

Fleet Conference  
& Exhibition

MAY 23-24  
ROSEHILL GARDENS  
RACECOURSE SYDNEY

AND FLEET AWARDS

# Critical Thinking

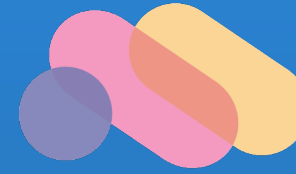
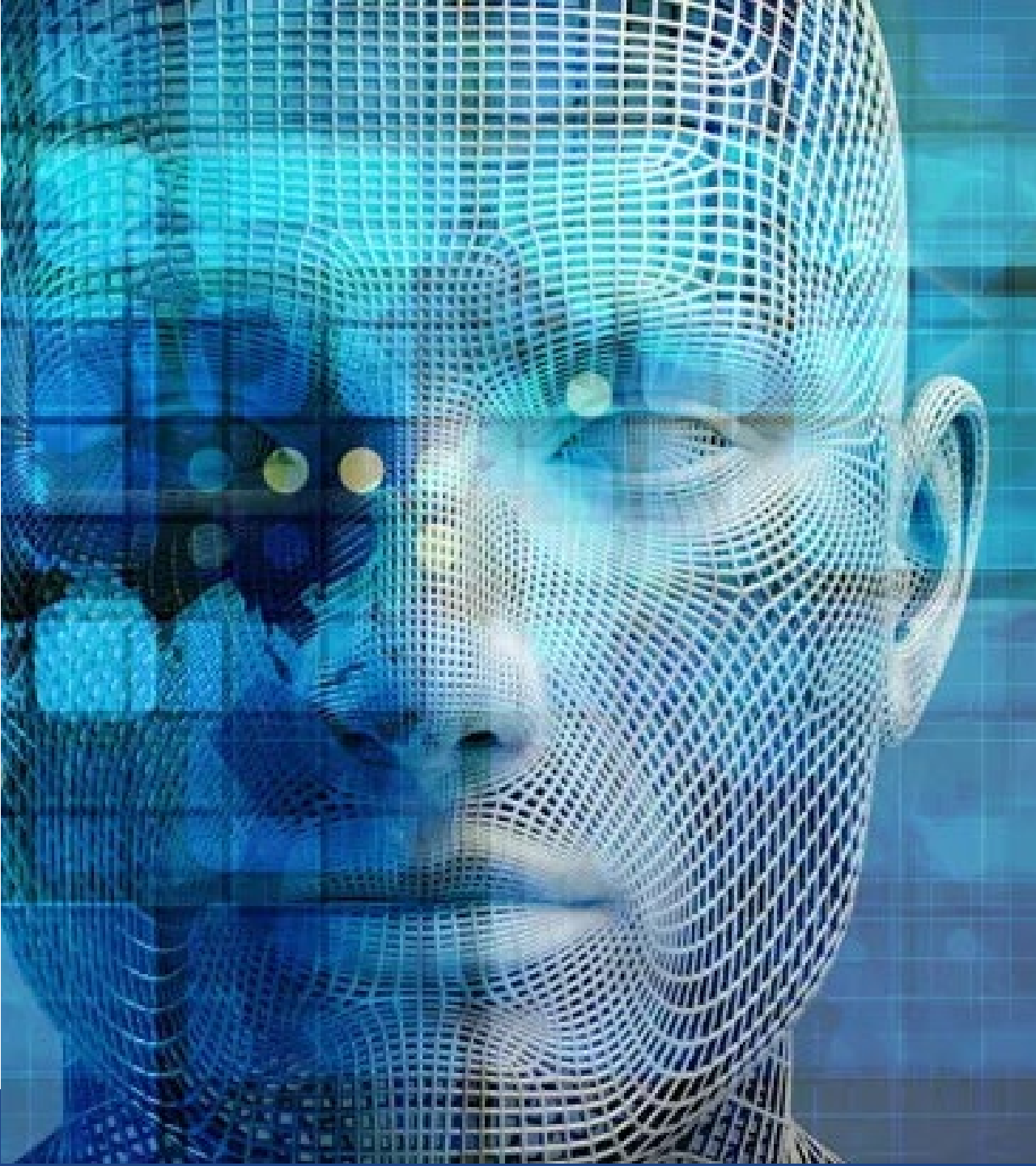
## Are You Equipped for Success

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Chief Customer Officer

GEOTAB



**2023 Australasian  
Fleet Conference  
& Exhibition**  
AND FLEET AWARDS

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# The Unexpected Decision

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A journey in critical thinking in  
fleet management



# Decisions You Make



When do you feel in control and proactive in your decision making versus when are decisions made for you.

