# A GUIDE TO
JOB REDESIGN IN THE AGE OF AI

Using Artificial Intelligence (AI) in your organisation?

AI transforms jobs task-by-task. This guide takes advantage of this to empower your employees to be confident and effective users of AI in the future of work.

4 AREAS OF JOB REDESIGN

This guide encourages organisations to take a human-centric approach to manage the impact of AI adoption by investing in redesigning jobs and reskilling employees.
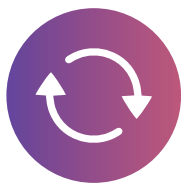
TRANSFORMING JOBS
Assess the impact of AI on tasks, including whether each task can be automated or augmented by AI or remain in human hands, and decide which jobs can be transformed within an appropriate time frame.
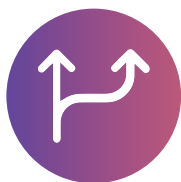
CHARTING CLEAR PATHWAYS BETWEEN JOBS
Chart task pathways between jobs within an organisation and identify the tasks employees would need to learn to transition from one job to another.

CLEARING BARRIERS TO DIGITAL TRANSFORMATION
Suggest ways to address potential challenges and support employees when implementing AI.

ENABLING EFFECTIVE COMMUNICATION BETWEEN EMPLOYERS AND EMPLOYEES
Build a shared understanding within the organisation on "why", "what", and "how" AI will augment human capabilities and empower employees in their career.

Find out more at **go.gov.sg/ai-guide-to-jobredesign**

TRANSFORMING JOBS

STEP 1
Break jobs down into tasks

Job X

- Refer to existing job descriptions or operating procedures
- Glean from employee interviews and observations

Task A   Task B   Task C

STEP 2
Assess the potential impact of AI on each of the tasks

Impact — Task A   Task B   Task C

- Work with relevant experts and stakeholders
- Look for viable use cases within or outside the industry
- Assess when AI will have an impact
- Review the estimated time frame required to implement the AI solution

STEP 3
Assess if AI should be implemented for each task, and the extent to which AI can be deployed
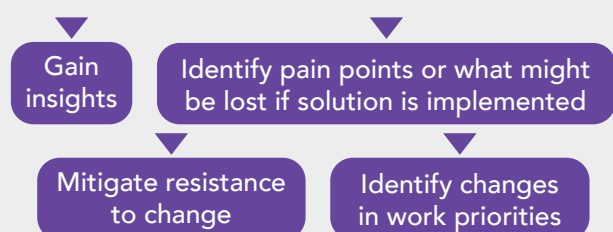
Considerations
- Improve efficiencies and lower cost
- Value and impact of job redesign on the end-users and end-customers
- Need to upskill employees to use AI
- Alignment with business strategy and regulatory requirements
- Availability of financial resources and support schemes

Task A
Recommend to **Automate**

Task B
Recommend to **Augment** human capabilities

Task C
Recommend to **Remain** in human hands

STEP 6
Recombine and reconstruct the transformed tasks into a future job

Redesigned Job
Task A'   Task B"   Task C

- Role transformed technologically
- Align with employees' needs and career goals
- Align with business goals and customers' experience

STEP 5
Decide the appropriate time frame to implement AI

Task B ▶ 📅 ▶ Task B"

Depends on
- How much change can be implemented at any one time
- Capability to support the use of AI
- Resources to support the transformation
- Organisational culture to change
- Employees' readiness for AI

Recommended: Phased approach
- ✓ Allow employees to adjust to the use of AI at work and understand how it benefits them
- ✓ Not disrupt critical employee and customer facing processes
- ✓ Improve acceptance of AI

STEP 4
Consult managers and employees about:

- Which tasks they value most
- Their preferences on which tasks could be fully or partially automated
- Which tasks could be done differently by leveraging AI
- Their views about changes in their jobs and/or industries

Gain insights

Identify pain points or what might be lost if solution is implemented

Mitigate resistance to change

Identify changes in work priorities

CHARTING CLEAR PATHWAYS BETWEEN JOBS

Standardise definition of tasks across jobs

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Job X	Job Y	Job Z
Task A	**Task A**	**Task A**
Task B	Task B"	Task B"
Task C	Task D	Task E

Use shared similar tasks to **generate potential pathways** for jobs within the same organisation

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Job X ▶ Job Y

Identifying similar tasks or experiences that are valuable or relevant to a new job can make difficult transitions easier

Job X ▶ Job Z

Identify the tasks that are not similar between jobs for **training and skills development**

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Identify new skills for | Identify new tasks for training

| Job Y | Task B" | Task D |
| Job Z | Task B" | Task E |

Re-examine assumptions and **change mindsets**

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- To better train and deploy employees
- To make better use of employees' skills and talents
- To spur additional transitions that could lead to emerging jobs

CLEARING BARRIERS TO DIGITAL TRANSFORMATION

SOME CONSIDERATIONS

- Lack of awareness of how AI technologies can augment work

- Resistance to change

- Potential for job redesign and training to disrupt existing business flow

- Trainings not targeted to impart new skills and abilities for new tasks
- Varying capacity levels for training

- Uncertainty of outcomes for employees after training and job redesign
- Perception that job redesign equates to more work

POTENTIAL SOLUTIONS

- Educate employees on opportunities of enhanced job roles

- Nominate innovation champions to identify pain points and opportunities

- Phase implementations
- Ensure business as usual with small batch trainings

- Provide training and learning for precise task(s)
- Ensure training is applicable and available in an accessible form

- Review remuneration and employee performance metrics for enhanced roles

ENABLING EFFECTIVE COMMUNICATION BETWEEN EMPLOYER AND EMPLOYEES

COMMUNICATING WITH KEY STAKEHOLDERS ON JOB REDESIGN

BEFORE

- Engage relevant experts to assess the potential impact of AI on tasks and job redesign
- Consult the line division managers and employees on which tasks are valuable to them

DURING

- Work with HR and line division managers to identify tasks for training and skills development for the employee
- Collaborate with unions to chart new career pathways and minimise displacement
- Communicate to employees "why", "what" and "how" the job redesign will occur

AFTER

- Ensure continuous dialogue and feedback between senior management, HR, line division managers and employees