Swiss Re

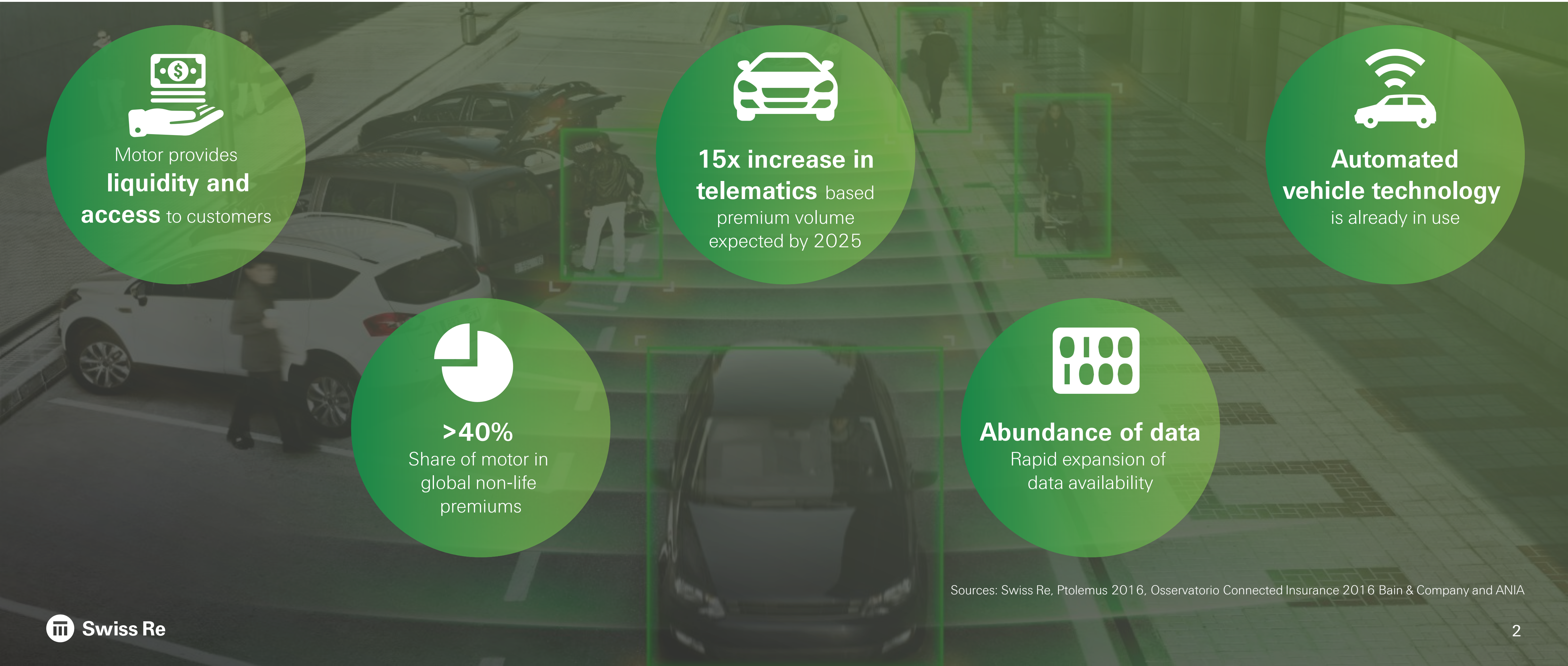
Telematics & Data Analytics

Securing profitable growth in motor using smart data

Orsolya Hegedus
Swiss Re Automotive Solutions

Motor is the most important P&C line globally

…and it's undergoing changes



Motor provides **liquidity and access** to customers

15x increase in telematics based premium volume expected by 2025

Automated vehicle technology is already in use

>40%
Share of motor in global non-life premiums

Abundance of data
Rapid expansion of data availability

Sources: Swiss Re, Ptolemus 2016, Osservatorio Connected Insurance 2016 Bain & Company and ANIA

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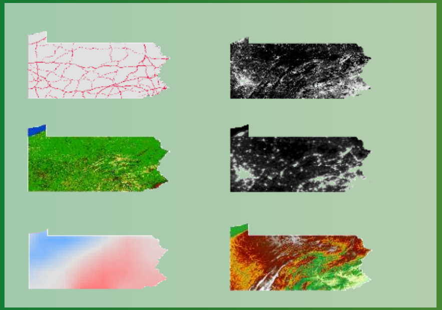
Data availability enables additional business insights

...risk drivers and market potential can be

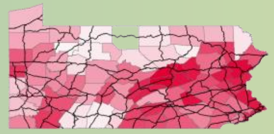


Highly granular input data representing risk factors

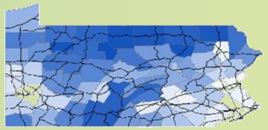
- Road network
- Population
- Weather
- Night light density
- Elevation
- Land use

Detailed risk predictions

Accident frequency



Accident severity



Open source data

Census, car market, competitors, ...

