



# **HOW TO MAXIMISE EFFICIENCY ON YOUR** SHOP FLOOR

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#### An inefficient shop floor is an unsuccessful shop floor. Building

efficient processes is the key to increasing production. In manufacturing, efficiency doesn't just mean increasing speed. It means saving money, eliminating errors, and improving performance.



No production line is identical. Even a build designed the same, with the same equipment, making the same products, the most important part of your production line will still be unique – the people.

If you want a more efficient and effective system, that begins and ends with the workers.

In high integrity, high value, and high variety manufacturing, precision and speed are paramount. The key to sustainable success lies in eliminating wasted time, wasted money, and errors. Industry 4.0 and digital manufacturing are more than just buzzwords – innovative technologies have catalyzed a new era of efficient and productive work environments.

But that all starts with...

### Lean Manufacturing

Lean manufacturing is a collection of 5 principles that strip the fat from the manufacturing process. Engaging with these principles is key to removing wasted expenditure and increasing your productivity. The principles of lean manufacturing are a great way to begin and expand on your own goals towards efficiency.

### Principles

#### 2. Map out the value stream

Here you record and analyze the input of information and materials required to produce your specific product. This allows you to find opportunities for you to further streamline this process. Anything that fails to add value should be cut or scrutinized further.

#### 4. Create a pull system

This means that you build your processes around demand – having a reactive approach to your manufacturing. Push systems rely on forecasts and having inventory be brought in based on predictions that can often be incorrect. A pull system relies on the previously established flow to make sure that you never have more than you need.

#### **1. Define value**

Look at your facility and see where the value is generated for the customer. This means looking at your production line from the customer's perspective, and understanding where and what customers are willing to spend. There's no doubt that most businesses have already approached their production with this in mind, but this is how your manufacturing process can find a singular goal to centre its efficiency around.

#### **3. Implement a flow**

The goal for this is to create a smooth delivery from the moment production begins to the moment it is shipped to the customer. Of course, if you're singularly focused on your production line then simply create the same flow across that.

#### 5. Strive to perfection

It might be fair to say it's unattainable, but what that means is your current processes likely still have room for improvement. Implementing these principles will not be instant, nor will it eliminate all your errors forever. Targeting the root causes of issues when they arise, and dismantling them is vital, but consistently analyzing your processes to further adapt and improve them will lead to further successes in the future.

These 5 principles cover a lot of ground and implementing them might seem like an impossible task – or at least one that you're likely too busy to achieve. So what are some fundamental processes you can implement to help you build up to these principles when you're starting fresh?

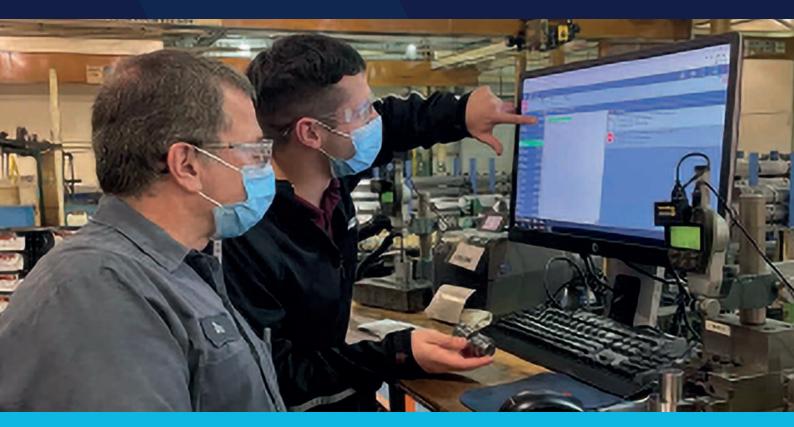
### Train Employees

Maintaining consistency with your teams is key to mitigating fluctuations in performance. One of the best ways to encourage employees to stay is by allowing them to train in new skills or build up their current skills. Your shop floor workers seeing their position in your business as an opportunity to improve themselves will encourage them to stay within your team to make the most of that personal development.

Implementing ways to discourage turnover is great for creating efficient production lines, but training your employees can help you in more ways than one. By cross-training employees, you don't have to worry about sickness or absences as anyone within your production line will have the skills to step in for that worker.

To begin this process, you will need to streamline any existing paper instructions in favour of a digitized system for operator guidance. This equips each worker with a detailed and guided list of checks and balances over the work they do at their station. Products like **NoMuda VisualFactory** are built to present instructions in an engaging and supportive way, making work easier and more effficient for everyone in your production line.

By creating an environment of education and support, you will foster a culture of collaboration and efficiency amongst your workforce, with the ability to cover absences and drive to create more efficient systems for themselves and others. This, in combination with your support, will help your production line maximize its efficiency and reduce wasted time, money and resources.



### **Streamline Changeovers**

Changeovers are a huge part of manufacturing. Whether they take minutes or days, streamlining changeover processes is one of the best ways to make sure your entire facility supports the principles of lean manufacturing.

Divided into three 'Ups': Clean-up, Set-up, and Start-up, finding efficiency in your changeover means analyzing how you work through each of these sections. Whether it's by thoroughly looking at each 'Up' as it happens, or physically recording the process, finding those interruptions – big or small – is the first step to creating a smoother flow of production within your facility.

This is a good opportunity to bring in your team, as they're the ones doing the changeover. You'll get a much better opportunity to find improvements in efficiency if you let them share their thoughts and opinions. Changeovers can be a huge delay for your facility and making sure that your start-up is smooth and has a plan for dealing with errors is vital to any efficient production line.

### **Monitor Maintenance**

Your health and safety policy likely sets an expectation that equipment should be thoroughly maintained at a scheduled time. However, detailed reporting on your equipment and adhering to consistent maintenance and replacement are vital for increasing efficiency.

Making sure your equipment is always operational will save you time and money in the long run. Understandably maintenance and cleaning might feel like an interruption but just avoiding one surprise delay can have a huge impact on your flow.

Monitoring your equipment, however, is only part of making sure your shop floor is well maintained. You can't forget to keep track of your workers – not just in how quickly they're working, but how they're feeling and how they're interacting with the rest of the team.

We always say that people are the most complicated part of any production line, and making sure you listen to your workers to create a supportive environment for them is vital for continuous smooth operation within your facility.

## **Get Rid of Paper**

We are in the age of Digital Manufacturing and it's now easier than ever to implement technology designed to streamline your production line. One huge inefficiency is the reliance on paper operator guidance – this outdated process has a dedicated solution in the form of VisualFactory.

Where paper instructions cause hurdles in your production line, VisualFactory bridges the gap between your worker, their equipment, and your product. This improves efficiency for your workers on your production line and makes it easier than ever to remove the risk of errors.



At NoMuda, our VisualFactory platform has been supporting manufacturers across the globe for over two decades. This tool transforms your Work Instructions from a novel-sized paper booklet to a single screen at each workstation.

Present instructions in a way designed to make sure no information gets missed by your team. We use an intuitive user interface and clear Work Instructions to ensure every single part of each workstation gets done.

**NoMuda has been working with manufacturers for over 25 years**, helping them implement lean best practices across their production lines. If you'd like to know more about us or how VisualFactory has improved our manufacturing partners' work processes drop us an email at info@nomuda.com