SKILL SETS FOR THE FUTURE

From time to time as a business we need to look ahead and review how we can improve, grow and continue to deliver success into the future. As part of this review we need to consider what skills we need to develop in order to meet any anticipated change.

Increased globalisation and shorter product cycles are driving shorter lead times, more flexibility, more modularity, more connectivity and driving more demand for the skills we possess.

Merging of traditionally different disciplines has been happening for some time in mechanical, electrical and software roles where close relationships are assisting us to maximise the value we offer our customers through design and build. There will always be a role for individual specialisms but having a broader base experience will create more opportunities.

Lambert was ahead of the market with its use of vision guided robots to achieve the high precision assembly. As the cost of processing power reduces, there is a greater opportunity to embed more intelligence in to our automation and processes. Whether this is 3D imaging, more condition and process monitoring, artificial intelligence or the use of tools such as augmented reality, virtual reality or automation process flow modelling.

We take apps and cloud storage on our phones for granted and how they make our everyday life easier. When we want to do something, it has enough intelligence and access to data to predict what we want to do without us explicitly commanding it. Just as this benefits us as consumers, the same benefits could be applied to both our internal production and our automation systems. This brings additional demand on IT and OT (operational technology) and the skills needed to cover both realms.

The growth of our aftersales function is increasing the demand for our multi-discipline engineers and their abilities to support our customers throughout the life of their production lines. Their ability to understand machines, materials and work with our customer’s production and maintenance teams to maximise plant OEE is highly valued.

But as well as these technical skills we need to keep developing the already world class people we have in this business. We wouldn’t be able to deliver a world class service without these people and speaking as part of our management team we are committed to developing and maximising this potential in the future.

Mike Lewis
Innovations Manager

Welcome to the latest edition of The Vision. I hope you enjoy catching up with the exciting changes happening throughout our business.

Skill shortages across the UK is always a topic that sparks lots of interest and it is vital that all companies, especially manufacturing and engineering have a long term investment strategy to ensure they have a sustainable workforce and skill base.

With this in mind I thought it would be good to have an edition of the vision that promotes what we do here at Lambert relating to the development of our people and the business.

From the various articles included you will see we have a strong focus which is delivered in many ways to ensure our talent pool is always overflowing.

As always everything we do at Lambert couldn’t fit into just this one edition and I also know there is still more that can be done but looking forward over the next 4 years to 2020 I can envision some fantastic opportunities for our staff to grow their knowledge and personally develop their career here at Lambert.

Warren Limbert
Managing Director
Lambert is celebrating the 7th successful undergraduate student summer placement in collaboration with Leeds University. These placements originally started in summer 2012 and are an opportunity for both the student and Lambert to benefit from a 12 week project. The students are supported and mentored by Lambert staff throughout their 12 weeks and finish by presenting their achievements to the board of directors.

This year Joe who is studying for a Masters in Electrical and Electronic Engineering joined us to work on part of our technology strategy where we wanted to showcase our ability to remotely connect to our automation platforms to display machine metrics.

Joe successfully turned one of our automation proof of principle rigs in to a typical production line and wrote code to simulate typical production losses such as wear of componentry as well as operator and material efficiencies. He then demonstrated how through logging on to the cloud via a smart phone or tablet he could successfully identify both the immediate status of the system (OEE) and where specifically within the system the components were not performing as benchmarked. This also included a feature to access historical data so further understanding and analysis could be made.

Joe was supported by Tom Pascall within Innovations and Rockwell Automation, one of Lamberts key strategic partners supporting their FactoryTalk® Historian and FactoryTalk® VantagePoint systems which were the foundation of this work.

Joe was joined this year by Mohammed who is studying for a Masters in Mechanical Engineering. Mohammed has returned to Lambert for a second time having successfully completed our internal knowledge library Tekipedia in 2016. This year Mohammed has been working within the Mechanical Design department developing a new part library for Solidworks 2016. Both these efficiency tools have greatly assisted the technical teams in proposing and delivering the best value solutions. Mohammed will be returning for his final year at university this year.

We hope the scheme will expand in the future and hopefully more companies will take the opportunity to invest and support local students in providing valuable industrial experience to complement their academic education so as a nation we can help develop the next generation of engineers such as Matthew Warburton who was a placement student last year and has now joined on our newly established graduate scheme.
INVESTMENT IN OUR PEOPLE DEVELOPMENT

Lambert has partnered with Festo during 2016 to deliver a number of development programmes. We were also able to secure funding towards the cost of these programmes through the LEP.