Actionable business insights

Portfolio steering

Marketing strategy

Performance benchmarking

Market potential view

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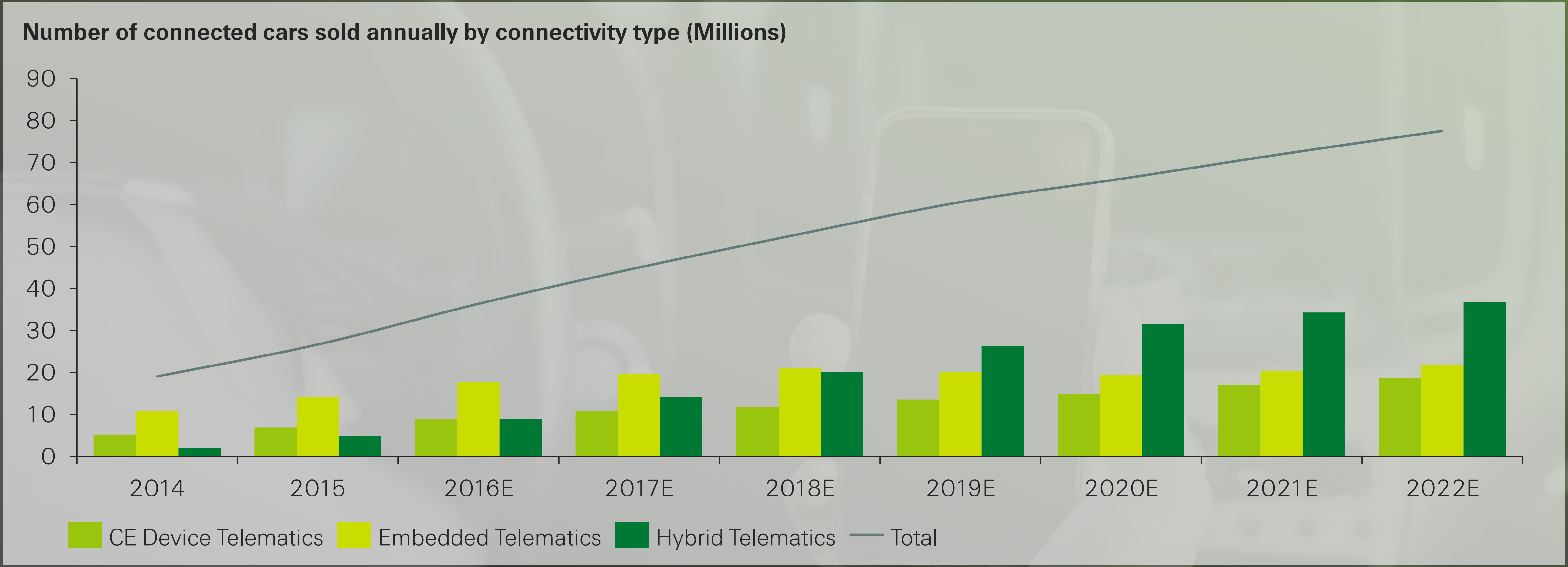
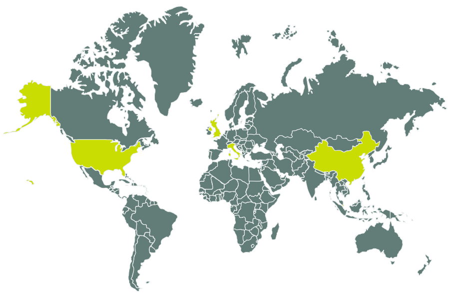
Tech trend I: Car connectivity growth



