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# Kaizen

# Effective ways to Implement & Sustain a Culture of Continuous Improvement

FlowPlus™

Helping you work smarter

Improve employee productivity by training them to solve problems

Create low cost, simple, smart solutions

Increase employee engagement and challenge them to improve

Grow internal capability by recognising and rewarding improvement

Break paradigms and unlock innovative potential

Shift the culture to become a Learning Organisation

# Contents

# Introduction

o What is Kaizen

o If you're not moving forward your moving backwards

o Kaizen is culture

# What is Kaizen?

## Continuously improving the product & the process

Kaizen is a word with ancient origin that belongs to the Japanese vocabulary. It is said to have originated from Japanese Samurai, who would persistently practice their kata/fighting techniques (process) and sharpen their sword everyday (product), striving to continuously improve both the process and product.



**Continuously improving the**

**product & the process**

In Japanese, the word Kaizen is composed of two words: Kai, which means "change" and Zen, which is related to the Oriental theories of the pursuit of perfection and means "good." Hence kaizen means to change for the good. This definition has evolved and now commonly means continuous improvement; improving everywhere, everyday & with everyone within your organisation.



**Kai**     **Zen**

**Change**    **Good**

The popularity of the word 'Kaizen' stems from the manufacturing & automotive industry. Toyota in particular; transforming Kaizen from an everyday Japanese word into a word that describes a cultural shift towards making incremental improvement changes every day.

Kaizen, among other things, was the key to Japan's competitive success in in the 1980's, transforming from a place that typically made cheap, poor quality products, to a place regarded as being at the forefront of manufacturing excellence & automation. Quality is decided by the customer, forming an opinion of whether a product/service exceeds or falls short of expectation. The customer should therefore be the focus for continuous improvement, maximising customer value.

With customer views forever changing and expectations rising, companies need to continuously improve to have a chance to compete. With 'culture eating strategy for breakfast', the importance of a Kaizen philosophy and the development of a continuous improvement culture really is the key to survival and prosperity in an environment where you need to change before you have to.

**The need for Kaizen**
In physics, entropy can be described as "a lack of order, predictability or decline in disorder". The same phenomenon occurs within businesses. If you are not actively improving, aligning resources and moving towards a shared vision, you never just stay still, you are getting worse (and your competitor may be getting better). Another way of looking at this is, if no one managed & enforced the law, would the world move forward in the right direction? Or would it tend towards disorder. Comparing a business with the cultural habits of society, a kaizen culture aligns all employees towards improvement and ensures the business is heading in the right direction.



**Order**            **Disorder**
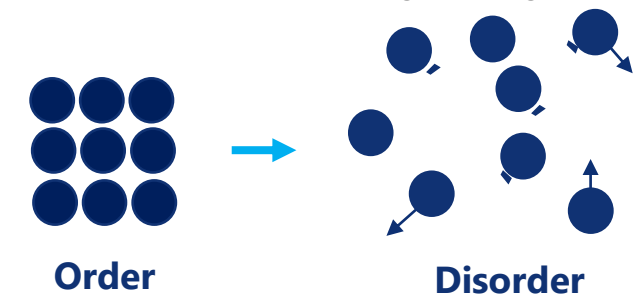
"**If you don't move forward, sooner or later you begin to move backward**." Mikhail Gorbachev

# What is Kaizen?

Kaizen can be viewed as the collective mindset of implementing improvements, however small, with the understanding that everyone is responsible for their processes and small improvement cumulate to make large improvements.

Kaizen is about constantly asking; what would my customer not be willing to pay for, if they knew about it? Followed by a sprint like pursuit to eliminate, minimize or isolate any non-value adding (waste) activities.

An important trait of kaizen is that to improve, you must change. The definition of insanity is repeating the same thing and expecting different results. The output of any process is dictated by its inputs in the same way a bodybuilder cannot expect to win Mr Olympia by eating pizza every night. If you don't change your inputs, you cannot expect a change in your outputs.

The no-brainer thing about kaizen (and change) is that if things change for the worse and the output is adverse, you can simply revert to the original methodology. There really is no harm in experimenting, every experiment provides a valuable lesson and is never a waste of time. Additionally, many good solutions require things to get worse off before they get better.

If you imagine the entirety of your company being contained within a ship, sailing on a sea (the environment – political, social, economic etc). Occasionally, a large wave will hit your ship in the form of a new competitor, a change in legislation, a new technology or an economic recession.

Ships don't sink because of the water around them. Ships sink because of the water that gets in them. So, create a ship that is watertight and create processes that are capable of dealing with the metaphorical bigger waves that are changes. Focus on the inputs and processes within your company and understand that if you don't continuously change, you will eventually sink.

Complacency is the enemy of a kaizen culture. Simple changes in technology tomorrow can destroy very capable and resource rich companies that haven't changed fast enough.

**Complacency is the enemy of a kaizen culture**

# The law of Compounding

- o Compounding Improvements
- o Marginal gains aggregation
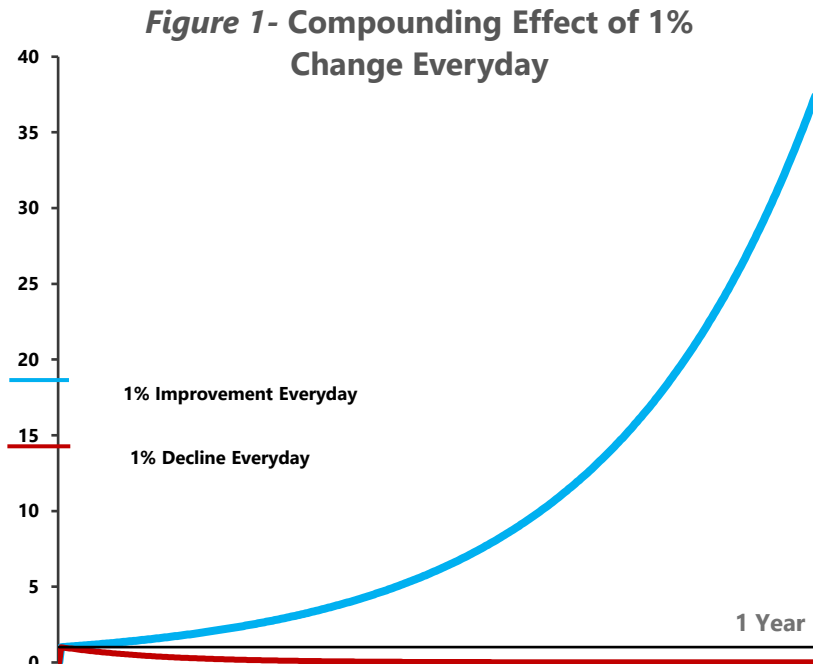- o Evolution not revolution

# Incremental Improvements

## The law of compounding

Kaizen is the dedication to making small changes and improvements every day, with the understanding that small changes of improvement made again and again compound to create an outcome much greater than the sum of the improvements made. Additionally, businesses that have very large workforces or produce vast quantities can save huge amounts of money from what may appear to be extremely small improvements.

Kaizen can be applied to almost anything, business, personal life, hobbies etc; the principle remains the same. We often convince ourselves that change is only meaningful if it's **big and recognisable** by outsiders, however that is not the case. Many successful companies such as Toyota, McDonald's & Amazon are proof of kaizens' power and results.

Incremental improvement for a business is the same things as the mathematical principle of compounding. The power and significance of the mathematical principle of compounding is almost always under-estimated.

### Figure 1 - Compounding Effect of 1% Change Everyday

*1% Improvement Everyday*

*1% Decline Everyday*

1 Year

For example improving only 1% a day is unlikely to be noticed, but over a year, the improvement is colossal.

**If you get one percent better each day for one year, you'll end up thirty-seven times better by the time you're done.**

Let that sink in. If you were focused on improving your touch-typing speed, and to start with you could type only 10 words a minute (6 seconds per word – that's very slow). By improving just 1% per day, by the end of the year you would be typing 370 words a minute and be the fastest touch-typer in the world. Another idea that demonstrates the true power of compounding; if given a piece of paper large enough, if you could fold it 42 times in half, the thickness of your paper would reach from earth to the moon.

*Figure 1* shows compounding in graphical form, in the beginning, there is virtually no difference between making a choice that is 1 percent better or 1 percent worse. (In other words, it won't impact you very much today). But as time goes on, these small improvements or deteriorations compound and you suddenly find a very big gap between people who make slightly better decisions daily and those who don't.

It is so easy to overestimate the importance of one defining moment and underestimate the value of making small improvements on a daily basis. Too often we fall into a trap where we prioritise large expensive, big projects and ambitious shortly lived sprints, over small steps being made every day. Whether it is losing weight, building a business, writing a book, we spend a miniscule amount of time working as hard as possible, putting pressure on ourselves to achieve earth shattering improvements, only to burn out and fall short.

