Ethical Management Self-Revolution of the Toyota-Daihatsu Cooperation

Presented by Group 24

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- Current States
- Proposed Initiatives
- Actions and Criteria
- Project Charter

The scandal of Toyota-Daihatsu

Facts, Standards, Actions & Evaluation

Executive Summary

- Current State
- Proposed Initiatives
- Plan of action and criteria for success
- Conclusion

Summary of Current State & Proposed Initiative

Current States: Daihatsu is a key Toyota subsidiary that plays an important role in Toyota’ s car manufacturing and market expansion. However, it was revealed that the company manipulated the safety tests for its cars of different models.

Proposed Initiatives: Our initiative addresses Daihatsu’ s ethical failures by integrating ethics theories, adopting ISO standards (e.g., whistleblowing, AI compliance), and corrective actions in product recall, transparent audits, and a whistleblowing platform. A short-term plan of actions and a long-term plan of standardization aim to restore trust, ensure accountability, and achieve full regulatory compliance.

Summary of Actions and Criteria & Conclusion

Actions and Criteria: We emphasize immediate corrective actions and an ethical after-sales workflow. The whistleblowing system will be enhanced. We also prioritize transparent auditing. Ethical AI systems will be integrated. A cultural transformation will be conducted. To ensure successful improvement, we set and quantify criteria for different actions. Details will be introduced later.

Conclusion: Our proposal for Daihatsu aims to restore brand credibility and ethical integrity through an innovative management system, regulatory frameworks, and technology like AI and blockchain. By emphasizing corrective actions, transparency, and cultural transformation, Daihatsu can enhance accountability, address challenges, and position itself as a leader in ethical automotive practices.

1. Current States

- The Toyota-Daihatsu Motor Cooperation
- The scandal of Daihatsu
- The causes of the scandal
- The impacts of the scandal

Current States

Toyota-Daihatsu Motor Cooperation

- Daihatsu produced more than 1.3 million vehicles in 2023
- A major player in the global market, especially in South-East Asia, where Daihatsu accounted for nearly 40 per cent of the Toyota Group's sales in the East Asia Rim.

2024年01月30日
ダイハツ工業株式会社

■実績　（単位：台）

		12月	前年同月比		1-12月累計	前年同期比
軽自動車		38,400	63.7%		599,036	98.0%
登録車		13,819	77.9%		221,929	86.0%
国内生産合計		52,219	66.9%		820,965	94.5%
海外生産合計		68,903	83.0%	★	848,265	102.4%
グローバル生産		121,122	75.2%		1,669,230	98.3%
軽自動車		41,067	88.3%		565,928	105.0%
登録車		1,903	71.1%		29,394	79.0%
国内販売合計		42,970	87.3%		595,322	103.3%
海外販売合計		46,375	97.6%	★	525,444	111.3%
グローバル販売		89,345	92.4%	★	1,120,766	106.9%
輸出合計		0	-		0	-

☆：当月最高　★：過去最高（月間・当該期間）

注）国内生産：ダイハツ車＋OEM車
海外生産：ダイハツ車＋プロドゥア＊車＋OEM車
海外販売：ダイハツ車＋プロドゥア＊車

（ご参考）プロドゥア*を除く生産・販売　*プロドゥア…マレーシアの連結子会社

海外生産合計		38,566	72.9%		504,865	93.6%
グローバル生産		90,785	69.3%		1,325,830	94.1%
海外販売合計		15,165	93.1%		195,119	102.7%
グローバル販売		58,135	88.8%		790,441	103.2%

Current States

The revealing of the scandal

- **April 2023**: revealed flawed side-collision tests for 4 overseas models; launched independent probe.
- **May 2023**: suspended production of Toyota Raize and Daihatsu Rocky after safety issues.
- **Dec 20, 2023**: president reported probe findings to Japan's transport ministry; announced global shipment halt and production pause.