1. LEADERSHIP AND COACHING
   This programme has been delivered over a 6 month period to all Directors and Senior Managers within our business. There were 3 elements to the programme:
   • Developing an effective personal leadership and management team.
   • Embedding a Coaching culture across the business
   • Sustaining growth and continuous improvement

2. VIRTUAL TEAM LEADERSHIP
   This programme has been delivered to our Programme Management, Project Design Managers and Senior Design Engineers and covered the following 3 elements:
   • Introduction to leadership
   • Employee Engagement and Behaviour awareness
   • Effective team working – the what and why of teams

3. MECHATRONIC DEVELOPMENT
   This programme was delivered to a number of our Mechanical Build Engineers allowing them to develop electrical build skills to enable them to fulfil our Mechatronic Engineer aspirations. This programme consisted of 2 elements:
   • Industrial Electrics & Control Fundamentals Part 1
   • Industrial Electrics & Control Fundamentals Part 2

THE LAMBERT EFFECT

Lambert recently welcomed groups of students from Leeds UTC as part of Industry Immersion fortnight organised by the Ahead Partnership.

Two groups of 15 students took a tour of our facility, attended talks and took part in a practical exercise to give them a feel for engineering and Lambert specifically.

QUALIFIED SUCCESS

Congratulations to the following people who have successfully completed IOSH Managing Safely and Effective Purchasing courses.

IOSH Managing Safely Course
Congratulations to Adam Mattison, Geoff Boyle, Sophie Nicholls, Darren Beardsmore and Glenn Wilson who recently completed an IOSH Managing Safely Course as part of the ongoing commitment to Health and Safety in the workplace.

Effective Purchasing Qualification
Congratulations also to Rob Williams who successfully completed his effective purchasing qualification in July of this year.
The objective is to train a team of Lambert engineers to become lean cellular build experts so that we deliver our five year strategic objective to double output in the Repetitive EE business unit by 2020.

**The Opportunity**

Lambert must increase our competitive standing by always delivering market leading quality at a market leading competitive price in the shortest lead time.

The team were tasked to develop a production model to achieve the objective without the need for additional staff and reducing inventory to Just-In-Time Levels – (2 weeks output), whilst at the same time achieving 100% On Time in Full delivery. In essence our goal was to deliver twice as much to our customers whilst delivering significant cost reduction.

To assist, Lambert engaged the consultative services of Phil Hanson - Lean Business Solutions who along with his co-Director Kerry Cochran has worked with our company for over eight years.

**Best Practice**

To start we looked at case studies where productivity had been improved whilst retaining the high level of bespoke building flexibility and quality, essential to our product and client expectation.

**Activities**

For the first phase, the team attended a number of workshops led by Phil Hanson designed to demonstrate Lean workstation principles to develop individual assembly cells each based on a 'U' shaped working area layout to minimise movement – one of the eight DOWN TIME wastes.

For the second phase the workshops gave insights of best practice by some of the world’s leading brands. The case studies looked at Maserati, the luxury handmade car marque that also needed to increase productivity to meet increasing demand. Maserati invested in making the tasks of the craftsmen easier whilst only automating through 1 robot! This has enabled major increases in productivity. In subsequent sessions our team worked on Kaizen experiments by building model planes where ideas for fixtures, jigs, Kanban and kitting of parts were developed.

**Outcome**

From initial analysis a 50% reduction in small batch assembly time was shown to be achievable, bringing us close to the project goal. Further work is now needed to align our supply chain so that they form part of the Kanban process and quality chain.

Many thanks to the team for their hard work, dedication and blue sky thinking during this initiative.

**Mark Rounding** Continuous Improvement Manager

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**OHAS 18001 & EEF AWARDS**

Following months of hard work and a robust external audit process conducted by the BSI, Lambert were successful in their certification for OHSAS 18001:2007.

OHSAS 18001 is a British Standard framework for occupational health and safety management systems and ensures that as a business, Lambert have in place, the policies, procedures and necessary controls required to achieve the best possible working conditions for our staff and ensuring the health and safety of our workforce. Certification involved a structured external audit across our full scope of services. 18001 further compliments and enhances our existing accreditations for ISO 9001 (Quality) and 14001 (Environmental).

Lambert work on a principle of Safety First. Safety is, and will always be at the forefront of everything we do. This certification confirms our commitment to achieving excellence in everything that we do and our ongoing process of measuring and delivering continued improvement. The OHAS certification demonstrates to our customers, suppliers and our employees our commitment to provide a workplace environment dedicated to employee safety at the highest levels.

Following the success of the OHSAS 18001 Certification Lambert will be entered into the EEF National awards. The improvements made over the past 3 years in Lambert Health and Safety culture and new initiatives implemented has further enhanced our principle of Safety First. With this in mind and the data collated to back up our claims Lambert feel very confident we are in a very strong position for success at the awards.

**Ian Hemingway** EHS Facilities Manager
THE PETER WAINMAN APPRENTICE OF THE YEAR AWARD 2016

Lambert is pleased to announce that the Winner of the Peter Wainman Apprentice of the Year Award for 2016, co-sponsored by Rockwell Automation, is Sam Yeadon.

Sam is an Electrical Build Engineer who has just completed his Apprenticeship and been offered a permanent position with Lambert.

