

University of Wales Trinity Saint David

School of Engineering



Reflective Project Report

Group Project

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3 Abstract

This report focuses on the organizational change at the St Athan manufacturing facility as part of Aston Martin Lagonda's project Horizon. A companywide strategy to streamline the business and introduce new lean manufacturing principles to save operational costs and increase EBITDA. A look into adaptations needed to the facility to save on waste. Given a short timeline of two weeks to make the changes Aston Martin successfully delivered due to a good planning strategy. During the project a reduction in the workforce meant many faced uncertainties of their future positions within the business leaving the majority frustrated. Techniques and research into possible recommended methods are highlighted throughout of ways the company could have used in order to improve the difficult situation and how it was communicated to the employees.

4 Introduction

4.1 Aston Martin

Aston Martin is a renowned British luxury motor vehicle manufacturer established in 1913 when Lionel Martin and Robert Banford founded the company in London. Associated with sophistication and exclusivity, the brand has been featured in various context, from being a symbol of luxury in the 1970s to partnering with Red Bull Formula One team to develop cutting edge hyper cars. In recent years Aston Martin has re-entered the world of formula one. Over the years, Aston Martin has created iconic model that have left lasting impact on the automotive industry, such as the DB series, Including the famous DB5 featured in the James Bond Films.

Aston Martin has embraced advancements in material science, partially in the use of advance composite, demonstrating a commitment to technological innovation in its vehicle manufacturing processes (Kendall, 2020).

In Aston Martins 100-year history. The company has declared bankruptcy six times. Who now look to use technology from Mercedes and Saudi Arabia back Lucid (Winton, 2024) to further succeed in develop the brand.

4.2 Project horizon

In 2020, Laurence Stroll became the majority stake holder of Aston Martin and became executive chairman (Aston Martin Lagonda, 2024). Soon after Stroll brought Ex Mercedes AMG Tobias Moers to the company as CEO. Project Horizon is the plan set out by Moers (Gallagher, 2021). Aiming to create a leading world class luxury car automaker. With the tag line” delivering operational excellence, agility and efficiency”. To do so a complete overhaul of the business. From organizational structure to be streamlined, portfolio and strategy & cycle planning and operational excellence. See figure 1.

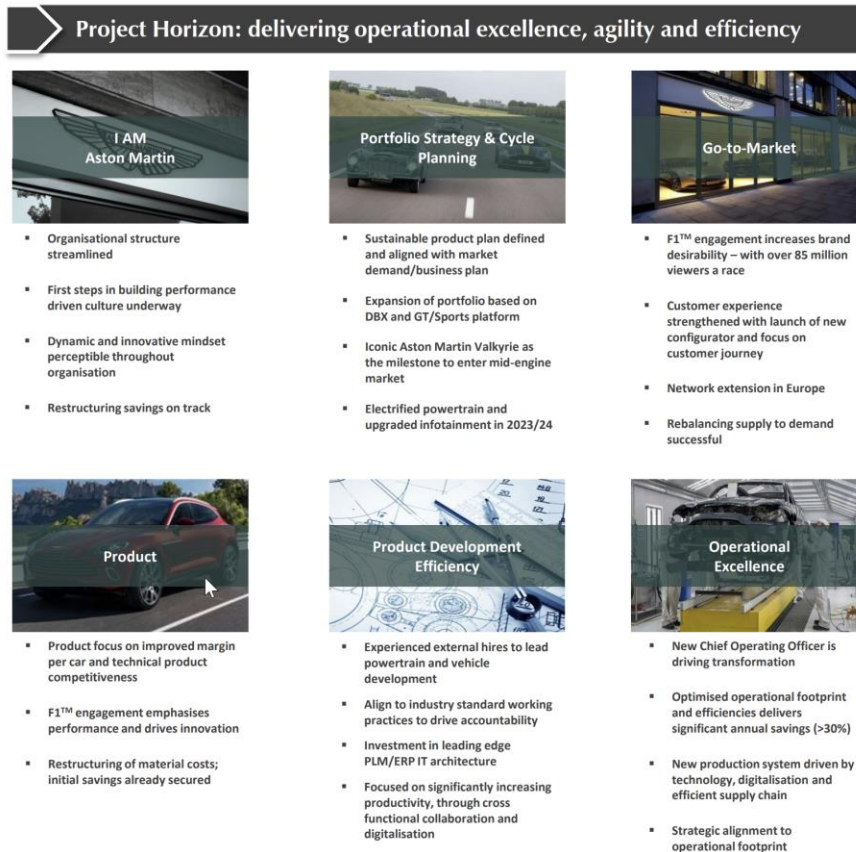


Figure 1-Aston Martin Corporate document. (Aston Martin Lagonda, 2024)

The project aims to boost profit margins for each vehicle manufactured at the St Athan Facility, reduce the operating cost and increase EBITDA (Earnings before interest, taxes, depreciation and amortisation) to £500M annually. To accomplish this, the production volume would initially be reduced from 92 units to 66 per week ensuring this transition is handled efficiently and effectively while eliminating waste in the manufacturing process. This reduction is intended to ease the implementation of a significant change, allowing potential issues to be managed in the least disruptive way possible. With the reduction of workstations, Technicians would need to learn more processes all the while maintain the same high level of quality expected by Aston Martin. The reduction in overheads means that some members of staff would become underutilized, and some would be facing redundancies. Included in the line balance. The production line would need to be altered by closing and/or moving stations to other areas. This would all need to be done in a two-week company shutdown period with the target of completing each stations workload every 31.1 minutes.

