

InsurTech Industry Analytical Framework



DEEP
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GROUP



DeepTech and
Longevity Industry
Financial Advisors

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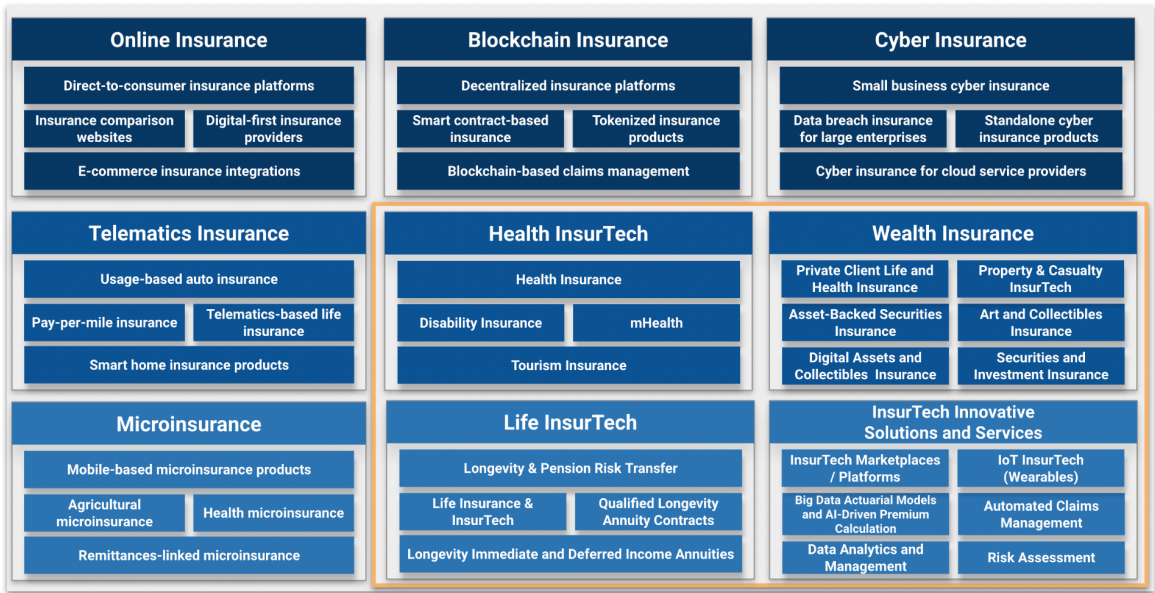
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Introduction

[Deep Knowledge Group](#) investment and finance subsidiary [DeepTech and Longevity Industry Financial Advisors](#), in partnership with the [AI and Data Science Division](#) has released a new [InsurTech Industry Analytical Framework](#), representing the most comprehensive classification system to date for analyzing the InsurTech Industry on a global scale. The framework has been made accessible in an open-access format to better serve the needs of individuals and decision makers within the InsurTech Industry who are dedicated to developing global non-profit activities and serving individuals in need. The main aim of the InsurTech Industry Analytical Framework is to share a comprehensive overview of InsurTech industry participants and make it easier to compare businesses internationally, and focus on each company's activity.

InsurTech Industry Analytical Framework

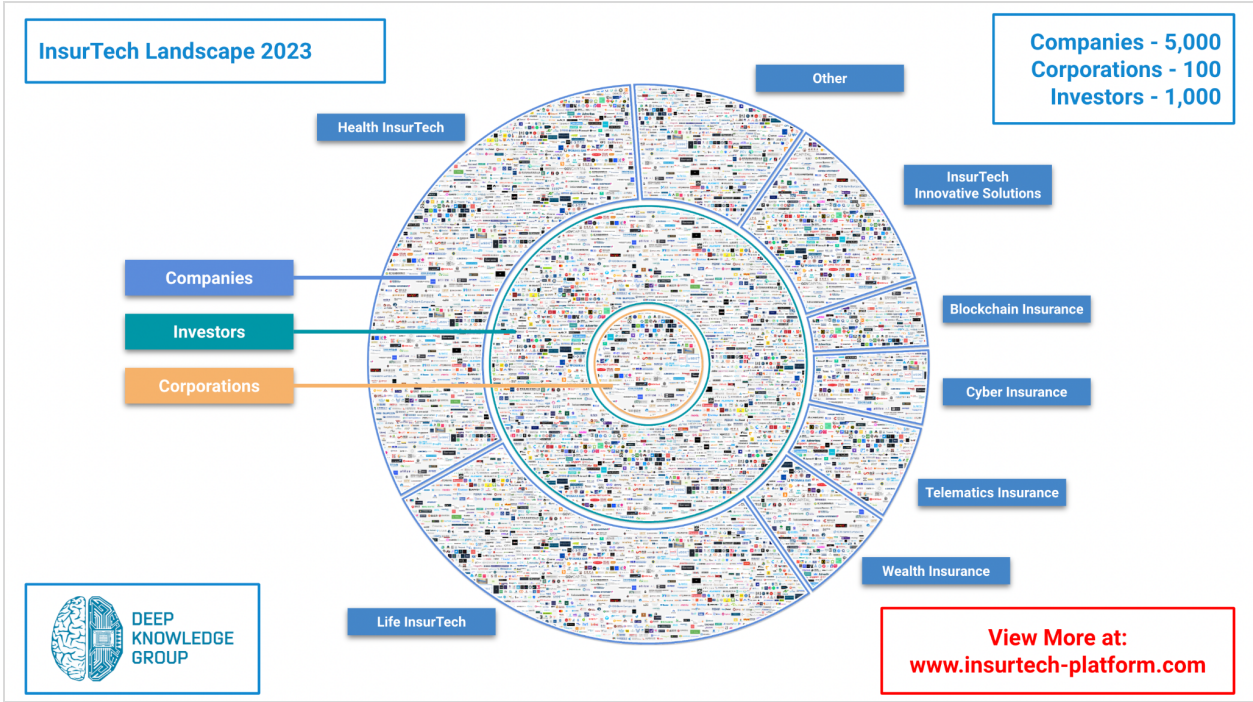


InsurTech Industry Analytical Framework

InsurTech is a rapidly growing industry that leverages technology to streamline and enhance various aspects of the insurance process. With the use of advanced analytics and Artificial Intelligence, InsurTech companies are able to provide more accurate risk assessments, faster claims processing, and personalized policy recommendations, among other benefits. The new analytical framework is poised to take these capabilities to the next level.

And as the industry continues to grow and change, the InsurTech Industry Analytical Framework will continue to incorporate the most recent advances and trends to stay relevant and up-to-date.

Deep Knowledge Group has profiled 5,000 companies, 100 corporations, and 1,000 investors in the InsurTech industry. These profiles provide a comprehensive database of InsurTech players that can be used by investors, corporations, and other stakeholders in the industry. To help users navigate this vast database, Deep Knowledge Group has created an interactive mindmap that allows users to explore the InsurTech landscape in a visual and intuitive way.



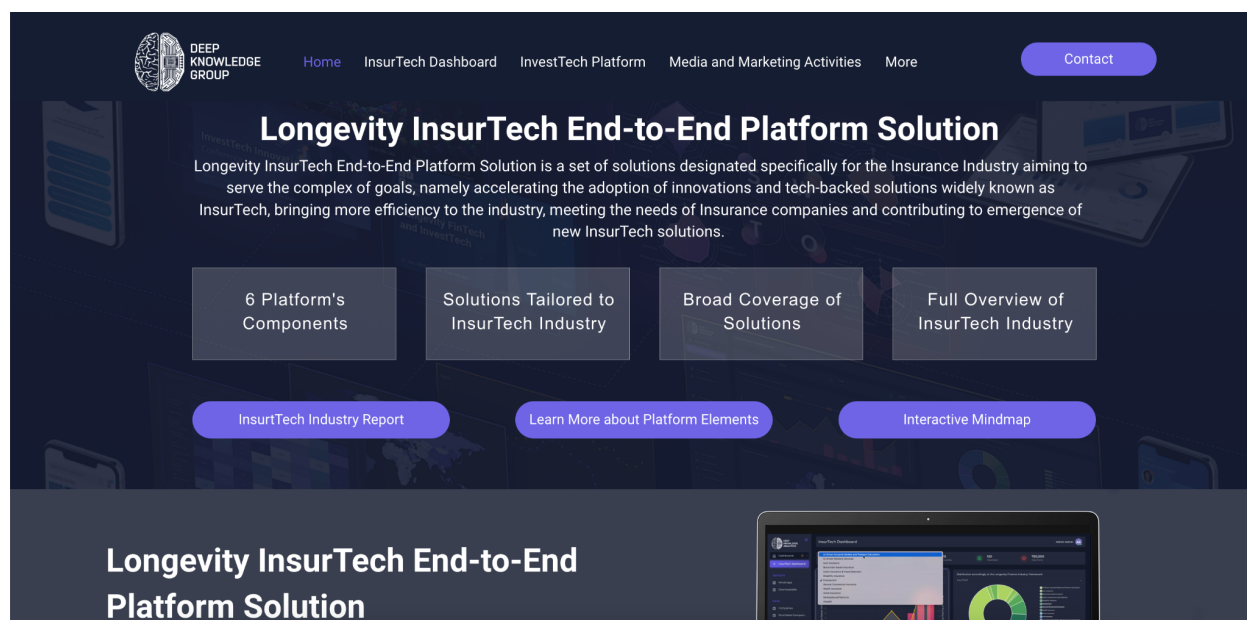
[InsurTech Industry Interactive Mindmap](#)

Longevity InsurTech Industry End-to-End Platform Solution

The analytical framework formed the basis of the dedicated [Longevity InsurTech Industry End-to-End Platform Solution](#), created in order to combine and deploy the extensive InsurTech expertise of Deep Knowledge Group. This is a comprehensive suite of tools and technologies designed specifically for the insurance industry. The goal of

this platform is to accelerate the adoption of innovative, tech-backed solutions that are commonly known as InsurTech.

By doing so, the platform aims to bring greater efficiency and effectiveness to the insurance industry, while also meeting the needs of insurance companies and contributing to the emergence of new InsurTech solutions.



[Longevity InsurTech End-to-End Platform Solution](#)

One of the key benefits of the Longevity InsurTech End-to-End Platform Solution is that it enables insurance companies to more easily adopt InsurTech solutions. This is because the platform provides a seamless, end-to-end solution that encompasses all aspects of the insurance process.

The Longevity InsurTech End-to-End Platform Solution is designed to meet the specific needs of the insurance industry. This means that the platform includes a range of features and tools that are tailored to the unique requirements of insurers, such as risk management and underwriting. Additionally, the platform is constantly updated and improved to ensure that it remains aligned with the evolving needs of the industry.

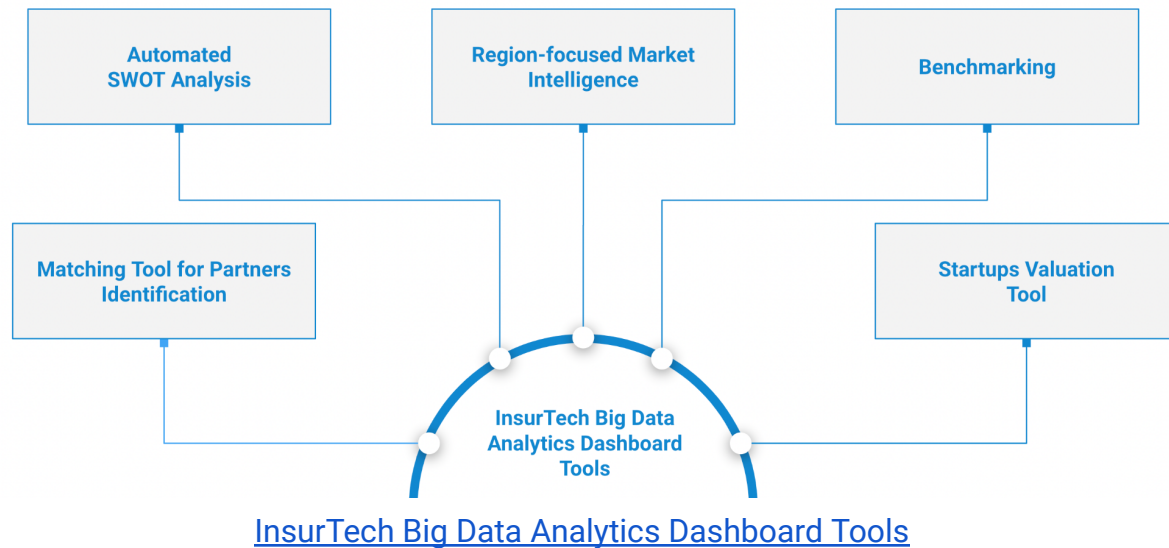
InsurTech Industry Big Data Analytics System and Dashboard

InsurTech Industry Analytical Framework provides a structured approach to the development and deployment of InsurTech Industry Big Data Analytics System and Dashboard, the innovative, tech-backed solution for market intelligence and industry analysis designed specifically to the needs of InsurTech Industry.



[InsurTech Industry Big Data Analytics System and Dashboard](#)

The InsurTech Big Data Analytics Dashboard is a sophisticated cutting-edge tool providing its user with computational risks assessment, general risk management, and multiple de-risking practices. This solution involves the best practices of DKG to the creation of Big Data Analytical Systems and Dashboards.



With its user-friendly interface and powerful analytics capabilities, the InsurTech Industry Big Data Analytics Dashboard enables users to make informed decisions and identify trends that impact the InsurTech industry.

By providing access to real-time information on funding trends, and key industry players, the dashboard empowers decision-makers to stay ahead of the curve and drive innovation in this rapidly evolving sector. Whether you're a government agency, a private sector firm, or a research institution, the Global Philanthropy Big Data Analytics Dashboard is an indispensable tool for anyone looking to stay on the cutting edge of philanthropy innovation.

To date, the Dashboard has aggregated the data on 5,000 InsurTech private and 400 public companies globally. The dashboard involves over 750,000 data points which are constantly extending to supply users with the most relevant market data on InsurTech Industry.

The primary goal of InsurTech Big Data Analytics Dashboard lies in delivering on-demand market intelligence analytics through data coverage across the InsurTech Industry.

The following list involves the practical applications of the Dashboard's tools for its users:

- **Identification, due diligence and comparison** of InsurTech companies based on set of parameters;

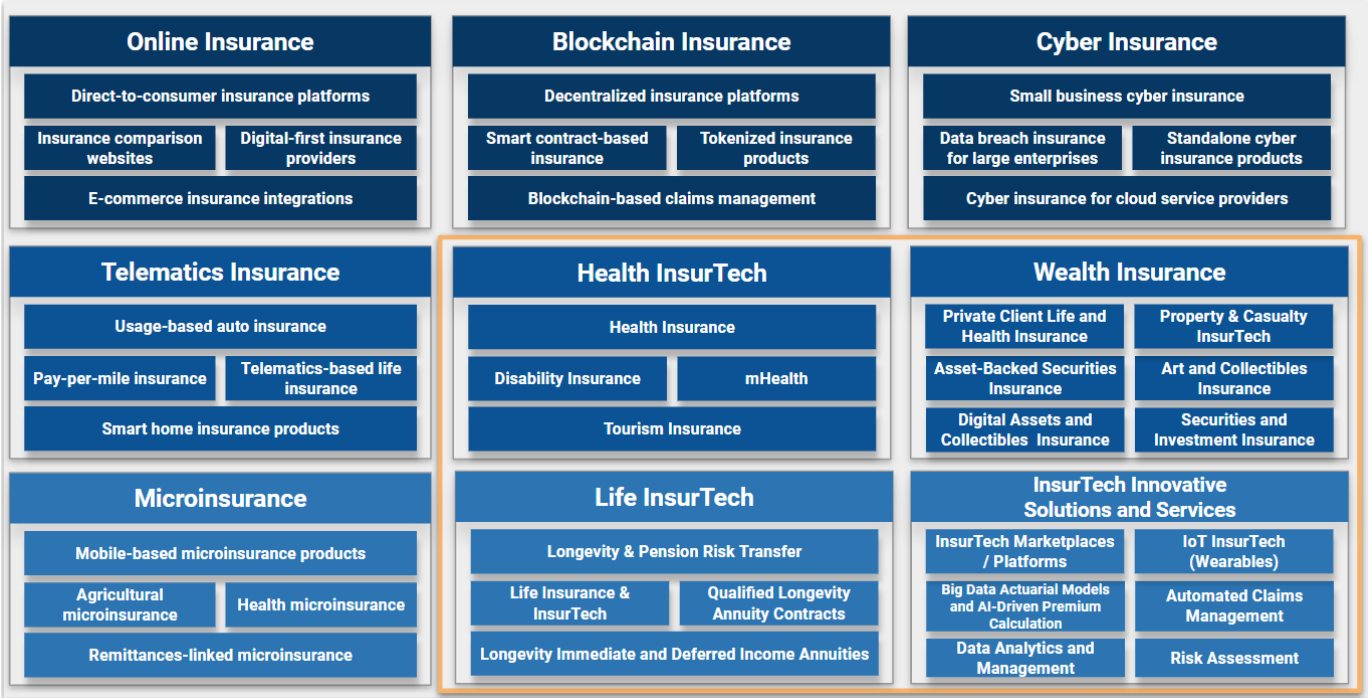
- **Identification, due diligence and comparison** of InsurTech companies based on set of parameters;
- **AI-driven tools providing fair evaluation** of InsurTech companies at different funding stages that will help to select the promising targets for investment deals or M&A transactions;
- **High level of customization** for users allowing to generate various types of analytics;
- **Matching with investors and partners** active in the same industry domains;
- **Constant tracking of InsurTech industry trends**, hidden interconnections between companies allowing to achieve the strategic awareness on the traction of the InsurTech Industry.

The key advantages of the Dashboard can be defined as follow:

- White-Label solution for market Intelligence in the InsurTech Industry, embodying the best practices and most sophisticated approaches pre-validated and developed for other Deep Knowledge Group Big Data Analytical Systems
- The InsurTech Industry Big Data Analytical System and Dashboard will serve as the ideal source of data-driven on-demand analytics guaranteeing uniquely and decisively asymmetric advantages for those who have access to it.
- Monitoring of technological trend and best-practice analysis of other InsurTech companies, deriving actionable insights into the activities of major industry players
- AI-driven Big Data analytical tools providing real-time analytics on startups, investors and corporations engaged in InsurTech, and precise insight identification for strategy optimization
- Comprehensive suite of AI tools for competitors landscape mapping and conducting tangible, practical and actionable data-drive and endpoint-focused market intelligence

The remainder of this document describes the Analytical Framework that makes this possible.

