



International
Labour
Organization

Record-keeping

Storeroom operations



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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 Record-keeping is a training for garment manufacturers to improve storeroom operations. Participants will work on revising their record-keeping system and using record-keeping tools more efficiently. This module takes about 2 hours to complete.

Upon completion of the training, participants should have:

- Understood the importance of record-keeping and discussed how to improve their own record-keeping systems.
- Learnt how to fill-in and use bin cards and inventory sheets for efficient record-keeping.

The **Factory Improvement Toolset** of the **International Labour Organization (ILO)** are developed and provided by the ILO's **Enterprises Department**.

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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	$\left(\frac{\text{\# surface occupied in sqm}}{\text{total surface of the stores in sqm}} \right) \times 100\%$ <p>Surface occupied = floor surface + shelf surface occupied by materials or others Total surface = floor surface + shelf surface available in the stores Shelf surface: e.g. a 3sqm shelf with 4 levels counts for 12sqm!</p>
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 records 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

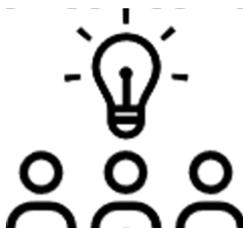
A business case study presents a real-life situation for learners to reflect on and discuss with other group members. By discussing the case, students learn from others' ideas and perspectives, and develop an understanding of the topic at hand within the workplace.



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

Activity

1



15 minutes

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 stores manager at the HS garment factory. During her first week at the factory, the head of merchandising complains to Sita that there is no system for recording received, issued, and leftover materials. So, no one knows exactly what quantity of which materials is available in the stores. As a result, sometimes too little is ordered and there is not enough fabric for the cutting room to complete the cut order in time. This stalls production and delays shipments to buyers. Sometimes, too much is ordered and there is a lot of leftover materials that cannot be used.

To solve these problems, Sita makes several changes. First, she designs bin cards to record the material coming in and out of the storerooms. Then, she shows her assistant how to update the bin cards whenever materials are received from suppliers or issued to the departments, and assigns one office clerk to checking weekly that the balance (quantity left in the stores) is correct. Last, she creates inventory sheets, which can easily be updated and shared with merchandising every day to show the material flow, expected delivery dates, as well as the value of incoming and outgoing materials, and material stock status (balance, damaged, left over).

Thanks to these changes, the merchandising department knows exactly what quantity to order for each material and when. The quantity of leftovers is greatly reduced, which saves the factory a lot of unnecessary costs. Production and shipment delays are avoided, and buyers are happy with this improvement.