More reductions in overheads would see the MVEC (Manufacturing vehicle engineering centre) where all the press and media vehicle are maintained and distributed across the world for marketing

and media purposes would be closed with the Gaydon site absorbing the department into their own. Leaving 21 staff uncertain about their future within the business.

4.3 Report Introduction.

Project Horizon being a companywide change. This report will focus on part of said project. The aim of the report is to analyse the effect of the organisational change at the South Wales Aston Martin Lagonda manufacturing facility which will include process changes to manufacturing, Department changes and Changes to the work force.

The changes in manufacturing will focus on the trim and final line rebalance. Trim and final being the area in which the painted body of the vehicle is received, and the assembly process begins. A look into the processes and evaluate the effectiveness of the production of the vehicle with the new lean manufacturing methods.

During the project there were departmental changes. There were departments added, removed and even merged. This brought along adjustments in the workforce. Some benefiting by gaining promotions, some were offered redeployment and others losing their positions. The project will look at the effect this had on its employees around this time and how the news was delivered by the company.

It will include the Changes to processes in production of the DBX SUV, its effect on staff and the change management style used in delivering the project. The report will evaluate the project and recommend improvements in its delivery.

5 Lean Manufacturing.

Lean manufacturing is a production system designed to eliminate waste and improve efficiency in manufacturing processes. It involves tactical methods focused on removing non-value-added activities while ensuring the delivery of high-quality products at a reduced cost and increased speed (Saravanan & Nallusamy, 2016). This approach has been widely adopted in various industries, including the automotive sector, where it has transformed traditional mass production practices by enhancing productivity and quality simultaneously (Howleg, 2006). The integration of lean manufacturing with sustainability practices has gained significant attention in recent years, Research has shown that “Lean” can support sustainability initiatives by minimising environment impact and enhancing resource efficiency (Indrawan, 2023). The concept of lean manufacturing originated at the Toyota plant in Japan after World War II, Originating from the (TPS) Toyota Production System (Thanki & Thankkar, 2014). Two basic concepts in Lean are to eliminate waste and create value. The concept of waste, known as “Muda” in Japanese, is central to lean manufacturing and refers to any activity that does not add value from a customer’s perspective. TPS identifies eight primary types of waste: Overproduction, waiting, unnecessary transport, excess processing, excess inventory, unnecessary motion, defects and underutilizing skills.

(Womack & Jones, 1996) Describes lean manufacturing as having 5 principles.

1. **Identify Customers and Define Value:** The process begins by recognizing that only a small portion of an organization's time and effort directly adds value for the end customer. By clearly identifying what the customer values in a specific product or service, non-value-adding activities (waste) can be targeted for elimination. Value is determined by what the product offers the customer, and this understanding is used to shape the production process. Key questions to consider include: What do customers want? When and how do they want it? Which combination of features, capabilities, availability, and price will best meet their needs?
2. **Identify and Map the Value Stream:** Companies map out the entire production process, known as the value stream, to ensure every step adds value. The value stream encompasses all the activities and processes across the organization involved in delivering the product or service to the customer. Once customer value is understood, the next step is to assess how effectively it is being delivered. This involves integrating suppliers, manufacturers, distributors, and retailers to analyse the value stream comprehensively. Activities are categorized into those that add value, those that do not add value but are currently unavoidable, and those that do not add value and should be eliminated.

3. **Create Flow by Eliminating Waste:** To ensure smooth product movement through value-creating steps, processes are reorganized to eliminate waste. When first mapped, only a small percentage of activities typically add value, but this can increase significantly in a service environment. Waste elimination ensures products or services reach the customer without delays, detours, or unnecessary waiting. Waste, in lean terms, is defined by what the customer is unwilling to pay for, leading to a production process focused on creating the best product in the least amount of time.
4. **Respond to Customer Pull:** Understanding customer demand is crucial for creating a responsive process. Production should be driven by customer demand rather than pushing products to market. This pull-based system ensures that materials are released, and activities are performed only when needed, often managed through kanban systems, which signal the need for parts and subassemblies at each step of the process.
5. **Pursue Perfection:** Achieving perfection involves continually striving to meet customer needs and improving processes to eliminate defects. This pursuit starts with reorganizing individual process steps but becomes more impactful as these steps are linked together. As waste is progressively removed, the process moves closer to perfection,

These five principles of Lean Manufacturing help organizations continuously review and refine their processes to consistently deliver value to customers, enabling them to maintain high service levels while adapting to changing environments through sustainable change.

The principles of lean manufacturing and its importance in industries has been historically studied see Figure 2. Studies from 1927 to present day.

