



ORGANISATIONAL CHANGE IN AUTOMOTIVE TRANSITION: A CASE STUDY OF TYMPHANY UKDC

A critical analysis of change management, motivation, and operational readiness during
sector transition



MODULE: ACMA5007 – MANAGEMENT, INNOVATION AND SUSTAINABILITY

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Executive Summary

Tymphany's transition from consumer and professional audio to the automotive sector was driven by market opportunity and the long-term commercial advantages associated with high-volume, long lifecycle automotive projects. The UK design centre played a key role in this transition, shifting from a small, research-focused team into a dedicated automotive development function. While the strategic direction of the transition was clear, the process introduced a range of technical and organisational challenges.

Structural changes were implemented successfully, including the reallocation of existing projects and the establishment of a dedicated automotive focus. However, the transition exposed a lack of technical readiness, as training and knowledge development did not occur at the same pace as the organisational change. This resulted in a gap between perceived and actual performance, with engineering outputs initially believed to meet requirements but later identified as non-compliant with automotive standards.

Leadership provided strong direction, support, and a clear vision for the future, which helped maintain morale during the transition. Despite this, limitations in technical capability, knowledge transfer, and process alignment led to operational inefficiencies and increased costs due to late-stage corrections. Early project successes also contributed to a level of confidence that did not fully reflect the complexity of sustained automotive development.

The transition highlights the importance of aligning strategic objectives with technical capability, ensuring that training, processes, and validation systems are established early to support sustainable performance in highly regulated industries.

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Introduction

Tymphany is a global leader in the design and manufacturing of loudspeaker drivers. With manufacturing in Czech Republic, China and Thailand, the UK design centre (UKDC) operates a very small team of engineers focused on R&D (Tymphany, 2025). Historically they were focused on development of consumer and professional audio drivers.

In 2017 Tymphany started investigating entry into the automotive sector. They started slow and took on only a couple of new innovative projects with some very high-profile automotive companies. In 2022 a very small team dedicated to automotive was formed in the UKDC. In 2024, with the demand for automotive increasing, there was a need to grow the team, so the decision was made to transition the UK site to focus solely on automotive development as the limited headcount meant they would not have the capacity to take on the automotive workload in addition to their current projects. Unfortunately, this meant that all consumer and pro projects were transferred to the design centre in China to complete the development.

Some of the main contributing factors to this are the more stringent automotive reliability and environmental testing standards such as those outlined in ISO 16750-1 (ISO, 2023), as well as much more documentation being required and the PPAP process often being much stricter.

Main Findings

Lewin's Three-Step Model and Organisational Readiness

To critically analyse Tymphany's transition into automotive it is important to look at Lewin's 3-step model (Lewin, 1947). The first stage, unfreezing, this means causing disruption to the status quo, it meant the end of the 7-year stretch where the UKDC focused only on consumer and pro customers, handing over current projects that people felt very personally invested in.

Management initiated this through a top-down approach. While the decision was logical and necessary if the UK site was to take on additional automotive workload without further hiring. People were nervous about the unknown and sad to stop work on their projects prematurely.

Management were however very supportive and encouraging during this time which helped morale, highlighting the role of organisational culture in shaping employee responses to change (Schein, 2010). They were also very sympathetic towards people losing their projects.

Once the old routines are destabilized, the organization enters the moving phase. This is a period of transition where the team "moves" toward the desired new state by developing new behaviours, values, and skills (Lewin, 1947). This supports the continued relevance of Lewin's model in modern organisational change (Burnes, 2004).

For Tymphany this phase was characterised by the lack of organisational readiness. Although the site transitioned in June 2024, no training was given until mid to late 2025, highlighting the importance of organisational readiness for successful change implementation (Hiatt, 2006). The training sessions were on DFMEA, 8D, introduction to PPAP and APQP. The absence of specific training on automotive standards meant that engineering drawings remained non-compliant for a prolonged period. Flammability resistance such as FMVSS-302 was missing for in cabin parts which the speakers usually are, incorrect coating spec for metal parts that wouldn't pass the harsher corrosion tests such as the 1000-hour 85°C, 85% humidity, salt spray test and -40°C to +85°C operating range. The incorrect green level was also used (K) shortly before being updated to the stricter (L) category usually required by most automotive manufacturers. This reflects a failure in organisational knowledge transfer (Argote, 2013)

The final stage, Refreezing, involves stabilizing the organization at a new state of equilibrium to ensure that the change is permanent. (Lewin, 1947).