Current States

What causes the scandal

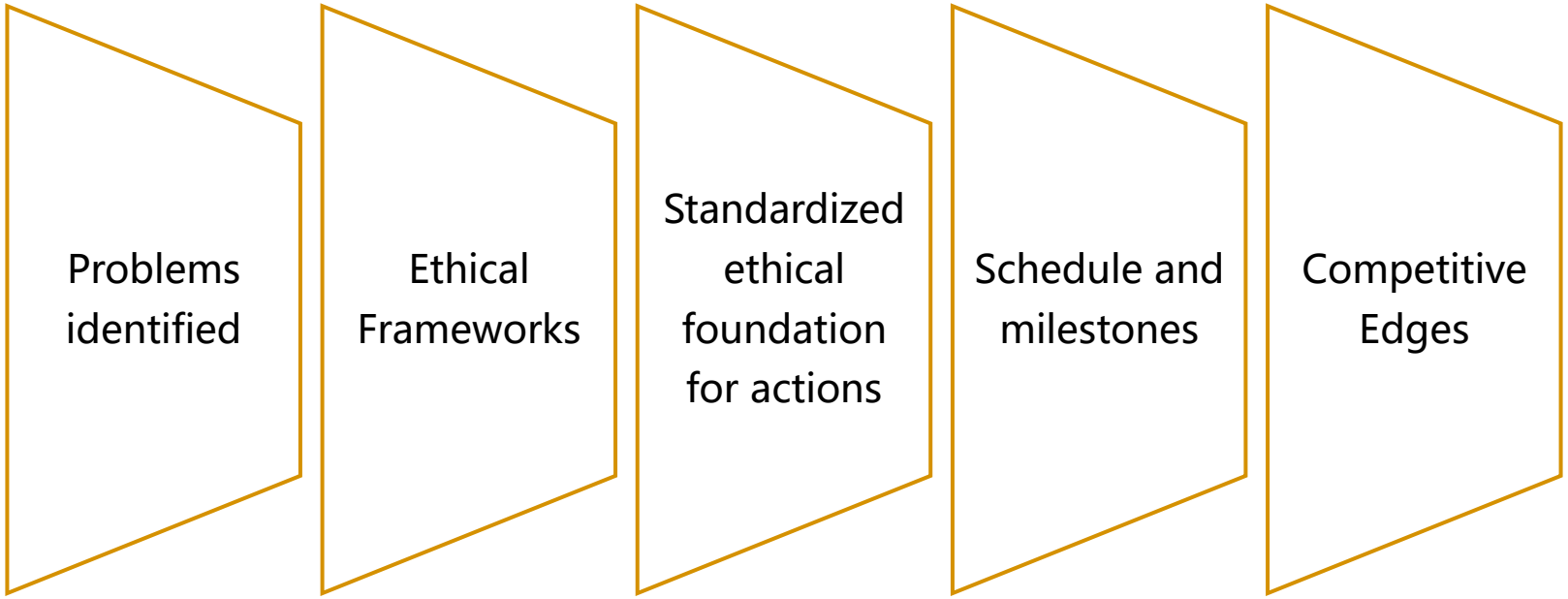
- Daihatsu prioritized cost reduction to maintain its dominant position in the market.
- They shortcut in safety testing and emissions compliance.
- The decentralized management of Toyota's head office allowed Daihatsu to operate with minimal supervision.

Current States

The impacts of the scandal

- Serious deterioration of the environment, turning into a disadvantage in the competition
- The sales of star products suffered a setback, and the market share was drastically reduced.
- Group credibility crisis, Toyota's overall credibility was questioned

2. Proposed Initiatives



Proposed Initiatives

Problems identified

HOW TO: ethical emergency handling of the scandal

LACK OF intra-organizational ethical management

LACK OF external accountability of ethical issues

INNOVATIONS in ethical organizational governance standards

We will have a 6-month plan of actions to handle them and a long-term schedule for standards

Daihatsu has flawed side-collision tests.
How about the emerging AI and information systems on automotive products?

Proposed Initiatives *Ethical Frameworks*

We should refer to the ethical frameworks – the foundational theories

Virtue Ethics

- Set appropriate subjective work ethics for each individual
- We need to enhance and expand our code of conduct for everyone in the cooperation

Deontological Ethics

- Seek ethical goals and constraints from objective standards and regular evaluation

Proposed Initiatives *Standardized foundation for actions*

Ethics in the ongoing recall procedures	→	*ISO 9001:2015 After-sales Service, Corrective Actions,* and *Customer Compliant, Suggestion and Survey*
Intra-organizational Reporting	→	*ISO 37002:2021 Whistleblowing Management System.*
External Accountability	→	*ISO 37001:2025 Anti-bribery Management Systems* *ISO 19011:2018 Guidelines for Auditing Management Systems*

Proposed Initiatives *Standardized foundation for actions*

Organizational governance specialized for automotive industry

→

International Automotive Task Force: IATF 16949:2016
ISO 37000:2021 Governance of Organizations
ISO 9001:2015 Quality Management Systems

AI and information systems on automotive products

→

International Automotive Task Force: IATF 16949:2016
SO42001:2023 Artificial Intelligence Management Systems
ISO 23894:2023 Guidance on Risk Management of AI Systems
ISO27001:2022 Information Security
ISO 5338:2023 AI System Life Cycle Processes

Standards can navigate us to efficient actions;
we are also expected to obtain ISO certifications.

