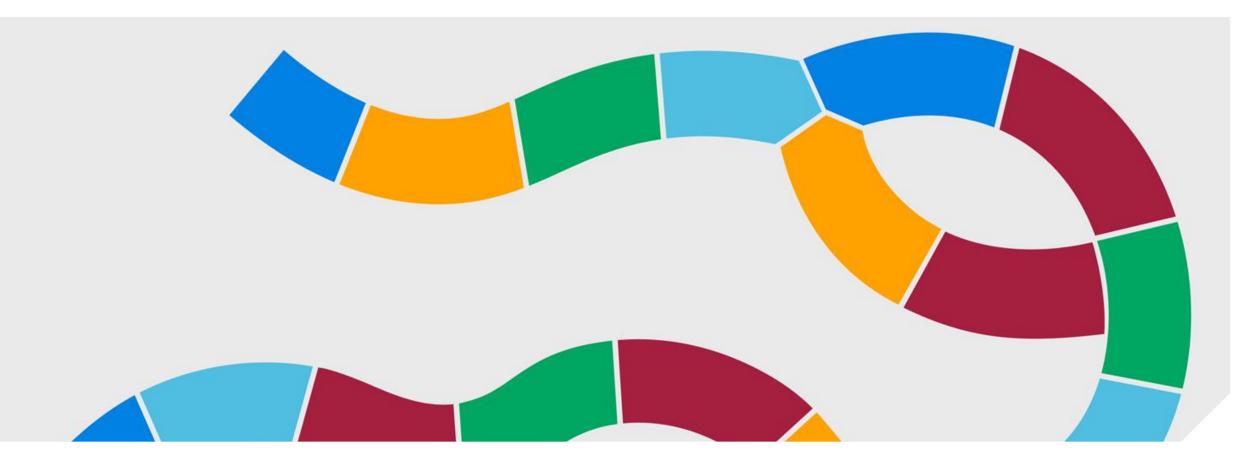


Hoops and Hurdles

The InsurTech Road to Market

Steve Walsh MAY 2018



Hoops and Hurdles

The InsurTech Road to Market

Bring your InsurTech Idea to Market!

Chip out of Sand Hill Sand Trap, traverse Regulatory Rocks, and reach Money Mountain!



