# Training Program on Simulation Software for Industrial Engineers

CommLab INDIA for effective learning

INTRODUCTION

## Client Details

**Industry**: Manufacturing
**Department**: Industrial Engineering
**Headquarters:** Singapore
**Status:** One among the Global 500 list
**Operating in:** 30 Countries
**Employees:** 200,000
**Learners:** Industrial Engineers

## Course Requirements

| | |
|---|---|
| **Tool:** | Flash |
| **Number of modules:** | 9 |
| **Quiz:** | No |
| **Interactivity level:** | Medium (Level 2) |
| **Audio:** | Yes |
| **Course duration:** | 3 Hours |

## Project Details

The customer's requirement was a training program on a simulation software that simulates manufacturing processes. With the help of this software, engineers create a virtual production line and test it without disturbing the actual system.

The existing training was in the form of an ILT session of about 3 days. The client wanted us to create an online training program that could be covered in 1 day.

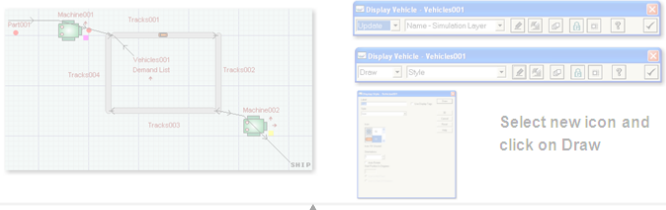
ABOUT THE CONTENT

## Content Details

| | |
|---|---|
| **Source content** | PDFs, PPTs, WebEx sessions |
| **Content clarity** | Average |
| **Content Type** | Concepts, Processes and Principles |
| **Images** | Yes |
| **SME assistance** | Yes |

### Track and Vehicles

1. Create parts and machines
2. Create tracks, preferred minimum three pieces
3. Create vehicle
4. Interconnect part to machine and tracks between them
5. Select place where vehicle enters the tracks using input rule at the vehicle or "To" Button using "PUSH to Tracks001(1)", usually vehicle enters the track in track 001.
6. Select track for loading use "PULL from Part001 out of Machine002"
7. Select track for unloading use "PUSH to Machine002"
8. To change the vehicle icon follow these steps, right click → Display




### Histogram



The screen shots of the software were provided by the client

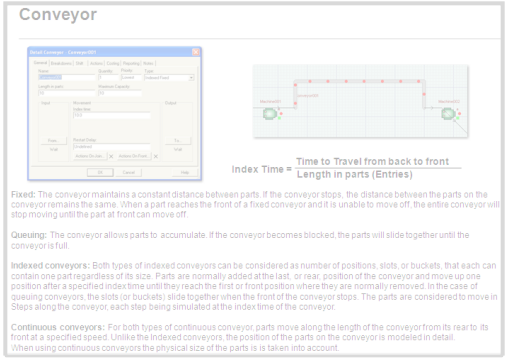
CHALLENGE & SOLUTION

## Challenge

**Content was a high-level overview of the software**

- Content included complex technical terminology
- It was a collection of concepts, processes and principles

**Content used complex technical terms**

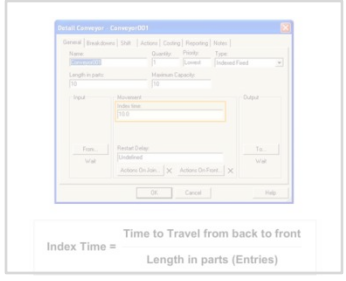


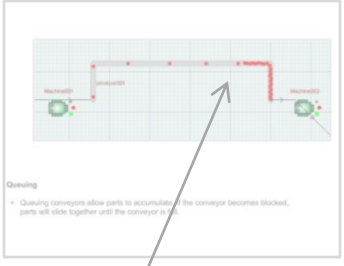

## CommLab Solution

**Internet Research and WebEx sessions with the SME**

- A lot of online research was done to understand the technical terminology
- WebEx sessions with the SME were very helpful in clarifying the content
- Concepts were explained using animations, resulting in more clarity

**Animation was used to make concepts more clear**



Movement of goods in production line shown through animation

CHALLENGE & SOLUTION

## Challenge

**Short time for course development**

The training program had 9 modules and had to be delivered in 45 days.

