# Organizing the stores

## Storeroom operations

# Table of Contents

# Factory Improvement Toolset

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT has been developed to be a sustainable, time- and cost-efficient option for supporting factories to enhance productivity through improved business practices and working conditions. FIT focuses on areas of production improvement and actions to be taken specific to each participating factory. It can be utilized as stand-alone learning tools or to complement other training programmes.

With each module lasting no more than 2.5 hours, FIT enables factories to train personnel, whilst minimizing interference with production realities. The easy-to-use methodology makes it possible to rapidly scale the implementation to reach a large cohort of trainees across multiple production facilities.

Working in small groups, participants review real-life situations and engage in discussions to determine improvements to be made in factory without an external trainer or specialist. This self-facilitated, activity-based and highly participatory learning approach positions participants as both student and teacher and makes the toolset self-tailored to the needs and interests of each group.

## About this module

This FIT module on Organizing the stores is a training for garment manufacturers to improve storeroom operations. Participants will work on improving the stores' layout and workflow, keeping the stores tidy, and training workers. This module takes about 2 hours to complete.

## Upon completion of the training, participants should have:

- Understood the importance of organizing the stores for efficiency, waste reduction, and safety.
- Learnt good practices in terms of layout, workflow, colour markings and tidiness.
- Discussed how, when and why to train workers in order for them to understand and maintain the organization system in the cutting room.
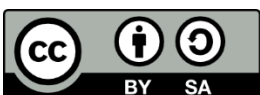
# Guidelines for successfully using the training tool

## Read out-loud

The FIT tool is designed for participants to take turns reading the instructions in the modules out loud to the group. At least one member of the group should be selected in the beginning of the session to take this responsibility.

## Work as a group

Always work in groups of 5-7 during a FIT session. The programme will not be successful if participants work independently or do not collaborate with each other.

## Be active

Encourage everyone in the group to actively contribute to the discussion. Ensure that no group member dominates the discussion or does not participate at all.

## Monitor the time

Select one member of the group to monitor the time for each activity and remind the group when it is time to move to the next exercise.

## Complete the action plan

Complete the action plan at the end of the session. This will help ensure that FIT results in improvements in the factory. Review the plan a while after the session to make sure that actions in the plan has been completed accordingly.

# Icons

A set of icons is used throughout the modules to provide easy to recognize reference points for different tasks within each session and activity.

### Read out loud
One member of the group should read out loud to the rest of group.

### Knowledge link
Knowledge and skills are linked to other FIT learning resources and support.

### Time allotted
Indicates how much time each sessions and activity should take.

### Supplies needed
Indicates that supplies may be necessary to complete the session.

### Begin step-by-step instructions
Indicates that the step-by-step instructions for an activity are beginning.

### Think about it
Indicates additional information for the participants to think about.

# Measuring your performance

Measuring operational efficiency is a key aspect of running a productive factory. The box(es) below guides you in understanding which measurement indicator(s) can be used to measure and evaluate the performance of your factory in relation to the topics covered in the FIT series on storeroom operations.

| Indicator 1 | Space utilization (%) |
|---|---|
| Definition | The proportion of space (floor + shelf surface) that is occupied by materials and other items (carts, machines, etc.) in your storerooms. |
| Purpose | To understand how efficiently space is used in your storerooms, and identify how you could improve storage efficiency while ensuring employees' safety. Both very low and very high space utilization is inefficient. It should not go above 85%. |
| Calculation | (# surface occupied in *sqm* / total surface of the stores in *sqm*) x 100%<br><br>Surface occupied   =   floor surface + shelf surface occupied by materials or others<br>Total surface         =   floor surface + shelf surface available in the stores<br>Shelf surface: e.g. a 3sqm shelf with 4 levels counts for 12sqm! |
| Frequency | Calculate every 6 months, or once a year. |
| Responsible | Storeroom manager |

| Indicator 2 | Average material retrieval time (Mins) |
|---|---|
| Definition | The average time (in minutes) that it takes for a storeroom worker to find, retrieve and prepare materials from the stores for issuing. |
| Purpose | To understand how well-organized and orderly your stores are (or how good your storage system is), and begin to identify how you could further improve organization and make storeroom operations faster and more efficient. |
| Calculation | Time how long it takes for a worker to locate, retrieve and prepare all items for a specific requisition. Record this for each requisition (trims and fabric separately) and calculate the average weekly, then monthly. |
| Frequency | Calculate monthly. |
| Responsible | Storeroom manager |

# Session 1

# Business case study

## Goals

Preparing you for the type of discussions you will have with other group members throughout the learning module and understanding the benefits of being exposed to different perspectives.

