**Group Project Proposal (Improvement for Ethics Risk)**

Course code: COMP 3511

Team No.: 24

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| Student ID #1: | 22103808d | Student ID #4: | 21099467d |
| Student Name #1: | Wang Ruijie | Student Name #4: | Zhang Wenxuan |
| Student ID #2: | 22098941d | Student ID #5: | 22100439d |
| Student Name #2: | Zeng Tianyi | Student Name #5: | Liu Yuyang |
| Student ID #3: | 22101071d | Student ID #6: |  |
| Student Name #3: | Zhu Jin Shun | Student Name #6: |  |

### Guidelines

1. Proposal submit should be within 6 pages with diagrams/tables for this assignment (included cover page but not for reference page). Please also submit presentation slide for 15min (10min presentation & 5min Q&A) together with the proposal.

2. Make sure that you have carefully read and fully understood the questions before answering them. Answer the questions fully but concisely and as directly as possible.

3. Answer all questions in your own words. Do not copy any text from the casebook, readings or other sources. **The assignment must be your group work only.**

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| **Plagiarism declaration:** |
| **1. I know that plagiarism is wrong. Plagiarism is to use another’s work and pretend that it is one’s own.**  **2. This assignment is my own work.**  **3. I have not allowed, and will not** **allow, anyone to copy my work with the intention of passing it off as his or her own work.**  **4. I acknowledge that copying someone else’s assignment (or part of it) is wrong and declare that my assignments are my own work.** |

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| Executive Summary of Proposal (within this page)  1. **Current State**   Daihatsu produced 1.7 million vehicles in FY2022, primarily in Japan, and relies heavily on the ASEAN market, contributing 40% of Toyota's sales in Indonesia. To maintain cost leadership, Daihatsu often shortcuts safety testing, leading to flaws, particularly in its popular Kei cars like the Tanto. This has resulted in a significant decline in brand credibility, with 25% of Kinto users doubting vehicle safety following a scandal. To improve, Daihatsu plans to integrate AI management and blockchain technology for compliance, and establish a digital quality management platform with real-time monitoring and transparent reporting systems.   1. **Proposal Initiative**   The initiative aims to establish an innovative ethical management system for the automotive industry over 5-10 years, achieving zero ethical defects and setting benchmarks in quality assurance and governance. Within 3 years, it will develop advanced regulatory frameworks for AI and information systems. Key actions include establishing ethical workflows, transparent reporting, and robust auditing aligned with ISO standards. A dedicated department will oversee reviews and stakeholder feedback. The initiative emphasizes flexibility in management and adherence to AI trends, ensuring comprehensive ethical practices in automotive manufacturing and enhancing consumer trust.   1. **Plan of action and criteria for success**   The initiative focuses on immediate corrective actions, including creating a cross-functional after-sales workflow and automating complaint tracking with AI. A transparent whistleblowing platform will be established, alongside an Ethics Oversight Committee. Internal and external audits will be conducted with third-party partners, and results will be publicly shared, utilizing blockchain for data integrity. Ethical AI integration will involve an AI Ethics Board and specialized training. Cultural transformation will embed a "Safety First" code and recognition programs. Key considerations include employee adaptation, upskilling opportunities, and balancing technology with human oversight to address ethical concerns like whistleblower anonymity and audit independence.   1. **Conclusion**   The proposed initiative for Daihatsu outlines a strategic path to restore brand credibility and ensure ethical integrity within the automotive industry. By implementing an innovative ethical management system, establishing robust regulatory frameworks, and leveraging technology such as AI and blockchain, Daihatsu can enhance product quality and governance. The focus on immediate corrective actions, transparent reporting, and cultural transformation will foster accountability and trust among stakeholders. This comprehensive approach not only addresses current challenges but also positions Daihatsu as a leader in ethical practices, ultimately securing a competitive edge in the evolving automotive landscape. |