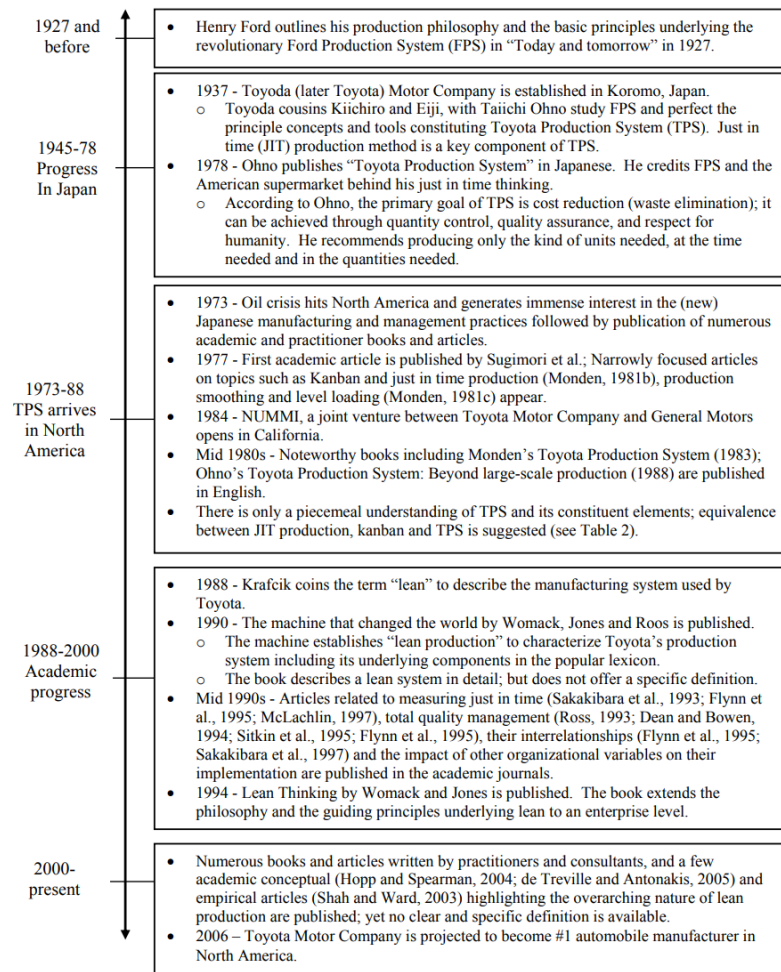


Figure 2-Time line marking critical phases in the lean production evolution (Shah & Ward, 2007)

6 Organizational change

6.1 Introducing and understanding change.

To ensure its continued success and survival, the organisation must be highly adaptable to external pressure. It needs to be responsive to change. Additionally key drivers for change include increased expectation for quality and customer service, the need for flexibility in organisational structures and management styles, changes in workforce composition and dynamics, and internal conflicts (Mullins, 2005). Significant change will encounter several obstacles. As mentioned by (Baulcomb, 2003) when they write about the National Health Service Trust. The force field analysis by (Lewin.K, 1951) is used to implement the change from the current situation to an improved way of work. This helps identify where the forces that drive change and the forces that resist change are. To achieve success, the driving change should outweigh the resistance, with the aim of reaching equilibrium.

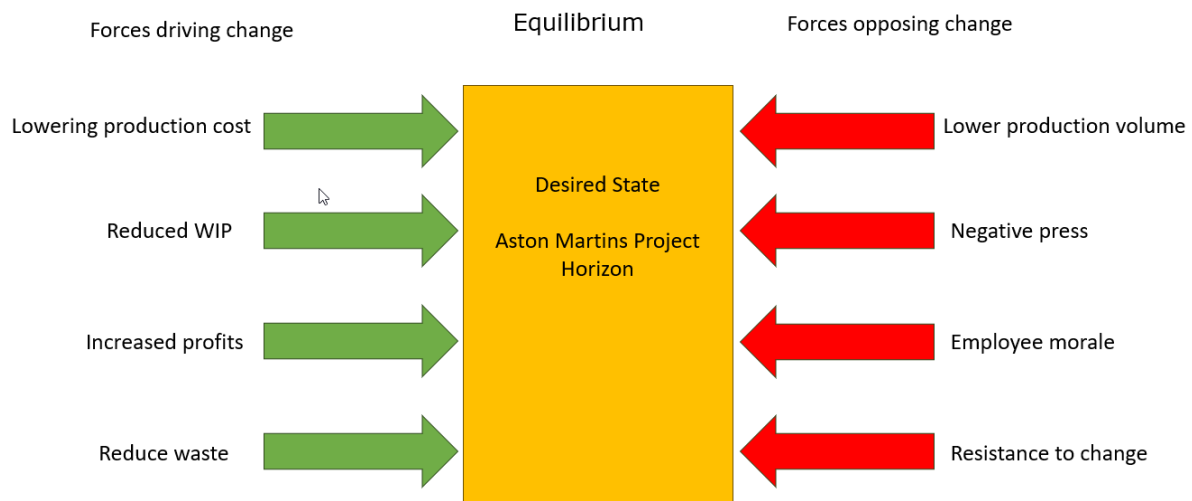


Figure 3 (Lewin.K, 1951) Force field analysis applied to Aston Martins Project Horizon.