Source: IHS Trax, 2014

Motor Telematics Market Snapshots

Telematics set to play a relevant niche role in several markets



	USA	UK	Italy	China	Russia
Market size	1.7% market penetration, telematics is the **new growth engine**	1.1M telematics-based policies, **3.4% market penetration**	7.1M telematics-based policies; **20.5% penetration**	**Motor insurance detariffication** creates opportunity for UBI. Already implemented in 3 test provinces, but by end 2019 extended to the whole country	Several insurance companies have **started telematics pilots,** however, **telematics market penetration so far rather low**
Use cases	Main use cases are **risk selection and behavioral change**	**Risk selection and behavioral change**	**Large discount on tariff,** separate fee for device/services + **top-up commission** for agents. Important to **share the** generated **value** across the value chain		So far limited to **MOD** as Compulsory MTPL (OSAGO) not yet liberalized (telematics features within OSAGO in the future?)
Device	**1/3rd mobile-app solutions** the market, 2/3rd manly **OBD-II**	**TBYB approach** is more developed than in other markets. **Smartphone-based** solutions account for >10% and growing	Almost the entirety of offerings is based on **hardware devices. Self-installed black boxes** have become the mass market ones	**Smartphone-based solutions** are dominating the UBI market	So far rather **hardware device based**
Other	Telematics technology introduced since many years, **2 different approaches:** "roll-over" or fixed which is the more popular	High **churn rate** makes loyalty steering an important factor	**First movers in telematics can improve their LR by 18%** (risk selection and claim frequency reduction) Main data use case: **Claims management** and **broad catalogue of value-added services. Scoring** and **customer engagement** angles **not developed,** due also to little access to data (TSP do not share with insurers)	**Very dynamic marketplace,** with players from different industries doing trials to enter this space	

