

NSG

GROUP



Creating Reinforcement for a Sustainable Future



LPPDE virtual summit

December 2024



Creating Reinforcement for a Sustainable Future



NGF Products and Capability


NSG Group Overview

FY2022 Revenue
¥601
BILLION


Sales in over
100
Countries

26K
Employees


Our Businesses



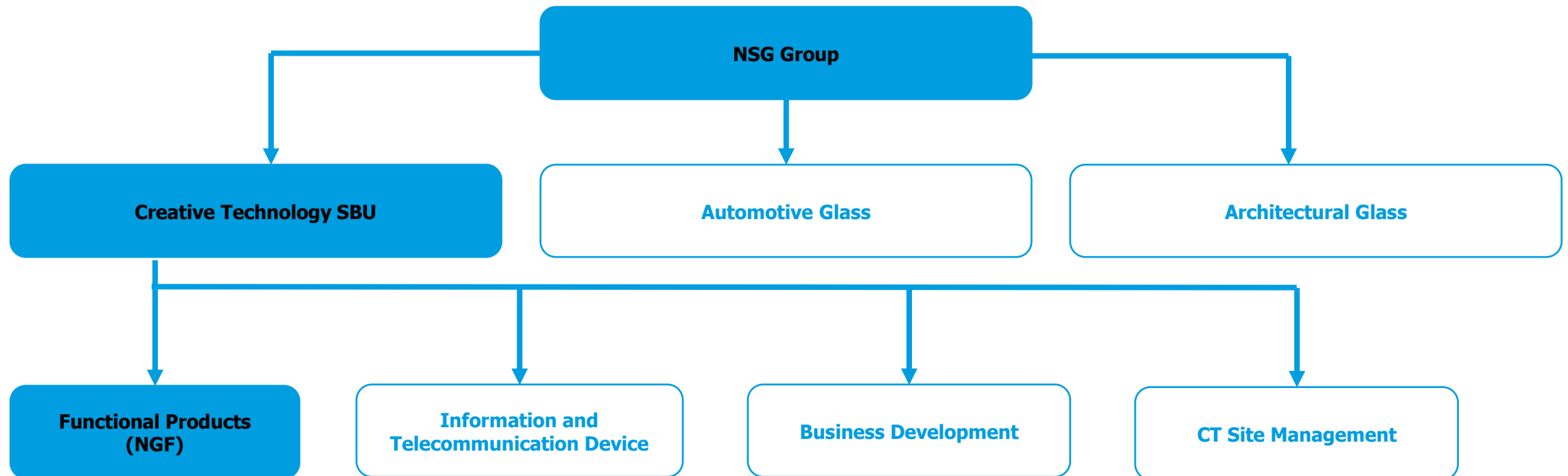
Architectural



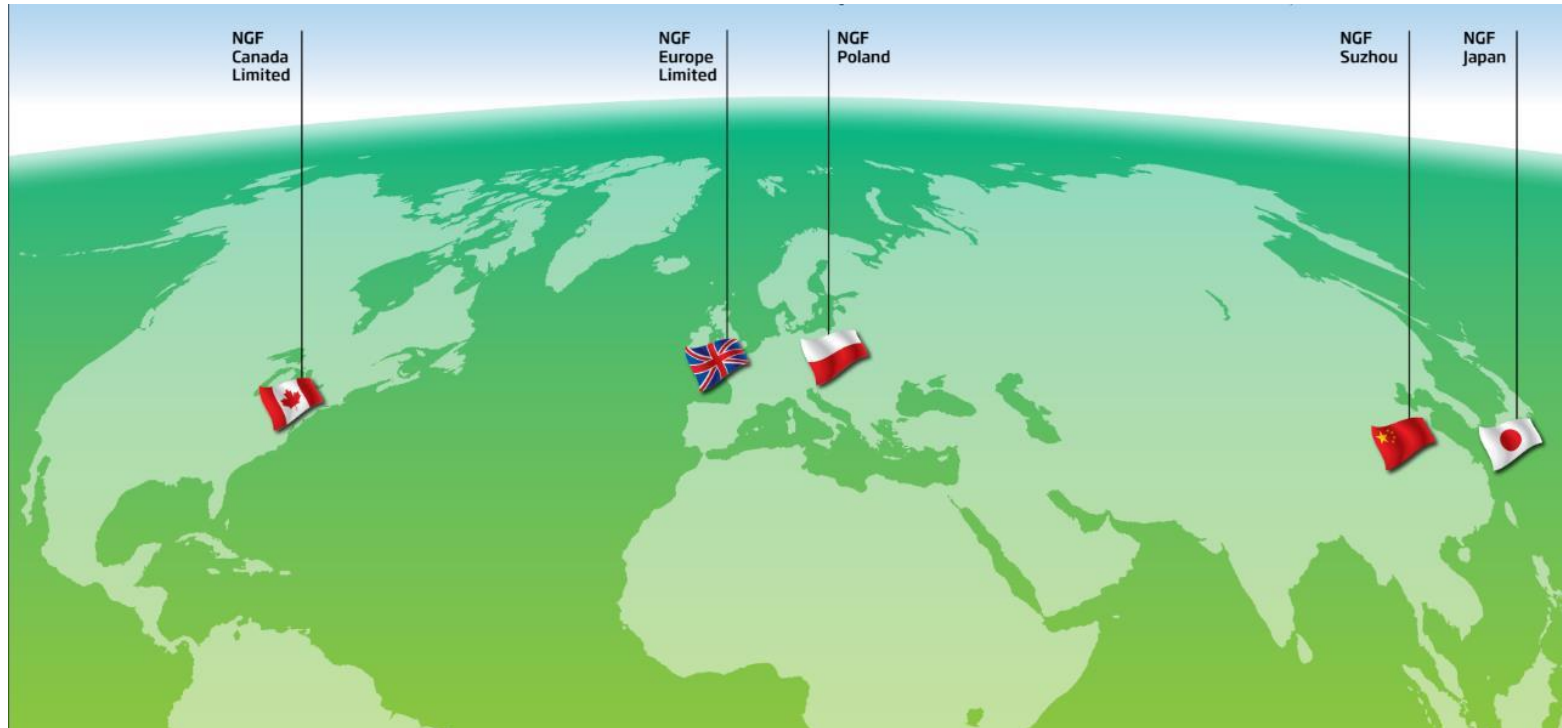
Automotive



Creative Technology



NGF Group Overview – Functional Products



Quality Certifications

UK

- Quality Management Accreditation IATF 16949:2016
- Environmental Management: ISO 14001: 2015

Canada

- Quality Management System ISO 9001:2015
