



## Executive Focus: Profit Maximization in Manufacturing

35 Questions to Assess if you are still a Job Shop

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Over the last several years, many of our Small-to-Medium size prospects and clients have been trying to achieve greater profit maximization by fine tuning their full scale production facility. Each has endeavored to reap wider profit margins by executing lean events and performing six sigma analyses. Yet, many have failed to reach their ultimate goal.

When examining why these organizations have ultimately not yet achieved their goal, we have found one common theme. Each began their operation as a small 'job shop' servicing either one very large customer or many small customers. Moreover, each has systems, people, and processes in place that worked well when the facility was a 'job shop.' The implication of applying this template onto a 'large scale' repetitive production facility is an increase in employee friction and inefficiency. Because an organization's departments are intertwined, companies foolhardily attempt to 'lean' a function or department such as purchasing or inventory only to find that the rest of the operation will not cope or align themselves with the change. The outcome is an erosion of profit maximization.

To resolve this problem, you must *first* clearly understand whether you are currently a 'job shop' or a mass production environment. After understanding your current environment, you should *then* focus on aligning the organization's functions along three dimensions: organization structure/roles, skill set, and information/data flow.

The following are 35 questions to assess whether your organization is truly a 'job shop' or a mass production environment.

### 1) Sales

- |                                                                                                                                       |     |    |
|---------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| a) Is your sales cycle shorter than three months?                                                                                     | Yes | No |
| b) Does your sales department "close deals" without the need of intensive interaction with other departments, especially engineering? | Yes | No |
| c) Is a majority of your employed sales staff's salary derived through commissions?                                                   | Yes | No |
| d) Does your sales staff have and use a catalog with pre-priced products?                                                             | Yes | No |
| e) Does your sales staff sell off product data sheets?                                                                                | Yes | No |

### 2) Program/Project/Product Management

- |                                                                                                                         |     |    |
|-------------------------------------------------------------------------------------------------------------------------|-----|----|
| a) Do you have more Product Managers than Project/Program Managers?                                                     | Yes | No |
| b) Is there a handover from engineering to Product Management after which no major engineering activities are required? | Yes | No |
| c) Can you sell the <u>same</u> product with marginal or no changes?                                                    | Yes | No |

### 3) Engineering

- |                                                                                    |     |    |
|------------------------------------------------------------------------------------|-----|----|
| a) Is the ratio of engineering cost to total cost 5% or less?                      | Yes | No |
| b) Are your Engineers <i>primarily developing</i> new products (not for projects)? | Yes | No |
| c) Can your operation begin work without constant engineering updates?             | Yes | No |

### 4) Planning

- |                                                                                                                 |     |    |
|-----------------------------------------------------------------------------------------------------------------|-----|----|
| a) Does your planner <i>usually meet</i> the previously planned output goal?                                    | Yes | No |
| b) Do your planners use a ERP or an enterprise planning system without any help of spread sheets or MS Project? | Yes | No |
| c) Does your planner <i>infrequently</i> have non-customer related 'get on the same page' meetings?             | Yes | No |
| d) Can your planner rely on historical sales data to forecast future plans?                                     | Yes | No |
| e) Does your planner instill a 'frozen' planning period into the production plan?                               | Yes | No |

### 5) Purchasing

- |                                                                                                                                         |     |    |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| a) Has your purchasing organization identified and proposed a plan of action to delineate between commodity versus strategic purchases? | Yes | No |
| b) Can your purchasing manager begin work without the constant input of engineering updates/drawings and resources?                     | Yes | No |



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- |            |                                                                                                                                                                         |     |    |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| c)         | Can your purchasing managers name the core components of your product?                                                                                                  | Yes | No |
| d)         | Does your purchasing team have or offer supplier partnership incentives and awards?                                                                                     | Yes | No |
| e)         | Can you verify cost savings per purchasing manager within a margin of +/- 3% for the same components over a three year period?                                          | Yes | No |
| <b>6)</b>  | <b>Quality</b>                                                                                                                                                          |     |    |
| a)         | Can your quality manager begin work without the input of engineering resources?                                                                                         | Yes | No |
| b)         | Do you have a high level of quality without a 100% quality check on components and finished goods ?                                                                     | Yes | No |
| <b>7)</b>  | <b>Inventory</b>                                                                                                                                                        |     |    |
| a)         | Do you end the year without <b>significant</b> 'write-downs' for left over inventory?                                                                                   | Yes | No |
| b)         | Do you mainly use standardized storage bins in your warehouse / storage area?                                                                                           | Yes | No |
| c)         | Since your last layout reconfiguration (including contents and bins), has your inventory department been able to keep their area organized and properly catalogued?     | Yes | No |
| <b>8)</b>  | <b>Assembly</b>                                                                                                                                                         |     |    |
| a)         | Do your assembly workers perform quality checks based on predefined and documented quality procedures?                                                                  | Yes | No |
| b)         | Is your assembly worker able to 'spot' quality issues based on experience in assembling certain repeatable components?                                                  | Yes | No |
| c)         | Are a large majority of your assembly workers considered specialists of certain assembly work (rather than all-a-rounder able to execute very different assembly work)? | Yes | No |
| d)         | Does your assembly worker get all of their instructions exclusively from standard work descriptions?                                                                    | Yes | No |
| <b>9)</b>  | <b>Logistics</b>                                                                                                                                                        |     |    |
| a)         | Do you have 'frame contracts' with large parcel shippers that can rely on your shipment estimates?                                                                      | Yes | No |
| b)         | Do you buy only one or few type/size(s) of packaging materials?                                                                                                         | Yes | No |
| c)         | Does your logistics team begin work able to 'spot' quality issues based on experience in of processing repeatable products?                                             | Yes | No |
| <b>10)</b> | <b>Service</b>                                                                                                                                                          |     |    |
| a)         | Do you have a person solely tasked with customer service?                                                                                                               | Yes | No |
| b)         | Does the customer service person train by using your product catalog?                                                                                                   | Yes | No |

If you replied "yes" to a majority of the questions, you are most likely in a mass production environment. If however, a majority of your answers are "no", then you may be in a job-shop type of business.

Applying mass production environment solutions to a 'job shop' type environment will ultimately erode profit maximization. Both models can be successful and highly lucrative, if properly aligned. A better alignment of your 'organization type' to your organization's structure/roles, skill set, and information/data flow processes can help to eliminate frictions and inefficiencies enabling your business to take full advantage of it's strategic position.

TMG-IMC Inc. is a Texas based affiliate of TMG – Industrial Management Consultants GmbH., Stuttgart Germany. With over 30 years of experience in implementing operational solutions to complex problems, the American affiliate has a special focus helping companies to increase EBITDA and Cash Flow in the Airline and Aerospace markets. TMG IMC has run successful projects in North America and in Europe. For more information contact: Francisco Aguilera, [aguilera@tmg-imc.com](mailto:aguilera@tmg-imc.com).