Proposed Initiatives *Schedule*

Short-term
(in 6 months)

The plan of actions to the identified problems, detailed in the next section and project charter

Need timeline to obtain certification from current ISO standards

Medium-term
(in 1 year)

Design, conclude, and implement ethical organizational management standards specialized for automotive industry

Medium-term
(in 2 years)

Design, conclude, and implement ethical AI and information system management specialized for automotive products

Long-term
(final goal)

Continuous improvement, become a manufacturer with *zero ethical defects*

Timeline for Standards Certifications

Year 1

Ethical organizational management

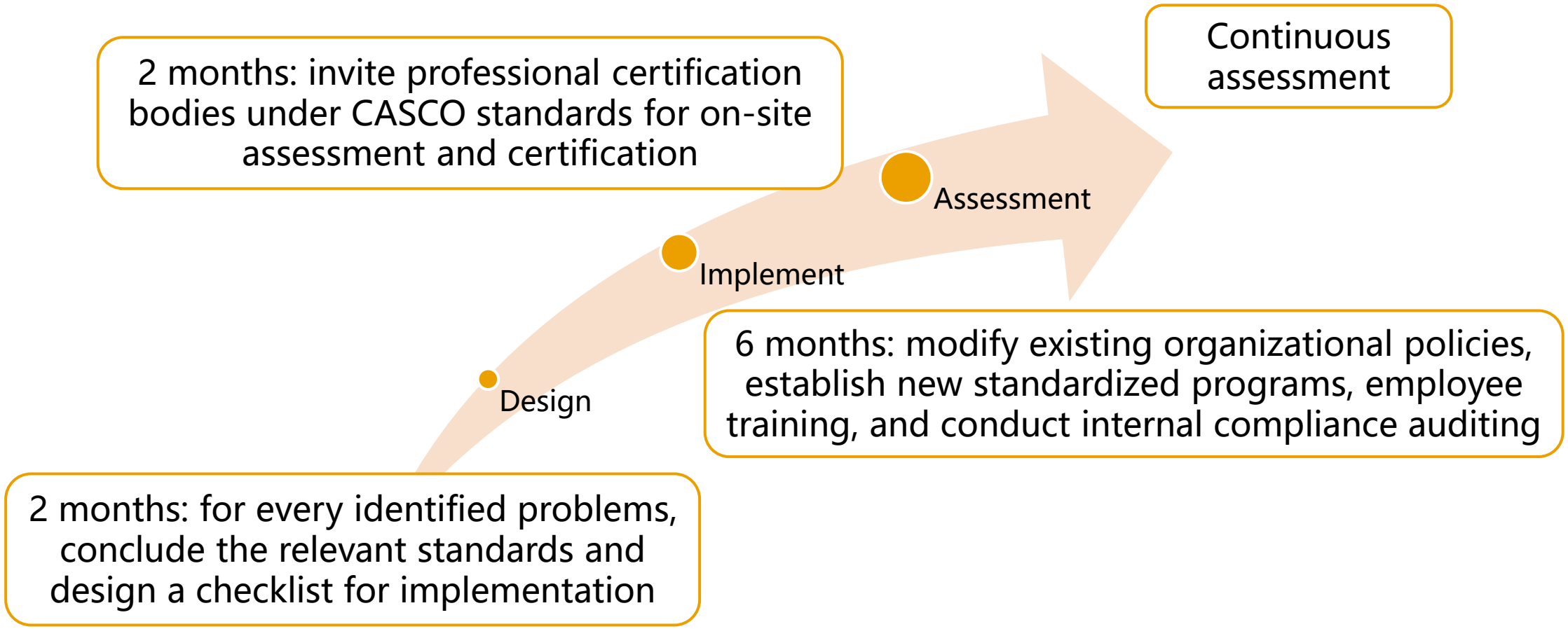
ISO 9001:2015
ISO 37002:2021
ISO 37001:2025
ISO 19011:2018
ISO 37000:2021
IATF 16949:2016