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DATA

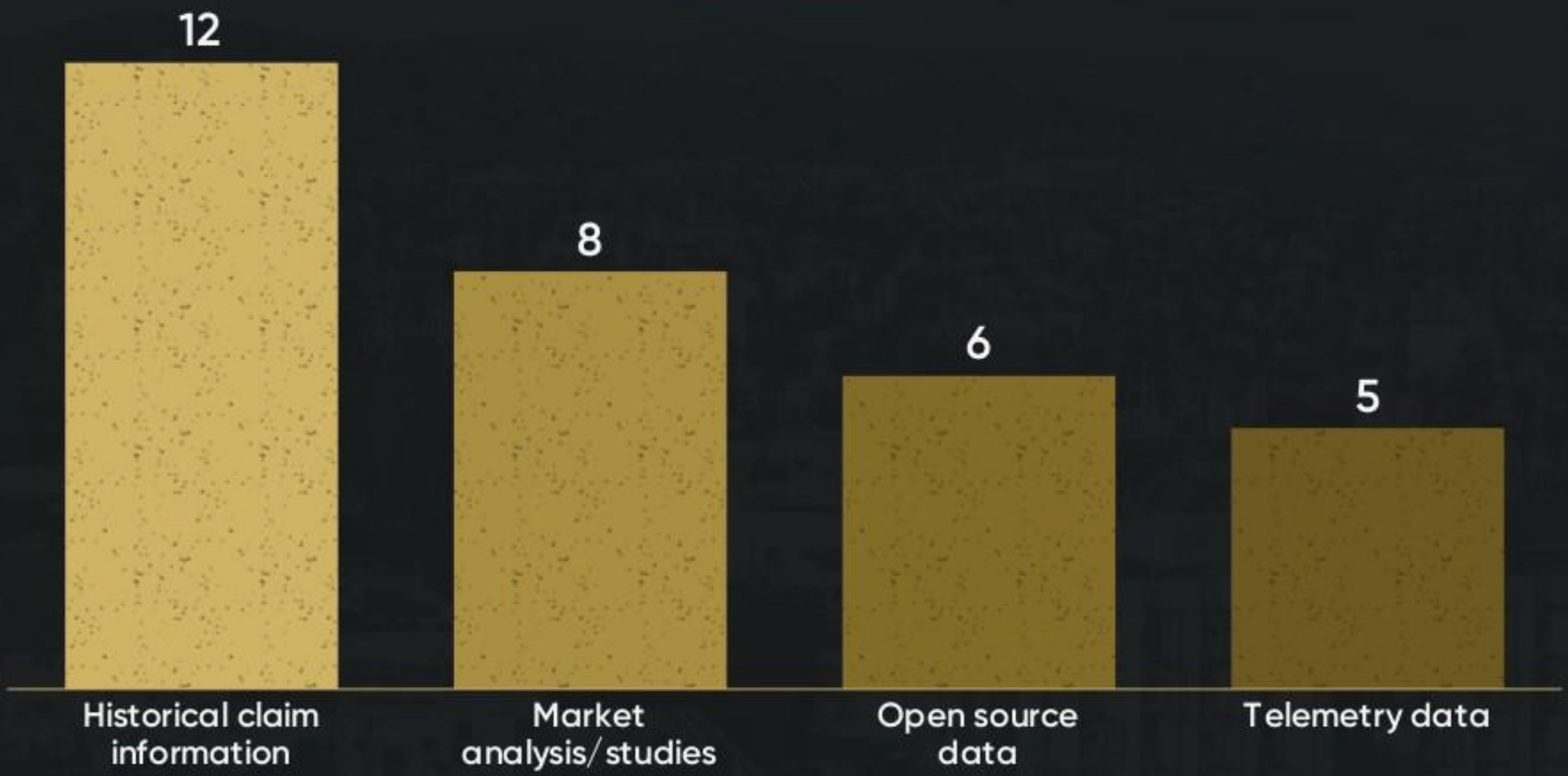
Existing and newly collected

What data sources are you using to grow your motor business?

- a) Historical claim information
- b) Market analysis/studies
- c) Open source data
- d) Telemetry data

What data sources are you using to grow your motor business?

Mentimeter



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DATA

Existing and newly collected

What can you do with data?

Data Analytics	**Telematics**
Pay-As-You-Drive (PAYD)	Pay-How-You-Drive (PHYD)

Swiss Re Motor Market Analyser supports your profitable growth

Data excellence for portfolio performance and strategic growth

Swiss Re model

Swiss Re's predictive model for accident frequency and severity provides a highly granular view of a country's risk landscape and acts as a sound basis to identify business opportunities

Your data

We use your portfolio data to understand your book's exposure to geographic accident risk and to benchmark its current performance against its potential performance

External data

Swiss Re motor experts and data analysts use external data to offer you business insights and a 360° view on the motor insurance markets you target

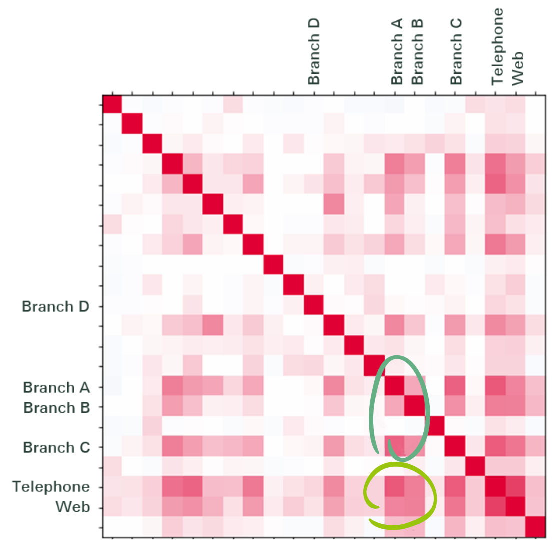
Innovative use of external data, risk modelling and cutting-edge analytics to increase your profitability

- **Portfolio performance**
- **Sales network optimisation**
- **Strategic growth**

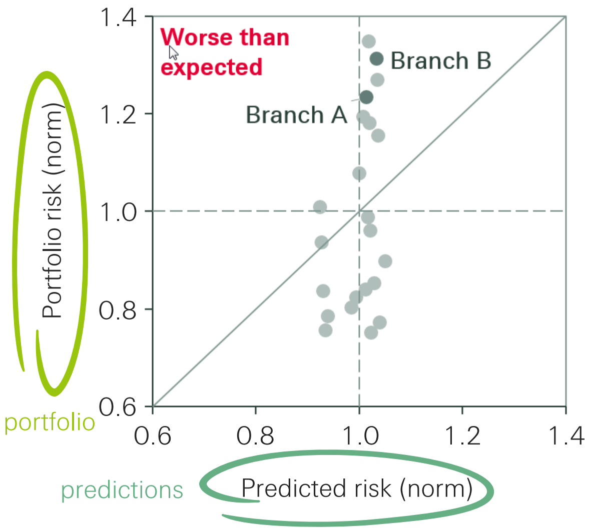
A client story: Enabling profitable growth with Swiss Re's MMA

Swiss Re identified new provinces to enter by rating risk exposures and benchmarked branch performance to enable portfolio steering