# Case Study – Team Sky Cycling

## Marginal Gains

There are many real world examples that demonstrate the power of compounding, but it is hard not to mention Dave Brailsford, head coach for team sky cycling. Before Dave Brailsford, no British cyclist had won the tour de France in its 110 year history.
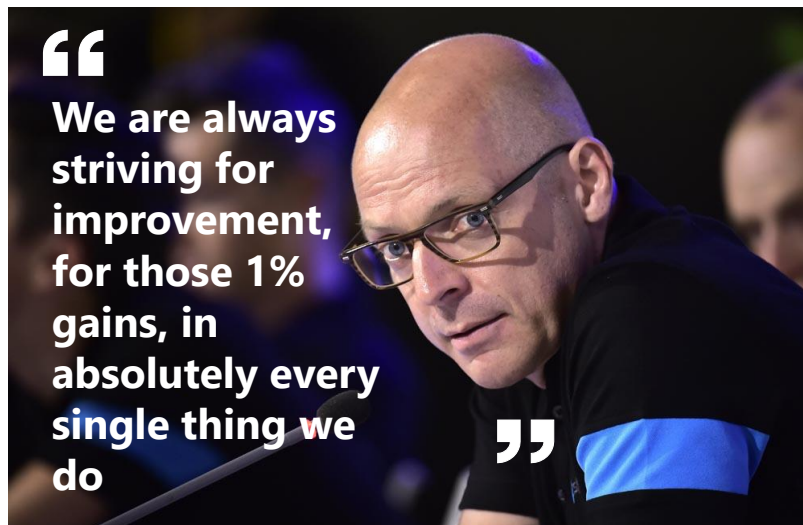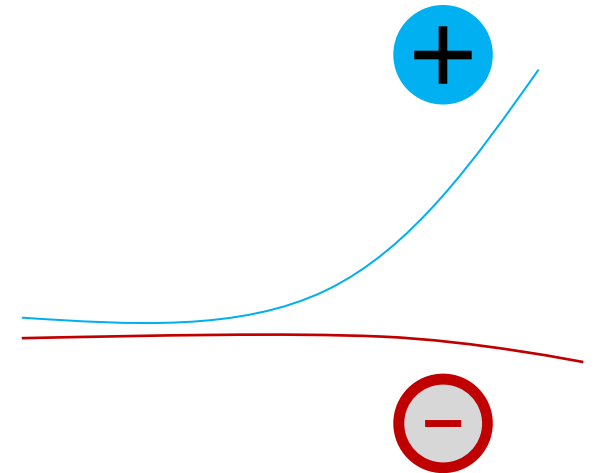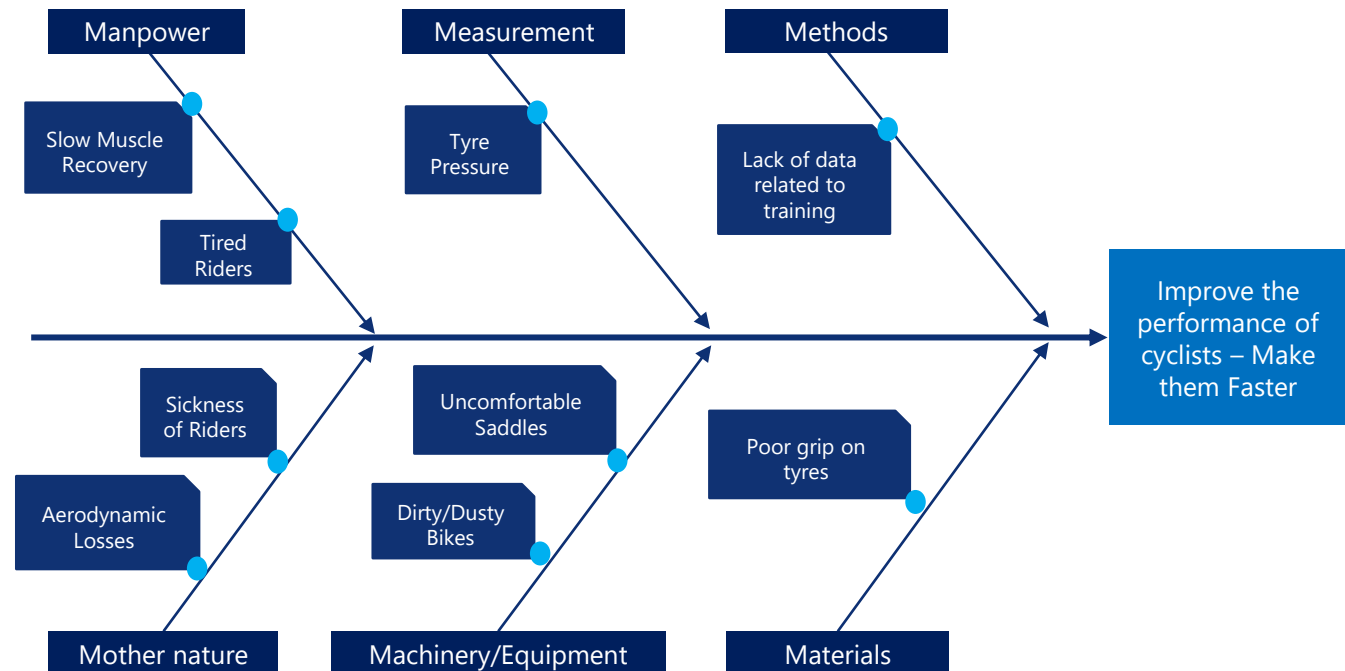
Dave Brailsford was hired to reshape British cycling, to start winning races. Brailsford was committed to something he referred to as 'aggregation of marginal gains', this is exactly what **Figure 1** demonstrates; small improvements compounding to create big results.

"The whole principle came from the idea that if you broke down everything you could think of that goes into riding a bike, and then improve it by 1 percent, you will get a significant increase when you put them all together." Dave Brailsford

**"** We are always striving for improvement, for those 1% gains, in absolutely every single thing we do **"**

**What actions did he take?**

Simply put, he did anything within his power that could improve the performance of the cyclists, looking at the people themselves, the environment around them and the equipment they used (sometimes called the 3Ms; man, machine & method).

A good visual way to demonstrate how he achieved success can be represented through a fishbone (cause & effect) diagram (see *collaborative problem solving* insight for more details.)

| Manpower | Measurement | Methods |
|---|---|---|
| Slow Muscle Recovery | Tyre Pressure | Lack of data related to training |
| Tired Riders | | |

Improve the performance of cyclists – Make them Faster

| | | |
|---|---|---|
| Sickness of Riders | Uncomfortable Saddles | Poor grip on tyres |
| Aerodynamic Losses | Dirty/Dusty Bikes | |
| Mother nature | Machinery/Equipment | Materials |

# Case Study – Team Sky Cycling

## Marginal Gains

The solutions he provided to address the problems identified within the fishbone diagram were:

**Slow Muscle Recovery**- He tested different formulas of massage gels to see which one led to the fastest muscle recovery

**Tired Riders** – Determined the type of pillow and mattress that led to the best night's sleep for each rider

**Sickness of riders** – Taught riders how to properly wash hands, minimising possibility of catching a cold and spreading germs that may reduce the cyclists performance and recovery rates

**Type pressures** – Numerous tests were completed to find the optimum pressure, not to the nearest PSI like other team but to the nearest 0.1 PSI.

**Lack of training data** – Biofeedback sensors to monitor each team members response (lactic acid, vo2 max etc ) to different workouts.

**Aerodynamic losses** – Testing of different clothing fabrics in a wind tunnel, switching to lighter and more aerodynamic indoor racing suits.

**Uncomfortable bike seats** – Redesigned more ergonomic bike seats

**Dust/Dirt on bikes** – Painted inside of team bus white so that dust could be seen and removed instead of reducing performance of bikes.

**Poor grip on tyres** – Tested different materials and rubbed alcohol on tyres for better grip

Solving problems aggregates marginal gains
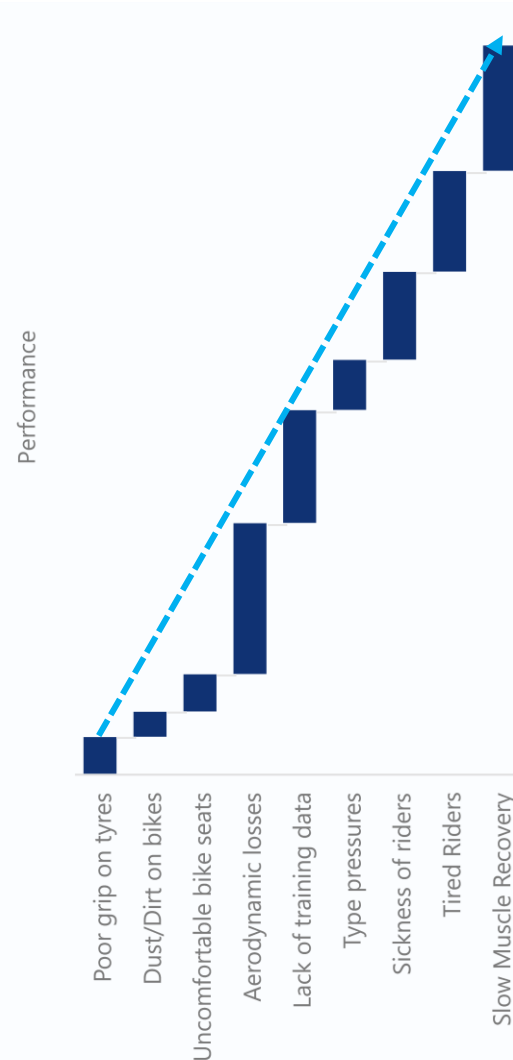
The impact of each improvement was small but the compounded improvement was huge and the results started to show.

British riders have won the last 6 out of 7 years of the Tour de France, in what is widely regarded as the most successful run in cycling history.

