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# DIGITISATION MADE SUCCESSFUL USING LEAN AUTONOMATION PRINCIPLES



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This is a knowledge document created by reLean to share insights in the topic of digital transformations. Our experts regularly share insights around the topics we are helping our clients with, visit our website, <a href="https://www.reLean.se">www.reLean.se</a> to read about other topics and share your views.

# Digitisation is hot

One of the biggest trends amongst both medium and large companies is to automate processes using digitisation methods. Both simple things such as automated forms for customers to fill in instead of paper, mail or phone, to more advanced data robotics. When working with our clients we see significant "right first time" improvements and productivity increases from these efforts. With a customer service department at a large IT company, we could reduce the service ticket lead time 68% and work content beyond 45% and for the on



boarding process of a financial service provider we saw reduction in lead times for KYC processing above 50% whilst at the same time increasing the quality assurance of the process. In general, making these type of transformations has a significant improvement potential. If done correctly of course. And here is where one of the largest problems of today lies.

# "...we could reduce the service ticket lead time 68% and work content beyond 45%"

Many companies embark on this journey looking at it only as a way of digitising and automating processes. They gain short term results in specific areas but it doesn't scale as desired. The end-goal of this type of transformation has to be greater than achieving a stand-alone improvement in a specific process. Competitors will copy, and probable enhance, that improvement quicker than it took you to make it. In our case the improvement in handling service tickets was quickly adopted by competitors and did not stand out as a competitive advantage for long. So how do we make digitisation a competitive advantage rather than just a commodity that is easily copied? It is like the analogy of getting fish. Give a man a fish and he will not be hungry for the day, teach him how to fish and he will never be hungry again. Digitisation is just one of these "survival" skills together with many others to



help a company improve. The key to any organisations success is designing it so that it is capable to always use the right skill to help the company develop towards its goal.

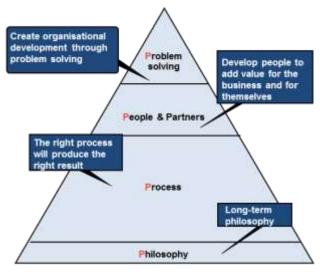
# The two challenges where most companies fail in digitising processes

The trend today is to put almost too much belief in digitisation, the "killer app" will fix it all! Not enough thought goes into digitise the right thing, digitise it in the right way and making sure it's done in a sustainable and repeatable fashion. There are of course many challenges in doing this, but we see two challenges that go beyond the others. Firstly, it's making sure that the focus is on improving the right process and that a good version of it is being digitised. Once digitised it tends to become much more difficult to change it. Secondly, for the long-term, companies should think carefully about how they do the improvements. A process digitised by consultants will be improved, but that's it. And once the job is completed they will probably walk across the road and do the same for the competitors in half the time. Fish or Fish?

#### Short-term challenge: Automating bad processes or autonomating best-in-class processes?

Who really knows what a best-in-class process looks like? Is it digitised? Does it spit fire? Many companies fall in the trap of making efficient processes (or even worse, efficiently digitised processes) before they figured out how the make them *effective*. As an example we once came across a whole factory next to a factory, only focused on making re-work of faults created in the first factory. The rework factory had perfect "5S" conditions, well-written standard work, a well-trained organisation, impressive management team and really efficient processes. They even had awards for best improvements every month. But it was all waste. They should have focused the efforts on reducing the quality problems in the first factory and they wouldn't have needed a second one at all. This can often be very visible in a production process, but usually the same type of issue happens in paper based/ computerised transaction processes, it is just more difficult to see them at a first glance.

We always work with our clients to take a long term view and ask ourselves if we are doing the right things. Lean follows 4 simple principles simply called the 4 Ps. It all starts from the basic foundation of what we are all about and having a long term direction and target. This Philosophy of what we want to achieve should help us define what Processes we need and what to expect from them. Before these core processes are defined our focus should be on effectiveness, not efficiency. Otherwise we risk spending time improving something we don't need and don't want. High involvement of the People of the organisation in the improvement



work using *Problem solving* is often critical to ensure we focus on effectiveness and see the business element of the improvement work.

If we are not focused on improving the right processes for the right reasons, we typically only create isolated improvements, great thing to do and talk about, however in the grand scheme of things do not help us in achieving our long term ambition as a business. It is equally important to realise that



digitisation is only one element of the process improvement portfolio together with several other methods.

Our approach to process improvements and digitisation of processes is to follow the principles of *Autonomation*. These principles allow us to make the best possible automation, whilst separating people and machine to allow people to continuously improve the processes faster than competitors. Before we continue, let's look guickly at what *Autonomation* actually is.