InsurTech Industry Analytical Framework



Above are shown the main segments and subsectors that comprise the InsurTech industry Analytical Framework. **These are documented in the next chapter, InsurTech Industry Analytical Framework: Main Segments.**

This framework places a large and growing focus not just on **Healthcare InsurTech** – the primary goal of which is to make people live healthier lives – but also the tech from which it is inextricable, **Longevity InsurTech**, which covers the methods by which the insurance industry needs to adapt in order to adjust to an increasingly long-lived population. E.g. bundling wellbeing initiatives between longevity and insurance companies has a great potential to resolve the possible challenges in a more holistic manner.

The bottom right yellow square partitions a subset of these InsurTech sectors which encompass these initiatives. **These are documented in the chapter after next: InsurTech Industry Analytical Framework: Longevity InsurTech segments.**

InsurTech Industry Analytical Framework: Main Segments

Online Insurance

Online InsurTech is revolutionizing the insurance industry by leveraging cutting-edge technology to provide streamlined, accessible, and customer-centric insurance solutions. This innovative approach has led to the emergence of various subsectors within the Online InsurTech space, including direct-to-consumer insurance platforms, insurance comparison websites, digital-first insurance providers, and e-commerce insurance integrations.

Direct-to-consumer insurance platforms are changing the way customers purchase insurance by eliminating intermediaries, such as agents and brokers, from the equation. These platforms enable consumers to research, compare, and purchase insurance policies directly from insurers, providing a more transparent and user-friendly experience. Insurance comparison websites, on the other hand, empower consumers by offering a one-stop-shop for comparing various insurance products and providers, allowing them to make well-informed decisions based on factors such as coverage, price, and customer reviews. These websites simplify the insurance selection process and often save customers time and money.

Digital-first insurance providers are companies built from the ground up to operate exclusively in the digital realm, capitalizing on advanced technologies like Artificial Intelligence, big data analytics, and Machine Learning to streamline their operations and deliver tailored insurance products. These providers are known for their agility, adaptability, and rapid response to changing market conditions and consumer needs. Meanwhile, e-commerce insurance integrations extend the reach of insurance services by embedding them into popular e-commerce platforms, enabling customers to purchase insurance coverage seamlessly as they shop online. This approach not only simplifies the insurance buying process but also opens up new avenues for cross-selling and up-selling insurance products to a broader audience.

Direct-to-consumer insurance platforms

Direct-to-consumer (D2C) insurance platforms are digital channels that allow customers to purchase insurance policies directly from insurance companies, without the need for intermediaries such as agents or brokers. These platforms typically offer a streamlined,

user-friendly experience that allows customers to compare and purchase insurance policies online, often with the help of Artificial Intelligence or Machine Learning algorithms.

One of the key benefits of D2C insurance platforms is that they allow customers to access insurance products and services more easily and conveniently. By eliminating the need for intermediaries, D2C platforms can reduce costs and pass on those savings to customers in the form of lower premiums. They can also provide more personalized and relevant insurance products by using data and analytics to understand customer needs and preferences.

Insurance comparison websites

Insurance comparison websites refers to a specific segment of the online insurance industry that focuses on providing consumers with a platform to compare various insurance products, such as auto, home, health, and life insurance, among others. These websites typically aggregate quotes and policy details from multiple insurance providers, allowing users to easily compare different options side-by-side in order to find the best coverage and pricing for their needs.

Insurance comparison websites have gained popularity due to the convenience they offer in simplifying the insurance shopping process. By consolidating information from multiple insurance companies, they allow consumers to save time and make more informed decisions without having to visit multiple provider websites or contact insurance agents directly.

Key features of insurance comparison websites include a user-friendly interface that is easily navigable and visually appealing, guiding users through the process of inputting necessary information and displaying results in a clear, organized manner. These websites also provide customizable search criteria, allowing users to input specific requirements and preferences, such as coverage levels, deductible amounts, and desired price range, to filter and sort through available policies. Side-by-side comparisons present policy details, coverage options, and pricing from multiple providers in a standardized format, making it easier for users to analyze and compare different offerings.

Digital-first insurance providers

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E-commerce insurance integrations

E-commerce insurance integrations refer to the bundling and sale of insurance coverage or protection while a consumer is purchasing a product or service online. This brings the coverage directly to the consumer at the point of sale. As a result, the customer doesn't have to go looking for coverage – and they may not even know they need it until they're offered the opportunity. E-commerce insurance integration works by offering insurance coverage or protection while a consumer is purchasing a product or service online. This can be done through an API integration or by using a ready-to-use app for certain e-commerce platforms.

Overall, e-commerce insurance integrations are an important trend in the insurance industry, as they offer a way to make insurance more accessible and relevant for customers, while also leveraging technology to increase efficiency and reduce costs. However, customers should carefully review the coverage and terms of the insurance products offered through e-commerce platforms to ensure that they are getting the best value and protection for their needs.

Blockchain Insurance

Blockchain Insurance is a cutting-edge and rapidly growing sector that is reshaping the traditional insurance landscape by leveraging the power of blockchain technology and advanced InsurTech solutions. This transformative industry is redefining the way insurance providers and policyholders interact by fostering enhanced efficiency,

transparency, and security across the entire insurance value chain. At the core of this revolution are four key segments: decentralized insurance platforms, smart contract-based insurance, tokenized insurance products, and blockchain-based claims management. These innovative approaches are streamlining various aspects of the insurance process, from policy issuance and underwriting to claims processing and risk management.

By harnessing the power of decentralized networks and smart contracts, Blockchain Insurance is able to eliminate the need for intermediaries and central authorities, thereby reducing operational costs and increasing trust among stakeholders. Furthermore, the tokenization of insurance products offers unprecedented flexibility, allowing policyholders to customize their coverage and insurers to effectively manage risk through a diverse pool of token holders. Additionally, blockchain-based claims management solutions are enhancing the efficiency, security, and transparency of the claims process by providing real-time access to data and automating key processes. As a result, insurers can make more accurate and timely decisions, while policyholders enjoy a smoother and more satisfying claims experience.

In essence, Blockchain Insurance is poised to dramatically change the insurance sector by providing innovative, cost-effective, and customer-centric solutions that leverage the power of blockchain technology and advanced InsurTech tools. As this industry continues to evolve and mature, it is expected to play a pivotal role in shaping the future of insurance and risk management, ultimately benefiting both insurance providers and policyholders alike.

Decentralized insurance platforms

Decentralized insurance platforms operate on blockchain-based networks, which enable secure, transparent, and efficient transactions without the need for a central authority or intermediary. These platforms are built on top of decentralized finance (DeFi) ecosystems, and they employ peer-to-peer (P2P) models to allow policyholders and investors to connect directly. Decentralized insurance platforms offer various advantages, such as reduced operational costs, streamlined processes, and enhanced data privacy, which ultimately result in more affordable and accessible insurance products for customers.

Smart contract-based insurance

Smart contract-based insurance is a groundbreaking approach to insurance that leverages the capabilities of blockchain technology to streamline and automate key processes in the insurance lifecycle. By utilizing self-executing contracts, this innovative insurance model offers numerous benefits to both insurers and policyholders, as detailed below:

- Efficiency - Smart contract-based insurance significantly improves the efficiency of the insurance process by automating many of the manual and time-consuming tasks
- Fraud and Dispute Reduction - Smart contract-based insurance greatly reduces the potential for fraud and disputes by providing an immutable and transparent record of all transactions, making it extremely difficult to manipulate or alter any data
- Trust - By eliminating the need for third-party intermediaries and central authorities, smart contract-based insurance inherently promotes trust among all stakeholders. Since smart contracts automatically execute and enforce themselves, policyholders can be confident that their claims will be processed

Tokenized insurance products

Tokenized insurance products represent a novel and innovative approach to insurance that leverages the capabilities of blockchain technology to digitize and tokenize traditional insurance policies. These digital tokens, which represent specific coverage or risk, can be traded, bought, or sold on blockchain-based marketplaces, resulting in a more efficient, transparent, and accessible insurance ecosystem.

Some examples of tokenized insurance products combat double payouts for the same claim by using blockchain technology to create a unique token for each claim. Another example is Lemonade which uses blockchain technology to create a unique digital asset called a “policy token” that represents a policyholder’s coverage.

Tokenized insurance products represent a significant shift in the way insurance is structured, distributed, and managed, offering numerous benefits in terms of risk management, customization, accessibility, efficiency, transparency, and innovation. These products are poised to play a critical role in shaping the future of the insurance sector, ultimately benefiting both insurers and policyholders alike.

Blockchain-based claims management

Blockchain-based claims management represents a transformative approach to handling insurance claims by harnessing the power of distributed ledger technology (DLT). By securely storing and sharing data across multiple parties, such as insurers, claimants, and service providers, blockchain-based claims management can significantly improve various aspects of the claims experience. For example, by providing a shared and immutable record of all claims-related data, blockchain-based claims management can streamline the claims process and reduce the time and effort required to settle claims. This increased efficiency can lead to faster claims resolution, reduced administrative costs for insurers, and improved customer satisfaction.

Cyber Insurance

Cyber Insurance is a rapidly growing sector, driven by the increasing prevalence of cyber threats and the need for organizations to protect themselves against financial losses resulting from cyber attacks. This industry consists of several sectors, including small business cyber insurance, data breach insurance for large enterprises, standalone cyber insurance products, and cyber insurance for cloud service providers.

As businesses and organizations of all sizes increasingly rely on digital infrastructure, tailored cyber insurance products such as standalone policies, small business cyber insurance, data breach insurance for large enterprises, and cyber insurance for cloud service providers address their unique needs and risks. These policies often include coverage for data breaches, cyber extortion, business interruption, and legal liabilities, while also offering access to cybersecurity resources, support, and proactive services such as risk assessments and incident response planning. InsurTech advancements enable customization and streamlined processes, enhancing the industry's ability to address evolving cyber risks effectively.

Overall, Cyber Insurance is an important trend in the insurance industry, as it offers a way to help organizations protect themselves against the financial losses and reputational damage that can result from cyber attacks. However, the industry is also facing challenges, including the evolving nature of cyber risks and the need to develop new products and services to meet changing customer needs. Nevertheless, the industry is expected to continue to grow in the coming years, as organizations of all sizes recognize the importance of cyber risk management and insurance protection.

Small business cyber insurance

Small business cyber insurance is a vital component in safeguarding small and medium-sized enterprises (SMEs) from the ever-growing threats of cybercrime. As businesses become increasingly reliant on technology, the risks associated with data breaches, cyber extortion, and business interruption become more prevalent. This insurance product is specifically tailored to address these challenges, providing businesses with the necessary financial protection and support resources to mitigate the consequences of a cyber-attack.

A key aspect of small business cyber insurance is coverage for data breaches. In the event of unauthorized access to sensitive information, businesses face not only the potential loss of data, but also legal liabilities and reputational damage. Cyber insurance policies help SMEs manage these risks by covering expenses related to breach notifications, credit monitoring for affected individuals, and legal defense costs. This coverage is crucial in ensuring that small businesses can quickly recover from a data breach and maintain their operations.

Data breach insurance for large enterprises

Data breach insurance for large enterprises is designed to protect organizations from the financial and reputational consequences of data breaches. Key aspects of these policies include coverage for legal fees, forensic investigations, and notification costs, as well as access to crisis management resources and support. These policies are essential in helping large organizations effectively respond to and manage the long-term effects of data breaches, ensuring compliance with legal requirements, mitigating financial impacts, and safeguarding their reputation.

One of the primary features of data breach insurance for large enterprises is coverage for legal fees and forensic investigations. In the event of a data breach, organizations must promptly identify the cause of the breach, assess the extent of the damage, and take appropriate measures to prevent future incidents. Data breach insurance policies help large enterprises manage these responsibilities by covering the costs of forensic investigations, as well as legal expenses related to regulatory compliance and potential lawsuits.

Standalone cyber insurance products

Standalone cyber insurance products offer extensive protection against various cyber threats, addressing the unique risks faced by organizations in today's digitally-driven

landscape. These customizable policies not only cover the financial losses arising from data breaches, cyber extortion, and business interruption.

One key aspect of standalone cyber insurance products is the inclusion of proactive services such as risk assessments, incident response planning, and cyber security training. These services enable organizations to identify potential vulnerabilities, develop appropriate response strategies, and strengthen their overall security posture.

The flexibility and comprehensiveness of standalone cyber insurance products make them an ideal choice for organizations seeking to protect their digital assets and mitigate the consequences of cyber-attacks. By offering tailored coverage and access to essential resources, these policies enable businesses to navigate the complex and evolving landscape of cyber risks.

Cyber insurance for cloud service providers

Cyber insurance for cloud service providers protects organizations using cloud services against financial losses and legal liabilities from cyber attacks. These policies address the unique risks of cloud environments, offering comprehensive coverage and essential cybersecurity resources.

Key coverage aspects include data breaches, cyber extortion, and business interruption, providing financial protection and ensuring operational continuity. Tailored to cloud-based environments, these policies help organizations manage risks effectively.

In addition to financial coverage, these policies offer cybersecurity resources and support, such as incident response planning and risk assessments. This comprehensive protection helps organizations navigate the complex landscape of cloud-related cyber risks and safeguard their assets.

Microinsurance

Microinsurance is a rapidly emerging sector within the insurance industry that leverages cutting-edge technology to provide affordable and accessible insurance products to low-income individuals and businesses, often in underserved markets. By utilizing mobile technology, data analytics, and innovative distribution channels, InsurTech aims to address the unique challenges and needs of these markets, offering tailored solutions in various areas such as mobile-based microinsurance products,

agricultural microinsurance, health microinsurance, and remittances-linked microinsurance. These innovative approaches not only provide vital financial protection to vulnerable populations but also contribute to the overall growth and stability of local economies. As technology continues to advance and the demand for inclusive financial services grows, Microinsurance InsurTech is poised to play a critical role in bridging the insurance gap for millions of underserved individuals and communities worldwide.

Microinsurance encounters numerous obstacles in its mission to bridge the insurance gap for underserved populations. The top five challenges encompass a lack of information on consumers, which makes accurate risk assessments difficult; inadequate access to consumers, often due to geographical or infrastructural constraints; the unique and evolving needs of this consumer segment, which demands innovative insurance solutions; customers' inexperience with formal financial services, which necessitates increased efforts in financial education and awareness; and constrained business models that may struggle to achieve profitability in low-income markets. Beyond these issues, Microinsurance InsurTech must also navigate regulatory challenges, as governments work to establish appropriate frameworks for this emerging sector.

Mobile-based microinsurance products

Mobile-based microinsurance products harness the power of mobile technology and widespread mobile phone usage to deliver affordable and accessible insurance solutions to underserved populations. By leveraging mobile platforms and digital distribution channels, these products simplify the enrollment, premium payment, and claim processes, making insurance more user-friendly and efficient for consumers who may have limited access to traditional financial services.

Mobile-based microinsurance also enables insurers to collect valuable data on consumer behavior, allowing for more accurate risk assessment and the development of tailored products. However, challenges such as limited internet connectivity, digital literacy, and data privacy concerns must be addressed to ensure the successful adoption and scalability of mobile-based microinsurance products.

Agricultural microinsurance

Agricultural microinsurance aims to provide financial protection to small-scale farmers and agribusinesses against risks such as crop failure, livestock disease, and natural disasters. By utilizing technologies such as remote sensing, satellite imagery, and

weather data, agricultural microinsurance can offer innovative products such as index-based insurance, which links payouts to measurable indices like rainfall levels or crop yields. This approach reduces the need for costly on-site assessments and enables more efficient claims processing.

Agricultural microinsurance can play a critical role in promoting food security, rural development, and climate change adaptation. However, challenges such as low awareness of insurance benefits, the need for localized risk assessments, and the potential for basis risk must be addressed for agricultural microinsurance to achieve its full potential.

Health Microinsurance

Health microinsurance seeks to provide low-income individuals and families with affordable access to essential healthcare services, reducing the financial burden associated with medical expenses. By utilizing digital platforms, data analytics, and innovative partnerships with healthcare providers, health microinsurance can offer customized and cost-effective policies that cater to the unique needs of underserved populations.

Additionally, preventative care and wellness initiatives can be integrated into health microinsurance products, encouraging policyholders to adopt healthier lifestyles and reducing the overall risk for insurers. However, challenges such as limited healthcare infrastructure, the need for consumer education on the importance of health insurance, and regulatory complexities must be addressed to ensure the widespread adoption and success of health microinsurance.

Remittances-linked Microinsurance

Remittances-linked microinsurance leverages the growing remittance market to provide insurance coverage to migrant workers and their families. By integrating microinsurance products into remittance services, insurers can tap into existing financial flows, making it easier for policyholders to pay premiums and access insurance benefits. This approach not only simplifies the insurance process for customers but also provides an additional value-added service for remittance providers, potentially increasing customer loyalty and engagement.

Remittances-linked microinsurance can play a crucial role in promoting financial inclusion and resilience among migrant communities. However, challenges such as

cross-border regulatory compliance, currency fluctuations, and the need for effective collaboration between insurers and remittance providers must be addressed to fully realize the potential of remittances-linked microinsurance.

Telematics Insurance

Telematics Insurance is a rapidly evolving domain within the insurance industry that leverages advancements in information technology and telecommunications to offer innovative and personalized insurance products. By using devices such as sensors, GPS tracking systems, and advanced analytics, Telematics InsurTech aims to collect and analyze real-time data to better understand the behavior and usage patterns of policyholders. This data-driven approach marks a significant departure from traditional insurance models, which often relied on generalized risk assessments and one-size-fits-all policies. The emergence of Telematics InsurTech can be attributed to several factors, including the increasing adoption of IoT devices, advancements in data analytics, and growing consumer demand for personalized services. Additionally, insurance companies are constantly searching for ways to minimize risk and reduce fraudulent claims, which has further driven the development and integration of telematics technologies.

Telematics InsurTech consists of several key components, including: Hardware (Sensors, telematics devices, and IoT-enabled gadgets that collect data on various parameters such as vehicle usage, driving behavior, health indicators, and home security); Software (advanced software platforms that process and analyze the collected data, enabling insurers to make more informed decisions about policy pricing, risk assessment, and claims management); Connectivity (telecommunication networks and cloud-based services that enable seamless data transmission between devices and insurance companies); User Interface (mobile apps, web portals, and other digital tools that allow policyholders to access their data, receive personalized feedback, and interact with their insurance providers).

Telematics InsurTech offers numerous advantages for both insurers and policyholders, including the ability to create personalized policies based on real-time data, incentivizing good behavior to reduce risk and lower premiums, improving claims management efficiency, and enhancing customer engagement through real-time feedback and value-added services. These benefits contribute to a more accurate, customer-centric approach to insurance, ultimately benefiting all stakeholders in the industry.