Year 2

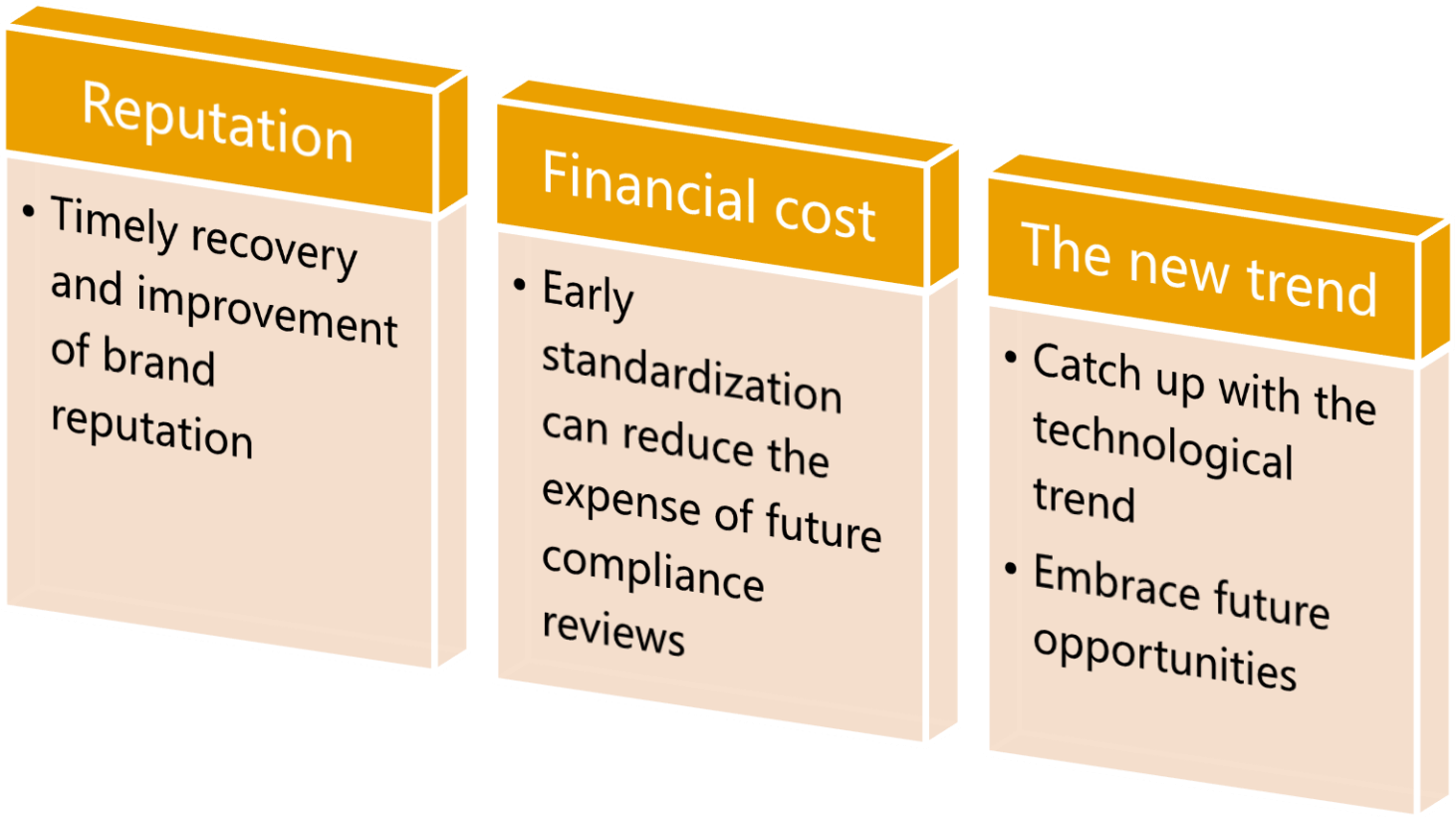
Ethical AI & information systems management

ISO 42001:2023
ISO 23894:2023
ISO 27001:2022
ISO 5338:2023
IATF 16949:2016

Two Phases for Standards Certifications For Each phase:



Proposed Initiatives *Competitive Edges*



3. Actions and Criteria

Proposed Initiatives *Schedule*

Short-term
(in 6 months)

The plan of actions to the identified problems, detailed in the next section and project charter

Need timeline to obtain certification from current ISO standards

Medium-term
(in 1 year)

Design, conclude, and implement ethical organizational management standards specialized for automotive industry

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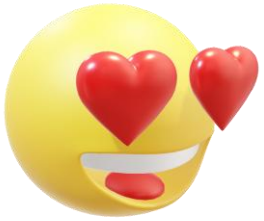


Plan of Actions

Immediate Corrective Actions & Ethical After-Sales Workflow

- Create after-sale workflow
- Automating customer complaint tracking

Whistleblowing & Governance Enhancement

- Build a transparent whitstleblowing platform accessible to all employees
- Provide training on anti-retaliation policies and ethical escalation protocols
- Establish an Ethics Oversight Committee with external auditors and employee representatives

Auditing & Public Transparency

- Partner with third-party auditors
- Integrate AI & blockchain into auditing system

Plan of Actions

Ethical AI & Information Systems Integration

- Ensure ethical AI adoption
- Integrating AI lifecycle standards into vehicle software development
- Offer special AI ethics training for employees