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

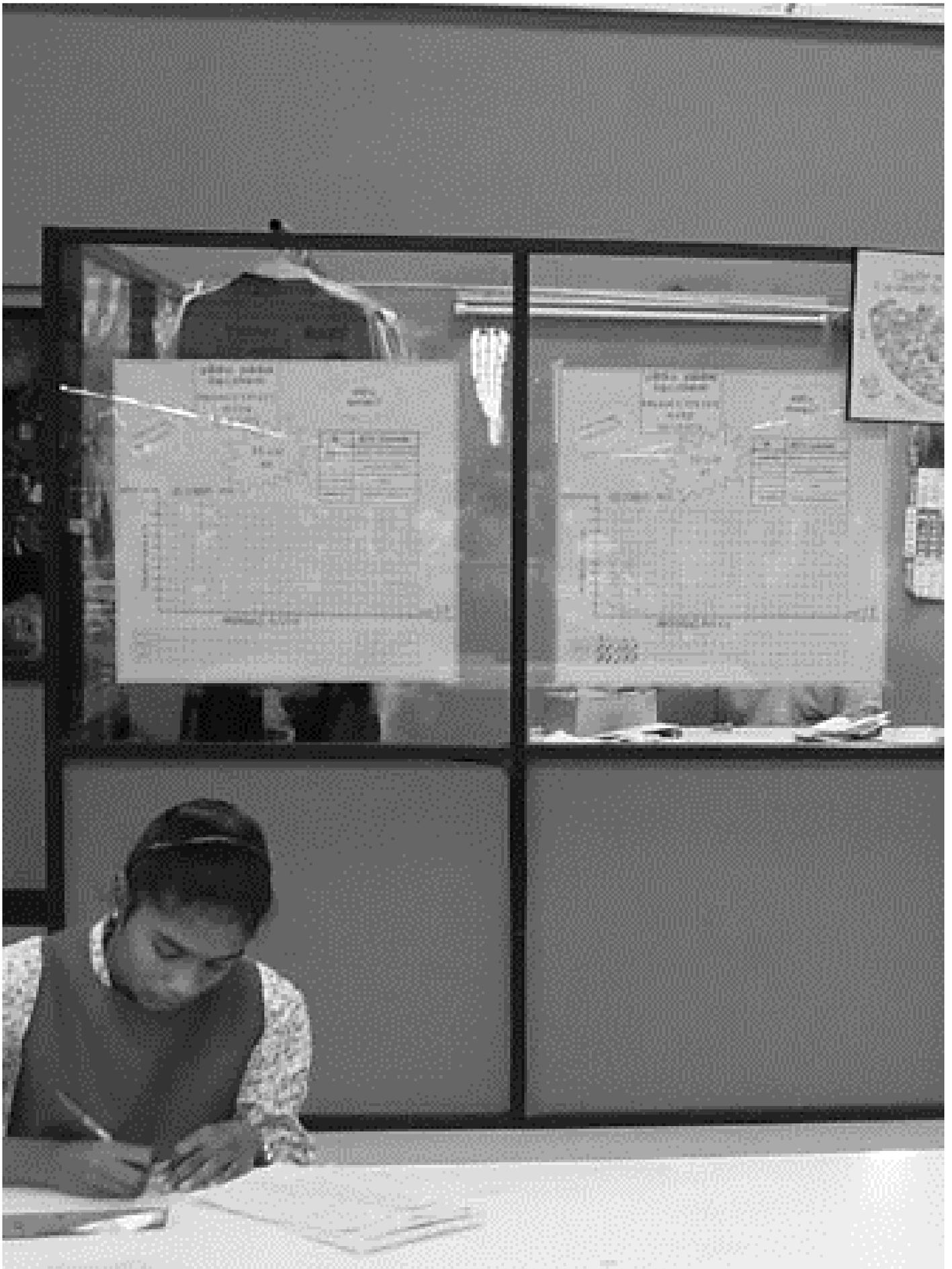
Table 1. Questions about Sita's situation

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?

This page has been intentionally left blank and can be used for note taking.



Session 2

Learning about the topic

Goals

Discussing the importance of record-keeping and thinking of how to improve your record-keeping system.

Learning how to fill-in and use bin cards for efficient record-keeping.

Learning how to set up and use inventory sheets for efficient record-keeping.

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 module aims to help you improve the way your storeroom operates by focusing on record-keeping operations. Keeping records is one of the key functions of the stores. It should be done by the Stores manager, his/her assistant, or stores office clerks. Good record-keeping helps reduce material waste by allowing Merchandising to control stock and place orders more accurately. Throughout this module, you will go through the two steps below.

Using **bin cards**



Using **inventory sheets**

First, you will discuss the importance of keeping records in your storeroom. Then, you will learn how to fill-in and use bin cards efficiently, and how to set up and use inventory sheets.

Activities

Activity

2a



20 minutes

Keeping records

Record-keeping in the storerooms is the process of recording everything that comes in and out of the storerooms on a daily basis. In this activity, you will discuss your own record-keeping system and the importance of having one.



Instructions:

- 1) Have a participant read aloud the text box below. Then, together, discuss:
 - How can record-keeping help merchandising know how much and when to re-order for each material?
 - What happens if you stock too much materials?
 - What happens if you stock too little materials?
- 2) Together, discuss: Do you have any record-keeping system in your factory? Does it work well?
- 3) Together, discuss the four questions in table 2. Write down your answers in the space provided.



Keeping records is important for you to:

1. Ensure that there is enough materials in stock to complete orders.
2. Avoid having too much excess / left over materials in the stores.
Excess should not be more than 3% (or what is agreed with buyers).
3. Know how much and when to re-order for each material item.
4. Provide information to other departments when they need it.

Table 2. Record-keeping

What?	What should be recorded?
Who?	Who should be responsible for or involved in record-keeping?
When?	When should record-keeping take place?
How?	How could you improve your record-keeping system? (Tip: Think about the 3 questions above as well).

Activity

2b



20 minutes

Recording with bin cards

Bin cards help you keep track of how much stock you have for each particular item (trims and fabric) at any time. In this activity, you will learn how to fill in and read bin cards to record material flow.