- Environmental Management: ISO 14001:2015

Japan

- Quality Management System ISO 9001:2015
- Environmental Management: ISO 14001:2015

China

- Quality Management System ISO 9001:2015
- Environmental Management: ISO 14001:2015

Poland

- Quality Management System ISO 9001:2015

<https://www.ngfglasscord.com/en-gb>

Functional Products (NGF products)

- Impregnated Continuous Cord.



- Impregnated Chopped Strands, reinforcing materials.



- METASHINE®



- GLASFLAKE®
For anti-corrosive
Paint.



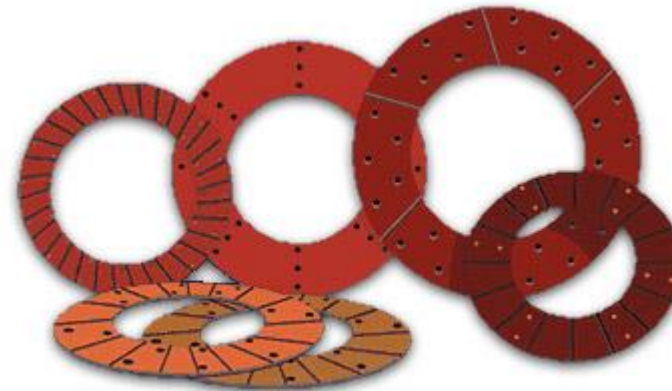
- MAGNAVI™
Gives strength
such as bending
or warping of
composites.



