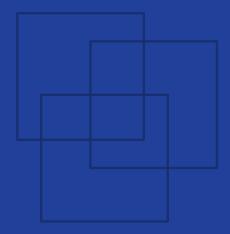


Solving problems in the factory An introduction to FIT





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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

The FIT module on 'Solving problems in the factory' is an introductory module for participants that never have participated in a FIT session before. It teaches participants to identify problems and find solutions while learning more about FIT. The module takes about 2 hours to complete.

Upon completion of the training, participants should have:

- A better understanding of the FIT programme.
- Learned about benefits of group learning for factory improvement processes.
- Practiced identifying problems and finding solutions to factory problems.

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 single 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.



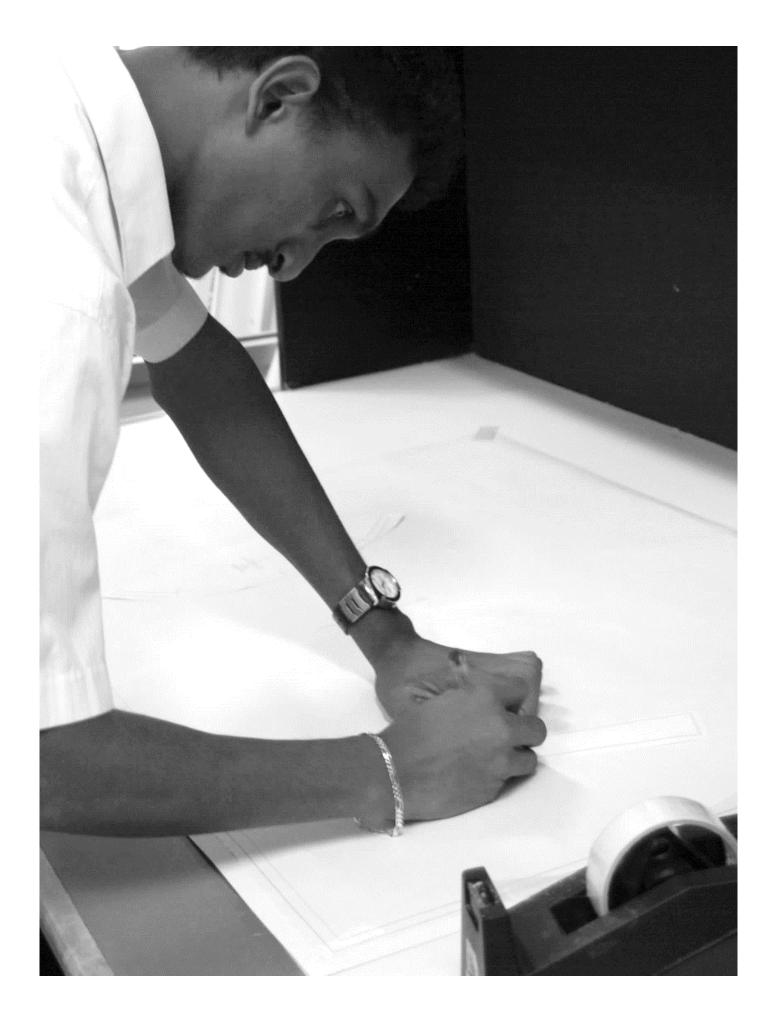
Think about it

Indicates additional information for the participants to think about.



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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 the ability to solve problems is important at work.

Session 1 Overview



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.





Learning manual, pens, markers and poster paper



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



Case study review and respond

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



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

Fern is the new assistant production manager at a factory called Quality Garments. Currently in the middle of peak holiday season, the factory is busy handling orders from a number of customers.

In a recent order for high quality polo shirts, a production change order was received, requesting a change from 3 buttons to 4. During final inspection, it was found that the production change had not taken place; shirts had been made with only 3 buttons.

The company has already had trouble meeting demand for its products and has missed several deadlines in the last few months, causing delays in delivery to customers. The late deliveries have upset customers, including some of Quality Garments' oldest clients.

Fern knows her production teams are already tired because of the heavy workload, and are making more mistakes due to longer work hours. Now, with a large order not meeting specifications, the factory faces an unhappy customer and a serious potential financial loss.

This is a big problem. The factory has to figure out how to deal with the large order of shirts that have one less button than what the customer ordered. Also, more delayed orders could result in Quality Garments losing customers.

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



Table 1. Questions about Fern's situation

- 1. What are the main problems here for:
 - a. The customers?
 - b. Quality Garments?
 - c. The workers?
- 2. What could the factory do to solve the problem with the shirts? What can Quality Garments do to avoid this type of problem in the future?
- 3. What could happen if the problem is not solved?
 - a. To the factory?
 - b. To the workers?



