Introduction

This document is a supplement to quick guide to Effective Job Redesign (*Recipe for Effective Job Redesign for the Food Services Sector*), which aims to guide Food Services companies through the 5 steps Job Redesign. Access the quick guide to Effective Job Redesign [here](#) or scan the following QR code:

Food Services companies can expect to complete a Job Redesign project within 3 to 6 months, which may include the adoption of automation and digital solutions. It is highly recommended for companies that would like to perform in-house Job Redesign to attend the 1.5 days workshop supported by Workforce Singapore (WSG). Find out more about the workshop [here](#) or scan the following QR code:

**Overview of the Job Redesign Framework for Food Services Sector**

**Objectives**

To encourage companies to transform the workforce by:

1. Improving the job scope of positions at both front and back of house.
2. Increasing productivity and providing higher value-added jobs.

**Definition of Job Redesign (JR)**

1. JR is an effort where job responsibilities and tasks are reviewed, and possibly re-allocated among staff.
2. Redesigning jobs can lead to improvements in both productivity and job satisfaction.

**About Job Redesign Guide**

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**Target Audience**

1. Those who do not know where and/or how to start.
2. Those who wish to redesign jobs to raise productivity.
3. Those who wish to improve job quality of workers.
4. Those who already have an idea of where and/or how to redesign, but need guidance on measuring techniques or they have a technology in mind but want to document the impacts.
Recommended Pre-Requisite Knowledge and Skills

It is strongly recommended that companies implementing JR in-house have the specific productivity measuring techniques knowledge such as Time-Motion Study, Process Mapping, Skills Gap Analysis and Change Management.

The productivity measuring techniques are covered in the workshop and companies that require assistance can participate in the workshop to acquire the knowledge.

The 5-Step Approach

<table>
<thead>
<tr>
<th>Step 1: Discover</th>
<th>• Identify where to redesign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Diagnose</td>
<td>• Define the specifics of the redesign plan</td>
</tr>
<tr>
<td>Step 3: Determine</td>
<td>• Select solutions and match to the JR method (REEFS)</td>
</tr>
<tr>
<td>Step 4: Design</td>
<td>• Create your implementation and communication plan</td>
</tr>
<tr>
<td>Step 5: Deliver</td>
<td>• Deploy solution and measure outcomes</td>
</tr>
</tbody>
</table>

Job Redesign in 5 Steps

Steps 1 and 2 of the Job Redesign framework are completed through the web application. The web application would guide users through Steps 1 and 2. Thereafter, an excel file containing the tabulated information would be generated, for use in Steps 3 to 5.

Companies can refer to Annex A for the case studies of 5 companies and understand some the benefits from implementing job redesign.

To begin, complete all necessary fields in the web application before proceeding further. The link to the web application can be found here or using this QR code:
Step 1: Discover

Refer to Excel Sheet – Step 1: Analysis

➢ **Aim**
To identify the functions and job roles that currently require the most manpower.

➢ **About**
The analysis provides an overview of the manpower requirements in the key function of a Food Services companies. This will form the basis when we move into *Step 2: Diagnose*. The table further provides an indication of the number of older workers hired in each function. This information allows company to implement productivity improvement initiatives and redesign jobs with the consideration to improve job quality of workers.

➢ **Who to fill up**
Human Resource Manager, Operation Manager and/or Owner

<table>
<thead>
<tr>
<th>Refer to Excel Sheet:</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Analysis (Workforce Analysis)</td>
<td>1. Fill up the number of full-time and part-time employees as well as the number of older workers, who are age 50 and above, in each function.</td>
</tr>
</tbody>
</table>

**Resources: The list of Food Services Job Roles**
Access the following link to the Singapore Skills Framework for Food Services for the job roles in the Front-of-House (FOH) and Back-of-House (BOH).

Access Links:

- Front-of-House (FOH) QR CODE:
- Back-of-House (BOH) QR CODE:

2. Fill up the employees' profile for the identified function.

**Lookout:**
The employees' profile list would identify the job roles that require the most manpower and the job roles where older workers are employed. Take note of these information which would be useful in redesigning the job that fit the workforce profile.
Step 2: Diagnose

Refer to Excel Sheet – Step 2: Diagnose

➢ **Aim**
To diagnose and scope the process and job roles to be redesigned

➢ **About**
A simplified and modified Motion Study, part of the time-motion study productivity diagnostic tool, is used to scope current processes that are time-consuming and laborious.