**Largely thanks to Marginal Gains & the Compounding effect – British riders have won 6 of the last 7 Tour de Frances'**

# Implement low cost solutions first

## Don't postpone implementation in the pursuit of perfection

**To succeed as a business and gain a competitive advantage, big 'wonder-like' investments or plans are not required.**

Kaizen doesn't require large investments, overly complex solutions or magical IT solutions. As stated by W. Edwards Deming; "There is no instant pudding". You cannot expect the results instantly by taking shortcuts. The principles of Kaizen are founded in creating low cost, smart solutions that are logical and commonly originate from the employees that work on the 'shop floor'. Through years of consulting experience, the simplest solution is usually the best one and the promise of a solution that solves everything is extremely rare. Often low cost, simple solutions are put on hold or delayed because a longer term, "instant pudding" capital heavy solution will solve the problem.

The problem with postponing low-cost improvements is that by delaying the introduction of them, the potential benefits that would have accumulated are missed and more often than not, the long term project will be cancelled or delayed.

**Imperfect improvements are better than postponed perfection.** As shown in the law of compounding; small, daily improvements are easier and more beneficial then infrequent 'step-change' improvements.

The aggregation of incremental improvements can be viewed as '**evolution, not revolution'.** Doing what you do better and better, adapting to your environment to give yourself a competitive advantage, not a radical change.
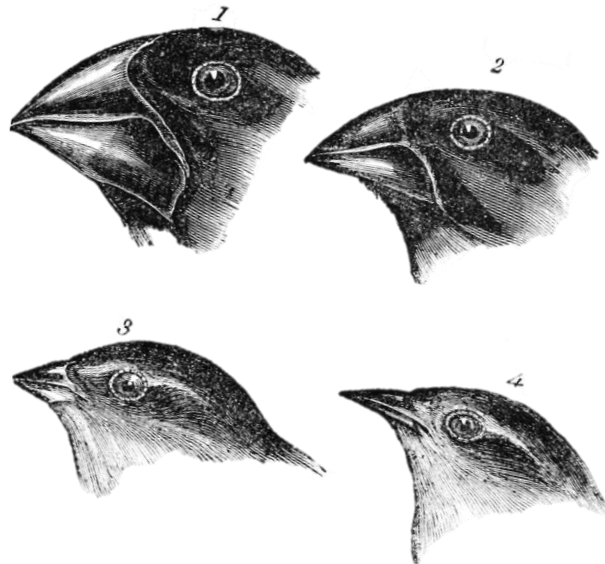


When providing consultancy services to a logistics company, our initial assessment identified that in comparison to similar size companies within the same industry, the maintenance costs were abnormally high. By helping their team to work smarter, we uncovered that over 30% of time was attributed to carry out visual inspections of conveyor motors. As the Organisation relied heavily on the operation of their conveyors, the motors were critical pieces of equipment. A longer term solution to fit all motors with sensors to identify abnormal conditions and relay the motors status was drafted. In the short term we decided to fit coloured paper to the outside of each motor casing. When the motor was functioning normally, its fan would spin and blow the coloured paper (like a wind flag), signifying it was operational. When it was faulty, the bright colour of the flag could not be visible and the flag would not be waving in the wind. This very low cost solution saved a vast amount of time associated with identifying what motors were functional or needed repairing.

# Paradigms

○ What are paradigms?

○ What examples can we learn from?

# Paradigms
## Outsider vs Insider thinking

A paradigm is a model, rule or habit that influences how we interpret a given solution or problem.

Paradigms are formed naturally based on individuals' past experience and habits, shaping the way we look at problems and solutions. For example before Galileo discovered that the world was round, there was a worldwide paradigm that the world was flat. The same thing occurs within organisations, peoples' wider thinking is restricted by the 'we've always done it this way' mentality and 'you can't change that' attitude.

There are countless examples of the breaking of paradigms and disruptive technologies creating step changes in the way a problem is solved. When people think of disruptive technologies they often think of the 21$^{st}$ century, the internet or the world wide web. In reality, disruptive technologies include the discovery of new materials like when metal was first smouldered. The change from transporting heavy items by rolling them on top of logs, to the invention of the wheel. The development of the horse and cart and the introduction of the steam engine. Industries have been transformed by the breaking of paradigms. Without the shift from steam engines to combustion engines, the need for oil & gas wouldn't exist, an industry worth Trillions. All paradigm shifts occur because of disruptions, disruptions that are unpredictable and can come from seemingly nowhere.

The following example provides an abstract but practical example of breaking paradigms and solving problems in a smarter way.

There was once a father who died, leaving 17 camels as inheritance for his 3 sons. Upon reading the will, the eldest son was given half of the camels, the middle son was given a third of the camels and the youngest was given one-ninth of the 17 camels. As it became apparent that the 17 camels couldn't be halved, divided by 3 or 9, the three sons started to argue with each other about how they should distribute the camels.

There seemed no solution to the problem, a mental block (paradigm) was preventing the sons from seeing clearly and developing a solution for them all. How would it be possible to split the 17 camels between them?

**Spend some time to think through your solution to the problem.**

# Paradigms
## Outsider vs Insider thinking

**The solution:**

Searching for advice, one of the sons visited a friend who owned camels to see if he had any ideas. The friend said, no problem I will donate one of my camels to you, so you now have a total of eighteen.

"The eldest can have 9 camels (half), the middle son can have 6 camels (one-third) and the youngest can have 2 camels (one-ninth), that totals to 17, and I will take the camel I donated back."

*If this is the answer you came to then well done. Sometimes, by looking at a problem in a different way, the solution becomes a lot more obvious.*

**How to overcome the resistance to change with paradigms?**

Individuals that strive to break organisational paradigms are often met with resistance. When Galileo wrote a book that hypothesised that the sun (not the earth) was at the centre of the solar system and that the earth was in fact round and not flat, he was sentenced to a light regimen of penance and imprisonment. The idea that the Earth was not the center of the universe went directly against the teachings of the Catholic Church, as certain passages in the Bible referenced the Earth as being immoveable were taken literally. His strong views broke extremely strong, religious paradigms and were therefore dismissed.

Although you are unlikely to be imprisoned for breaking paradigms at work, 'out of the box' thoughts/solutions often do encounter resistance that needs to be recognised and overcome in order to achieve the breakthrough results that follow. Often people will fail to see the bigger picture or will be so accustomed to the way things currently are that they will fail to see the reasons in your new way of working.

The most important aspect of overcoming resistance to change is understanding that it is a highly personal and emotional process. It is not a science.

With that in mind, there are still some steps that can be taken to maximise chances of success. Resistance to change can be viewed as a function of the following factors.

$$\text{Probability of change} = f\left( \begin{array}{c} \text{Discomfort} \\ \text{with current} \\ \text{situation} \end{array} + \begin{array}{c} \text{Appeal of} \\ \text{future} \\ \text{situation} \end{array} \right) \times \left( \text{Driving force} + \text{Support} \right)$$

This mathematical representation of change represents the different elements required to help increase the chances of change. Firstly you need to highlight the inadequacies of the current situation and create an urgency to change – bring facts and data to light. Secondly you need to propose a future state and improved situation.

Once the first part of the equation has been satisfied, now in order to address the aspects surrounding security and comfort, the more people adding to the driving force for change, the greater the chance of success, coupled with a support structure that can help manage the change.

Although resistance to change is often viewed as something negative that needs to be fought, it is extremely useful. Resistance helps highlight the negative aspects of the change & knock-on effects that may not have been considered. By on-boarding the person resistant to change, highly effective solutions that provide a more holistic solution can be achieved.

# Paradigms

## The lean paradigm

FlowPlus utilise a wide range of tools and methodologies to identify areas for improvement and create smart, robust solutions. The basis for improvement stems largely from lean principles; reducing waste, maximising customer value and enabling processes to flow. A paradigm is often uncovered in the teaching of lean. People see lean as a 'head cutting' exercise, understanding LEAN to stand for

**L**ess **E**mployees **A**re **N**eeded.

Lean is in fact not that, it is almost the polar opposite, it is about growth, positive thinking & collaboration– seeing problems as opportunities to improve. A Lean organisation is one that is efficient at using its resources to deliver value to the customer, striving to continuously improve and work smarter instead of harder. Launching growth initiatives while also driving lean improvements is the perfect symbiotic match. By using lean principles to deliver increased customer value, demand will increase, and the spare capacity captured through lean initiatives will allow for growth.  This is far from the original paradigm of lean as head cutting.

Lean is about elegance. It is about creating a system (value chain) that can provide an elegant solution (value) to the end customer, while expending optimal effort (flow). Lean encompasses our ambition to help clients work smarter.

The purpose of lean is to increase *value* to the customer. The starting and endpoint for lean is value. Lessons on  having a customer focus can be learnt from Amazon. Founder Jeff Bezos frames it in terms of being a "customer obsession,  figuring out what they want, what's important to them."

Amazon do sell products but deep down they are a data company. Every opportunity to interact with the customer is another opportunity to collect data. Thousands of metrics including clickstreams, provide an insider view of where customers click, how long they spend, which sites users come from, how they visually interpret information on a page etc. This collection of data allows them to catagorise customers in a scarily detailed way, predicting products we are likely to want, yet feel spontaneous to ourselves.