The refreezing stage at Tymphany only really began in late 2025, after the technical gaps had been closed, things seem more familiar, people had settled into the new more demanding roles. Fewer mistakes were now being made and more technical standards were in place.

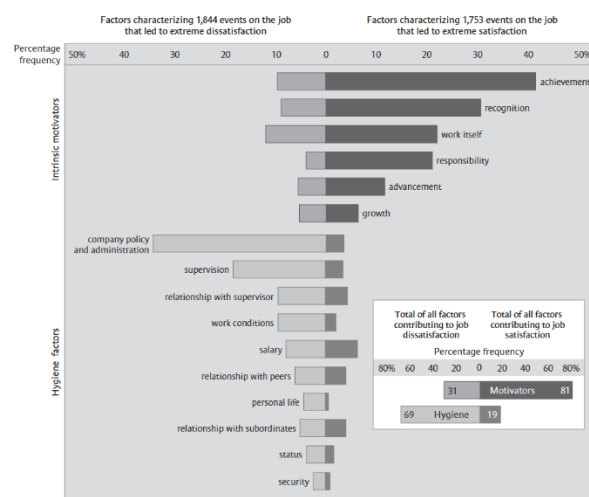
Motivation and Employee Response to Change

While Lewin's model explains the process of the transition, Herzberg's Two-Factor Theory (Herzberg, 1968) explains the performance gap during the moving phase. Herzberg distinguishes between Motivators such as recognition and growth and hygiene factors such as technical supervision, tools and training. Within Tymphany, management provided high quality motivators though emotional support and a clear vision. However, failure to provide hygiene factors, specifically technical training on automotive standards resulted in technical errors and drawing specifications not meeting standards. According to Herzberg, motivators cannot compensate for a lack of hygiene

factors. Even though the team was high encouraged and motivated, there was still some frustration and operational failure. This resulted in drawings being incorrect, meaning that sometimes the price of components would increase at a cost to Tymphany, as the original quoted price was already agreed by their customers at the beginning of the project. This is particularly troublesome in the automotive industry as volumes tend to be much higher than professional audio and often consumer audio too. Coupled with much thinner margins, a small increase in cost can have huge impacts on profits and even put the product into net loss.

The table below shows some of Herzberg's findings, which align very well with the findings within Tymphany. Starting with the hygiene factors, as workload became more demanding, some people felt undervalued and unhappy with their salary, they felt that they were having to provide too much without receiving the proper compensation. There was ineffective technical supervision, the whole team was lacking automotive experience, so managers and leaders were also struggling to provide the necessary infrastructure and resources needed, but this was not from a lack of care about the work or for the people, but simply a technical knowledge gap.

Factors affecting job attitudes as reported in 12 investigations



(Herzberg, 1968)

Vroom's Expectancy theory (Vroom, 1964) highlights that individuals act based on their perception that effort will lead to successful performance. Within Tymphany, engineers believed their outputs met the required standards, however, due to a lack of training and understanding of automotive requirements, this perception was inaccurate. As a result, errors remained undetected until later stages.

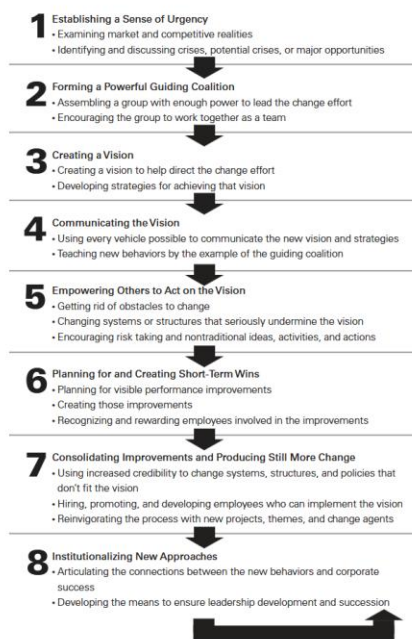
Adams' Equity Theory suggests that employees evaluate fairness by comparing their inputs, such as effort and responsibility, with the outcomes they receive, including pay and recognition. When an imbalance is perceived, individuals experience inequity, creating psychological tension that they attempt to reduce through changes in behaviour (Adams, 1965, cited in Mullins, 2016). Within Tymphany, the transition to automotive increased workload and technical responsibility without a corresponding increase in reward, leading to perceived inequity and contributing to dissatisfaction and reduced morale.

