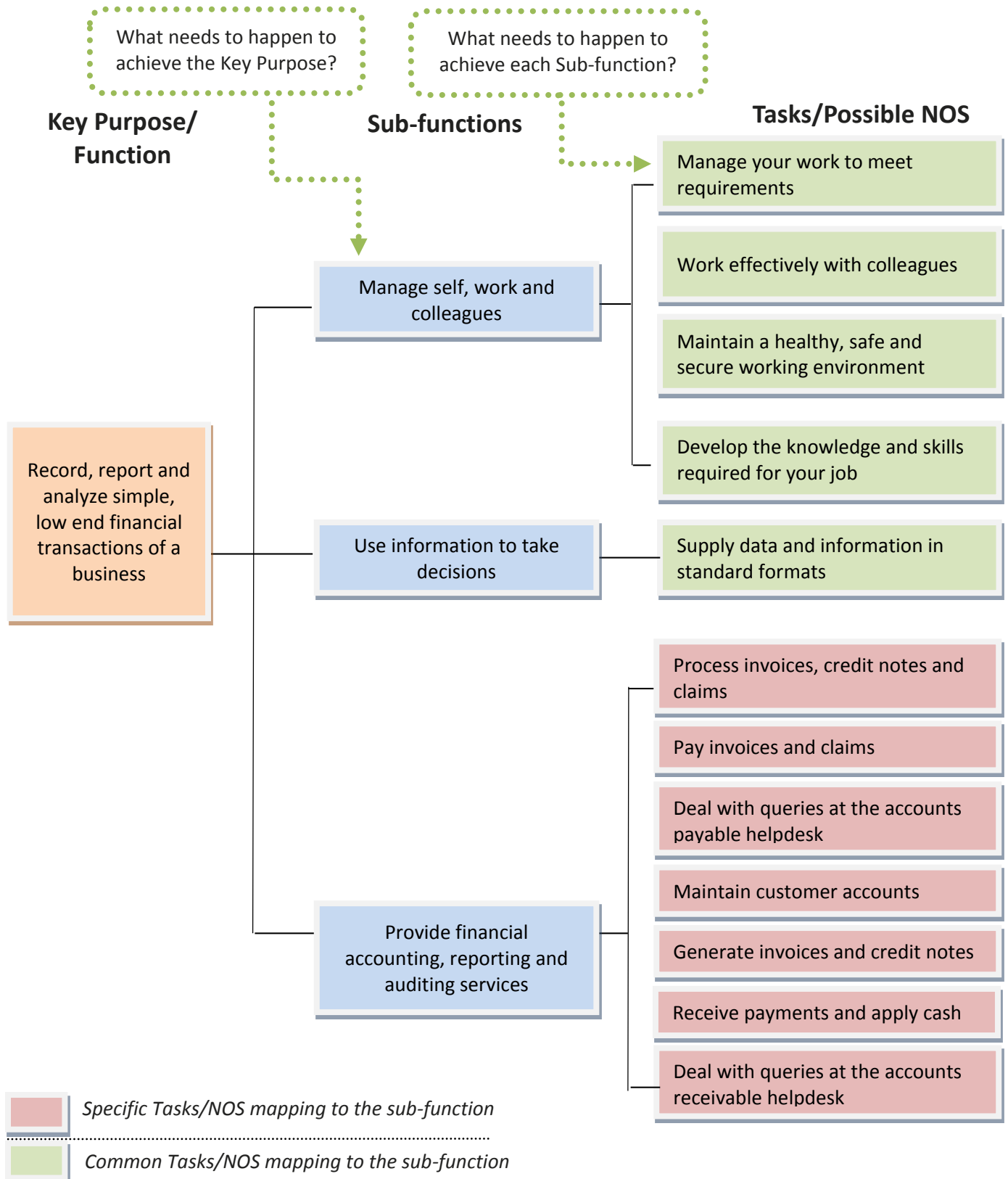
About the job role: Associates-Transactional F&A are engaged in simple activities that range from month end accounting, foreign remittances, book keeping, account reconciliation & financial assignment, daily general ledger control checks, general ledger balance substantiation & reconciliation, ad hoc issues resolution and queries for the General Ledger, and helpdesk support to query resolution for financial systems.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: Transactional F&A

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Finance and Accounting (F&A)
Function	Job role	Associate- Transactional F&A: Record, report and analyze simple, low end financial transactions of a business
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Provide financial accounting, reporting and auditing services
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Process invoices, credit notes and claims vii. Pay invoices and claims viii. Deal with queries at the accounts payable helpdesk ix. Maintain customer accounts x. Generate invoices and credit notes xi. Receive payments and apply cash xii. Deal with queries at the accounts receivable helpdesk

Functional Mapping for Associate: Transactional F&A (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Transactional F&A

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Record, report and analyze simple, low end financial transactions of a business	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard formats
	Provide financial accounting, reporting and auditing services	i. SSC / N 2302: Process invoices, credit notes and claims
		ii. SSC / N 2303: Pay invoices and claims
		iii. SSC / N 2304: Deal with queries at the accounts payable helpdesk
		iv. SSC / N 2305: Maintain customer accounts
		v. SSC / N 2306: Generate invoices and credit notes
		vi. SSC / N 2307: Receive payments and apply cash
		vii. SSC / N 2309: Deal with queries at the accounts receivable helpdesk



Functional Analysis-Associate: F&A Complex

Why Functional Analysis?

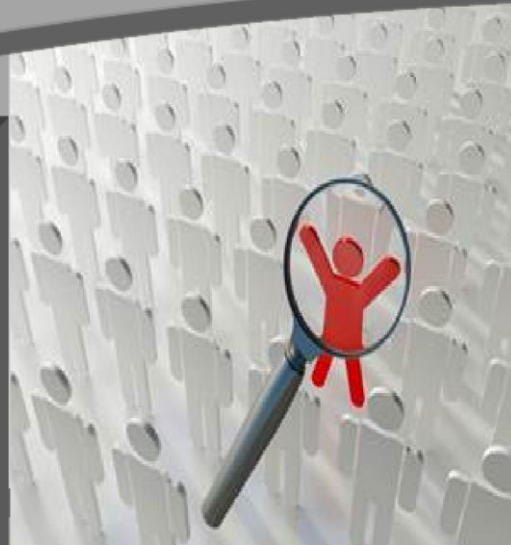
- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Finance & Accounting (F&A) Complex'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Finance and Accounting (F&A)

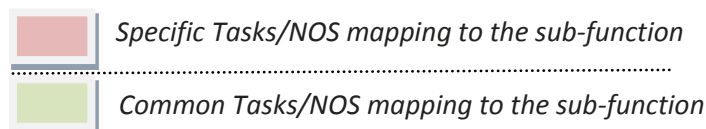
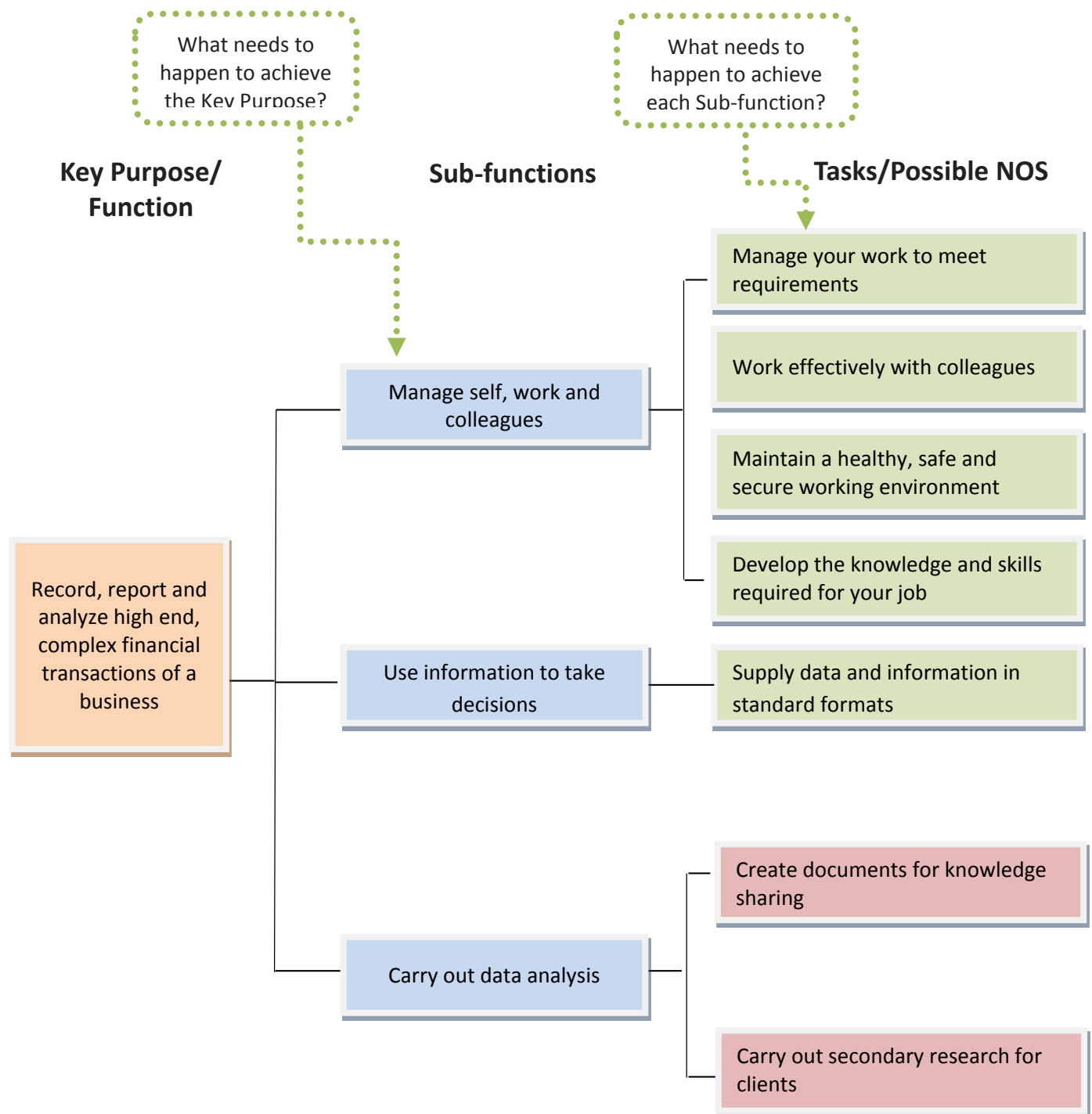
About the job role: Associates-Transactional F&A are engaged in complex, high end accounting activities that range from month end accounting, foreign remittances, book keeping, account reconciliation & financial assignment, daily general ledger control checks, general ledger balance substantiation & reconciliation, ad hoc issues resolution and queries for the General Ledger, and helpdesk support to query resolution for financial systems.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: F&A Complex

