# H7095 - Business and Project Management - Group Project

**266720, 268644, 267405, 262954, 263036, 278857**

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**Contents**





## 1. Introduction

Toyota Motor Corporation or Toyota is a global leader in the automotive industry that operates in over 170 countries. It produces and distributes vehicles, spare parts, and mobility services. Toyota's portfolio ranges from mass-market vehicles like the Corolla and Camry to luxury like the Lexus brand, as well as electric and hybrid vehicles. Toyota uses lean manufacturing and Just-In-Time (JIT) production, to maintain a competitive edge (Liker, 2004).

Toyota has rapid technological advancement, shifting consumer preferences, and stringent environmental regulations. The automotive sector

is undergoing significant transformation due to increased sustainability concerns, with many countries phasing out internal combustion engines in favour of electric and hydrogen (IEA, 2023). Toyota's strategy has ability to adapt, helping it despite challenges like supply chain issues and economic changes.

This report examines Toyota's strategic alignment with key concepts covered in this module, including leadership, innovation, and sustainability.

### 1.1. Objectives

(i) To analyse Toyota's application of contemporary management practices
(ii) Evaluate its response to external environmental challenges
(iii) Assess the implications of its strategies on long-term performance

Concepts like transformational leadership will be explored to understand their relevance to Toyota's success.

## 2. Organising for Project Management & Project Management Office (PMO)

Toyota has a hybrid organisational structure for its project management. It is based on the two foundational pillars of Continuous Improvement, also known as kaizen, and Respect for People. The word kaizen is a derivation of japanese terminology that means "good change and improvement" . Kaizen is the concept of creating small positive changes to eventually obtain major improvements. Kaizen is defined more as an "attitude" based on cooperation and improvement, instead of radical top-down changes.

The Kaizen concept has 7 fundamental steps:
(i) Involving employees to crowdsource issues and problems,
(ii) Identifying problems and potential opportunities,
(iii) Creating solutions to encourage ideas from all employees,
(iv) Testing solutions with the engagement of all employees,
(v) Analyzing the results at various interval and determine the success level,
(vi) Standardizing and adopting the solution if results are positive,
(vii) Repeating the cycle for all future problems.

The PMO at Toyota started on a small scale, operating at a relatively low level within the organization. Initially, its primary focus was collecting project financial data and reporting to a mid-tier financial officer.

However, as a project management assessment highlighted the need for a fully functional PMO, the decision was made to establish an enterprise-level PMO and reposition it to report directly to the CIO. This move elevated its authority, recognizing that a PMO can drive significant changes in project management processes and requires strong organizational positioning to be effective. The PMO's design and the development of its project management methodology were made to remain independent of any specific product development methodologies.

In this structure, the project manager oversees the project's overall management, while the technical lead determines the software development approach. At TFS, the development team primarily applied the Rational Unified Process (RUP) for many projects while retaining a traditional waterfall methodology for mainframe systems.

The project management framework is designed to be flexible, allowing project managers to align their management practices with the chosen development methodology.

A key focus of the PMO was creating a consistent set of methodologies, including standardized processes. This represented a significant shift from the previous environment, where project managers had considerable autonomy to manage projects without standardized reporting or controls. However, this initiative faced resistance.

### 2.1. Toyota organisational structure

The board plays the main role in guiding Toyota's operations and upholding responsible corporate governance. It is tasked with maintaining strong governance principles, encouraging ethical behavior, and implementing transparent partnerships with the organization.

The board works in close collaboration with senior management to shape Toyota's strategic vision, establish long-term goals, and provide critical vision on major business decisions and investments. It also serves as a representative body for shareholders, ensuring decisions are made to enhance shareholder value, such as determining dividend policies and overseeing significant corporate actions.

Toyota's organizational structure is defined by clear authority and decision-making lines. At the top, the President provides overall strategic leadership for the company, supported by Operating Officers who oversee various functional domains, including technology, finance, and the Toyota Research Institute. This structured hierarchy ensures a coherent chain of command and facilitates effective management.

A standout feature is the use of autonomous teams in its production system. These teams are empowered to make decisions about quality, production processes, and continuous improvement, enabling frontline employees to actively participate in problem-solving and innovation. This balance of centralized strategy and decentralized execution fosters agility and adaptability.

