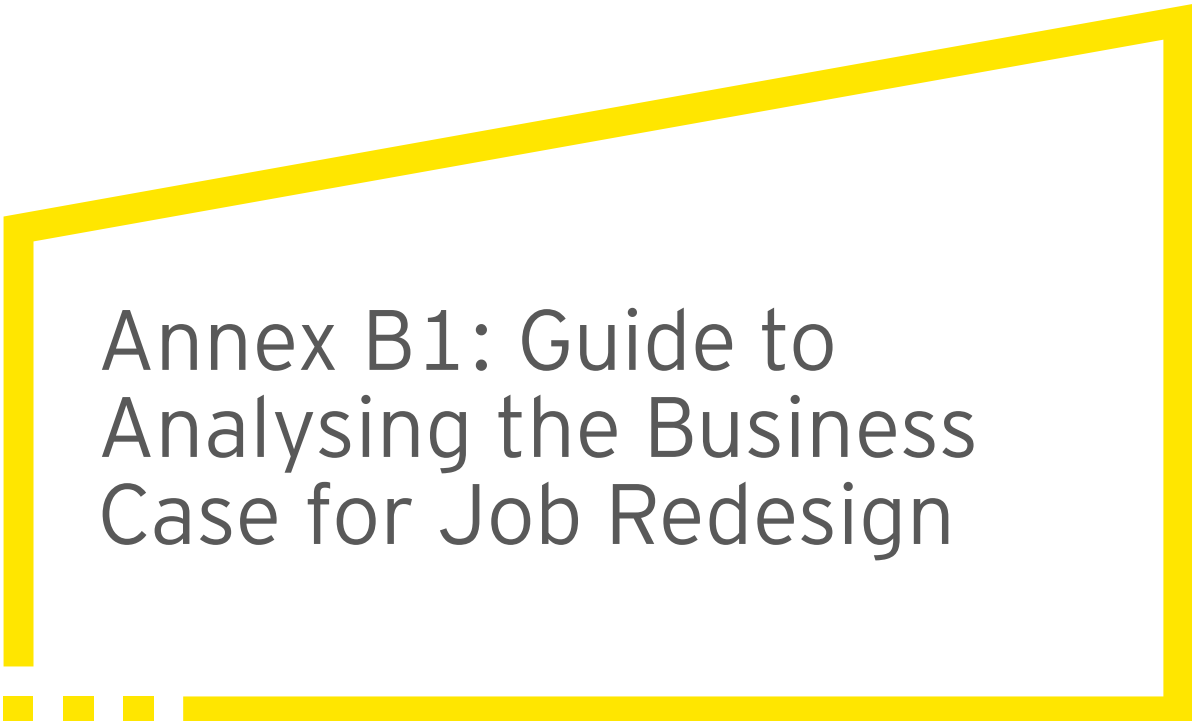


Study of the Impact of Industry 4.0 on Singapore's Logistics Workforce

Annex B: Guidelines for Job Redesign
June 2020

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Annex B1: Guide to Analysing the Business Case for Job Redesign



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Annex B1: Guide to Analysing the Business Case for Job Redesign

Overview

DESCRIPTION:

This template will help Human Resource practitioners summarise the key details of a Job Redesign exercise and assess its business viability, to assist in obtaining stakeholder buy-in.

In addition to the provided template, an effective business case would identify viable alternatives for the Job Redesign effort and assess the risks and mitigation options for each alternative.

TEMPLATES PROVIDED IN THIS TOOLKIT

EXECUTIVE SUMMARY		
BUSINESS DIRECTION <i>Current State</i>	GAP / CHALLENGE	JOB REDESIGN SOLUTION
<i>Desired State</i>	COST	EXECUTION TIMELINE
TARGET AREAS / AUDIENCE	BENEFITS	
PROJECT TEAM		

INSTRUCTIONS

To build the business case for Job Redesign, gather and summarise the following insights in the provided template:

- The current and desired state of the business and its direction
- Key gaps and challenges to be addressed
- Broad Job Redesign interventions to address these gaps
- Broad estimates of the necessary costs and resulting benefits
- Planning of the stakeholders involved (including target functional areas and project team members)
- A brief estimate of the execution timeline

OUTCOME

- Alignment of Job Redesign effort with business goals
- Initial but comprehensive summary of the Job Redesign value proposition
- Stakeholder buy-in for the Job Redesign effort

Annex B1: Guide to Analysing the Business Case for Job Redesign

Instructions

INSTRUCTIONS

Gather and summarise the following insights, as shown in the template below (template available on the next page):

- The current and desired state of the business direction
- Key gaps and challenges to be addressed
- Broad Job Redesign interventions to address these gaps
- Approximate estimates of the necessary costs and resulting benefits
- Planning of the stakeholders involved (including target functional areas and project team members)
- A brief estimate of the execution timeline

EXECUTIVE SUMMARY		
BUSINESS DIRECTION <i>Current State</i>	GAP / CHALLENGE	JOB REDESIGN SOLUTION
<i>Desired State</i>	COST	EXECUTION TIMELINE
TARGET AREAS / AUDIENCE	BENEFITS	
PROJECT TEAM		

Annex B1: Guide to Analysing the Business Case for Job Redesign

Template



Annex B1: Guide to Analysing the Business Case for Job Redesign

Template (Sample)

SAMPLE

EXECUTIVE SUMMARY

- Identify opportunities to cross-train employees across functions for a more flexible and agile staffing pool
- Identify opportunities to leverage technology and digitalise warehouse operations for increased productivity and efficiency

BUSINESS DIRECTION

Current State

- Revenue centric operating model
- Limited technology usage in labour-intensive processes

Desired State

- Customer centric operating model
- Lean and agile workforce
- Optimised processes through technology implementation

TARGET AREAS / AUDIENCE

- Warehouse Officers
- Warehouse Supervisors

PROJECT TEAM

- Human Resources Specialist
- Warehouse Operations Manager
- Head of Operations

GAP / CHALLENGE

- Teams working in silos in the warehouse and limited talent in the market have resulted in a large number of employees with focused competencies
- Lack of technology implementation resulted in manual warehouse planning and storage utilization processes

COST

Item	Current	After Job Redesign
Headcount	30	15 operators
Labour hours	8 hrs/day/staff	8 hrs/day/staff
Technology implementation cost	Nil	\$300,000
Training and development cost	\$200 / staff	\$600 / staff

BENEFITS

Item	Current	After Job Redesign
Time required for day-to-day warehouse operation planning	4 hours	2 hours
Manpower required to monitor	8 pax	4 pax
Quality of products
Process improvements

JOB REDESIGN SOLUTION

Restructuring and capability development

- Cross-train employees across functions to collapse redundant roles and create a more flexible and agile staffing pool

Technology integration and digitalisation

- Implement new technologies to enhance productivity, efficiency and quality of output

EXECUTION TIMELINE

Milestone	Jan	Feb	Mar	Apr	May	Jun	Jul
Kickoff and stakeholder buy-in	█						
Diagnosis (Stakeholder interviews, Job shadowing)	█	█					
Diagnosis (Operational diagnostics, prioritisation and recommendation)		█	█				
Design (action plan, change agenda, performance metrics)			█	█			
Implementation (project roll out and change management interventions)				█	█		
Post Job Redesign monitoring and iterations						█	
Analysis and final report							█



Annex B2: Guide to Job Shadowing



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Annex B2: Guide to Job Shadowing

Overview

DESCRIPTION:

This template will help Human Resource (HR) practitioners record and summarise observations obtained from job shadowing as part of a "Diagnose" activity within a Job Redesign exercise.