➢ **Who to fill up**
Operation Manager and/or Owner

<table>
<thead>
<tr>
<th>Refer to Excel Sheet</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Diagnose</td>
<td>3. Map the current processes in the identified function. For example, a generic process flow of a restaurant FOH:</td>
</tr>
<tr>
<td>(Current Process)</td>
<td>![Process Diagram]</td>
</tr>
</tbody>
</table>

![Process Diagram]

**How to conduct simplified Motion Study**

It is recommended to conduct a simplified time-motion study. The aim is to define the most time-consuming and physically strenuous process where possible technology solutions and job redesign can be implemented.

1. Standardised the measurement unit.

   *Motion study can be measured in various units, such as distance, number of trips, number of steps to perform a task, and the duration used. The key is to use a standardised measurement unit throughout the whole process.*

2. Field trip to the outlet.

3. Record the **number of steps (SOPs)** taken to perform each process, for example we use the measurement: number of SOPs taken to perform a process by the specific job role.

   **Example Scenario:**
   
   *Crew Leader needs to follow a 6-steps SOP to take 1 order from customers.*
   
   **SOP – Steps for Taking Orders**
   
   1. Take pen and paper
<table>
<thead>
<tr>
<th>Step 2: Diagnose (Current Process)</th>
<th>4. Scope the process and job role to redesign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to define the job role and process to be redesigned?</td>
<td>Based on results of the process mapped and motion study to identify job roles and process to be redesigned by addressing the following:</td>
</tr>
<tr>
<td></td>
<td>□ What are the job roles that require the most manpower to perform?</td>
</tr>
<tr>
<td></td>
<td>□ Which are the processes that require the most effort to perform?</td>
</tr>
<tr>
<td></td>
<td>□ Why does the process require the most resources (time/effort)?</td>
</tr>
<tr>
<td></td>
<td>□ What can be done to improve the process?</td>
</tr>
<tr>
<td></td>
<td>□ Collect and validate feedback from the employees performing the process on the challenges faced.</td>
</tr>
</tbody>
</table>

**Step 3: Determine**

Refer to Excel Sheet – Step 2: Diagnose & Step 3: Determine

➢ **Aim**

To determine possible solution(s) to address the scoped area and adopt appropriate job redesign methods

➢ **About**

This is the key step of the JR guide, where majority of the redesigning resides. Companies would need to determine the solutions to address the identified area. A link to the guide about the considering factors is provided below to assist companies to evaluate suitability of the technology solution. Companies are encouraged to do a scenario planning upon selecting the suitable technology solution to anticipate the impact.

With the information gathered in the previous two steps, companies can determine how to redesign the job role using some of the commonly adopted job redesign methods by the companies in the Resources Reference on Job Redesign Methods (refer to Page 8).

Thereafter, companies would need to assess the team's competency level and identify the skills gap as well as training needs.
➢ Who to fill up
Human Resource Manager, Operation Manager and/or Owner

<table>
<thead>
<tr>
<th>Refer to Excel Sheet:</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Diagnose (Current Process)</td>
<td>5. Determine and select suitable solution.</td>
</tr>
</tbody>
</table>

There are different solutions available such as using technology as enabler to reduce manpower reliance or workflow redesign with assistance from consultants. If the decision is to explore technology solution, you can refer to following Resources: The considering factors when identifying suitable technology solution.

### Resources: Considering factors and evaluation criteria for suitable technology solution

There are 6 areas to consider when determining suitability of the technology. It varies for each company in terms of the prioritisation of the areas. Companies should have vendor evaluation checklist to determine the suitable technology solution.

#### Factors to consider

| Space and location for the equipment | How will the equipment be used?  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How does the equipment affect workflow, movement, and layout?</td>
</tr>
<tr>
<td></td>
<td>How much space is available?</td>
</tr>
<tr>
<td></td>
<td>What are the dimensions of the equipment?</td>
</tr>
</tbody>
</table>

| Cost | What is the cost of the equipment?  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Are there other cost that you may incur, such as renovation, operating cost and maintaining cost?</td>
</tr>
<tr>
<td></td>
<td>What is the payback period?</td>
</tr>
</tbody>
</table>

| Benefits/Function(s) | What are the benefits such as the cost, man-hours savings? |

<table>
<thead>
<tr>
<th>Performance and reliability</th>
<th>Can the equipment handle the capacity and speed that you need?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is it user-friendly?</td>
</tr>
<tr>
<td></td>
<td>How long can it typically last?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintenance and repair requirements</th>
<th>Is warranty provided?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is the equipment easy to clean?</td>
</tr>
<tr>
<td></td>
<td>Are the maintenance and repair services easily available?</td>
</tr>
</tbody>
</table>

| Return of Investment | How long the usage of the equipment to earn back the cost of the investment?  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eg: ROI Ratio= (Earning from Investment- Cost of Investment)+ Cost o Investment</td>
</tr>
</tbody>
</table>