Understanding better why keeping the storeroom organized is important in the factory.

# Session 1
# **Overview**

**One member should read the full session out loud to the rest of group**

**15 minutes**

**Learning manual, pens, markers and poster paper**

A business case study presents a real-life situation for learners to reflect on and discuss with other group members. By discussing the case, students learn from others' ideas and perspectives, and develop an understanding of the topic at hand within the workplace.

**One group member reads the case study out loud**

**The whole group discusses the case study**

**Everyone develops a deeper understanding of the topic**

# Activities

## Case study review and respond

The case study below presents a situation that could happen in real life.

✏️ **Instructions:**

**1)** As a group, listen to one member read the case study below while following along in your learning module.

Sita is a new storeroom manager at the HS garment factory. The storeroom is disorganized. Piles of receipts are lying around next to boxes of thread and fabric rolls. This makes it hard for workers to know where to store what, and where to find the materials that are needed for production. It also makes cleaning difficult, and fabric sometimes has to be thrown away because of damage. In addition, the inspection tables are far away from the entrance of the room, where materials are unloaded. So, new materials must be carried all the way to the other side of the room for inspection. Workers bump into each other, drop materials, and sometimes trip over carts and boxes, hurting themselves.

To put some order in the stores and solve these problems, Sita makes the following changes. First, she re-organizes the stores so that the inspection tables are between the unloading area and the storage shelves. Then, she uses yellow paint to mark the path that workers should take to walk from one area to the other. She divides the storage area into separate locations for fabric, trims, packing materials, machine spares, cleaning aids, office items and sets up a small office to store documents used in the storerooms.

Thanks to these changes, the storeroom is much cleaner than before, and less material is wasted. Workers know where to store what, where to find what they need, and can now move around much faster. Accidents also happen less often.

**2)** Together, discuss Sita's situation by answering the three questions in table 1 on the next page.

| Table 1. Questions about Sita's situation |
|---|
| 1. What problems has Sita identified? What impact do these problems have on the factory and its workers? |
| 2. What does Sita do or change in order to solve these problems? |
| 3. What are the results of Sita's solutions for the factory and its workers? |

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blank and can be used for note taking.

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# Learning about the topic

## Goals

Identifying ways to improve the layout and the workflow of your stores.

Learning to use colour markings to clearly separate areas and increase safety.

Identifying specific actions to keep the stores tidy and organized on a daily basis.

Discussing how and when to train workers in order to keep the storeroom organized at all times.

# Session 2
# **Overview**

**One member should read the full session out loud to the rest of group**

**90 minutes**

**Learning manual, pens, and markers**

This training module will help you improve the organization of your stores by running you through 3 important aspects: (1) layout, (2) tidiness, and (3) training. Organizing your stores efficiently will help you make your storing operations more efficient, gain time, and protect your workers' health and safety. It will also help reduce unnecessary costs by avoiding damage to materials which are very expensive.

Improving your **layout & workflow**

Keeping stores **tidy**

**Training** workers

Throughout the activities, you will work on this topic by learning how to: (1) improve your stores' layout and workflow, (2) keep your stores clean, tidy, and organized, including by using colour markings, and (3) making sure your storeroom workers understands and maintains the stores' organization.

What you will learn today is part of the **5S** model, a globally-recognized method to improve house-keeping leading to improved productivity in factories. The 5S are:
- **Sort**: Reduce waste, dispose of unnecessary items
- **Straighten**: Organise your locations, keep tools and facilities in order
- **Shine**: Clean and improve the look of the factory
- **Standardize**: Document, record and display work processes
- **Sustain**: Train workers to follow good 5S practices

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# Activities

## Improving your layout

In your storerooms, everything should have its own place. A well-organized **stores layout** will make your storing operations more efficient, orderly and help you gain time. In this activity, you will practice improving the layout of a storage room.

## ✏️ Instructions:

**1)** Have a participant read aloud the 6 tips for organizing the stores in table 2 below.

**2)** Together, look at the stores layout in table 3, then discuss how it could be improved based on the 6 tips (table 2).