Job shadowing offers an opportunity for HR practitioners to identify parts of a job role that can be changed and/or supplemented by technology to improve workflow. Job shadowing can also be conducted after a new technology has been implemented, to guide required Job Redesign efforts.

TEMPLATES PROVIDED IN THIS TOOLKIT

	Job Roles	Processes	New Tasks	Remarks
Observations				

INSTRUCTIONS

To identify opportunities for improvement in an existing workflow, the day-to-day work of a job incumbent can be observed by conducting job shadowing. To do so, an HR practitioner (or equivalent) should shadow a job incumbent and take note of:

- Job roles that appear to be most impacted (or can be impacted) by implementation of technology
- Key tasks being carried out by the job incumbent within the job role
- The changes in processes based on the implementation of technology, or ways in which work processes can be further improved
- Other tasks that can be conducted by the job incumbent in the event of time being freed up due to the impact of technology and process changes

OUTCOME

- Identify which job roles are most impacted by the implementation of technology, and how they are impacted.
- Identify ways in which work processes can be made more efficient.
- Identify what else the job incumbent can work on if their time is freed up through process changes.

Annex B2: Guide to Job Shadowing

Instructions

INSTRUCTIONS

To identify opportunities for improvement in an existing workflow, the day-to-day work of a job incumbent can be observed by conducting job shadowing. To do so, a Human Resource practitioner (or equivalent) should shadow a job incumbent and take note of:

- Job roles that appear to be most impacted (or can be impacted) by implementation of technology.
- Key tasks being carried out by the job incumbent within the job role.
- The changes in processes based on the implementation of technology, or ways in which work processes can be further improved.
- Other tasks that can be conducted by the job incumbent in the event of time being freed up due to the impact of technology and process changes.

	Job Roles	Processes	New Tasks	Remarks
Observations				

Annex B2: Guide to Job Shadowing

Template

	Job Roles	Processes	New Tasks	Remarks
Observations				

Annex B2: Guide to Job Shadowing

Template (Sample)

SAMPLE

	Job Roles	Processes	New Tasks	Remarks
Observations	Warehouse Supervisor	Manually records inventory count and monitor warehouse operations.	<p>Actively uses RFID-logging, barcode scanning and sensor technology to records inventory count.</p> <p>Uses advanced analytics to gain insights on warehouse processes and areas for improvement.</p>	<p>Reduction in time spent conducting manual recording. Time can be diverted to value-add tasks such process improvement.</p> <p>Tap on advanced analytics for more accurate reporting with less human errors to enhance overall warehouse operations efficiency.</p>
		Uses conventional tools (e.g. paper and pen) to conduct warehouse quality, safety and risk assessment	Uses dashboards quality, safety and risk monitoring tool to generate investigation reports.	



Annex B3: Guide to Change Management Plan and Approach



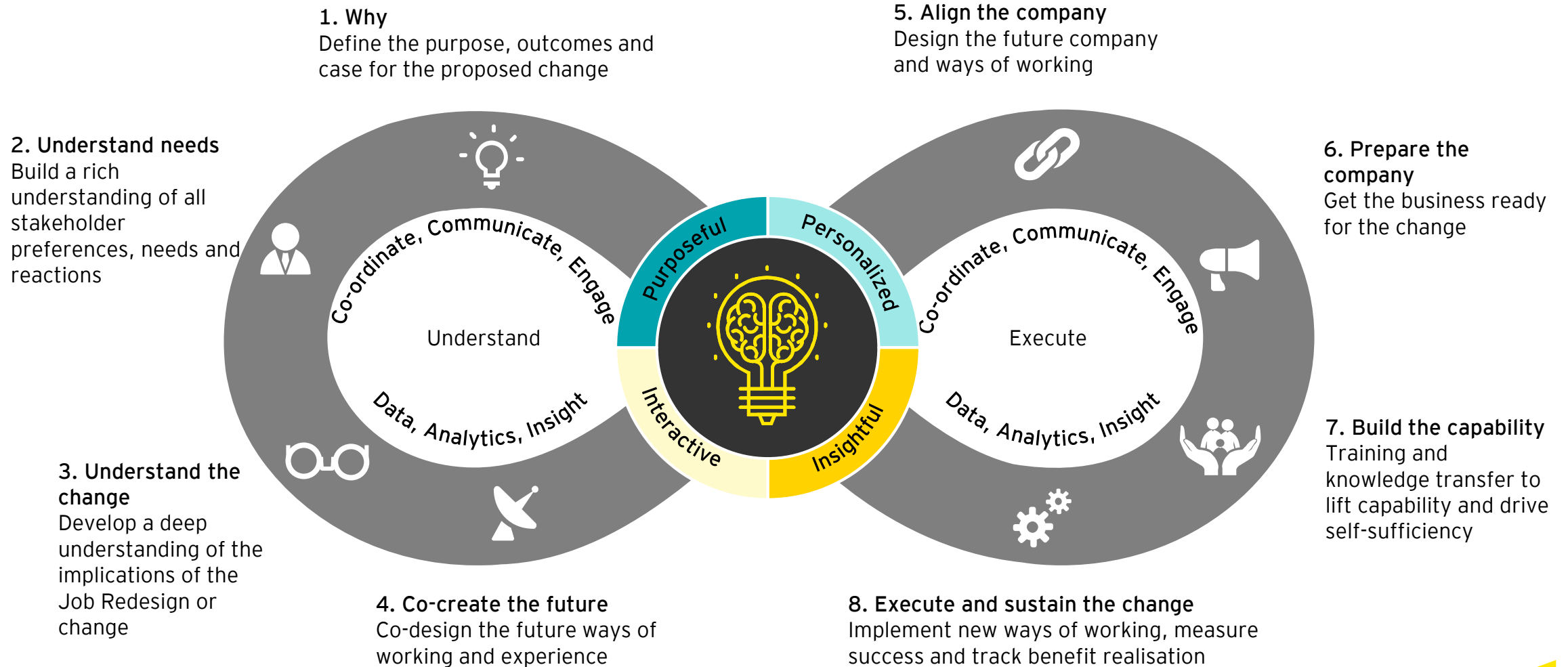
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Annex B3: Change Management