Page 7 of 17
**Evaluation check list**

<table>
<thead>
<tr>
<th>SN</th>
<th>Equipment / Solution</th>
<th>Space / Location</th>
<th>Benefits</th>
<th>Performance / Reliability</th>
<th>Maintenance / Repair</th>
<th>Cost</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vendor A</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Vendor B</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Vendor C</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>16</td>
</tr>
</tbody>
</table>

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**Resources: List of Technology Solutions**

Access this [link](#) to some of the technology solutions that are suitable in Food Services FOH and BOH.
6. Identify the employees who would be impacted with the selected technology solution(s) and adopt the suitable type of Job Redesign methods.

**Resources: Job Redesign Methods**

When adopting suitable type of job redesign methods, there are a few areas to consider:

- ✓ Consider the workforce profile in the impacted roles. Refer to Template 1.2: Workforce Profile.
  - The age groups
  - The composition of Full Timers and Part Timers
  - The employees’ abilities
- ✓ Consider the complexity of the activities with the solution implemented.
- ✓ Understand and select job redesign methods.

**Job Redesign Methods**

In the JR Framework, REEFS is used to determine the possible ways which a person's job can be enhanced. There are many JR methods available, but REEFS has been adopted as it was the most common method based on a study by the Singapore Productivity Centre.

**Rotation** – cross train staff in other lateral areas of the company. This widens their exposure. Staff learn more about company culture and can cultivate interest in new areas.

**Enlargement** – increase the responsibilities or the scope of a designation, while still remaining largely within the same function. This gradual method of coaching allows staff to gain confidence despite having started in a narrow role.

**Enrichment** – employers provide for more in-depth skills and knowledge in a role, allowing the employee to become more specialised and provide more value-added input.

**Flexible hours** – rostering of manpower becomes more lean, yet still caters to the peaks of operations. Meanwhile, employees are able to better balance the responsibilities of work and home.

**Simplification** – through the use of more efficient processes or even technology and automation, physical tasks become easier or are eliminated. This reduces fatigue in workers, and enables them to concentrate on tasks that are more dynamic, requiring human intelligence.

7. Do a scenario planning - plot the new processes and redesigned job roles. Estimate the impact/outcomes after implementing the solution.
Step 3: Determine

8. Identify skills gap and training needs.
   • Determine the skills gap and training needs based on the competency of the team.
   • Identify the change in task and/or new task that the team requires to perform using **Step 2 Diagnose (Scenario Planning)** as reference.
   • Assess the team's competency level to perform the task and if training is required.
   • Develop the new Job Description (JD) for the redesigned roles. This may be used for recruitment and communicating to the existing staff. An example of the JD is appended in the following:

<table>
<thead>
<tr>
<th>Operation Area</th>
<th>Food &amp; Beverage Service</th>
<th>Job Function</th>
<th>Service Ambassador</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Role Description</strong></td>
<td>The Service Ambassador is responsible for achieving F&amp;B sales, delivering service and operations excellence.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Main Duties** | • **Oversee** F&B quality of service and cleanliness of outlet  
  • Manage customer complaints and solve problems at supervisory level  
  • Drive sales through up-selling  
  • Build customer relationships  
  • Perform cashiering and counter duties |
| **Skills Required** | • Menu (including beverage) advisory – broaden and deepen product knowledge  
  • Customer relationship management  
  • **Interact and serve customers**  
  • Follow F&B safety and hygiene policies and procedures  
  • Process payments  
  • Implement operations for service excellence |
**Step 4: Design**

Refer to Excel Sheet – Step 4: Design

- **Aim**
  To develop an actionable plan to execute the selected solution and redesigned job roles

- **About**
  Develop a simple implementation plan and communication plan to ensure key milestones are met and there is effective communication to the employees to ensure smooth transition and adaptation.

- **Who to fill up**
  Human Resource Manager, Operation Manager and/or Owner

<table>
<thead>
<tr>
<th>Refer to Excel Sheet</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Step 4: Design</td>
<td>9. Fill up the simplified implementation plan and communication plan.</td>
</tr>
</tbody>
</table>

**Resources: Effective Communication Plan**

Establish effective communication using the following:

- **Address & Assure**
  - Address employees’ concerns
  - Assure their needs are considered
  - Share information & plan to help employees adapt
  - Provide feedback avenue

- **Reasons**
  - Open communication
  - What are the changes?
  - Why is there a need change?
  - What are the benefits for change / consequences of no change?

