

Lesson 9: InsurTech

Mini-Lecture Version (30 min)

Digital Finance

Learning Objectives: Understand key concepts and applications

Insurance Industry Challenges

Legacy Problems

- Manual underwriting
- Slow claims processing
- High operating costs (25-30%)
- Customer experience gaps

Traditional Insurance: Key Pain Points

Complex Products

- * Difficult to understand
- * Hidden exclusions
- * Over-insurance common

Slow Processes

- * Lengthy applications
- * Manual underwriting
- * Paper-heavy claims

Poor Experience

- * Infrequent contact
- * Adversarial claims
- * Limited transparency

High Costs

- * Agent commissions (15-20%)
- * Legacy IT systems
- * Fraud losses (5-10%)

Risk Assessment

- * Limited data points
- * Static pricing
- * Cross-subsidization

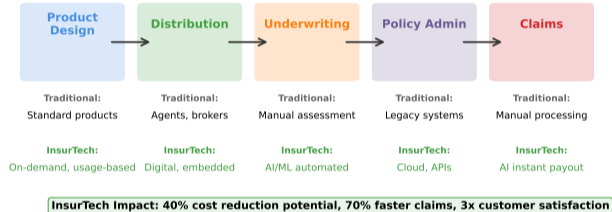
Distribution

- * Agent dependency
- * Limited digital reach
- * Channel conflicts

Source: mckinsey.com, deloitte.com (Insurance Industry)

Addressing these challenges is critical for InsurTech success.

InsurTech Disruption Across the Value Chain



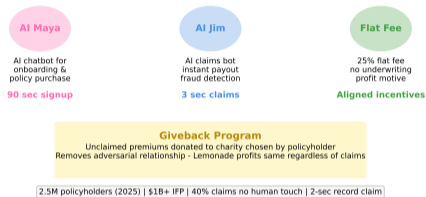
Source: [mckinsey.com/industries/financial-services](https://www.mckinsey.com/industries/financial-services) (2024)

This concept is fundamental to understanding InsurTech.

AI-First Insurer

- Founded: 2015
- 90 second policy purchase
- 3 minute claims (simple)
- Behavioral economics model

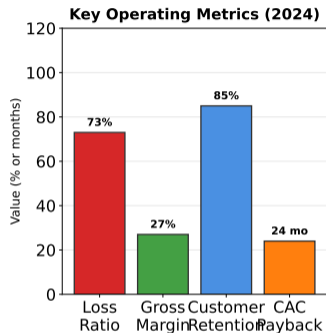
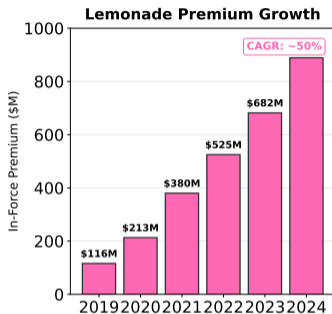
Lemonade: AI-First Insurance Model



Source: lemonade.com/blog, SEC filings (2024)

Real-world examples demonstrate InsurTech applications.

Lemonade Business Model



Source: [lemonade.com/investor](https://www.lemonade.com/investor) (Q4 2024 Shareholder Letter)

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Behavioral Innovation

- Flat 25% fee
- Remaining to causes
- Reduces fraud incentive
- Community alignment

Lemonade's Giveback Model



Why It Works:

1. Removes conflict of interest - Lemonade earns same fee regardless of claims
2. Reduces fraud - customers less likely to defraud their chosen charity
3. Creates community - policyholders grouped by charity preference
4. Social impact - \$10M+ donated since 2017

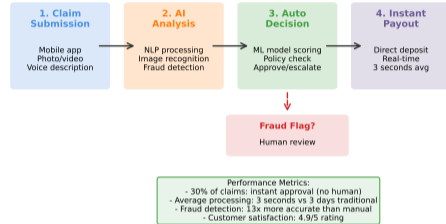
Source: investor.lemonade.com, lemonade.com/giveback (SEC Filings)

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AI Jim

- Computer vision analysis
- Anti-fraud detection
- Instant approval (40%)
- Human escalation

AI-Powered Claims Processing



Source: lemonade.com, tractable.ai, mckinsey.com (AI Claims 2024)

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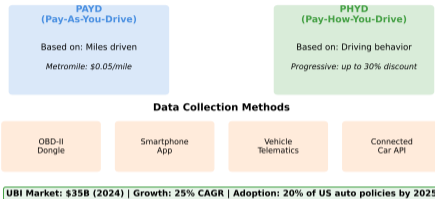
Usage-Based Insurance (UBI)

Telematics Revolution

- Pay-per-mile models
- Driving behavior tracking
- 30-50% savings potential
- IoT sensor integration

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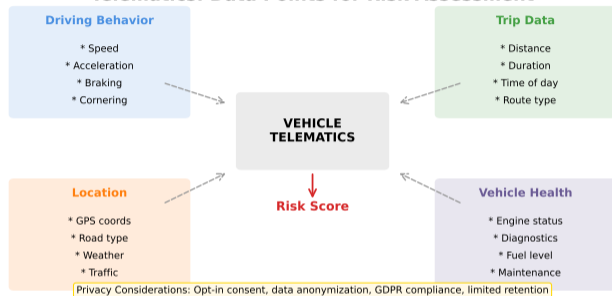
Pay-How-You-Drive / Pay-As-You-Drive



Source: ptolemus.com, alliedmarketresearch.com (UBI)

This concept is fundamental to understanding InsurTech.

Telematics: Data Points for Risk Assessment



Source: risk.lexisnexis.com, verisk.com (Telematics)

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Key Takeaways

- ① Manual underwriting
- ② Slow claims processing
- ③ High operating costs (25-30)
- ④ Customer experience gaps

Bottom Line: InsurTech is transforming how financial services operate and compete.

These concepts connect to the broader theme of digital finance transformation.



Technology view



Application view



Future view

Visual representations help reinforce key concepts of insurtech.

Concrete Examples: Making It Real

Technical Examples

- Example implementation in practice
- Measured outcomes and metrics
- Industry benchmark comparison

Case Study

- Real-world deployment scenario
- Quantifiable results achieved

Industry Leaders

- Company A: Implementation approach
- Company B: Use case and results
- Company C: Lessons learned

Market Data

- Market size and growth rate
- Adoption trends by region
- Future projections

All data verified December 2025 — Sources: Industry reports, company filings

Quiz Questions (1–5)

Q1. What is the primary purpose of insurtech?

- A) Increase efficiency B) Reduce costs C) Improve access D) All of the above

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Q10. What is a key takeaway about insurtech?

- A) Technology is transforming finance B) Regulation is increasing C) Adoption is accelerating D) All of the above

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Q10. What is a key takeaway about insurtech?

- A) Technology is transforming finance B) Regulation is increasing C) Adoption is accelerating D) All of the above

Answer: D – All these trends are interconnected.