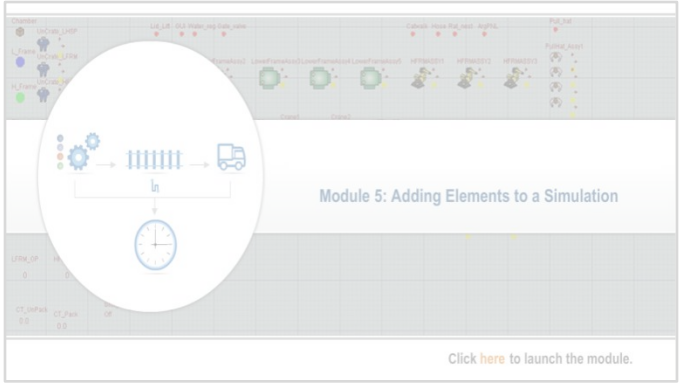
**Deadline: 45 days**


## CommLab Solution

**Team huddles everyday to avoid inconsistencies and deliver the project on-time**

The team used to meet together in daily huddles. This was done to standardize the templates, visual style and finalize the instructional approach. This strategy helped cut down the time for development.

**Standardized templates**



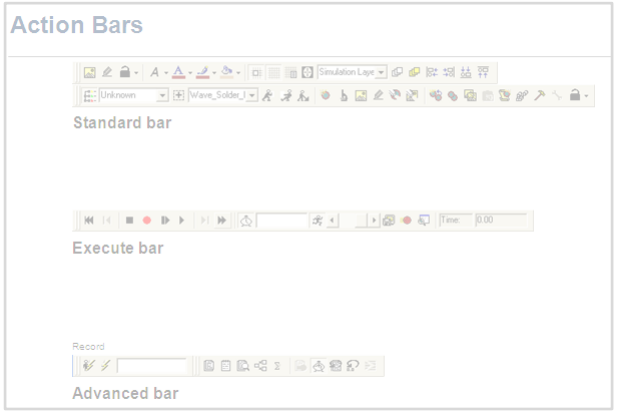
CHALLENGE & SOLUTION

## Challenge

**Missing content and unavailability of SME**

- Content provided had a lot of inconsistencies.
- SME unavailability was another issue which resulted in delays.

**Missing content**




## CommLab Solution

**Taking the initiative to look for missing content**

Online research was done for filling in gaps caused by the missing content. Researched information was sent to the SME for approval.

We had a sound communication plan in place and used several ways to contact the SME including WebEx sessions, sending queries via emails and direct calls.

**Following up with SME via emails and direct calls**

STRATEGY

## Instructional

**Job-aids and simulation videos**

Job-aids in the form of PDFs were provided in the modules, so that the engineers could refer to them when they started using the software.

Videos of the software simulation were embedded in the modules so that the learners became familiar with the actual functionality of the software.

## Visual

**Icons to represent the concepts**

There were many concepts throughout the 9 modules. In order to maintain consistency, icons were created to clearly represent various concepts.

These icons also helped the engineers to create mental-models for various concepts which were repeated throughout the training program.

See the example in the next page.

EXAMPLE

Instructional

## Screenshot of the PPT

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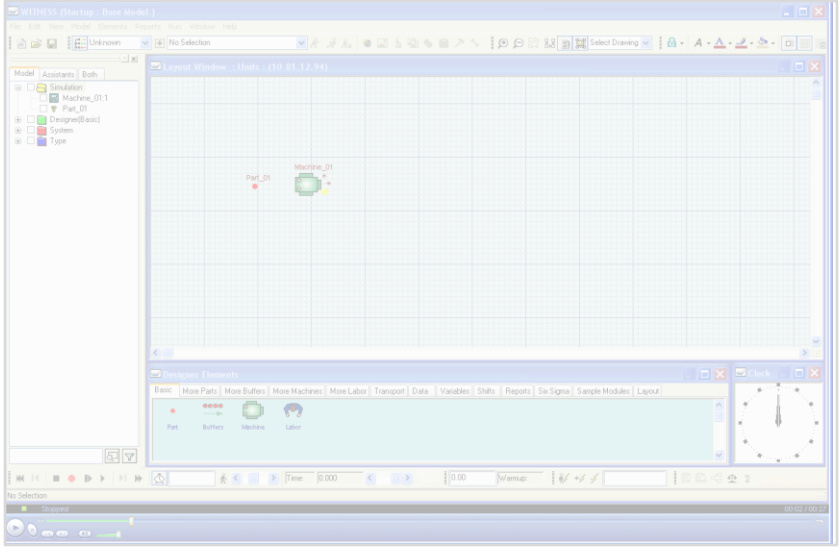
Select new icon and click on Draw

## Snapshot of video showing software simulation



EXAMPLE

Visual

**Icons were created for representing various concepts**

EXAMPLE

Visual

**Line diagrams were created to explain the process flow**

EXAMPLE

Visual

**Screenshot of the PPT**




**Line drawings and icons were used to make the content easy to understand**

RESULT

## Customer Feedback

As a result of online research, there was lots of useful information collected for the training program.

Looking at this information, the client feedback was :

> "Excellent initiative on CommLab's part finding this training document to supplement SME's material."

On the Alpha submission of the Module 5, the client's feedback was :

> "I like the look and feel a great deal – very clean and information is presented in an engaging way."