(Lewin, 1945) views culture as being in a state of equilibrium. He writes: "A culture is not a painted picture; it is a living process, composed of countless social interactions. Like a river whose form and velocity are determined by the balance of those forces that tend to make the water flow faster, and the friction that tends to make the water flow more slowly the cultural pattern of a people at a given time is maintained by a balance of counteracting forces."

6.2 Line re-balance.

The rebalancing of the main assembly line within the trim and final department was the most significant part of the project at St Athan, Requiring the relocation of processes, personnel, tools and

heavy machinery such as lifting equipment and assistors. One target of the project was to reach and EBITDA of £500M, making cost savings a crucial focus in the trim and final rebalance. With the average technician cost approximately £72,000 annually, including salary, pension contribution, health care and insurance, Reducing the workforce became essential in reaching the EBITDA target.

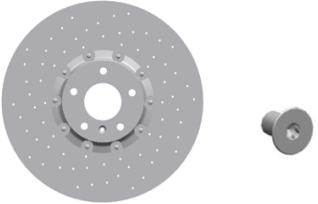
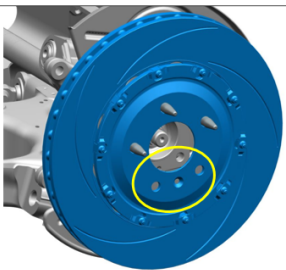
Another major goal was to implement lean strategies to minimize work-in-progress, inventory, and other inefficiencies in the production line. This was to be achieved by reducing the number of vehicles on the line at any one time. Instead of stocking parts individually at each station, parts would now be kitted for each vehicle and delivered only when needed, minimizing the time technicians spent selecting parts and reducing picking errors. Each vehicle on the trim and final line holds a business value of £90,000 at this stage, so eliminating unnecessary stations would streamline the line and save £90,000 per station removed.

The project involved numerous internal and external stakeholders, including engineering, controls, maintenance, and various contractors. Due to the scale of the project, several time and project management techniques were employed. However, before diving into those techniques, it's essential to understand how workstations are configured and tasks are assigned during a line balance, and where this information is sourced and organized.

6.3 Planning change.

6.3.1 Ease

At Aston Martin there is a system that is used to list the process that the technicians must following in each takt. This includes a step-by-step guide of each operation that is to be performed. Each operation is listed with instructions including visuals. The parts required, tightening torques for fixings and serial scans that are required are also listed.

ASTON MARTIN		Desc Rev# Status	PSS_AM800_14507 3 Un-Release,	Released George Griffiths	ID 17869
1					
2					
Step:		Key point icon	Key point / why:		
Obtain Parts			Obtain (x1) LH Disc and (x1) Disc Retaining Screw from Lineside Storage. (Fig. 1) Part Scan Disc to ensure correct part has been obtained Perform a visual inspection to ensure correct fitment		
Part Shortage Log			If a part is lost or damaged you must log it as a shortage on the system.		
Locate Disc to Guide Pins			Locate the Disc to the (x3) Guide Pins as shown in (Fig. 2) Take care to avoid any damage and contact on the Disc face and outer edge during loading. Fit the R-pins through the Guide Pins as a guide for the correct orientation, also use the 3 closely located pin holes beneath the guide pins as a reference to ensure that the orientation is correct as shown in (Fig. 2).		
 Safety  Quality  Critical  Knock  Environment  Sequence					

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Figure 4-Ease deck process document. (Aston Martin Lagonda, 2024)

All operations are given a time in which they should be completed. It is these timings that are set by the manufacturing business office engineers (MBO). The time allocated to each operation is derived from studies carried out by the MBO team using program evaluation and review analysis (PERT analysis). Processes are recorded in real time and are analysed to find improvements that can better the efficiency of each operation. During the project horizon. Aston Martin employed the service of an external company "Wolf" who are a team of people that specialise in Lean manufacturing and reducing waste in processes. WOLF was tasked with evaluating the existing build processes and identifying areas for improvement to enhance efficiency. This analysis led to the development of "WOLF-rated TAKT times," which were compared to current TAKT times to quantify potential efficiency gains. One proposed improvement was to establish a sub-assembly area. This area would handle pre-assembling modules that required mounting brackets, allowing these sub-assembled parts to be stored lineside. Technicians could then access them quickly and fit them to vehicles immediately upon arrival at their stations. This change aimed to reduce non-value-added (NVA) assembly time, saving over four minutes per vehicle.