Cultural Transformation & Virtue Ethics

- Draft a "Safety First" code emphasizing accountability, transparency, and customer safety
- Reward teams for proactive safety improvements and ethical decision-making

Key Impacts

Technology:

- AI/ML will predict safety risks, automate recalls, and detect anomalies in testing
- Take over manual roles like testing

People:

- Employees may have initial resistance to new workflows
- Increasing need of human's ethical oversight and stakeholders' engagement
- Upskill opportunities in tech-skills and soft-skills

Key Impacts

Jobs & Management:

- Increasing accountability for ethical lapses
- Collaboration on decision-making with the Ethics Oversight Committee

Concerns:

- whistleblowers may fear retaliation if their identity is leaked
- Internal audits may lack objectivity if influenced by external incentives

Evaluation Criteria

Immediate Corrective Actions & Ethical after-Sales Workflow

- Reduction in recall resolution time (goal: 50% faster)
- 90% safty-related complaints are resolved within 24 hours by AI-powered automated system

Whistleblowing & Governance Enhancement

- 80% employees aware of the whistleblowing system
- Zero retaliation cases against whistleblowers
- All employees complete anti-retaliation and escalation protocol training.

Auditing & Public Transparency

- 100% of audits conducted by third parties with no conflicts of interest

Evaluation Criteria

Ethical AI & Information Systems Integration

- 100% compliance with ISO/IEC 42001 within 18 months
- Zero reported incidents of AI bias or safety risks in vehicle software
- 90% of AI developers complete ethics training and certification

Cultural Transformation & Virtue Ethics

- 80% employee participation in mandatory ethical training
- "Safety First" code embedded in 100% of performance reviews and team KPIs