Impregnated Cord and Chopped Impregnated Strands

- Applications

- Tires
- Fabrics
- Belts
- Extruded Rubber Profiles
- Industrial Brushes
- Friction Materials



The Why and Who



If you don't understand Why you are doing the project, how can you support the team on their journey to make the improvement?



The saying it takes years to build a good reputation, and five minutes to ruin it, quote from Warren Buffet, chairman and CEO of Berkshire Hathaway.

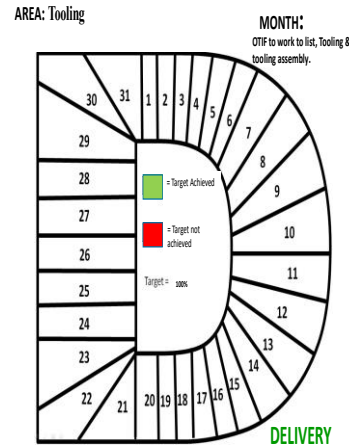
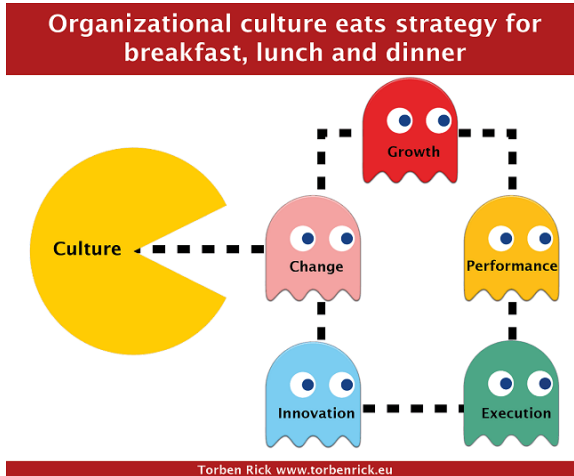
The customer expectations, when you deliver on time can be positive. The other side of the customer experience, by missing your delivery date will make the customer think why am I buying from this firm. the saying it takes years to build a good reputation, and five minutes to ruin it, Warren Buffet.

The Customer

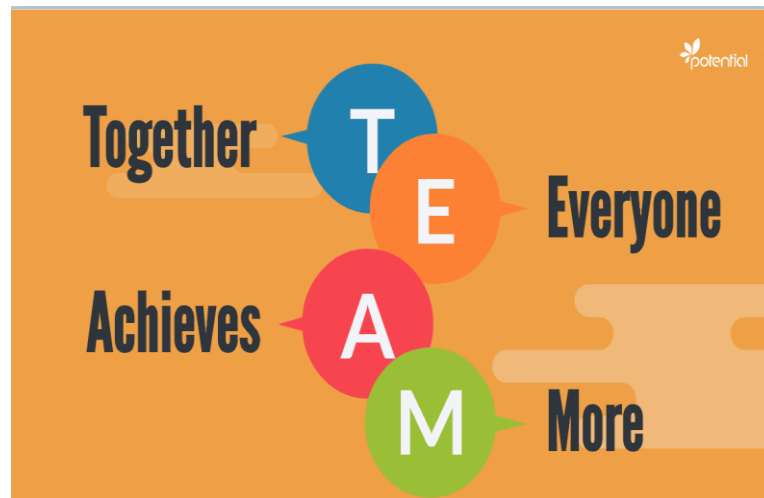


- The current process of delivering to the customer has been two to three weeks, the question from a customer to our sales team why do your products take so long to make, when the competition is much quicker? They deliver within a week.
- The Director of the company asked me to look at what is going on with the tools getting designed for packing machines and pull together a team who have the skills and knowledge to make the improvements, to reduce the lead time.
- The team members: the planner, tool designers, project support, manufacturing team members, and Stores packing team.
- Designers at a comfortable pace, not wanting their boat rocked in any way, we make it happen it might take a bit of time, designers who are creatives and you can't rush that.
- Tools within the business had been treated by designers as not important, taking two to three weeks to design, the lead time getting longer and longer, when most of the time it's a repeatable process, a copy and paste process.