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Finance and Accounting (F&A)
Function	Job role	Associate- F&A Complex: Record, report and analyze high end, complex financial transactions of a business
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Carry out data analysis
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Work effectively with colleagues iii. Maintain a healthy, safe and secure working environment iv. Develop the knowledge and skills required for your job v. Supply data and information in standard formats vi. Create documents for knowledge sharing vii. Carry out secondary research for clients

Functional Mapping for Associate: F&A Complex (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: F&A Complex

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Record, report and analyze high end, complex financial transactions of a business	Manage self, work and colleagues	i. SSC/ N 9001: Manage your work to meet requirements
		ii. SSC/ N 9002: Work effectively with colleagues
		iii. SSC/ N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC/ N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC/ N 9004: Supply data and information in standard for mats
	Carry out data analysis	i. SSC/ N 0703: ii. Create documents for knowledge sharing
		iii. SSC/ N 2602 Undertake primary research

Functional Analysis-Associate: SCM

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Functional Analysis, 'Associate: Supply Chain Management (SCM)'

Introduction

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Supply Chain Management (SCM)

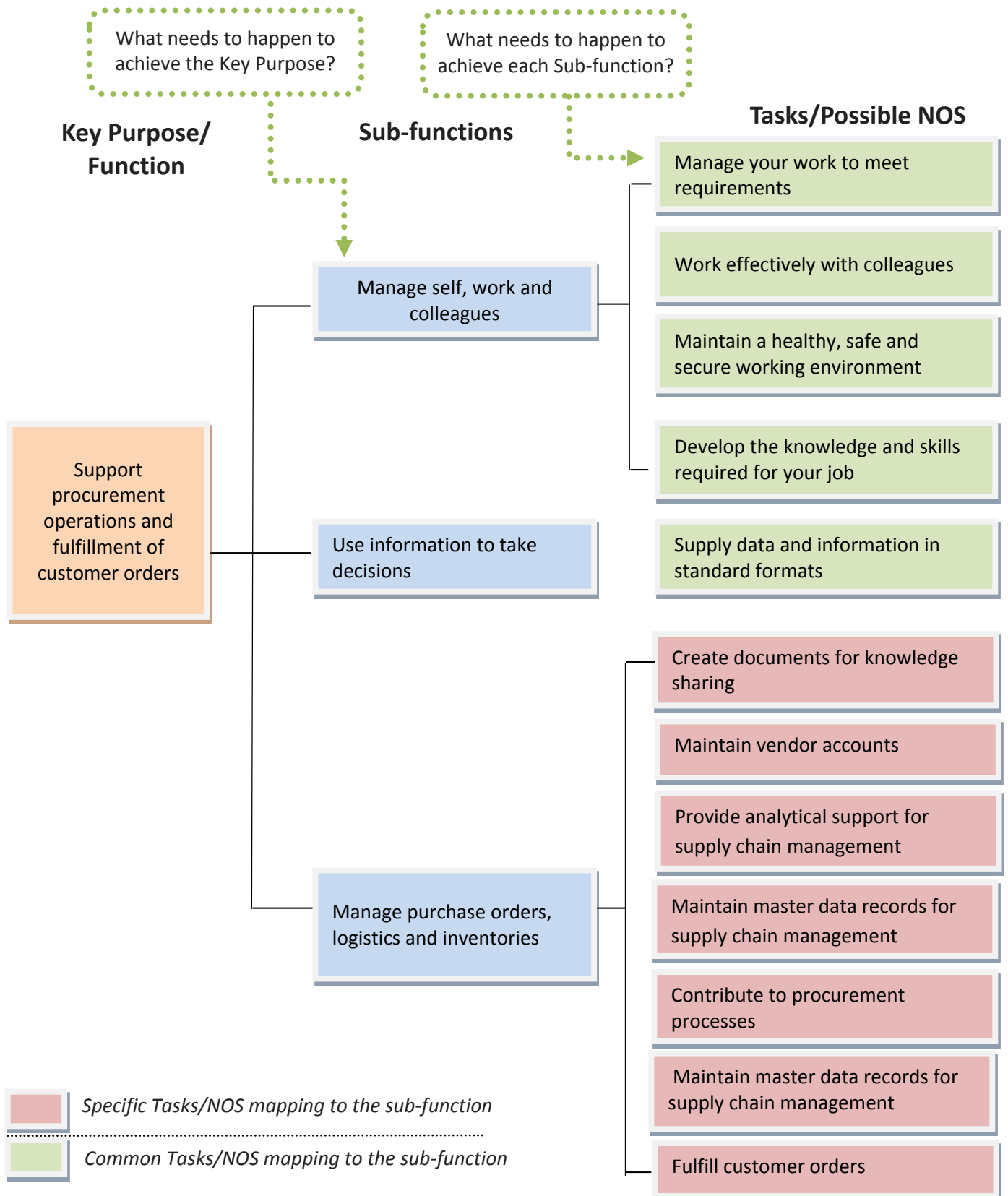
About the job role: Associates-SCM help supply chain optimization through SCM Support Processes. They also improve client profitability by better cost containment in the supply chain through Fulfillment Operations.. The Fulfillment function involves SCM co-ordination, replenishment planning, and vendor management.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: SCM

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Supply Chain Management
Function	Job role	Associate- SCM Support procurement operations and fulfillment of customer orders
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Manage purchase orders, logistics and inventories
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Work effectively with colleagues iii. Maintain a healthy, safe and secure working environment iv. Develop the knowledge and skills required for your job v. Supply data and information in standard formats vi. Create documents for knowledge sharing vii. Maintain vendor accounts viii. Maintain master data records for supply chain management ix. Contribute to procurement processes x. Provide analytical support for supply chain management xi. Fulfill customer orders

Functional Mapping for Associate: SCM (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Associate SCM

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Support procurement operations and fulfillment of customer orders.	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Manage purchase orders, logistics and inventories	i. SSC/ N 0703 Create documents for knowledge sharing
		ii. SSC/ N 2301 Maintain vendor accounts
		iii. SSC/ N 3101 Maintain master data records for supply chain management
		iv. SSC/ N 3102 Contribute to procurement processes
		v. SSC/ N 3103 Provide analytical support for supply chain management
		vi. SSC/ N 3104 Fulfill customer orders

Functional Analysis-Associate: Analytics

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Analytics'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Analytics

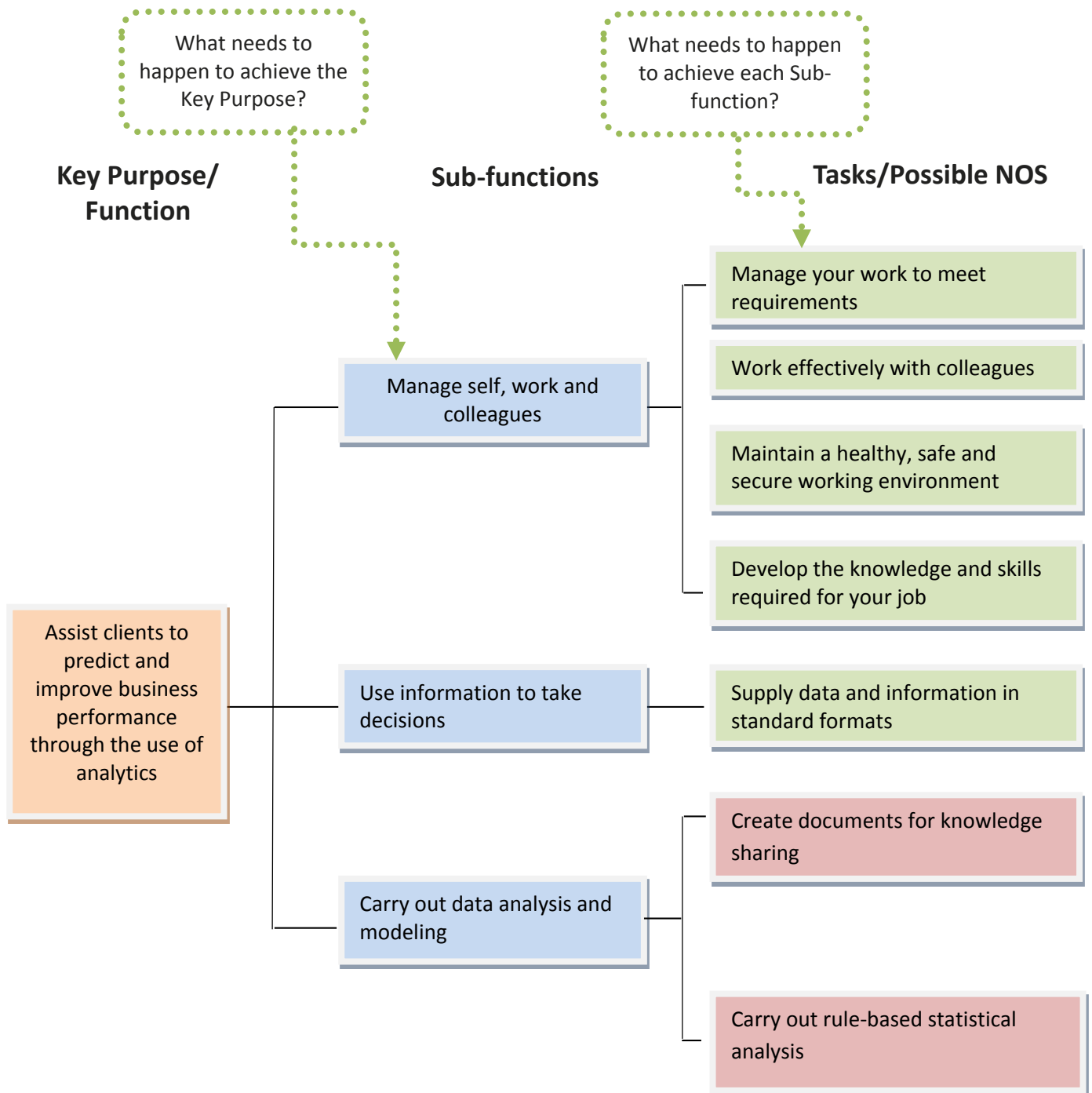
About the job role: Associate-Modeling and Analysis include the study of business data using statistical analysis to find trends and historical evidence to take informed decisions. The objective is to assist clients to predict and improve business performance in the future.