This 'obsession' with customers has only taken this level of granularity in recent years, however it epitomises the level of customer focus that a highly successful lean company requires. As Darwin stated 'It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change', responsive to customer trends & patterns.
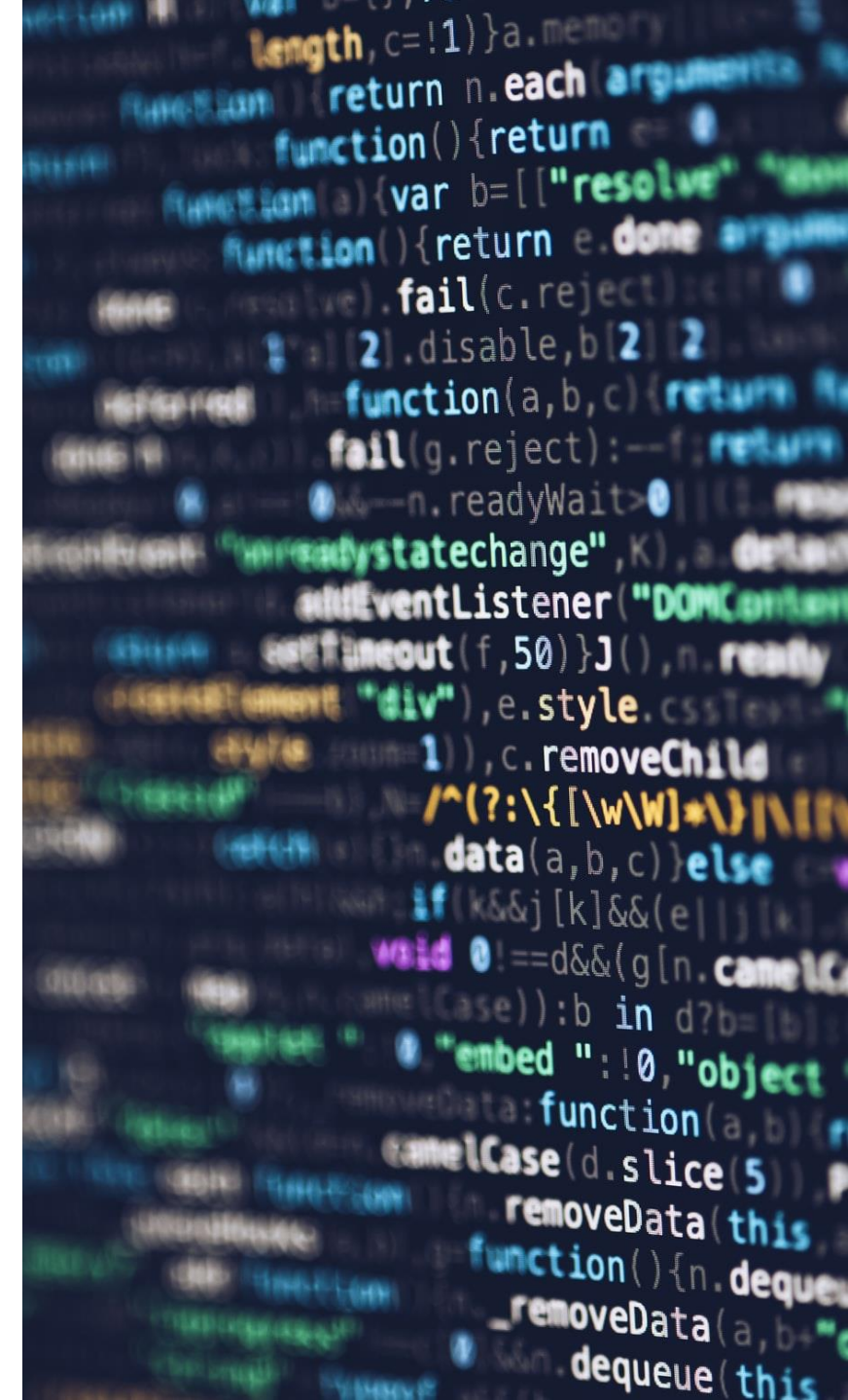
# Paradigms

## Examples of paradigm breaking



1912 Western Roll

1896 Scissors

1968 Fosbury Flop

1936 Straddle
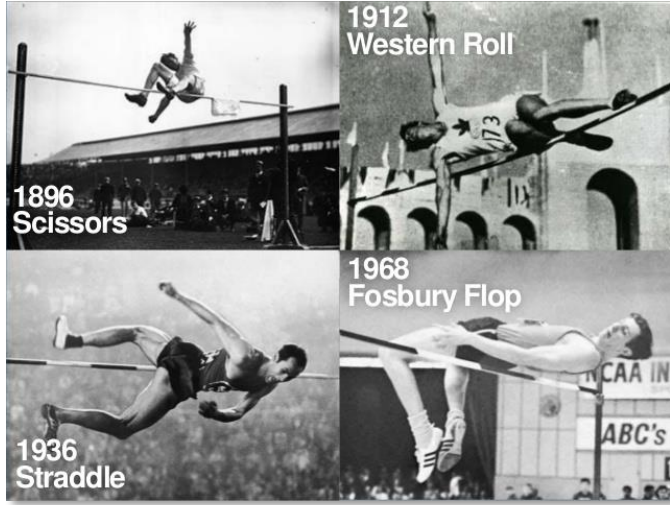
It was the 1968 Olympics in Mexico and the high jump event was underway. Three men had just cleared the bar & up next was Dick Fosbury. Dick approached the high jump mat and, using his wrong foot, powered himself into the air, arching his back and clearing the bar. No one had ever seen a technique like this before as the straddle technique had been the norm for over 20 years. Dick Fosbury shattered the paradigm and within a few hours was a gold medalist, clearing 2.24m in the high jump and redefining what people thought was humanly possible.

Past running shoes rely on the thinking that the less amount of rubber on the sole, the lighter and higher performing the shoe will be.

In stark contrast to previous running shoes, Nike Vaporflly™ utilises ingenious material selection, inspired form the aerospace industry. Combining a thick foam sole that is highly elastic and lightweight, with a high rigidity carbon fiber inner plate that provides stability, a superior result is realised. This combination of clever materials results in a shoe that feels soft, springy and also rigid, minimizing any losses in energy transfer between the runner and the ground. For that reason, the alphafly version of this shoe was banned in 2020, providing an unfair advantage and claimed to improve running performance by an estimated 4%.

Henry Ford once said; "If I had asked people what they wanted; they would have said faster horses."'. At a time where the need for cars never existed, peoples' paradigms had been broken, the previous fastest mode of transport (horse & cart) was no longer. The step change in innovation coupled with Henry Fords' ability to produce cars at an un-heard of rate meant that cars went from being produced by craftsmen with a lead time of a matter of months, to a mass-produced item, where 7,000 could be made each day.

### Number of Cars Manufactured Each Year
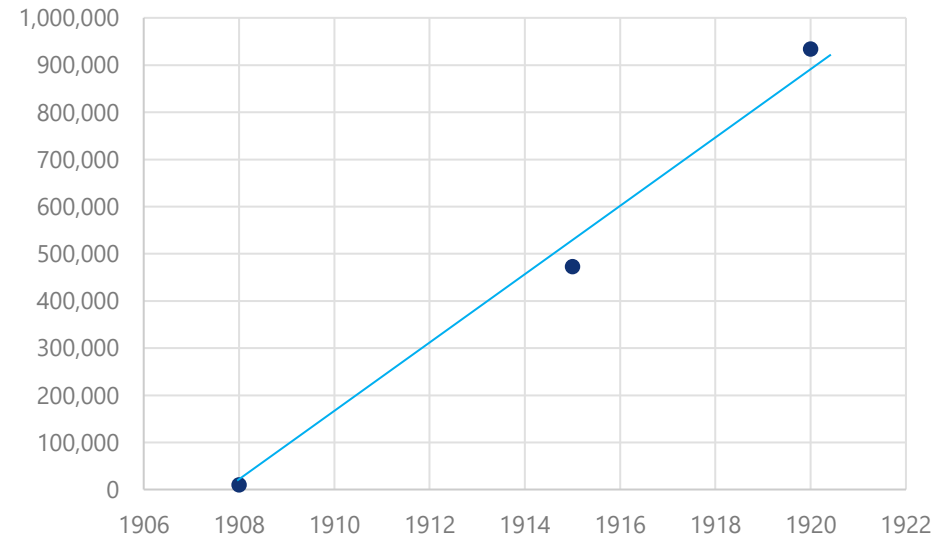
Prior to the introduction of app based taxi services such as Uber & Lyft, customers were willing to: wait excessively long times, pay only with cash, be unclear about the taxis time of arrival & pay a hefty premium for the service. Uber broke peoples paradigm in 2015 by making taxis much more affordable, user-focused & simple.
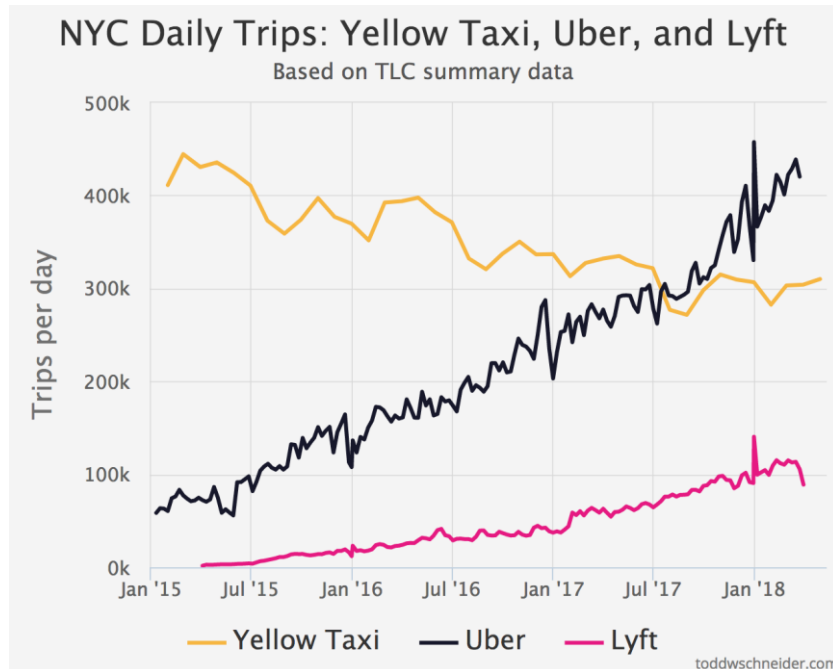
The result has caused a major decrease in traditional taxi companies throughout cities like New York, London & Paris.