Leadership and Change Management

To further evaluate leadership's approach to the transition, Kotter's 8-step process for leading change (Kotter, 1995) can be applied.

Kotter's 8 steps are outlined in the image below.

EIGHT STEPS TO TRANSFORMING YOUR ORGANIZATION



(Kotter, 1995)

This model emphasises that for change to stick, leadership need to go beyond announcing the decision, they must prepare the organisation and all the people within it.

At Tymphany, management performed well at stage 4 by providing a clear vision for the future, being supportive and sympathetic for the loss of projects resulting from the top-down decision to transition the entire site to automotive. They ensured that the team really understood the why and allowed them to voice any concerns.

However, a failure occurred at stage 5, where management failed to remove key obstacles and did not provide the tools required to support compliance. This aligns with John Kotter (1995), who argues that failure to remove critical barriers can undermine organisational change, and is further supported by research highlighting that many change initiatives fail due to poor execution and ineffective decision-making (Nutt, 2002; Beer and Nohria, 2000).

Kotter (1995) emphasises short-term wins in building momentum and reinforcing change during the transition process. Within Tymphany, early success of ambitious automotive projects that were an industry first, using a removable, portable Bluetooth speaker that docked safely in the vehicle and was part of the original audio architecture. This acted as a key driver for the strategic shift. However, these successes occurred prior to the full transition and did not reflect the complexity of sustained automotive development. As a result, while these early wins helped justify the change, they did not adequately prepare the organisation for the technical demands that followed, contributing to issues during implementation.

Driving and Restraining Forces

Lewin's force field analysis model can also be looked at as to why the change took place. This framework suggests that an organisation is held in a state of equilibrium by a balance of driving forces pushing for change and restraining forces acting as barriers. For change to take place, there must either be an increase in driving forces or a reduction in restraining forces to give a net force for change (Lewin, 1976).

The driving forces for the change were the high-volume customer of the automotive sector and the long product life cycle. This allows for high stable income for usually around 7 years per project. Although for the larger well-established customers the profit margins are very low, however this can be off-set a little with lower volume high margin products with premium car brands. Also supplying an integrated system rather than just the speaker driver also helps to drive up profit margins. Coupled with the willingness to take on projects more established suppliers are not willing to risk, Tympany established its position as the supplier of removable audio systems (RAS) within automotive. With a few products already in production for a few years, and more in development with other companies, it is slowly changing the market for in car audio and now for in car entertainment.

Tympany's parent company Primax is a supplier of screens and camera modules. The opportunities that have arisen from automotive has ignited the collaboration of the Tympany and Primax to develop solutions for customers that combine speaker drivers/modules, microphones, cameras and screens.

The greatest current use case for this is in autonomous vehicles, particularly driverless taxis, where they utilise many external cameras for viewings its surroundings, internal cameras for the safety of passengers, speakers inside and outside to communicate with passengers, pedestrian warning Acoustic Vehicle Alerting Systems (AVAS) (Fortino et al., 2016), screens internally and externally for communication and entertainment and internal speakers for entertainment.

The restraining forces to the change were resource capacity, the very small team at the UKDC represented a barrier. It was impossible to maintain the engineering rigor required for automotive customers while managing legacy consumer and pro customers.

The history of the site, focused on non-automotive customers provided two barriers. One, people were attached personally and professionally to their projects and had a lot of pride and care in their work which had to be given up during the change. Also, the lack of automotive experience across most of the team, which leads into the third force.

The technical knowledge gap. Material selection considerations were not up to automotive standards. Coating specifications were not sufficient to meet validation testing requirements, highlighting the importance of developing organisational capability during periods of transition (Ulrich, 1997).

To shift the equilibrium and allow for change, management weakened the restraining forces by relocating consumer and pro projects to remove the workload barrier. This allowed the driving forces of a clear strategic vision and financial opportunity to overcome organisational resistance. However, the transition prioritised structural change over technical readiness, resulting in operational failures and financial implications, highlighting the importance of robust validation and quality control processes (Deming, 2000; Juran, 1988). This imbalance between organisational restructuring and capability development was a key factor contributing to the issues experienced during implementation.