Toyota's organizational model combines

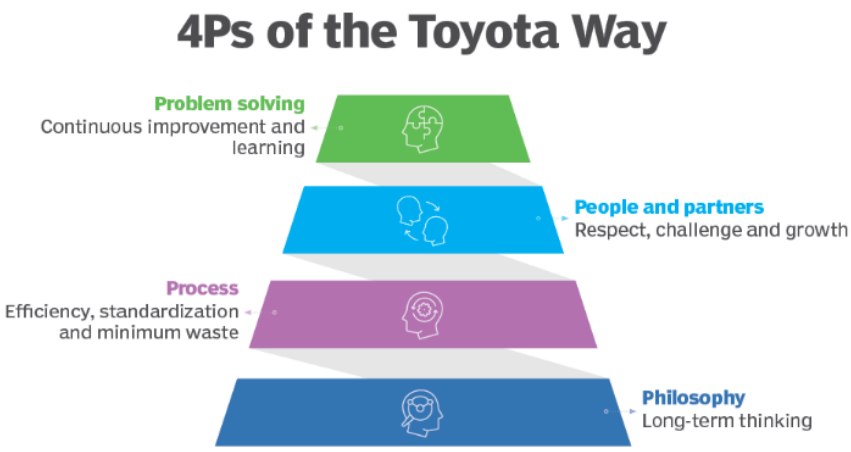


**Fig. 1**: 4Ps of the Toyota Way

hierarchical structure with decentralization, employee empowerment, and cross-functional collaboration. This combination supports long-term governance and decision-making while promoting innovation, continuous quality improvement, and customer-centric practices, which are foundational to the Toyota Production System.

Toyota's project management success stems from this structured yet adaptable framework, which incorporates several key principles: customer-Centric Approach, data-driven decision-making, and collaborative culture.

Toyota's hybrid structure and strategic PMO functions ensure that its projects match with corporate strategy and are executed effectively. By embedding project management practices into its culture and values, Toyota continues to innovate and maintain its position as a global automotive leader.

## 3. Project Management Maturity & Security Risks

Toyota focuses on project management efficiency through systematic improvement of maturity and reduction of security concerts. The organisation employs outlined frameworks, continuous growth and risk management to guarantee that projects are efficient , secure, and connected with objective.

Toyota uses the Staged Project Management Maturity Model to evaluate and improve project management practices (Ireland, 2004)(10) outlines five maturity levels, ranging from basic processes to refined, continually improving techniques. Toyota displays a high level of development defined by uniform, and refined procedures. This strict methodology aids the organisation in establishing projects, reducing instability, and enhancing performance. Toyota examines industry leaders to identify weaknesses in performance and embrace best practices, facilitating ongoing enhancement and preserving its competitive advantage (Kerzner, 2022)(14).

Toyota's project maturity strategy depends on total quality management. It points out the integration of quality standards throughout the project life cycle. This guarantees methods that are reversible, accessible, and consistent with ISO 9000 standards. Toyota may systematically discover root causes, deliver solutions, and better project outcomes by sticking to these principles. Toyota applies the DMAIC framework of Six Sigma to minimise process variability and faults. This careful procedure demonstrates Toyota's commitment to quality and consistency (Kerzner, 2022)(14).

Toyota employs many methodologies to assess and enhance project management. Visual management is used in the obeya room to demonstrates project plans, Key performance indicators, and risks within a collaborative environment. This facilitates prompt decision-making, clarity and improvement (Sato, 2024)(17).

Toyota employs key performance indicators to monitor cost, time, quality and customer satisfaction to guarantee project success (Sato, 2024)(17). Toyota regularly records, assess and ranks hazards using risk registers and matrices. These instruments offer a methodical framework for addressing probable obstacles and allocating resources (Evrin, 2021)(6).

Security risk management is included into Toyota's project management process via detection, analysis, mitigation, and monitoring. Brainstorming , checklists, interviews, and SWOT analysis are utilised to identify risks (Sato,2024)(17). These methodologies guarantee a comprehensive

understanding of cyber, physical and environmental threats. Upon identification, risk matrices categorise hazards based on their probability and consequences (Evrin, 2021)(6). Toyota may prioritise reducing its most significant risks.

The organisation employs data encryption, physical safety precautions, and access restrictions to reduce hazards. These methodologies safeguard sensitive information and comply with ISO 27001 (Sato, 2024)(17). Toyota assesses project hazards through risk dashboards and methodical project reviews. Toyota can modify its policies in response to emerging threats by continuous monitoring, therefore maintaining safety (Kaplan & Mikes, 2012)(13).

Security threats significantly impact Toyota's project management. Poor risk mitigation may result in delays, financial losses, and damage to reputation. A data breach during the creation of vehicle models might compromise confidential information and undermine stakeholder confidence. Toyota incorporates security into project design to mitigate risks and ensure compliance with GDPR (Sato,2024)(17). This proactive strategy improves project success and elevates Toyota's reliability and quality.