NYC Daily Trips: Yellow Taxi, Uber, and Lyft
Based on TLC summary data



Now things are very different again, a new market has developed with smart watches. In 2019 Apple sold more apple watches than the whole swiss watch industry. New technology is constantly shaping the wristwatch sector, what is the next shift going to be?



What is the next paradigm shift going to be?

The watch industry has undergone multiple paradigm shifts. In the 1970s and early 1980s a colossal paradigm shift occurred. Quartz watches provided a superior means of timekeeping and caused a huge decline in the swiss watch industry. All the hard work, R&D and previous market conditions were flipped on their head, as a brand new product entered. The majority of the worlds watch production shifted to Asian countries. This paradigm shift was completely unexpected and looked like the end for swiss watch manufacturers.

After an initial shock in demand, some of the main Swiss watch manufacturers; IWC, Omega, Rolex, to mention a few, carried on making watches and the demand has since been consistently rising. The ownership of a watch became much more than a means to tell the time, watches became symbols of luxury, craftsmanship and art. For those reasons, the Swiss watch industry is booming today. Even though a paradigm shift occurred in technology, so also did a paradigm shift in peoples perception of watches.

# Kaizen Culture

- Becoming a Learning Organisation
- A voice to all employees
- Innovation
- Habits

# Kaizen Culture

## Becoming a Learning Organisation

# "Culture" appears **71** times in the average annual report

A survey conduced in 2019 across 45 different companies has shown that the word 'culture' has appeared on average 71 times within annual reports. Culture is extremely important as it dictates the behaviour and willingness of a company to improve. A learning organisation epitomises the correct culture required to succeed. In order to truly embrace kaizen and achieve the vast compounding results that are possible, the traditional, hierarchal & (top-down) management structure needs to be changed.

### The beginning of culture

Prior to the cognitive revolution, sapiens weren't able to transmit large quantities of data about social relationships, the surrounding world and things that weren't tangible. That all changed after the cognitive revolution, humans developed cultures and discussed ideologies, imagined realities and a distinction between what was normal/not normal and 'right or wrong' was formed. As a human race, we started seeing the huge

benefits of working together, co-operating, forming clans and hunting/gathering as teams and not individuals. Specialised roles started to form and habits & acceptable boundaries were created. Culture dictated the way members act as part of a group. A good culture may encourage problems to be raised as soon as possible and a team consensus formed to resolve it. A bad culture may brush problems under the carpet due to fear of being punished or appearing incapable to the team or the leader. Companies are no different to clans/tribes. They are groups of individuals working together, co-operating to deliver value. Culture for an organisation means the same thing as the culture of a tribe. Culture is simply the sum of the individuals habits.

There is a natural human tendency to make yourself busy or at least look busy. Humans enjoy being occupied with things to do. People are often seen as successful when they say things like, 'I am really busy with work, I have a lot on my plate'. To some extent this is understandable, the more work you do the more efficient you are. However people end up making up jobs, or jobs that add no value to anyone but themselves. A true Kaizen culture exists when employees are happy to stand still and wait, not overproduce or over-process, refrain from making themselves busy and make their true availability clearly & immediately visible.

### A Learning Organisation

Built on a foundation of managerial support, problems are identified at the shop floor, by the people that do the practical work. This not only ensures the problems raised have real effects where the value is added but also means problems are identified extremely quickly. This idea directly relates to something called short interval control; where problems are identified and countermeasures applied in a very short time, allowing longer term, preventative solutions to be created, tested and implemented.

Unlike traditional organisations where problems are identified and communicated top-down, with a feeling from most employees of 'they don't know what really happens here'. A Learning Organisation structure ensures that problems are solved as close to the source as possible, by the people that are most equipped and knowledgeable to do so. Saving management time and effort as well as providing employees with empowerment to autonomously solve problems.

If problems are identified by the customer themselves, then even better, you have been gifted with knowledge of how to further improve customer value. The knowledge should be shared and each process aligned to enhance value as per the feedback.

# Kaizen Culture

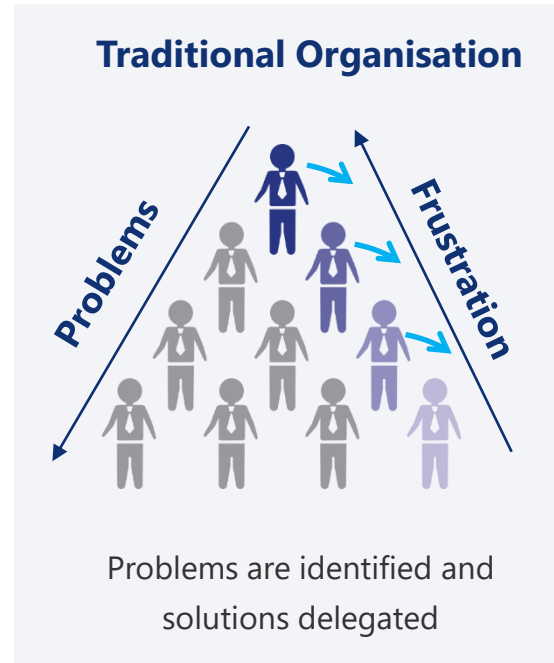## Providing a voice to all employees

In order to develop a continuous improvement, learning culture, the organisation must move from **firefighting to improvement support.**

Many companies suffer from a phobia of raising problems and concerns. It is easier to put on a brave face, say that everything went perfectly well, and not learn from the callosal feedback and advice that has been provided. A shift in cultural behaviours is required, where problems can be openly raised and the voices of customers & employees are truly listened to and acted upon.

**How do you help create a Learning Organisation?**

One, guiding principle: provide a voice to all employees & the tools/support required to solve problems.

1) **Voice to all employees**

2) **Tools required to solve problems**

3) **Support from superiors to solve the problems**



**Traditional Organisation**

Problems

Frustration

Problems are identified and solutions delegated

**Learning Organisation**

Challenges

Support

Everybody, Everyday identifies and solves improvement opportunities

Employees are becoming increasingly skilled, educated and able to solve problems. By showing them respect & giving them a platform to provide feedback to senior members, they can solve problems closer to the source, in a data-driven methodical way.

Daily, morning improvement huddles provide a perfect opportunity to discuss the problems from yesterday, the challenges faced today & the actions required to overcome them. By holding a short, 15minute meeting, all team members are able to raise improvement suggestions and review the teams performance. Improvement actions form part of an action tracker, where they are then picked up throughout the week at dedicated improvement huddles to be delivered and implemented.
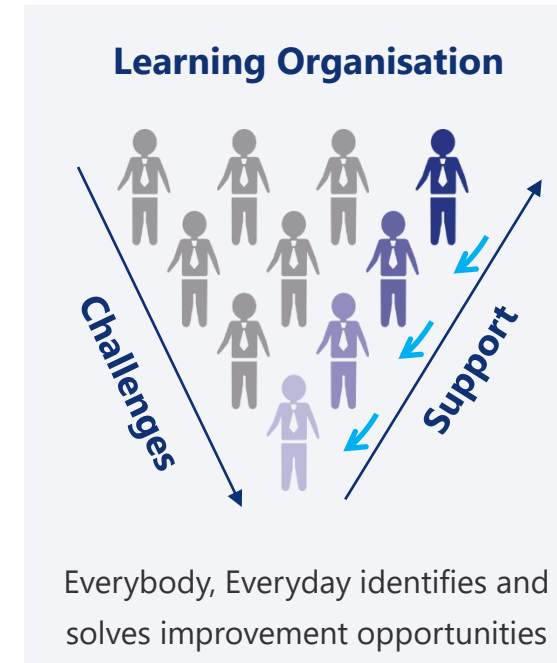
The use of visual management is essential for daily meetings to be successful. As opposed to an unstructured discussion, a team board will act as the home to all improvements & centre of the meeting. This doesn't mean a PowerPoint will need to be created every morning or people will have to login to skype. It means, the meeting will occur at a place where the KPIs are visual to everybody, the progress/status of actions can be seen, and any support can be clearly identified. By working around a visual board, people communicate highly effectively, using data as the driver to make decisions and appeasing all the different types of learner. Without a board, the meeting will not have structure and will soon become people airing their opinions with no decisive actions being generated.

If you want to change a culture you have to make a physical change that encourages the desired behaviour to become part of a daily routine.