**3)** In pairs, draw the layout of your storeroom in table 3, then discuss what could be improved based on the 6 tips (table 2).

| Table 2. Tips for organizing the stores |
|---|
| 1. Store fabric, trims, packing materials, machine spares, cleaning aids, office items and documents in separate, demarcated areas. |
| 2. Reserve an area for unloading which leads directly into the stores where materials can be counted (area sometimes called "quarantine" or "hold" area). |
| 3. Have a special area for materials inspection and indicate it clearly. |
| 4. Have a separate office area in the stores where the paper work is done and records and computer kept tidily, with tables and chairs for storeroom administration staff. |
| 5. Have a reserved area for leftover / excess items and for defective items. |
| 6. Have a separate location to store moving equipment and tools, clearly marked out and to avoid any possible accidents. |

## Table 3. Improving your layout

Storeroom administration office

Unloading area

**Storeroom**

Entrance

Cleaning aids

Leftover and defective items

Quarantine

Fabric, trims, and packing

Tools & equipment 2

Office items

Inspection area

Cutting room

Machine spares & office documents

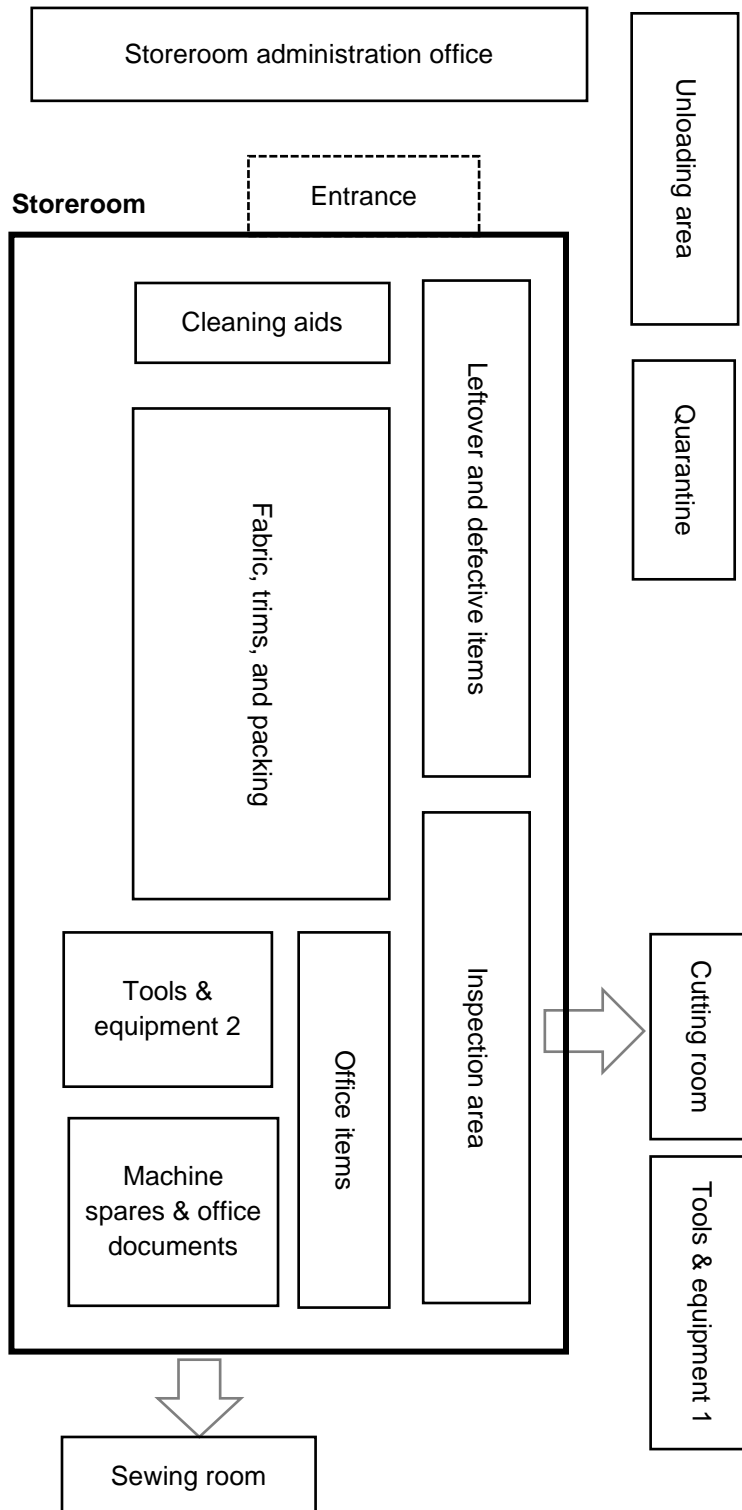Tools & equipment 1

Sewing room

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## Table 4. Improving your layout

