

by SMARTCAP

Queensland Trucking Association Final Pilot Review

February 17th, 2020

Pilot Overview

Results from 5th February 2019 to 14th February 2020

- 18447.29+ hours to date
- 7 Companies
- 71 Drivers and 4 Control Room Operators
- 1252 Fatigue Alarms (Alarm rate of 0.068)
- 1 Fatigue alarm every 14.70 LifeBand hours
- 96.6% Early Warning Actions effective at preventing Fatigue Alarm



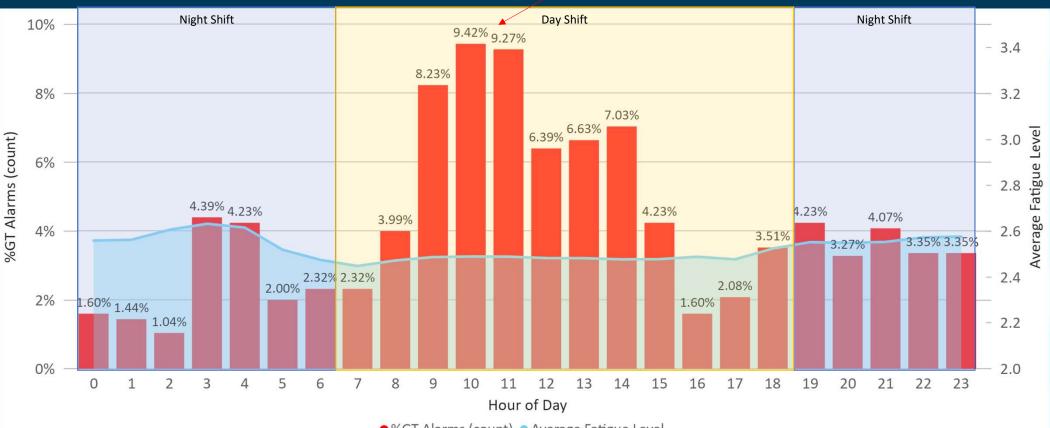


Identification of Site Fatigue Risk

Fatigue Alarm Profile

46.97% of Alarms occurring during day shift (9am to 2pm)

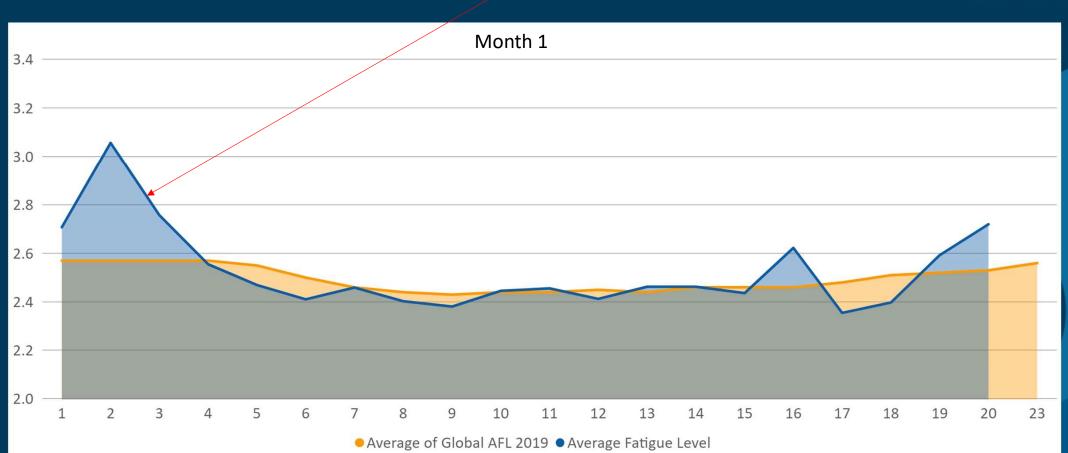
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• %GT Alarms (count) • Average Fatigue Level

Fatigue Profile Comparison

Day shift site average fatigue largely below global AFL. Night shift above.

