Parametric solutions – a game changer?

Swiss Re Tour de Raison Poland 2018:
Get future ready!

David Mäder-Soyka
Property & Specialty Solutions
P&C Solutions: Support across your entire value chain

From innovative design to claims optimisation

Product design
We assist you in designing innovative products adapted to digital environments.

Digital consumer
You profit from digital consumer engagement and predictive churn modelling.

Underwriting
We reduce your operational effort with automated and predictive underwriting.

Business management
We increase your process efficiency through contracts intelligence and easy self-service options.

Claims
You benefit from faster, more insightful processing and early warning functionalities.
P&C Solutions for your every need

Increase efficiency, steer portfolios and grow into new markets and segments

**P&C Analytics**
- Portfolio Insights interactive risk visualisation for steering and growth
- Tailored P&C Analytics consultancy services to solve your every need

**Property & Specialty**
- CatNet® natural hazard risk analyser
- Sophisticated engineering underwriting with PUMA
- Agro Suite modular, end-to-end agriculture solutions

**Cyber**
- Cyber Product Suite for cyber insurance product development
- Cyber Analytics Platform for risk scoring, portfolio, and accumulation management

**Liability**
- Analyse and model liability portfolios with Forward-Looking Modelling (FLM) to grow into new markets and segments
- Manage Casualty Accumulation risks

**Parametric**
- End-to-end pricing, risk monitoring, policy administration, automated claims pay out and real-time reporting for:
  - Flight delay
  - Earthquake
  - Tropical cyclone

**Automotive**
- Insurance-relevant driver scoring with end-to-end telematics solution
- Grow strategically and steer portfolios with Motor Market Analyser

**SwiftRe®**
- Online risk placement, claims and accounting platform
- Cost-effective risk management
- Full transparency into entire portfolio

**Smart homes**
- Develop next generation solutions with advanced risk scoring
- Preventive risk services
- Fast time-to-market via Swiss Re’s curated partners ecosystem
01
Opportunity
Parametric solutions
Natural catastrophe risks are largely uninsured

The global natural catastrophe protection gap totalled USD193 billion in 2017

Percentage of uninsured economic losses, 1975-2017

North America
- 69.7% uninsured earthquake loss
- 40.0% uninsured storm loss

Western Europe
- 96.4% uninsured earthquake loss
- 39.2% uninsured storm loss

Latin America
- 83.3% uninsured earthquake loss
- 82.4% uninsured storm loss

Asia
- 88.8% uninsured earthquake loss
- 80.3% uninsured storm loss

Source: Swiss Re Institute

"Natural catastrophe protection gap is calculated based on known insured and economics losses by region and peril, 1975-2017."
Parametric solutions

Property insurance gap in Poland

<table>
<thead>
<tr>
<th>Country</th>
<th>Insurance penetration</th>
<th>Written premium/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>0.31%</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>0.52%</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>0.8%</td>
<td></td>
</tr>
</tbody>
</table>

Source: AXCO Property premium estimates
Flight delays or missing connections can mean extra time and costs for passengers

- Airlines carried about 4.1 billion passengers in 2017 and are expected to carry more than 4.3 billion in 2018.¹
- About 13% of all flights have an arrival delay of more than 30 minutes, 6% have a delay of more than 1 hour and 2% have a delay more than 2 hours. Delays are unevenly spread across the time of day, weekdays, months and operators.
- Airlines domiciled in EU or flying to an EU country are legally obliged² to compensate for delays, but the claims process is complicated and tedious.
- Travel insurance products covering delays are available, but they typically bundle various risks (and are therefore rather expensive); delay triggers are usually high (typically compensation only happens for delays of more than 6 hours).

A simple, stand-alone Flight Delay Compensation (FDC) offering is likely to address many currently poorly served passenger needs

¹ Based on IATA estimation
² EU Flight Delay Compensation Regulation
Parametric solutions

Powered by Swiss Re’s fully automatic parametric insurance platform

What is it?

Fully automatic insurance offering with embedded **parametric product design** in a **lean, cloud-based, modular ecosystem**. Features include real-time reporting, steering, dynamic pricing, automated claims payments and policy administration.

How do you benefit?

Gain **access to a broader customer base** through innovative product design. Expand your offering with **high consumer value at low investment cost**. Open up **new areas of growth** across various distribution channels.
Value Proposition

Parametric NatCat
Parametric solutions

Parametric insurance

Simple, predictable, fully transparent with few exclusions

- **Parametric insurance** is a type of insurance that settles on a pre-agreed, simple measure (the "parameter" or "index").
- Pay out depends on the **occurrence of a triggering event**, regardless of the actual loss.
- An **independent third party** (e.g. USGS for earthquake) determines the intensity of the event and hence the impact on the claim.
- The insured purchases a **maximum pay out cover** from the insurer. The premium depends on the chosen limit as well as exposure of the insured.
- The pay out on a parametric product is unlikely to be exactly equal to the financial loss of an insured and the difference is known as "basis risk".

"Simplification is the ultimate sophistication" Leonardo Da Vinci
Parametric solutions

Parametric insurance value proposition
Make your insurance solutions fast, flexible and affordable

- **Fast**
  - access to cash

- **Flexible**
  - usage of cash

- **Affordable**
  - no claims process
  - low limits

Parametric insurance makes sense when traditional insurance is not accessible or affordable.

Parametric insurance acts as a complement to traditional insurance, not as a substitute.

Parametric insurance offers immediate pay out for emergency cash relief.
Parametric solutions

**Swiss Re parametric solutions**

A dynamic, easy-to-integrate, modular turnkey solution
Parametric solutions

Parametric digital IT platform

A lean digital platform that covers your entire value chain

Insurance Service Model

- Customer end-to-end journey developed by insurance carrier or distribution partner
- Integration into digital back end via standard API interfaces

Hybrid Model

- Joint development in customer end-to-end journey
- Integration into digital back end via standard API interfaces

Portal Service Model

- Customer end-to-end journey developed by Swiss Re
- Integration into digital back end

From modular service to a full-stack platform
Outlook & Conclusion
Innovative retail solutions that allow for simple, fast-purchasing and optimised pay out processes

**Parametric insurance products**

- Earthquake
- Tropical cyclone
- Flight delay

- Flood
- Rotating machinery

**Digitized**

- Earthquake
- Tropical cyclone
- Flight delay

**Proven products**

- Earthquake
- Tropical cyclone
- Flight delay

- Flood
- Rotating machinery
Parametric solutions

Parametric flood products – the next product (r)evolution?

- Event detection
- AI-powered picture recognition
Appendix
Project scope and duration tailored to your needs

- **Deep Dive:** IT, Distribution, pricing engine, regulatory check
- **Product design:** Consumer journey, type of service model
- **Shaping**
- **Cooperation**
- **IT integration**
- **Pilot**
- **Go-to-market**

- NDA: Non Disclosure Agreement
- MOU: Memorandum of Understanding
- Contract: Market product & revenue model

Time to market: 3-12 month (depends on covered risk)
Parametric NatCat

Earthquake “shake vouchers”

Simple, transparent customer journey

1 For illustration purposes only
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