Draw the layout of your storeroom below.

To learn more about how to improve your storing operations, ask your facilitator for the "Storeroom series" modules!

## Improving the workflow

A **workflow** is a series of steps involved in a work process. A logical workflow helps workers move materials quickly and safely. In this activity, you will think about the workflow of your storeroom.

## ✎. Instructions:

**1)** Together, look at the workflow illustrated with arrows on the layout plan below (Image 1). Then, discuss:

- Is this workflow simple and logical?
- Is this workflow safe and easy to understand for workers?

**2)** Together, discuss, then list or draw each step of your storing process from start to end in table 5. Then, have a participant read aloud the text box below table 5.

**3)** In pairs, come back to your drawing of your storeroom layout in table 4, and add arrows to indicate the workflow based on the steps listed in table 5. Then, discuss: Is it quick, safe, and logical? Do you need to change anything to the layout?

**4)** Have a participant read aloud the explanations on colour markings in table 6. Then, together, look at the list of objects/areas in table 6, and discuss for each: Which colour would you use to mark them?

## Image 1:

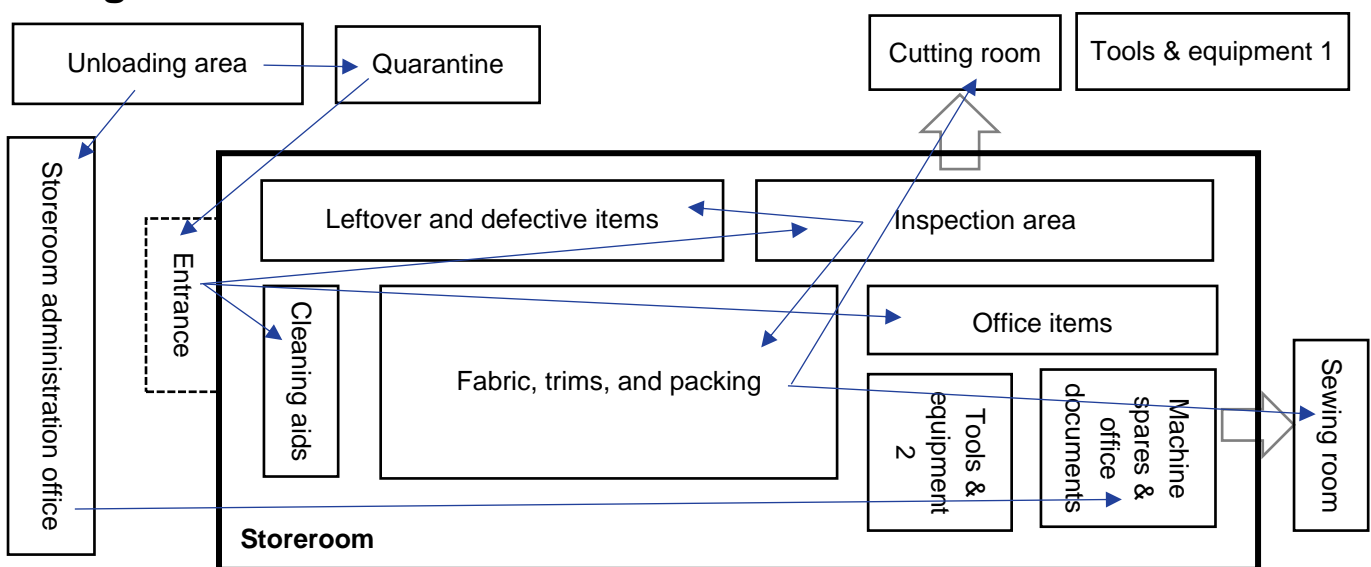## Table 5. Your storing process

List or draw all steps of your storing process below (from receiving fabric to issuing materials).