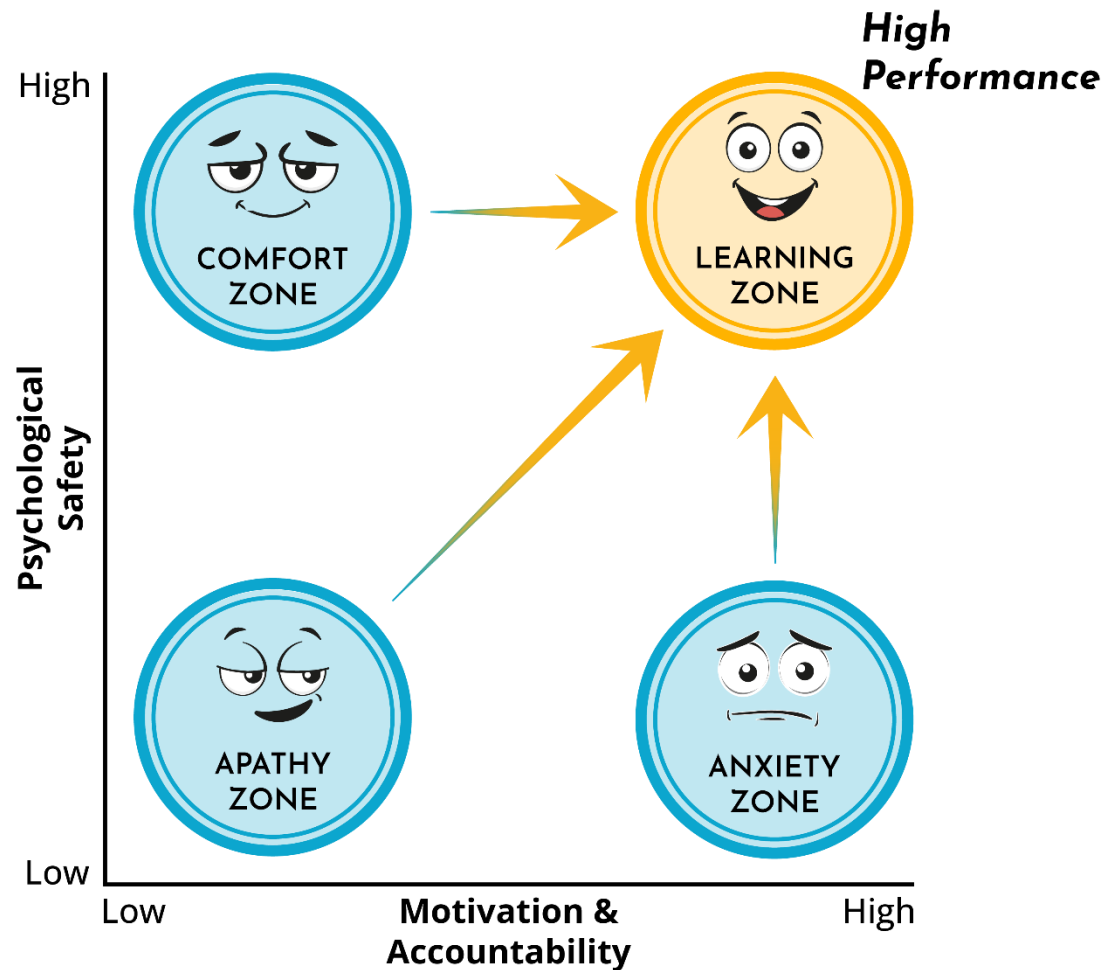
The Culture



- The background to moving the culture forward before the tooling lead-time reduction project. Implementing SQCDP boards, focusing on OTIF for tooling. Communicating to all tooling makes us the most profit, share information with teams.
- No project in any business will get a positive outcome, if you have not prepared, supported, and trained teams on what is expected of them. KPIs are a good start this supports the teams to link to the business strategy.
- Making changes no one wants their day changed, the pattern and behaviour, I do my work this way, and have no interest in changing this is the norm.
- It's better to involve the folks who will be impacted by the changes, than not, working with them not imposing change on them.
- Customers make the business without them you won't be in business, ensure the business has 100% focus on the customers.