6.3.2 Takt time.

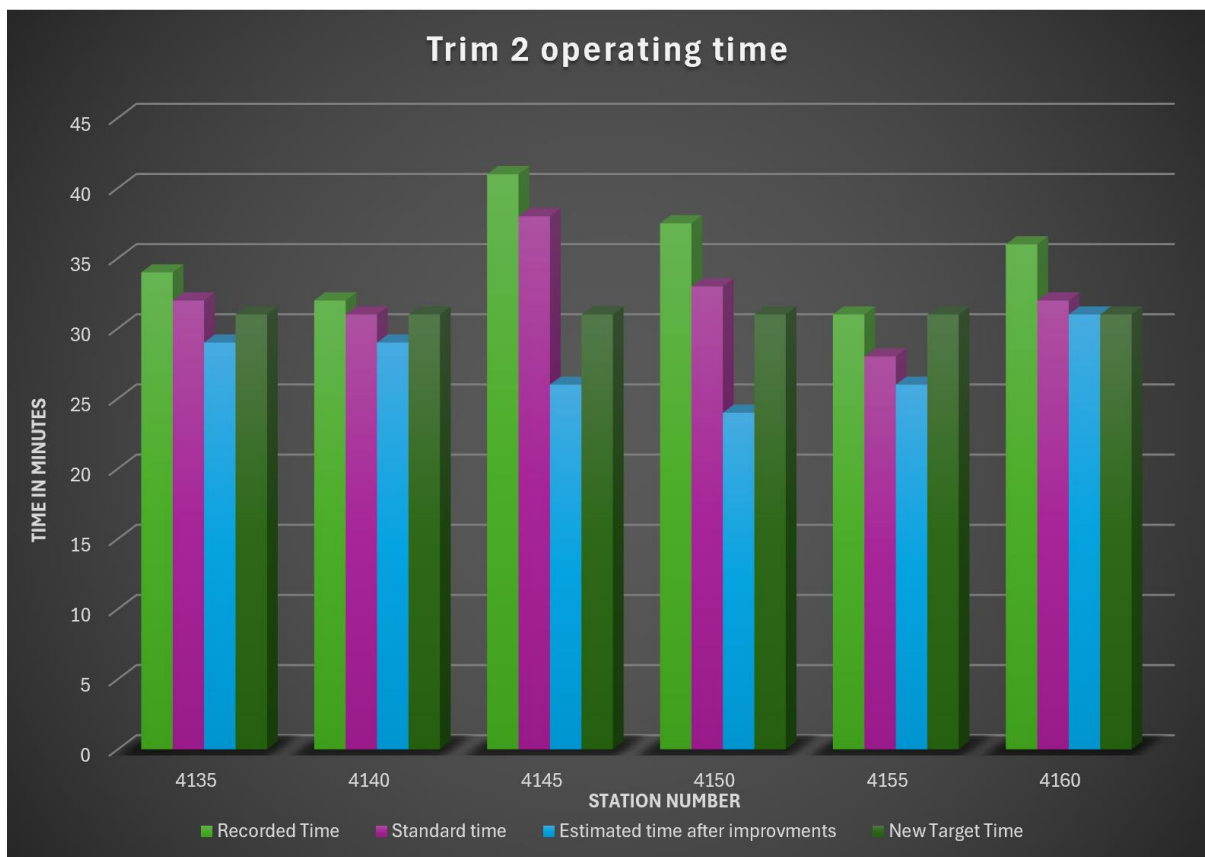


Figure 5-Trim 2 station operation times (Aston Martin Lagonda, 2024)

Figure 5 shows selected stations and timings. The recorded time by Wolf, the standard time which is currently assigned to the station, and estimated time following the purposed improvements and the target new Takt time. The analysis empowered the engineering and production teams to measure change and evaluate the project's success. However, immediate results were not expected. Figure 5 illustrates that observed process times initially exceeded the target TAKT of 31.3 minutes, as it was generated during the first week after the rebalance. During this time, technicians and supporting personnel, including line runners from procurement, were adapting to new processes and layouts. To account for the learning curve, initial production targets were set below the standard 66 units per week (UPW) but were closely monitored to track progress. This gradual approach allowed WOLF to implement their proposed changes effectively. As indicated by figure 5, if these changes succeeded, they would significantly reduce technician workload and enable the target TAKT time to be consistently achieved.

6.3.3 Layout change.

As many station operations are to be changed/moved to other stations. This would mean that layout would need to be altered. The re-positioning of lifting assistors, parts shelving/racking and tooling would need to be planned. To monitor and manage the project, the engineering team developed a Gantt chart. This chart included all the tasks required to complete the project and ensured it could be executed within the two-week shutdown period. However, before creating the Gantt chart, a critical path analysis (CPA) had to be conducted. The Critical Path Method (CPM), developed in the early 1960s, has become one of the most widely used tools in planning and managing complex projects. Its primary function is to identify critical paths, activities, and events within the project's network model, aiming for the earliest possible project completion. The method also calculates key values useful for decision-makers, such as slack for events and activities, as well as the earliest and latest start and finish times for specific tasks. A key feature of CPM is that activity durations are assumed to be deterministic and known. However, in practice, this assumption is not always met with the desired accuracy (Chanas & Zielinski, 2001).