A good workflow should be **unidirectional**, meaning that all storerooms operations follow one continuous direction, from entrance to exit. This saves times, avoids damage to material, and is safer and easier for workers. Usually, a good layout ensures a good workflow.

## Table 6. Colour markings

To help workers understand your workflow and respect it during their daily work, you can use **colour markings** on the floor. Floor colour markings can also help you make the room more organized and safer by indicating important areas and paths.



**Yellow:** To indicate paths and areas (aisles, traffic lanes and work cells.

**Orange:** Materials or products that need to be inspected.





**Blue / Green:** Materials: Blue for work-in-progress, Green for finished goods.

**Red:** To indicate storage areas for scrap, defective materials, rework.



| Area / path | Colour |
|---|---|
| 1. Path for going from unloading area to inspection area | |
| 2. Unloading area | |
| 3. Rolls of fabric | |
| 4. Toxic chemicals or products (see box below) | |
| 5. Defective rolls of fabric | |
| 6. Materials waiting to be inspected in the inspection area | |
| 7. Finished garments waiting to be shipped | |

Here are a few tips for using **colour markings**:
- Use as few colours as possible so it is easier to remember
- Train all workers on the meaning of colours
- Use the same colour codes in all factory departments

Toxic / flammable chemicals must be securely stored in a ventilated area outside the stores but protected from rain, sunlight, humidity, etc.

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## Keeping the stores tidy

Keeping the **stores tidy and orderly** is important to (1) avoid damage to materials, and (2) protect your workers' health and safety. In this activity, you will discuss how to keep stores tidy.

## ✎. Instructions:

**1)** Together, discuss: Would you say your stores are tidy and orderly? Why or why not?

**2)** Together, read through the list of actions below to keep stores tidy and orderly in table 7, and put a ✓ in the column on the right if you do these things in your factory.

**3)** Together, look at the four pictures in table 8, then discuss: What is right or wrong in each of them? <u>Tip:</u> use the good practices from table 7 to guide you!

**4)** Together, discuss:
- How can keeping stores tidy help avoid waste of materials, or damage to materials?
- How can keeping stores tidy help you protect your workers' health and safety?

| Table 7. Keeping stores tidy | |
|---|:---:|
| **Actions** | ✓ |
| 1. Do not allow workers to store personal belongings or bring food and drinks into the stores. | |
| 2. Clearly mark areas for trucks to park and discharge to avoid anything blocking the way/ the entrance. | |
| 3. Keep unloading area clear of any materials except for the ones that have just been delivered. | |
| 4. Clearly separate the different areas (e.g. inspection, storage, unloading). | |
| 5. Reserve space to temporarily store goods that need to be inspected (e.g. in boxes or on carts). | |
| 6. Keep fabric and trims in different storage areas. Separate raw materials, work-in-progress, and finished goods. | |
| 7. Keep materials properly packaged to avoid damage (e.g. wrapping, boxes, etc.). | |
| 8. Keep stores clean and check regularly for pests, insects, and mold. | |
| 9. Have a specific storage area reserved for leftover/excess materials to avoid confusion. | |
| 10. Always keep alleys/paths clear of objects, boxes, carts and others to avoid blockages and accidents (e.g. trips and falls). | |
| 11. Draw specific paths on the floor and train workers in using them to go from one area to the other. | |
| 12. Keep documents (e.g. purchase orders) on shelves, in a separate room, to avoid damage. | |
| 13. Use a classification system for documents (e.g. by type and by date). | |
| 14. Check the stores regularly to make sure there is no water (e.g. from the roof or after rains) is leaking inside. | |
| 15. Make sure that items stored in the storerooms are not exposed to direct sunlight in order to avoid them getting damaged or discoloured. | |

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# Table 8. Good or bad practices?

Image A:



Image B:



Image C:



Image D:

## Training workers

To make sure that the stores remain tidy and organized, it is important to involve your staff in the process, and **train workers** in understanding and maintaining the organization of the storerooms. In this activity, you will discuss how to train workers in this.

## ✎ Instructions:

**1)** Together, discuss the four questions in table 9.

**2)** Together, read through the list of things you can do to train workers, in table 10, and put a ✓ in the column on the right if you do these things in your factory.