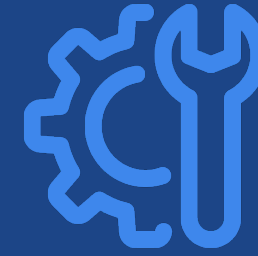
Who is making those decisions?

Are algorithms making the decisions?

Who is accountable for decisions when multiple stakeholders provide input?



# It started with a scan tool



Scan tools became connected to mobile device devices (untethered from the vehicle) in 1999 (Palm Pilot)

Scan tools enabled faster diagnosis and repair of a vehicle

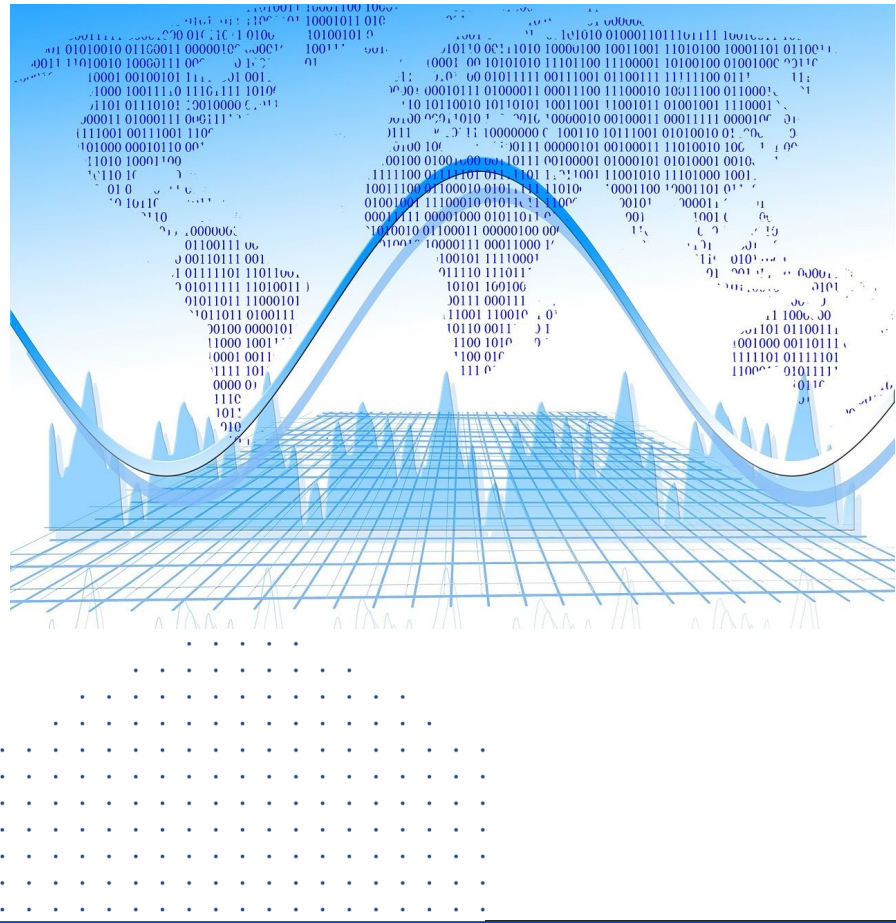
Mechanics evolved, machines evolved.

Routine maintenance evolved to Predictive Maintenance





## Data was siloed in fleet



Business problems evolved with the technology from reducing the number of days a vehicle was in the shop to reducing the number of spare vehicles required by keeping the vehicles maintained and on the road - repairs being done prescriptively as fault codes were detected early, light maintenance was done avoiding expensive downtime.



# Then came GPS

The introduction of GPS location, navigation, route planning increased the data stakeholders beyond vehicle specification and balancing the fleet maintenance annual budget.