Overview

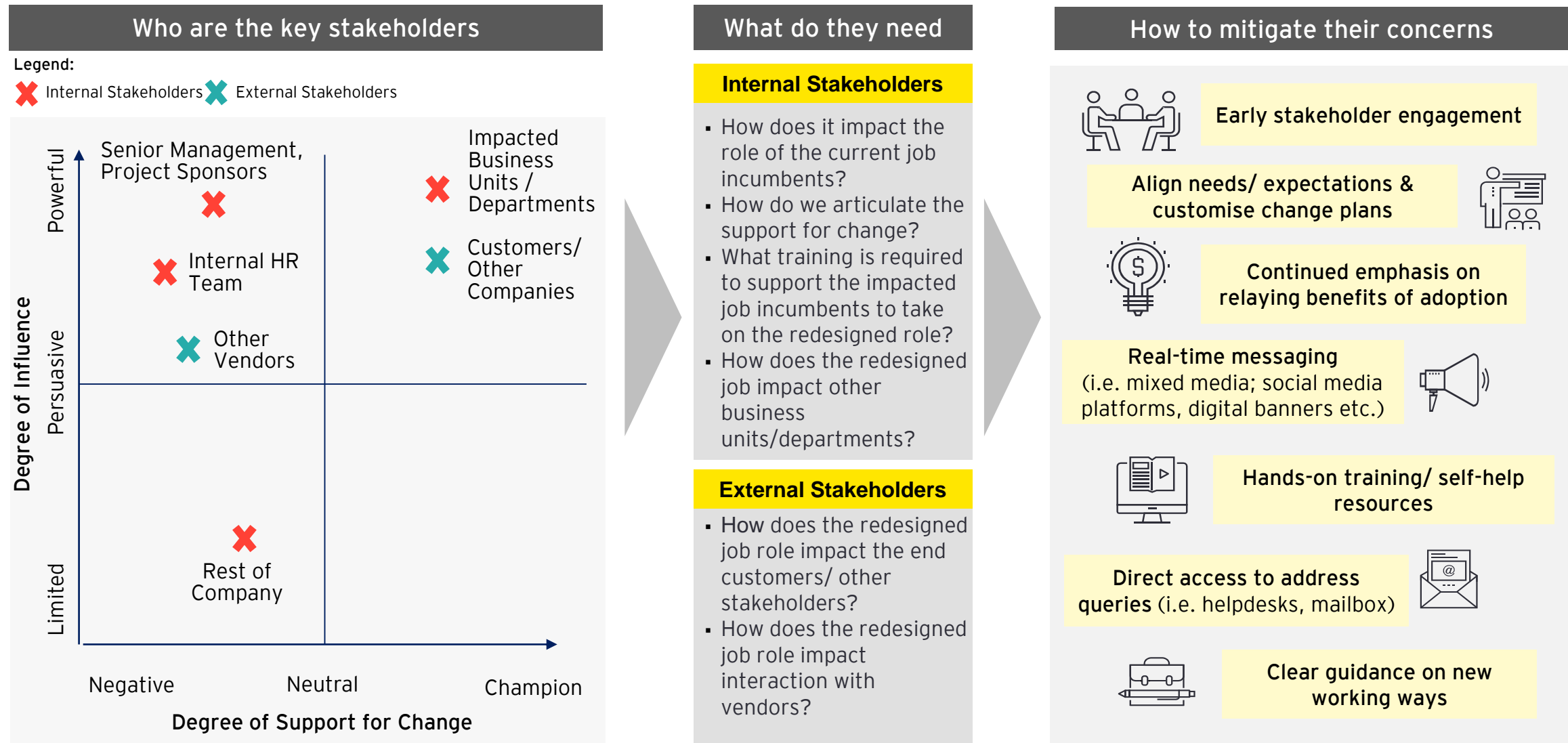
It is important to design an effective Change Management plan to combat potential pitfalls in Job Redesign.

Apply the 8 steps in your planning process for implementing change.



Annex B3: Guide to Change Management Plan and Approach

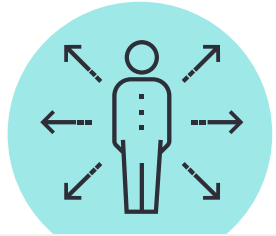
Key Stakeholders to engage in the Change Management process



Annex B3: Guide to Change Management Plan and Approach

Successful Job Redesign requires collaboration between a diverse set of stakeholders

Key roles in a Job Redesign team include...



LEADERS

- Advocate the importance of change agenda of Job Redesign across the company
- Partner with HR to obtain buy-in from stakeholders across the company
- Chart out transition planning of change implementation
- Cascade value proposition of Job Redesign for each division and how the initiative contributes to company goals
- Coach direct reports through the changes that impact their day-to-day work

Examples of Job Roles

- Senior Management
- Head of Department
- Business Unit Managers



CHANGE CHAMPIONS

- Support change initiatives and relationships
- Initiate dialogue to build trust and communication between stakeholders and change agents
- Foster sponsorship and ownership of coming changes
- Promote visibility and build support ahead of the coming changes
- Pilot Job Redesign implementation
- Assess effectiveness of post Job Redesign implementation

Examples of Job Roles

- Business Unit Managers
- Employees

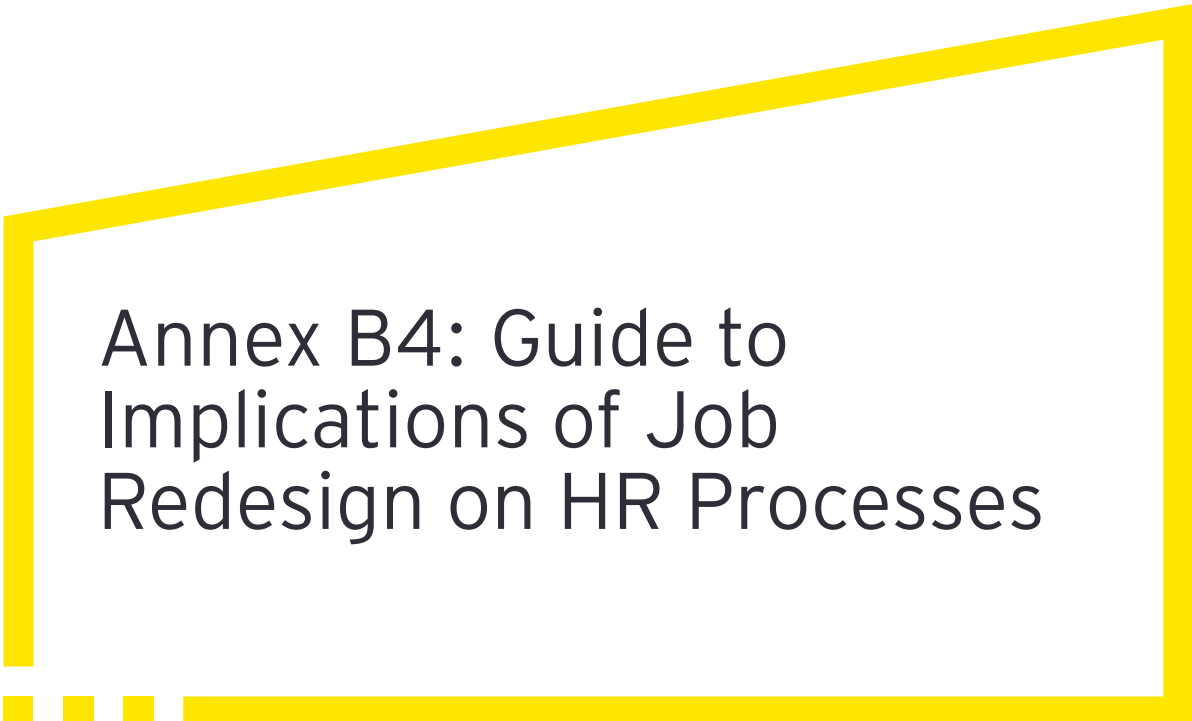


IMPACTED EMPLOYEES

- Receive instructions from change agents and leaders
- Find out what change means to employees by attending town halls, keep track of communications and actively seeking advice from change agents within teams
- Provide feedback on change initiatives
- Attend training and learning sessions to learn about how to adopt the changes in your day-to-day job