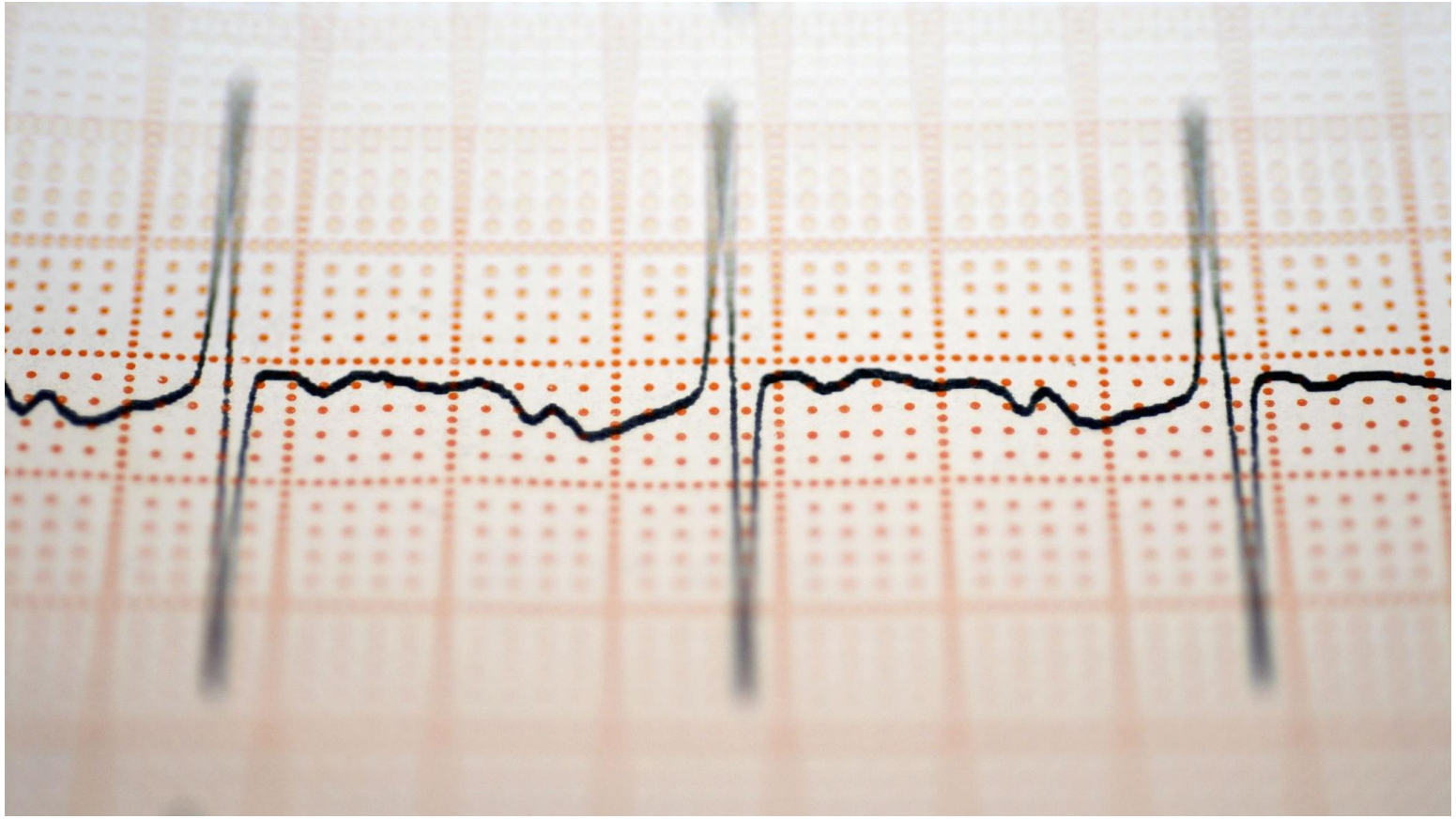
Evaluation Criteria

Standardization of Actions

- In the first year, all ISO-recognized certificates regarding updating ethical organizational governance for automotive industry should be obtained
- In the second year, all ISO-recognized certificates regarding ethical technological innovations management should be obtained
- All adapted standards should be evaluated and recertificated every five years by a third party

Appendix

Project Charter



Business Case & Goal

- Daihatsu Motors is facing manipulated safety test results that raised significant safety concerns, and an independent investigation has uncovered flaws in emissions and environmental data.
- **Goal**
- Enhance improved policies, quality assurance, regulatory compliance
- Prevent future similar incidents
- Restore customer trust in Daihatsu’ s products.

Milestone for *Plan of Actions*

Mar 19: Project Start (Define Project Charter)

Mar 26: Stakeholder Engagement and Initial Risk Assessment

Apr 10: Create After-Sale Workflow

Apr 24: Automating Customer Complaint Tracking

May 8: Whistleblowing & Governance Enhancement

May 22: Analyze Current Security Testing Data & Analyze Materials for Certification Alignment

Jun 5: Develop To-Be Safety Control and Testing Framework

Jun 19: Stakeholder Review and Feedback on Proposed Framework

Jun 26: Establish Ethics Oversight Committee

Jul 10: Testing of Enhanced Safety Measures & Integrate AI & Blockchain into Auditing System

Jul 24: Training and Preparation for Rollout

Aug 7: Rollout Enhanced Security Controls, Testing Protocols, and Whistleblowing Platform

Aug 21: Align with Initial Certification: ISO 42001

Sep 4: Evaluate and Improve Security Measures and Production Quality

Sep 18: Project Review, Quality/Safety Audit, and Establish Medium/Long-Term Continuous Improvement Plan

Appendix- The Team

Team Leader:

- Wang Ruijie

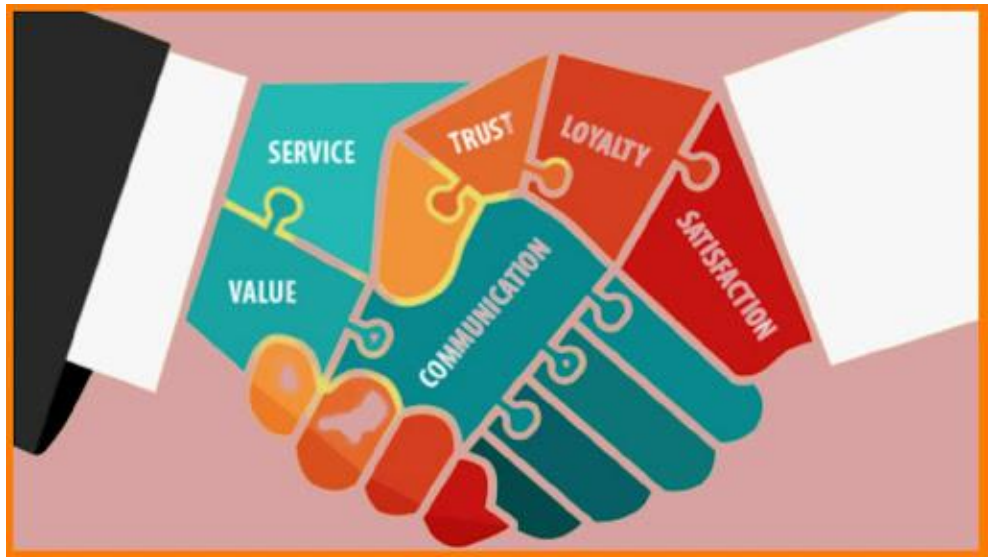
Sponsor:

- Toyota (Parent Company)

Members:

