

Kirchhoff Automotive Ireland:

Workplace Social Partnership and the Journey to Industry 5.0

Peter Totterdill & Rosemary Exton Workplace Innovation Europe Ireland

Kirchhoff's journey over more than a decade exemplifies Industry 5.0 in practice through the use of digital technologies to create a more human centric, environmentally sustainable and resilient organisation.

This case study was originally prepared as part of the EU-funded Broad Voice project. You can learn more about the project <u>here</u>.

Given the nature of Kirchhoff's transformation and its relevance to Industry 5.0, the following film was created as a deliverable for HORIZON Bridges 5.0.



Context

This case study describes a union-management partnership in Kirchhoff Automotive's plant in Ireland, one which led to the transformation of working practices and to the achievement of

substantial win-win outcomes for the company and its workers. Kirchhoff Ireland is 100% unionised.

SIPTU, Ireland's largest trade union, established the Institute for the Development of Employees Advancement Services (IDEAS) in February 2001. Its primary focus is workplace innovation, education and research (particularly research involving workers, employment and trade unions). IDEAS' principal role is to identify ways in which new thinking and new services can be introduced into the workplace for the benefit of employees and the enterprise as a whole. IDEAS began its involvement with Kirchhoff in 2010, stimulating a remarkable self-sustaining momentum of change within the company.

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Kirchhoff Automotive in Ireland is part of a wider international group, a Tier 1 Supplier delivering high-quality complex stampings and complete assemblies to global automobile manufacturers. It focuses strongly on JIT delivery with high standards of quality and service, listing BMW, General Motors, and Ford amongst its largest customers.

The plant's location in the relatively remote North West of Ireland involves significant transportation of raw materials from central Europe, specifically Germany, adding to operational costs. This contrasts with competitors in Hungary and Poland who do not face these extra costs.

Above all, this case study demonstrates how union-led intervention can generate a selfsustaining momentum of workplace innovation firmly embedded within the culture and practice of an organisation.

The Start of the Journey

Sean McDermott's 43 year career progression from apprentice tool maker to Managing Director of Operations at Kirchhoff Ireland means that he is well placed to understand the company at every level. During the early years of the current century, he was well aware that the company was facing management-union conflicts, In particular, the traditional piece work payment system caused instability in staff pay and led to frequent disputes with SIPTU. Customer complaints also presented a significant challenge to the company which, in the words of SIPTU Shop Steward Paul McGee, "cost a fortune".

It was a local SIPTU official, Martin O'Rourke, who identified difficulties within Kirchhoff in 2010. Working with Sean and other managers, he initiated a joint union-management effort to address these issues, proposing a collaborative approach to improve competitiveness, upskill the workforce and address individual issues more constructively, thereby reducing union-management conflicts.

Enter Tony Murphy, an experienced workplace innovation facilitator from IDEAS. Under Tony's guidance, a joint union-management Steering Committee was formed, consisting of Paul McGee, Sean McDermott, a forklift driver, tool makers, a general operator, and other managers. Its remit, according to a presentation delivered at the inaugural meeting, was to address communications, upskilling, union-management partnership, quality and "Health & Safety, Housekeeping and

Environment (HSHE)" in order to ensure the continuation of profitable operations in Letterkenny to 2020 and beyond.

A key principle underpinning the Joint Steering Committee was that adversarial industrial relations or HR issues would be excluded from its agenda, focusing instead on collaboration and working together to make the plant more competitive.

At the outset, all Steering Committee members underwent formal teamwork training together, designed to foster a non-adversarial, cooperative environment. The training course, accredited by Quality Qualifications Ireland and the Department of Education, concluded with all participants receiving formal qualifications. In particular, the course highlighted the importance of team working skills in achieving organisational change.

Operations Director John Roulstone emphasises the importance of Tony's role in coaching the management side in how to build a positive relationship with the union, as well as "to get away from a blame culture by having regular interaction with everybody involved in the process". For Paul McGee, the course empowered people with the skills and confidence to "put up their hand and ask questions - because there's no stupid questions".

Paul McGee played a key role as a champion of the new culture, helping overcome resistance and scepticism. His positive relationship with Sean McDermott began to exemplify the emerging partnership culture. Paul did encounter some suspicion amongst the workforce: "People were very nervous. 'Is this the company trying to get one over us?' That was hard for us to sell, so we had to get to the low hanging fruit, the easy ones."

The Steering Committee conducted a gap analysis to identify the current state of the art at Kirchhoff and to define future objectives, leading to a vision for operating effectively and profitably in Letterkenny by 2020. Seeking collective support for the journey ahead, a clear plan for the future was presented to, and was eventually supported by, the entire workforce.

An early milestone was reached when the Steering Committee successfully implemented a 5S project in a specific department, demonstrating the effectiveness of the partnership model and strengthening the legitimacy of the approach through visible improvements in organisation and efficiency. One early win lay in developing a collaborative approach to root cause analysis of customer complaints, and resulted in a significant reduction in their frequency.