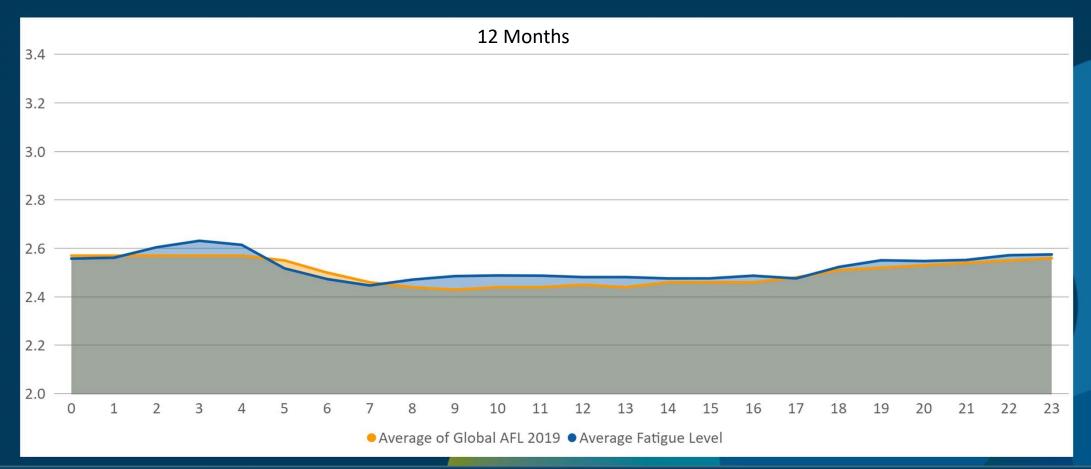


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Fatigue Profile Comparison

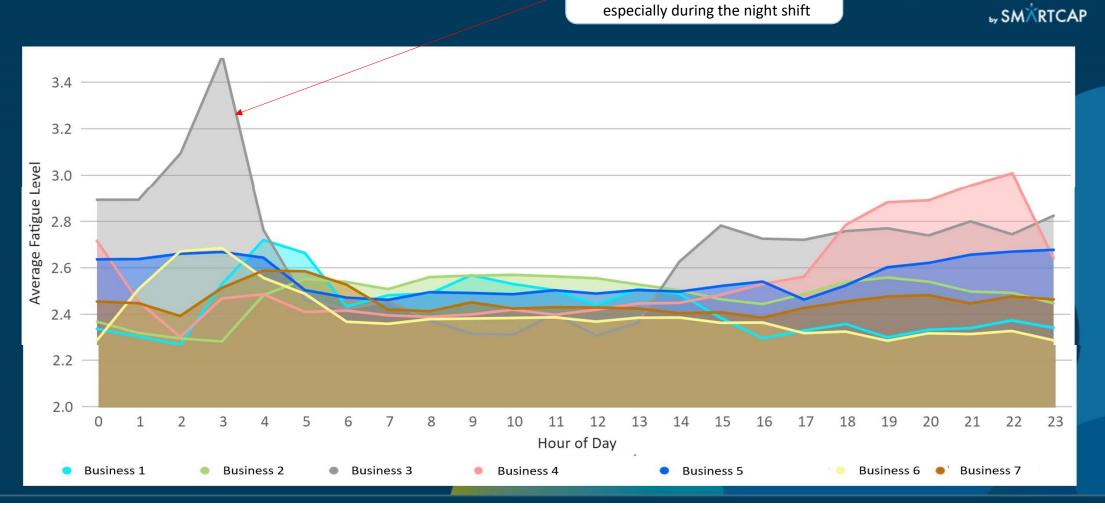
Site average fatigue close to global average fatigue by hour of day





Fatigue Profile Comparison

One business reported a higher average fatigue compared to other teams, especially during the night shift





Reduction of Fatigue Risk

Alert, Alarm Counts and LifeBand Hours

- 2,000 Alarms (count) and Alerts (count) - 1,500 LifeBand Hours - 1,000 - 500 Month

