

Mandatory Intellectual Property Sharing for Motor Vehicle Road Safety

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I. Introduction

Australian roads currently consists of motor vehicles of all makes and models, increasingly made by manufacturers based overseas. Whilst Australian market is not adversary to such open markets in the automotive sector, however, precautions have to be taken that no safety aspects are compromised, when such foreign operators are the major stakeholders for the running automobiles on Australian roads.

With the developing 'Intellectual Property' economic war that countries have unleashed upon each other, companies, especially the ones who have any engineering or innovation aspect to their business model, are becoming increasingly protective to disclose the particular innovation or engineered solution that they have contained in the particular technology. Here, the stated risk by such companies is that by disclosing or making available publicly, the intricate or latest technology that they have adopted in their engineering, the particular Intellectual Property that is researched and produced, would have a shorter financial lifespan, including a much lesser payout from such Research and Development costs that the company had incurred to develop such a product.

Also, it is argued that the ordinary road-side mechanic may not have the adequate tools and utilities required to appropriately and adequately fix the vehicle. Hence, it is safest to visit the Service Centre of the manufacturer to undertake the required vehicle checks.

II. Risks of Protected Intellectual Property

When a particular Motor Vehicle manufacturer ‘protects’ its Intellectual Property, it increases the risk of operations in Australian roads. This can be allocated to the fact that when the motor vehicle has any problems or issues that the driver may feel should be checked by a mechanic, the availability of such authorised and qualified mechanic may not be immediately accessible to most Australian drivers.

With the vast array of Australian road networks, that increasingly consists of roads in rural and regional Australia, where the particular foreign company may not have an office or service centre, puts the Australian consumer in a state where they are driving such vehicles at their own risk, and without the ability to have an automobile expert assure that their vehicle is safe to drive. Thereby, the driver of such vehicles continue to drive such unsafe vehicles, owing to the fact that they do not have a mechanic who is qualified and has the adequate and appropriate knowledge, to undertake all aspects of safety for the driven vehicle.

Conversely, the driver may choose to visit a local mechanic, who may not have the adequate resources, in terms of such protected Intellectual Property by the manufacturer, to adequately assure the safety of such a vehicle. In such cases, the mechanic would apply a ‘guess’ as to the working mechanics of the vehicle and pass such safety checks, still causing the driver to drive an adequately and appropriately safety checked vehicle, despite the driver’s best efforts and intentions, and indeed the costs.

An added risk to such an ad-hoc and guessed mechanic work, undertaken by an ‘unaccredited’ mechanic, is that the customer potentially becomes more at a risk of the vehicle breakdown, when carrying the dual risks of the car mis-functioning, coupled with a guess work that has been applied to the vehicle by such a mechanic, who did not have the adequate training.

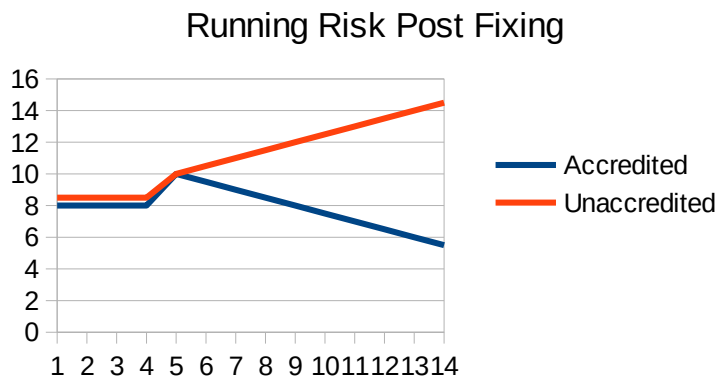


Figure 1: Motor Vehicle Driving Risk Post Mechanic Visit

Hence, the loss to the Customer is increased exponentially as:

- a. Costs are paid for fixing the vehicle
- b. The Driving Risk for accidents increases post visit

As the latest technology that is used in the design and development of latest motor vehicles often consist of computerisation and artificial intelligence embedded in the mechatronic product, it's manual fixing by any unauthorized or untrained mechanic, would largely break the existing system design of the vehicle, that is integrated with the mechanical as well as computerised solution. Therefore, it should be assumed for the safety assurance of such vehicles, that the corresponding risk of the particular vehicle is indeed increased as such a mechanic would have to 'hack' into the engineered solution by using such manual and ad-hoc fixes by an untrained personnel.

III. Recommendations

It is suggested that for any manufacturer to sell motor vehicles in Australia, appropriate and adequate training be provided to approved motor mechanics to fix such vehicles.

a. Dissolve Black-Monopoly of After-Sale Service

In the Australian market there is a monopoly of the manufacturer to fix the motor vehicle of its own brand. However, the after-market for motor vehicle operations, post selling the vehicle, is inappropriate to be monopolized by the manufacturer. However, manufacturers have implemented a 'black-monopoly' by introducing aspects of computerisation and artificial intelligence, that they do not disclose to protect any such IP.

Manufacturers should be required to disclose any used Intellectual Property that may affect the safety of its driving on Australian roads, including the use of any additional machines, software, etc., that is currently used by the manufacturer to analyse and approve the fixing of the vehicle including its safety checks.

b. Provide Adequate Personnel Training

Manufacturers of motor vehicles should be mandatorily required to train Australian licensed motor mechanics, to undertake analysis and rectification of issues of driving their manufactured vehicle, especially with due regards to the safety of the vehicle on Australian roads.

Regular courses, and handover of critical IP, that affects Australian Road Safety should be managed and organized by a responsible manufacturer, to ensure and eliminate accidents on Australian roads.

By implementing such regulatory requirements, the safety of motor vehicles on Australian roads will be better ensured, preventing further accidents, injuries and loss of life, that could be caused by such mechanically un-worthy vehicles.