3 things every Lean expert has to master!

1. Putting people's needs first
Oh no, it's sounds like I'm about to write an HR manual instead of a Lean blogpost. But let's go back to how Lean got started: Toyota failed. Basically fell on its face.

Severe reduction in sales hit; there were not enough orders coming in, so there was not enough work for its people or money to pay salaries. They decided to fire workers.
The workers' union fought back. They put up a strike and the head of the company, Kiichiro Toyoda, resigned… Toyota's bankers refused to issue new loans to the company.
- From Understand Lean in 30 Min – see details below.

And then, they decided to do some serious cultural change.

Toyota's workers were given new contracts that ensured lifetime employment. They were also allowed to use the company's facilities and recreation for their entire lives. Salaries were based on seniority acquired over time, and not on job titles. This, too, ensured a skilled workforce. Workers had full control over production and maximum power was transferred to those who "do the job." And workers were cross-trained. For example: as part of engineer training, employees had to work a few months in the marketing department.

By focusing on the people aspect and putting that first, making a culture where people felt the company was taking care of them and where everyone pitched in, Toyota ensured skilled motivated workers.

They also got very good at building relationships with their customers:
If a customer's car needed repair, Toyota lent the customer a car during that time. It fixed cars for free after warranty was over, dealt with insurance claims, and kept in constant touch with the family, sending cards for birthdays and funerals.

2. Knowing cause and effect
Lean practitioners have a few tools for understanding what causes problems, waste of resources (including money and time). Charts, Pareto effect and 5 Whys are among them:

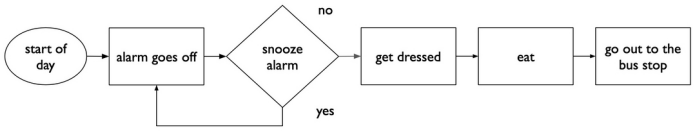
Five Whys is a methodology used to identify the root cause of a problem by asking the question "Why" five times to reveal the different layers of the situation. Its importance lies in the fact that if the true cause of a problem is not identified, the wrong solution might be applied, wasting money and resources, and creating inefficient processes.
Here is an easy example from everyday life:
Problem: I arrived home late.
1. Why? I missed the train.
2. Why? I did not arrive at the platform on time.
3. Why? I was delayed at the ticket office.
4. Why? There was a large line at the ticket office.
5. Why? There was a football match and many people wanted to purchase tickets today.
Solution: Buy tickets in advance, especially on days that have events that might cause congestion in the ticket office. This will ensure the problem never recurs.

Pareto Effect is another important tool:
It is a principle that states that 80% of the output is caused by 20% of the input. It is named after Italian economist Vilfredo Pareto.
Pareto effect is a way to focus on the main cause, and measure its effects. For example: "20% of the donors of a charity make 80% of the donations."

- This is normally measured using Pareto charts to find the relative importance of each part of a problem or a situation.

3. Understanding Processes
Process Mapping is a technique that creates a flowchart to track an entire process and highlight any inefficiency and waste.
***How is it used?** Process mapping creates a flowchart that summarizes every step of the production process, usually with its materials, length, and product.*

A simplified example: Morning routine process mapping could result in the following flowchart. A few common symbols here: Circle for start, diamond for decision, and rectangles for steps in the process.



In a more detailed flowchart, it is easy to identify the "weakest link" or bottleneck of the process – the longest or most inefficient part. Improving it speeds the entire process.

Why is it so important to understand a process?

Again, if we don't know what is really going on, we will come up with wrong solutions that just waste money and don't really fix the problem. People will get blamed. Even fired, but the problems will persist.

If we understand what the process is, we can find bottlenecks, places where our systems or our external relationships break.
- What are the steps needed to make our widget?
- Or win our next client?
- Or what is the user journey inside our software-as-a-service product that gets people stuck?
- How many steps do customers go through from when they discover us until they buy something (funnel thinking) and where do people drop off?
- All of these are process-thinking questions.

And in all of them you can save money – one way is to go backwards: from the finished product or desired result and re-invent what is needed, eliminate unnecessary steps and save money and time.

More like this?

Why not check out Understand Lean in 30 Min

+**The main elements of Lean**:
- Just in time production
- Continuous Improvement
- Eliminating waste
- Lean employee culture

+**The basic Lean tools**:
- Kanban
- Kaizen
- 5 Why's
- 7 Wastes – Muda
- 5S
- SMED, or Quick Die Change (using Formula 1 as an example– no kidding)
- Andon
- Customer Obsession
- Process Mapping
- Gemba Walk
- Pareto Effect
- Six Sigma

More info here