The teams comfort zone conversation



- The first thing to do is get your plan ,and have an outline of what you want to do, it does not need to be war and peace, a one-page plan of action, and how you will facilitate the team to reach the project goal within the timeline to complete. 8 weeks had been set for the tooling lead-time improvement.
- The team members are picked by their skills required to improve, one-to-one conversations take place with team members, and doing this before any project meetings take place, supports the team to see a change is coming. Within the conversation explain what we are doing and why. It is also important to understand their mindset will be in their comfort zone, not always wanting to learn
- Designers like to work at a comfortable pace, stay in their creative bubble, not wanting their boat rocked in any way.
- Tooling had been the biggest selling product for the business making the most profit, within the culture you would not know that fact.

Project structure

1. The Why for the project has been established, the scope and outcome, how long you have to complete the project.
2. Team members were picked for their skills, running the current process for manufacturing tools.
3. Train the team in the problem-solving tools you are using, in the tooling design project, we completed a 5Whys, our question why are we missing tooling lead-times? Reminder you are looking at the process, not the person, when making improvements.
4. Make meetings quick, this frees up time to do the actions, we had one hour per week, 20 minutes of updates on actions, and then the rest of the time to go and make it happen. Every meeting I reaffirm to the team, the Why of the project, the goal of the project, and the timeline to complete the project, this gives everyone an understanding we need to achieve the outcome of the project.
5. The first meeting in any project turns out to be discussions only, the Why we cannot do this improvement, this and that stops us. This is the emotional side of the project, the defending trying to keep the process the same.
6. In the second meeting all the reasons why should be out of the way, if not give a small amount of time to this, and then communicate this has been covered, we need to start noting the process from the start to design tools.
7. If there are any SOPs review them, in the case of the tooling they had no SOPs in place, and no standard process. Without the SOP every designer, planner, and manufacturing team would continue to work their way, every tool takes a different time to design and manufacture, and another customer would wait for the product.

Three Trials

- Trial one never goes to plan a bit of crash and burn, folks will go back to the normal pattern when doing the process, forgetting the new time frame to complete the tasks. This can also be a testing time for the team, if we fail will the change stop?
- Hold a review on how the first trial went, the time for the first trial took 4 days, and some of the issues had been other folks, not understanding the no interruption when an urgent tool request had been made. The SOP was sent out to all teams, so when the sign was on display the teams are working on urgent tooling orders, unless life life-threatening circumstances you had to wait.
- The second trial the goal to get one day. Have honest conversations about what do we need to change to achieve the one day , we made changes to the SOP, and the planner put urgent on tool orders when the new lead-time process taking place. We got better, we delivered in 2 days .
- Reviewed again, what stopped us, made changes, do we need to make. We ensured all were focused by planning their day, knowing the tool trial was coming, block out the time, so no one could call you to meetings.
- The third trial, we did it in 1.5 days. Nope, not the goal of one day but positive we are going in the right direction. A machine had broken down so, this had been out of our control.

Outcomes

- Training other team members to cover when others are on holiday to ensure the process would still work.
- The new tooling process SOP, carry out weekly Right First Time Audits to ensure the process becomes the norm behaviour.
- Address any problems stopping the team from delivering within 1 to 1.5 days.
- Advertise the changes to customers on lead-times.
- Offered different levels of service, quicker to the customer, the business can charge a little more, and still be quicker than the competition.
- Never stop improving the process. The site purchased two Hurco CNC machines just to make tooling. ROI within 2 years, within the increased sales.
- Tooling became the biggest money earning for the company.



