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MOVE Score: Redefining Risk Assessment in Motor Insurance

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CONTENT

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EXECUTIVE SUMMARY

Traditional motor insurance models have predominantly relied on static data such as demographics, historical claims records, and vehicle type to assess risk. While these methods provide some insight, there is tremendous value in capturing the nuances of actual driving behaviors and real-time risk exposure. To address this critical gap, Dolphin Technologies developed the MOVE Score—an innovative telematics-based scoring system designed to evaluate driving behavior (MOVE IQ) and exposure to risk (ETR™) with unprecedented accuracy. The MOVE Score enables insurance companies to **find the good risks within traditionally high-risk segments** and to **identify hidden risks within what may appear to be low-risk** groups.

Validated through comprehensive empirical studies, the MOVE Score enables insurers to enhance underwriting precision, reduce claim frequency and severity, incentivize safer driving behaviors, and seamlessly integrate advanced risk assessments into their operations. At the same time, it rigorously protects user privacy and supports scalable implementation.

THE NEED FOR A NEW APPROACH

Traditional underwriting practices in motor insurance rely on fixed demographic profiles, historical data, and general vehicle information—metrics that inadequately reflect a driver's real-time behavior and situational risk exposure. This reliance on static data may result in pricing inaccuracies, adverse selection, inflated claims costs, and customer dissatisfaction.

MOVE Score provides dynamic, behavior-based insights that allow insurers to refine pricing models, improve risk selection, enhance profitability, and deliver more personalized and equitable insurance experiences. With motor insurance operating on historically narrow technical margins, there is now a heightened need to move beyond averages and recognize meaningful differences in individual risk.

INTRODUCING MOVE SCORE: A COMPREHENSIVE SOLUTION

Motor insurance—particularly Casco insurance—is a business driven by tight margins and high sensitivity to risk. Across European markets, the average combined ratio for motor insurance has hovered around the break-even point in recent years, often ranging between 97% and 103% (OECD, 2024). In several countries—such as the UK, Spain, and Italy—motor insurers have faced significant underwriting losses due to claims inflation, supply chain disruptions, and rising repair costs. For instance, the UK reported a combined ratio of over 112% in 2023 (Ernst & Young, 2024), and many continental European markets have experienced erosion in profitability. This environment demands ever-greater precision in pricing and risk selection.

Existing actuarial models—based on demographic data, claims history, and vehicle attributes—continue to provide valuable insights and remain essential to underwriting. They are accurate and effective in many segments. However, when underwriting operates within such narrow technical margins, it becomes increasingly critical to go one level deeper: to find the good risks within traditionally high-risk segments and to identify hidden risks within what may appear to be low-risk groups. This is precisely where MOVE Score delivers its greatest value.

MOVE Score does not seek to replace actuarial models but to complement them by adding behavioral and exposure-based insights. It introduces a new layer of data granularity that enhances existing pricing models and strengthens risk selection. The ability to more accurately segment risk in this way is no longer a competitive advantage—it is quickly becoming a necessity for sustainable underwriting performance in today's market conditions.

The MOVE Score is structured around two essential, interrelated components—Exposure to Risk (ETR™) and Driving Behavior (MOVE IQ)—which together provide insurers with unparalleled precision in risk assessment and management. MOVE Score serves as complementary data, enhancing existing actuarial models by incorporating additional behavioral and exposure insights rather than replacing traditional metrics entirely.

EXPOSURE TO RISK (ETR™)

Exposure to Risk (ETR™) quantifies the actual risks associated with specific vehicle usage patterns by incorporating detailed analytics, including mileage, trip duration, road type, and daily driving patterns. Dolphin Technologies' rigorous studies have revealed critical insights, such as the fact that 25% of accidents occur during the first three minutes of driving. Further research demonstrates that trips exceeding 40 minutes exhibit a risk factor 2.5 times greater than shorter journeys. These findings highlight the need to understand granular risk factors in everyday driving situations, enabling insurers to develop more accurate risk profiles.

Moreover, the MOVE Score accounts for significant risk variations across different types of roads. Urban roads exhibit a risk factor that is 1.92 times higher than highways, and rural roads present an even more substantial risk, approximately 2.14 times higher than highway risk levels. By integrating these detailed metrics, insurers can better differentiate and manage risk, thereby enhancing their underwriting strategies.

MOVE IQ (DRIVING BEHAVIOR)

Complementing ETR™, the MOVE IQ focuses explicitly on evaluating driving behaviors directly linked to accident risk, environmental impact, and vehicle efficiency. Specific behaviors analyzed by the MOVE IQ include smartphone usage while driving, adherence to speed limits, and patterns of acceleration and braking. These behaviors are critically important for safety and have direct impacts on emissions and fuel consumption.