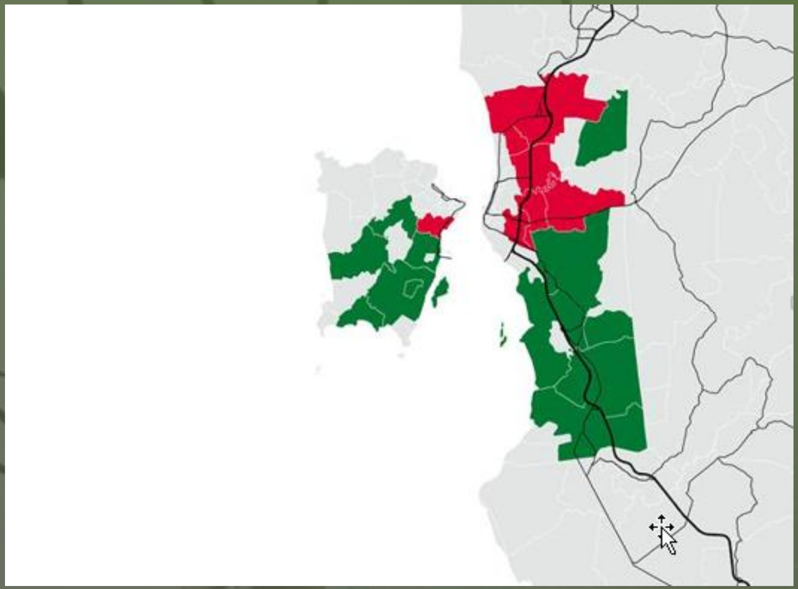
Overlap of catchment areas



Benchmarked performance



Growth and portfolio steering



Recommendation: Brach A is a closing candidate
The catchment areas of **branches A and B have substantial overlaps** and are **well penetrated by sales via phone and web, they are underperformers given their geographical risk**.

Looking at the catchment areas of branch D, we identify **favourable** and **unfavourable** areas in terms of risk. **Growing** in **favourable areas by 30%** and shrinking **in unfavourable areas by 10%** allows to **improve** the branch's **LR by 2%**

Research shows shift in motor risk modelling and pricing

Telematics is the first step in helping insurers transition to new business models

Deliver added value to today's consumers

Traditional risk pricing model

- Age
- Driving years
- Territory
- Vehicle data
- Previous claims

Risk proxy

UBI pricing model

- Driver behaviour
- Context of driving
- Surrounding information
- Comparison to other drivers

Behavioural rating

Automated vehicles model

- UBI pricing model
- Advanced driver assistance systems assessment
- Usage of autonomous features
- Vehicle "behaviour"

Behavioural & vehicle rating

Why telematics?

Telematics is creating benefits for consumer and insurer along the value chain

Increasing safety
- Safer driving through driver coaching
- Stolen vehicle recovery (black box only)

Convenience
- Easier and quicker claims handling

Customer experience
- Gamification
- Driver rewards
- Value-added services (e.g., location-based services, theft recovery)

Adequate premiums
- Satisfying demand for risk-adequate insurance premiums
- Transparency on, and ability to influence insurance premiums

Distribution/Sales
- Customer engagement
- Customer interaction/loyalty
- Cross-selling opportunities

Product Development
- Product suite e.g., PAYD, PHYD, Pay Per Trip
- Analytics skillset to assess ADAS/AV

Underwriting/Pricing
- Risk selection
- UW accuracy

Claims/Accounting
- Duration of claims process
- Claims cost
- Fraud (and theft)

Operations
- Admin efficiency

What keeps you most from implementing Telematics?