Usage-based auto insurance

Usage-Based Auto Insurance (UBI) is an innovative insurance model that calculates premiums based on individual driving habits, rewarding safer drivers with lower rates. By leveraging real-time data collected through telematics devices, UBI promotes safer driving habits and offers greater transparency in premium calculations.

Despite challenges such as data privacy, regulatory issues, and implementation costs, the future of UBI appears promising as technology advances and consumer demand for personalized services grows. Insurers that successfully navigate these challenges and implement UBI effectively are likely to gain a competitive advantage in the marketplace and cater to the evolving needs of their customers.

Pay-per-mile insurance

Pay-Per-Mile Insurance calculates premiums based on the actual number of miles driven by the policyholder, offering a more equitable pricing structure and encouraging drivers to reduce their mileage. This model can lead to cost savings for policyholders and lower claim payouts for insurers, as well as environmental benefits through reduced traffic congestion and emissions.

Although it has potential disadvantages such as limited availability and privacy concerns, pay-per-mile insurance is particularly attractive for those who drive infrequently or have varying driving patterns. As the market continues to evolve, the adoption of pay-per-mile insurance may increase, offering consumers more flexibility and choice in their auto insurance coverage.

Telematics-based life insurance

Telematics-Based Life Insurance employs wearable technology and IoT devices to collect personalized health data, enabling insurers to offer tailored policies based on individual health and lifestyle choices. This data-driven approach allows for more accurate risk assessment and pricing structures, ultimately benefiting both insurers and policyholders. However, telematics-based life insurance also faces challenges such as data privacy concerns, potential biases in data analysis, and the need to address consumer apprehensions about sharing personal health information.

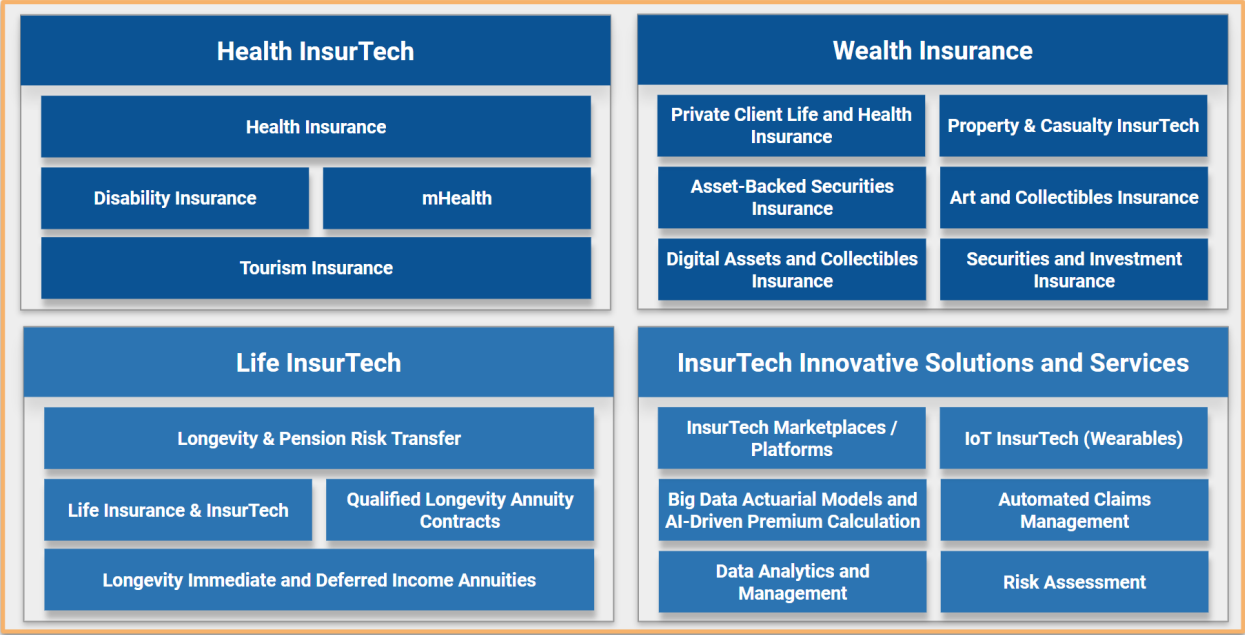
As the life insurance industry continues to evolve, addressing these challenges will be crucial for insurers looking to capitalize on the potential of telematics-based life insurance and offer innovative, customer-centric products.

Smart home insurance products

Smart Home Insurance Products leverage IoT devices and sensors to monitor and manage potential risks in the home environment, such as fire, water damage, and burglary. By providing homeowners with valuable insights and tools to mitigate risks, smart home insurance products enable insurers to offer more accurate and customized insurance policies.

However, challenges such as data privacy concerns and the costs of technology implementation must be addressed for smart home insurance to gain widespread adoption in the market. As insurers continue to explore the potential of IoT in home insurance, addressing these challenges will be crucial for the development and success of smart home insurance products, ultimately benefiting both insurers and homeowners alike.

InsurTech Industry Analytical Framework: Longevity InsurTech Segments



Health InsurTech

Health InsurTech represents the fusion of cutting-edge technologies with the health insurance industry, aimed at enhancing its efficiency and effectiveness. This sector incorporates the use of Artificial Intelligence, Machine Learning, blockchain, and big data analytics to optimize healthcare policies and streamline claims administration. InsurTech companies in the healthcare space are developing innovative insurance products and services tailored to the evolving needs of consumers and healthcare providers, including personalized insurance plans, telemedicine, and wellness programs.

By capitalizing on data and analytics, Health InsurTech providers can refine underwriting accuracy, detect fraud, and manage risk more effectively, resulting in precise pricing and sustainable insurance products. Furthermore, Health InsurTech significantly expands access to healthcare services, particularly for underserved populations, by leveraging technology to reach remote and rural areas with virtual consultations and remote monitoring, ultimately improving health outcomes. Health InsurTech offers numerous benefits, such as cost savings, increased efficiency, enhanced patient outcomes, and improved customer experiences. Additionally, InsurTech companies can swiftly adapt to fluctuating market conditions and consumer needs. As the healthcare industry

continues to progress and become increasingly digital, Health InsurTech is poised to play an even more prominent role in shaping the future of healthcare.

Health Insurance

Health Insurance and InsurTech is transforming the way individuals and organizations access and manage healthcare coverage. Health InsurTech encompasses a wide range of services, including personalized insurance plans, telemedicine, and wellness programs, which cater to the evolving needs of consumers and healthcare providers. As the healthcare industry continues to face challenges related to rising costs, uneven access to care, and inefficiencies in service delivery.

One significant area where Health Insurance and InsurTech are making an impact is in the underwriting process. By leveraging data and analytics, Health InsurTech providers can improve underwriting accuracy, fraud detection, and risk management, leading to more accurate pricing and sustainable insurance products. Additionally, technology-driven innovations in healthcare, such as telemedicine, remote patient monitoring, and wearable devices, are enabling insurers to develop more comprehensive and proactive coverage options.

Disability Insurance

Disability insurance is a crucial component of the insurance industry that safeguards policyholders from financial distress in the event of a disability that prevents them from working and earning an income. This insurance product replaces a portion of the policyholder's paycheck, allowing them to continue paying bills and maintain their standard of living. With the rise of InsurTech, technological advancements have the potential to revolutionize the disability insurance subsector. This segment is represented by organizations offering or developing innovative disability insurance solutions, paving the way for a more secure and inclusive financial future.

As the InsurTech industry continues to evolve, disability insurance providers are well-positioned to revolutionize the way they serve their clients. By leveraging technology to enhance the customer experience, optimize underwriting, and increase accessibility, these organizations are not only ensuring the extended Wealthspan of the population but also fostering a more inclusive and secure financial future for all.

mHealth

mHealth, or mobile health, refers to the use of mobile devices such as smartphones, tablets, and wearable technology to support and enhance healthcare delivery and patient outcomes. This can include a wide range of applications, including remote monitoring of patient health, medication management, appointment scheduling, and disease prevention and management.

By leveraging mobile devices and health data, insurers can offer more personalized and cost-effective policies to their customers. For example, a life insurance company might use data from a customer's fitness tracker to adjust their premiums based on their overall health and fitness level.

Similarly, mHealth can help insurers to better manage claims and reduce fraud. For instance, by using mobile apps to capture and verify medical records and receipts, insurers can reduce the risk of false claims and expedite the claims process.

Tourism Insurance

Travel insurance is an essential part of the insurance industry, providing coverage to travelers for unforeseen circumstances that may occur during their trips. These policies often include coverage for trip cancellations, interruptions, medical emergencies, and more. With the rise of InsurTech, technological advancements are shaping the future of travel insurance, making it more accessible, personalized, and convenient. This segment is represented by organizations offering or developing innovative tourism insurance solutions to enhance the travel experience while ensuring peace of mind.

As the InsurTech industry continues to evolve, tourism insurance providers have the opportunity to transform the way they serve travelers. By leveraging technology to enhance the customer experience, streamline policy management, and increase personalization, these organizations are not only providing peace of mind to travelers but also contributing to a more enjoyable and worry-free travel experience for all.

Wealth Insurance

The Wealth InsurTech is a rapidly evolving segment that encompasses a diverse range of subsectors. By leveraging state-of-the-art technologies such as Artificial Intelligence (AI), Machine Learning, big data analytics, Internet of Things (IoT) devices, telematics, and blockchain, this industry segment is revolutionizing the way insurance providers manage policies and investment portfolios for various asset classes, catering to the

unique needs of different clients. InsurTech innovations enable insurers to offer tailored insurance solutions, assess risks more accurately, and deliver real-time customer support through AI-powered chatbots and virtual agents. These advancements not only streamline the insurance process but also improve the overall customer experience, providing clients with greater control, transparency, and convenience in managing their wealth and investments. Furthermore, Wealth Insurance is exploring new business models that provide clients with personalized financial advice and investment recommendations without the need for human interaction. These tech-driven models empower clients to make well-informed decisions about their wealth management, leading to better financial outcomes and higher customer satisfaction.

In addition to improving the customer experience, InsurTech advancements are also helping insurers better manage risk and pricing strategies by harnessing the power of data analytics and Machine Learning. This allows them to develop more accurate and sustainable insurance products, leading to increased profitability and stability within the industry. As Wealth Insurance continues to evolve, it is expected to play an increasingly significant role in shaping the future of wealth management and insurance. With the rapid growth of digital assets, such as cryptocurrencies and non-fungible tokens (NFTs), as well as the expanding market for art and collectibles, the industry's potential for further innovation and disruption is vast.

Private Client Life and Health Insurance

InsurTech plays a pivotal role in providing tailored solutions for high-net-worth individuals (HNWIs) in the realm of Private Client Life and Health Insurance. By using technologies such as big data analytics and Machine Learning, insurers can assess the unique risks and needs of their affluent clientele, offering customized policies with enhanced coverage and flexibility. These innovations enable insurance providers to deliver an improved customer experience by offering personalized advice and recommendations, while also ensuring prompt and efficient resolution of queries and issues.

Property & Casualty InsurTech

InsurTech firms in the Property & Casualty (P&C) insurance sector utilize cutting-edge technology to safeguard you and your assets. These innovative companies offer protection for your home and vehicle by employing advanced analytics and IoT devices to assess risk and provide tailored coverage. Casualty insurance covers your liabilities if you are deemed legally responsible for an accident that causes injury or property

damage. Property and casualty insurance are often combined to offer comprehensive protection.

For landlords, specialized insurance policies are available that cater to the unique risks associated with rental properties. These policies typically include building and contents insurance, as well as landlord-specific coverages such as property owners' liability, loss of rent, and tenant default insurance. InsurTech advancements in the P&C insurance sector streamline the process and elevate the customer experience, making it more efficient and personalized to cater to the evolving needs of policyholders.

Asset-Backed Securities Insurance

InsurTech is applied in Asset-Backed Securities Insurance to provide coverage for investors in asset-backed securities (ABS). Employing sophisticated data analytics, insurers can better assess the risk profile of the underlying assets, resulting in improved risk management and pricing strategies. These technologies also enable insurers to monitor the performance of the ABS in real-time, providing investors with valuable insights and alerts on potential risks, ultimately contributing to an enhanced customer experience.

Art and Collectibles Insurance

Art and Collectibles Insurance is a niche segment within the InsurTech industry that uses cutting-edge technology to cater to the unique needs of art collectors, museums, and galleries. Technologies like blockchain enable insurers to assess the value, authenticity, and provenance of art pieces, ensuring accurate coverage and pricing. Advanced data analytics help insurers identify trends and risks within the art market, allowing them to develop tailored policies addressing the specific needs of their clients. Real-time customer support further improves the customer experience by offering prompt assistance and personalized advice.

Digital Assets and Collectibles Insurance

The growth of digital assets and collectibles, including cryptocurrencies and non-fungible tokens (NFTs), has necessitated the development of specialized insurance solutions to address the unique risks associated with these emerging asset classes. InsurTech companies are at the forefront of this evolution, leveraging blockchain technology to securely store, verify ownership records, and track the value of digital assets in real-time. This comprehensive approach enables insurers to accurately assess

risk factors, such as cyber threats, market volatility, and regulatory changes, associated with these digital assets.

By harnessing advanced data analytics and Machine Learning algorithms, InsurTech firms can develop customized insurance policies tailored to the specific needs of individuals and businesses engaged in the digital assets and collectibles space. These policies may cover risks such as theft, loss of private keys, and damage to digital wallets, ensuring that policyholders are well-protected against potential setbacks.

Securities and Investment Insurance

Securities and Investment Insurance focuses on providing insurance coverage and protection for various types of financial assets, such as stocks, bonds, and other investment instruments. This sector aims to safeguard the financial interests of investors and wealth management clients, protecting them against potential losses and risks associated with their investment portfolios.

Securities and investment insurance can help mitigate a variety of risks, such as market volatility, fraud, and the failure of financial institutions. These insurance products typically cover losses that may arise due to unforeseen circumstances that impact the value or management of the insured assets.

Key aspects of securities and investment InsurTechs include offering diverse coverage options for a wide range of financial assets, such as equities, fixed-income securities, commodities, and alternative investments, tailored to the specific needs and risk profile of the investor or wealth management client. These InsurTechs play an important role in risk management strategies by providing insurance coverage for investment portfolios, helping to reduce the potential financial impact of unexpected events or market downturns. They must also adhere to strict regulatory requirements and industry standards to ensure proper protection of clients' assets and interests. Often, they collaborate with financial advisors, wealth managers, and other industry professionals to help clients make informed decisions about their investment insurance needs and develop comprehensive risk management strategies. In the event of a covered loss, securities and investment InsurTechs work with clients to assess damages and facilitate the claims process, ensuring timely and fair compensation.

Life InsurTech

Longevity Life InsurTech refers to the innovative solutions and services within the insurance industry that focus on addressing the challenges and opportunities presented by an increasingly long-lived population. By integrating advanced technologies such as Artificial Intelligence (AI), Machine Learning (ML), big data analytics, and the Internet of Things (IoT), Longevity Life InsurTech aims to create more efficient, personalized, and accessible insurance products and services tailored to the unique needs of individuals experiencing extended lifespans. The convergence of well-being initiatives between Longevity and insurance companies can offer holistic solutions to the challenges posed by longer life expectancies, including the financial risks associated with outliving personal savings and the need for long-term care.

The broader inclusion of Longevity-tied InsurTech solutions, particularly in health and life insurance industries, is driven by the development of innovative products such as Longevity-Enhanced Annuities (QLACs) and AI-driven premium calculation models. These solutions not only improve operational efficiency but also enable insurers to offer customized services and products to their clients. By leveraging AI and other advanced technologies, insurance companies can streamline their operations, offer personalized risk assessment and pricing, and ultimately increase the accessibility of insurance products to a wider audience.

Longevity Life InsurTech represents a transformative movement within the insurance industry, focused on addressing the challenges and opportunities presented by an aging population. By harnessing advanced technologies and fostering collaboration between Longevity and insurance companies, the industry can develop innovative solutions that cater to the unique needs of individuals with extended lifespans. However, it is crucial for industry experts and stakeholders to address emerging challenges, particularly in data privacy and security, to ensure that these technologies are implemented responsibly and effectively, and that customer trust is maintained in this rapidly evolving landscape.

Longevity & Pension Risk Transfer

The Longevity Financial Industry is expanding rapidly, with the emergence of new global capital markets such as the Life Market and Longevity Risk Transfer Market. "Longevity pools" are predicted to become the first major asset class of the 21st century. Traditional financial entities, such as pension funds, life insurance are highly exposed to

Longevity Risk and need to understand a wide range of Longevity Risk issues. These include risk measurement for pricing, reserving, and setting aside capital, risk management through de-risking, reinsurance, and capital markets solutions, and the use of Longevity-derived financial instruments.

The subsegment covers a wide range of organizations, namely insurance, reinsurance companies, pension funds, and banks that make operations associated with Longevity Risk transferring or hedging. The more developed global value chain is already emerging for transferring Longevity Risk from traditional holders of such risk – public and private pension funds – to a broader set of risk takers, including the capital markets.

Life Insurance & InsurTech

Life Insurance & InsurTech refers to the innovative solutions that aim to address the challenges and opportunities presented by an increasingly long-lived population. By developing new products and services tailored to the unique needs of individuals experiencing extended lifespans, Longevity Life InsurTech is transforming life insurance policies to be more efficient, personalized, and accessible. The collaboration between Longevity and life insurance companies enables a more holistic approach to addressing the challenges posed by longer life expectancies, such as the financial risks associated with outliving personal savings and providing for dependents over an extended period.

Inclusion of Longevity-tied InsurTech solutions in the life insurance industry is driven by the development of innovative products and sophisticated risk assessment models. These solutions not only improve operational efficiency but also enable life insurers to offer customized services and products to their clients.

Qualified Longevity Annuity Contracts

Longevity-Enhanced Annuities are specialized financial products designed to provide a guaranteed series of lifelong payments in exchange for an upfront investment. These annuities are primarily purchased to secure a steady income during retirement, mitigating the risk of outliving personal savings and ensuring financial stability in the later years of life. Longevity-Enhanced Annuities are structured to feature an annual increase in income, which is determined by a future declared bonus rate.

In Longevity-Enhanced Annuities, the longevity risk is transferred from the annuitant to the life insurer, meaning that the insurer is responsible for making the guaranteed payments for the entire duration of the annuitant's life, regardless of how long they live.

This risk transfer provides peace of mind to annuitants, ensuring that they will receive a reliable income throughout retirement. On the other hand, the investment risk primarily resides with the annuitant, as the future declared bonus rate is subject to market fluctuations and investment performance. As a result, annuitants must carefully consider their risk tolerance and investment strategy when selecting a Longevity-Enhanced Annuity.