# Kaizen Culture

## Using meaningful KPIs

Key Performance Indicators need to be customer focused, leading and lagging & simple to understand. The role of each team within an organisation is to deliver value to their internal customer. Whenever you pay for a product or service, you are paying for the value it delivers. In its most simple sense, when you purchase food, you are paying for the value of the food – its nutritional value, flavour & enjoyment. If you wanted to improve the value of the food to the customer, you could: reduce its cost, increase its nutritional value, enhance its flavour or increase the enjoyment of consuming the food. These are all KPIs that could be measured to help identify where improvements can be made.

**Example**

Imagine working in a restaurant kitchen, before preparation for lunch time service begins, you and your team (sous chefs, commis chefs, kitchen assistants, waiters/waitresses & head chef) gather around a team board. Following a routine meeting agenda, you start by reviewing the workplan for the day. What are the tasks everyone is doing for the shift, in what priority & can anyone foresee any challenges? After addressing any challenges, the team reviews the performance indicators from yesterday. What was the average order-to-service time? If it was below the target, what were the main contributing factors and what could have been improved? Reviewing the 3 KPIs, 'order-to-service time', 'number of customer complaints' & 'ordering mistakes', the team become aware of their performance & understand the importance on delivering an ever-increasing value to the customers.

While reviewing the KPIs, actions are created on the action tracker, assigning the department with the ability to make the change with the improvement action. These improvement actions could include:

**Minimise errors** - Repeat the order to the customer to ensure its has been written correctly.

**Enhance customer value** – Provide suggested wine pairings, based on the sommeliers recommendations.

**Enhance customer value** – Devise suitable way to store customers' coats/belongings.

The job for a leader should be to recognise good work, challenge their team to improve and encourage creativity. Instead of creating an environment of complacency, challenge them to improve. If you want to stay healthy, you have to exercise. If you want a healthy culture you need to exercise employees brains – challenge them and give them responsibility to improve their process. What you will find is that people much prefer being given a challenge with the right support as opposed to either being told what to do or left out.
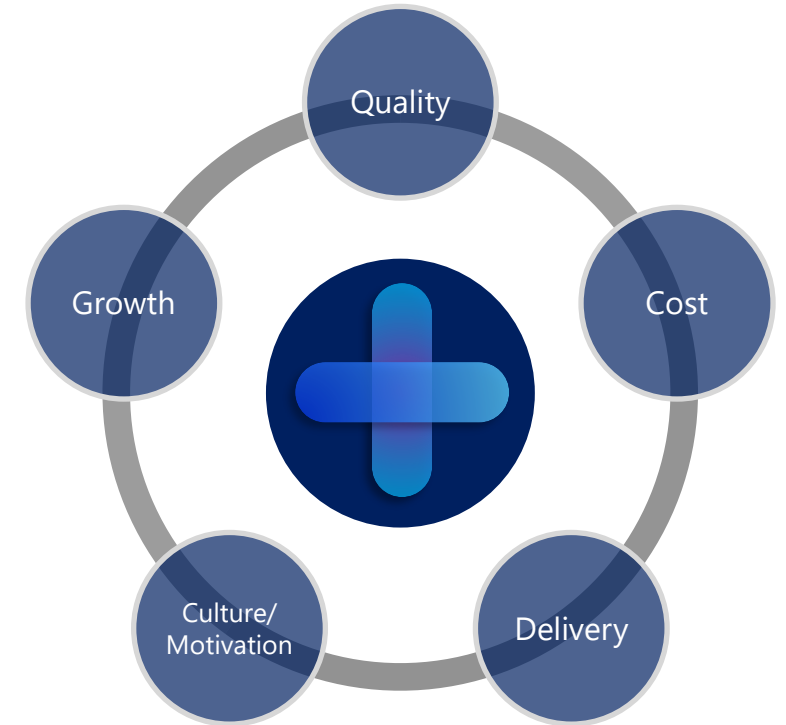
# Kaizen Culture

## Innovation requires discipline

Why do we spend so much of our life in education? Because we understand the value in learning. Learning is the single best investment of our time that we can make. That why successful billionaires like Warren Buffet read & think for 80% of his day.

It is amazing how many companies simply do not learn from their mistakes or do not act on feedback. Feedback should be viewed as a golden gift, the identification of where/how to improve.

When surveyed, innovation is a trait that all employees value as part of their working culture. Innovation is fun. Innovation leads to success; innovation is synonymous with becoming a market leader. But why do so many companies fail to become innovative and a true learning organisation?
As articulately stated in an article written by Gary Pisano called "The hard truth about innovative cultures" for Harvard business review; **"A tolerance for failure requires an intolerance for incompetence."**

The truth is that to be innovative you must accept failure and adopt a challenger mindset. As mentioned previously, strong leaders are required to challenge all employees to improve their work area. The difficulty in achieving this innovative culture paradoxical - discipline and routines.

The very definition of innovation means to be creative, however, to be creating and accept failure you need to have extremely disciplined routines and practices.

Attempts to create novel technological or business models are fraught with uncertainty. You often don't know what you don't know, and you have to learn as you go. "Failures" under these circumstances provide valuable lessons about paths forward. But failure can also result from poorly thought-out designs, flawed analyses, lack of routine discipline, and poor management. If strong improvement routines (katas) are followed in conjunction with correct and thorough analysis/ insights, when something does fail, valuable lessons can be learnt as opposed to simply a lack of competence, sloppy thinking or bad work habits. Innovation is inherently risky, otherwise it would have been achieved already, hence failing when innovating is common.

**"An investment in knowledge pays the best interest."
Benjamin Franklin**

# How to Create Kaizen Culture

Creating habits

## Habits account for around 40% of our behaviours of a day

Just like how an athlete needs to train and practice again and again, so do organisations.

Habits can be good or bad, the key is to create such a large barrier for bad habits that the easiest option is to continue with good habits or further improve the good habit. In other words; reward good habits and deter bad habits by making them harder and with less rewards. Whenever possible, deter the bad habits by removing them from your environment/day to day, eliminating the temptation.

For example, if you had the aim of losing weight but whenever you walked past your favourite bakery you often couldn't resist the smell drawing you in to buy something. The simplest and most effective thing to do is simply avoid walking past the bakery, preventing the opportunity of breaking your good habits. After a habit has been formed, in a month or so, you can then make the decision to go back to the previous route with no risk.

The most important behavioural habit required by a kaizen organisations is that leaders are teachers. Forming a habit of reinforcing good lean practices, active problem solving and paradigm shifts, simultaneously challenging the norm and striving to develop employees.

An important understanding from habits is that they are daily actions, they need to be implemented and sustained in practice, not in the classroom or on the company wide intranet, but where the value is being added.

**"Habits account for around 40% of our behaviours of a day"**

If you look at professional athletes as an example, in order to improve performance they train for 7 hours a day, normally 7 days a week. This 7 hours of training is carefully designed to maximise results and become a daily habit.

The 10,000 hour rule founded by Gladwell outlines how if you want to be really good at anything, you need to put in ten thousand hours of practice. In order to reach this number of hours, you need to adopt it as a habit, 20 hours a week for 10 years.

**An organisation culture is the sum of all employee habits**.

Since the book 'Toyota Kata' was published in 2010, the need for a kata (a well rehearsed routine) or habit was not truly explored or documented. The idea of Kata is that routines should become so much second nature that they become automatic and are part of day to day life. An effective kata is designed and rehearsed until the 'optimal' routine is created for each job role, the new improved way of working then becomes the habit, until a better solution is created, tested and implemented.

# Terminology

- What is Lean & Six Sigma
- Breakthrough & Kaizen

# What is the difference between Kaizen, Lean & Six Sigma?

The tools and techniques used to achieve improvement can vary from extremely simple to exceptionally complex, dependent on nature of your business, how far through your Kaizen journey you are, along with many other factors. The word lean was coined in 1988 by John Krafcik John and popularised in 1990 with a book called "the machine that changed the world" by Womack & Jones. Unfortunately lean is seen by some as being 'old wine in new bottles'. Like most things, there is an element of truth – the fundamental principles were developments from other literature, however they still remain as relevant today as they were when first applied at Toyota.

## How does Lean, Kaizen and 6σ link?

Within industry there is a lot of confusion and misunderstanding between what distinguishes kaizen from six sigma & lean? It is very simple; Lean is the destination and Kaizen is the journey you take to get there. Lean is an unachievable utopia-like state (the target) and kaizen is a strategy to work towards that state . Six Sigma is one of many tools that can help generate improvements as part of the Kaizen journey, focusing on the reduction of process variation.

The terminology becomes further confused by the many combinations and adaptations that have been developed as a way to confuse people; lean six sigma, lean-healthcare, lean-manufacturing, agile, six sigma black belt, scrum master, master black belt powerpoint samurai... (you get the idea).

## What is Lean?

Lean in a physical sense means without fat (waste), getting superior results in the easiest, most efficient way. If you are hiking up a mountain, you want to do it the smartest way (safest and most direct), carrying the minimum possible luggage and being as lean & fit as possible. Lean is: "healthy, strong, without superfluous fat".

