

# Case 8: Tarrant Fixtures

By: David Welch (Kellogg Class of '04), Edited By: Adam Louras (Kellogg Class of '11)

## Case Question

- Our client, Tarrant Fixtures, is a low-intensity manufacturing company that produces display fixtures for retail clients. The company's financial performance has deteriorated in each of the last three years. Specifically, they are concerned with the company's falling Return on Investment (ROI).
- The CEO has asked us to look into this problem. How can Tarrant Fixtures get back on track?

## Case tracker

- Industry:**  
Industrial goods
- Level of Difficulty:**  
Medium
- Case format:**  
Improving profitability
- Concepts being tested:**
  - Operations
  - Accounting

## Fit Questions

### Spend first 15 min on fit

- What do you see as the most challenging aspect of this job?
- Tell me about your written communication skills.
- What are a couple of the best and worst decisions you have made in the past year?

## Guide to interviewer

- This case is about improving profitability and requires a real understanding of finance to solve. There has been a massive increase in working capital due to inventory build-up from an increase in the number of SKUs.
- This is a short case, designed to be solved in approximately 15-20 minutes. There are no slides.
- The important steps are:
  - Establishing a viable structure (Using ROI formula)
  - Breaking down the problem into component parts
  - Continuing to examine issues until the correct ones are identified.

8

Quants.

7

Structure



Opps.  
Acct.

# Clarifying answers and case guide

## Clarifying answers to provide if Asked

### Industry Characteristics/Market Economics

- The market has grown at 25% over the past three years

### Client Characteristics

- Client has remained the industry *market share leader* in displays over the past three years and has maintained 25% market share

### Competitive Dynamics

- There are several players in the market, but everything has remained stable from a competitive standpoint

## Interviewer Guide to Case

A sample case structure would include the following:

- 1) Start with the definition of ROI and identify the potential areas for problems
- 2) Identify differences in profits over the last few years
- 3) Identify capital employed and deep dive increase in working capital

### Necessary Information that should be given only when specifically asked :

- Product Types:
  - *Custom displays* (50% of Sales)- Produced only when an order is placed and the payment is received
  - *Standard displays* (50% of Sales)@Manufactured to “open standard” for display sizes/types and stored in inventory (Built-to-stock)
    - 5 standardized products account for 80% of sales in standardized products; Number of standardized products increased from 5 to 12 over last 3 years
- Past Three Years of Financial Performance:
  - *Total Revenues*: Grew by a 25%, from \$100M to \$125M, equally across both types
  - *Costs of production* (COGS, labor, SG&A, etc.): Remained stable as a percentage of revenue [80%]
  - *CAPEX*: The company has no new investments in Property, Plant, & Equipment
  - *Working Capital*
    - Total Working Capital Employed three years ago = \$80M
    - Total Working Capital Employed today = \$130M
    - Inventory levels have increased by 300% (primarily in finished goods), from \$25 million to \$75 million

# Key elements to analyze

## Definition of ROI

- To begin this case correctly, the interviewee must understand the components of ROI
- If the interviewee doesn't know the formula for ROI, the case is dead; however, you should guide the interviewer to help them practice

## Net Profits

- The interviewee will likely begin by discussing the "top line" of the ROI equation
- Net Profit is not the cause of the ROI issue as shown from the calculation below

## Capital Employed

- The interviewee should examine Capital Employed to find that PP&E is constant as no CAPEX was employed, Inventory is the culprit
- Once identified, follow up with, "What can management do to improve the Inventory Problem?"

## Notes to Interviewer

- The formula for ROI:

$$\text{ROI} = \frac{\text{Return}}{\text{Investment}} = \frac{\text{Profits}}{\text{Capital Employed}} = \frac{f(\text{price, quantify, fixed costs, variable costs})}{f(\text{PPE, working capital})}$$

## Notes to Interviewer

- Net Profit can be calculated based on the information from the prior page as follows:

	Year 1	Year 3
Revenue	100M	125M
Cost of Production \$	80M	100M
<b>Net Profit</b>	20M	25M
<b>Cost of Production % of Revenue</b>	80%	80%

- The company's absolute level of profits have increased 25% during the last three years, so this is not the cause of the ROI issue

## Notes on Exhibit 1 & 2

- A line-by-by line examination of a typical Working Capital statement will indicate all of the relevant categories of capital for purposes of calculating ROI.
- Based on the data from the prior page, following conclusion may then be drawn:
  - Total Working Capital increased by \$50M because Inventory levels increased by \$50M
  - PP&E, AR, AP, Cash etc. are all stable
- Potential Causes/fixes for Inventory Increase:
  - Proliferation of standardized product lines
  - Inaccurate demand forecasts resulting in excess safety stock
  - Obsolete inventories of out-dated product lines.

# Solution and recommendations

## Solution & Recommendations

- The client's ROI has fallen over the past three years due to a \$50M increase in Working Capital caused by a 300% increase in inventory. Inventory has grown because of:
  - The increase in the Total number of standardized product SKUs from 5 to 12
  - Inaccurate demand forecasts resulting in excess safety stock
  - Obsolete inventories of out-dated products
- To correct this issue, the client should work to reduce its inventory by:
  - Write-off or work-down obsolete inventory (this will cause an immediate hit on profits, so management may be reluctant)
  - Improve demand forecasting to set more realistic safety stock levels
  - Reducing the "Standard" product-line down to the top 5 products (80% of current sales)

## Bonus/Guide to an Excellent Case

- An excellent interviewee will:
  - Provide creative, logical reasons for the inventory increase
  - Provide creative, logical solutions to reduce Inventory
  - Detail a cohesive demand forecasting plan that would improve accuracy
  - Provide a plan to limit future product proliferation in the "Standard" product lines