Examples of Job Roles

- Business Unit Managers
- Employees



Annex B4: Guide to Implications of Job Redesign on HR Processes

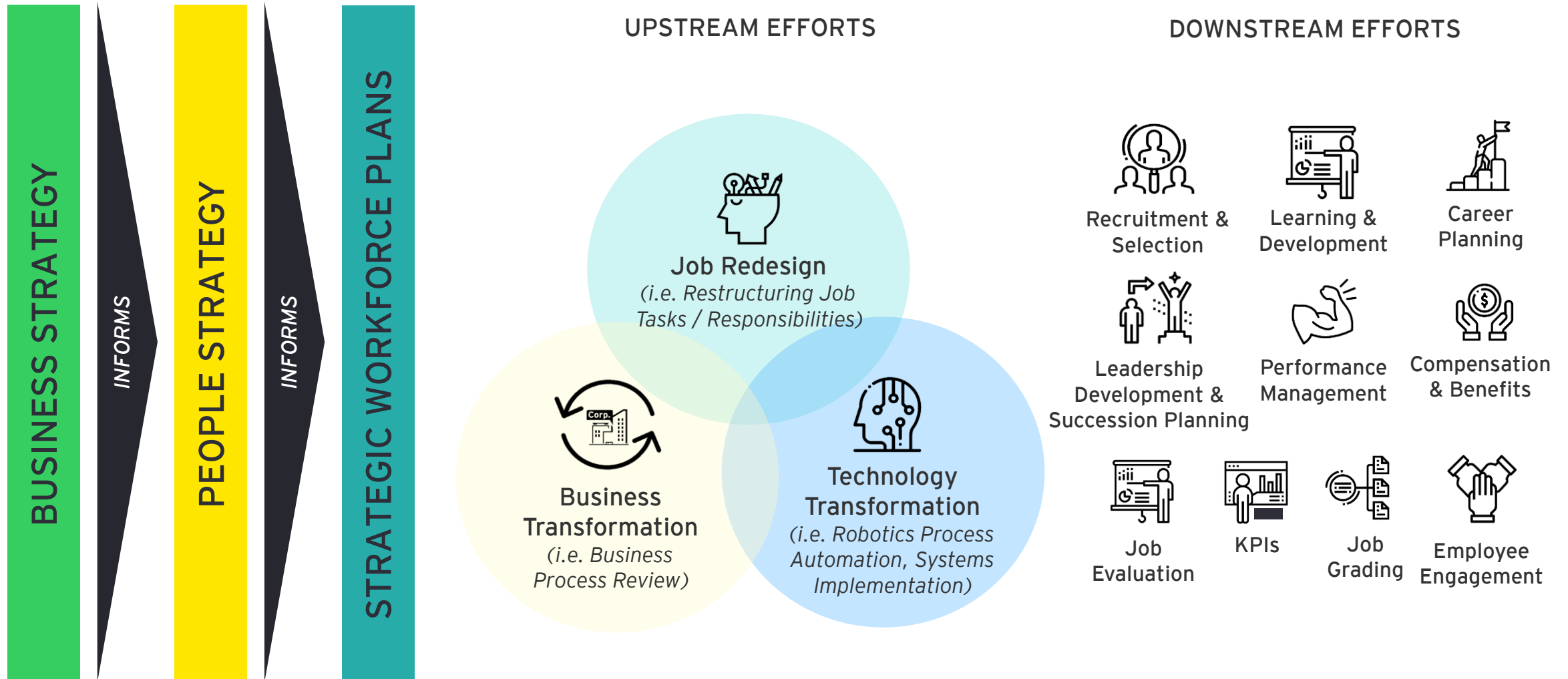


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Annex B4: Guide to Implications of Job Redesign on HR Processes

Overall workforce transformation

Job Redesign is only one component in the overall workforce transformation process and should not be considered in isolation

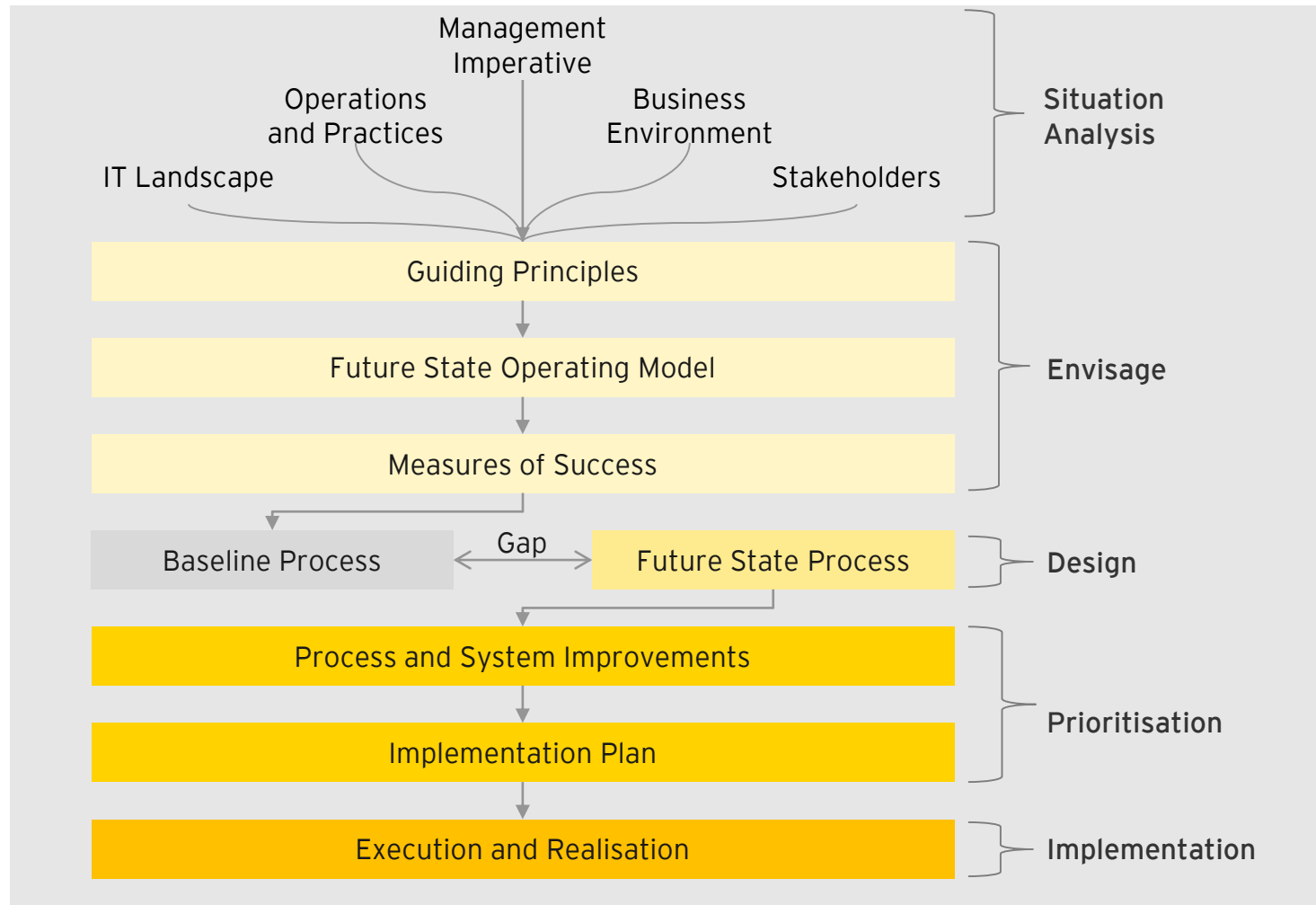


Annex B4: Guide to Implications of Job Redesign on HR Processes

Business Transformation

Job Redesign is part of the larger Workforce Transformation agenda, which must consider the Business Transformation angle.