Time to Play: 6 to 24 months

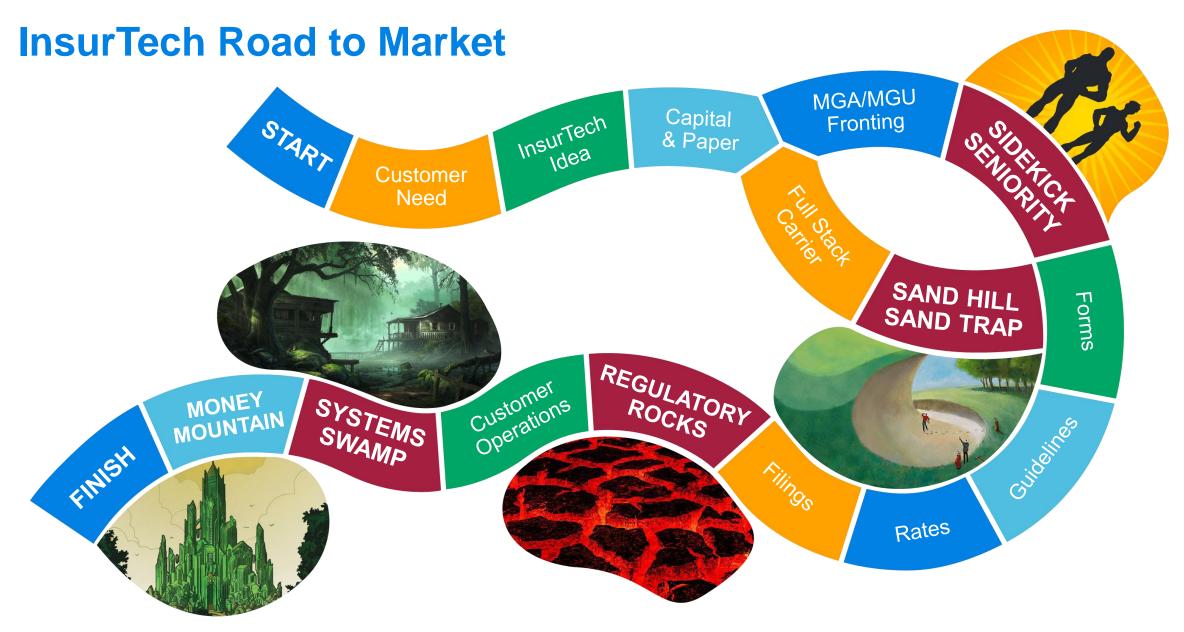


Number of Players: Over 1,500 funded¹



Ages: Startup to Incumbent



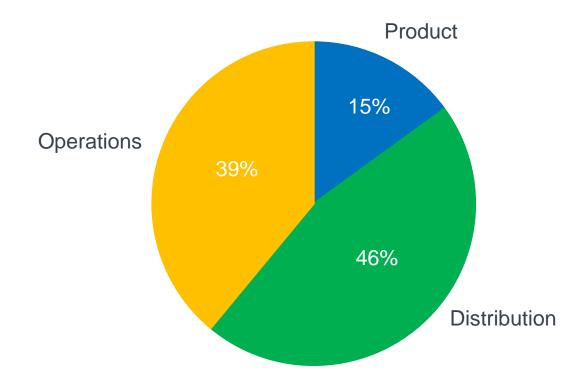




Customer Need and InsurTech Idea

InsurTechs provide innovative products, convenient distribution, and streamlined operations

InsurTechs by Business Offering



- Product
 - New coverage structures (episodic, micro, etc.)
 - New coverages (drone, security deposit, etc.)
- Distribution
 - Broker models and unique partnerships
 - New media (Chatbot, IoT, etc.)
- Operations
 - Data & analytics
 - Process automation

Capital & Paper: Sand Hill Sand Trap vs. Sidekick Seniority

Structural decisions must be compatible with "Sand Hill Road" venture capital or strategic funding

	Full Stack	Fronting	Strategic Partner
Structure	Carrier	Managing General Agent or Underwriter (MGA/MGU)	MGA or Vendor
Up-front Requirements	Certificate of Authority	Fronting Agreement	Carrier Partnership
"Paper"	Own legal entities	Fronting carrier's entity for 5-7% of premium	Partner
Capital Need & Source	High: VC, Reinsurers	Medium: Reinsurers	Low: Carrier
Strategic Limitations	Few: Investors' appetites	Some: Fronting agreements	Many: Partner's scope & existing operations
Risks	Sand Hill Sand Trap: Up-front capital and regulatory approval	Multi-party agreement on capital, paper, and operations	Sidekick Seniority: Lower priority than existing operations

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"We'll start as an MGA, then go Full Stack."

- ALMOST EVERY INSURTECH START-UP

- Everyone says it, no one does it
 - Incurs all the costs of partner integration, and all the cost of capital raising
 - Requires rebuilding your structure exactly when you should be scaling up to profitability



Forms, Guidelines, and Rates

Forms, guidelines, and rates describe the product, target customer segment, and price

Forms define the risk transfer Product

- ISO & AAIS are familiar to agents and regulators
- Custom forms allow innovation, with risk

Guidelines delineate acceptable Customers

- One customer can bankrupt an InsurTech
- Exclude high risk or likely unprofitable segments

Rates are the Price per unit of exposure

- Must be reasonable, not excessive, adequate, and not unfairly discriminatory
- "Me-too" copies a competitor for speed to market

	Typical Tech	InsurTech
Product / Forms	Fun! (Apple, Samsung)	Risk Transfer
Customer / Guidelines	Everyone! (Amazon, Netflix)	Defined Segment
Price / Rates	Free! (Facebook, Google)	Not Free