## 4. Project Portfolio Planning & Management

Toyota's portfolio management is rooted in its commitment to innovation, efficiency, and sustainability. By applying structured methods, the company ensures its projects and programmes are aligned with its strategic objectives, deliver measurable value, and maintain a competitive edge. These criteria include:

### 4.1. Strategic relevance

Projects must align with Toyota's vision, such as achieving carbon neutrality or enhancing autonomous driving technologies. Projects that address long-term goals, like the shift toward hydrogen fuel cells, are prioritised.

### 4.2. Financial success

The key metrics in regards to this criterion include Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period. Firstly, NPV ensures that the financial benefits outweigh the costs over the project's lifetime. In regards to IRR, this assesses the project's profitability and will analyse whether it will return a high investment. Closely linked to IRR is the payback period which looks into how quickly Toyota can recover its investment into a particular project. (Cleland & Ireland, 2006) (4).

### 4.3. Risk assessment

Technological, financial, and operational risks are evaluated to ensure feasibility and prevent avoidable setbacks from delaying or negatively impacting the project timeline overall. (Cooper, 2005)(5).

### 4.4. Resource optimisation

Projects requiring constrained or underused resources are critically analysed to avoid mismanagement (Turner, 2009) which saves costs in the long term and will also make a positive impact sustainability with fewer resources wasted contributing towards Toyota's sustainability goals of conserving resources for example. (Toyota Europe, 2023) (25)

### 4.5. Continuous monitoring and evaluation

Real time dashboards track project variables such as budget and deliverables. Post-Completion reviews evaluate outcomes to measure alignment with strategic goals and use this information to determine for future projects (Turner, 2009)(31).

Feedback loops ensure lessons learnt are integrated into future planning to optimise processes hence reducing costs, providing more efficient design processes and using resources more sustainably (Cooper, 2005)(5).

### 4.6. Alignment mechanisms

Alignment mechanisms ensure all projects support Toyota's strategic goals. Centralised oversight - the Project Management Office (PMO) holds the responsibility of overseeing project reviews and monitoring alignment with strategy (Turner, 2009)(31).

### 4.7. Governance councils

The governing board or senior management team sometimes inspects the portfolio to ensure that it is still within the scope of the corporate goals (Cooper, 2005)(5).

### 4.8. Scenario planning

Tools which are designed to understand how the market will evolve are used to pick the most relevant projects (Meredith & Mantel, 2010)(16).

### 4.9. Decision Gate Processes

Projects pass through gates sequentially where they are assessed on performance and goal alignment before being allowed to the next phase (Cleland & Ireland, 2006)(4).

An example of where Toyota have been aligning with their strategic objectives is where they have been investing in advanced electric motors and improved

power electronics (Toyota Europe, 2023a)(24) in order to get closer to their sustainability-related strategic goal of becoming fully carbon neutral for its vehicles and operations by 2040 (Toyota Europe, 2022)(23).

## 5. Maintaining the Project Pipeline & Project Termination

### 5.1. Vehicle Pipeline

Toyota uses a JIT (just-in-time) approach called TPS (Toyota Production System) to maintain its vehicle production process pipeline, whereby all production plants are synchronised, minimising delays and waste. Parts are made when needed, in the required quantity and specification (Toyota Motor Corporation)(27). Jidoka ('automation with human touch') is also employed - human workers spot vehicle defects and can halt the production line until the issue is resolved.

### 5.2. Cost Leadership

Toyota's cost leadership strategy aims to maintain competitive sale prices and minimise operating costs (Thompson, 2024)(22). JIT production is relevant and valuable to this strategy; there is no unnecessary cost expenditure on parts, which cheapens inventory, and production demand is quickly met. Jidoka reduces the outflow of faulty vehicles, ensuring streamlined production while retaining quality. It is also relevant and valuable to cost leadership as fewer humans are employed and must be paid, and productivity of those who are is increased (Toyota Motor Corporation)(27).

### 5.3. Kaizen

Kaizen ('continuous improvement') is an underpinning innovation practice, aiming to humanise the workplace, train workers to optimise their tasks and eliminate waste (Toyota Blog, 2024)(20). Kaizen's implementation in TPS in South Africa positively impacted competitiveness, productivity and quality (Ishigame, 2020)(12). However, its prioritisation overburdened employees with tense working environments, causing resignations (GearShifters, 2012)(7). Toyota's GD3 system enforces quality in TPS. Each part's function, potential failure modes and corresponding customer impact are reviewed, with issues receiving suggestions for improvement (Savas, M. and Morgan, J., 2024)(21). This streamlines TPS; better-designed parts likely encounter less issues further along production. Conversely, GD3 can prove complex due to its reliance on navigating employee communication.