The Steering Committee subsequently decided to adopt a lean manufacturing approach across the plant, with a strong emphasis on collaboration supported by the appointment of lean manufacturing champions from within the workforce.

A significant operational issue identified was the inefficient handling of heavy tools, leading to excessive time spent locating and moving them. A study revealed that some 1968 hours a year were spent looking for, finding and moving tools unnecessarily. A simple yet effective solution was implemented by introducing a clear storage and signage system, drastically reducing unnecessary labour hours.

According to Paul, "So the operators loved it and they could see then this is good." As John Roulstone points out, a key element in employee acceptance of the partnership approach was the focus on "improvements to the daily work of all staff."

Tony Murphy commented that, as a result of this experience,

"People realised that working together in an honest and a transparent way can yield those sort of benefits. It was just a matter of identifying more incremental changes that the teams could look at and contribute to making the plant more effective. And I think everyone bought into that, and we had teams doing all sorts of interesting stuff."

And from a management perspective, John Roulstone says "That was an eye opener in those first couple of months of the power of collaboration within the workplace."

A Partnership Agreement

Alongside partnership with the union, distancing HR from production issues in the plant was a key element in building trust between management and the workforce, dismantling the blame culture and recognising that most manufacturing issues were technical rather than personnel-related.

A new company-union agreement was developed over two years, focusing on fairness and proper processes including the abolition of piece rate and subsequently the introduction of a bonus system based on KPIs. This agreement, which is still the basis for operations nearly 15 years later, has been a key foundation for the company's growing success. The Steering Committee also led a transition from yearly to three-year pay agreement processes, eventually extending to five-year deals. This was aimed at reducing time spent on negotiations and providing a stable basis for planning labour costs, benefiting both the business and the workforce.

More recently the company has also established a ten-year strategic perspective, enhancing workforce confidence and direction. According to Sean, "So that gives everybody skin in the game, you know, and everybody, everybody recognises that we're all working together towards a long term future."

Contextualising Lean Production

As potential challenge appeared in 2011 when Kirchhoff began to roll out a corporate approach to lean production, with the support of Porsche Consultancy. The consultants undertook a similar exercise to the gap analysis previously undertaken by the steering team, and created "lighthouse projects" to disseminate the corporate lean manufacturing approach.

According to John Roulstone, "At the time there was some conflicts because we, as a local plant, felt that we were on a good way with our Steering Committee. I can fully understand why our senior management in Germany wanted to have this production system from a corporate perspective. But it was a Japanese production system being rolled out by German consultants in Ireland, so we had to strip all that back and come up with a philosophy that that suited us here, based on the fundamental learnings from that we took from Tony in 2010."

In short, the strength of the foundations laid in 2010 provided the Steering Committee with the knowledge and ability to adapt and contextualise a generic corporate approach to lean in ways that maximised its effectiveness whilst embedding partnership and human perspectives.

Changing Work Practices

The efforts initiated in 2010 led to a major cultural shift within the organisation, emphasising transparency, collaboration, and employee involvement. This change was supported by both the Joint Steering Committee and senior management, leading to innovative changes and a more effective competitive environment. The development of soft skills within the workforce has been central to establishing this culture of collaboration.

A critical examination of spending within the plant led to the realisation that some managerial roles were adding cost without adding value. This prompted a decision to remove certain management layers. Over time, a less hierarchical management structure has evolved across the organisation. Many traditional management roles have been eliminated, thereby reducing conflict and fostering a more collaborative work environment. According to Sean:

"We approach each operational team within the plant from a collaborative perspective, and the workforce within each of those departments no longer needs management or supervision. We have a team meeting in the morning and the guys self-organise, they allocate their own work through the day, and everybody understands who's doing what."

He continued:

"We don't have a management team anymore. We have a very flat structure, so we only have one person managing the whole shift. And they're there as a support function rather than as a management function. It's not a management team that runs the company, it's the workforce that runs the company. The workforce is focused on developing themselves and developing the company as a whole."

The Steering Committee emphasises the importance of workers owning their processes. A very evident difference between now and 2010 is that the role of the operator within the company is significantly elevated, harnessing their unique insights gained from direct interaction with the machinery. Operators have gained more autonomy in day-to-day operations, taking lead responsibility for quality, making sure that the process is correct and being empowered to stop the machine if something isn't right. They can digitally register maintenance issues, enabling the maintenance team to plan preventative actions based on this data. This collaboration fosters a service-oriented relationship between operators and the maintenance team, aiming to prevent future issues.

John also emphasises the collaborative nature of goals setting and attainment:

"We agree a common standard of what our targets are and we train everybody properly on how to input the data. So when we have a gap, then it's very easy to communicate where we need to be to, to bring us back to the to the standard."

Different departments work together as a single team, facilitated by digital communication tools that enhance collaboration and facilitate horizontal information sharing and problem solving. For Sean, "Because [staff] now have an opportunity to communicate digitally, the system works like a beehive almost, you know like an organism rather than a formal management system."