Longevity Immediate and Deferred Income Annuities

Annuities provide a guaranteed series of lifelong payments in exchange for an upfront amount. Annuities are purchased to provide an income during retirement and protect against outliving personal savings. This solution features an annual increase in income depending on a future declared bonus rate. Thus, Longevity Risk resides with the life insurer while the investment risk primarily resides with the annuitant.

Insurance companies are financial intermediaries that offer direct insurance or reinsurance services, thereby providing financial protection against future risks. In exchange for a fee, or "premium," the insurer agrees in an insurance policy to compensate the policyholder for losses caused by a predefined event.

In the case of life insurance policies, the event is usually the death of the insured or deterioration in health. Life insurance policies are frequently purchased to save money for extended periods and sometimes for retirement.

InsurTech Innovative Solutions and Services

InsurTech Innovative Solutions and Services encompass a broad range of advanced technologies and methodologies that are transforming the insurance industry, from risk assessment and underwriting to claims management and customer experiences. By leveraging cutting-edge tools such as Artificial Intelligence (AI), Machine Learning (ML), big data analytics, and the Internet of Things (IoT), InsurTech is revolutionizing traditional insurance processes and practices, making them more efficient, accurate, and customer-centric. These innovative solutions and services are reshaping the industry landscape by introducing new business models, enhancing existing operations, and paving the way for more personalized and responsive insurance products.

Some notable InsurTech Innovative Solutions and Services include disruptive risk assessment techniques, Big Data actuarial models, AI-driven insurance premium calculation, automated claims management, and digital insurance marketplaces and

platforms. These solutions enable insurance providers to streamline operations, optimize decision-making, and improve customer satisfaction. By harnessing the power of advanced technologies and embracing innovative approaches, insurance companies can better assess risks, calculate premiums, process claims, and connect with various stakeholders in the ecosystem, ultimately leading to a more agile and resilient industry.

In summary, InsurTech Innovative Solutions and Services represent a paradigm shift in the insurance sector, driven by the integration of emerging technologies and novel methodologies. These solutions and services not only enhance the efficiency, accuracy, and personalization of insurance operations but also promote a more customer-focused approach, transforming the way insurance products are designed, distributed, and managed. As the industry continues to evolve, InsurTech will play a crucial role in shaping the future of insurance, offering better solutions and experiences for both insurers and policyholders alike.

InsurTech Marketplaces / Platforms

InsurTech Marketplaces/Platforms are advanced digital ecosystems that revolutionize the insurance industry by connecting carriers, customers, agents, brokers, and even non-insurance participants. These platforms streamline the distribution and purchasing process of insurance products, particularly focusing on the facilitation of innovative Longevity-related insurance products. Longevity insurance products address financial risks and challenges associated with longer life expectancies, such as outliving one's savings or the need for long-term care.

These platforms offer various benefits, including economic advantages, innovation, price transparency, enhanced customer experience, and collaboration opportunities. By streamlining operations and fostering innovation, InsurTech Marketplaces/Platforms generate economic benefits for all participants. Customers benefit from increased price transparency, which allows for easy comparison of insurance products, leading to better prices and informed decision-making. The digital nature of these platforms also promotes a culture of innovation within the industry, leading to the development of novel Longevity-related insurance solutions.

IoT InsurTech (Wearables)

The Internet of Things (IoT) refers to the interconnected network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, and connectivity which enables these objects to connect and exchange data.

Wearable devices, such as smartwatches, fitness trackers, and health monitors, collect and transmit data about an individual's health and activity level. This data can then be used by insurance companies to create more personalized and accurate insurance policies. For example, if a wearable device shows that an individual is more active and has a healthier lifestyle, the insurance company may offer them lower rates. On the other hand, if the data shows that an individual has a sedentary lifestyle and is at higher risk of certain health conditions, the insurance company may charge higher rates. InsurTech companies are also using IoT data to improve the overall insurance process, from underwriting and risk assessment to claims and settlement. For instance, wearable devices can provide real-time data about the health of an individual, which can be used by insurance companies to quickly assess the risk of a certain condition and provide personalized care.

Big Data Actuarial Models and AI-Driven Premium Calculation

InsurTech Big Data Actuarial Models and AI-Driven Insurance Premium Calculation refer to the integration of Big Data and AI technologies into actuarial modeling practices within the insurance industry. Actuarial modeling is a set of techniques that employ equations to represent the functioning of insurance companies. These equations account for the probabilities of events covered by policies and the associated costs each event presents to the company.

The incorporation of Big Data and AI into actuarial modeling offers numerous benefits, such as enhanced accuracy, better risk assessment, and personalized premium pricing. Big Data allows for the analysis of large and diverse datasets, providing a more comprehensive understanding of various risk factors. Consequently, insurance companies can calculate premiums more precisely, resulting in personalized pricing tailored to each policyholder's specific risk profile.

Automated Claims Management

Automated Claims Management involves InsurTech companies leveraging cutting-edge technologies such as Machine Learning (ML) to transform the claims management process within the insurance industry. The automation encompasses tasks like claims assessment and processing, fraud detection, and delivering a more efficient, customer-centric experience. This innovation aims to streamline the claims process, reduce processing times, enhance accuracy, and boost customer satisfaction, ultimately disrupting and improving traditional insurance practices.

The benefits of Automated Claims Management include time and cost savings, improved accuracy, and heightened customer satisfaction. By automating the claims process, insurance companies can significantly reduce the time spent on manual tasks, resulting in faster claim resolution and cost savings. Furthermore, AI and ML technologies can help detect fraudulent claims more effectively, minimizing financial losses. These technologies also contribute to increased accuracy in claims assessment, ensuring fair and appropriate compensation for policyholders.

Data Analytics and Management

Disruptive technologies in data analytics and management are revolutionizing the global insurance industry by transforming risk evaluation, customer experience, efficiency, and decision-making throughout the underwriting process. Furthermore, these technologies are employed in loss prevention, enabling insurers to proactively mitigate risks and reduce potential losses.

Leading insurance carriers are harnessing advanced data analytics capabilities to reinvent their underwriting process. They utilize vast amounts of third-party data from diverse sources such as environmental, industry-specific, location-based, and government data. By integrating these data sources, insurers can gain deeper insights into risk factors and make more informed decisions. Moreover, they have developed sophisticated tech stacks that facilitate efficient model development and continuous revisions, allowing for a more dynamic and responsive underwriting process.

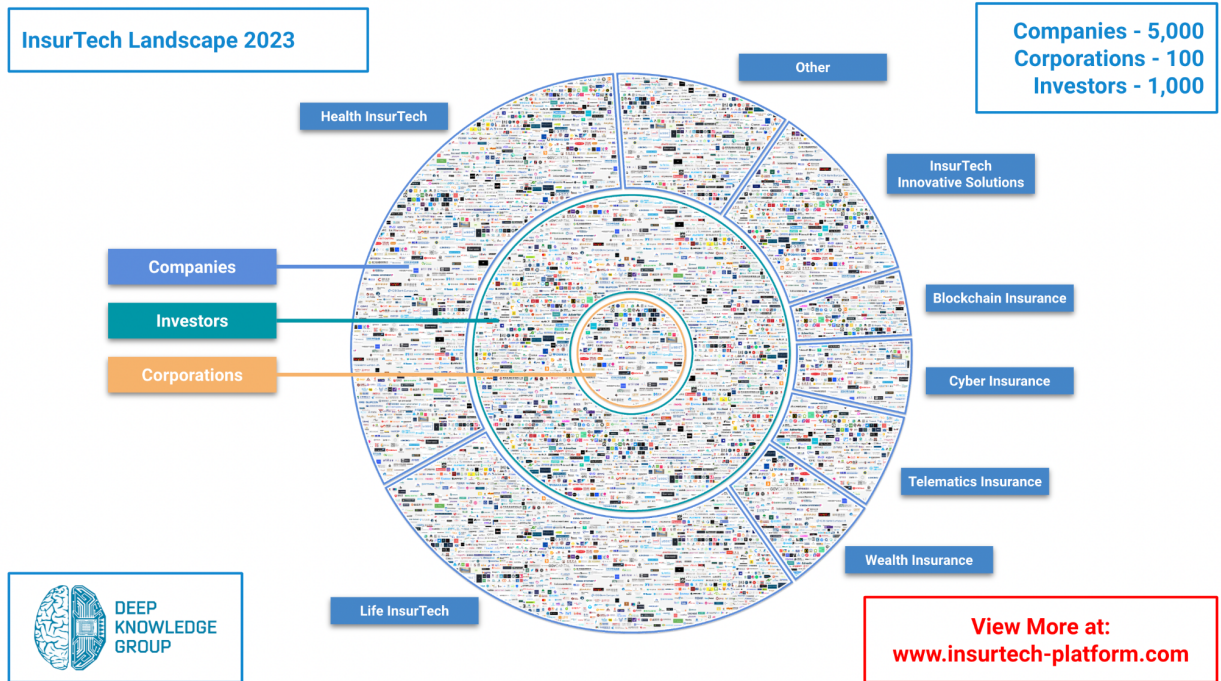
Risk Assessment

InsurTech Disruptive Risk Assessment Techniques refer to innovative approaches and methodologies in the insurance industry that leverage advanced technologies to revolutionize the risk assessment process. These techniques challenge traditional practices by utilizing cutting-edge tools to provide a more accurate, efficient, and personalized assessment of risks associated with insurance policies.

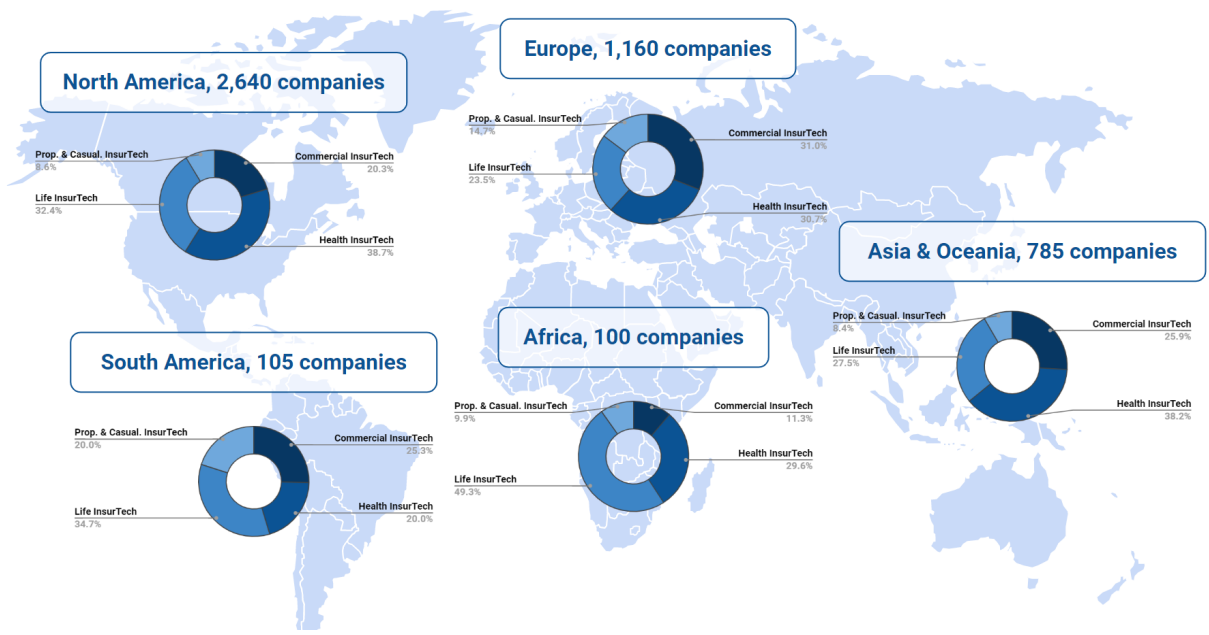
The implementation of next-generation risk assessment techniques offers numerous benefits, including improved accuracy, enhanced efficiency, and better customer experiences. The data-driven approach allows insurers to identify patterns and trends, leading to more accurate risk assessments and pricing models. Additionally, IoT devices can provide real-time data on factors such as driving behavior, health metrics, or property conditions, further refining risk assessments. These improvements in accuracy

and efficiency result in more personalized and fair premium pricing for policyholders while reducing costs for insurers.

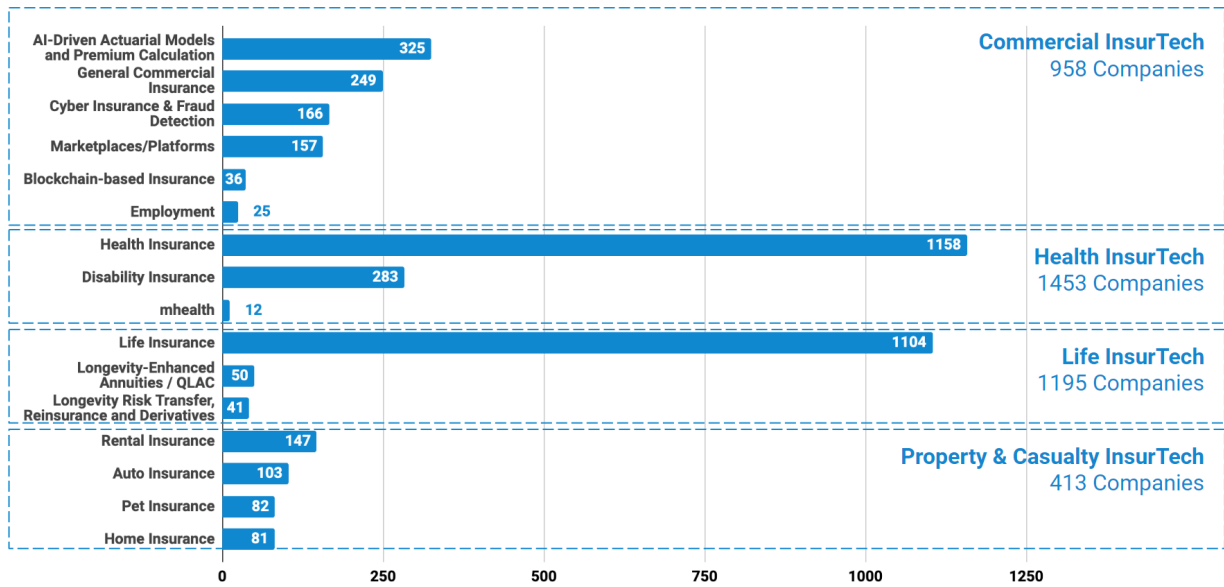
InsurTech Industry Market Overview



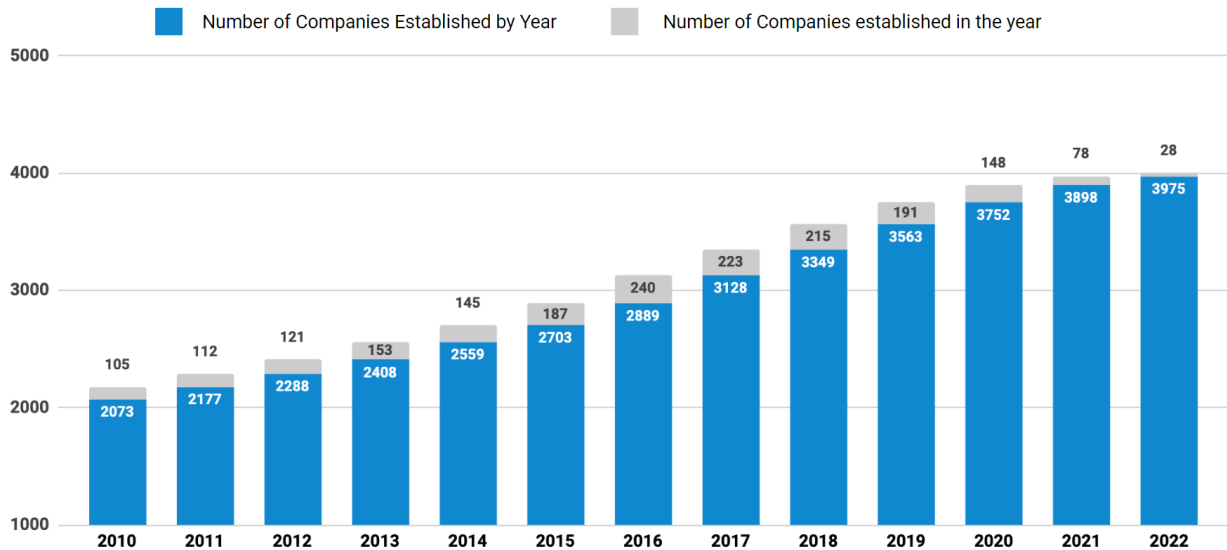
InsurTech Companies Geographical Distribution



Companies Distribution by Industry Sectors



Cumulative Number of Established Companies

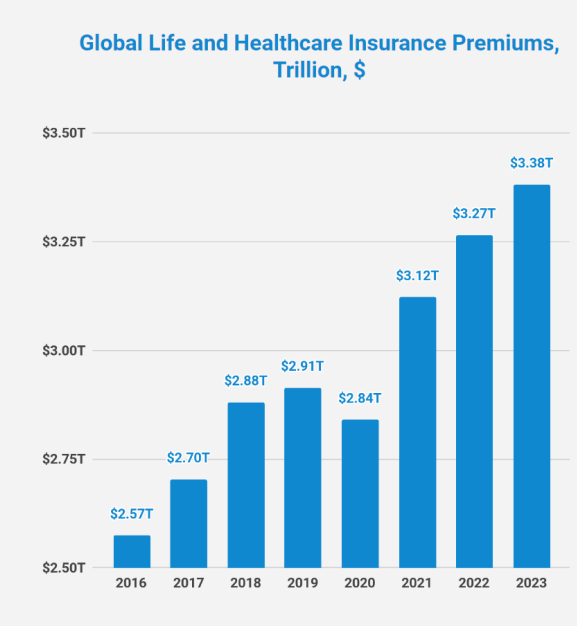
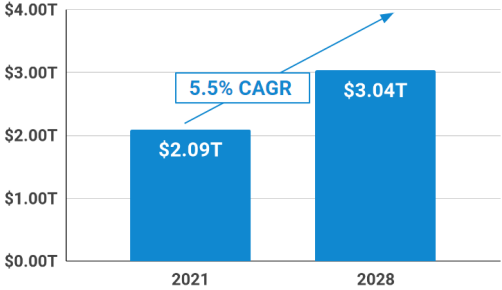


Macroeconomic Trends of Healthcare Insurance Industry

Insurance remains a growing industry even in the period of global economic slowdown: increased risk awareness will continue to support demand for life and health protection products.