The MOVE IQ clearly illustrates the interconnectedness of safe, ecological, and economical driving practices, encouraging drivers to adopt habits that simultaneously enhance their safety, protect the environment, and reduce operational costs. Insurers leveraging the MOVE IQ can motivate their policyholders towards positive behavioral changes, ultimately reducing risk exposure and enhancing overall safety.

ADVANCED TECHNOLOGICAL ACCURACY WITHOUT COMPLEXITY

MOVE Score employs cutting-edge technologies to guarantee precise and accurate assessments without adding unnecessary complexity or expenses for insurers. Acknowledging that motor insurance fundamentally insures the vehicle rather than individual drivers, the MOVE Score utilizes robust technologies such as Bluetooth connectivity checks, odometer verification through Dolphin Scan, and the aggregation of scores for vehicles shared by multiple drivers.

MOVE Score is available as a stand-alone app, eliminating the need for insurers to develop or maintain their own smartphone applications. Insurers simply collect the individual's MOVE Score via an API provided by Dolphin Technologies. This ensures a strict separation between telematics data (managed by Dolphin) and personal information (maintained by the insurer). Additionally, the MOVE Score is accessible in Dolphin's MOVE SDK, a comprehensive software development kit, as well as in custom and white-label solutions tailored to insurer-specific branding and integration requirements.

