



USAGE BASED MOTOR INSURANCE

NICHOLAS ACTUARIAL SOLUTIONS

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This white paper sets out key success factors when implementing usage based motor insurance, and recommends technology providers that we have identified to have a designed world leading solutions suitable for insurance applications. This is a succinct, conceptual summary. We welcome discussions and collaborations.

Nicholas Yeo | FIA, FASM, FSA, FSAS | Founder & Actuary
nicholas.yeo@n-actuarial.com | +6 012 502 3566

INTRODUCTION

Usage based motor insurance refers to motor insurance designed to charge consumers based on actual vehicle usage. This is different from traditional actuarial pricing, where consumers are charged based on their risk profile. Usage based motor insurance is ideal for consumer segments whom are price sensitive and whom are better risks than their risk profile suggests.

TECHNOLOGY

There are several technologies which support usage based motor insurance, for example:

1. On-board diagnostic (OBD) device – a plug and play hardware enables the reading and collection of driving related data. We advocate **True Mileage**, a leading OBD design for insurance as it is cost effective (no sim card required) and consumer privacy orientated as low value information such as location is not collected.
2. Mobile Application – **DraVA** is a mobile application which can function at the background of smartphones, collecting key driving related data with its unique and distinct features.
3. Verified Odometer Reading – through validating the images collected such as odometer readings and VINs. **Vehcon** is an example of such leading technology, tracking mileage which is the key pricing factor.

It is important to note that not all generic technologies are suitable to be implemented into insurance. Technologies which are not designed specifically for insurance purposes e.g. those designed for fleet monitoring, vehicle security or vehicle performance enthusiasts, would typically be wasteful as they contain redundant features, some of which are costly.

KEY SUCCESS FACTORS

Behaviour Driven Selection – Consumers select usage based motor insurance programme if they believe that they are good drivers or have usage of their vehicles. This is the element that leads to the significant difference in claims experience.

Private and Unobtrusive – Typically, programmes that are intrusive or require regular maintenance are unpopular with customers.

Cost Effective – The technology costs, together with any implementation related cost, needs to be kept at a small fraction of the insurance premium.

Double Counting – The analytics need to be technically sound, blending into the traditional actuarial pricing engine without any double counting.

Carrot Approach – Consumers should be rewarded instead of penalised when considering the driving data collected.

Realistic Business Plan – This is a niche market programme that can attract very high per unit margins to the insurer. Many technology companies have an unrealistic expectation of mass market appeal leading to their downfall.

BACKGROUND

“Usage Based Motor Insurance” is our second issue of succinct white paper. Our objective of issuing succinct white papers is to enable our thought leadership to reach a wider audience, and make a larger positive impact. Our white papers are publicly available and we do not claim any proprietary intellectual property on the contents.

“Usage Based Motor Insurance” is not a new concept. However, insurance companies are often unsuccessful in implementing such programmes. This paper sets out key success factors we observed and recommend leading technology providers in this area.

ABOUT US

Nicholas Actuarial Solutions is founded as a platform to collaborate with like-minded businesses and individuals to make a difference. Our interests are wide and varied, with our core focus being the actuarial field.

Our mission is to develop and implement novel and cutting edge solutions to make our clients more successful.

It is our vision to achieve global recognition of our thought leadership and innovative solutions in the actuarial field.

Contact us:

E: nicholas.yeo@n-actuarial.com

T: +6012 502 3566