About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: Analytics

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Analytics
Function	Job role	Associate- Analytics Assist clients to predict and improve business performance through the use of analytics
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Carry out data analysis and modeling
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Work effectively with colleagues iii. Maintain a healthy, safe and secure working environment iv. Develop the knowledge and skills required for your job v. Supply data and information in standard formats vi. Create documents for knowledge sharing vii. Carry out rule-based statistical analysis

Functional Mapping for Associate: Analytics (Pictorial)



-  Specific Tasks/NOS mapping to the sub-function
-  Common Tasks/NOS mapping to the sub-function

*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Analytics

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Assist clients to predict and improve business performance through the use of analytics	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9004: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9003: Supply data and information in standard for mats
	Carry out data analysis and modeling	i. SSC/ N 0703: Create documents for knowledge sharing
		ii. SSC/ N 2101: Carry out rule-based statistical analysis



Functional Analysis-Associate: Clinical Data Management

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate Clinical Data Management'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Health Services

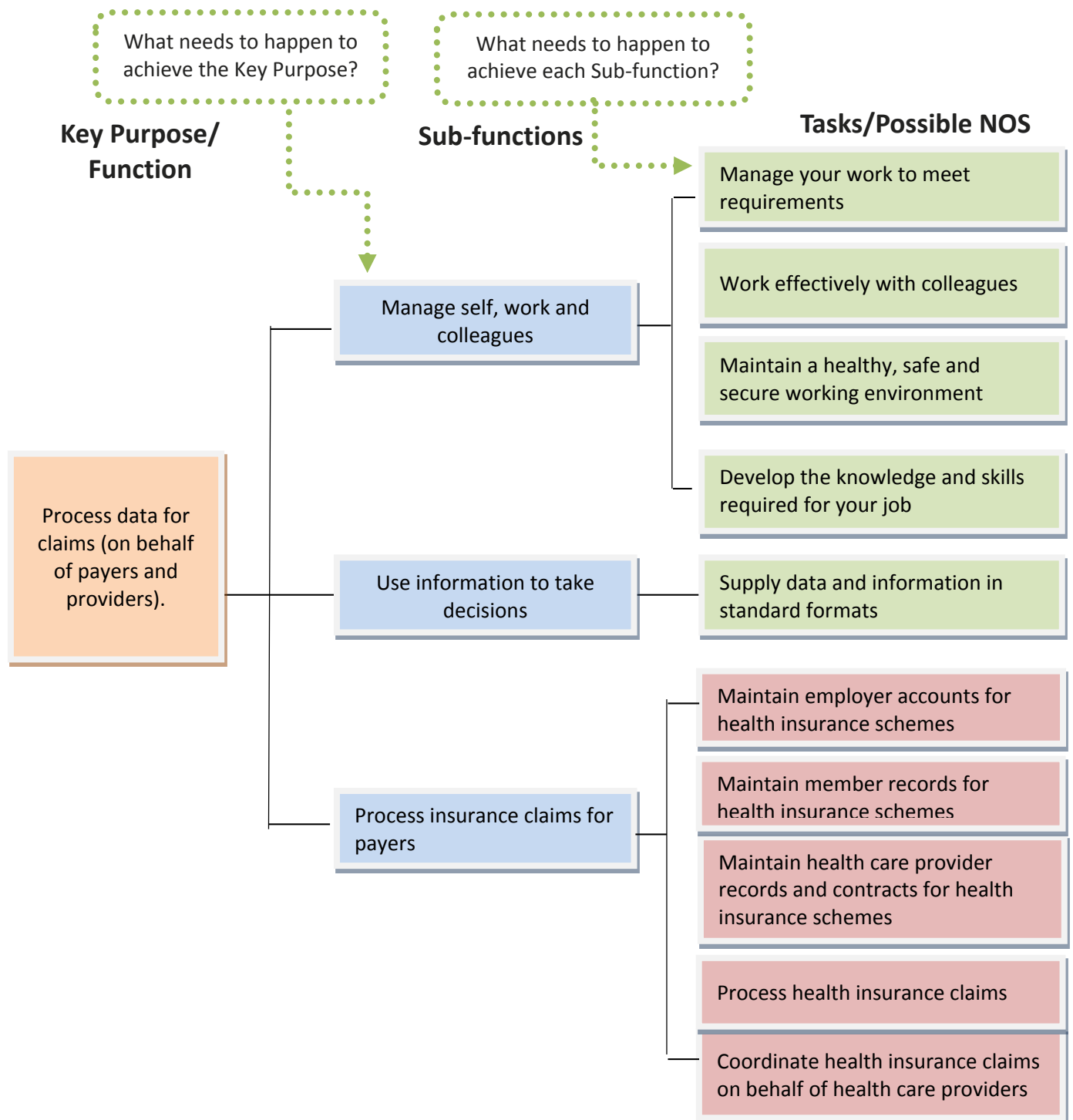
About the job role: Associates- Clinical Data Management are involved in the organization and maintenance of information relating to medical research and records. Professionals are required to ensure completeness, correctness and quality of the data generated during clinical trials with high accuracy.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: Clinical Data Management

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Health Services
Function	Job role	Associate- Clinical Data Services: Process data for claims (on behalf of payers and providers).
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Process insurance claims for payers 4) Generate invoices/claims for providers
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Maintain employer accounts for health insurance schemes vii. Maintain member records for health insurance schemes viii. Maintain health care provider records and contracts for health insurance schemes ix. Process health insurance claims x. Coordinate health insurance claims on behalf of health care providers

Functional Mapping for Associate: Clinical Data Management (Pictorial)



- Specific Tasks/NOS mapping to the sub-function
- Common Tasks/NOS mapping to the sub-function

*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Clinical Data Management

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Process data for claims (on behalf of payers and providers).	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9004: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9003: Supply data and information in standard for mats
	Process insurance claims for payers	i. SSC / N 2401: Maintain employer accounts for health insurance schemes
		ii. SSC / N 2402: Maintain member records for health insurance schemes
		iii. SSC / N 2403: Maintain health care provider records and contracts for health insurance schemes
		iv. SSC / N 2405: Process health insurance claims
		v. SSC / N 2409: Coordinate health insurance claims on behalf of health care providers

Functional Analysis-Associate: Medical Transcription

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate Medical Transcription'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Health Services

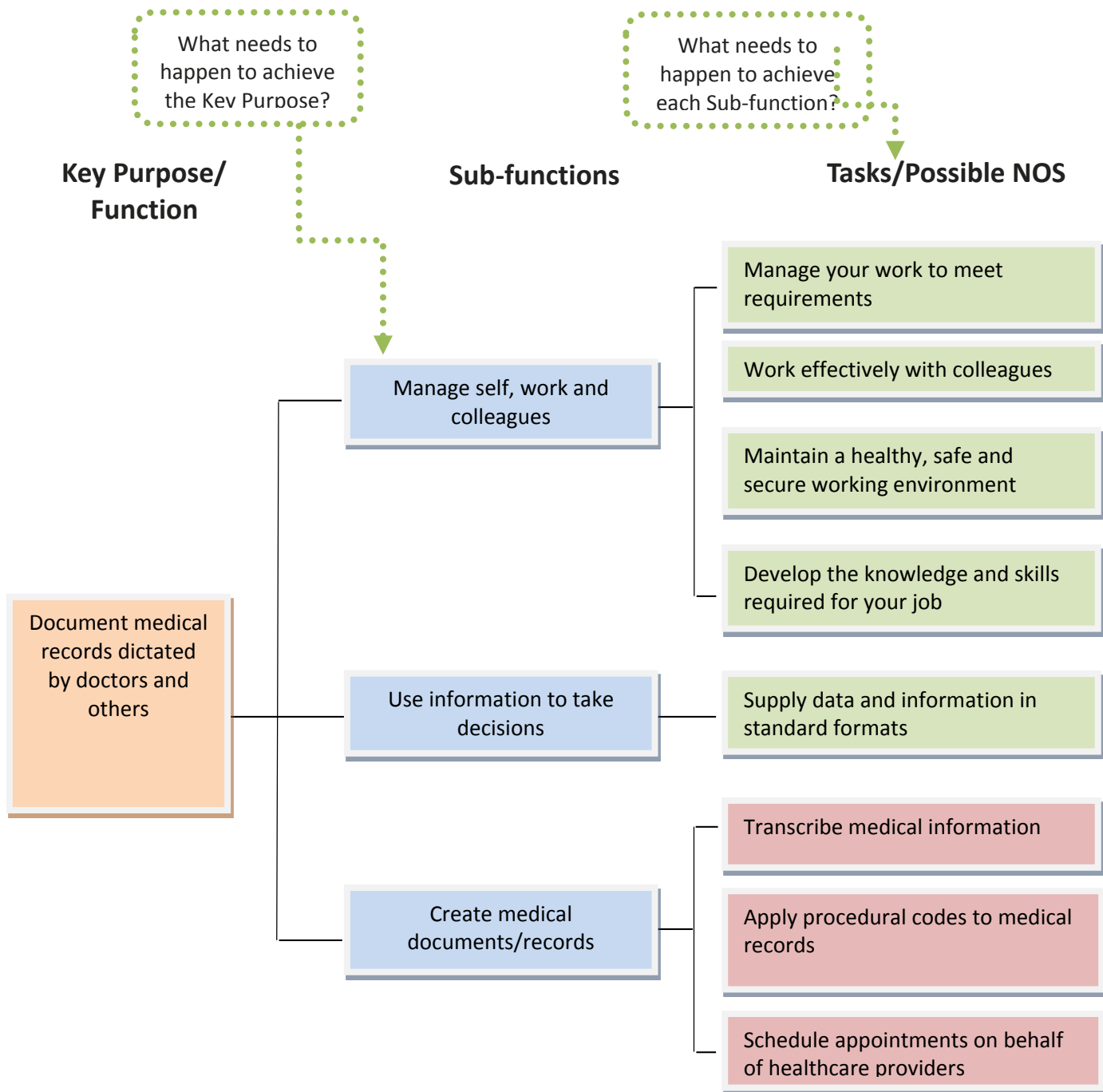
About the job role: Associates- Medical Transcription is involved in documentation of medical records dictated and authored by medical professionals. This involves basic documentation, verification and validation of the documents. It could include transcription of medical records dictated by doctors 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.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.