After performing the CPA, an accurate timeline was then mapped onto the Gantt chart to outline the project. CPA was crucial because certain tasks had to be completed before others could begin. For instance, moving a pneumatic lifting assistor required isolating the electrical and pneumatic supplies first. This would involve arranging electricians, maintenance technicians and the hire of tooling to carry out the task. Contactors would also be used so the use of the Gantt chart would help align all the activities.

The Gantt chart outlined each workstation and the plan for implementing changes at each station during the line rebalance, ensuring tasks were completed on schedule. A responsible individual was assigned to oversee each task, and relevant stakeholders, including contractors, were also mapped to specific activities. Figure 5 shows the intended plan for changes required on station 4160.

Area	Description of work	Owner	Supplier	Week 30								Week 31							
				24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	01-Aug	02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug
				Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
				P.Moreton	P.Moreton	P.Moreton	P.Moreton	P.Moreton	On-site lead	P.Moreton	P.Moreton	P.Moreton	P.Moreton	P.Moreton	P.Moreton	On-site lead	P.Moreton	P.Moreton	P.Moreton
	Assistor commissioning	T.Hunt	Dalmecc																
	Relocate wheel DC tooling	P.Moreton	AML																
	Layout station racking	P.Moreton	Amk																
T2 4160	Relocate DC tooling from 4155	P.Moreton	AML																
	Headliner stillage layout	P.Moreton	AML																
	Spare wheel assistor relocation	P.Moreton	AML																
	Spare wheel assistor install	T.Hunt	Dalmecc																
	Assistor air supply	T.Hunt	Dalmecc																
	Interlock cable	T.Hunt	Celtic																
	Power supply	T.Hunt	Celtic																
	Interlock commissioning	M.Cheetham	AML																
	Assistor commissioning	T.Hunt	Dalmecc																
		P.Moreton	AML																
		P.Moreton	AML																

Figure 6-Gantt chart showing timeline for required changes (Aston Martin Current model engineering, 2020)

6.4 Change in the workforce

In the context of organisational change at Aston Martin, the company's focus shifted toward enhancing operational efficiency and productivity across its sites. This transition, aimed at streamlining operations and adopting lean manufacturing principles to minimize waste, resulted in job losses for both permanent and agency workers, along with the closure of some departments. Some employees were redeployed, many faced uncertainties during the redundancy phase. As noted in studies of organizational restructuring (Mishra & Spreitzer, 1998), employees often experience heightened insecurity and anxiety during periods of significant change, particularly when communication is inconsistent. In this case, the premature disclosure of sensitive information, likely due to a breach of confidentiality within senior management, fuelled rumours and exacerbated employees fears about their job security.

The official communication regarding the organizational restructuring was delivered via email, offering minimal detail about which employees would be at risk. The decision-making process involved departments using a point-based system to determine who would be affected. This system factored in variables such as attendance, sickness, length of service, and annual performance reviews. As research highlights, unclear communication during layoffs can erode trust and lead to organizational cynicism (Reichers, et al., 2005). In this instance, the disjointed communication strategy left employees and managers alike feeling uncertain about the future, undermining morale and productivity.

At the St Athan manufacturing site, a relatively new facility, the restructuring was especially disheartening for employees who had recently left stable careers with other employers, expecting long-term opportunities at Aston Martin. Some employees chose to take voluntary redundancy, preferring to leave rather than face potential demotion or redeployment to roles they did not desire. This phenomenon aligns with the findings of (Brockner, et al., 1992), which suggest that employees often opt for voluntary exit when faced with involuntary downsizing, as a means of exercising some control over their future.

For those who remained, morale was significantly low, with reduced communication between the company and employees further exacerbating the situation. Work across plant declined, as did overall production numbers. Reports of suspected damage to company property by recently laid-off workers underscore the negative psychological impact of job insecurity (Sverke, et al., 2002). While some employees benefited from the changes due to the creation of new departments offering development opportunities, the overall atmosphere was one of apprehension and discontent. Many

workers faced the difficult choice between accepting roles they had not originally sought or facing unemployment.

As there were multiple possible outcomes for employees' futures either positive or negative, the uncertainty due to the lack of communication from the business was the prime cause of concern within the workforce. Employees outcomes were being made departmentally. This caused further anxiety within the business as people were finding out their fate their colleagues at different times, this left most fearing for their futures.

6.5 Challenges to change

Armed with insights into the likely effects of organizational change, the focus at Aston Martin shifted to implementing the plan. The restructuring was inevitable given the strategic direction of the company, but it faced resistance from employees, largely due to poor communication. This lack of transparency contributed to an environment devoid of clear leadership, teamwork, and trust. Research by (Astrachen, 2004) highlights that during periods of turbulence, employees often exhibit negative reactions, psychological distress, and resistance to change. The absence of consistent communication exacerbates these issues, weakening the overall change process.

Resistance to change is a well-documented phenomenon in both organizational behaviour and psychological literature. As (Mullins, 2005) notes, resistance can stem from fear of the unknown or reluctance to adopt new ways of working, even when the outcomes may ultimately be positive. This sentiment is echoed by (Toffler, 1970), who observed that "among many there is an uneasy mood—a suspicion that change is out of control." Such reactions are common, particularly in organizations where communication gaps exist between leadership and employees.