Instructions:

- 1) Together, look at the example of a filled-in bin card in table 3, and make sure everyone understands.
- 2) Have a participant read aloud the scenario in table 4. Then, together fill in the two bin cards (one for each item) below table 4.
- 3) Together, based on the filled-in bin cards, discuss the two questions below. Solutions are provided at the bottom of the next page.
 - What is the balance for small black buttons on December 15?
 - What is the balance for black cotton fabric on December 16?

Table 3. Bin cards

BIN CARD							
Bin No.....427							
Article....Yellow silk							
Date	Quantity Received	Quantity Issued	Balance	Date	Quantity Received	Quantity Issued	Balance
Feb 6	40	15	30	Feb 8			
Feb 7	0	10	20	Feb 9			
Checked Feb 7, 2019				Checked			
Initials.....V.S.				Initials.....			



There are different ways to design **bin cards**. Yours can be adapted depending on your needs and record-keeping system.

Table 4. Filling-in bin cards

Scenario:

- December 4: Balance for small black buttons is 40 boxes, balance for black cotton fabric is 25 rolls.
- December 5 at 8.35am: Stores receive 40 boxes of small black buttons, and 30 fabric rolls.
- December 8 at 1.25pm: Stores issues 10 fabric rolls to the cutting room.
- December 9 at 3.40pm: Stores issues 15 boxes of buttons to the sewing lines.
- December 15 at 10.15am: Stores receives 40 boxes of small black buttons.
- December 16 at 2.50pm: Stores issues 30 fabric rolls to the cutting room.

Bin card 1				
Bin No.		564	Material	Button
Colour		Black	Size / Width	Small (1')
Date	Time	Quantity received	Quantity issued	Balance
4/12	/	/	/	

Bin card 2				
Bin No.		764	Material	Fabric (cotton)
Colour		Black	Size / width	120cm
Date	Time	Quantity received	Quantity issued	Balance
4/12	/	/	/	



For general items such as machine spare parts, pens, cleaning aids and others, **bin cards** should also include the following information:

- Minimum quantity: Lowest quantity that an item in stock can reach.
- Maximum quantity: Highest quantity that an item in stock can reach.
- Ordering level: Number between minimum and maximum quantity. An order is placed when the balance reaches that number.

Solutions: Balance for small black buttons on December 15 (Bin Card 1) is 110 boxes; Balance for black cotton fabric (Bin Card 2) on December 16 is 70 rolls.

Activity

2c



10 minutes

Using bin cards efficiently

It is important to fill-in **bin cards** appropriately, but also to use them efficiently in order to facilitate accurate record-keeping. In this activity, you will discuss how to use bin cards for efficient record-keeping.



Instructions:

- 1) Together, go through the list of good practices for using bin cards in table 5, and put a ✓ in the column on the right if you use these practices in your factory.
- 2) Together, discuss: Which practices are you most likely to implement in your factory and why?

Table 5. Using bin cards efficiently

Good practices	✓
1. Use the same bin card form for all materials to simplify and standardize the record-keeping process.	
2. Fill-in (update) bin cards every time new materials are stored, and stored materials are issued.	
3. Bin cards should only be updated by the Stores manager, his/her assistant, or qualified stores administration office clerks.	
4. Hang bin cards on the same shelf / rack as the materials they keep track of are on. This simplifies the updating and verification process.	
5. Have someone (stores manager / assistant / office clerk) verify frequently that the information on the bin cards is correct by comparing the balance with the actual number left on shelves.	
6. Teach workers to systematically collect bin cards corresponding to the materials that are stored / issued, bring them to the stores office for updating, then put them back where they belong.	

Activity

2d



20 minutes

Recording with inventory sheets

An **inventory sheet** helps you keep track of how much stock you have for all the different materials in your storeroom. In this activity, you will discuss how to fill in inventory sheets to record important information.



Instructions:

- 1) Have a participant read aloud the three scenarios in table 6. Then, in pairs, fill in the information in the inventory sheet (table 7) based on scenario 2 and 3. Scenario 1 has been filled in to guide you.
- 2) In pairs, discuss the two practice questions in table 8.
- 3) Together, compare your answers, then complete the inventory table by filling them in in the corresponding cells. Solutions are at the bottom of the next page.

Table 6. Filling in inventory sheets

Scenario 1:

- On February 3, there is 5 rolls of red nylon fabric from supplier A&C left over.
- On February 4, the factory receives 20 rolls.
- On February 4, 5 rolls are issued to the cutting room.
- One roll costs 40 USD.

