

Constraints Management

As we move quickly out of recession, many companies find themselves unable to meet excessive customer demand due to constraints within their own value stream. This limitation ultimately means lost revenues, reduced contribution margin and even lost market share.

Constraints are those factors, which prevent a system from meeting its required output. In other words the market demands more from the system than it can deliver. In the manufacturing process, it is widely believed that these constraints are limited in number (at least one), and rarely so many that an improvement cannot be addressed.

We consider there to be four main constraints:

Equipment Constraints: The manufacturing equipment in its current configuration and usage is unable to achieve the level of output required by the market

Supply Chain Constraints: These exist within the supply chain, prior to or after the manufacturing process. This can include a shortage of raw materials (i.e. Steel), constraints at suppliers manufacturing facilities, lack of suppliers in the market, key suppliers holding market to ransom, or potentially transport constraints

People Constraints: Shortage of skilled labour, restrictive labour practices and inflexible working attitude can play a significant role in the expansion of output.

Regulatory Constraints: Laws, labour agreements, internal policies and procedures as well as health and safety policies can contribute individually or conjointly to a capping on deliveries.

Constraints Management is a cost improvement activity, which seeks to identify and address these issues. There are five steps to breaking open these constraints:

- **Analysis:** Identify the constraints within the value chain. This can often be obvious to the manufacturing and logistics team, however, they are often surprised when one constraint is solved and suddenly another (unknown) appears somewhere else
- **Action:** Decide which action to take to address the constraint, and implement it through a controlled and communicated approach

- Support: The rest of the system must be aligned with the changes. Additionally, the organization must understand the goal of addressing the constraint and support it
- Elevate the constraint (make other major changes necessary to break the constraint)
- Move rapidly on to the next constraint, without losing momentum

Constraints Management is an area of specialty at Cost Improvement Consultants. If you wish to know more about Constraints Management or need support from our engineering and supply chain experts on a project, please do not hesitate to contact us.