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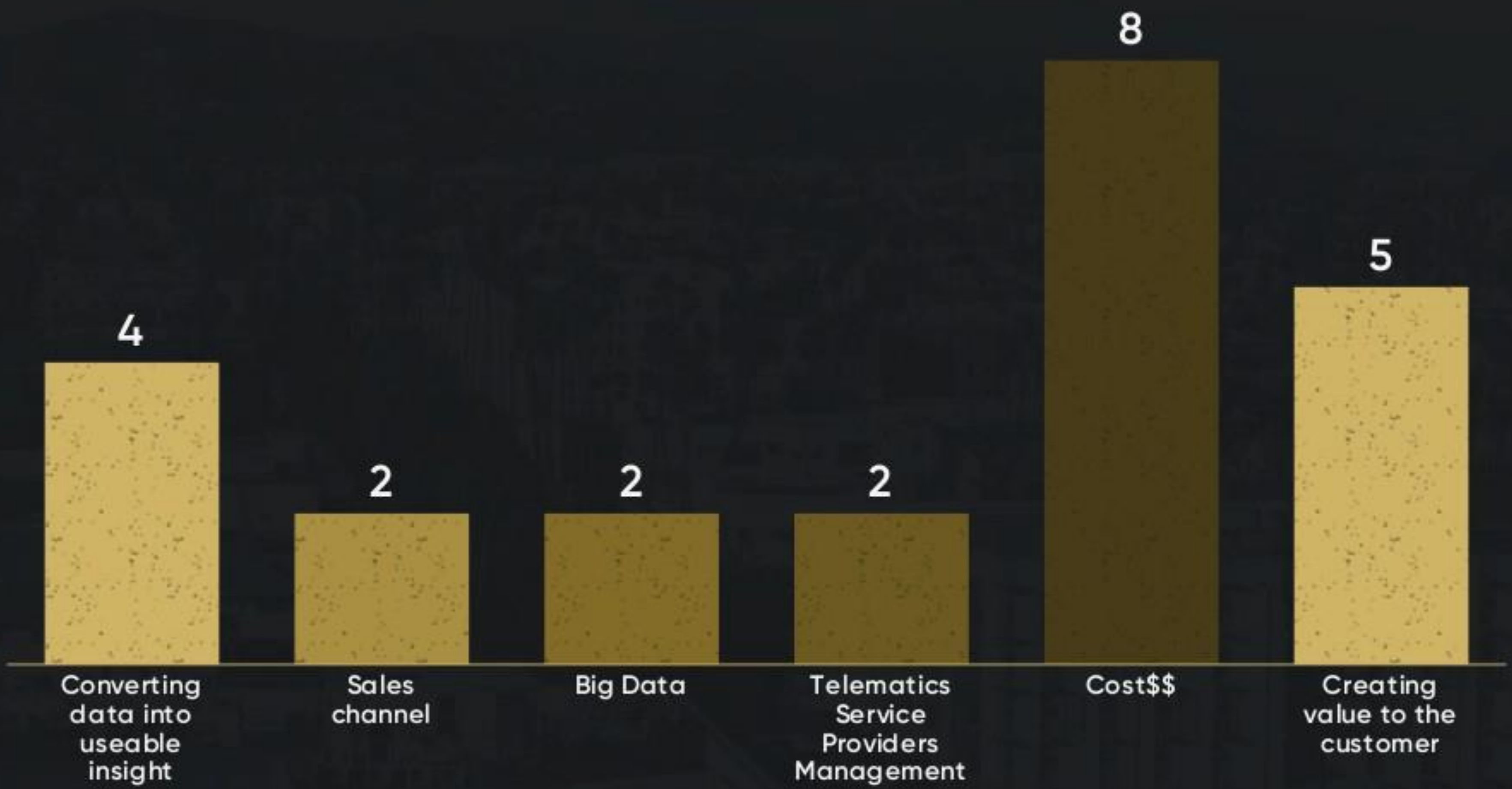

Mentimeter

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Swiss Re's modular, end-to-end personal telematics solution

Customisable to meet your changing needs

1 App + platform

App (white-labelled app or SDK) + Device-agnostic IoT telematics platform

2 Scoring + actuarial support

Dynamic, machine learning-based scoring platform developed by data scientists and actuaries

3 Go-to-market support

Support in product roll-out from client segmentation and product definition, through incentive design, to positioning

+1 Reinsurance

Swiss Re shares the risk and helps insurers deploy telematics solutions

A client story: New Usage-Based Insurance (UBI) product for growth

Swiss Re deployed white-label telematics app, IoT platform, scoring & analytics and supported go-to-market to launch innovative motor product on the market for growth

Ansvar is a Dutch insurer interested in growing through an innovative UBI product offering.