# Then came safety sensors

The introduction of safety sensors including speed, driver seat belt use, low speed vehicle damage enabled businesses who self-insure to choose whether or not they wanted to reinforce (or introduce) driving policies along with what to do if the employees ignored the policy. Insurance organizations sought out 2 strategies with the tech - how to better underwrite risk to provide competitively priced insurance for businesses whose drivers were compliant - and how to manage claims more effectively when damage or personal injury claims did happen.



## We are at a point of technology convergence



We are at a moment of convergence that is sometimes difficult to navigate but essential to keep our eyes open and heads up to comprehend what's going around us.

Vehicles are producing data and OEMs are soliciting your loyalty to one brand

Electric is coming - infrastructure is lagging opportunity

Assisted emergency braking is now - fully autonomous is not



# Fleet's role is evolving as strategic



Drivers are leaving, employees are now in vehicle - it's about the activity at the destination - not the journey

Cellular access is a dependency

Distracted driving is only going to get worse

Business vehicles are company strategic infrastructure as much as offices or warehouses

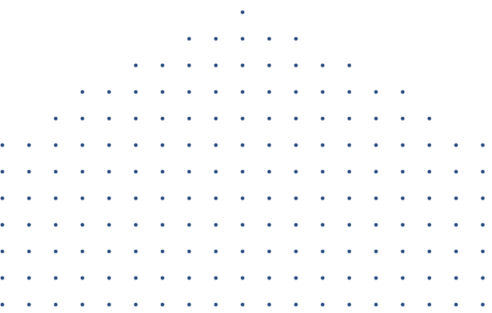
# Business Objectives are #1

Maximize use of resources at destinations

Driving time is unproductive - move infrastructure closer to consumption

Centralization of reporting from all company assets

Reducing supplier networks to interoperable data



# Case Study # 1



Fleet with its own maintenance technicians

Fleet makes over 50 stops daily (ignition on/off)

Fleet drives 4 hours daily, 4 hours with customers, 16 hours in company facility

Field Employees both drive and perform delivery of services

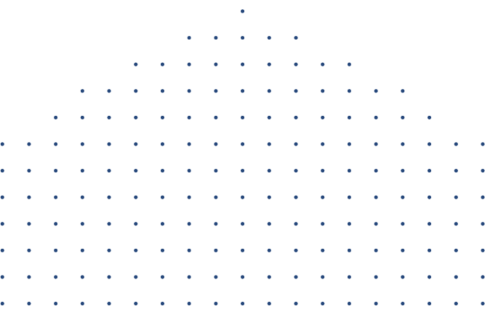
Facility Employees are in 2 groups - reloading materials for next day, vehicle maintenance

Company has not invested in automation solutions, relies on people efficiency and reliability of vehicles

Competitors have invested heavily in automation and are more profitable on a revenue per employee basis

# Critical Thinking

Company Focus is on uptime of equipment while maximizing employee productivity without employees cutting corners on safety





# Gather information

Measure All Maintenance Costs (labour and materials)

12V Battery Health

Alternator/Starter Replacement

Vehicle / Technician Pool Assignment (vs FIFO)

Roadside Assistance Forensic Data Discovery

Prescriptive Maintenance vs Routine 3 Preventative  
Maintenance Scans

Time Study

Human Resources Policy Review / Employee Engagement



# Gather more information

Vehicle Specification

Cube vs weight vs fuel (refuel)

Warehouse Infrastructure Review

Move goods closer to service delivery zones

Impact on Infrastructure, Impact on Vehicle Selection,  
Impact on Employee Qualifications



# Case Study #2



Fleet operating with an average 6 MPG vehicles

Employees allowed to take company vehicles home

Company fuel card issued to each vehicle

Employees assigned daily work - employees assumed start time is to be at first Customer by 9AM and last customer by 430 - overtime is exception with no compensation for traffic delays

Vehicle specified 4 star crash rated, company insures its fleets

Employees need to come to an company location at least once per week for stock replenishment, training and other admin functions

# Case Study #3



Business spends 5% of company revenue on insurance claims, vehicle damage, personal injury and workplace compensation

Company CEO believes they are out of business if they don't control this cost

Company hires Loss Control VP, underwrites their own risk for vehicle damage and personal injury

Measuring all aspects of every cost

Reviews driver scores and incentives

Reviews human behaviours that could be trained to reduce severity of crashes (ex: speed and seatbelt)