However, during this period, insurers can face more intense competition. Most probably price will not suffice to attract customers but should be paired with convenient and personal digital experiences. Additionally, insurers will have to seek for options to optimize costs and revenue streams.

Projections of Global Health Insurance Market Size



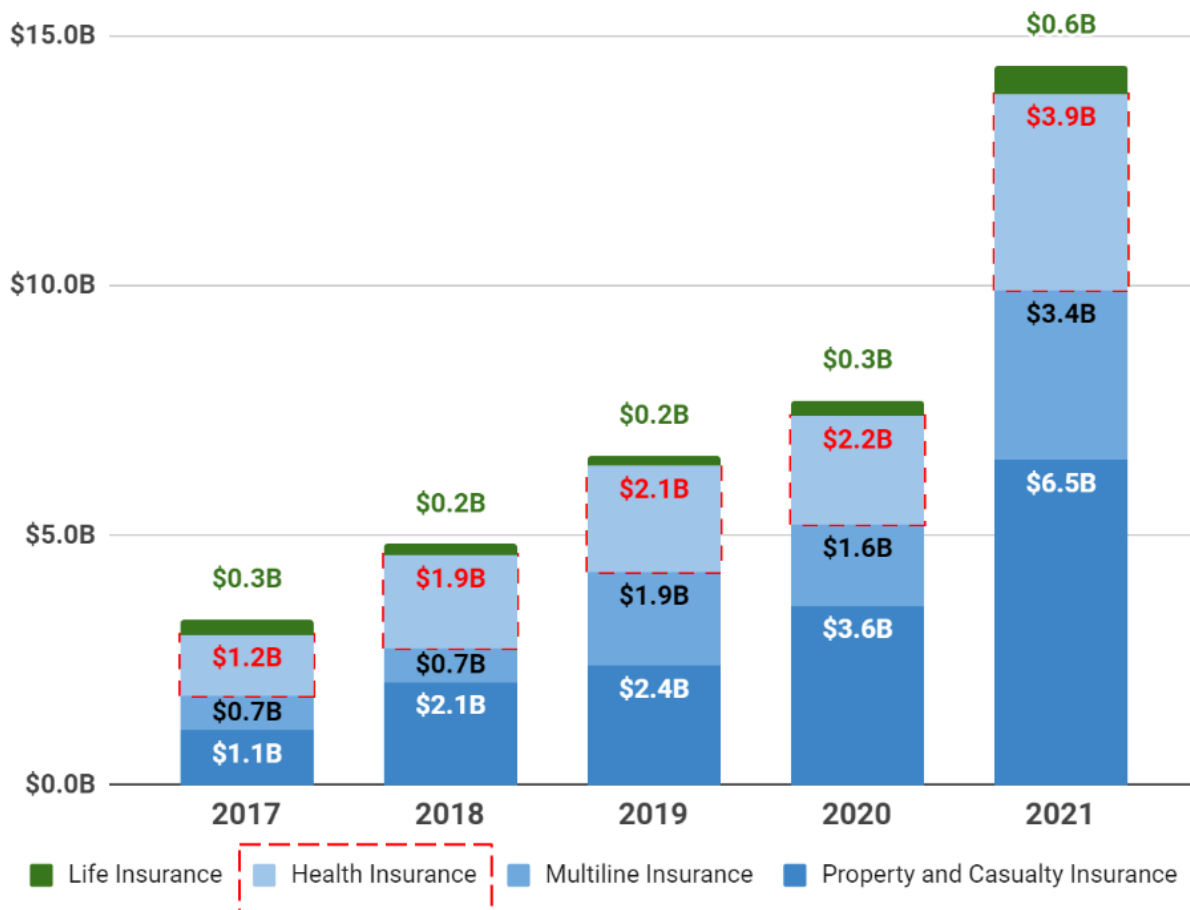
Investment Trends in Healthcare InsurTech

Globally, InsurTech companies in 2021 raised \$14.1 billion across 633 deals. This represents a 105% YoY increase in terms of deal value that is more than the previous two years combined.

HealthCare InsurTech sector has received \$3.9 billion investments in 2021 – an increase of about 81% from 2020 and roughly 27% of the 2021 total.

Growth of investments appears to be strongest for firms with leading-edge capabilities in AI, Big Data, application programming interfaces and digitalization across the value chain. InsurTech investors can succeed by screening for solutions that address the technology and commercial challenges facing the insurance industry.

Global Investments in InsurTech Companies by Sectors



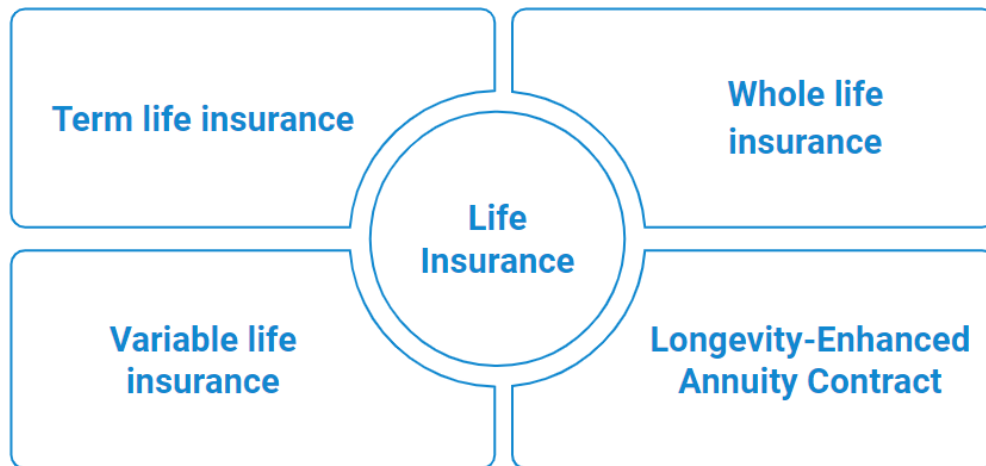
Source: [Boston Consulting Group FinTech Control Tower](#)

Life Insurance

There are various life insurance policies to choose from. Having a variety of life insurance policies from which to select is a great luxury. Still, it also requires research and thought to decide which policies are best for retirees.

Life insurance is one of the most challenging and expensive insurance types. Invasive health tests and questioning, with higher rates based on prior ailments and even the customer's residence, have expanded the protection gap in the last two years.

Digital insurers design products that can be acquired in minutes with a few clicks and customized by the user.



Market Trends: Life Insurance

Longevity-Enhanced Annuities

This variation on a standard annuity takes into account the health issues of a customer and provides an annuity reflecting their individual life expectancy. An underwritten annuity offers higher regular income to applicants who are not in good health, or who in all likelihood have a lower life expectancy calculated using the standard annuity tables and mortality indices.

These products are for people over 70 who are already in need of medical care and have a shorter life expectancy than other people their age. Compared with a regular single premium, immediate annuities pay a higher amount of monthly income because of this shorter life expectancy. Costs vary by age and medical condition, but someone might get up to 50% more monthly payment than a healthy person.

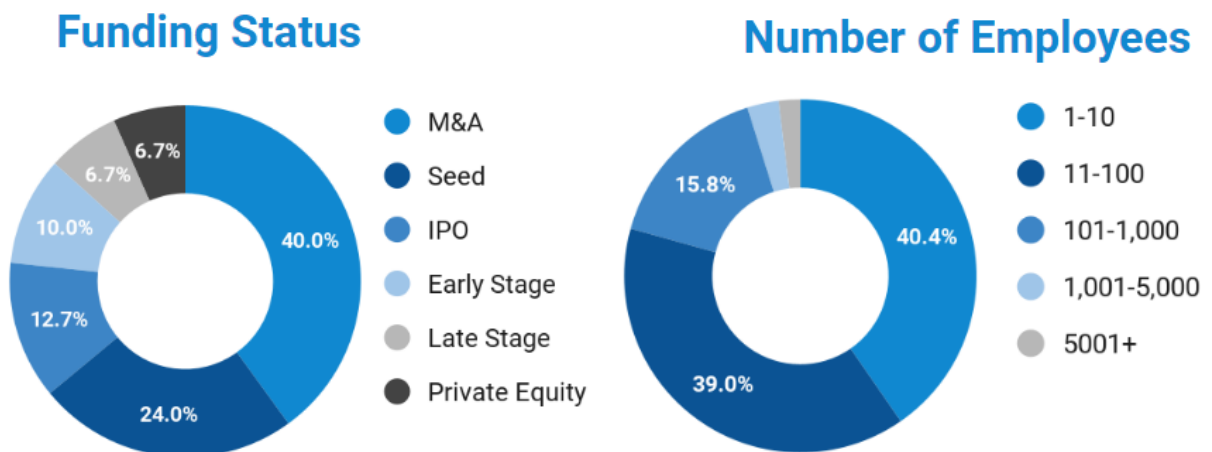
The enhanced annuities are predominantly associated with the following benefits:

- High enhancement and optimal rates
- Opportunity of lasting income for consumers who have not purchased a standard annuity
- Fair longevity solution for older people with medical history

Life Insurance Subsector

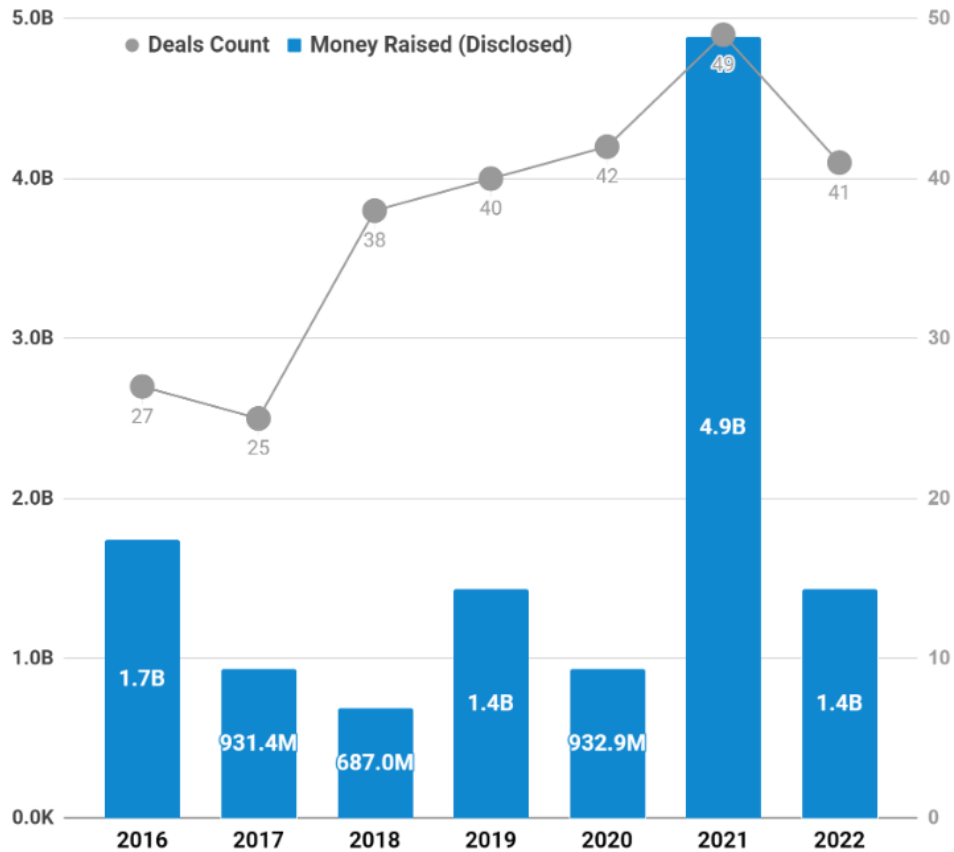
The M&A category is in the lead by funding status. Next are Seed and IPO categories. The Early Stage, Late Stage, and Private Equity round out the list.

In terms of number of employees, most companies have 1-10 employees 40.4%, 39% of companies have 11-100 employees, 15.8% have 101-1000 employees, and the smallest number of companies have 1000-5000+ employees.



The record high of private funding of Life Insurance has reached \$4.9B over 49 investment deals in 2021. Data is collected for 1093 companies.

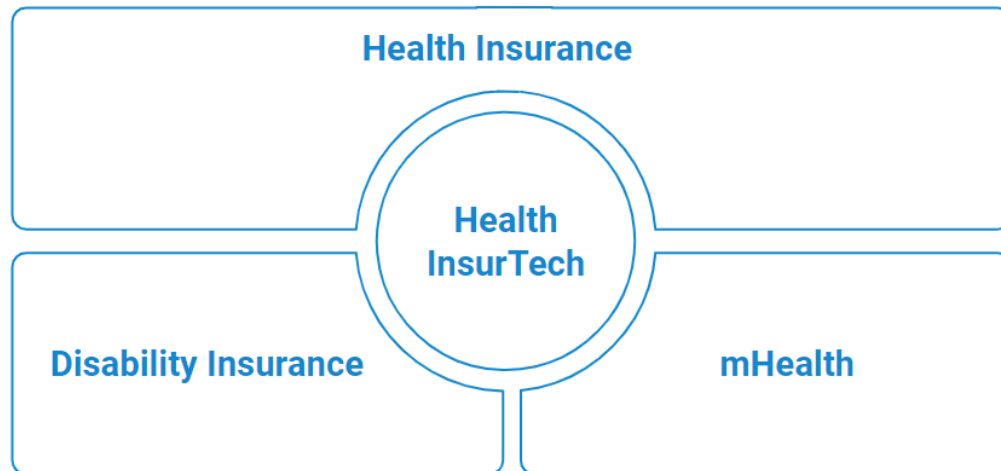
Investment Dynamics in Life Insurance



Health InsurTech

Health insurance has made massive progress in the previous two years. The pandemic has made people more mindful of life's uncertainties and their lack of health-related disaster preparedness.

It has changed how people understand health insurance, helping them realize the importance of adequate coverage to address escalating medical costs. The requirement for seamless service and flexible coverage push insurance companies to develop innovative service models and cutting-edge products.



Market Trends: Health InsurTech

Increasing mental health focused services

COVID-19 has sparked more debates about mental health as part of complete therapy. In acknowledgment of the increased demand for mental health services, insurers now cover professional advice, access to meditation apps, and other methods to deal with mental trauma.

New Health Insurance Solutions

New health insurance solutions meet client demands and offer a personalized customer experience. Rising middle-class knowledge of healthcare and retirement planning would support the rise of the health InsurTech sector.

Virtual Delivery

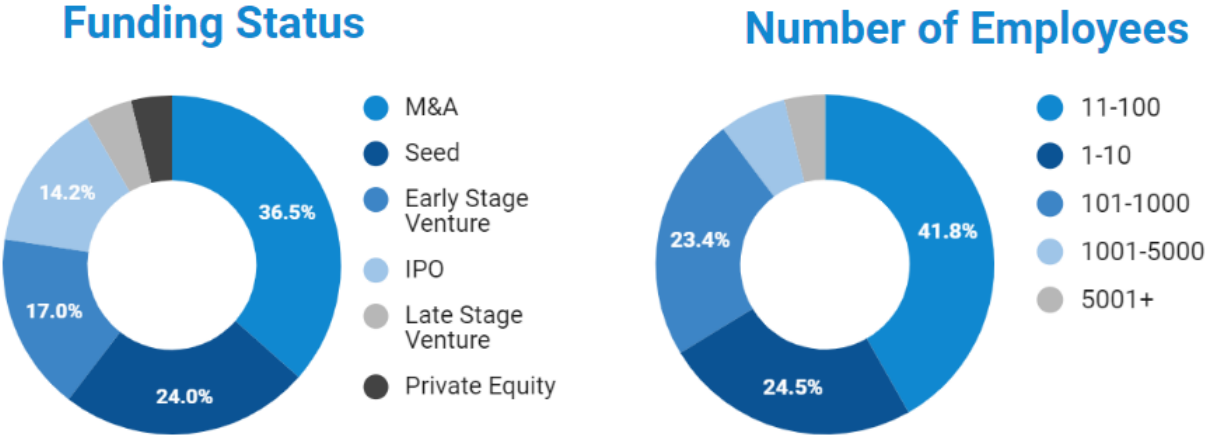
Value chain actors are building a modern infrastructure for optimal patient interaction as virtual healthcare delivery becomes more critical. Real-time patient data improves health outcomes and medical management. Preventive care should be prioritized for whole-patient care.

Data interoperability and cloud migration are required for virtual healthcare delivery and seamless care. Healthcare providers and insurers are researching cost-effective methods to handle, preserve, and use patient data.

Health InsurTech Subsectors

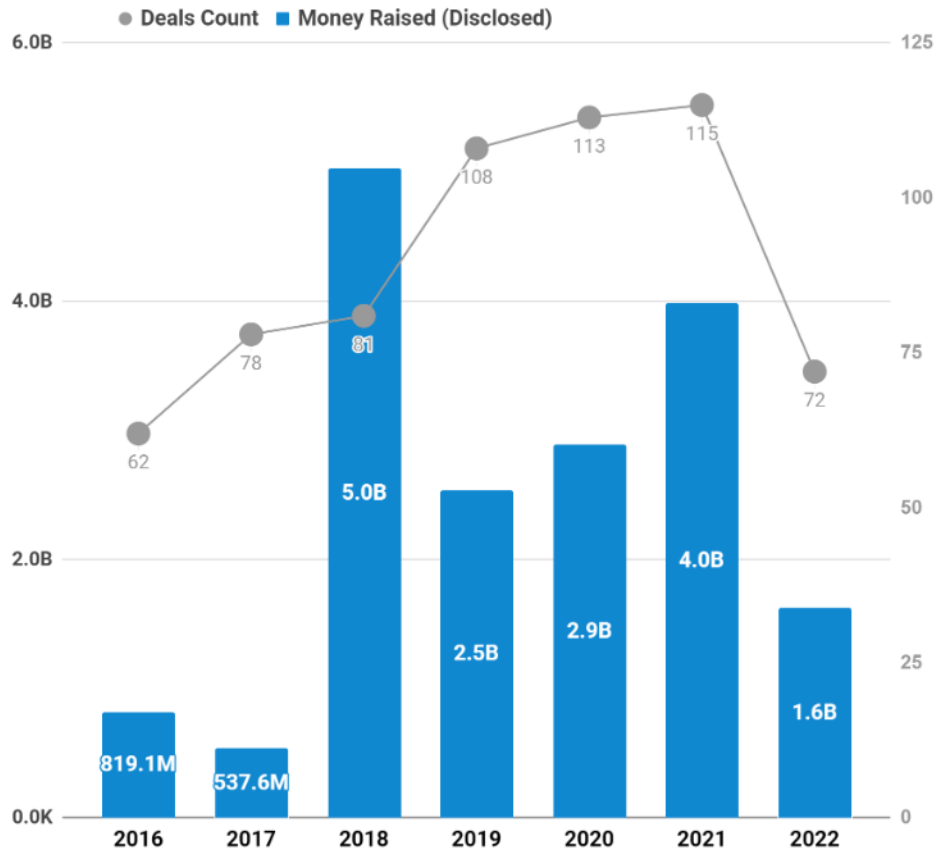
The M&A category is in the lead by funding status. Next are Seed and Early Stage Venture categories. The IPO, Late Stage Venture and Private Equity round out the list.