BUSINESS PROCESS REVIEW METHODOLOGY



- 1. Situational Analysis:** Involves consideration of five key aspects (Management Imperatives, Operations and Practices, Business Environment, Stakeholders, and IT Landscape) to be taken into consideration when building a desired future state.
- 2. Envisage:** Involves creating the vision of the future state, the guiding principles as well as the measurable indicators for the future design
- 3. Design:** Define the baseline processes, identifying gaps between the current state and the desired state. From the view of the desired future state, transformation principles are then developed to guide Job Redesign/business transformation efforts.
- 4. Prioritisation:** Recommend the process and system improvements and prioritise initiatives.
- 5. Implementation:** The Execution and Realisation where detailed 'desired state' process designs and system requirements can commence. This is followed by validation with stakeholders and subject matter advisors for feasibility and risks before deployment.

Annex B4: Guide to Implications of Job Redesign on HR Processes

Technology Transformation on roles

Job Redesign should also consider how Technology Transformations can change roles, or support the changing of roles

PROCESSES WHICH CAN BE AUTOMATED WILL CHANGE HOW THE WORKFORCE IS INVOLVED



- Data intensive
- Repetitive in nature
- Rule-driven
- Electronic trigger to the process
- Have electronic start-points and endpoints
- Involve manual calculation
- High error rates
- Sensitive content
- Can be performed out of office hours
- Complex IT landscape

EXAMPLE OF TECHNOLOGY TRANSFORMATIONS THAT CAN OCCUR ALONGSIDE WORKFORCE TRANSFORMATIONS

IT Services

- Installation
- FTP download, upload and backup
- Server application and monitoring
- Synchronising, deleting and emptying folders
- File management
- Email processing
- Batch processing

HR Services

- Payroll
- Benefits admin
- Pay slip management
- Time and attendance management
- Recruiting process
- Onboarding
- Education and training

Supply Chain

- Work order management
- Demand and supply planning
- Quote, invoice and contract management
- Returns processing
- Freight management

Finance and Accounting

- Sales order
- Order to cash
- Collection
- Procure to pay
- Incentive claim
- Record to report
- Supply chain vendor setup
- Trend tracking
- Closing procedures

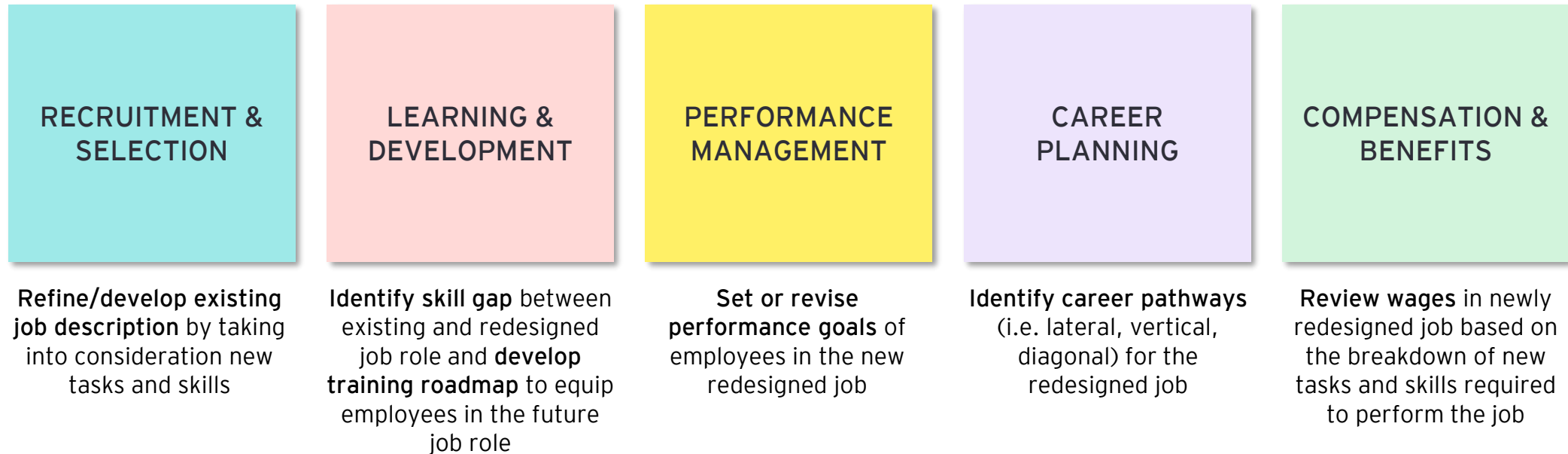
Annex B4: Guide to Implications of Job Redesign on HR Processes

Impact to human resource processes

Together with other upstream efforts, Job Redesign initiatives can have certain downstream implications on Human Resource Processes

Job Redesign has downstream impacts on the following HR functions...