Methodology for Functional Analysis- Associate: Medical Transcription

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Health Services
Function	Job role	Associate- Medical Transcription: Document medical records dictated by doctors and others
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Create medical documents/records
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Transcribe medical information vii. Apply procedural codes to medical records viii. Schedule appointments on behalf of healthcare providers

Functional Mapping for Associate: Medical Transcription (Pictorial)



 Specific Tasks/NOS mapping to the sub-function

 Common Tasks/NOS mapping to the sub-function

*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Medical Transcription

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Document medical records dictated by doctors and others	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Create medical documents/records	i. SSC / N 2407: Transcribe medical information
		ii. SSC / N 2408: Apply procedural codes to medical records
		iii. SSC / N 2410: Schedule appointments on behalf of healthcare providers

Functional Analysis-Associate: Recruitment

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Recruitment'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Human Resource Outsourcing (HRO)

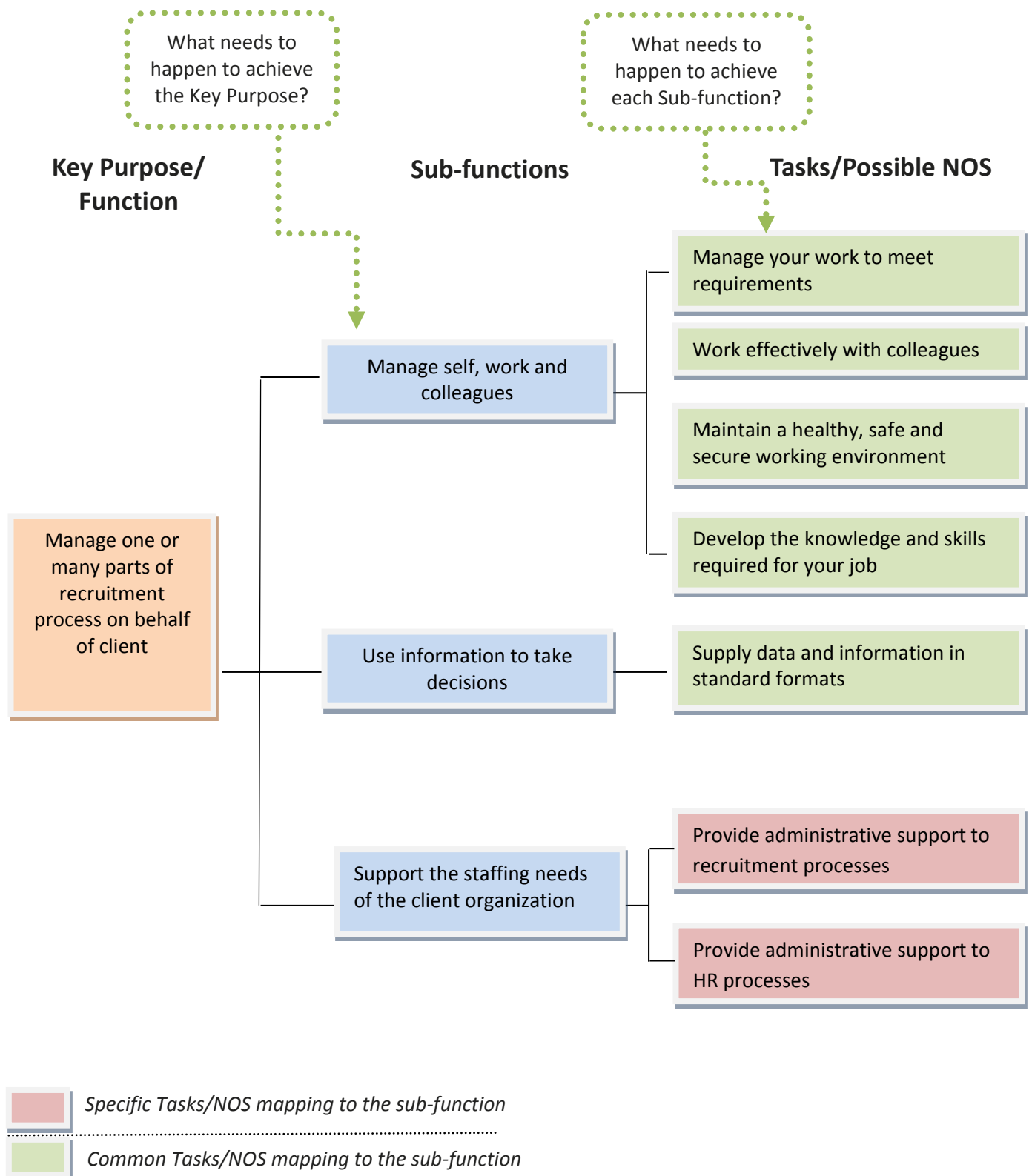
About the job role: Associate-Recruitment support the staffing needs of the Organization. These professionals are required to attract and employ the most appropriate candidates from the prospective employee pool. Some of the activities in this process include resume mining, background checks, and reference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

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: Recruitment

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Human Resource Outsourcing (HRO)
Function	Job role	Associate-Recruitment: Manage one or many parts of recruitment process on behalf of client
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Support the staffing needs of the client organization
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Provide administrative support to recruitment processes vii. Provide administrative support to HR Processes

Functional Mapping for Associate: Recruitment (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Recruitment

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Manage one or many parts of recruitment process on behalf of client	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9004: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9003: Supply data and information in standard for mats
	Support the staffing needs of the client organization	i. SSC / N 2501: Provide administrative support to recruitment processes
		ii. SSC / N 2502: Provide administrative support to HR Processes

Functional Analysis-Associate: HRO

Why Functional Analysis?

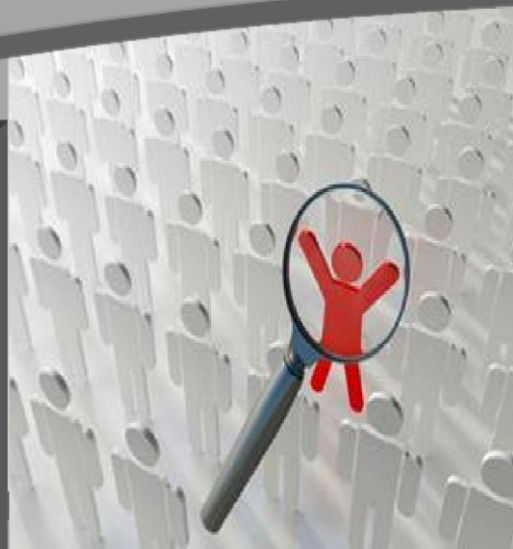
- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: HRO'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Human Resource Outsourcing (HRO)

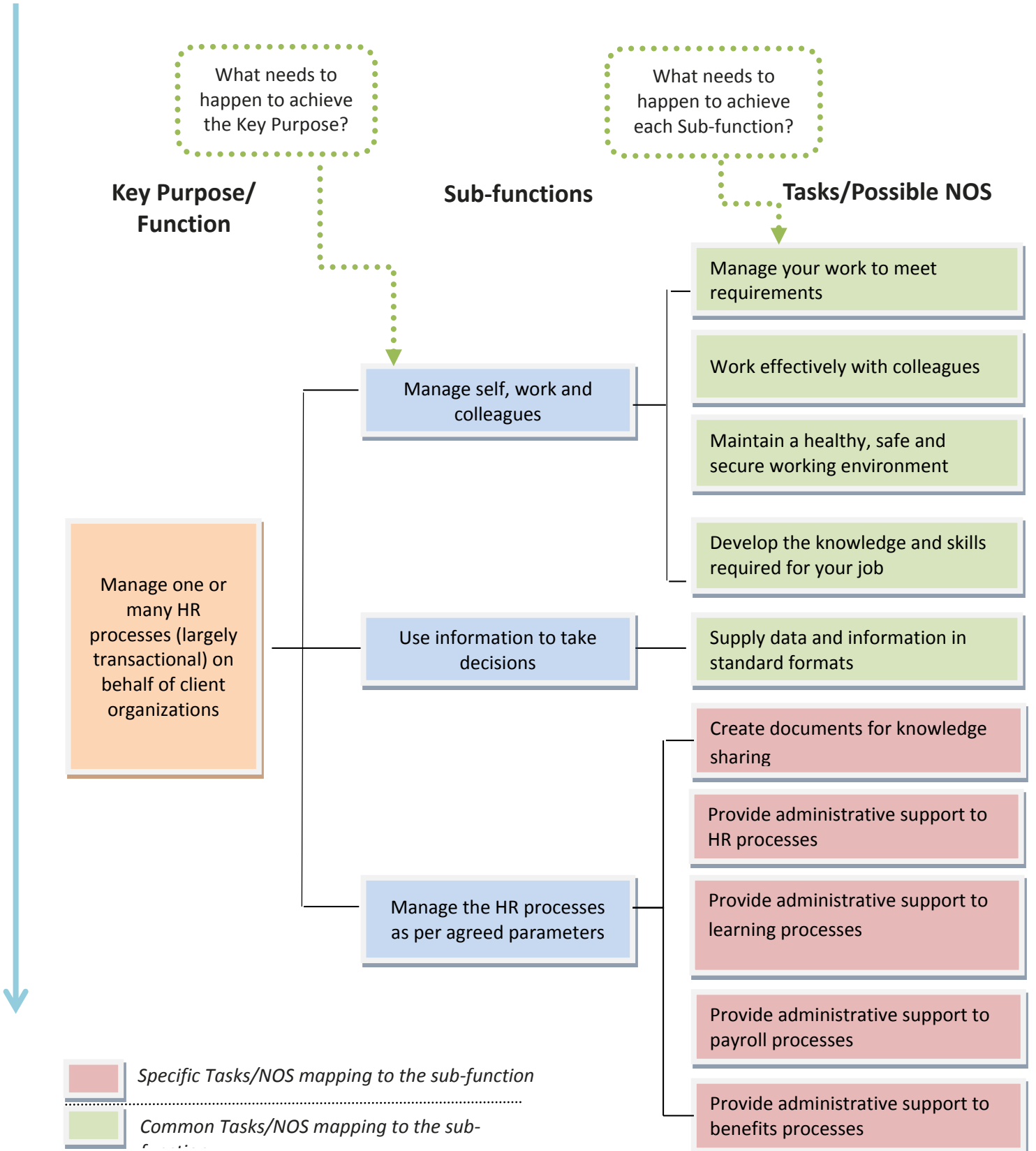
About the job role: Associate-HRO: provide advice and assistance in the area of human resource and personnel policies, practices, and procedures; employee benefits planning, communication, and administration; compensation systems planning; and wage and salary administration.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: HRO