- Security Test Officer: Zeng Tianyi
- Production Leader: Zhu Jin Shun
- Vehicle Safety Manager: Zhang Wenxuan, Liu Yuyang

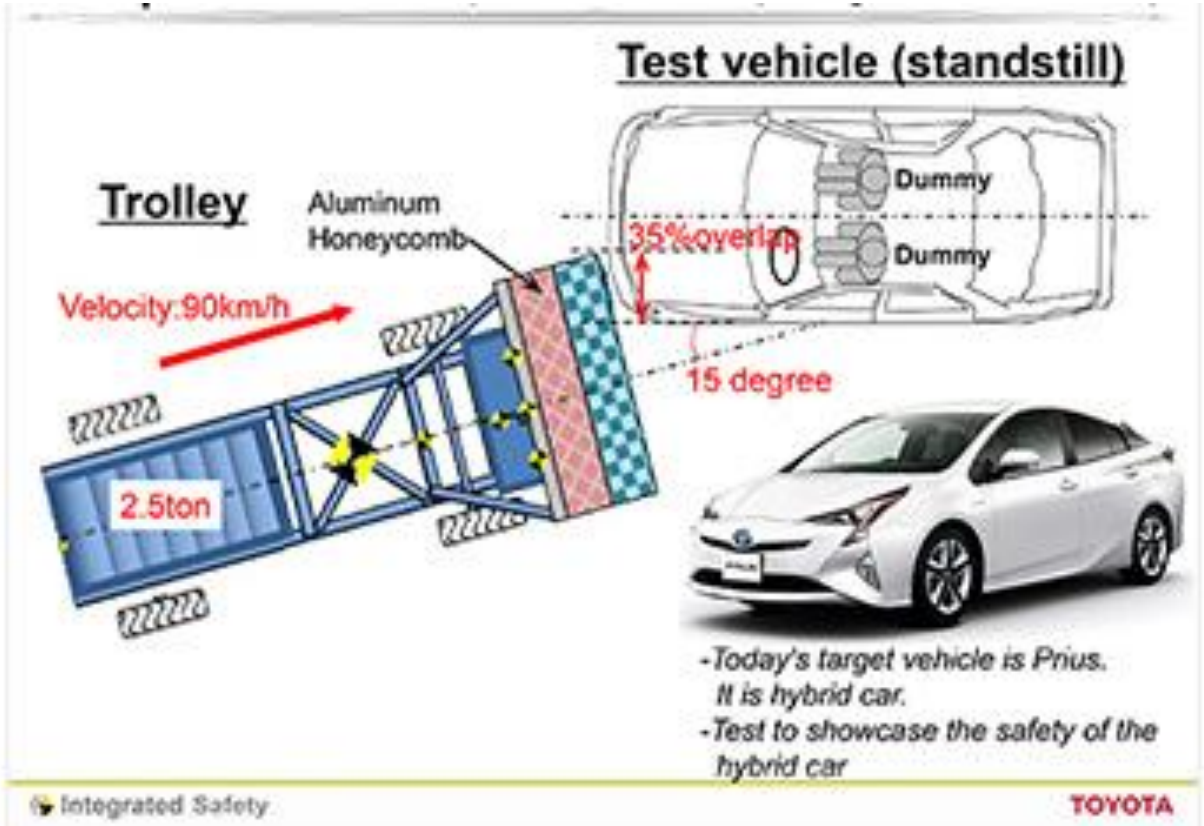
Appendix- Intangible Costs and Benefits



- <u>Costs:</u>
- Employee Resistance
- Time Investment
- Market Position and Competitiveness

- <u>Benefits:</u>
- Customer Trust
- Enhanced Brand Reputation
- Long-term Sustainability

Appendix- Detailed Tangible Costs Breakdown



- **Increased Material Testing:**
- **Definition:** Additional testing to ensure materials meet industry or regulatory standards.
- **Breakdown:**
- 30 tests (QTY) include stress tests, chemical analysis, durability checks, or safety validations.
- **$5,000 per test covers:**
- Lab fees (third-party or in-house).
- Sample preparation and destruction.
- Compliance documentation.
- **Total Cost: 30QTY × $5,000 = $150,000**