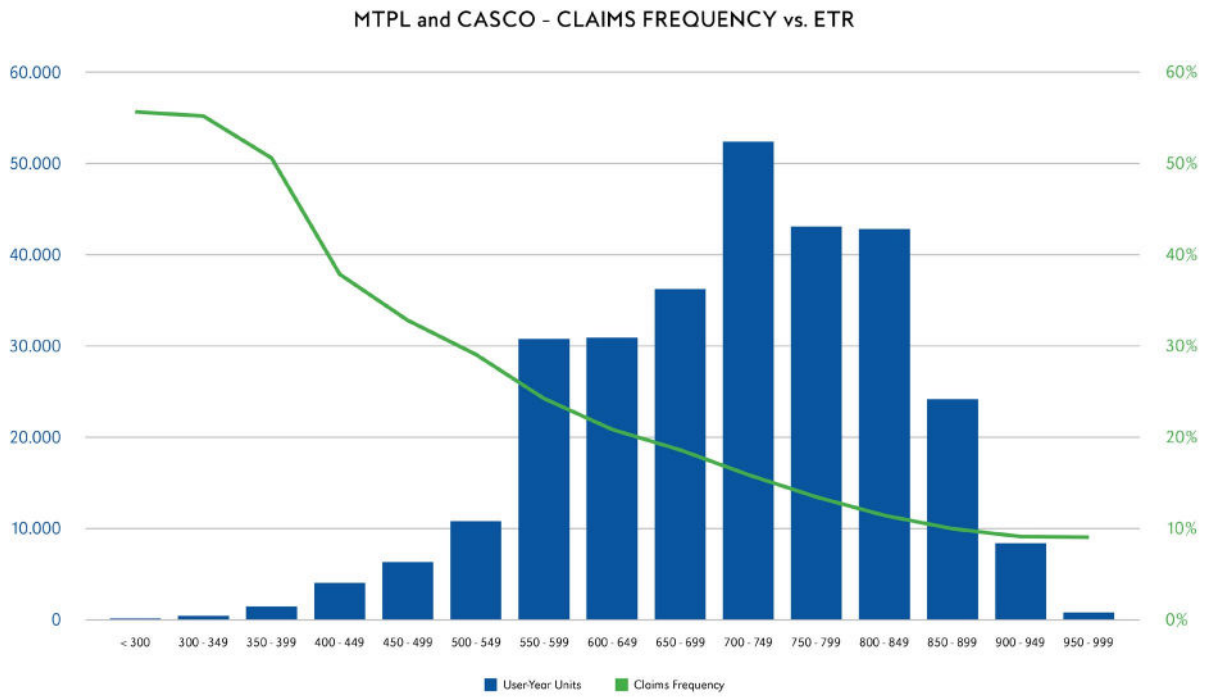
MOVE Score Website

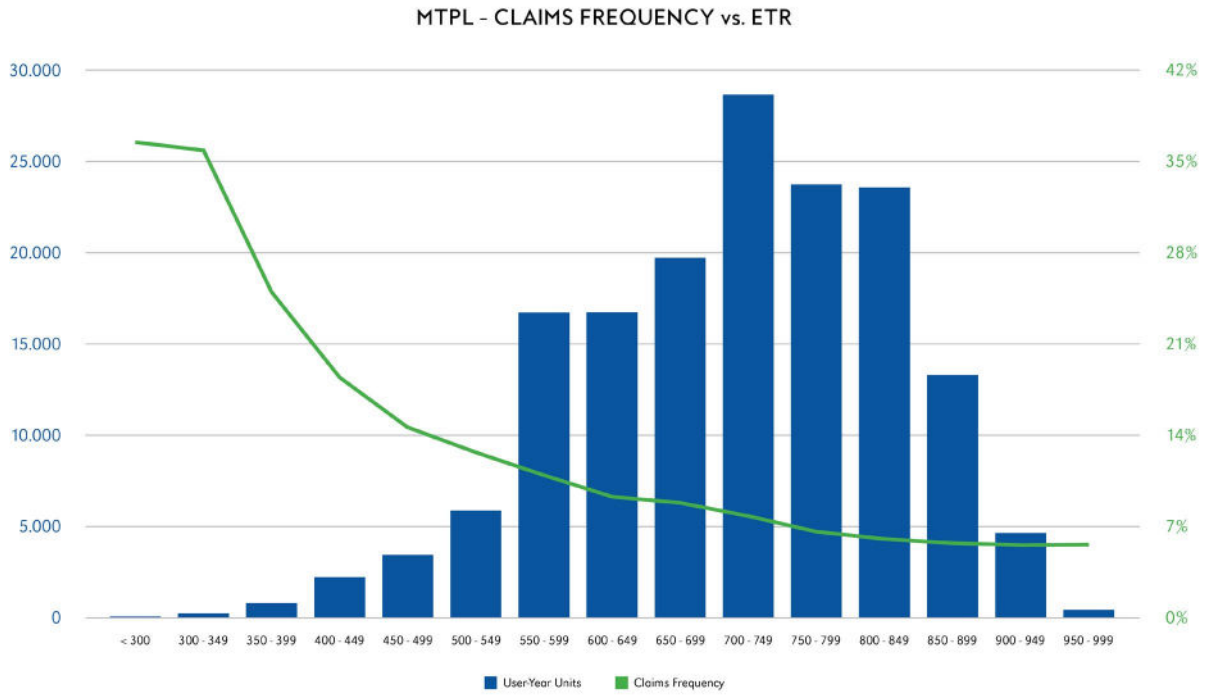
MOVE SDK Website

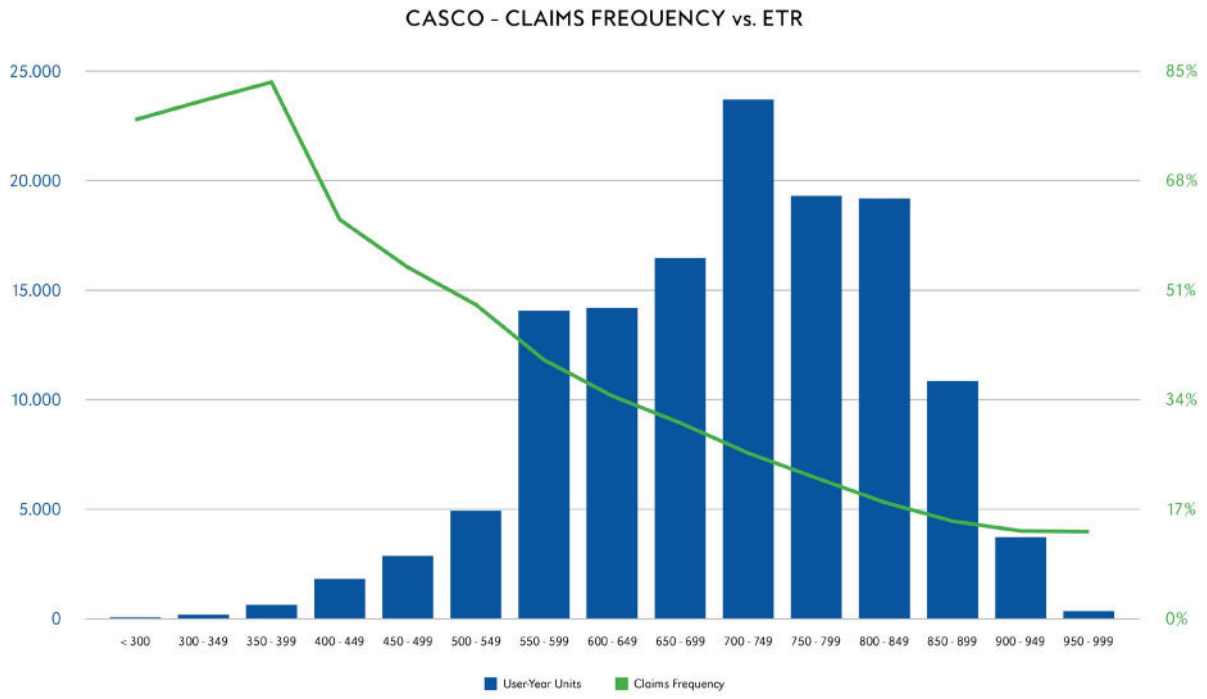
These methods validate the accuracy of vehicle usage and risk exposure data without requiring additional hardware or infrastructure investment. The MOVE Score seamlessly integrates into existing insurance company processes, offering a highly effective and practical risk assessment solution.