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Session 2 Learning about the topic

Goals

Learning about the benefits of group work for learning purposes and for ensuring a successful factory improvement process.

Understanding that identifying problems in the factory is everyone's responsibility and practicing identifying such.

Learning about the FIT programme and how it works.

Session 2 Overview





Learning manual, pens, and markers All factories have problems or areas that can be improved. It is important that everyone in the factory work together to identify problems because problems that stay hidden will not get fixed! Solving problems will improve the performance of the factory and will create a better workplace.

In this module, you will learn more about the FIT programme and how it can help you identify and solve problems in the factory. The module will cover three different steps:

Identifying problems

Identifying problems in the factory

Finding solutions

Improving the performance of the factory

Learn about FIT

How can FIT help solve factory problems



Activities

Activity

2a

Introduction

In this activity, you will introduce yourself to other group members.



- **1)** Take turns and share the following information with the rest of the group:
 - What is your name and your position?
 - When did you start working in the factory?
 - Have you ever participated in any factory improvement programme or a training at work before? If so, what was it in?



Activity **2b** () 15 minutes

Working in groups

FIT is all about working together in a group to learn and to come up with improvements in the factory. In this activity, we will discuss and learn more about the benefits of group work.

2. Instructions:

- **1)** Take turns and share the following information with the rest of the group:
 - When do you collaborate with others at work?
 - What is good about working in groups?
 - What is difficult about working in groups?
- 2) Together, read aloud and discuss the statements in table 2 below on why group work is good for learning and for improving the factory. Discuss: Do you agree or not?

Table 2. Benefits of group work	
Group work can help us learn, as we can explain to each other and share our knowledge with each other.	√
Group work can help us become better at collaborating with each other in our daily work.	\checkmark
Group work can help us communicate better.	V
Group work can help us solve difficult problems that we could not have handled on our own.	\checkmark
Group work can help us find solutions to the problem that everyone agree with.	\checkmark
Group work can help us come up with more solutions and help us find the right solution together.	\checkmark
Group work can help us implement solutions faster in the factory.	\checkmark



Activity **2C**

Identifying problems

Solving problems at work is everyone's responsibility. In this activity, you will think about problems that you come across at work.



- 1) Together, write down as many problems in the factory that you can think of in table 3 below. *Remember: Identifying problems in the factory is not a bad thing, solving them will help the factory perform better and it will create a better workplace!*
- 2) Together, circle the problems that you have tried to solve or reported to anyone in the past.
- **3)** Together, discuss:
 - Whose responsibility is it to identify problems in the factory?
 - Who should solve the problems in the factory?

Table 3. Problems in our factory

Example: Storeroom is not organized. The light is weak so I cannot see properly when sewing.



Activity **2d** () 20 minutes

Finding solutions

In this activity, you will learn more about FIT and how it can be used to improve your factory.



- 1) Together, select <u>one</u> of the problems that you identified in the previous activity. Then, come up with all the solutions that you can think of to address this problem. Write down all solutions in table 4.
- 2) Have a participant read aloud the text box at the bottom of the page.
- 3) Together, review the solutions that you identified in step 1 and circle 1 - 3 solutions that you believe are best suited to solve the problem in the factory. Use the information in the text box to guide you.

Table 4. Solutions to a problem in our factory



There are often many solutions to a problem. In the end, you have to choose which you believe is the right one. Often, time and cost are used as criteria for comparing different solutions. Depending on the situation, other criteria may also be relevant, such as safety. Activity **2e**

Learning about FIT

Previous activities helped you become more faimilar with the FIT group learning methodology. In this last activity, you will learn more about the FIT programme.



- 1) Have a participant read aloud the information box below.
- 2) Together, complete the quiz about FIT in table 5 by circling what you think are the right answer(s). Then, compare your answers with the solutions provided on the bottom of the page.



FIT was developed by the ILO to help factories improve their productivity, working conditions and competitiveness. There are more than 50 different FIT modules. Each module takes 2 - 2.5 hours to complete. The FIT approach is designed for both managers and workers.

When taking a FIT module, participants are divided into small groups of 5-7. The groups discuss real factory situations, share knowledge and experiences with each other and work together to identify improvements to be made in the factory.

The group learning methodology has many benefits for participants. For example, it helps participants improve their problem-solving ability and creativity. It also helps develop the teamwork and social skills of participants.

FIT was designed to help factories solve problems and make improvements. During the FIT sessions, participants discuss and apply new knowledge on their own factory. At the end of the FIT session, participants must come up with an action plan. The action plan is important, as it is the plan for how factories can make improvements in the factory.