In terms of number of employees, most companies have 11-100+ employees 41.8%, 24.5% of companies have 1-10 employees, 23.4% have 101-1000 employees, and the smallest number of companies have 1001-5000+ employees.



A decrease in private funding of companies engaged in Health InsurTech has been observed in 2022, reaching \$1.6B compared to \$4B in 2021. Data was collected for 1371 private companies.

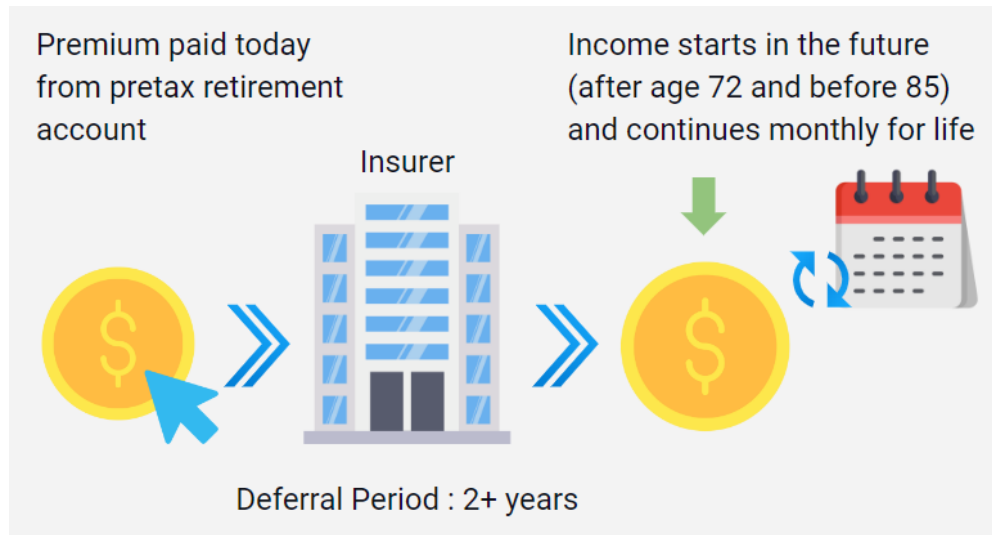
Investment Dynamics in Health InsurTech



Qualified Longevity Annuity Contract (QLAC)

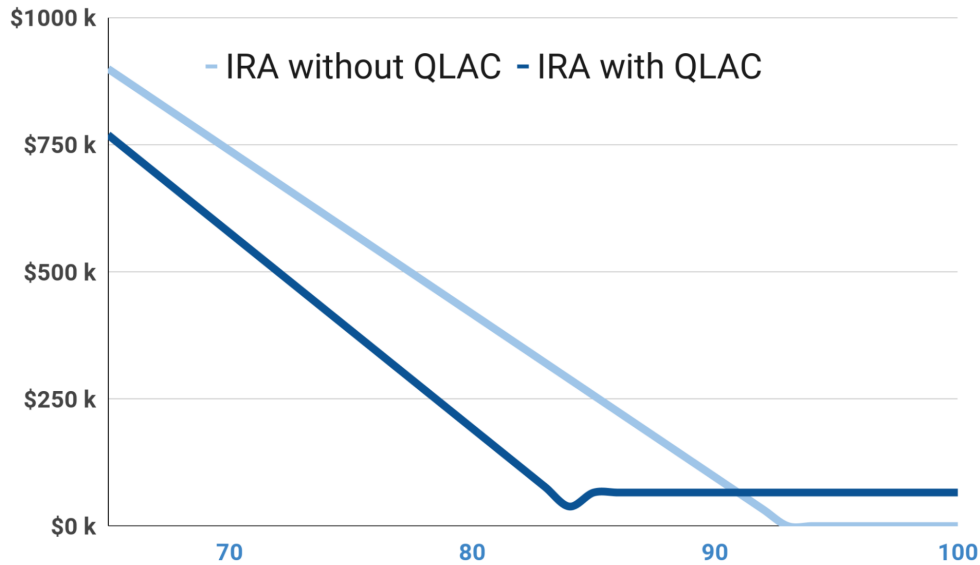
Another way to hedge individual longevity risk is a Qualified Longevity Annuity Contract. However, so far this instrument is used only on the US wealth-management market. A qualified longevity annuity contract (QLAC) helps a retiree not to run out of their individual retirement account (IRA) when they hope to live much longer than an average American, which is 77.5 years. QLAC guarantees fixed monthly payoffs after the 85th anniversary and until death.

For example, with \$130,000 of his IRA balance, he can buy a QLAC that pays him a guaranteed \$5,500 per month starting at age 85 and continuing for the rest of his life.



Main Mechanics:

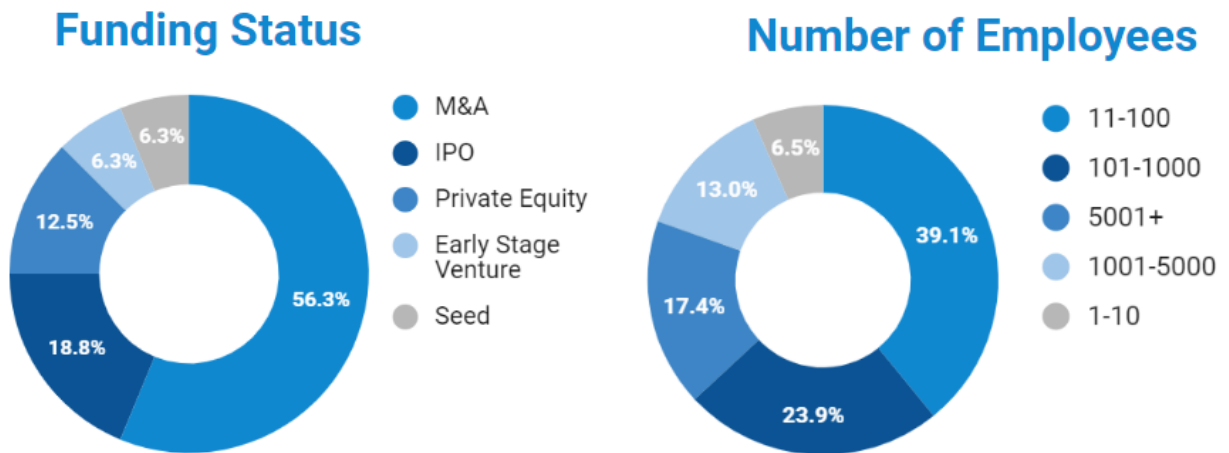
- QLAC is an income annuity. An income annuity is a contractual agreement between client and an insurance company. In exchange for a lump-sum premium, the insurance company promises to give you a steady, guaranteed paycheck for life.
- QLAC is a deferred income annuity. A longevity annuity begins payments at a future date, typically 2-40 years after the premium is paid. The longer you delay starting to receive payments, the greater the size of the payments they'll be able to offer you.
- A QLAC is purchased with savings from your qualified retirement account. As a qualified annuity, the money used to make the purchase comes from 401(k), Traditional IRA, or other qualified plan. The annuity maintains the special tax-deferred treatment meaning that QLAC buyer does not incur any penalties or pays any taxes until income payments begin.



Longevity-Enhanced Annuities (QLACs and Others) Subsector

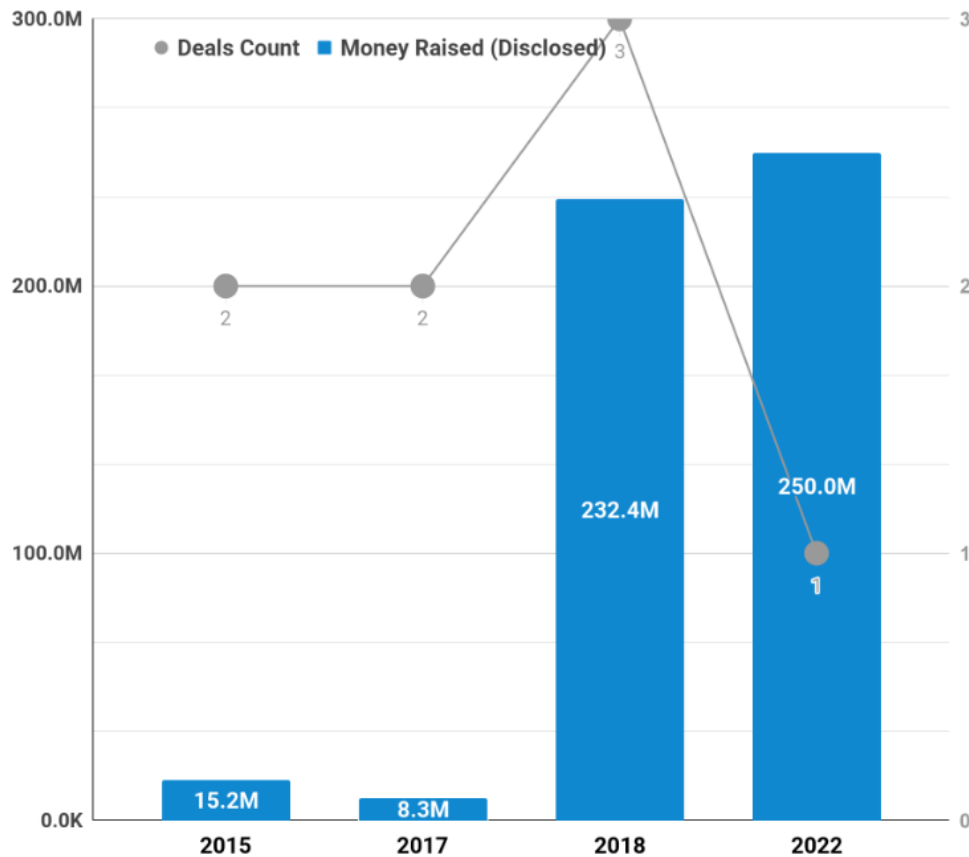
The M&A category is in the lead by funding status. Next are IPO and Private Equity categories. The Early Stage Venture and Seed round out the list.

In terms of number of employees, most companies have 11-100 employees 39.1%, 23.9% of companies have 101-1000 employees, 17.4% have 5000+ employees, and the smallest number of companies have 1001-5000 and 1-10 employees.



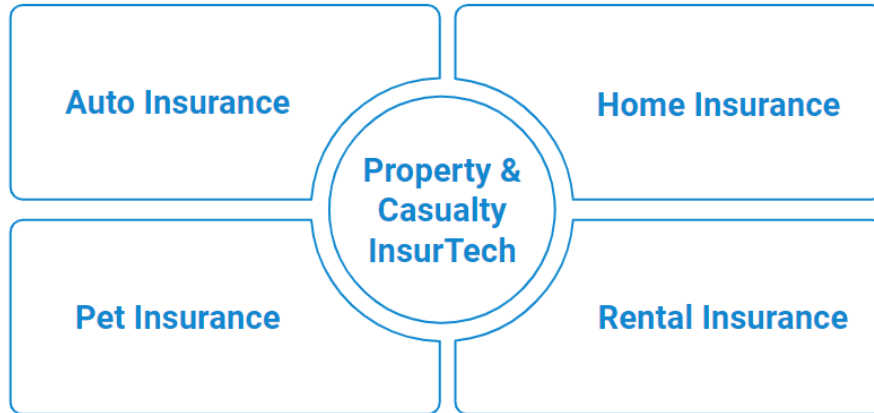
The record high of private funding in Longevity-Enhanced Annuities has been observed in 2022 reaching \$250M over 1 investment deal. Data is collected for 48 companies.

Investment Dynamics in Longevity-Enhanced Annuities (QLAC)



Property & Casualty InsurTech

P&C insurance protects you and your property. These InsurTech firms employ innovative technology to protect your house and automobile. Casualty insurance protects you if you're judged legally accountable for an accident that injures someone or damages their property. Property and casualty insurance are usually combined. Landlord insurance protects landlords against risks linked with rental properties. It typically consists of buildings and contents insurance, but it can also contain landlord-specific coverages such as property owners' liability, loss of rent, and tenant default insurance.



Market Trends: Property & Casualty InsurTech

Property & Casualty InsurTech move to as-a-service providers

The Insurance executives are selecting cloud service providers and formulating cloud migration strategies. 55% of companies have already started transitioning key platforms to platform-as-a-service and infrastructure-as-a-service providers over the next two years.

Macro trends Impact

Changing social demographics, climate change, and technology/digital acceleration are top macro developments in P&C insurance this year. A shortage of IT skills is limiting digitization, while climatic factors like decarbonization affect regulation. The P&C companies focus on IT acquisition and retention, digitalization and data to generate new digital services, and sustainability measures.

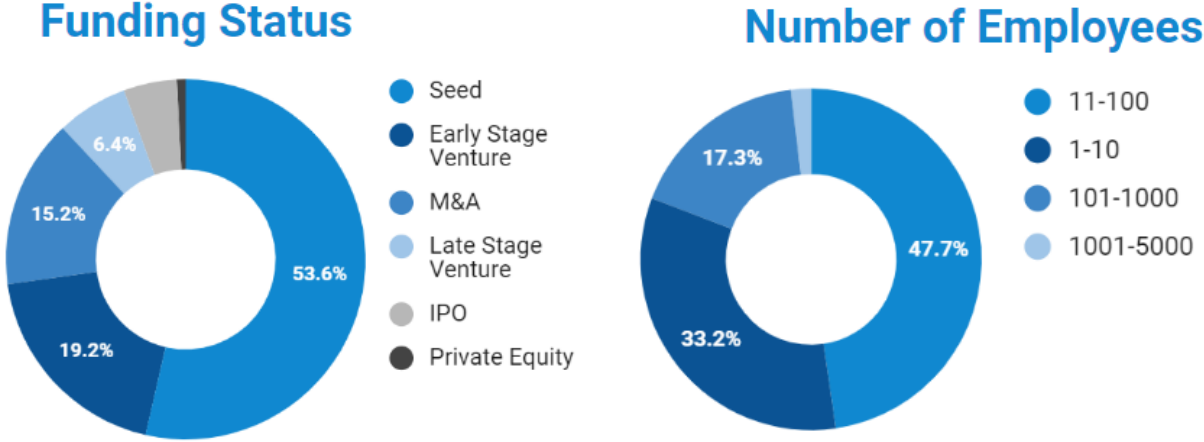
The Personalization of Services

The Property & Casualty InsurTech industry focuses more closely on customer needs, provides differentiated products and services, expands insurance coverage, further enriches the insurance service experience, and enables the risk protection function of insurance.

Property & Casualty InsurTech Subsectors

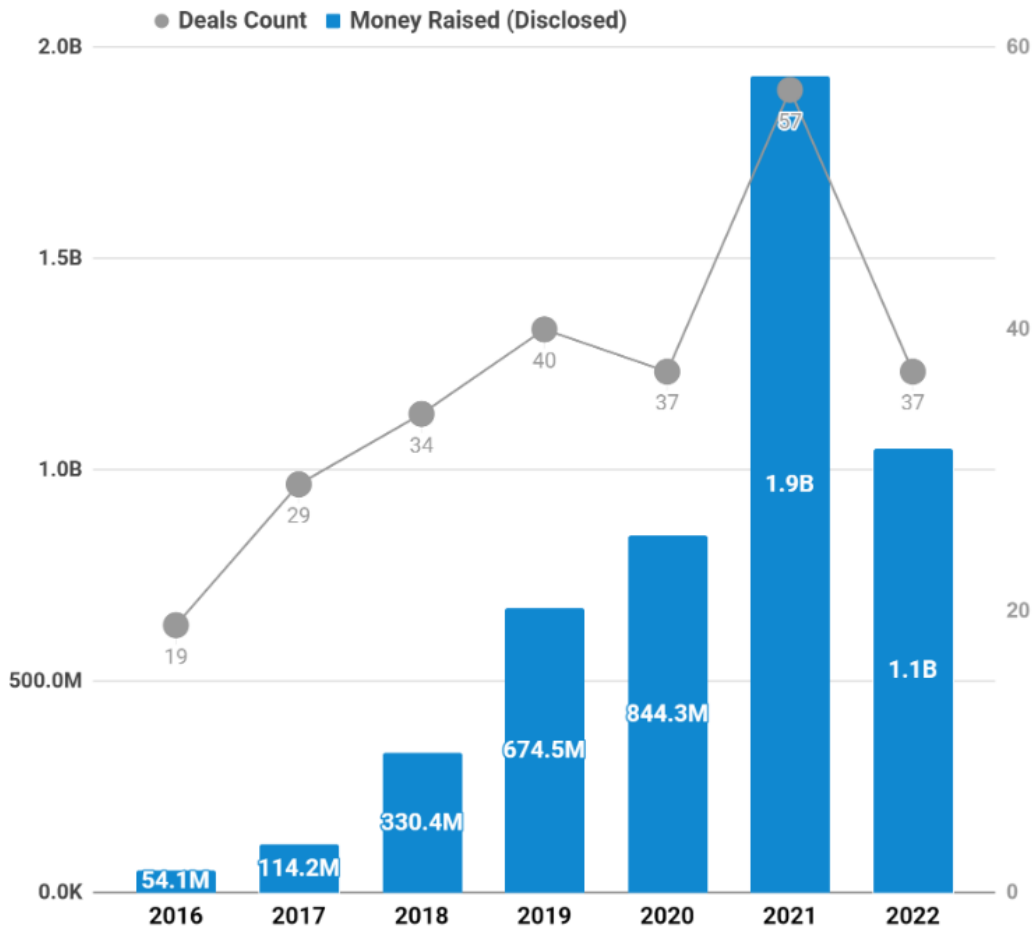
The Seed category is in the lead by funding status. Next are Early Stage Venture and M&A categories. The Late Stage Venture, IPO, and Private Equity round out the list.

In terms of number of employees, most companies have 11-100 employees 47.7%, 32.2% of companies have 1-10 employees, 17.3% have 101-1000 employees, and the smallest number of companies have 1000-5000 employees.



A decrease in private funding of companies engaged in Property & Casualty InsurTech has been witnessed in 2022, reaching \$1.1B compared to \$1.9B in 2021. Data was collected for 413 private companies.