### 5.4. Project Portfolio

Toyota's project portfolio sees prioritisation of projects which align with its long-term environmental goals. Toyota North America received $4.5 million from the US Department of Energy to combat bottlenecks in electric vehicle (EV) battery supply chain circularity – aligning with 'establishing a recycling-based society' (Bourgoise, 2024)(3), (32). Conversely, Toyota suspended shipments of 10 diesel models after finding irregularities with their emissions – continuing these models would create more emissions than necessary and work against 'vehicle zero emissions' (Green Car Congress)(8).

### 5.5. Sustainability Management Structure

Toyota Tsusho Corporation's Sustainability Management Structure is shown in figure 2. A monthly Carbon Neutrality Promotion meeting takes place, chaired by the president and CEO, to discuss decarbonisation strategies (Toyota Tsusho Corporation)(29). The Sustainability Management Committee meets annually with sales division CEOs and executive vice presidents, to determine sustainability policies. Information from these sustainability-focused meetings is monitored and reviewed by the Board of Directors who make final management decisions (Toyota Tsusho Corporation)(28).

## 6. Governance of Project-Based Organisation & International Projects & Teams

### 6.1. Strategic level

Toyota's approach to governance is to maintain and improve upon efficiency, fairness and transparency. To achieve this Toyota, conduct monthly meetings with their board members with members both internal and external to the company. Having external directors gives the board greater diversity and therefore should be better adapted to change and adversity. This structure can bring order to the project management level of the organisation resulting in a project that is completed on time and to the correct specification. The board of directors has direct reports from all levels of management and supervisory boards to ensure that the correct governance is in place (Toyota Industries Corporation, 2024)(26).

### 6.2. Tactical level

The project management office (PMO) is overseen by the board of directors, committees and supervisors to ensure that all work is being conducted to the regulatory standards and those set by those in charge.

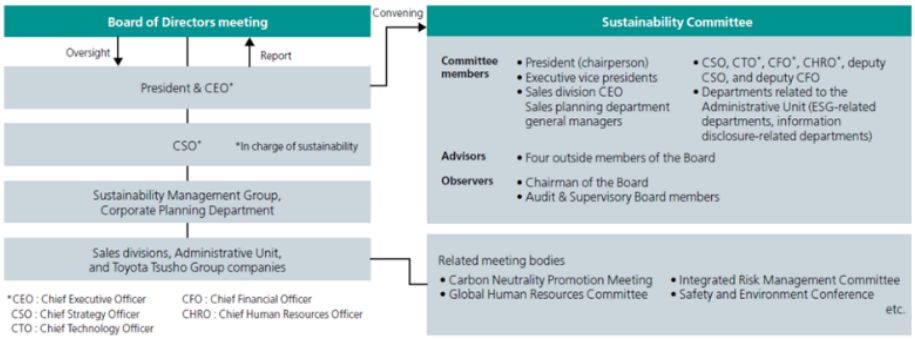


**Fig. 2**: Sustainability Management Promotion Structure (Toyota Tsusho Corporation) (30)

This level in governance is responsible for overseeing and completing the project itself.

### 6.3. Operational level

This level involves governance over individuals rather than large groups of people, monitoring progress at a smaller scale. To oversee and monitor progress methods such as the Kaizen and A3 method can be used to gauge problem solving and improvement. Applying these methods help ensure that a project is being handled correctly.

### 6.4. International projects

A project that is always evolving and changing is Toyota's plants around the world, each location Toyota has expanded to has its unique challenges. These can range from language barriers, laws, regulations. These challenges require clear efficient communication to build cars and other technologies that can be easily adapted to different countries' laws and regulations.

A major international project is Toyota and BMW collaboration to advance hydrogen fuel cells for passenger car use (Aigner and BMW Group, 2024)(1). Not only does this project span continents but organisations as well. To start this project both Toyota and BMW would agree at a strategic level to conceptualise the idea then pass it through their respective management team until the correct members in the strategic, tactical and operational level are chosen to coordinate, oversee and conduct the project.

### 6.5. Cultural considerations in PM

Toyota prides itself on being a diverse company that encourages its employees to grow to improve innovation. The company is respectful to those inside and outside of the company. This is accomplished through using different perspectives from people of diverse backgrounds to create an environment where everyone is welcome and can maximise their contribution towards projects (Toyota, 2023)(19).