Sam was up against keen competition from 2 of our other Apprentices – Louis Knight (IT Apprentice) and Ben Newby (Mechanical Engineering Apprentice). This year, our judges were Peter Wainman (Co-Founder), Martin Williams (Chairman), Allan Stewart (Principal at Selby College), Kevin Wright (Rockwell), June Smith (EEF) and Warren Limbert.

Although the final decision was extremely difficult, Sam demonstrated his passion, commitment and engagement with Lambert and its values and also his commitment towards the development of other young people through his activities outside of work.

As winner, along with this accolade, Sam was kindly presented with an iPad, courtesy of Peter Wainman and the fantastic opportunity to travel to Atlanta, Georgia as a guest of Rockwell Automation to attend their 2016 Automation Fair.

All of our nominated apprentices have received an award of £100 each from Lambert, which they can spend on tooling or other equipment to assist them at work through the Lambert Tool Club.

I am sure you will all join me in congratulating Sam, Louis and Ben and wishing them all continued success in their career.

Warren Limbert said “Engineering isn’t just our business – we are passionate about it. We want to make sure that young people recognise the opportunities that a career in this sector offers and Sam epitomises this passion”.

Linda Underhill HR Manager
When you are looking for areas within Lamberts that can inspire through achievement you don’t have to look much further than the Equipment Engineering build area.

For many years the EE build area has been one of the most productive at Lamberts with the skills and knowledge of our staff working in the department being a cornerstone of this success.

As part of our continuous improvement programme at Lambert during 2016 there has been additional investment put into the infrastructure of the EE build area along with the development of staff. For Lambert to provide an increased service of value to its customers it was decided to introduce new faces into the department so they could develop the skills required from the existing team. At the same time challenges to the methods and structure of the department were also made with areas for improvement being identified.

The first consideration when setting up any team is to ensure you have a good balance. With a mixture of managers, experienced engineers and apprentice engineers you had team members that could structure ideas to the business model, identify what worked or could be improved with fresh (outside the box thinking) ideas. Using the power of the team will always provide effective solutions quicker than relying on one individual.

The first major development agreed was to redesign the area layout with individual build cells. The area was designed to make the flow of the project lifecycle effective and efficient.

Overhead booms were suggested for safe provision of services and reduce clutter.

Fixed lecterns were introduced after the idea was entered into our suggestion scheme. A very simple idea but it now means that drawing packs are not obstructing the work space and most importantly they have a home during the build process.

An information centre was installed so our engineers have access to real time data along with a location to control WIP and complete project documentation. Basic 6S methodology “a place for everything and everything in its place”.

A soundproof purpose built test station was installed so jobs can be thoroughly tested and the information logged prior to dispatch. Another example of value engineering for our customers.

I have only touched on a few of the improvements the team have introduced and they aren’t finished yet.

Whenever I speak to any of the team they are always talking about what they want to do next. Continual improvement is exactly that, it never ends. Small regular improvements can make huge difference to aiding efficiency and driving down costs.

Greg Ward Manufacturing Manager
Please return your completed word search to Rachel if you wish to enter the Inspirational Word Challenge and be in with the chance of WINNING £50.00! ENTRIES TO BE RECEIVED NO LATER THAN 21ST NOVEMBER 2016.

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CHARGING INTO THE FUTURE

As part of our ongoing commitment to the environment Lambert have recently invested in a double electric charging point opposite our visitor parking on the main building.

This, along with the investment of a brand new fully electric van, will really cut our carbon emissions around the facility.

Also the new fleet of company vehicles have been getting in on the act with (at this present moment in time) four Hybrid cars now being driven, two of which are electric/hybrids that can be charged on the new charging station.

ONWARDS AND UPWARDS!

TAD1 has enjoyed further success in 2016, especially at Valley Gardens, Harrogate where we finished two seconds clear of our nearest rival, retaining the trophy for the third year running!

As usual, the win did not come without drama!

Our Humber Bridge success also continued in 2016 with us taking awards for fastest time of the day, fastest adult class and first overall.

We have also had outings at Harewood and Windmill Hill, and missed out on first place at both by a very small margin!!

A new, revised version of TAD1 is being looked at for next year.

CHARITY DONATIONS

TADCASTER SWIMMING POOL DUCK RACE 2016 – after a very late entry, our ‘lucky’ duck chosen by Rachel Udakis was first over the line!

We have received thanks from TADCASTER FLOOD ACTION GROUP for our donation. They have recently taken delivery of two towable flood pumps which will be greatly appreciated.

We have also continued to support MARIE CURIE DAFFODIL APPEAL, through the selling of daffodils during the early part of 2016

A final special mention on charity donations must go out to Mike Jennings and our Apprentices. With their TAD1 Racing Team visiting a number of Soap Box challenges during 2016 they have actively sponsored a number of good causes such as Hey Smile Foundation, Martin House Children’s Hospice, Marie Currie and Clifford AFC.

SCIENTISTS INVESTIGATE THAT WHICH ALREADY IS; ENGINEERS CREATE THAT WHICH HAS NEVER BEEN.