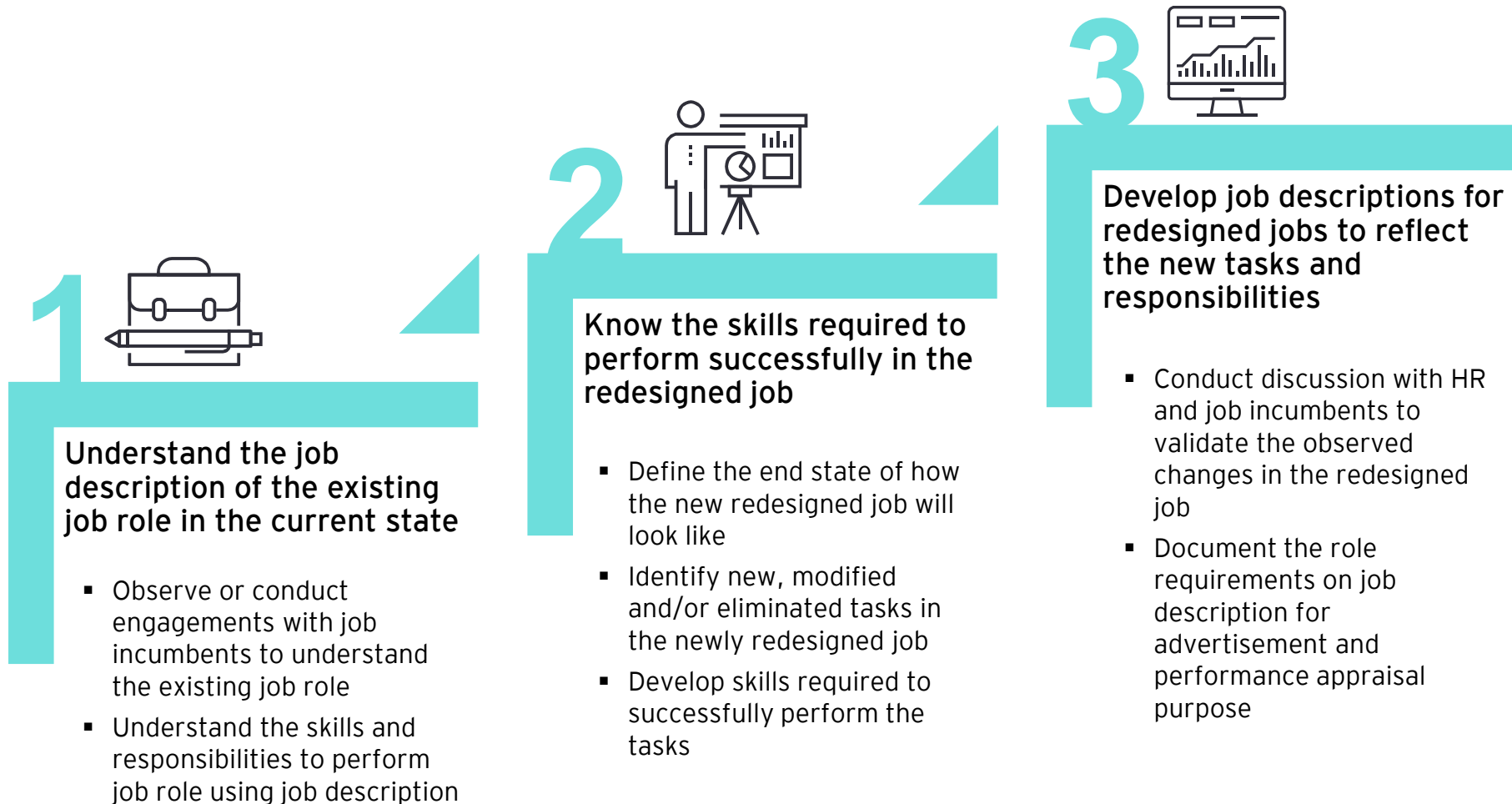
It becomes pertinent for organisations to consider these when planning Job Redesign interventions:



Annex B4: Guide to Implications of Job Redesign on HR Processes

Downstream human resource efforts impacted by job redesign initiatives (1/5)

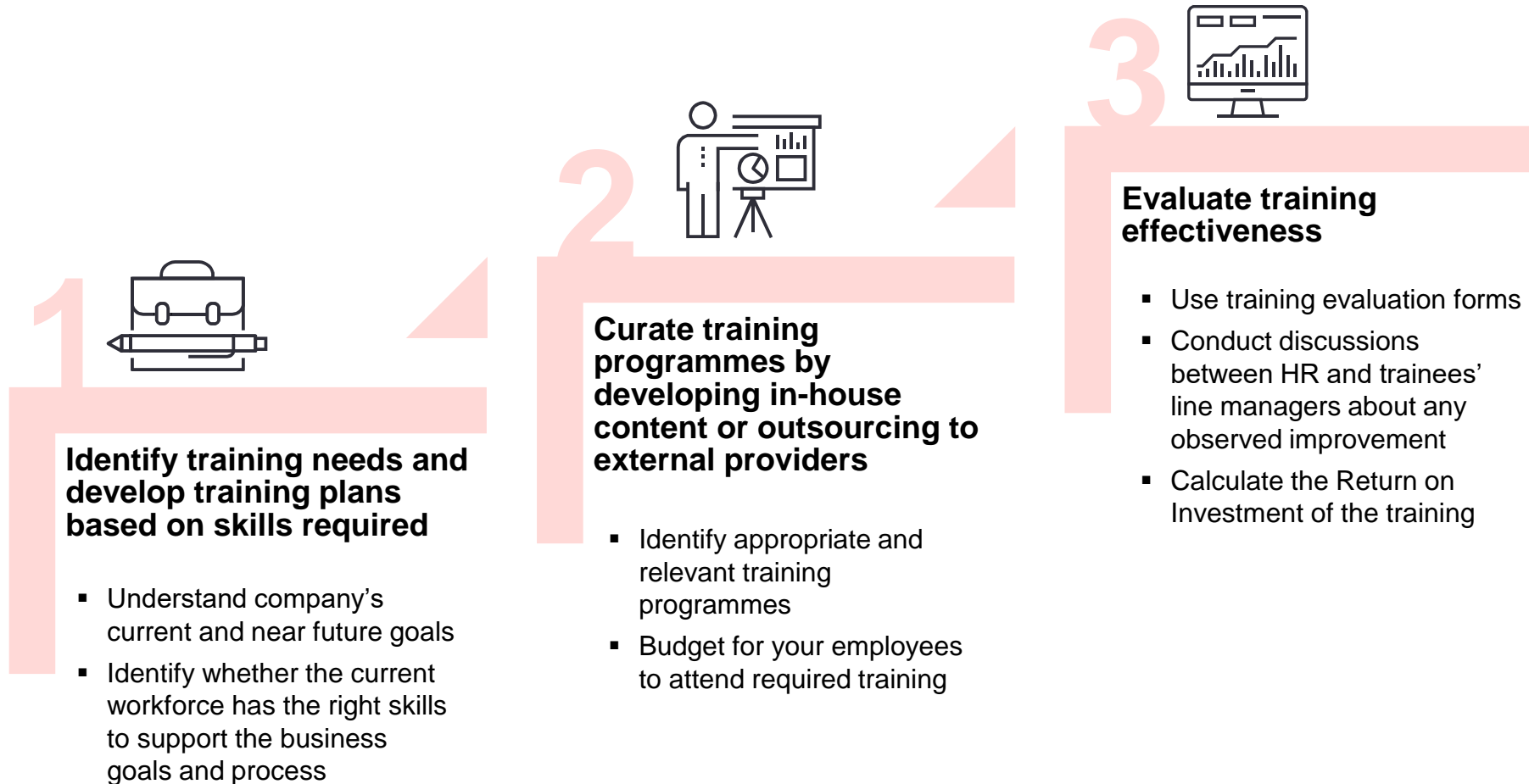
RECRUITMENT AND SELECTION



Annex B4: Guide to Implications of Job Redesign on HR Processes

Downstream human resource efforts impacted by job redesign initiatives (2/5)