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Human Resource Outsourcing
Function	Job role	Associate: HRO Manage one or many HR processes (largely transactional) on behalf of client organizations
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Manage the HR processes per agreed parameters
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Create documents for knowledge sharing vii. Provide administrative support to HR processes viii. Provide administrative support to Learning processes ix. Provide administrative support to Payroll processes x. Provide administrative support to Benefits processes

Functional Mapping for Associate: HRO (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: HRO

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Manage one or many HR processes (largely transactional) on behalf of client organizations	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Manage the HR processes as per agreed parameters	i. SSC / N 0703: Create documents for knowledge sharing
		ii. SSC / N 2502: Provide administrative support to HR processes
		iii. SSC / N 2503: Provide administrative support to learning processes
		iv. SSC / N 2504: Provide administrative support to payroll processes
		v. SSC / N 2505: Provide administrative support to benefits processes

Functional Analysis-Analyst: Research

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Analyst: Research'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Knowledge Services- Research

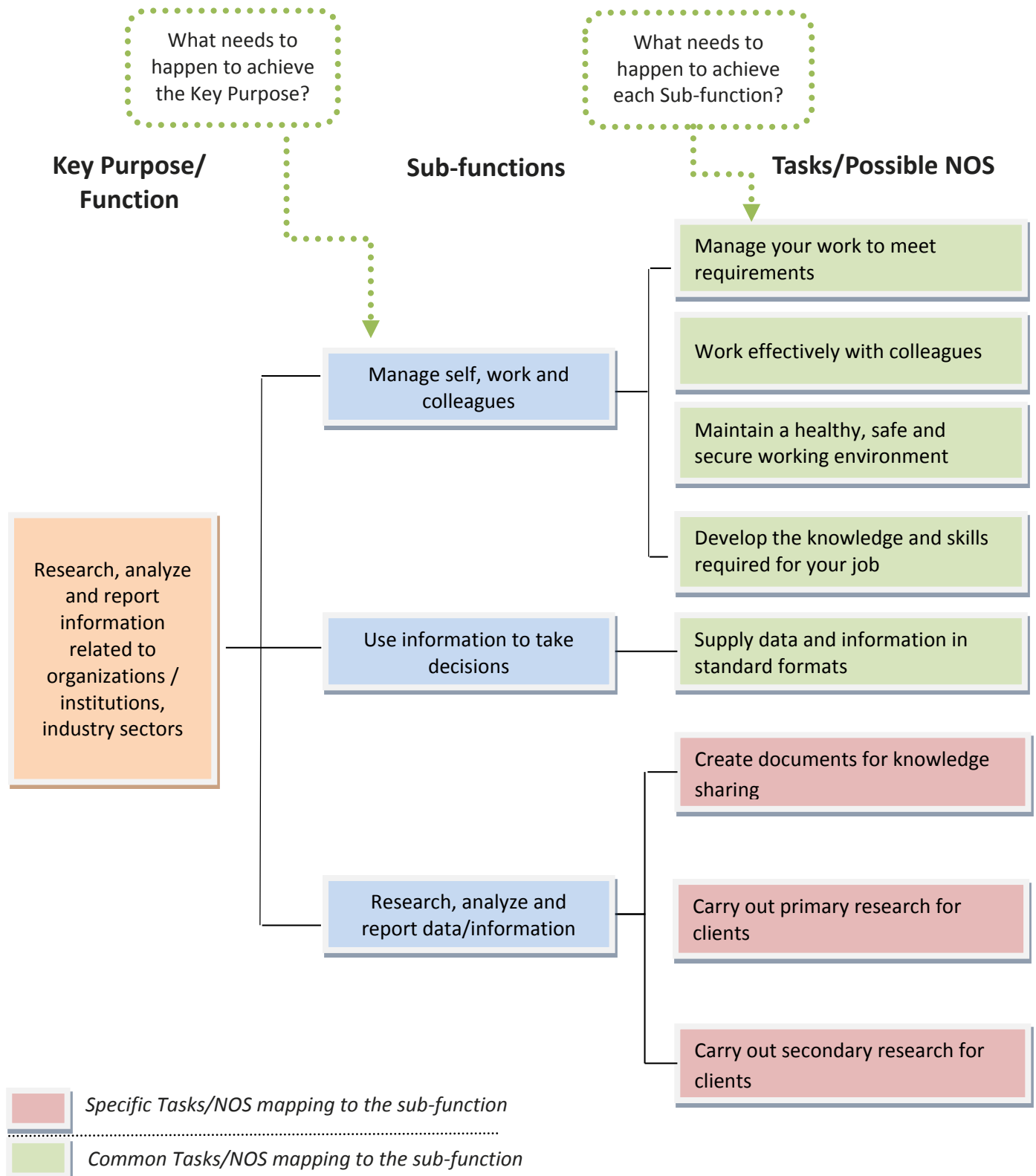
About the job role: Analysts-Research undertake activities catering to specialized research across sectors. They are generally involved in researching, analyzing and reporting information related to organizations / institutions, industry sectors, or economic conditions. There exists an element of domain expertise for some of these roles.

About the sub-sector: Business Process Management (BPM): BPM is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Analyst: Research

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Knowledge Services - Research
Function	Job role	Analyst – Research: Research, analyze and report information related to organizations / institutions, industry sectors
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Research, analyse and report data/information
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Work effectively with colleagues iii. Maintain a healthy, safe and secure working environment iv. Develop the knowledge and skills required for your job v. Supply data and information in standard formats vi. Create documents for knowledge sharing vii. Carry out primary research for clients viii. Carry out secondary research for clients

Functional Mapping for Analyst: Research (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Analyst: Research

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Research, analyze and report information related to organizations / institutions, industry sectors	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9004: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9003: Supply data and information in standard for mats
	Research, analyse and report data/information	i. SSC / N 2601: Carry out primary research for clients
		ii. SSC / N 2602: Carry out secondary research for clients
		iii. SSC / N 0703: Create documents for knowledge sharing



Functional Analysis-Associate: Learning

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate: Learning'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

About the job role: Associates-Learning basically work at Content Management and Instructional Design.

Content Management activities include researching, conceptualizing, writing and structuring e-learning courseware to facilitate effective, engaging and performance-enhancing learning.

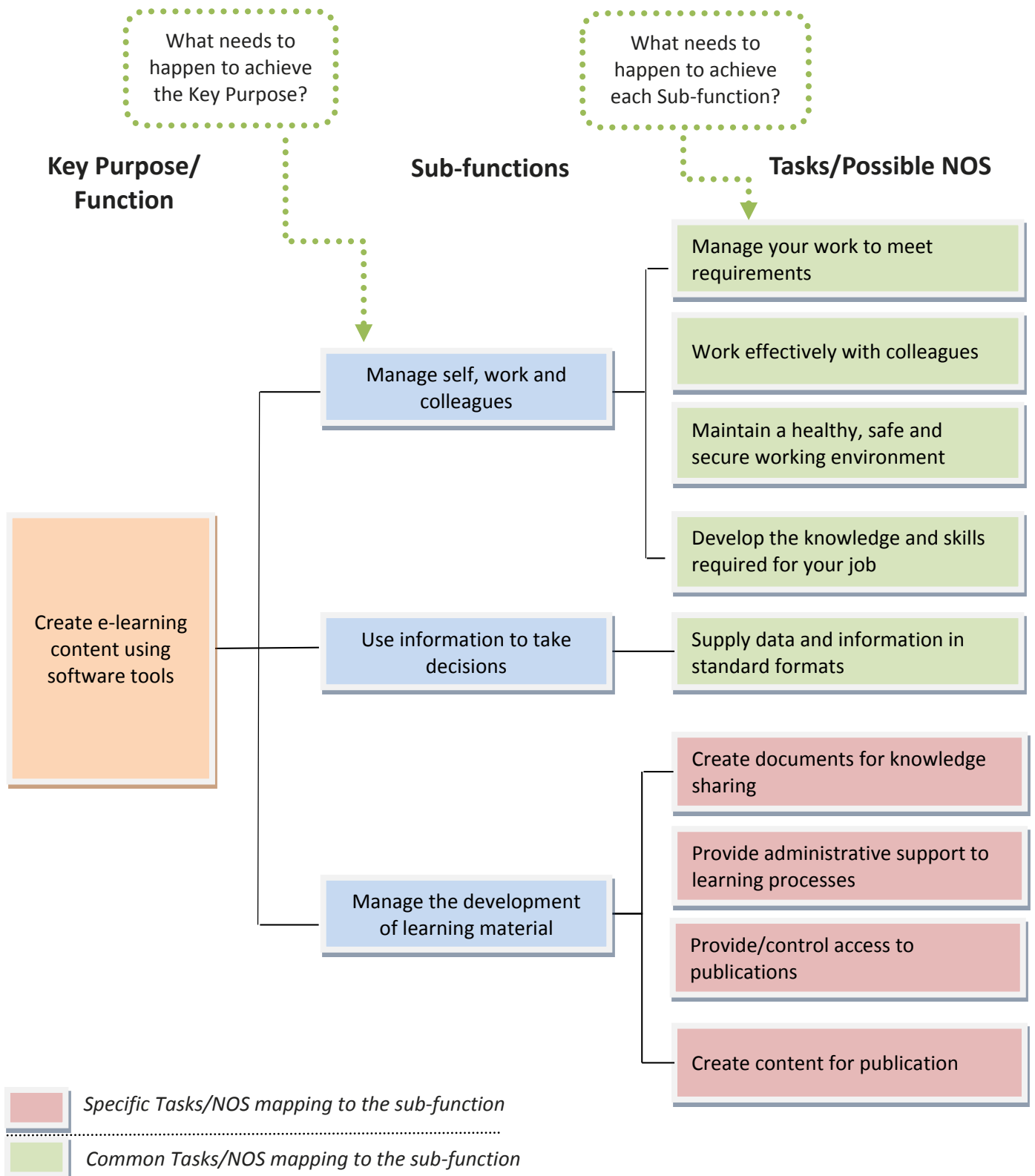
Instructional design activities include writing/repurposing content for online training courses and structuring of e-learning courseware to facilitate effective, engaging and performance-enhancing learning.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: Learning