#### **Autonomation**

Autonomation is a translation of the Japanese work Jidoka. *Ji Do Ka* translates to *self move happen*, but the Japanese characters for jidoka can also be translated as *self work happen* when adding the symbol for *man* in the symbol of jidoka. Both symbols are pronounced Jidoka, but automation (self move happen) means that something happens by itself and autonomation (self work happen) that it is not only automated but also performing a *job*. And a *job* is something that requires a certain amount of intellect. The meaning of Jidoka is that a process should be separated from humans and automatically detect when an issue happens, stop an alert the human. The human should use his/her time to prevent this issue from ever happening again by improving the process. In this way we develop a continuously improving process.

The automation part of Jidoka follows the simple steps toward mechanisation

- 1. Mechanise
- 2. Auto eject
- 3. Auto load
- 4. Auto convey

Read more about Jidoka and Autonomation on our website, www.reLean.se/#!jidoka-en/km5xy

Practically this means that we first of all automate the *doing* of the process to get a stable, repeatable and capable result, then automate the transfer of products or data to the process and finally connect this product or data with the next and previous process steps to fully automate the step. Achieving a stable, repeatable and capable process is key, before we can move on. Assuming we are improving what we consider an important process for achieving our long-term direction, we must spend enough time building in quality to make it stable, repeatable and capable before progressing.

In the same way as industry has automated processes for several decades, we now need to digitise processes in the same manner. Digitisation is after all just a new horizon of automation. We usually use a Material and Information Flow Diagram and Analysis (MIFD and MIFA) to visualise the current state of the process before we start identifying what we need to do and how we best achieve it using available skills in our toolbox.



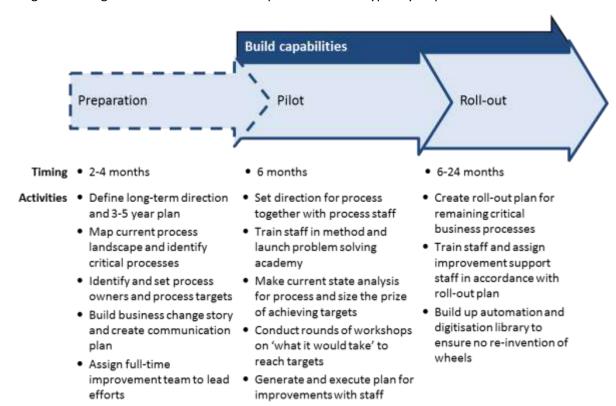
### Long-term challenge: A learning organisation or a learning computer?

Skills links us to the second challenge in the digitisation journey. For some businesses building a machine with exceptional Artificial Intelligence (AI) may be the actual business model, but for most businesses – like Toyota – developing AI and robotics is a sub-part of achieving effective and efficient processes. The increased focus on robotics, AI, digitisation and similar hot topics today will be normally accepted business practices in any company 20 years from now. What will be the next big thing by then? We may not know now, but enabling the organisation to be ready for it is something we can do. Lean is all a about build a continuously learning organisation. An organisation that always finds solutions to future challenges, whatever they may be. This has been the key success factor behind Toyotas development from the 1950's. We believe it will be the key success factor in the future too.

Hence, the way we choose to digitise our processes will be key for the long-term success of our company. A model built on empowering staff with capabilities to identify and do the improvements to key processes with corresponding digitisation will be key to enable the organisation to keep doing exactly that year in year out. Developing the business philosophy and peoples problem solving skills, at all organisation levels, to improve Processes will drive business success. Not just during a 3 months focused "transformation" but long term.

## The digitisation framework helps you succeed in your transformation

We have developed a digitisation framework with our clients to succeed on their journey to digitisation. In simplicity the framework (shown below) reflects the content of the 4P model, where the first step, preparation, aims at developing the long-term direction and map the current process landscape to understand which processes are critical to the business. Already at this stage, some redesign of the organisation structure and responsibilities are typically required.





Once this is made, we focus on the most important process as a pilot, train the staff in problem solving, digitisation and other process improvement mechanisms and together transform the process to achieve very ambitious performance improvements. We then roll the approach out to other core processes until we have worked with and engaged the entire organisation.

This is different from other approaches in that it is the actual employees and managers doing the work, coached by true experts on the subject. It might take a bit longer then having external experts doing it all but after two or three full cycles coached by experts, your employees can do it themselves. This we guarantee. And the good thing with this is that the employees will then not only be able to manage digitisation challenges in the future, they will manage the next 'digitisation' or 'automation' frontier too.

# reLean has the skills and experience to help you on your journey

reLean is a consulting and resourcing firm built by passionate operational excellence experts. We are a one-stop shop for expertise, regardless if you are in need of consulting or stand alone resources. From our offices in the UK, Sweden and the US we help clients transform operations to excellence.

All the people in our team have a unique combination of experience from world leading companies like Toyota mixed with the leadership experience from top tier consulting firms like McKinsey & Co. With over 15 years' experience each and a collective experience of more than 200 years, we know what it takes to succeed. We have helped over 200 companies in most business sectors. From banks and IT companies, to automotive, med-tech, pharma, FMCG, basic materials, private equity, transportation, retail, service and public sector.

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