Tool makers are one example of a fully autonomous team, taking on tasks such as assessing work, ordering parts, and working with external tool makers. Involving tool makers in the design

stage ensures that tools are easy to maintain and function properly. This benefits both the company and the tool makers by reducing labour costs and maintenance issues.

Paul McGee also experienced this change in his role as a tool maker. In 2010, "We would have had 10 tool makers, and they would have had a manager and an assistant manager. Now there's no manager, there's no assistant manager. We've taken ownership, we run it ourselves."

John Roulstone emphasises the continuing importance of an inclusive approach to problem solving:

"Unless you integrate everybody into the to the problem solving team, then you're not going to be successful. So the guys in production, they know 99% of the problems. I think that the management and the technicians only know 1%. We also have our town hall meeting every month where we present our quality issues and everyone can have their say."

Shift leaders also have a role in gathering ideas from the shopfloor and bringing them to daily plant management meetings. Ad hoc workshops – currently around 16 a year - are another effective tool for stimulating new ideas. The number of ideas generated each month is measured, together with the percentage of those actually implemented as part of a company-wide KPI.

Digitalisation and Skills

Sean and Tony both highlighted the transition to digital operations, noting that the plant has secured production contracts running up to 2032 thereby enabling substantial investments in new technologies. Both also point to the long-term benefits such as process optimisation and increased productivity per employee, leading to strengthened competitive advantage that can secure the plant's future.

Acknowledging the workforce's initial fear of new technologies, the Steering Committee implemented a digital training programme in collaboration with SIPTU. This programme aimed to increase digital confidence amongst the workforce, ensuring they were comfortable using the new technologies. Individual development plans enable each employee to prepare for new technologies by identifying personal learning and skill gaps. The partnership agreement with SIPTU also ensured that none of the digital production data would be used by HR to measure individual performance.

Automation has led to a shift in roles rather than a reduction in employment, with operators developing the collaborative and digital skills that have enabled them to take on different processes, whilst creating a continuous need for skill upgrades. The aim has been to build a learning culture within the plant, reflecting the fast-changing nature of digital technologies and (especially) AI.

For Paul:

"There was always a fear that there would be no jobs for operators, but I think there'll always be jobs for operators. Not as many, but we as a union have tried to upskill our workers here, as many people as we can. So maybe fewer jobs, but higher skilled jobs and more secure jobs." The company is building on its digital foundation to incorporate more robotics, with plans to introduce 10 to 12 new robots in the next year or two in areas such as arc welding. This will diversify the plant's product portfolio whilst also enabling an increase in capacity without reducing headcount. For workers, the complexity of their tasks will increase as will their role in ensuring quality as the industry adopts a zero defect philosophy. Upskilling will clearly continue to play an important role in achieving that goal.

The Legacy

Sean McDermott:

"So we would have come, you know, from a traditional manufacturing basis where you're told what to do and, and, if it wasn't done, then there would be consequences. We've moved away from that completely. We've gained competitive advantages through this process because we changed to a collaborative process, a partnership process. And over the last 14 or 15 years that has completely changed the landscape within the company.

We can compete with low-cost East European competitors because they still have the formal structures, they still have department managers, managers, supervisors...they have five or six layers of management, whereas we only have one. So that gives us a huge advantage, a huge competitive advantage.

Why do you need management structures? To explain to tell the workforce what they should do? That's a thing of the past."

Tony Murphy:

"I have to say that the Joint Steering Committee, the shop stewards and the senior management people have taken the opportunity and they've run hard and fast with it. They've introduced all sorts of new and very interesting changes in the way the plant is run, the way operators can get involved, they have a voice. All those things are a direct result of that initial work back in 2010. But I would have to say that the workers here have really developed it way beyond what we all thought was possible back in 2010, and I'm very pleased. So walking around today and listening to the people, you can feel the difference."

John Roulstone:

"I think we've used a combination of both our partnership foundation and what we've learned of what works and what doesn't work with lean tools in over the past 10 or 12 years. We back that up with regular follow on meetings after each project's closed, because it's continuous improvement and continuous learning. Nowadays, it's ingrained in our organisation."

Paul McGee:

"And I honestly think that if we hadn't do this, would we still be here?"

Conclusion

Kirchhoff Ireland offers compelling evidence that a time-limited but highly structured period of intervention can lead to a sustainable momentum of change with employee participation at its heart. Such evidence is not however commonplace, so it is important to understand the

underpinning success factors at Kirchhoff. Not only was Tony an experienced change facilitator in his own right, but he also represented the trade union recognised by the company. This helped to overcome the major barriers of trust and employee engagement typically found at the inception of such change projects.

Ireland's history of social partnership, albeit diminished by 2010, nonetheless left a legacy of trust and co-operation between SITU and management at Kirchhoff, facilitating Tony's acceptance by the company proposal and easing his initial pathway.

Nonetheless, for employees and management alike, the achievement of relatively "quick wins" as a result of the initial course played an important role in creating enthusiasm and subsequent commitment to the programme.