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Learning
Function	Job role	Associate- Learning: Create e-learning content using software tools
Sub-function(s)		1) Manage self, work and colleagues 2) Use information to take decisions 3) Manage the development of learning material
Tasks/NOS		i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Create documents for knowledge sharing vii. Provide administrative support to learning processes viii. Provide/control access to publications ix. Create content for publication

Functional Mapping for Associate: Learning (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Learning

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Create e-learning content using software tools	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Manage the development of learning material	i. SSC / N 0703: Create documents for knowledge sharing
		ii. SSC / N 2503: Provide administrative support to learning processes
		iii. SSC / N 2702: Provide/control access to publications
		iv. SSC / N 2801: Create content for publication

Functional Analysis-Associate: Editorial

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate: Editorial'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Editorial and Desktop Publishing

About the job role: Associate-Editorial checks grammatical errors and edits the research reports. Professionals in this occupation may work on content created by someone else. The reports could be sector reports, statistical analysis, etc.

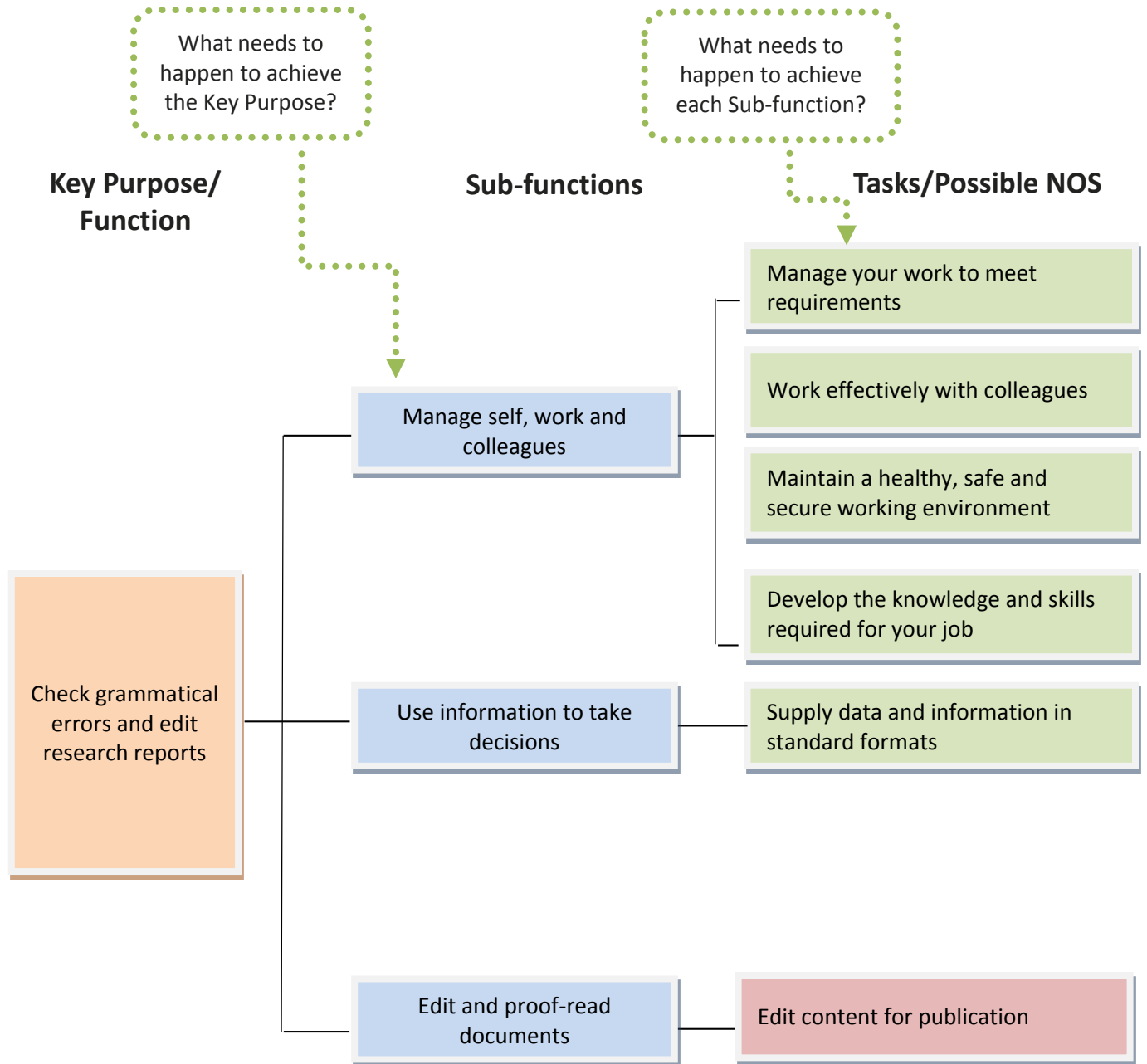
Editorial team puts it into readable form with grammar checks, checklists driven and thus put matter into logical flow.


About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: Editorial

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Editorial and Desktop Publishing
Function	Job role	Associate- Editorial: Check grammatical errors and edit research reports
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Edit and proof-read documents
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Edit content for publication

Functional Mapping for Associate: Editorial (Pictorial)



 Specific Tasks/NOS mapping to the sub-function

 Common Tasks/NOS mapping to the sub-function

Functional Mapping for Associate: Editorial

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Check grammatical errors and edit research reports	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard formats
	Edit and proof-read documents	i. SSC / N 2701: Edit content for publication

Functional Analysis Associate: DTP

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:
osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping (Template)

Introduction

Functional Analysis, 'Associate: Desk Top Publishing (DTP)'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Editorial and Desktop Publishing

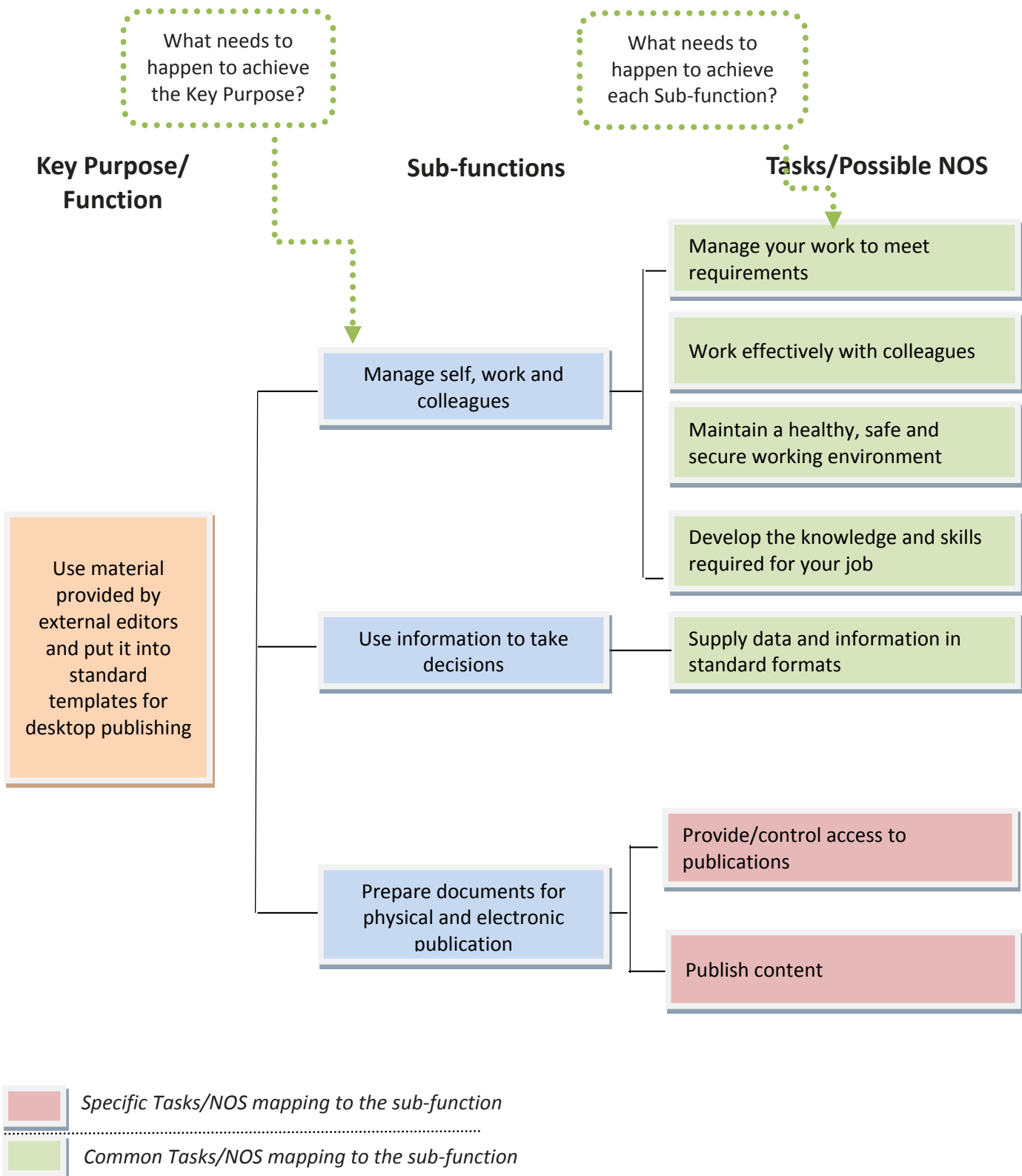
About the job role: Associates-Depot research reports into flash, macromedia, acrobat, or html, work with existing templates and do not do independent design work. Their work is to use material provided by external editors (in editorial team) and put it into standard templates.