Table 5. The Factory Improvement Toolset quiz				
 Why did the ILO develop the FIT programme for garment factories? 	a) To improve their productivityb) To improve their competitivenessc) To improve their working conditions			
2. How many FIT modules are there?	a) 20 b) 35 c) 50+			
3. How long does it take to complete a FIT module?	a) 1 day b) 2 - 2.5 hours c) 6 hours			
4. Who should participate in FIT sessions?	a) Managers b) Workers c) Both managers and workers			
 How many participants should be in each group when running a FIT session? 	a) 3 - 4 b) 5 - 7 c) 9 - 12			
6. What are participants doing during an FIT session?	a) Discuss real factory situationsb) Share knowledge and prior experiencesc) Identify improvements to be made in the factory			
7. What is a special feature of the FIT methodology?	a) Takes a lot of time b) Expert-led c) Highly participatory			
8. Why should factories use FIT?	 a) It is time- and cost-efficient b) It helps factories identify problems in the factory and to come up with solutions and an action plan c) It improves participant's creativity, problem- solving ability and teamwork skills 			
9. Why is the action plan that participants develop at the end of a FIT session important?	 a) It is testing the knowledge of participants b) It is a plan for how factories can make improvements in the factory after the session c) It must be completed because it is part of the FIT module 			



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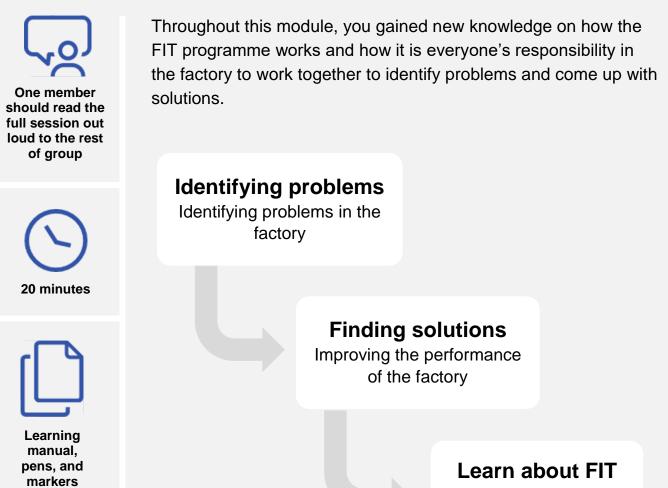
Session 3 Your action plan

Goals

Summarizing and revising the new knowledge gained.

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

Session 3 Overview



How can FIT help solve factory problems

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



Activity **3a**

Best practices checklist

In this activity, you will review best practices for solving problems in the factory.



1) Together, look at the list of best practices in table 6, and put a ✓ in the column on the right if you use these practices in your factory.

Table 6. Best practices for solving problems

Best practices

- 1. Work together to identify problems and to find solutions. This will help your factory improve over time.
- 2. When encountering a problem, try to define it clearly. You can do this by comparing what should be happening with what is happening in reality.
- 3. Find the cause of the problem. Without knowing the cause, there is no way to find the right solution.
- 4. Develop a solution to the problem that you encountered. Think about criteria such as time and cost to find a solution that is possible for your factory to implement.
- 5. Involve all factory staff, workers, supervisors and managers, in being problem solvers in the factory.
- 6. Inform your manager about problems that you encounter in the factory, and share a solution if you have identified such. *Remember, problems that stay hidden will not get fixed!*



 \checkmark

Activity 3b

15 minutes

Your action plan

In this activity, you will think of ways to solve problems in your factory by drafting your own action plan.



- **1)** Together, look at table 7 on the next page containing a completed action plan for a common factory problem.
- 2) Together, fill in the action plan (table 8). Select one of the problems that you identified in activity 2c and write down up to 4 solutions you can identify.



Table 7. Example of a completed action plan							
Problem identified	Problem identified The sewing floor is dirty and dusty, with fabric bits, thread and buttons lying around.						
Solutions identified	Action(s) to be taken	Person responsible	By when?	How will improvements be measured?			
Buy more bins and place in close connection to work stations.	 Buy 40 new bins Place the new bins in good locations in the sewing department 	Department manager	20 February	 Defects per Hundred Units (%), end line, per line (caused by garment being dirty) Number of slip and fall accidents 			
Inform workers to use new bins.	 Raise issue with all workers at the daily line meeting Put up a reminder note on all info boards. 	Line leaders	21 February	Same as above.			
Clean the sewing room floor and empty bins every day.	- Assign staff member responsibility for sweeping the floor and emptying bins at the end of each day.	Department manager	15 February	Same as above.			



	Table 8. Solving problems – Action plan						
Problem identified							
Solutions identified	Action(s) to be taken	Person responsible	By when?	How will improvements be measured?			



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Solving problems in the factory

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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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