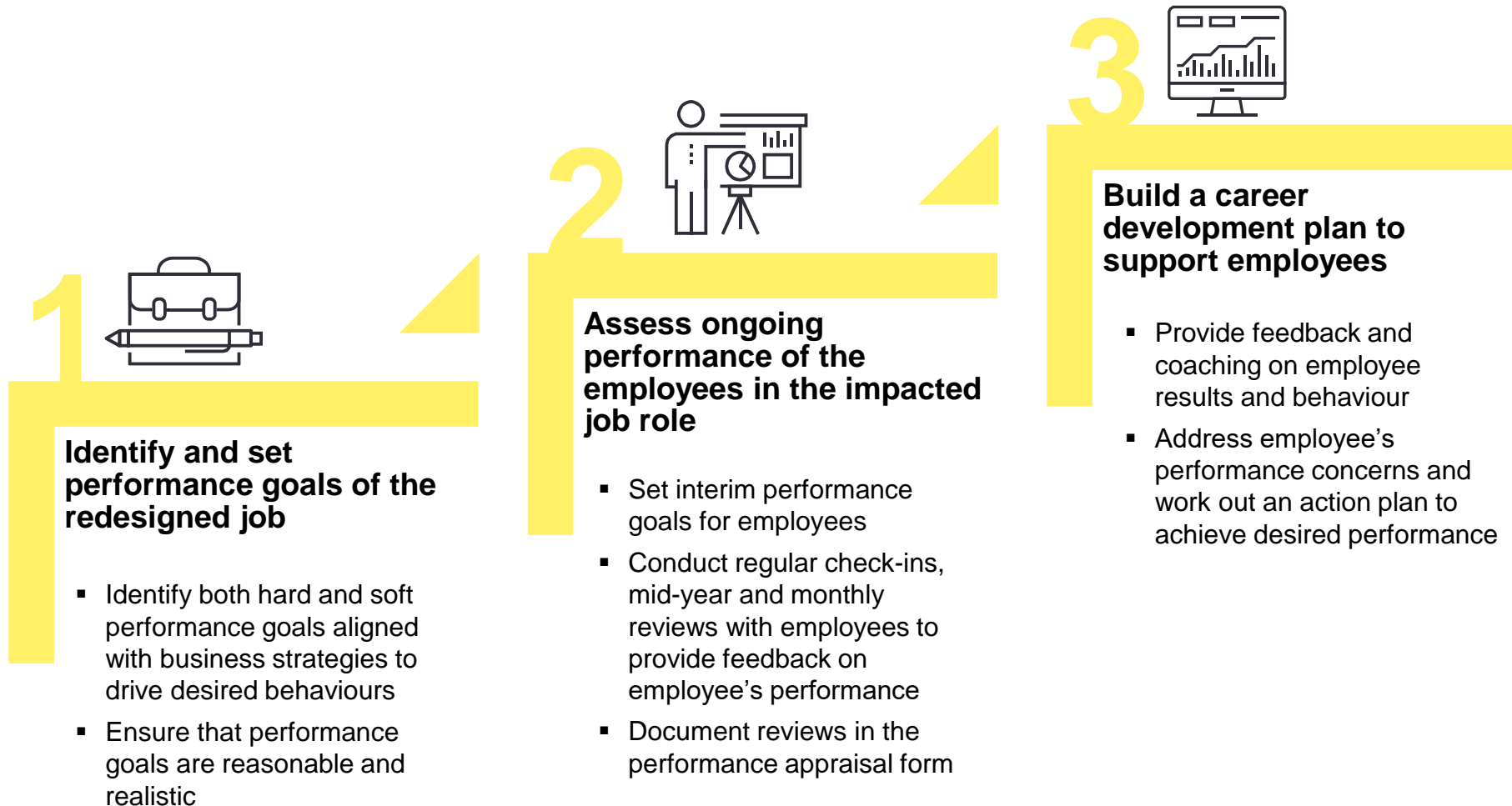
TRAINING & DEVELOPMENT



Annex B4: Guide to Implications of Job Redesign on HR Processes

Downstream human resource efforts impacted by job redesign initiatives (3/5)

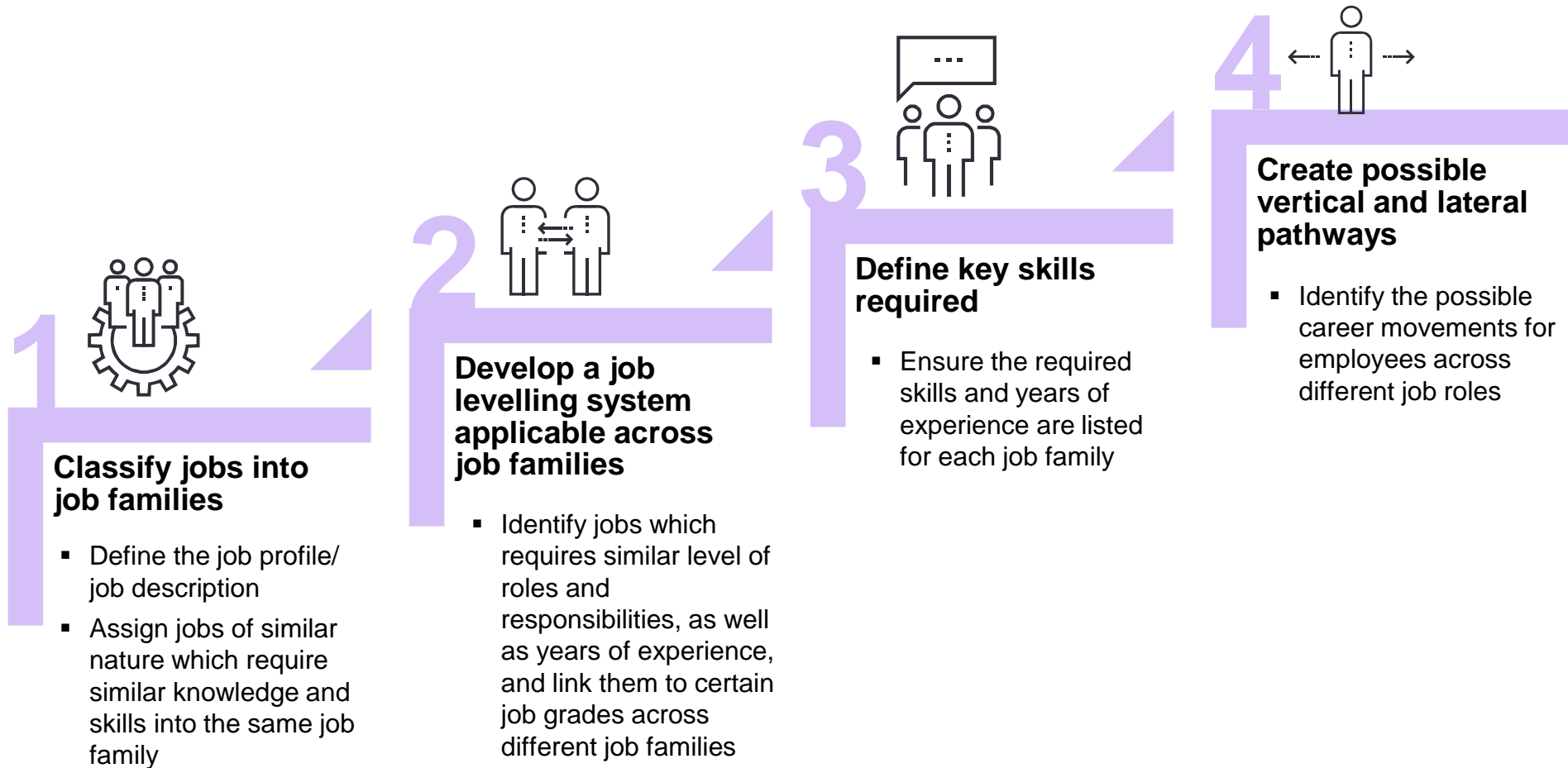
PERFORMANCE MANAGEMENT



Annex B4: Guide to Implications of Job Redesign on HR Processes

Downstream human resource efforts impacted by job redesign initiatives (4/5)