# Ask Questions



Asking Questions is the future career path for fleet and infrastructure successfully working with technology departments - including generative AI

Know your business - know its priorities

Know your Customers - users of your goods - know how they are evolving

Survey them, talk with them, spend a day in the life with your customers

# Introduce Benchmarking

In the past, all you could compare your performance to was against your own fleet (other vehicles or employee efficiency in your fleet) - now not only can you benchmark - but -

*algorithms are benchmarking for you*

Take a moment and think about those algorithms - developed and operating with parameters you may not know, you can't adjust yourself - you can accept or reject

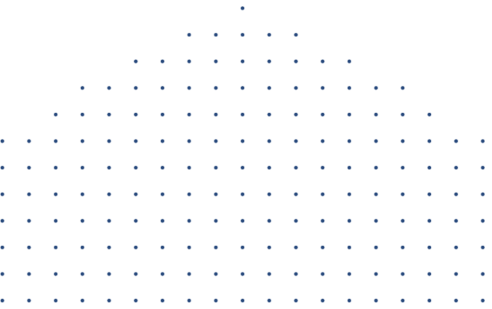
It is better for you to accept the suggestion of an algorithm or to create your own solutions from your research?



# Example



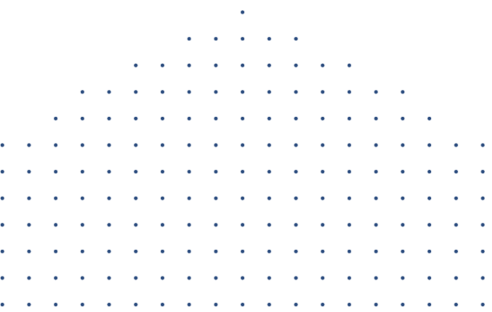
Hey Colin, I noticed that 10 of your vehicles drove through the same traffic intersection recently that has been identified as being at high risk of collisions by local police reports, would you like to block that intersection from future routing of your vehicles?



# Example



Hi Again Colin, I've identified a vehicle in your fleet whose battery I believe will fail in the next week, I suggest you schedule it to have the battery replaced tomorrow to avoid downtime and improve the safety of your employee. We have a maintenance contract with a local service location, can I try to book something in their scheduling calendar directly?





# Example

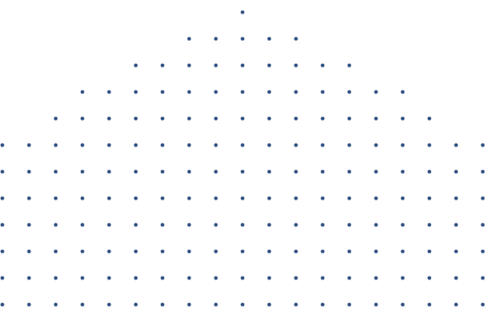


Hi Colin, I've been thinking about electric vehicles and studied the current vehicles we have. I have found 10 vehicles whose range and parking location would be ideal for a fully electric vehicle. Fully electric vehicles operate about \$1,500 less expensively than gas or diesel vehicles, can I suggest some models of electric vehicle for you to consider?

# Example

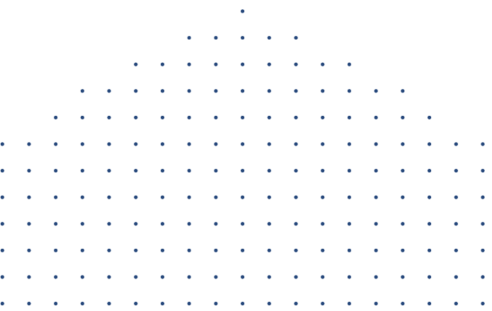


Me Again Colin, studying all of the trips our vehicles have driven in the past 12 weeks and I've found a lot of wasted miles. Wasted miles not only costs us wear and tear on the vehicles, but a waste in gas and most importantly wasted time when our employees could be more productive. I've noticed that we could actually reduce our overall vehicles by 5% if we reduced the waste. Would you like to share this information with Finance?