About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Associate: DTP

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Editorial and Desktop Publishing
Function	Job role	Associate- DTP: Use material provided by external editors and put it into standard templates for desktop publishing
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Prepare documents for physical and electronic publication
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Work effectively with colleagues iii. Maintain a healthy, safe and secure working environment iv. Develop the knowledge and skills required for your job v. Supply data and information in standard formats vi. Provide/control access to publications vii. Publish content

Functional Mapping for Associate DTP (Pictorial)



*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Associate DTP

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Use material provided by external editors and put it into standard templates for desktop publishing	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Prepare documents for physical and electronic publication	i. SSC / N 2702: Provide/control access to publications
ii. SSC / N 2703: Publish content		

Functional Analysis-Associate: Document Coder/Processor

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Associate: Document Coder/Processor'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Legal Services

About the job role: Document Processors assist in the delivery of legal services by processing, organizing and storing large volumes of documents

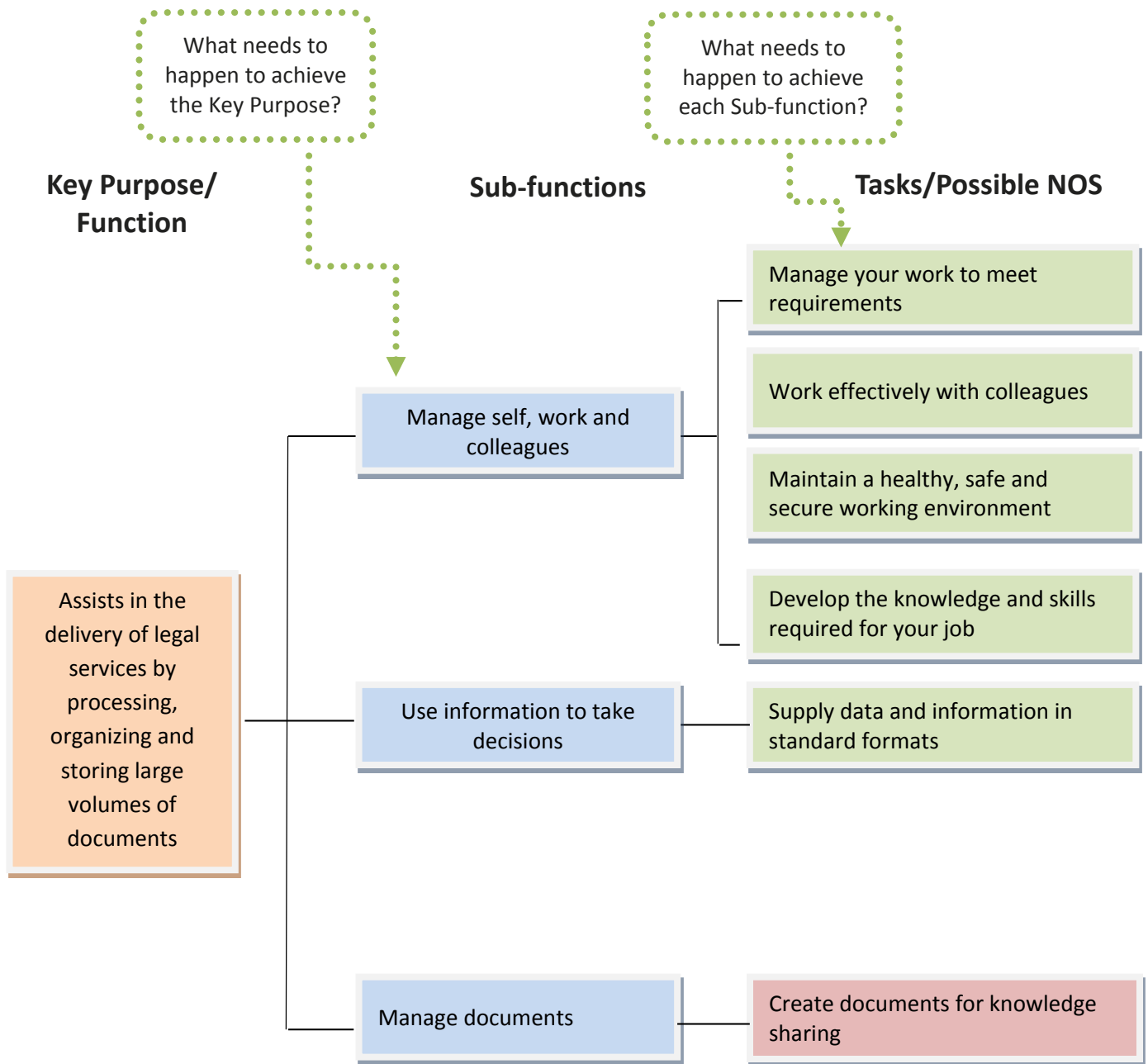
About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis- Associate: Document Coder/Processor

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Legal Services
Function	Job role	Document Coder/ Processor: Assists in the delivery of legal services by processing, organizing and storing large volumes of documents
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Manage documents
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Create documents for knowledge sharing



Functional Mapping for Document Coder/Processor (Pictorial)



- Specific Tasks/NOS mapping to the sub-function
- Common Tasks/NOS mapping to the sub-function

*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

SCM Functional Mapping for Associate: Document Coder/ Processor

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Assist in the delivery of legal services by processing, organizing and storing large volumes of documents	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9003: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9004: Supply data and information in standard for mats
	Manage documents	i. SSC / N 0703: Create documents for knowledge sharing

Functional Analysis-Legal Associate

Why Functional Analysis?

- Functional Analysis defines the nature of an occupation in a sector and the functions performed within it
- Functional Analysis helps break down any area of work until the functions that individuals are expected to perform – in other words what people need to be able to do

Contact us:

IT-ITeS SSC NASSCOM

Email:

osproject@nasscom.in



Contents

1. Methodology for Functional Mapping
2. Functional Mapping (Pictorial)
3. Functional Mapping

Introduction

Functional Analysis, 'Legal Associate'

SECTOR: IT-BPM

SUB-SECTOR: Business Process Management (BPM)

OCCUPATION: Legal Services

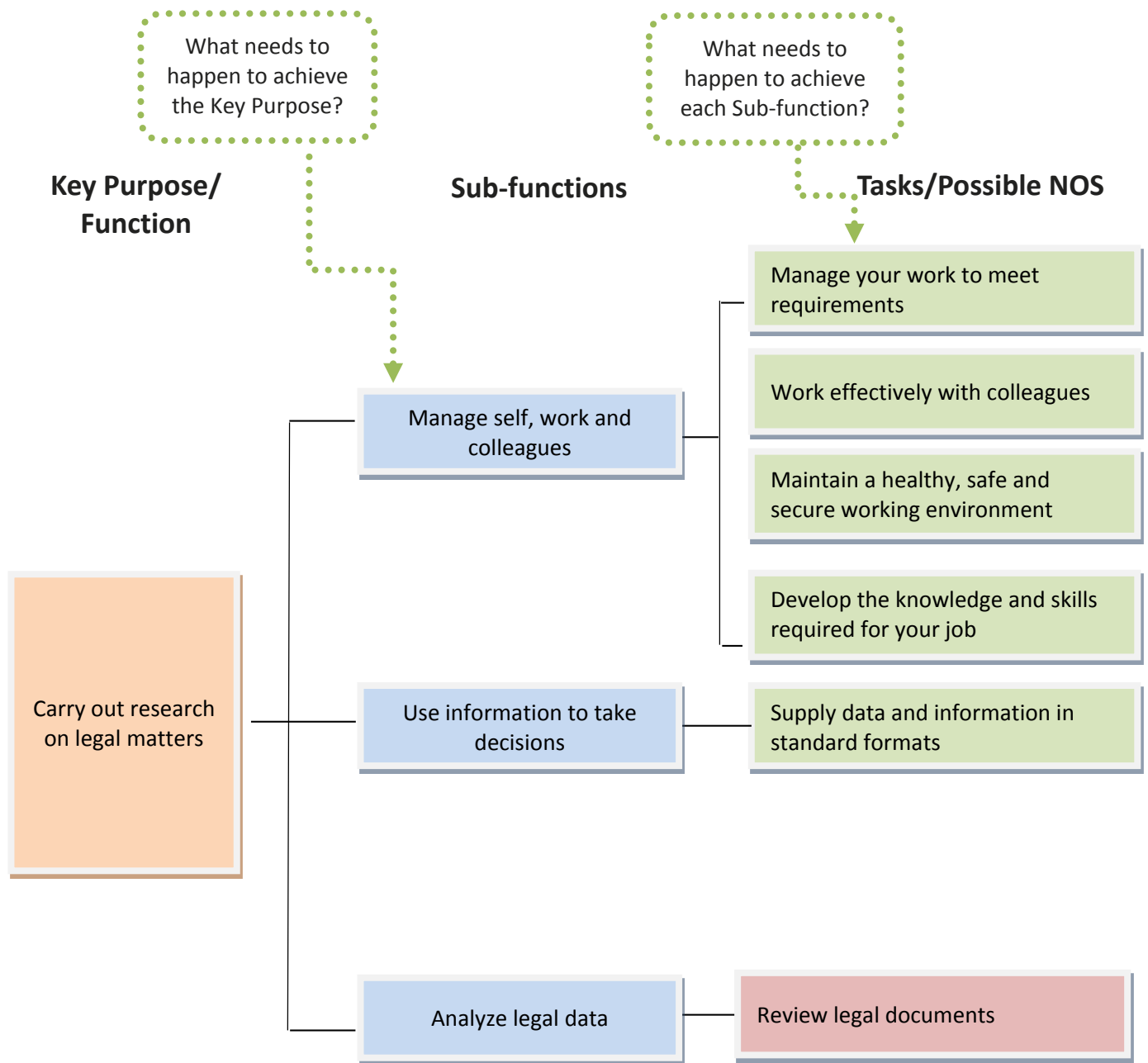
About the job role: Legal Associate assists in the delivery of legal services, review of large volumes of litigation documents for international law firms and corporate legal departments. The most commonly offered services have been agency work, document review, legal research and writing and drafting of pleadings and briefs and patent services.