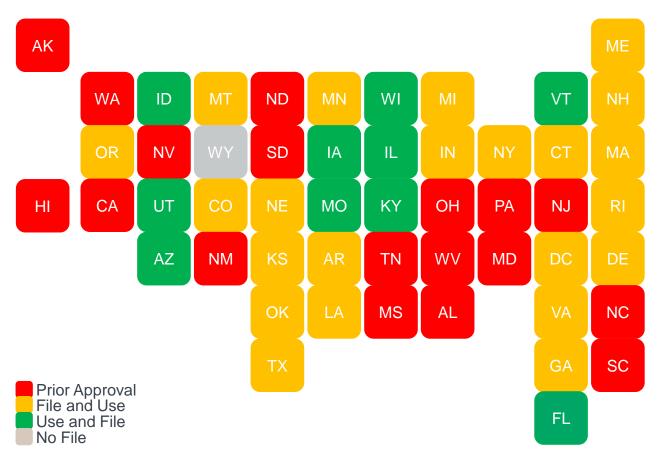
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Filings and Regulatory Rocks

In the U.S., state-based regulations create opportunities and challenges

- Regulators Rock
 - Generations of solvency regulations facilitate customers buying insurance from startups
 - State-based regulation allows competitive trials
- ...but beware Regulatory Rocks
 - State differences require national roll-out, not national launch
 - Filings require consistency, not A/B tests
 - Regulations generally are more strict in:
 - Admitted markets than Surplus markets
 - Personal lines than Commercial lines
 - Rating and Underwriting than Marketing and Distribution

Homeowners Rate Filing Method, Simplified



Customer Operations and Systems Swamp; Build vs. Buy

Policy Administration, Billing, and Claims systems can present new costs or legacy challenges

Build: Ground-Up	Build: Vendor System	Buy: Vendor Services	Buy: Partner Services
 May be faster Controls customer experience 	 Allows suites that are comprehensive Facilitates partner platform integrations 	 Allows InsurTech options Broadens geography with Claims TPAs¹ 	 Leverages expertise Provides consistent customer experience
 Requires capital Requires expertise 	 Requires capital Reduces flexibility 	 Reduces control of customer experience Not available for all functions & lines 	 Reduces control of customer experience Requires legacy integration

Money Mountain, not Money Pit

Start-ups need to plan for expense ratios to improve at scale and manage loss ratio early

- Accumulated profits fund future growth
 - Investors understand start-up costs, but expect returns
 - Regulators monitor solvency tests
- Expense ratio should improve profitability with scale
 - InsurTech automated processes are designed to scale without additional fixed expenses, esp. labor
 - \$100 Million minimum efficient scale for incumbent carriers to drop expense ratio from 11% to 7%
- Gross loss ratio will be volatile, but must be profitable on average
 - Insurance Losses are the Cost of Goods Sold, the variable expense of product delivery
 - Negative gross margin does not improve with scale
 - Risk segmentation separates InsurTech from Tech; sophisticated pricing attracts profitable customers



General Expense Ratio

Milliman Source: SNL, 924 U.S. P&C Carriers 2016

How Milliman Can Help

Milliman is the leading independent global provider of actuarial and risk management services

Insurance line of business subject matter expertise

Subject matter experts including personal homeowners, auto, dwelling fire, umbrella, and title insurance as well as commercial auto, workers compensation, property, liability, and business owners protection

Product management and pricing

Strategic product and pricing advice, including incorporating predictive modeling into connected home, car, and other risk models

 Rate development, regulatory filing strategy, and approval Preparation and submission of state rate filings and response to questions from state insurance departments

Capital modeling

Implementation of economic capital models aligned with business strategies and a realistic assessment of available and required capital

Claims management strategy

Evaluation of insurance operations as well as market and regulatory factors that affect operational and financial performance





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