**From a process perspective, 'superfluous fat' can be understood as inefficiency.**



**Lean is the destination, Kaizen is the journey.**

## Breakthrough & Kaizen

Breakthrough projects require medium term measurement to ensure real improvement and a tangible reduction in waste, alongside the support and sustainment from management.
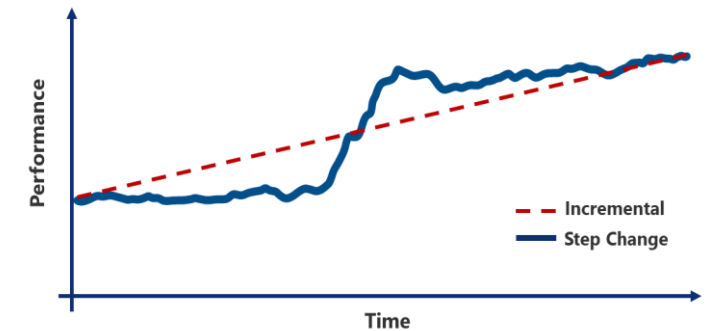


In combination to breakthrough projects, a kaizen culture is required to sustain and accelerate improvement much like the trend in the figure above. In order to sustain something, long term improvement habits need to be changed and behaviours altered. The word kata perfectly describes this, practicing routines until they become second nature and form a habit. Typically habits take 2-3months to truly form, using a strict audit process to ensure they are followed and the standards are being upheld. An example of this Kata and culture aspect of Kaizen can be demonstrated when learning to ride a bike or play the piano. Discipline and repetition is required to learn the skill and become familiar with how to play or ride a bike. Once the routine of practicing becomes a habit (part of the culture), the improvement will be sustained and long term results will follow.

# How to achieve a Kaizen culture and results

- o Where to start
- o Typical problems
- o How to implement
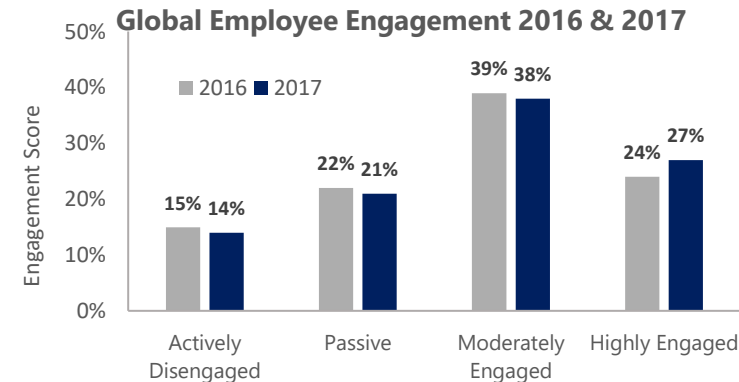
# How to proceed & where to start?

**10 Important Flowplus philosophies**

- Challenge current paradigms and seek innovative disruptions
- Implement ideas however small, kaizen is all about small steps
- Train employees to all become problem solvers, so the continous improvement can compound.
- Don't solve problems alone, use the delphi model to understand the root cause and appropriate solution
- Avoid initial capital heavy investments, start with the low hanging, low cost solutions
- Involve everyone in the kaizen journey and communicate progress
- Reward anyone that makes an improvement, give them recognition
- Use data & a business case for any more complex problems, let the facts do the talking as opposed to opinion
- Create and train to standards as a means for stability, quality and process improvement

**The Statistics & truth about a Kaizen journey**

There are more lean & kaizen 'failures' than true successes.

Only a fraction of the companies that set out on a kaizen journey ever make it past the first waypoint: the initial steps to eliminate waste (the low-hanging fruit).

**Global Employee Engagement 2016 & 2017**

| Category | 2016 | 2017 |
|---|---|---|
| Actively Disengaged | 15% | 14% |
| Passive | 22% | 21% |
| Moderately Engaged | 39% | 38% |
| Highly Engaged | 24% | 27% |

Engagement Score (Y-axis: 0% – 50%)

*Data from 8m people – AON, 2018 Trends in Global Employee Engagement

Many organisations fall-back into bad habits because they haven't been able to transform their thinking or their culture to adopt the kaizen **philosophy**. Kaizen is not a project, you cannot ' do kaizen', what you can do, is change the behaviours of employees, motivate and reward/recognise their improvements and enable them solve problems within their teams.

Organisation

Vision

Strategy

Practices
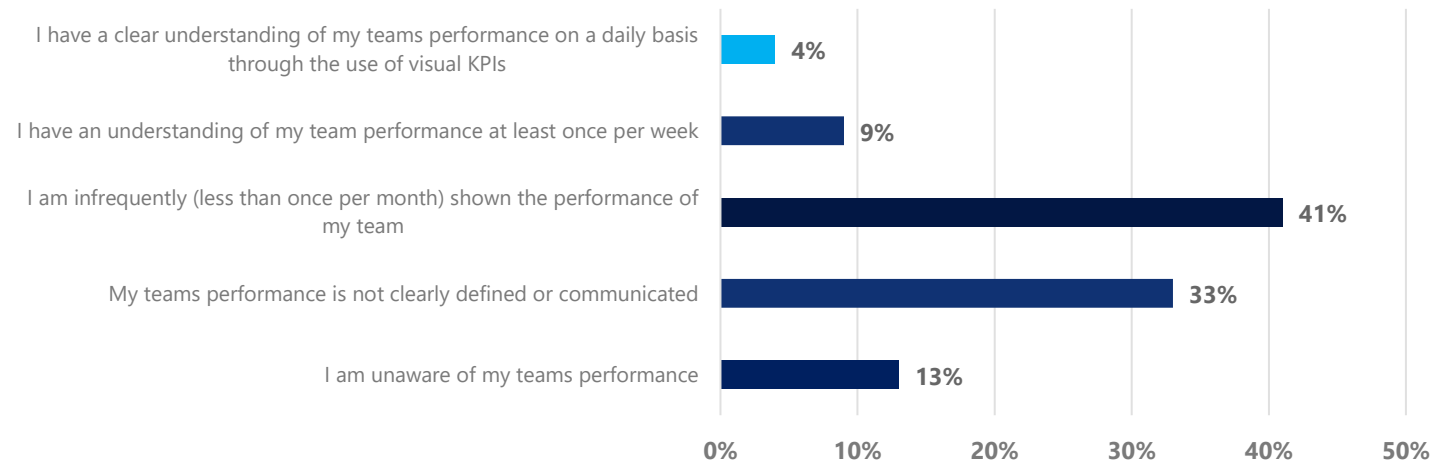
Values

Attitudes

Beliefs
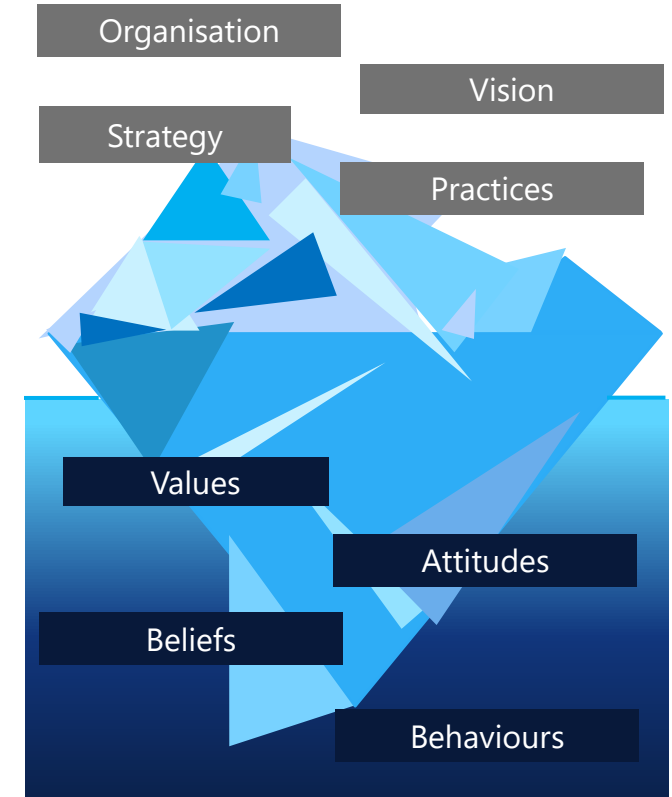
Behaviours

As depicted with the iceberg schematic above. The vision, strategy and everyday practices are visible within the company. It is however the values, behaviours and attitudes that contribute to the strategy.
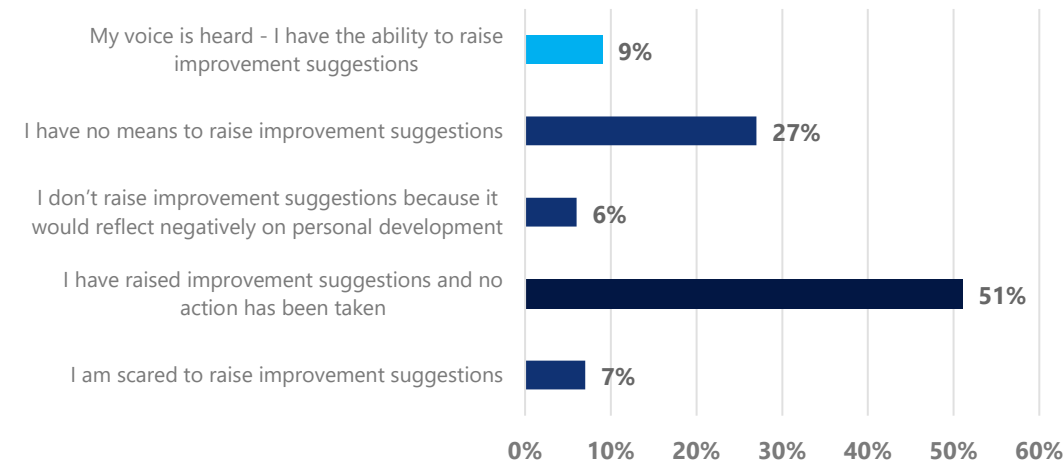
# The problems

A worryingly large number of employees cannot answer the question "how is your team performing in accordance to the company strategy?" To further that, 87% of employees are not even aware of their team performance, while only 4% receive daily KPI updates.