Investment Dynamics in Property & Casualty InsurTech



AI-Driven Actuarial Models & Premium Calculation for InsurTech

The insurance industry has been experiencing a technology revolution over the past decade. Emerging capabilities such as telematics, AI, wearables and claims automation have become more prevalent as insurers have doubled down on using technology for optimization of both cost and processes. Nowadays the Insurance Industry is embracing AI solutions for reaching higher performance through improving underwriting, customer experience and internal processes.

Big data may improve risk assessment. An insurance business may use big data and predictive modeling to count prospective customer difficulties and put them in a proper risk class before making a final choice.

Reasons of Growing AI Use in Insurance:

- Explosion of data from connected devices
- The need for enhanced approaches to risks underwriting
- Growing demand for personalized insurance products
- Wider presence of open-source and data ecosystems

Big Data Trends of Longevity InsurTech

Big Data Analytics from Wearables

John Hancock, one of the oldest and largest North American life insurers, exclusively provides only interactive plans based on app and device data. Big Data in medical coverage raises data security, protection, and morality challenges.

AI-automating underrating

The AI algorithms may automate manual underrating operations, making them more efficient and decreasing claims and administration expenses. This allows enterprises to provide reduced rates to clients and compete in the market.

Personalization and pricing

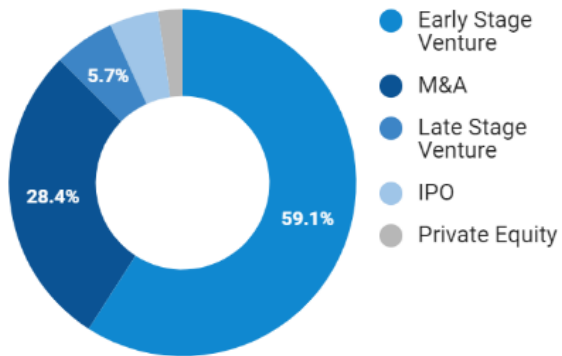
Everyone likes exceptional treatment. Companies have embraced personalization. Both unstructured and structured data analysis helps firms satisfy client demands. Big data-based life insurance may be tailored by considering a customer's medical history and activity tracker habits. The data may be used to determine a client- and company-friendly pricing strategy.

AI-Driven Actuarial Models & Premium Calculation Subsector

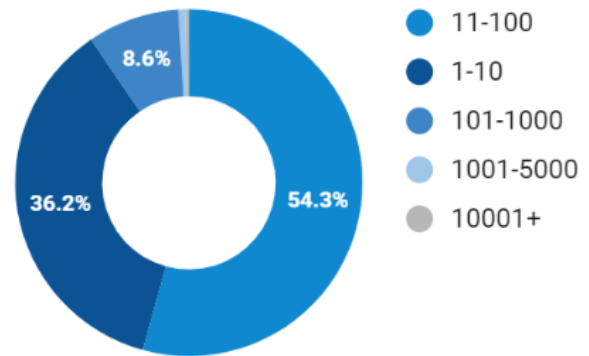
The Early Stage Venture category is in the lead by funding status. Next are M&A and Late Stage Venture categories. The IPO and Private Equity round out the list.

In terms of number of employees, most companies have 11-100 employees 54.3%, 36.2% of companies have 1-10 employees, 8.6% have 101-1000 employees, and the smallest number of companies have 1000-5000+ employees.

Funding Status

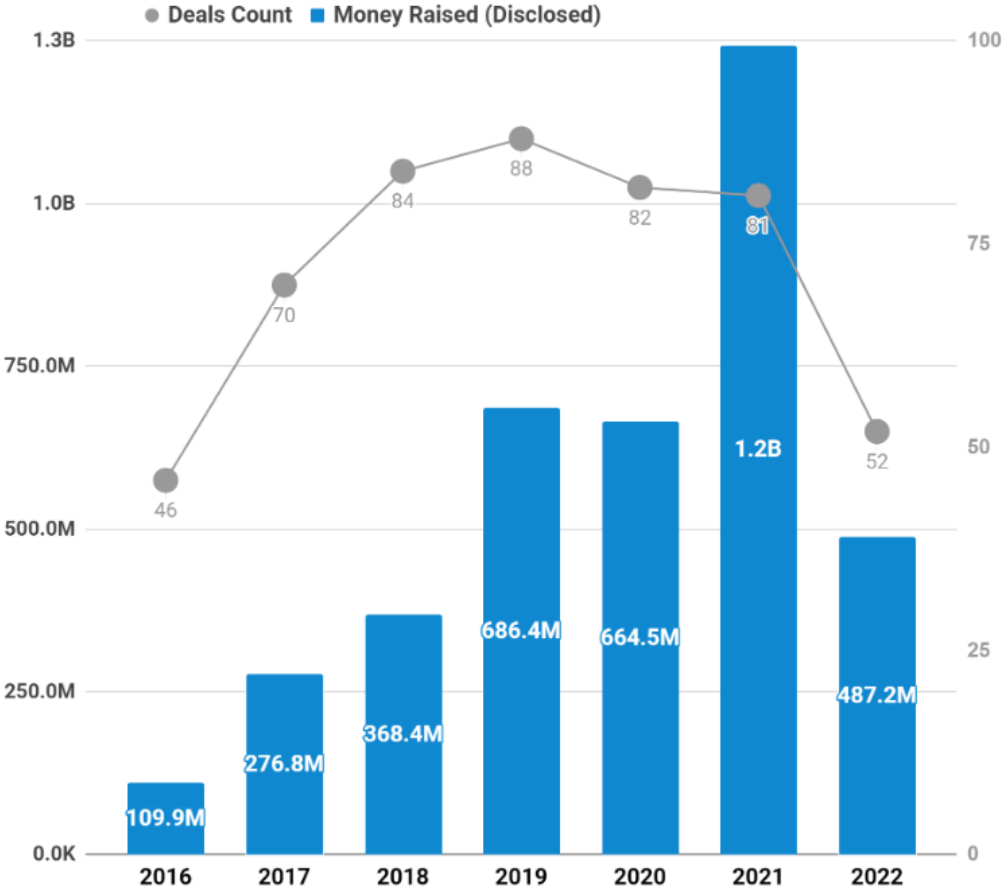


Number of Employees



2022 has witnessed a decrease in private funding of companies engaged in AI-Driven Actuarial Models & Premium Calculation, reaching \$487.2M compared to \$1.2B in 2021. Data was collected for 322 private companies.

Investment Dynamics in AI-Driven Actuarial Models & Premium Calculation



General Commercial InsurTech

General Commercial Insurtech Sector combines the multiple advanced technologies used to protect against the most common risks of running a business, like General liability insurance policies and Cyber InsurTechs, as well as Blockchain-powered solutions, AI-Driven Actuarial Modeling, etc. Insurance marketplaces and platforms are also key pillars of the Longevity Insurtech ecosystem.

Commercial InsurTech:

- General Commercial Insurance
- Blockchain-based Insurance

- Cyber Insurance
- AI-Driven Actuarial Models & Premium Calculation
- Employment
- Marketplaces & Platforms

Market Trends: General Commercial InsurTech

Insurance meets blockchain

The insurance industry is beginning to understand the importance that blockchain technology has evolved and will leverage over the insurance sector due to its security and immutability features. Blockchain claims to be the central repository of truth, allowing insurers to automate various portions of underwriting because the data in the blockchain is trustworthy and from a verified source.

The rising demand for cyber insurance

Cyber insurance demand is outpacing supply. Healthcare, services, retail, manufacturing, and government institutions, including education and financial services providers, need proper risk coverage. The insurance industry prioritizes clear language, adequate security, and risk transparency. For example, the ransomware industry hit a new height in 2022 and is attracting an increasing number of cyber criminals. According to Chainalysis, extortionists collected ransoms average of \$148,000 per successful operation, up from \$88,000 in 2017.

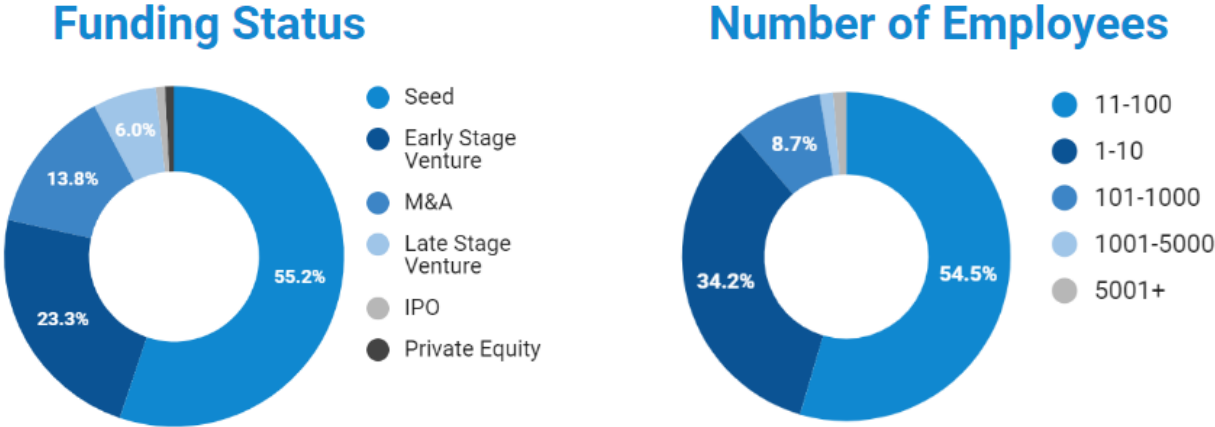
Insurtech-focused platforms

The current business model of venture capital funds does not support investments in InsurTech startups in a most efficient manner. The rising wave of InvestTech and InsurTech platforms and marketplaces offers multiple modern technological and organizational solutions to optimize investors relations, technology analysis, intellectual property trading, etc.

General Commercial Insurance Subsectors

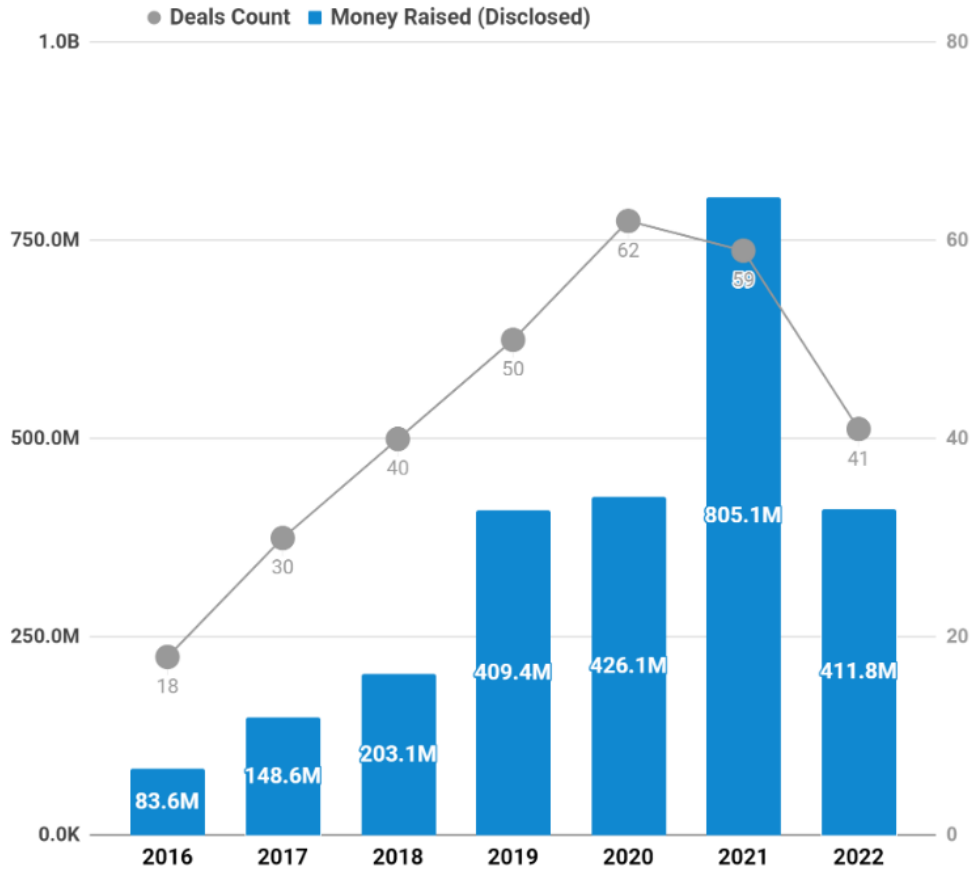
The Seed category is in the lead by funding status. Next are Early Stage Venture and M&A categories. The Late Stage Venture, IPO, and Private Equity round out the list.

In terms of number of employees, most companies have 11-100 employees 54.5%, 34.2% of companies have 1-10 employees, 8.7% have 101-1000 employees, and the smallest number of companies have 1001-5000+ employees.



A decrease in private funding of companies engaged in General Commercial Insurance has been observed in 2022, reaching \$411.8M compared to \$805.1M in 2021. Data was collected for 249 private companies.

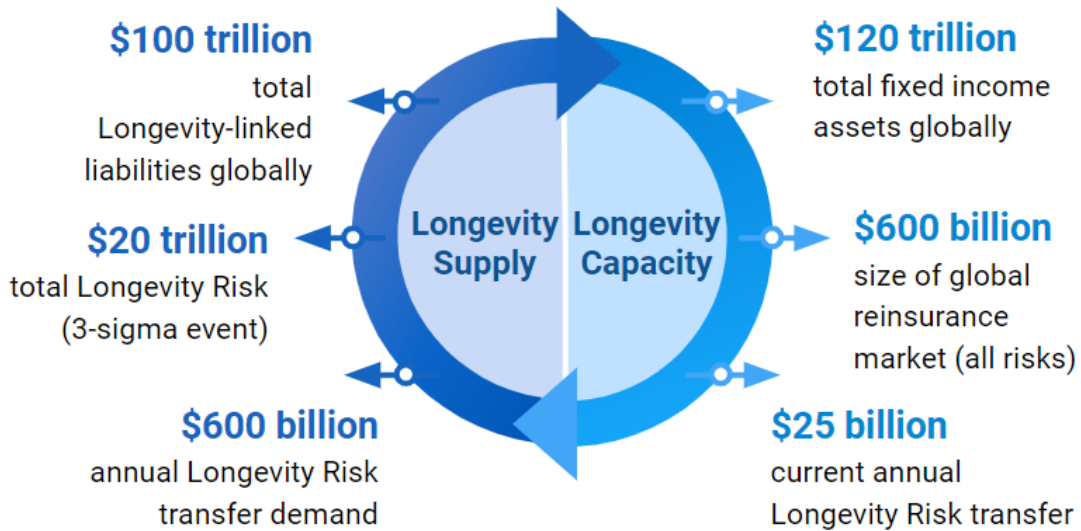
Investment Dynamics in General Commercial Insurance



Longevity & Pension Risk Transfer

A new global capital market, the Life Market, is developing and “Longevity pools” are on their way to becoming the first major asset class of the twenty-first century.

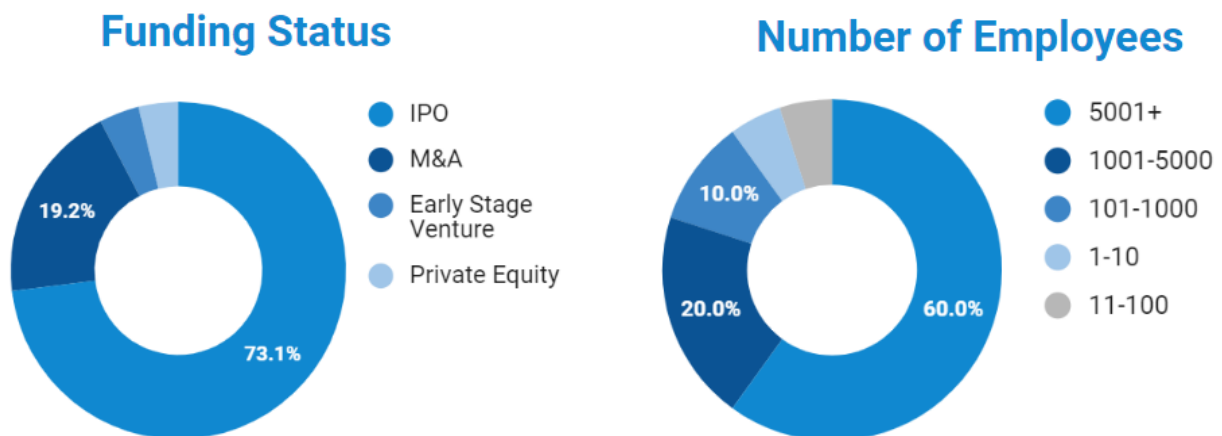
Longevity risks arrive due to inaccurate predictions of the level of mortality rate and numbers of retirees. Another reason why managing Longevity risks has become more important for the entities is new regulation requirements. Solvency II is the directive in European Union law and it requires that insurance companies measure and evaluate Longevity risk and as a result increase the capital level required for Longevity risk.



Longevity & Pension Risk Transfer Subsector

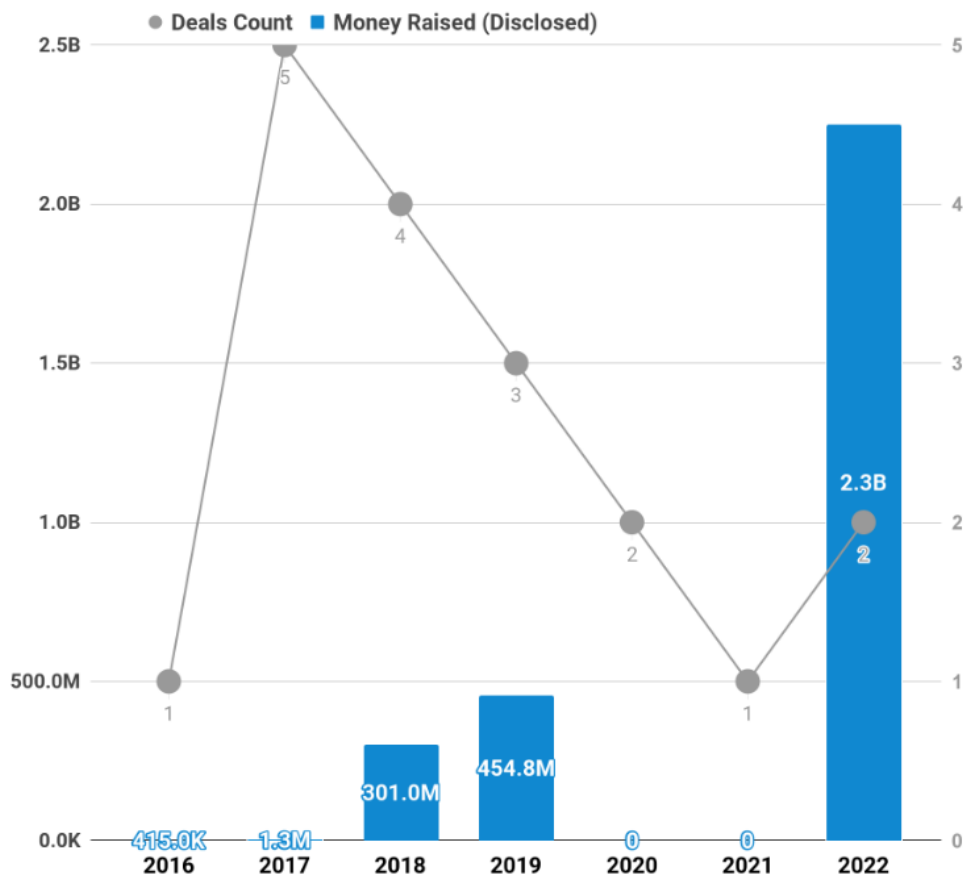
The IPO category is in the lead by funding status. Next are M&A and Early stage venture categories. The Early Stage Venture and Private Equity round out the list.