# Chat GPT - Gas lighting/Hallucinating

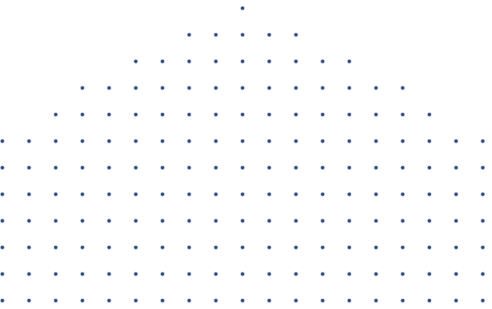
Here are some examples of challenges that Australian fleet managers may face with respect to critical thinking:



# Chat GPT - Analyzing Data



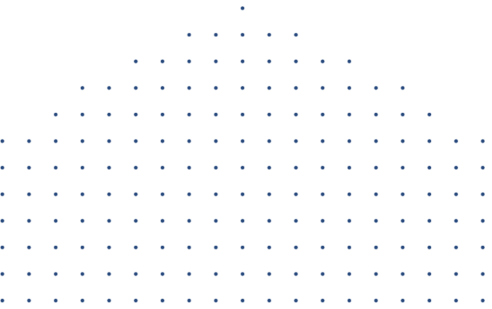
Fleet managers need to collect and analyze data from various sources, including vehicle telematics systems, driver reports, and financial data. They must be able to identify patterns and trends in the data, and use this information to make informed decisions about maintenance, routing, and other operational matters.



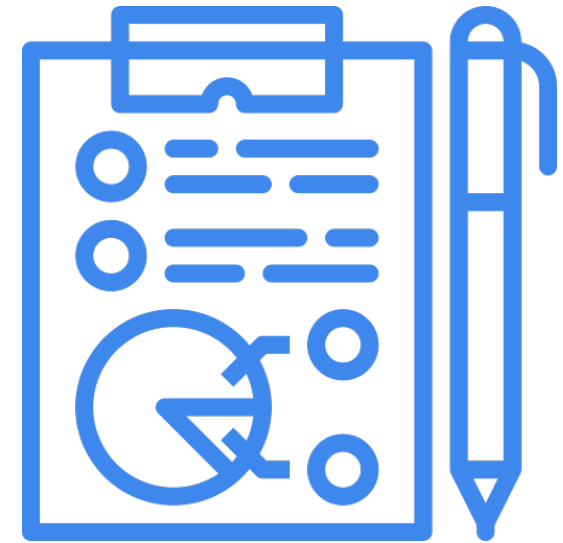
# Chat GPT - Managing Risk



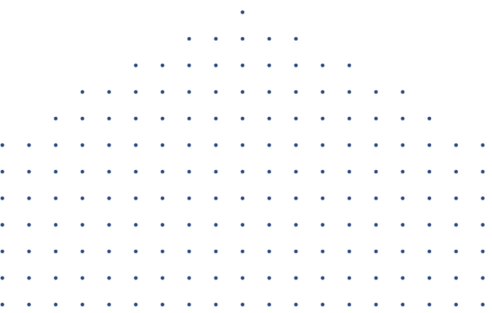
Fleet managers must be able to assess and manage risk in a constantly changing environment. This includes identifying potential hazards on the road, evaluating the safety performance of drivers, and ensuring that vehicles are properly maintained and serviced. Effective risk management requires critical thinking skills such as problem-solving, decision-making, and prioritization.



# Chat GPT - Strategic Planning



Fleet managers must be able to think strategically about the long-term direction of the fleet. This may involve identifying opportunities for growth, exploring new technologies and business models, and developing contingency plans for unexpected events. Strategic thinking requires the ability to analyze complex information, synthesize insights, and make sound judgments about the future.





# Chat GPT - Resolving Conflict

Fleet managers must be able to navigate conflicts and disputes between drivers, customers, and other stakeholders. This requires the ability to listen actively, communicate clearly, and find creative solutions that satisfy all parties. Conflict resolution requires critical thinking skills such as negotiation, problem-solving, and empathy.



# Chat GPT - Adapting to Change

Finally, fleet managers must be able to adapt to change in a rapidly evolving industry. This may involve responding to new regulations, incorporating new technologies, or adjusting to shifts in customer demand. Adapting to change requires critical thinking skills such as flexibility, resilience, and the ability to learn quickly.



# What do you think?



Happy to share thoughts, concerns as our incredibly strategic fleet management industry evolves.

## **Colin Sutherland**

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