Although there is no single method to manage change, John Kotter's 8-step model is one of the most widely recognized frameworks for guiding organizations through change (Kotter, 1996). The first step in Kotter's model emphasizes the importance of creating a sense of urgency. Aston Martin failed to implement this critical step, which is foundational to successful change management. Without a clear sense of urgency, organizations often struggle to motivate stakeholders and drive the necessary momentum for change (Laig & Abocejo, 2021). (Kotter, 2008) himself emphasized the importance of urgency in his later work, underscoring its pivotal role in managing expectations, building trust, and fostering alignment among employees.

The second step in Kotter's model involves building a guiding coalition. Aston Martin's restructuring efforts sought to address this by creating teams that would strengthen all levels of the business,

from upper management to shop floor technicians. A well-constructed coalition is essential to leading and sustaining change (Pollack & Pollack, 2014). However, Aston Martin struggled particularly with step four, which is to communicate the change vision effectively. (Ansari & Bell, 2009) underscore the significance of both steps one and four in driving successful organizational change. Without proper communication, the leadership at Aston Martin failed to inspire confidence in the change process, and as (Engelbert, 2018) suggests, trust and transparency are key attributes of effective leadership. The lack of open, honest communication led to a decline in trust between employees and the leadership team at Aston Martin, further complicating the change process.

To summarize the application of Kotter's model: Step one was only partially fulfilled, as Aston Martin recognized the need for change but failed to instill a sense of urgency. In step two, a coalition was formed, though it lacked full alignment due to incomplete communication. Step three involved setting a clear goal of reducing waste and enhancing efficiency, which was understood but not sufficiently communicated. Step four—communicating the vision—was where Aston Martin fell short, resulting in resistance to the change process. Step five, removing obstacles, saw the company adopt lean manufacturing principles to address inefficiencies. Step six involved creating short-term wins by rapidly implementing key changes. Step seven built on these short-term successes to establish long-term stability. Finally, step eight sought to anchor these changes within the organizational culture, aiming to make the new practices part of the company's operational norm.

7 Conclusion

7.1 Finance

The trim and final line rebalance project was considered a success financially by Aston Martin due to the significant cost savings it achieved. A key aspect of this success was meeting critical objectives of Project Horizon, such as reducing production overhead costs, minimizing work-in-progress vehicles, and lowering inventory levels on the main production line. One notable improvement was the reduction of workstations on the trim and final production line from 60 to 47, which significantly decreased production costs at the St Athan plant. This change reduced the number of vehicles in WIP (Work in Progress) by 13, and with each vehicle carrying a cost of £90,000, the company realized total savings of £1.17 million in work-in-progress inventory. (Shah & Ward, 2007) Speaks of the importance and studies of lean manufacturing and reducing WIP. Using the lean manufacturing principles the reduced cycle time was achieved by removing technician movement and processing waste. Sub assembly areas were created allowing the required parts to be delivered to each station in kit form, leaving only the required parts for each operation. With this in places, less production and support staff were needed to deliver the new reduced WIP target of 66 units per week. With the cost of each technician to the business being an average of £70,000 per annum. The outcome of reducing the headcount in the trim and final assembly hall alone by 71 would save the company approximately five million pounds in wage cost. A substantial contribution to project Horizon as the same activities would be applied across all sites of the company.

7.2 Rebalance

The project management techniques employed, such as Gantt charts, Critical Path Analysis (CPA), and PERT (Program Evaluation and Review Technique), were highly effective in managing a complex project with many tasks.

The following are considered as successfully delivered during the project.

Critical Path Analysis (CPA):

1. Allowed the team to identify the sequence of tasks that directly impacted the project timeline, ensuring focused resource allocation to critical activities.
2. Served as a foundation for creating a detailed and accurate Gantt chart.

2. PERT:

1. Assisted in estimating task durations with a structured approach, particularly useful for tasks with uncertain or undefined timescales.

2. Helped set realistic timelines and provide contingency buffers for uncertain tasks.
3. **Gantt Chart:**
 1. Enabled clear visualization of the project schedule, tasks, dependencies, and progress.
 2. Facilitated tracking of milestones and overall project status, aiding in effective communication among stakeholders.
4. **Timely Delivery:**
 1. Despite some inefficiencies, the project was completed on time, demonstrating the robustness of the chosen methodologies.

However, Challenges were met with the following:

Overcompensation with PERT:

- The probabilistic approach of PERT led to overestimated durations for some tasks, resulting in time inefficiencies.
- This overcompensation created wasted resources in certain areas, though it did not jeopardize the overall timeline.

7.3 Workforce

Aston Martin underwent a significant organizational restructuring aimed at enhancing operational efficiency and implementing lean manufacturing principles. This process resulted in job losses, departmental closures, and the redeployment of some employees, leaving many workers facing uncertainty. The lack of consistent and transparent communication exacerbated employee anxiety and mistrust, with premature disclosures and minimal details about job security fuelling fears.