Scenario 2:

- On February 4, the factory receives 10 boxes of 20 cones of black sewing thread.
- On February 3, there was already 2 boxes of 20 cones left.
- On February 4, 3 boxes are issued to the sewing room.
- One box costs 6 USD.

Scenario 3:

- On February 4, the stores receive 40 rolls of white mesh fabric, from supplier TC.
- On February 3, there was already 8 rolls left.
- On February 4, 12 rolls are issued to the cutting room.
- One roll costs 18 USD.



There are different ways to design **inventory sheets**. Yours can be adapted depending on your needs and record-keeping system.

Table 7. Inventory sheet

Date: 4 February				Person responsible: Vijay				Signature:		
Item Code	Supplier	PO#	Category	Description	Receiving date	Quantity received	Quantity issued	Balance	Unit value (\$)	Total value of stock (\$)
3682483	A&C	679456	Fabric	Red, nylon	04-02	20	5	15	40	600
3239732		896740								
9238749		532710								

Table 8. Practice questions

1. What is the balance for black sewing thread on February 4? What is the total value for your inventory of black sewing thread on February 4?
2. What is the balance for white mesh fabric on February 4? What is the total value for your inventory of white mesh fabric on February 4?

Solutions: 1. 9 boxes, 2. 54 USD, 3. 36 rolls, 4. 648 USD

Activity

2e



20 minutes

Using inventory sheets

Nowadays, it is good practice to use computerized **inventory sheets**, as it is easier to update them and share them with merchandising. In this activity, you will discuss how to use inventory sheets.



Instructions:

- 1) Together, discuss: What is the difference between bin cards and inventory sheets? Make sure everyone understands.
- 2) Together, go through the list of 8 good practices for using inventory sheets in table 9, and put a ✓ in the column on the right if you use these practices in your factory.
- 3) Together, discuss the three questions in table 10.

Table 9. Using inventory sheets efficiently

Good practices	✓
1. The storeroom manager or his/her deputy should fill in inventory sheets every day in a consistent manner.	
2. Fill-in (update) the inventory sheet every time materials come in and out (are received, stored, and issued).	
3. Update the inventory sheets after updating the bin cards.	
4. A clerk should frequently check that the information on the inventory sheet is correct by comparing the balance with the actual number left on shelves.	
5. Include information on receiving on your inventory sheets: purchase order number, supplier, (expected) receiving date, quantity ordered, etc.	
6. Include information on unit value (cost) – for example, 20USD/roll – and on the total value of material stock (balance multiplied by unit cost).	
7. Include the item code, item order number, and a clear description for each material – for example “Trims, buttons, small, 30mm, black, plastic” – to avoid confusion, as the inventory covers all the materials in stock.	

Table 10. Setting up inventory sheets

1. **What** do you think should be recorded in your own inventory sheets?

2. **When** should inventory sheets be updated and why (which moments of the day)?

3. **Who** should be responsible for updating inventory sheets in your storerooms?



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 keep records more efficiently by using bin cards and inventory sheets.

Using **bin cards**



Using **inventory sheets**

In this session, you will think of ways to apply your new knowledge to improve your record-keeping systems by reviewing best practices and drafting your own action plan.



Bin card and inventory table templates are available online for you to print out and use in your own factory. To obtain it, contact your factory's FIT coordinator!

Activities

Activity

3a



5 minutes

Best practices checklist

In this activity, you will review best record-keeping 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. Record-keeping

Best practices	✓
1. There is a clear record-keeping system in place. The storeroom manager and other staff involved understand and respect this system.	
2. The information from the record-keeping system is shared with Merchandising for ordering and accounting purposes.	
3. Bin cards are used to record material movement and balance for each item. They are updated with every movement for each material item.	
4. Computerized inventory sheets are used to record material movement and balances for all the materials. They are updated every day.	
5. Bin cards and inventory sheets are checked regularly for mistakes by comparing balances with the physical items in stock (physical count).	

Activity

3b



15 minutes

Your action plan

In this activity, you will think of ways to apply your new knowledge to improve record-keeping in the stores 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. Record-keeping – Action Plan

Problem identified				
Solutions identified	Action(s) to be taken	Person responsible	By when?	How will improvements be measured?

Record-keeping

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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.

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