FinTech:
Shaping the Financial World

May 4, 2020
Class 10: Overview

- Insurance Value Chain
- Insurance Sector Landscape
- Insurance Sector Challenges
- InsurTech Opportunities & Challenges
- InsurTech Business Models & Startups
Class 10: Readings

• 'Quarterly InsurTech Briefing Q4 2019', CB Insights (Intro & Charts)

• 'Three insurtech trends to watch in 2020', Harry Menear, FinTech

• 'Fintech developments in the insurance industry – Executive Summary' Bank of International Settlement

• 'Why Asia is fertile new ground for the insurtech startup movement', Tech Wire Asia
Class 10: Study Questions

• What opportunities does the current insurance sector landscape and possible ‘pain points’ present for ongoing technological disruption?

• How have machine learning, alternative data, and so-called ‘Internet of Things’ devices begun to transform the underwriting, selling, administration & claims processing of insurance?

• What are InsurTech trends and applications affecting each part of the insurance sector’s value chain? What are the capital, regulatory, and data challenges confronting startups in this space? To date, why have Big Tech firms been less engaged in insurance than other finance sectors?
Insurance Value Chain

Product Design & Approval  Marketing  Underwriting & Rating  Policy Administration  Claims Management  Finance & Asset Management

Image by the Federal Insurance Office and is in the public domain.

Insurance Sector Landscape

• **Life Insurance**: Aegon (1968), AFLAC (1955), China Life (1949), Great West (1891), Legal & General (1836), Manulife (1887), MetLife (1868), New China Life (1996), New York Life (1845), Nippon Life (1889), Prudential (1875), Swiss Life (1857), Taikang Life (1996)

• **Property & Casualty**: Allstate (1931), Chubb (1882), Cincinnati Financial (1950), CNA (1897), Intact Financial (1807), Hartford (1810), Liberty Mutual (1912), Markel (1980), Progressive (1937), State Farm (1922), Travelers (1853)
Insurance Sector Landscape

• **Health & Managed Care**: Anthem (1946), Centene (1984), Cigna (1792), CVS Health / Aetna (1853), Healthcare Services (1936), Humana (1961), UnitedHealth (1977)

• **Diversified**: AIG (1919), Allianz (1890), Axa (1816), Aviva (1696), China Pacific (1991), Generali (1839), Ping An (1988), People’s Insurance Company of China (1949), Zurich (1872)
Insurance Sector Landscape

• **Reinsurance Companies:** Arch Capital (1995), Berkshire Hathaway (1839 / 1967), Munich Re (1880), Swiss Re (1863)

• **Brokers:** Aon (1918), Brown & Brown (1939), Arthur Gallagher (1927), Marsh & McLennan (1905), Willis Towers Watson (1828)

• **Benefits Administration:** ADP (1949), Paychex (1971)

• **Claims Administration:** Sedgwick (1969)

• **Software or Services:** Duck Creek (2000), Goldwire (2001)
U.S. Insurance Sector Premiums

Source: S&P Global

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U.S. P & C Insurance Premiums

Source: S&P Global

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Insurance Sector Challenges

• Agent & Broker Fees
• Claims Administration
• Distribution Channels
• Legacy Tech
• Operating Costs & Expense Ratios
• Product Development & Speed to Market
• Regulatory Landscape
• Trust
• User Interface and User Experience
InsurTech Opportunities

InsurTech Opportunities

• Sales, Account Management & Claims UI & UX:
  • Digital, Mobile & Conversational Interface

• Underwriting Availability, Pricing & Targeted Products:
  • Machine Learning & Alternative Data

• Claims Processing & Underwriting Data Capture:
  • Drones, Internet of Thing Sensors, Smartphones Telematics, & Wearables
  • Genetic Testing – Life, Disability & Long-term Care
InsurTech Challenges

• Funding
  • Capital Requirements if a Carrier
  • Startup Run Rate Losses
• Competitive Landscape
  • Incumbents
  • InsurTech Startups
• Regulatory Frameworks
  • Licensing & Compliance
  • Appropriate use of Data
• User Adoption
InsurTech Business Models