Key challenges included:

1. **Communication Failures:** Official updates were vague, and inconsistent messaging led to widespread uncertainty and a decline in morale.
2. **Employee Resistance:** Many employees resisted the changes, citing fear of the unknown and dissatisfaction with new roles. Voluntary redundancies were common, as workers sought to retain control over their futures.

3. **Negative Impacts:** Reports of property damage, declining productivity, and a demoralized workforce highlighted the adverse effects of poor change management.

The restructuring process was analysed using **Kotter's 8-Step Model** (Kotter, 1996):

1. **Urgency:** Recognized but insufficiently emphasized, leading to lack of momentum.
2. **Coalition:** Teams were formed but lacked alignment due to poor communication.
3. **Vision:** Goals were set but not effectively conveyed.
4. **Communication:** A critical failure, undermining trust and engagement.
5. **Obstacle Removal:** Lean manufacturing principles were adopted to address inefficiencies.
6. **Short-Term Wins:** Key changes were quickly implemented to showcase progress.
7. **Sustainability:** Short-term successes were leveraged to promote stability.
8. **Cultural Integration:** Efforts were made to anchor new practices into the company culture.

The restructuring effort ultimately highlighted the importance of transparent communication and trust in driving successful organizational change. While some employees benefited from new opportunities, the overall process left many feeling disheartened and uncertain about the future.

7.4 Suggested improvements.

The financial impact of project Horizon is deemed to be a success because of companywide savings. The line re-balance was successful although improvements could be made, such as:

1. **Refine PERT Estimates:**
 1. Use historical data and expert judgment to make more accurate estimates for task durations, reducing the likelihood of overcompensation.
 2. Regularly review and adjust time estimates based on real-time progress and emerging patterns.
2. **Integrate Software Tools:**
 1. Use project management software to dynamically link CPA, PERT, and Gantt charts, streamlining updates and ensuring that changes in one area are reflected across all tools.

3. Conduct Post-Project Review:

1. Analyse areas where time or resources were inefficiently used to improve estimation techniques and processes for future projects.

By addressing these areas, the combination of Gantt charts, CPA, and PERT can be further optimized to manage resources efficiently while maintaining the strengths of timely delivery and effective tracking.

The biggest challenge Aston Martin faced that significant improvements can be made are delivery of the project to its employees. Supported by (Kotter, 1996) 8 step model, (Kotter, 2008) sense of urgency, (Lewin.K, 1951)Force field analysis and (Mullins, 2005) Management and organisational behaviours. The following could be implemented to enhance their organizational change process and mitigate the challenges they faced:

- **1. Enhance Communication Transparency**
- **Early and Clear Communication:** Establish a clear communication strategy before implementing changes. Share details about the restructuring process, timelines, and potential outcomes to reduce uncertainty.
- **Two-Way Dialogue:** Create forums (e.g., town halls, Q&A sessions) where employees can ask questions and express concerns.
- **Consistent Messaging:** Ensure that all communication aligns across leadership levels to prevent mixed messages or premature disclosures.
- **2. Build Trust and Engagement**
- **Involve Employees in Decision-Making:** Incorporate employee feedback into the planning process to foster a sense of ownership and reduce resistance.
- **Visible Leadership:** Leadership should be more present and approachable during the transition, showing empathy and actively addressing concerns.
- **Transparency About Criteria:** Clearly explain the point-based system used to assess job risk to minimize perceptions of unfairness.
- **3. Improve Change Management Practices**
- **Strengthen Urgency:** Clearly articulate the reasons for change and the consequences of inaction to create a shared sense of purpose.

- **Align Leadership Teams:** Form a guiding coalition that is fully aligned and capable of effectively leading the change.
- **Training Programs:** Offer change management training for leaders and managers to equip them with tools to support employees.
- **4. Address Psychological Impact**
- **Support Programs:** Provide counselling services, career transition assistance, and workshops to help employees navigate uncertainty and develop new skills.
- **Acknowledgement of Contributions:** Recognize and value employees past efforts, emphasizing that the changes are not a reflection of their performance but of business needs.
- **5. Plan for Transition Periods**
- **Phased Implementation:** Break down the restructuring into smaller, manageable phases with clear milestones and success indicators.
- **Interim Roles:** Offer temporary roles or projects to employees whose positions are uncertain to keep them engaged and productive during the transition.
- **6. Create a Stronger Cultural Integration**
- **Embed New Practices:** Reinforce new operational norms through training, recognition programs, and consistent monitoring to ensure sustainability.
- **Focus on Positive Outcomes:** Highlight success stories and benefits of the changes to rebuild morale and foster a positive outlook.
- **7. Monitor and Evaluate**
- **Feedback Loops:** Regularly collect and act on feedback from employees about the change process.
- **Post-Change Assessment:** Assess the effectiveness of the restructuring against predefined goals, adjusting strategies as needed.

By implementing these improvements, Aston Martin could better manage future organizational changes, minimizing negative impacts on employees while achieving strategic objectives.

Since Project Horizon the company has seen the arrival of two further CEO who have each implemented their own visions in the business.

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