Appendix- Detailed Tangible Costs Breakdown

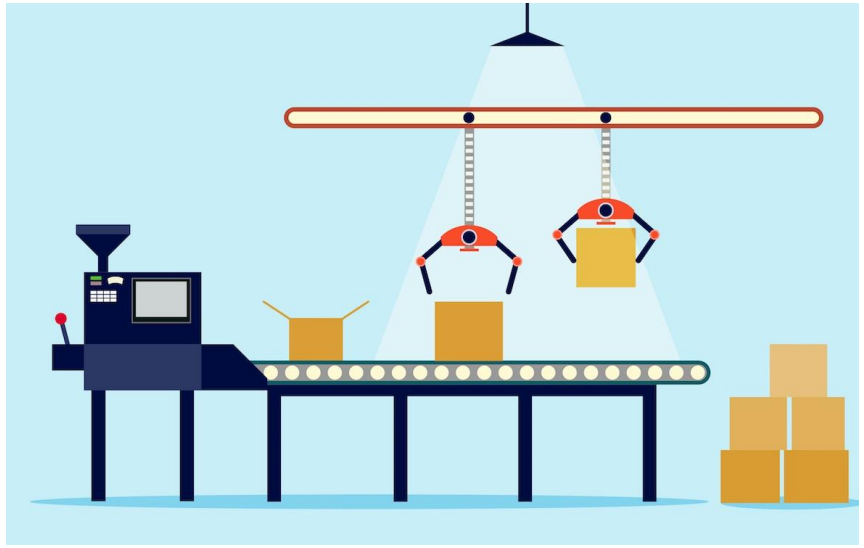
- **Manpower Fees for Upgrading**
- **Definition:** Costs for hiring specialists to modify software, hardware, or processes.
- **Breakdown:**
- 10 engineers/programmers (QTY) for tasks like:
- Software updates for compliance (e.g., cybersecurity, data handling).
- Hardware redesign for improved safety/reliability.
- **$15,000 per unit reflects:**
- Salaries for skilled professionals (e.g., testing engineers, AI ethics specialists).
- Contracted consultants for ISO implementation.
- **Total Cost: 10QTY × $15,000 = $150,000**

Appendix- Detailed Tangible Costs Breakdown

- **Initial Certification Costs**
- **Definition:** Fees for obtaining mandatory or voluntary certifications.
- **Breakdown:**
- **Initial certifications/licenses (QTY), such as:**
- ISO 42001 (AI governance ~$20,000–$50,000 depending on org size).
- **$50,000 per unit includes:**
- Application and audit fees.
- Consultant fees for documentation prep.
- Surveillance audits (annual renewals).
- **Total Cost: 1QTY × $50,000 = $50,000**

Appendix- Detailed Tangible Costs Breakdown

- **Production Delay Cost**
- **Definition:** Financial impact of missing deadlines due to certification delays, supply issues, or redesigns.
- **Breakdown:**
- **1 delay event (QTY) caused by:**
- Rework after failed material tests.
- **$150,000 cost covers:**
- Penalties for late delivery.
- Idle production line costs.
- Expedited shipping to compensate.
- **Total Cost: 1QTY × $150,000 = $150,000**



Appendix- Table Tangible Costs Breakdown (Short-term)

Fees	QTY	Price Per Unit	Total Budget
Increased Material Testing	30	$5000	$150,000
Manpower Fees for Upgrading (Testing Engineers/App Programmer)	10	$15,000	$150,000
Initial Certification Costs	1	$50,000	$50,000
Production Delay Cost	1	$150,000	$150,000
		Subtotal	HK$ 500,000

Appendix- Detailed Tangible Costs Medium/Long-Term

Employees	Stage 1+2 audit	Surveillance audit
2-200	$10-15k	$5-10k
200-500	$20-25k	$10-15k
500-1000	$25-35k	$15-20k
1000+	$35-50k	$30-40k

Example cost of ISO 27001

- **Medium/Long Term Certification Costs**
- **Definition:** Fees for obtaining mandatory or voluntary certifications.
- **Planning to earn certifications/licenses:**
- ISO 9001: HKD 50,000 - 150,000
- ISO 37002: HKD 30,000 - 100,000
- ISO 37001: HKD 80,000 - 200,000
- ISO 19011: HKD 20,000 - 50,000
- ISO 37000: HKD 50,000 - 150,000
- IATF 16949: HKD 100,000 - 300,000
- ISO 42001: HKD 50,000 - 150,000
- ISO 23894: HKD 40,000 - 120,000
- ISO 27001: HKD 80,000 - 250,000
- ISO 5338: HKD 50,000 - 150,000
- **Total Estimated Cost: HKD 450,000 - 1,520,000**

Appendix- Tangible Benefits Breakdown

Benefits	QTY	Price Per Unit	Total Budget
Increased Revenue from Market Share	20	$50,000	$1,000,000
Reduced Liability Costs	10	$20,000	$200,000
Avoidance of Recall Costs	30	$10,000	$300,000
Operational Cost Savings	20	$20,000	$400,000
Tax Incentives and Grants	1	$100,000	$100,000
		Subtotal	HK$ 2,000,000

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