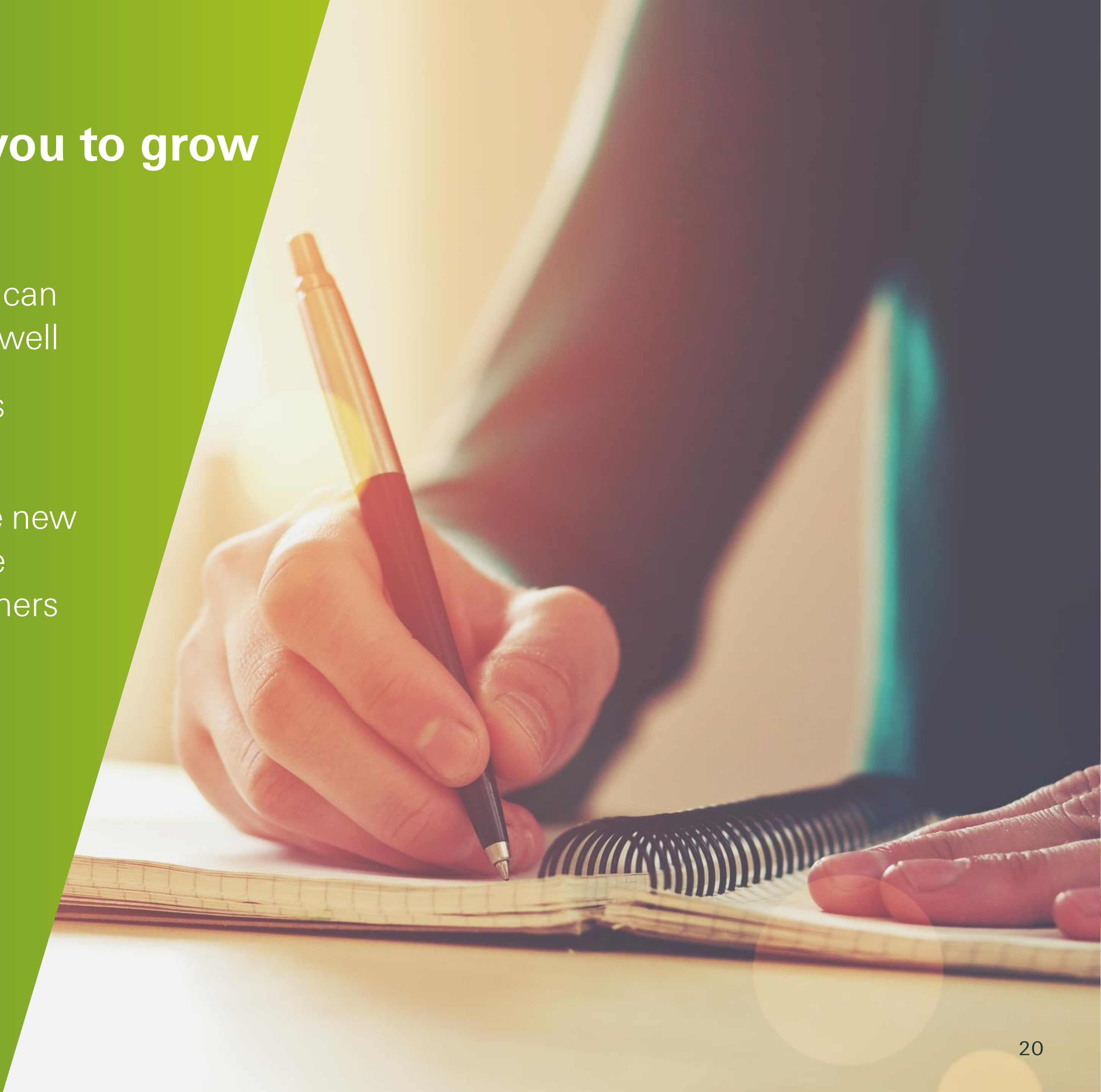
Challenges

- Creating an engaging app and insurance product to attract customers
- Launching a telematics product with minimal IT integration efforts and in line with GDPR regulation

- Safe driving app developed by Swiss Re is on the market since summer 2018
- IT integration was minimal
- GDPR compliance
- Scoring & analytics for quarterly cash backs and rewards
- No gamification

Using data in a smart way helps you to grow

- Expanded data availability and new technologies can help you boost profitable growth in motor if used well
- Swiss Re´s Motor Market Analyzer and Telematics App/expertise can help you do so
- Companies that have the capabilities to use these new data sources in their risk assessment and improve customer experience are ahead of the game … others will lag behind



Contact us
PC_Solutions@swissre.com

Swiss Reinsurance Company Ltd
Mythenquai 60
8002 Zurich
Switzerland

Telephone +41 43 285 2121
Fax +41 43 285 2999
www.swissre.com

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