## 7. Continuous Improvement through Projects & Cultural Considerations in Project Management

### 7.1. Continuous improvement

Toyota shows continuous improvement through Kaizen within its project management practices. Defined as a systematic, organization-wide approach to incremental innovation, Kaizen allows employees at all levels to use daily improvement activities. Kaizen directly influences the management of indivdual projects by allowing everyone to make improvements regardless of rank which means employees take more initiative. Toyota keeps employees motivated and empowered to propose solutions, even in regions with hierarchical cultures using this method. This philosophy is central to the Toyota Production System (TPS), which uses just-in-time (JIT) principles to reduce waste and increase efficiency (Tidd et al., 2001)(18). Through project portfolio management (PPM), Toyota projects have strategic objectives, allowing adaptation and growth.

### 7.2. Cultural Considerations

Cultural considerations are important for Toyota's project management, due to its global footprint. The "Toyota Way" means respect for people and teamwork, fostering an inclusive culture where diverse perspectives are valued. Hofstede's cultural dimensions, such as collectivism and long-term orientation, align with Toyota's group harmony and future-focused innovation (Isaksen & Tidd, 2006)(11). This cultural integration means that cross-national projects address local contexts whilst maintaining organisational coherence.

With globalisation, comes new cultural challenges, such as language, communication styles, standards and regulations. Even time zones can make it tricky for teams to communicate. Toyota, being a global company, has to deal with these issues and implement a balance between these.

### 7.3. Tools and Techniques

Toyota uses structured tools and techniques like A3 problem-solving and Hoshin Kanri guide to decision making and alignment with overarching goals. The company uses knowledge sharing through Hansei (reflection) sessions and after-action reviews, which inform future projects (Liker, 2004)(15). Knowledge management systems facilitate the organisation-wide dissemination of insights. Toyota has allowed advanced technologies to be integrated into its knowledge management and project improvement strategies.

The CI maturity model highlights Toyota's capability in embedding continuous improvement into its operations. Employees are encouraged to identify inefficiencies and propose solutions, creating a bottom-up approach to change (Bessant et al., 2001)(2). Toyota uses JIT principles to streamline administrative and operational processes.

### 7.4. Continuous Improvement makes Organisational Change

Toyota's continuous improvement makes organisational change by using lessons learnt in future projects and strategic initiatives. After implementation of a lean manufacturing project in one facility, Hansei sessions were shared globally through Toyota's knowledge management systems. This meant multiple plants used the streamlined process, increasing efficiency and reducing lead times. Toyota aligns individual project outcomes with long-term goals through its project portfolio management practices, making incremental improvements collectively lead to transformational change.

## 8. Conclusion

Overall we can see how Toyota Motor Corporation showcases its excellence in project management, as the strategic objectives are aligned with innovative practices and sustainability. To summarise, it has structured governance, continuous improvement philosophies such as kaizen, and with the use of tools like the PMO and risk management frameworks, Toyota ensures that projects are delivered efficiently while fostering adaptability in a dynamic business environment that has expectations to improve upon each project using feedback loops. Furthermore, cultural considerations, along with high project maturity and risk mitigation strategies, deepen the enhancement of global operations and stakeholder value for Toyota. This report points out that Toyota is dedicated to applying innovation, quality, and strategic alignment, which guarantees long-term success in the competitive automotive industry.

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## 9. Appendix

| **Group Member's Candidate Number** | **Criterion** | **Score** | **Comments** |
|---|---|---|---|
| 268644 | Teamwork and Overall Contribution to the Report | 8 | Completed section 3 and promptly responded to messages when addressed |
| 266720 | Teamwork and Overall Contribution to the Report | 10 | Formatting, Introduction, 'Continuous Improvement through Projects & Cultural Considerations in Project Management' section |
| 267405 | Teamwork and Overall Contribution to the Report | 9 | Completed section 2 and structural part. |
| 262954 | Teamwork and Overall Contribution to the Report | 9 | Completed section 6 and contributed to the introduction. Created initial idea to use toyota for this project. |
| 263036 | Teamwork and Overall Contribution to the Report | 9 | Completed section 4 and conclusion. Proofread the entire document to ensure there are no grammatical errors. |
| 278857 | Teamwork and Overall Contribution to the Report | 9 | Completed section 5 - 'Maintaining the Project Pipeline & Termination of Projects'. |

**Table 1**: Summary of Bearing Types and Their Applications