- **Timely**
  - Proper planning on communication timeline
  - In tandem with change curve stages
  - Communicate in advance before implementation of change

Some of the communication methods to refrain from:
- ⊗ Sudden announcement of immediate change
- ⊗ Unclear reasons why the changes take place
- ⊗ Did not provide any assistance channel for the employees
- ⊗ Not involving the employees
Step 5: Deliver

Refer to Excel Sheet – Step 2: Diagnose (Actual Improvement for New Process)

➢ **Aim**
  To measure the outcomes of the implemented solution and redesign job role

➢ **About**
  This is to measure the outcomes and effectiveness of the changes and refining any issues faced. *Step 2: Diagnose (Actual Improvement for New Process)* of the excel sheet would be used to validate the outcomes, to be done after 3-6 months.

➢ **Who to fill up**
  Human Resource Manager, Operation Manager and/or Owner

<table>
<thead>
<tr>
<th>Refer to Excel Sheet</th>
<th>Instructions</th>
</tr>
</thead>
</table>

**Resources: Measuring Outcomes**

Key points to take note when measuring the outcomes and effectiveness of the changes.

- Compare the new time-motion study results with the results before implementing the changes. Record the productivity gains.
- Conduct feedback session with the employees and find out any teething issues faced with the changes.
- Address and refine any issues, if any.
- Share with the employees about the improvement from the changes.
## The 5 Job Redesign Examples

### 1. Examples: Bar & Restaurant (The Nook)

**Discover & Diagnose** (Areas that require the most manpower; areas that require improvement)
- Similar to many food services outlets, substantial floor staff were deployed to operations where staff were required to shuttle between customers, kitchen and working stations. This often resulted in frequent miscommunication and involved many processes and movements that did not add or create value. By leveraging on technology to implement self-service, processes could be optimised, while staff could be redeployed to perform higher value-added work.

**Determine** (Suitable solution adopted and why the solution, and job redesign methods adopted and why/what was changed)
- **Suitable solution:** Digital Self-Service
  Complete with self-serve dispenser for alcoholic beverages such as beer, wine, whisky or sake, use of mobile applications for food ordering and payment, as well as Cash Management System.

- **Job Redesign Method:** Job Enrichment and Enlargement
  Up-skilling of the staff to provide higher value-added services such as improved guest interaction, upselling and product knowledge skills. Increase staff knowledge on food and wine pairings to create value in upselling and customer satisfaction.

**Design & Deliver** (Implementation journey)
- Purchase of self-service beer tap stations and automated wine dispenser stations using prepaid cashless payment systems.
- Mobile application for food ordering with e-payment services.

**Benefits of Job Redesign**

**Operation Benefits:**
- Removal of non-value-added activities (i.e. taking orders for food, serving of drinks, preparation of drinks) resulted in higher productivity. Space optimization by removing the need for a physical bar within the premises led to increased seating capacity.

**Manpower and Employee Benefits:**
- Manpower needs reduced by up to 60%. New outlet only needed 1 manager and 2 supervisors to man, compared to a traditional setup of 6 servers, 1 cashier and 1 bartender.
- Employees were relieved of menial tasks and gained new skills and knowledge on customer engagement, food and wine pairing, which in turn led to greater staff satisfaction and retention.
• Optimised workforce also enabled recognition of new skills and scope of work, which led to higher remuneration for staff.

2. Example: Food Shop (Mr Bean)

Discover & Diagnose (Areas that require the most manpower; areas that require improvement)
• Every kiosk previously produced soybean milk within their own establishment with a total of 2 staff needed to man the back-of-house. Due to the preparation process, staff for the opening shift were required to start earlier to prepare for the day’s operations. The back-of-house environment was also not conducive for staff, as it was hot and uncomfortable due to the cooking process.

Determine (Suitable solution adopted and why the solution, and job redesign methods adopted and why/what was changed)
• Suitable solution: Automation
Centralisation of the soaking, cooking and production process at the central kitchen.

• Job Redesign Method: Job Simplification and Enrichment
Staff were multi-skilled and multi-tasked with improved internal communication. For example: production of pancakes, making of pancake mix.

Design & Deliver (Implementation journey)
• Introduction of the changed production process was announced to the staff through townhall sessions and the various outlets / area managers. Some resistance were felt within the ranks as they were unsure about the quality and consistency of the centralised production.
• Production was reinforced by sending batches to the outlets for the staff to test and re-enforce the quality and standards of the product, which gained acceptance.

Benefits of Job Redesign
Operation Benefits:
• With the removal of the cooking process, kiosk environment became more conducive for the staff.