Happy customers.

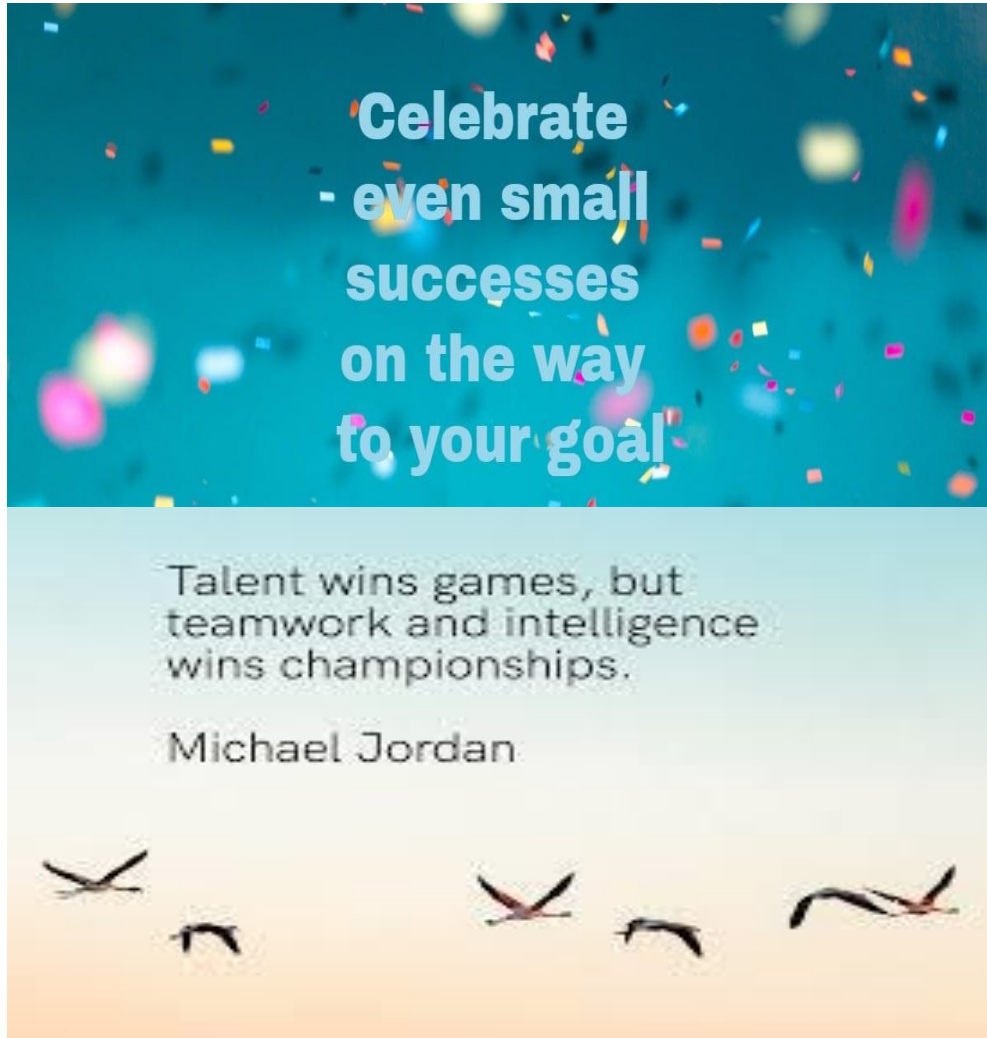


Sales of tooling increased month on month.



Everyone in the business, wins when the business grows.

Celebrate every win



- Every milestone celebrated it's not easy to make improvements.
- Stay positive to support the team to the end of the goal, you are there to ensure they shine and grow in knowledge.
- Mistakes help us learn, don't be afraid of them.
- Share with others what you have learned along the way with the project.
- We had treats, pizzas, bacon butties, and cakes.
- The team wrote an article for the monthly team magazine.

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