PROVEN RELIABILITY THROUGH REAL-WORLD VALIDATION

The reliability and effectiveness of the MOVE Score have been validated through extensive real-world studies conducted between 2018 and 2023, involving over 62,000 drivers. For each driver and year, MOVE Scores were compared with claims-related KPIs, resulting in nearly 310,000 data points. The studies not only show robust and consistent MOVE Scores for individual drivers over time but also reveal strong correlations between higher scores and significantly lower claim frequencies and loss ratios—especially in Motor Third-Party Liability (MTPL) and Own-Damage Coverage (CASCO) insurance lines.







The figures above illustrate the correlation between ETR™ scores and claims frequency (indicated in green) across both Third-Party Liability (TPL) and Comprehensive Coverage. The underlying barchart (indicated in blue) represents the distribution of yearly ETR™ scores.

Policyholders with higher MOVE Scores consistently experienced fewer accidents, empowering insurers with data-driven confidence in MOVE Score's predictive capabilities. This allows insurers to employ MOVE Score effectively in their underwriting and pricing strategies, improving their overall operational efficiency and financial performance.

PRIVACY AS A CORE PRINCIPLE

One of the most significant barriers to telematics adoption among consumers is their concern about data privacy. Dolphin Technologies addresses this challenge comprehensively by embedding rigorous privacy protocols directly into the MOVE Score app. Central to MOVE Score's privacy strategy is the strict separation of personally identifiable data from driving behavior data, ensuring insurers receive only anonymized and aggregated score information without accessing individual location or personal behavior details.

The MOVE Score provides policyholders with complete transparency and control over their personal data, with clear, explicit consent processes that enable users to dynamically manage their preferences at any point. Advanced verification technologies like Bluetooth device pairing and Dolphin Scan further reinforce data accuracy without compromising privacy.

By rigorously adhering to international data protection standards such as GDPR, Dolphin Technologies strengthens policyholder trust and significantly enhances consumer adoption and comfort with telematics solutions.

ENCOURAGING SAFER, SMARTER DRIVING

Dolphin Technologies actively fosters safer driving behaviors by enabling insurers to offer personalized educational content and targeted risk alerts to policyholders. Besides driving behavior coaching, these notifications highlight less obvious yet significant risk factors, such as increased wildlife crossing dangers associated with seasonal time changes.

Additionally, the MOVE Score educates drivers about the increased accident risk linked to short trips, encouraging the use of safer transportation alternatives such as walking or cycling for brief journeys. These educational interventions significantly impact driving behavior, effectively reducing accident risk, decreasing claim frequency, and enhancing overall road safety.

ECOLOGICAL AND ECONOMIC IMPACT

The safe driving practices encouraged by MOVE Score directly generate substantial ecological and economic benefits. Adhering to optimal driving speeds (typically between 50–90 km/h), minimizing aggressive acceleration and braking, and reducing smartphone distractions collectively lead to significant reductions in fuel consumption and vehicle emissions.

These optimized driving behaviors provide substantial cost savings for policyholders and align insurers' operational strategies with broader sustainability objectives. Insurers employing the MOVE Score actively contribute to environmental sustainability, reinforcing corporate responsibility and delivering tangible value to policyholders.

CONCLUSION

With motor insurance operating on historically narrow technical margins, there is now a heightened need to move beyond averages and recognize meaningful differences in individual risk. The ability to more accurately segment risk in this way is no longer a competitive advantage—it is quickly becoming a necessity for sustainable underwriting performance in today's market conditions. Dolphin's MOVE Score serves as complementary data, enhancing existing actuarial models by incorporating additional behavioral and exposure insights rather than replacing traditional metrics entirely. This technology represents a significant advancement in motor insurance risk assessment, marked by empirical evidence, technological innovation, seamless integration, and comprehensive privacy protection measures. Its detailed evaluation of driving behavior and risk exposure markedly improves underwriting accuracy, decreases claims rates, and promotes safer driving for the benefit of insurers, drivers, and society as a whole.

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