Leadership Effectiveness and Capability

This can be further backed up by Adair's action-centred leadership model (Adair, 1979).



(Adair, 1979)

Using Adair's model to analyse the change reveals an imbalance. While management demonstrated high proficiency in building and maintaining the team and caring for the individual by maintaining empathy. There was notable failure within the task circle as management and leadership operated in a state of unconscious incompetence regarding automotive standards, they were unable to provide the necessary technical tools or guidance simply because they lacked the domain-specific expertise required for the new sector. As Mullins (2016) highlights, management and leadership are "inextricably linked". In this case, the lack of technical "Expert Power" hindered the management's ability to effectively guide the team, despite their positive intentions and commitment to the workforce. Expert power is the perception of leadership to be competent and have special knowledge or expertise (Mullins, 2016).

Managerial Roles in Supporting Change

According to Mintzberg's management roles theory (Mintzberg, 1973) managers must balance various roles to ensure organisational stability.

A clear example of this was the director of automotive business. He relocated from California to Bridgend for 2 years to help establish the automotive team, this is described by Mintzberg as the "Liaison" role (Mintzberg, 1973). Although being of director level, he opted to take a desk sat with the engineers in a makeshift space set up, upstairs next to the open canteen rather than take a private office downstairs which Mintzberg describes as the "Leader" role (Mintzberg, 1973). This helped the team to truly feel part of the change and that all levels of the business were facing this together; it helped it feel like a family. He would be on sales pitch calls, then on a high-level management meeting the following hour, giving regular updates to the team regarding all parts of the transition such as customer feedback, project awards and management feedback, always delivered with a very positive attitude. The sharing of high-level management feedback and project awards from the top down he is acting as Mintzberg would call the "Disseminator" (Mintzberg, 1973). He would always be sure to highlight any opportunities and positives rather than dwelling on negatives, showing a clear path to overcome obstacles. This is a clear example of Mintzberg's "Entrepreneur" role (Mintzberg, 1973), driving the transition forward as an innovator.

A further consideration is the role of timing in the transition process. While the strategic decision to enter the automotive sector was justified by market opportunity, the sequencing of key activities was not fully aligned with the technical demands of the industry. In particular, capability

development, training, and standards implementation occurred after the structural transition had already taken place. This created a period where the organisation was operating in a new environment without the necessary technical foundation. This highlights that effective change management requires not only the right strategic direction, but also careful planning of when critical capabilities are introduced to support sustainable performance.

Conclusion

Tymphany's UKDC transition from consumer and professional audio to a dedicated automotive development site was a strategic necessity that was driven by market demand, the opportunities of the automotive sector and the size of the UK team. When analysed with Lewin's 3 - step model (Lewin, 1947), it is clear that while the "unfreezing" and "moving" phases were successful in terms of organisational restructuring but the "refreezing" stage was significantly delayed by the lack of operational readiness resulting in the team struggling to stabilise with the new technical demands.

As Herzberg's Two-Factor Theory demonstrates, the high-quality "Motivators" (Herzberg, 1968) provided by management, such as emotional support and recognition, could not offset the lack of "Hygiene' factors" (Herzberg, 1968), specifically the lack of training and structure around the automotive technical standards. This created a visible imbalance in Adair's action-centred leadership model. While the "Individual" (Adair, 1979) and "Team" (Adair, 1979) circles were prioritized, the "Task" circle suffered due to a deficit in Expert Power (Mullins, 2016).

Ultimately, the Director's effective use of Mintzberg's management roles, acting as a Liaison, Leader, Disseminator, and Entrepreneur (Mintzberg, 1973), was vital for maintaining morale and innovation. However, the delay in bridging the technical knowledge gap resulted in non-compliant drawings and financial repercussions. For future transitions, Tymphany should ensure technical readiness is integrated into the change process from the outset to ensure a more balanced and efficient transformation. This highlights the importance of integrating technical expertise earlier in the change process to avoid similar issues. It also demonstrates that successful organisational change requires not only strategic alignment, but the timely development of technical capability to ensure that performance expectations can be met consistently throughout the transition.

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