**3)** If you have other training practices in your factory, share with the group, discuss, and add them to the list.

| Table 9. Training workers | |
|---|---|
| **What?** | What should workers be trained in (think about activities 2a~2d)? |
| **Who?** | Who should be trained? Everyone? Only some workers? |
| **When?** | When should training take place? When starting the job? Continuously? Others? |
| **How?** | Which training method do you usually use? Are there other suitable methods? |

🔗 To learn more about how to organize trainings for workers, ask for the "Training workers" module.

| Table 10. Training workers | |
|---|:---:|
| **Actions** | ✓ |
| 1. Train workers in understanding the layout, workflow, colour codes, and tidying practices when they start the job. | |
| 2. Re-train workers whenever something changes, or improvements are made. | |
| 3. Keep simple boards on the wall to remind workers about important information such as the meaning of colour codes, with simple pictures and little text. | |
| 4. Encourage workers to tell their manager whenever they see something that is not consistent with the organization system, or untidy. | |
| 5. Train workers to always put back tools, machines, trolleys and others where they belong so as to maintain the organization system. | |
| 6. Forbid smoking and eating, allocate a specific area for drinking water, and explain to the workers why you are doing so. | |
| 7. Have workers place their belongings in lockers outside the storerooms, and explain to them why you are doing so. | |
| 8. Encourage more experienced workers to train newer workers and make sure they respect the organization system. | |
| 9. Make sure all storeroom workers are trained and involved in maintaining the system, even if they only work in one specific area of the storerooms. | |
| 10.  Put up posters on the wall to remind workers about safety guidelines (for example wearing gloves or helmets, lifting safely, etc.). | |
| | |
| | |
| | |
| | |

RACK - D

RACK - C

Session 3

# Action items

## Goals

Summarizing and revising the new knowledge gained.

Identifying concrete applications of the new knowledge that benefit your factory.

# Session 3
# **Overview**

**One member should read the full session out loud to the rest of group**

**20 minutes**

**Learning manual, pens, and markers**

Throughout this module, you gained new knowledge on how to organize your stores by improving their layout and workflow, keeping them tidy and organized, and training workers to respect and implement the system.

Improving your
**layout & workflow**

Keeping stores
**tidy**

**Training** workers

In this session, you will think of ways to apply your new knowledge to improve the organization of your stores by reviewing best practices and drafting your own action plan.

# Activities

## Best practices checklist

In this activity, you will review best storeroom organization practices as a next step for evaluating your own and implementing improvements.

✎. **Instructions:**

**1)** Together, look at the list of best practices in table 11, and put a ✓ in the column on the right if you use these practices in your factory.

| Table 11. Organizing the stores | |
|---|---|
| **Best practices** | **✓** |
| 1. The storerooms' layout is clearly separated into clearly marked areas corresponding to different storeroom functions / operations. | |
| 2. The storerooms' layout logically follows the storeroom operation workflow. | |
| 3. Everything in the storeroom (materials, etc.) has its own marked out place. | |
| 4. Coloured markings are used to delineate specific storeroom areas and pathways, and to keep workers safe by indicating dangers. | |
| 5. Stores are kept tidy and orderly at all times. Inspections are carried out regularly to ensure that the system is maintained. | |
| 6. Workers are trained to understand and maintain the organization of the stores. | |

## Your action plan

In this activity, you will think of ways to apply your new knowledge to improve your storeroom organization by drafting your own action plan.

## ✎. Instructions:

**1)** Together, fill in the action plan (table 12) on the next page. Identify a key problem that you want to solve and write down the solutions you identified while working on this module.

| Table 12. Organizing the stores – Action Plan | | | | |
|---|---|---|---|---|
| **Problem identified** | | | | |
| **Solutions identified** | **Action(s) to be taken** | **Person responsible** | **By when?** | **How will improvements be measured?** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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# Organizing the stores

The Factory Improvement Toolset (FIT) is an innovative self-facilitated, activity-based learning approach designed by the International Labour Organization (ILO) to create more decent and sustainable employment. FIT supports manufacturers in global supply chains to improve productivity, competitiveness and working conditions by upgrading production systems and factory practices.

FIT is being piloted in Asia under the regional Decent Work in the Garment Sector Supply Chains in Asia project funded by the Government of Sweden.