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| Current state 1. Current State of Toyota Daihatsu  (1). Current Environment  Global Production Disruption: Daihatsu produced 1.7 million vehicles in FY2022, half of which were produced in Japan (Daihatsu Motor Co., Ltd., 2023)1.  ASEAN Market Dependence: Daihatsu accounts for 40% of Toyota’s sales in Indonesia, a key growth market (Toyota Motor Corporation, 2023)2.  Dependence on cost leadership: To maintain its dominant market position, Daihatsu prioritizes cost reduction and thus takes shortcuts in safety testing and emission compliance.  Root Cause: Decentralized management allowed subsidiaries such as Daihatsu to operate with minimal oversight, leading to tampering of system data.  (2) Products  Dominance of Kei cars: Daihatsu has a 30% market share in the Japanese Kei car segment, which is critical for urban transport and low-cost markets. (Japan Automobile Manufacturers Association [JAMA], 2023)3 . The Daihatsu Tanto is the best-selling Kei car, but side-impact tests of these models have been found to be flawed.  Root Cause: An anonymous Daihatsu engineer told the Asahi Shimbun: ‘We were pressured to skip retesting to meet the launch deadline. The management put speed ahead of safety’ (Asahi Shimbun, December 2023).4  (3) Services  Serious decline in brand credibility: Not only the faulty models, but also even the non-faulty ones are distrusted by consumers. For example, Toyota's Kinto service relies on cars made by Daihatsu, and a Kinto user survey afterwards found that 25% of customers doubted the safety of their vehicles after the scandal.  Root cause: Daihatsu's 2022 internal audit report, obtained by NHK, warned of a ‘weak whistleblower review system that allowed quality problems to arise unknowingly’ (NHK investigation, December 2023).5  2.Technology or methodology to improve efficiency and productivity  (1) Automation and AI management system: Integrate ISO 42001 (AI Management System) and ISO 23894 (AI Risk Management) to optimize production processes. Apply ISO 5338 (AI Lifecycle Process) to ensure transparent and controlled AI system development.  (2) Blockchain technology: Used to record compliance data (e.g., security test results, audit reports) and ensure tameability (refer to ISO 37001 Anti-Bribery Management).  (3) Digital quality management platform: Based on ISO 9001 and IATF 16949, deploying real-time monitoring systems to track production defects and integrating with ISO 27001 (information security) to guarantee data reliability.  (4) Intelligent Reporting Tools: Transparent internal reporting process (ISO 37002), to collect employee feedback and reduce process delays. |

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| Proposed initiative **PLAN & VISION**  **(1)** *In 5~10 years:* put forward and implement an innovative ethical management system for product quality assurance and organizational governance in the automotive industry.  **(2)** *In 3 years*: establish state-of-art regulatory frameworks for AI and information systems on automative platforms, in response to the current trend of autonomous vehicles.  **(3)** *In 10~15 years:* become an automotive manufacturer to achieve zero ethical defects and a benchmark in the innovation of product quality assurance, organizational governance, and management of application of emerging technologies.  **DO**   1. Establish an ethical workflow for after-sales service and emergent corrective actions in accordance with the chapters *ISO 9001:2015 After-sales Service, Corrective Actions,* and *Customer Compliant, Suggestion and Survey.* 2. Establish transparent intra-organizational reporting procedures of malpractice or weakness in the production, quality control, and marketing processes. This system should comply with *ISO 37002:2021 Whistleblowing Management System.* 3. Introduce external and internal auditing on to prevent malpractice or weakness in the production, quality control, and marketing processes, in which the results should be subject to public scrutiny in a transparent manner. It should be aligned with *ISO 37001:2025 Anti-bribery Management Systems* and *ISO 19011:2018 Guidelines for Auditing Management Systems.* 4. Enhance the ethical organizational governance system specialized for automotive manufacturers as a selective merging of *ISO 37000:2021 Governance of Organizations, ISO 9001:2015 Quality Management Systems,* and *IATF 16949:2016.* There should be a special chapter for a deontological ethic framework and code of conduct of virtue ethics regarding the authentic challenges faced by automotive manufactures who are responsible to guarantee a safe and comfortable experience for customers of our automotive products. 5. Integrate *ISO42001:2023 Artificial Intelligence Management Systems, ISO 23894:2023 Guidance on Risk Management of AI Systems, ISO 5338:2023 AI System Life Cycle Processes,* and *ISO27001:2022 Information Security* with the automotive industry standard *IATF 16949:2016* to ensure the ethical comprehensiveness of applying AI and information systems on vehicles.   **CHECK**   1. Review the proposed new management systems through long-term public review and by inviting experts and stakeholders to conduct inspections. 2. Establish a dedicated department within the organization to oversee and manage the process of review and temporal execution of the proposed management systems and collect relevant feedback from stakeholders.   **ACT**   1. Revise the proposed new management system based on the specific condition and feedback after a period of trial operation. 2. Consider the emergence of new ISO standards or technologies to secure the state-of-art position of the proposed management system.   **COMPETITIVE EDGE**  **(1)** Combine the general organizational management and quality control systems with the specific. realities of the automotive industry to prevent rigidity.  **(2)** Comply with the trend of adapting AI and information systems in automotive products. |