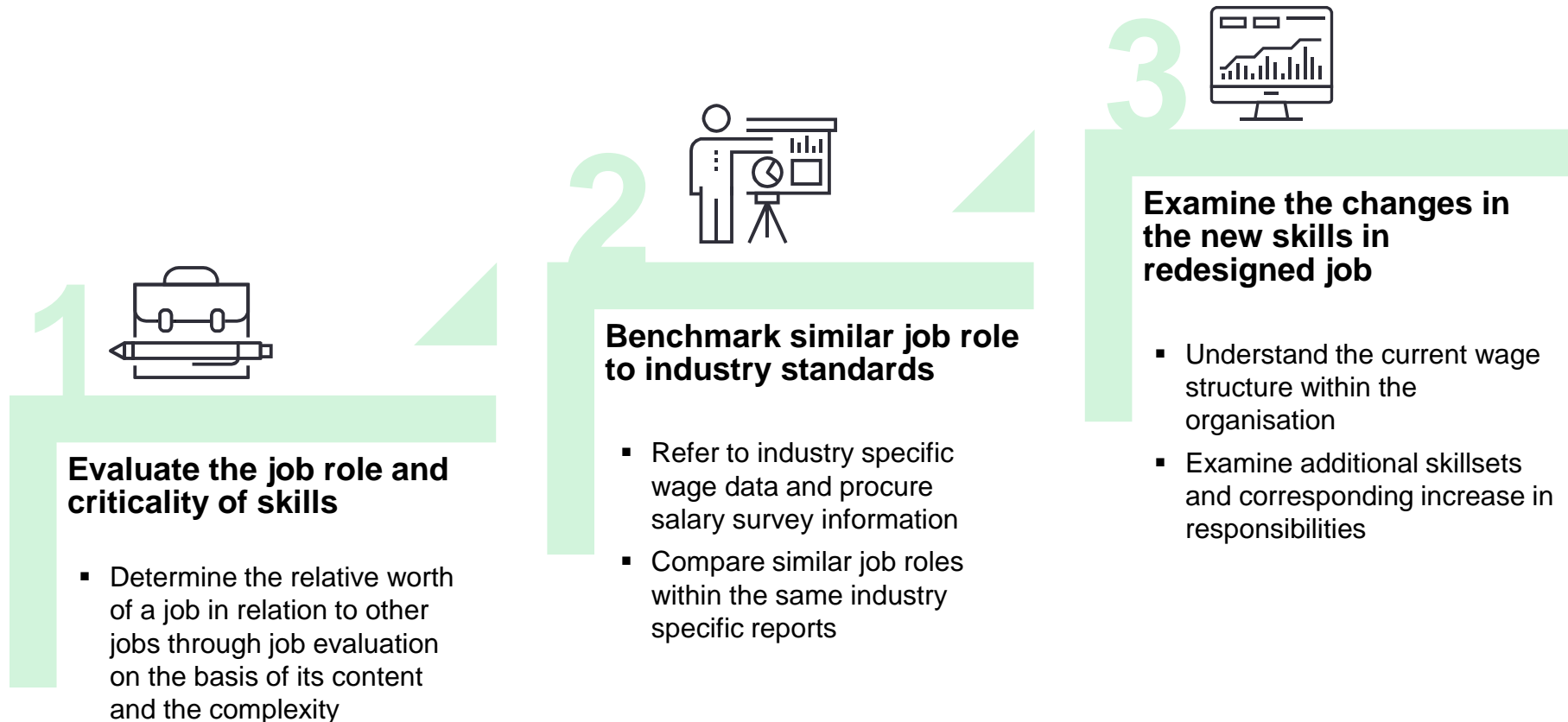
CAREER MANAGEMENT




Annex B4: Guide to Implications of Job Redesign on HR Processes

Downstream human resource efforts impacted by job redesign initiatives (5/5)

COMPENSATION & BENEFITS





Annex B5: Post-Job
Redesign
Implementation
Analysis



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Annex B5: Post-Job Redesign Implementation Analysis

Overview

DESCRIPTION

Following the implementation of your Job Redesign interventions, it is crucial to monitor and assess their effectiveness through key metrics and Key Performance Indicators, such as:

- Increase in productivity:
 - Decrease in manning ratio
 - Increase in sales per employee
 - Increase in value-add per worker
- Improved customer experience
- Improved employee satisfaction

This template will help Human Resources practitioners evaluate the impact of your Job Redesign interventions and identify next steps for continuous improvement.

TEMPLATES PROVIDED IN THIS TOOLKIT

Job Redesign Intervention	IMPACT ANALYSIS				Adjustments required / Next Steps
	Key Performance Indicators	Before Job Redesign	After Job Redesign	Other outcomes	

INSTRUCTIONS

- Following the roll out of Job Redesign interventions, monitor the effectiveness using the Post Job Redesign Impact Analysis template.
- For each Job Redesign intervention, populate the template with the key performance indicators (i.e. success metrics), as previously identified in the *Recommendation Report*.
- Monitor the quantitative and qualitative impact of each Job Redesign intervention using the Impact Analysis section of the template.
- Identify any necessary iterations under the Next Steps section of the template.

OUTCOME

- Tracking of success metrics and reception of Job Redesign intervention.
- Outlining of required adjustments or next steps.

Annex B5: Post-Job Redesign Implementation Analysis

Instructions

INSTRUCTIONS

- Monitor the effectiveness of each Job Redesign intervention using the Post-Job Redesign Impact Analysis template shown below (available on the next page).
- For each Job Redesign intervention, populate the template with the key performance indicators (i.e. success metrics), as previously identified in the *Recommendation Report*.
- Monitor the quantitative and qualitative impact of each Job Redesign intervention using the Impact Analysis section of the template.
- Identify any necessary iterations under the Next Steps section of the template.

Job Redesign Intervention	IMPACT ANALYSIS			Adjustments required / Next Steps
	Key Performance Indicators	Before Job Redesign	After Job Redesign	

Annex B5: Post-Job Redesign Implementation Analysis

Template

Job Redesign Intervention	IMPACT ANALYSIS				Adjustments required / Next Steps
	Key Performance Indicators	Before Job Redesign	After Job Redesign	Other outcomes	

Annex B5: Post-Job Redesign Implementation Analysis

Template (sample)

Sample job role: Warehouse Officer

SAMPLE

Job Redesign Intervention	IMPACT ANALYSIS				Adjustments required / Next Steps
	Key Performance Indicators	Before Job Redesign	After Job Redesign	Other outcomes	
Introduce RFID, Barcode, sensor technology, robotic sorting system <ul style="list-style-type: none"> To support planning, utilisation of warehouse storage and inspection of cargo 	Time taken for planning and monitoring of inventory level and storage utilization	4 hours	2 hours	<ul style="list-style-type: none"> Positive customer feedback - faster response and processing of customer orders Positive employee feedback - less labour intensive job scope Increase in productivity by 5% with less human error 	Consider enlarging existing job scope to fill waiting gaps
	Time taken to inspect cargo handling activities	2 hours	0.5 hour		
	Number of staff required on the ground	8 officers	4 officers		
	...				

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