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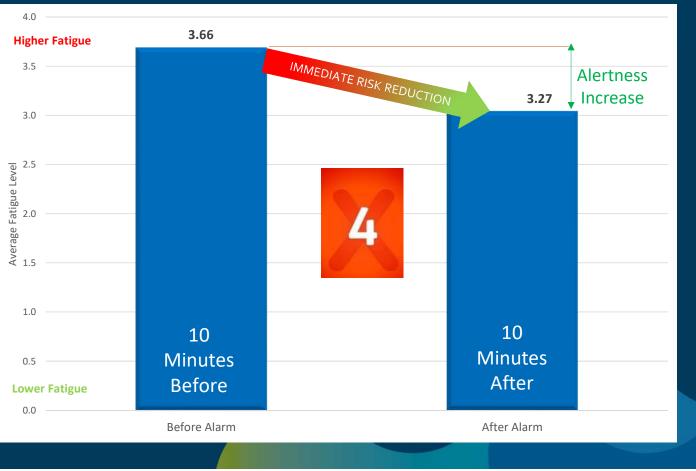
Alarms (count)

Overall Alarm Response



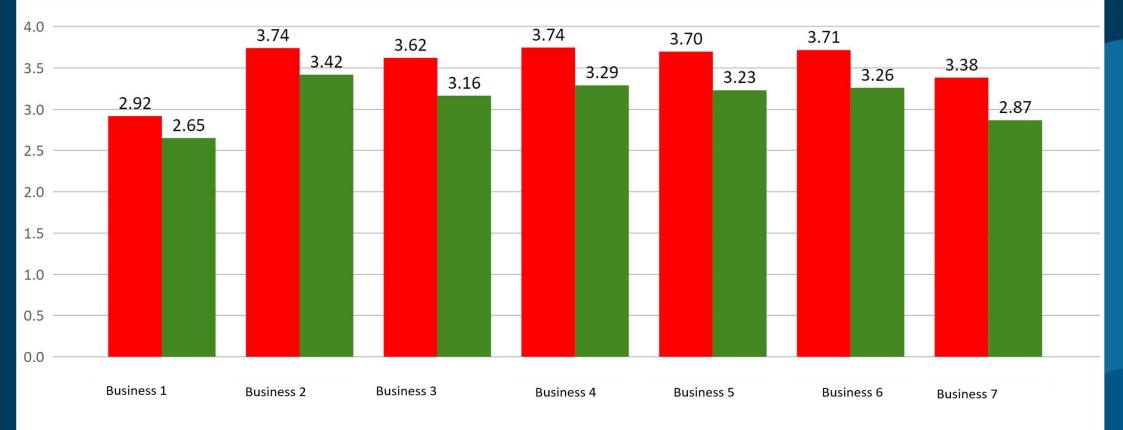
AFL Before Alarms: Average Fatigue Level before Fatigue Alarm AFL After Alarms: Average