About the sub-sector: Business Process Management (BPM) is the management of one or more business processes by an external organisation that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics.

Methodology for Functional Analysis-Legal Associate

Items	Alternate Acceptable Usage	Example
Sector	Industry	IT-BPM
Sub-sector	NA	Business Process Management
Occupation	NA	Legal Services
Function	Job role	Legal Associate: Carry out research on legal matters
Sub-function(s)		<ol style="list-style-type: none"> 1) Manage self, work and colleagues 2) Use information to take decisions 3) Analyze legal data
Tasks/NOS		<ol style="list-style-type: none"> i. Manage your work to meet requirements ii. Develop the knowledge and skills required for your job iii. Work effectively with colleagues iv. Supply data and information in standard formats v. Maintain a healthy, safe and secure working environment vi. Review legal documents

Functional Mapping for Legal Associate (Pictorial)



-  Specific Tasks/NOS mapping to the sub-function
-  Common Tasks/NOS mapping to the sub-function

*****Note:** A set of Tasks/ Possible NOS can be part of one or multiple Sub-functions. This means that a possible NOS or Task may appear under multiple Sub-functions.

Functional Mapping for Associate: Legal Associate

Key Purpose of the Job/ Function	Sub-functions	Tasks/National Occupational Standards (NOS)
Carry out research on legal matters	Manage self, work and colleagues	i. SSC / N 9001: Manage your work to meet requirements
		ii. SSC / N 9002: Work effectively with colleagues
		iii. SSC / N 9004: Maintain a healthy, safe and secure working environment
		iv. SSC / N 9005: Develop the knowledge and skills required for your job
	Use information to take decisions	i. SSC / N 9003: Supply data and information in standard formats
		i. SSC / N 2901: Review legal documents

Next Steps

Functional Analysis leads to the identification of tasks/ activities / Functions for each of the 67 entry level Job-roles across the IT-BPM industry. These entry level functions have been derived after numerous levels of disaggregation from the occupation definitions, Job-roles and competencies and are therefore indicative of the possible titles for the National Occupational Standards. They help identify the skills and competencies required for these entry level Job-roles as well as the levels of knowledge required.

The functions identified through the process of Functional Analysis have been listed below. For ease of reference, these have been split into Generic functions or functions that are common across the IT-BPM Industry and Technical functions or functions that are specific to each sub-sector of the IT-BPM industry.

Generic Functions

(Common across all four Sub-sectors)

No.	NOS Code	Function / Tasks
1	SSC/ N 9001	Manage your work to meet requirements
2	SSC/ N 9005	Develop your knowledge, skills and competence
3	SSC/ N 9002	Work effectively with colleagues
4	SSC/ N 9004	Provide data/information in standard formats
5	SSC/ N 9003	Maintain a healthy, safe and secure working environment

Technical Functions for BPM Sub-sector

S No.	NOS Code	Function / Task
1	SSC/ N 0703	Create documents for knowledge sharing
2	SSC/ N 2801	Create content for publication
3	SSC/ N 2701	Edit content for publication
4	SSC/ N 2702	Provide/control access to publications
5	SSC/ N 2703	Publish content
6	SSC/ N 3001	Convert customer enquiries into sales
7	SSC/ N 3002	Make outbound telesales calls
8	SSC/ N 3003	Deal remotely with customer queries
9	SSC/ N 2301	Maintain vendor accounts
10	SSC/ N 2302	Process invoices, credit notes and claims
11	SSC/ N 2303	Pay invoices and claims
12	SSC/ N 2304	Deal with queries at the accounts payable helpdesk
13	SSC/ N 2305	Maintain customer accounts
14	SSC/ N 2306	Generate invoices and credit notes
15	SSC/ N 2307	Receive payments and apply cash
16	SSC/ N 2308	Collect payments over the telephone
17	SSC/ N 2309	Deal with queries at the accounts receivable helpdesk
18	SSC/ N 2501	Provide administrative support to recruitment processes
19	SSC/ N 2502	Provide administrative support to HR processes
20	SSC/ N 2503	Provide administrative support to learning processes
21	SSC/ N 2504	Provide administrative support to payroll processes
22	SSC/ N 2505	Provide administrative support to benefits processes
23	SSC/ N 3101	Maintain master data records for supply chain management
24	SSC/ N 3102	Contribute to procurement processes
25	SSC/ N 3103	Provide analytical support for supply chain management
26	SSC/ N 3104	Fulfill customer orders
27	SSC/ N 2601	Carry out primary research for clients
28	SSC/ N 2602	Carry out secondary research for clients
29	SSC/ N 2101	Carry out rule-based statistical analysis
30	SSC/ N 2401	Maintain employer accounts for health insurance schemes
31	SSC/ N 2402	Maintain member records for health insurance schemes
32	SSC/ N 2403	Maintain health care provider records and contracts for health insurance schemes
33	SSC/ N 2405	Process health insurance claims
34	SSC/ N 2407	Transcribe medical information
35	SSC/ N 2408	Apply procedural codes to medical records
36	SSC/ N 2409	Coordinate health insurance claims on behalf of health care providers
37	SSC/ N 2410	Schedule appointments on behalf of healthcare providers
38	SSC/ N 2901	Review legal documents

Annexure A: NVEQF level descriptors

Level	General Education Qualifications MHRD-AICTE , UGC	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
1	Class IX (Pre-vocational)	prepares person to carry out process that are repetitive and require no previous practice	familiar with common trade-related terminologies, words meaning & understanding	Routine and repetitive, takes safety and security measures.	reading and writing, addition subtraction personal financing, familiarity with social and religious diversity, hygiene and environment	no responsibility, always works under continuous instruction and close supervision
2	Class X (Pre-vocational)	prepares person to/carry out process that are repetitive on regular basis with little application of understanding, more of practice	Material tools and application in a limited context, understands context of work and quality	limited service skill used in limited context, select and apply tools, assist in professional works with no variables differentiates good and bad quality	receive and transmit written and oral messages, basic arithmetic personal financing understanding of social political and religious diversity, hygiene and environment	no responsibility works under instruction and close supervision
3 Semi-skilled worker	Class XI (General Academic/ Vocational Education)	person may carry out a job which may require limited range of activities routine and predictable	Basic facts, process and principle applied in trade of employment	recall and demonstrate practical skill, routine and repetitive in narrow range of application	Communication written and oral, with minimum required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment	Under close supervision. Some responsibility for own work within defined limit.

Level	General Education Qualifications MHRD-AICTE , UGC	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
4 Skilled-worker	Class XII (General Academic/Vocational Education)	work in familiar, predictable, routine, situation of clear choice	factual knowledge of field of knowledge or study	recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	language to communicate written or oral, with required clarity, skill to basic arithmetic and algebraic principles, basic understanding of social political and natural environment	Responsibility for own work and learning
5 Supervisor	Diplomas	job that require well developed skill, with clear choice of procedures in familiar context	Knowledge of facts, principles, processes and general concepts, in a field of work or study.	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Desired mathematical skill, understanding of social, political and some skill of collecting and organizing information, communication	responsibility for own work and learning and some responsibility for other 's works and learning
6 Master technician/trainer	Graduate Certificates/Advanced Diplomas	demands wide range of specialized technical skill, clarity of knowledge and practice in broad range of activity involving standard non-standard	factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Reasonably good in mathematical calculation, understanding of social, political and, reasonably good in data collecting organizing information, and logical communication	Responsibility for own work and learning and full responsibility for other 's works and learning

Level	General Education Qualifications MHRD-AICTE , UGC	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
		practices				
7 Graduates	Bachelor Degrees and Graduate Diplomas	requires a command of wide ranging specialized theoretical and practical skill, involving variable routine and non-routine context.	wide ranging , factual and theoretical knowledge in broad contexts within a field of work or study	wide range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	good logical and mathematical skill, understanding of social political and natural environment good in collecting and organizing information, communication skill	full responsibility for output of group and development
8 Honours	Post Graduate Certificates, Post Graduate Diplomas and Bachelor Degrees (Honours)	Comprehensive, cognitive, theoretical knowledge and practical skills to develop creative solutions, to abstract problem. Undertakes self-study, demonstrates intellectual independence, analytical rigor and good communication.			Exercise management and supervision in the context of work/study having unpredictable changes, responsible for development of self and others.	
9 Master	Masters	Advanced Knowledge and skill. Critical understanding of the subject, demonstrating mastery and innovation, completion of substantial research and dissertation.			Responsible for decision making in complex technical activities, involving unpredictable study/work situations.	

Level	General Education Qualifications MHRD-AICTE , UGC	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
10 Doctorate	Doctorates	Highly specialized knowledge and problem solving skill to provide original contribution to knowledge through research and scholarship.			Responsible for strategic decisions in unpredictable complex situations of work/study. (Source: Report on NVQ of DGET, Ministry of Labour and Employment, GOI).	