Manpower and Employee Benefits:
• Overall working hours were shortened as the opening shift were no longer required to report early, thus resulting in manpower cost savings.
• Flexi-shift was introduced to empower employees to determine their own shift timings.
• Staff now have the opportunity to be upskilled to cover the different areas within operations based on their own preferences.
3. **Example: Food Court (Kou Fu)**

**Discover & Diagnose** (Areas that require the most manpower; areas that require improvement)
- Staff accountable for cash collection and tallying of cash at the end of the day had to count the cash manually, taking up a lot of time and were prone to errors.
- Hygiene was also an issue as staff would come into contact with cash during the preparation of food.

**Determine** (Suitable solution adopted and why the solution, and job redesign methods adopted and why/what was changed)
- **Suitable solution:** Cash Management System
  Koufu determined that a Cash Management System would release the stress from the older workers from having to be held accountable for the cash collected and the time spent to count them. It would also increase the hygiene of the food that they serve.
- **Job Redesign Method:** Job Simplification
  Workers need not collect cash from the customers, and would face lesser stress as a result.

**Design & Deliver** (Implementation journey)
- Koufu briefed the employees on the advantages of using a Cash Management System.
- Employees also went through training with the vendor on how to use the Cash Management System to ensure that they know how to use the machine correctly.

**Benefits of Job Redesign**

**Operation Benefits:**
- No dispute with customers on collection of cash.
- Employees could now focus more on delivering good service and serving the customers more efficiently.

**Manpower and Employee Benefits:**
- Employee satisfaction improved as stress in accountability of cash were eliminated.
- Cashier roles were simplified and allowed employees to multi-task such as prepare drinks.
- Cash collection data is sent directly to finance through cloud.
4. **Example: Chinese Chain Restaurant (Jew Kit Hainanese Chicken Rice)**

**Discover & Diagnose**

- Strenuous process for older employees to manually prepare and cut vegetables.
- Long hours of standing and cutting increases the risk of employee injury.

**Determine**

- **Suitable solution: Automation**
  Jew Kit determined that automated slicing machine would be suitable to increase the efficiency of the preparation and cutting of vegetables by 50% and eliminated the prolonged hours of cutting motion that caused strain to the employees’ wrist.
- **Job Redesign Method: Job Simplification and Job Enlargement**
  Preparation of vegetables were simplified with automated slicing machine. Employee could then be deployed to other food production stations, such as cooking of sauces and packaging.

**Design & Deliver**

- Jew Kit sought the views of their employees and shared with them about the implementation, benefits of automated slicing machine.
- Employee also went through training to acquire competency in using the machine.
- Jew Kit also held a feedback session with the employees after implementing the machine to refine the work process.

**Benefits of Job Redesign**

**Operation Benefits:**

- Reduced 50% of vegetables cutting time
- Increased consistency of processed ingredients

**Manpower and Employee Benefits:**

- Employee morale improved due to less strenuous work, which also resulted in higher staff retention
- Staff were trained to perform other functions such as packing as they become more efficient in doing their tasks

5. **Example: Indian Cuisine Restaurant**

**Discover & Diagnose** (Areas that require the most manpower; areas that require improvement)

- Many of the restaurant's processes comprised on cutting, peeling, grinding and cooking, due to its focus on natural and fresh ingredients.
- In order to cope with demand, kitchen crew were employed to assist solely for the grinding, cutting and peeling processes, but demand still outweighed supply. For example, cutting and peeling of potatoes would require 4 staff a total of 7 hours.
Determine (Suitable solution adopted and why the solution, and job redesign methods adopted and why/what was changed)

- **Suitable solution: Kitchen Automation**
  Automated kitchen equipment were introduced to assist in manual functions, as well as expansion of current kitchen facilities.

- **Job Redesign Method: Job Rotation and Simplification**
  Kitchen crew were trained to do more value-added activities such as production of paste, stocks and sauces through the use of automated kitchen equipment.

Design & Deliver (Implementation journey)

- Identification of space availability to earmark for production processes.
- Identification of manual processes as well as load requirements for the purchase of the automated equipment's.

Benefits of Job Redesign

**Operation Benefits:**

- Higher yield and production since the introduction of automated kitchen equipment.
- Consistency and standards were maintained.

**Manpower and Employee Benefits:**

- Staff were trained in the usage /maintenance and cleaning of the automated kitchen equipment. Higher staff morale was noticed since the introduction of the new kitchen equipment.
- Process time in preparation were reduced allowing kitchen crew to learn new skillsets such as the production of paste, stocks and sauces.