Fatigue Level after Fatigue Alarm



Alarm Response by Companies

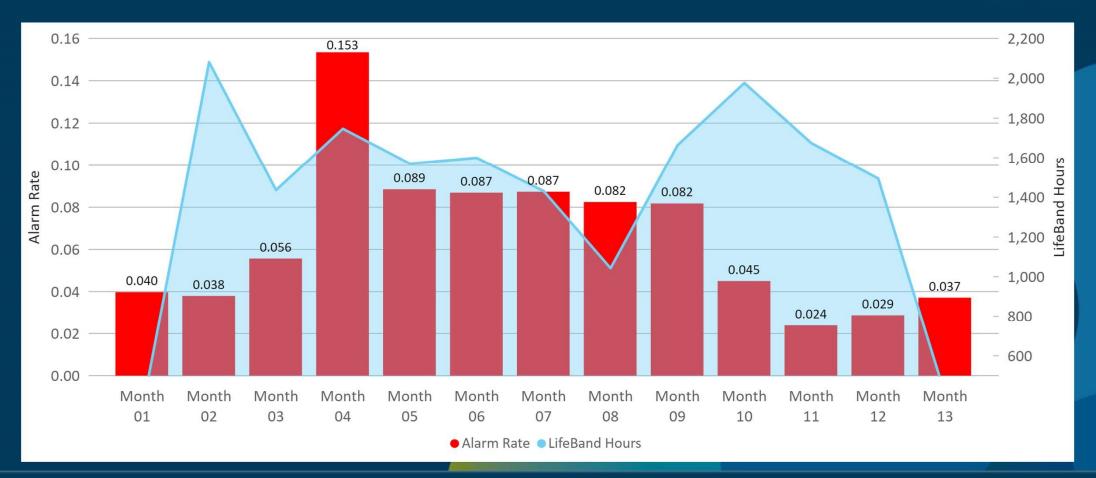




Alarm Rate by Month

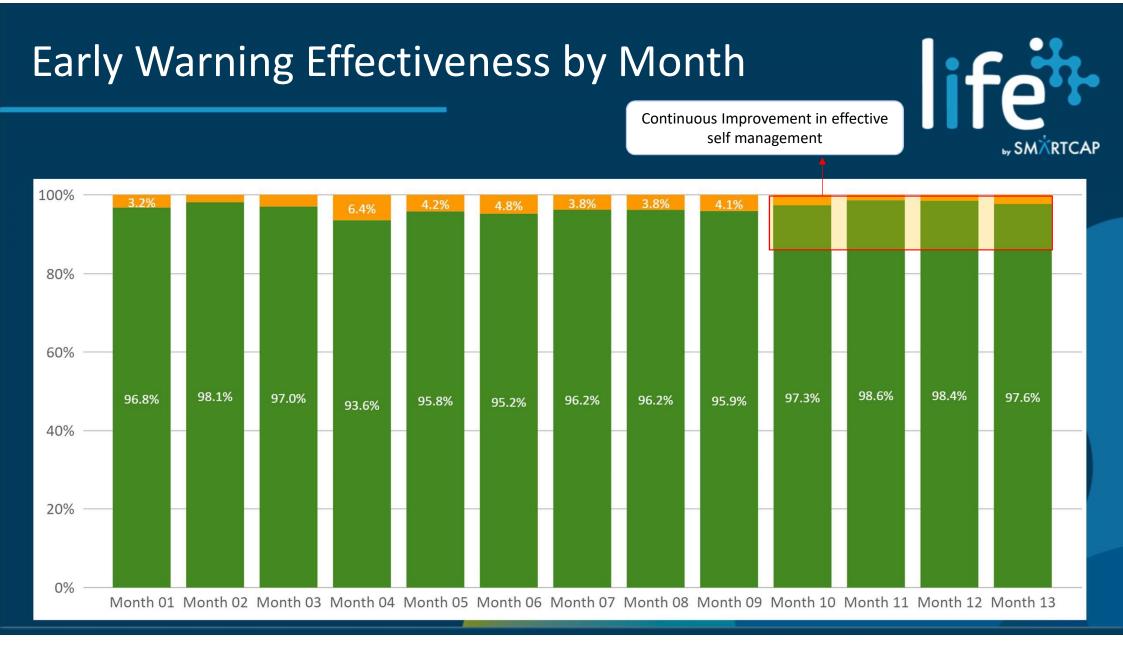
Reduced alarm rates in last guarter

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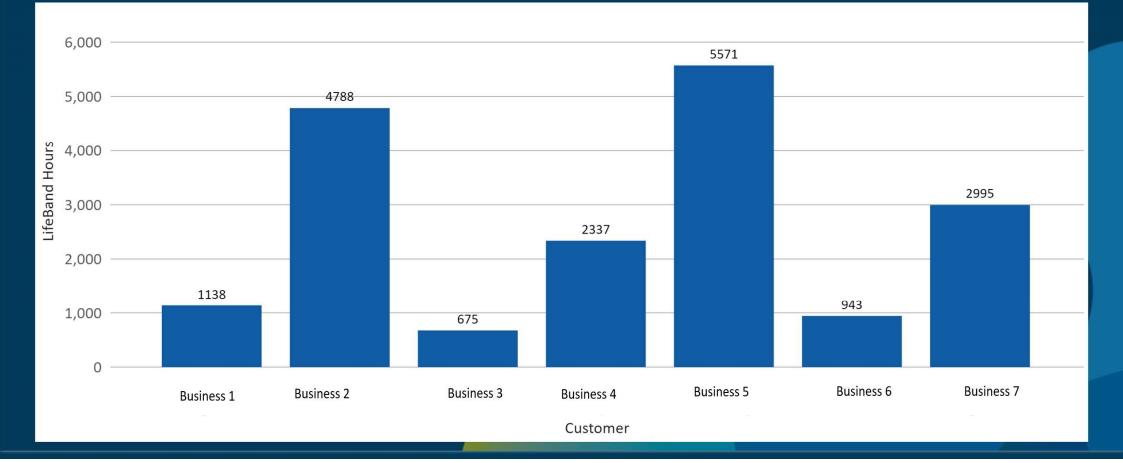