• Licensed Insurer

• Managed General Agent

• Technology Service Provider

• Data Aggregator
InsurTech Startups

• Acko (2017) – Auto, Travel - India
• Assurance (2016) – Diversified ‘Financial Wellness’ Direct to Consumer
• Bold Penguin (2016) – Commercial Insurance Exchange
• CoverHound (2010) – Auto Marketplace Comparison
• CoverWallet (2015) – Small Business P & C
• Ethos (2016) - Life
• FINEOS (1993) – Software for Life, Accident & Health
• Fri:Day (2017) – Auto – Germany
• Goji (2007) – Auto Marketplace using Driving History Data
InsurTech Startups

• Hippo (2015) - Home
• Insureon (1997) Small Business P & C Marketplace
• Insurify (2013) – Auto Marketplace Comparison
• Ladder (2015) - Life
• Lemonade (2015) – Home, Renters
• Metromile (2011) - Auto
• Next (2016) – Small Business P & C
• Pie Insurance (2017) – Workers Comp
InsurTech Startups

• PolicyBazaar (2008) – Life & Health Marketplace Comparison - India
• PolicyGenius (2014) - Marketplace Comparison
• Prima Assicurazioni (2015) – Auto - Italy
• Root (2015) - Auto
• Singlife (2014) – Life - Singapore
• Snapsheet (2011) – Claims Management
• Tractable (2014) – Auto Claims Management
• WeFox / One (2015) – Marketplace / P & C Carrier - Germany
• ZhongAn (2013) – Online P & C - China
HEALTHCARE FINTECH

Sectors

Patient Care Administration

Providers
(Hospitals, Physician Practices, Urgent Care Centers, etc.)

Payers
Carriers
Plan Sponsors

Benefits Management

Employers
Carriers
Plan Sponsors
FIs & Other Exchanges

Health Insurance Sales & Distribution

Employers

Individuals

Other Healthcare Information Technology

Primarily Providers

Target Users

FinTech Area of Focus

Revenue Cycle Management ("RCM")

Payment Integrity

Program Management / Coordination of Benefits

Content, Data and Risk Analysis

Member Engagement and Quality Measurement

Administration Platforms

Software

Services / BPO

Online Consumer / SMB Sales Platforms

Financial Management (Premium Billing & Payment)

Eligibility / Enrollment / Plan Comparison

Third Party Administrators ("TPAs")

Pharmacy Benefits Management

Public and Private Healthcare Exchanges

Electronic Medical Records / Electronic Health Records

Tech-Enabled Brokers

Utilization Management

Point-of-Care & Workflow Technologies

Health InsurTech Startups

• American Well (2006) - Telehealth
• BIMA (2010) – Emerging Markets
• Bright Health (2015) – Medicare Advantage
• CareCloud (2009) – Patient Billing & Claims Management
• Clover (2014) – Patient Analytics & Preventive Care driven Insurance
• Collective Health (2013) – Self employed & Small Business Platform
Health InsurTech Startups

• GoHealth (2001) - Marketplace Comparison
• Gusto (2011) – Benefits & Payroll Administrations
• HealthEquity (2002) – Benefits & Health Savings Account Administrator
• Oscar Health (2012) – Individual & Small Business Coverage
• Shuidi (2016) – Crowdfunding of Medical Bills - China
• Zenefits (2013) - Benefits Administrations
Data Related InsurTech Startups

• Cambridge Mobile Telematics (2010) – Road & Driver Safety
• FitSense (2015) – Data Analytics for Health & Life
• Habit Analytics (2018) – Behavioral Patterns from Smartphone & IoT
• HyperScience (2014) – Automated Data Entry
• Open Data Nation (2015) – Public Records Data Aggregator
• Shift Technology (2013) – Fraud Detection
• StrongArm Tech (2011) – Sensor Data for Safety & Injury Protection
• The Floow (2012) – Auto Telematics
• TrueMotion (2012) – Smartphone Sensor Data to Score Drivers