The provision of daily KPIs provides one magical change to the way people work. They start caring and taking notice of their performance. Previously they were blind to reality and numb to the conditions of the company, no sense of urgency or celebration, instead, in a daily trance.

## Team Performance Awareness



| Statement | % |
|---|---|
| I have a clear understanding of my teams performance on a daily basis through the use of visual KPIs | 4% |
| I have an understanding of my team performance at least once per week | 9% |
| I am infrequently (less than once per month) shown the performance of my team | 41% |
| My teams performance is not clearly defined or communicated | 33% |
| I am unaware of my teams performance | 13% |

## Ability to Raise Improvement Suggestions



| Statement | % |
|---|---|
| My voice is heard - I have the ability to raise improvement suggestions | 9% |
| I have no means to raise improvement suggestions | 27% |
| I don't raise improvement suggestions because it would reflect negatively on personal development | 6% |
| I have raised improvement suggestions and no action has been taken | 51% |
| I am scared to raise improvement suggestions | 7% |

The concept of Kaizen makes logical sense and is a no-brainer to many that hear about it. Why wouldn't you want to continuously improve? The answer is that many employees simply aren't listened to or provided a platform to raise improvement suggestions. A measly 9% of employees claim to be able to raise improvement suggestions and have their voice heard. The majority of employees have previously raised improvements with no action, so have now given up.

This needs to change. A platform needs to be present to allow everyone to have a voice, raise improvement suggestions, prioritise initiates and be empowered to collaboratively solve the problems that have drastic impact.

# How do I initiate/rollout a continuous improvement culture?

The most effective way to rollout a continuous improvement plan can be mimicked by looking at the remarkable way religion (Christianity for this example) was able to spread throughout the world and across different cultures at extreme speeds.

Lean is like religion in many ways. It requires a preacher who has genuine enthusiasm & faith in what they are doing, and strong knowledge regarding the text you are preaching from (''text' being used loosely here). You must find willing converts who can be developed into disciples (someone who is sent out to spread the message individually). The disciples will meet persecution from those who do not understand the message, but the fact remains that the flock (business system and people) are really the ones that benefit from the conversion. Don't forget that you are going to have perform a couple of miracles (flow-based tools) along the way as well.

Within an organisation, the disciples are CI champions;' who focus on enlightening the managers of the 'new', best way of working. The managers then spread the word to their subordinates, acting as role models & change drivers. The new way of working trickles down the organisation and spreads at an accelerated rate, much like the spread of Christianity.

It is extremely important to note that in order to maximise the chance of success, middle managers need to be 100% on-board with the transformation. Masaaki Imai, founder of the Kaizen Institute once said there are 3 things you need to ensure change, "middle management commitment, middle management commitment & middle management commitment." The importance of management cannot be overestimated, they act as the connecting link between the top management's strategic aspiration's, market realities, and the capabilities & actions of the work force. They are also the intermediary between the employee's voice and problems and the resources/support to solve them.



*FlowPlus Consultant*

*CI Champions*

*Managers*

*Team Members*
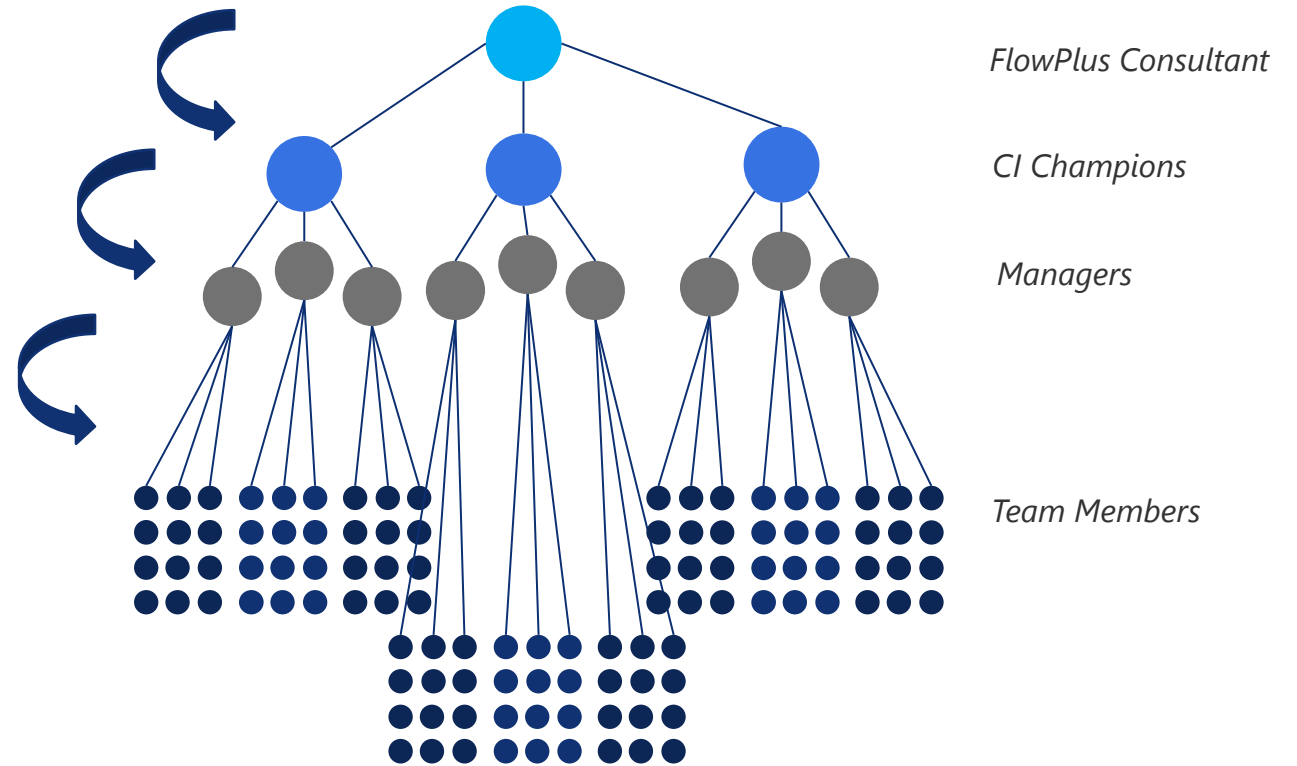
As seen in the schematic above, the transformation trickles down the organisational structure, starting from the top and multiplying as it moves downwards. FlowPlus experts commence the transformation by training, coaching & implementing improvement initiatives with the support of CI champions. FlowPlus Consultants train the trainers, ensuring all CI champions are aligned and understand the methodology, The CI champions then work with managers to further multiply the benefits throughout the organisation.

# FlowPlus™

- o What we can do
- o Where we can help

# FlowPlus

## What is **FlowPlus**™ and what do we do?

### About Us

With headquarters in London, FlowPlus™ is a specialist in operational improvement, with a fundamental principal that by making processes flow we can create vast improvements in productivity & cost reduction. We help you work smarter by creating solutions that eliminate non-value added activities, enhance quality, reduce costs, improved delivery, transform culture & enable growth.

Our approach is deliberately different. We believe sustaining results is the true test. That's why we follow a 3-step process; Assessment, Implementation and Sustainability.

We work hand in hand with our clients, delivering at the place where value is added. Together, we crack some of the largest and most complex challenges in the public and private sectors, by pinpointing and implementing the changes that have the greatest impact.

Our promise is simple: we'll leave your O
rganisation better equipped to solve future challenges without us. We believe we have done a good job when we are no longer required.

Quality

Growth

Cost

Culture/
Motivation

Delivery

# FlowPlus

## The 3 Services We Provide

### FlowPlus™ Assessment

**"Recognising the problem is more important than finding a solution, because the exact description of the problem leads almost automatically to the correct solution."** *Albert Einstein*

For that reason we believe that it is critically important to get things right first time and ensure we are solving the most impactful problems, with the biggest potential.

The creation of your company DNA profile allows us to use various benchmarking methodologies to conduct a 'gap to potential analysis', identifying your improvement potential using an audit of over 30 criteria. A roadmap and action plan is then created to bridge the gap and ensure long term, sustained improvements in growth, quality, cost & delivery are achieved.

### FlowPlus™ Implementation

Our Industry experts utilise our selection of bespoke tools to work directly with you. We believe that if you don't change, then you can't improve, and change needs to take place where you work. For that reason we don't produce reports from behind a computer, we roll up our sleeves and solve the problems as close to the source as possible.

Consulting is what we do. We identify the problems that are most significant, and work with the teams to create permanent solutions.

We are so confident in our expertise & methodology that we only charge on the results we deliver. It eliminates any risk to our clients and shapes our organisation to evolve & continuously improve the tools and ways in which we work.

### FlowPlus™ Sustainability

In order to sustain improvements, we strive to develop the skills internally so you can solve problems on your own. We do this partially through training but also through the introduction of an improvement framework/routine to ensure a continuous improvement habit is maintained.

The combination of both a routine, and the ability to overcome firefighting by solving problems at the root is the magic formula.

FlowPlus™
Helping you work smarter