User Effectiveness at Self-Managing Fatigue



SmartCap Usage Hours

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Geo Mapping

Early Warning Alert Mapping

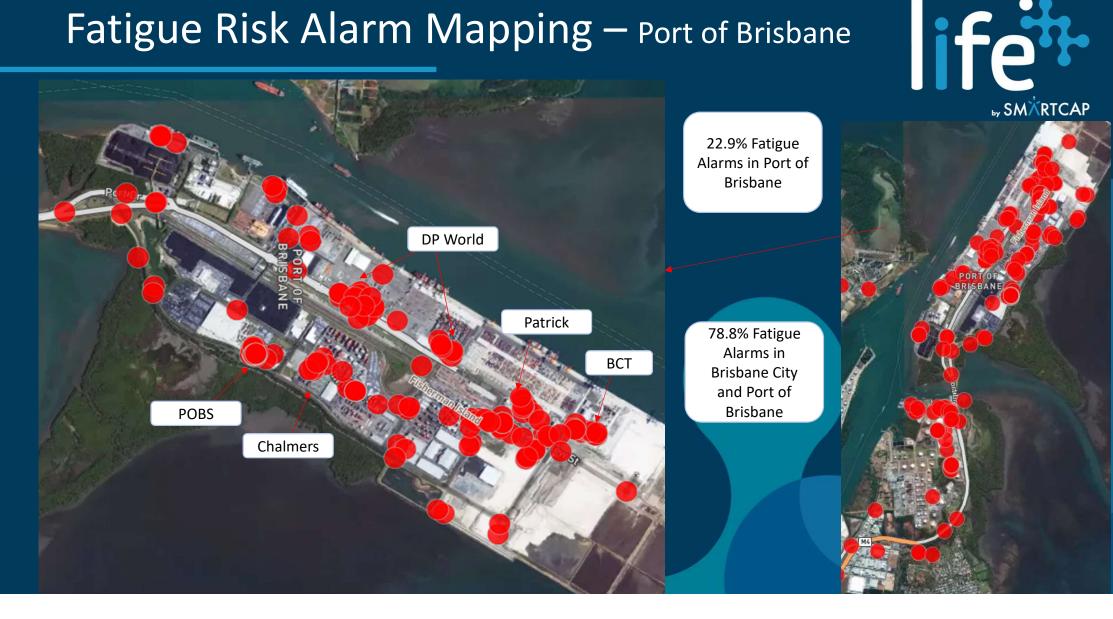
60 Bundaberg A3 Mackay 1 Carnarvon Hervey Bay National Park QUEENSLAND Expedition (Limited Depth) National Park ndra A55 Brisbane A5 isbane A55 Coast amworth NEW SOUTH WALES A55 42 Newcastle Lismo dnes



Fatigue Risk Alarm Mapping

Jife → SM[×]RTCAP Maroochydore Conondale Macka National Park Caloundra 6 85 Kilcoy A3 Elei. **Crows Nest** 22 A17 D'Aguilar Irisbane National Park Manuta I sbane A2 AZ Toowoomba Ipswich A15 48 NEW SOUTH A3 WALES Main Range Beaudesert National Pari Gold-Coast Newcastle

Fatigue Risk Alarm Mapping – Port of Brisbane



Highlights



1 Fatigue Alarm every 14.70 Hours of Use

96.6% Effective self-management of risk at early warning

46.97% of Fatigue Alarms occur between 09:00 & 14:00

Zero Fatigue incidents since using Life System

Eliminating Fatigue Events, making operations Safer and more Productive

#HomeSafeEveryDay