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| Plan of action and criteria for success **Detailed plan of action:**   1. **Immediate Corrective Actions & Ethical After-Sales Workflow** First, the company needs to create after-sale workflow by setting cross-functional teams to manage recalls and corrective actions and automating customer complaint tracking using AI-powered CRM systems to prioritize safety-related issues. 2. **Whistleblowing & Governance Enhancement** First, a transparent reporting system needs to be built by launching an anonymized, multilingual whistleblowing platform accessible to all employees and suppliers, then training managers on anti-retaliation policies and ethical escalation protocols. Meanwhile, the company needs to establish an Ethics Oversight Committee with external auditors and employee representatives 3. **Auditing & Public Transparency** For internal/external audits, the company could Partner with third-party auditors to review production, quality control, and marketing processes and publish audit results quarterly on the official website. Blockchain could be integrated into the auditing system to ensure logging data immutability.6 4. **Ethical AI & Information Systems Integration** The company needs to ensure ethical AI adoption by integrating AI lifecycle standards into vehicle software development and forming an AI Ethics Board to audit algorithms for bias, safety risks, and compliance, then offer special AI ethics training for employees. 5. **Cultural Transformation & Virtue Ethics** First, the company needs to draft a "Safety First" code emphasizing accountability, transparency, and customer safety and mandate ethical training for all employees. Recognition programs could also be utilized to reward teams for proactive safety improvements and ethical decision-making.   **Key Questions**   1. **Impact on Employees, Management, and Jobs** Employees may have Initial resistance to new workflows. In the management cycle, accountability for ethical lapses will be increased, and additional collaboration on decision-making with the Ethics Oversight Committee is needed. Automation will reduce roles in manual testing but creates demand like AI Governance Specialists. 2. **Upskilling/Reskilling Opportunities** For technicalskills, employees will gain certification on ISO standards, and knowledge training in fields like cybersecurity and AI risk management. For soft skills, employees will enhance decision-making abilities through ethical decision-making workshops. 3. **Roles of Technology vs. People** For technologies, AI/ML will predict safety risks, automate recalls, and detect anomalies in testing. For people, interpreting audit results, resolving whistleblower cases, and leading cultural change will need human’s ethical oversight, and communication will need people's engagement. 4. **Ethical Concerns** 1) Whistleblower anonymity: whistleblowers may fear retaliation if their identity is leaked. 2) Audit independence: Internal audits may lack objectivity if auditors are influenced by corporate hierarchies or financial incentives. |

1. **Project Charter**

(Please fill the Project Charter for your plan.)

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| **Business Case** | **Milestone** |
| Daihatsu Motors is facing a scandal over falsified safety test data for models like the Rocky SUV and Toyota Raize. The manipulated safety test results have raised significant safety concerns, and an independent investigation has uncovered flaws in emissions and environmental data.  Unfavourable investigation results could lead to legal challenges and reduced consumer trust, impacting sales.  Problem Statement:  Daihatsu's production and safety testing processes are inadequate, risking compliance and consumer trust. | |  |  | | --- | --- | | **Date** | **Milestone & Release** | | Mar 19 | Project Start (Define project charter) | | Apr 2 | Stakeholder Engagement and Initial Risk Assessment | | Apr 12 | Analyze Current Security Testing Data | | Apr 20 | Develop To-Be Safety Control and Testing Framework | | May 1 | Stakeholder Review and Feedback on Proposed Framework | | May 12 | Testing on Enhanced Safety Measures | | May 20 | Training and Preparation for Rollout | | May 28 | Rollout Enhanced Security Controls and Testing Protocols | | Jun 1 | Evaluate and Improvement in Security Measure and Production Quality | | Jun 5 | Project Review & Quality/Safety Audit | |
| **Goal** | **Scope** |
| Enhance improved policies, quality assurance, regulatory compliance and production processes before resuming production to prevent future similar incidents and restore customer trust in Daihatsu’s products. | In: Daihatsu Motors  Out: Improve the quality assurance and production processes at Daihatsu Motors. |
| **Team** | **Benefits & Cost** |
| Team Leader:   * Wang Ruijie   Sponsor:   * Toyota (Parent Company)   Members:   * Security Test Officer: Zeng Tianyi * Production Leader: Zhu Jin Shun * Vehicle Safety Manager: Zhang Wenxuan, Liu Yuyang | Costs:   * Tangible: $ 500,000 (Safety Testing) * Intangible: Employee Resistance/ Time Investment   Benefits:   * Tangible: $ 2,000,000 (Increased Sales $1,500,000 + Reduction in Repairs $500,000) * Intangible: Customer Trust/ Enhanced Brand Reputation/ Long-term Sustainability |

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| Reference (If any) [1] Daihatsu Motor Co., Ltd. (2023). Daihatsu Global Production Report 2023. [Report]. Osaka: Daihatsu Motor Co., Ltd.  [2]Toyota Motor Corporation. (2023). Toyota ASEAN Strategy Report 2023. [Report]. Tokyo: Toyota Motor Corporation.  [3] Japan Automobile Manufacturers Association [JAMA]. (2023). Automotive Industry Outlook in Japan 2023. [Report]. Tokyo: Japan Automobile Manufacturers Association.  [4] Asahi Shimbun. (2023, December). *We were pressured to skip retests to meet launch deadlines. Management prioritized speed over safety* [Interview with Daihatsu engineer]. Retrieved from [https://www.asahi.com](https://www.asahi.com/)  [5] NHK Investigation. (2023, December). *Weak whistleblower systems allow quality issues to escalate unnoticed* [Internal audit report]. Retrieved from [https://www.nhk.or.jp](https://www.nhk.or.jp/)  [6] A. Ahmad, M. Saad, J. Kim, D. Nyang and D. Mohaisen, "Performance Evaluation of Consensus Protocols in Blockchain-based Audit Systems," 2021 International Conference on Information Networking (ICOIN), Jeju Island, Korea (South), 2021, pp. 654-656, doi: 10.1109/ICOIN50884.2021.9333867. |

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