In terms of number of employees, most companies have 5001+ employees 60%, 20% of companies have 1001-5000 employees, 10% have 1-10 employees, and the smallest number of companies have 1-10 and 11-100 employees.



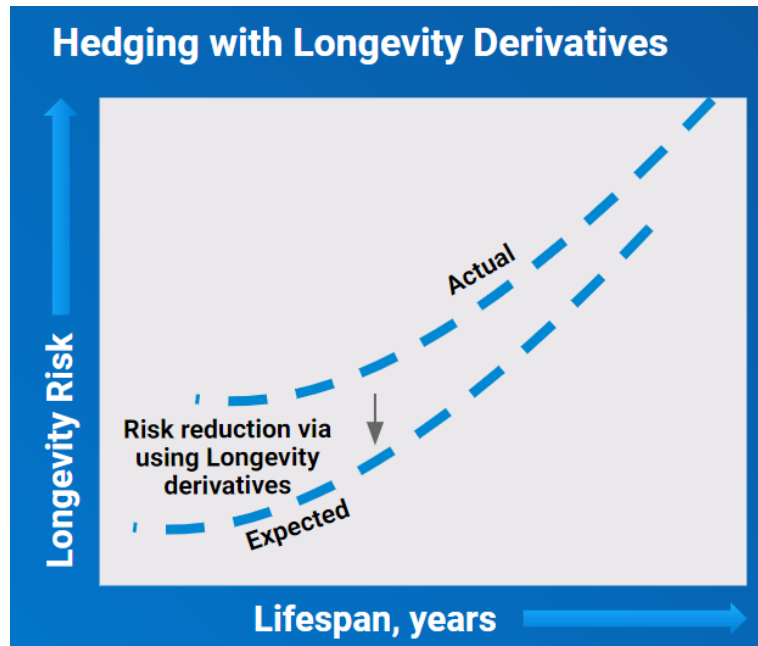
The record high of private funding of Longevity & Pension Risk Transfer has reached \$2.3B in volume over 2 investment deals. Data is collected for 40 companies.

Investment Dynamics in Longevity & Pension Risk Transfer



Market Trends: Longevity & Pension Risk Transfer

Insurance and reinsurance companies provide risk transfer mechanisms for institutions, predominantly pension funds. Risk transfer is a risk management technique whereby risk is shifted to a third party. In other words, it involves one party assuming the liabilities of another party. Purchasing insurance is a common example of transferring risk from an individual or entity to an insurance company. Globally, there is an enormous amount of Longevity-linked liabilities in public and private pension and annuity markets. The magnitude of Longevity risk dwarfs the capacity of traditional providers – capital markets investors must get involved.



Challenges Confronting InsurTech Industry

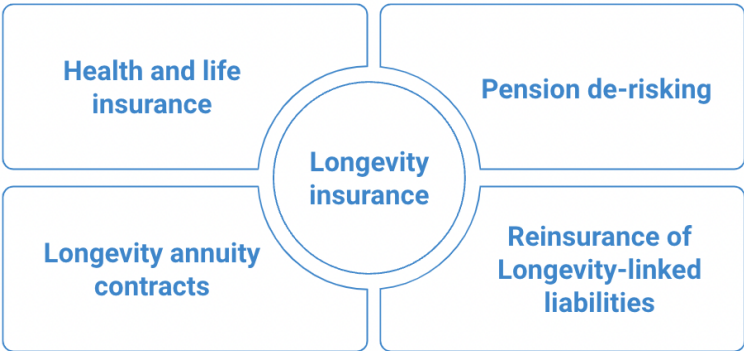
- Extending the Range of Innovative Approaches for Risk Underwriting. Insurance products and services require enhanced methodologies for underwriting the risk of clients. The industry has witnessed the emergence of many, but there is a strong need for their extension.
- Need for Wider Application of AI in Insurance Products and Services. Insurers can get a set of benefits through application of AI in improving the customer experience, identification of new revenue streams, reducing risks and cost saving.
- Problem of Efficient Innovation Models. The current practice in the industry demonstrates that wider cooperation between traditional insurance companies and InsurTechs is beneficial for both sides. Thus, the emergence of new partnerships can bring more efficiency to the market.
- Lack of Reliable Analytics Methods
- Insurance providers need to drive new areas of growth and anticipate market trends through application of innovative analytical techniques, including AI and Big Data. It would contribute to personalized client service and strong market position.

Forefront Segments of InsurTech Industry

Longevity InsurTech

InsurTech refers to the use of technology innovations designed to squeeze out savings and efficiency from the current insurance industry model through collecting and analyzing consumer data that may be used to target the proper client at an affordable price. The main aim of Longevity InsurTech is to develop solutions and services which help synchronize client’s wealthspan (period of extended financial stability) and healthspans (period of Healthy Longevity).

Longevity Insurance covers the wide range of products and services associated with the risks of an aging population. Life insurance companies have relatively flat exposure to Longevity risk, with annuity portfolios offsetting insurance policies. Hence, the market has overall negative exposure to Longevity improvements. Reinsurers neither have the capacity, nor are willing to accept such a large risk. Capital markets, with their depth, capacity and experience in risk hedging, have the potential to hedge Longevity risk effectively. Longevity risk is explicitly incorporated on a portfolio level of a life insurance company issuing participating contracts and being subject to default risk.

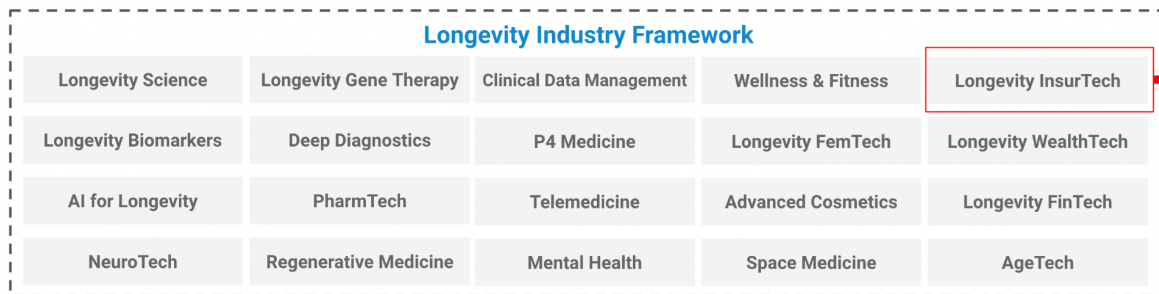
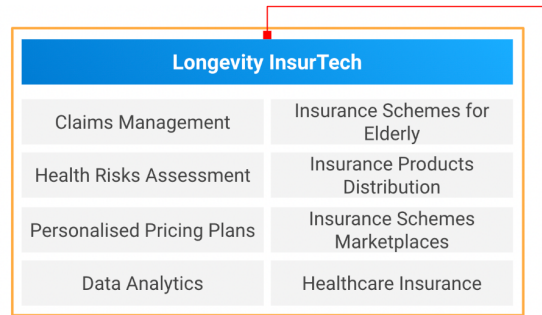


Longevity InsurTech encompasses progressive and modern insurance solutions that are designed to meet the needs of individuals who plan to actively expand their healthspan and maintain prolonged periods of healthy Longevity.

Longevity InsurTech aims to offer discounted insurance rates in proportion to clients’ decreased risk of ill health and disease, and supporting coverage for a broader array of products, services, and tools to help them maintain their health and wellness.

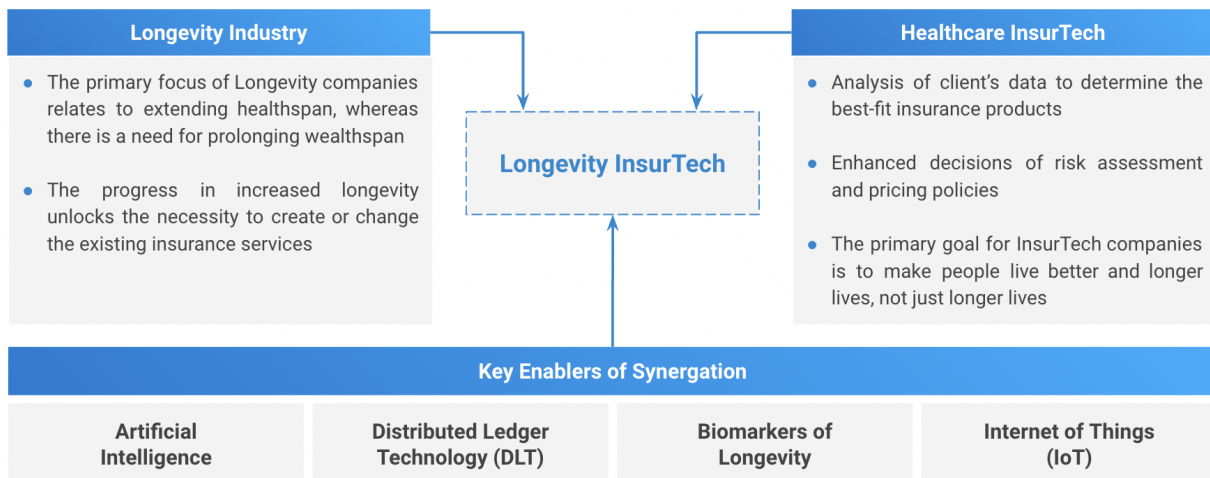
Intersection of Longevity and InsurTech

- Longevity Industry** comprises 20 segments, currently including over 50,000 companies operating in the life sciences market and cross-industrial domains.
- InsurTech** is an integral part within the broad framework of the Longevity Industry. With a broad range of innovative solutions created for health insurance, the wider inclusion of Longevity-tied InsurTech solutions is underway.



There is a growing focus on how the insurance industry needs to adapt in order to adjust to an increasingly long-lived population. Bundling wellbeing initiatives between longevity and insurance companies has a great potential to resolve the possible challenges in a more holistic manner.

Synergistic Effect of Longevity Industry and Healthcare InsurTech



Key Trends of Longevity InsurTech:

- *Longevity insurance continues to be underused in retirement planning.* The significant proportion of retirees undervalue the Longevity risk avoiding to purchase insurance products such as Longevity annuities etc. Moreover, such insurance products are difficult to find outside the most developed markets (like US, UK, Australia).
- *Longevity risk becomes the multiplier of all insured risks.* During upcoming years the insurance industry must further develop the approaches to hedge the Longevity risk which acts as a multiplier: if the insured person lives for longer, all other risks (e.g. market, inflation, long-term care, deflation risks etc.) will multiply.
- *Life insurers have to revise business strategies: consumer engagement and tech should be made a priority.* The emergence of connected devices presents an opportunity for insurers to assist consumers in managing personal risk and improving their health by providing services that adapt to their behavior. Insurers can evolve from being perceived as merely "providers of policies that protect against risks" to being "the protectors of Longevity."

Projections of Longevity InsurTech Development:

- *Insurance providers will closely partner with seniors caregivers .* Using innovative digital solutions such as non-invasive tools and devices or by improving home care aspects, insurers can become real partners to patients and caregivers by sharing the burden of care and helping patients increase their quality of life.
- *Insurers have to become simple and digital.* Life and health insurers have woken up to the need to simplify and digitalise their businesses. Simplifying complex products, identifying, alleviating customer pain points and episodes, and creating a seamless customer experience across all channels is critical.
- *Embracing advanced analytics tools.* Longevity InsurTechs are mastering processes such as underwriting, which were formerly the sole domain of incumbents, through leveraging data and advanced analytics.
- *InsurTech companies ease the burden of the insurance industry.* Older people are deemed more costly to the insurance system. Insurers make the decisions based on aggregate profiles that include gender and age. Using data from wearable devices and through tracking the health conditions, insurers can create more insightful individual profiles and provide personalized services leveraging behavioral analytics.

Longevity InsurTech is one of the most innovative sectors within the InsurTech Industry which has been emerging from the convergence of Healthcare Insurance, Longevity

Industry and is backed by application of advanced technologies such as IoT, AI, Distributed Ledger Technology (DLT).

There is a growing focus on how the insurance industry needs to adapt in order to adjust to an increasingly long-lived population. Bundling wellbeing initiatives between longevity and insurance companies has a great potential to resolve the possible challenges in a more holistic manner.

Artificial Intelligence in InsurTech

Insurance industry has been experiencing a technology revolution over the past decade. Nowadays the Insurance Industry is embracing AI solutions for reaching higher performance through improving underwriting, money and risk management, customer experience and internal processes.

The insurance industry has been experiencing a technology revolution over the past decade. Emerging capabilities such as telematics, AI, wearables and claims automation have become more prevalent as insurers have doubled down on using technology for optimization of both cost and processes.

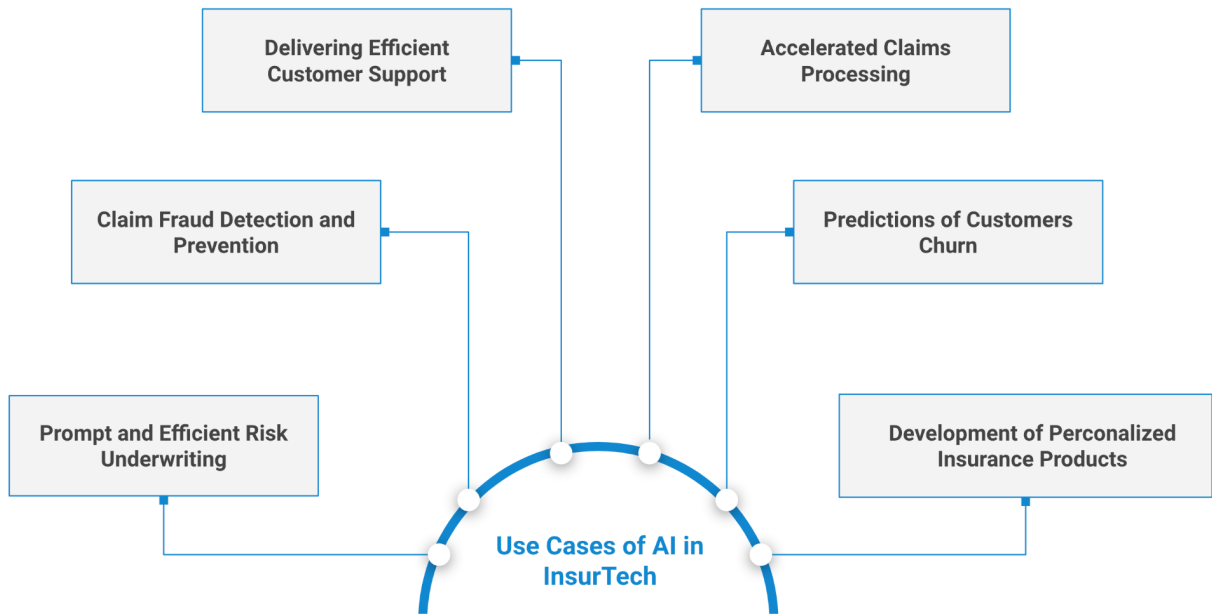
Nowadays the Insurance Industry is embracing AI solutions for reaching higher performance through improving underwriting, customer experience and internal processes.

The insurance sector has a solid background in taking advantage of AI technology, especially insurance companies that used it for optimizing portfolio, fraud detection, recommendation engines and personalized services.

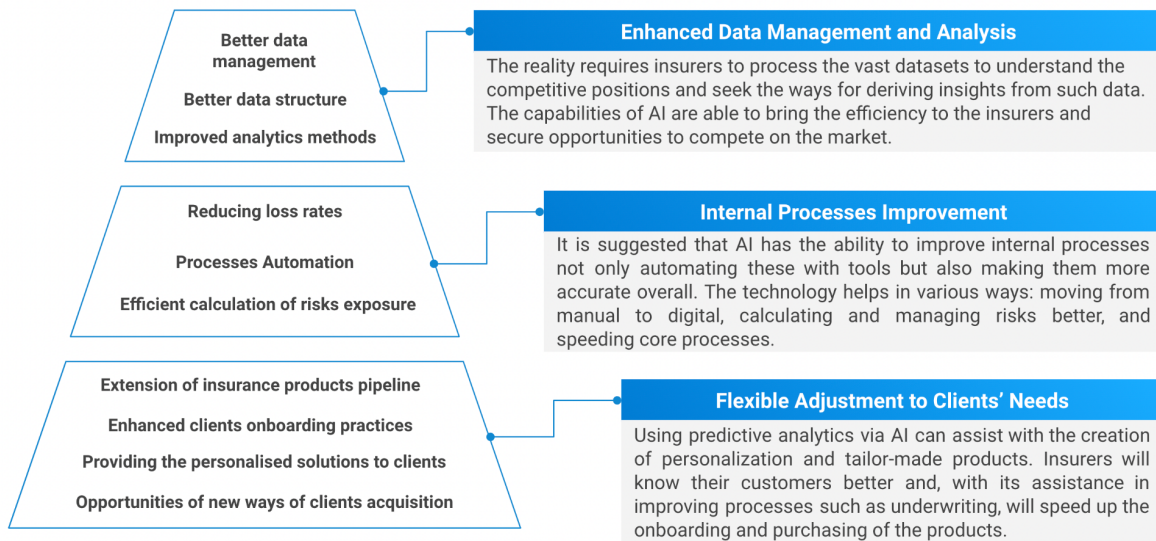
Reasons of Growing AI Use in Insurance

- Explosion of data from connected devices
- The need for enhanced approaches to risks underwriting
- Growing demand for personalized insurance products
- Wider presence of open-source and data ecosystems

Use Cases of AI in InsurTech

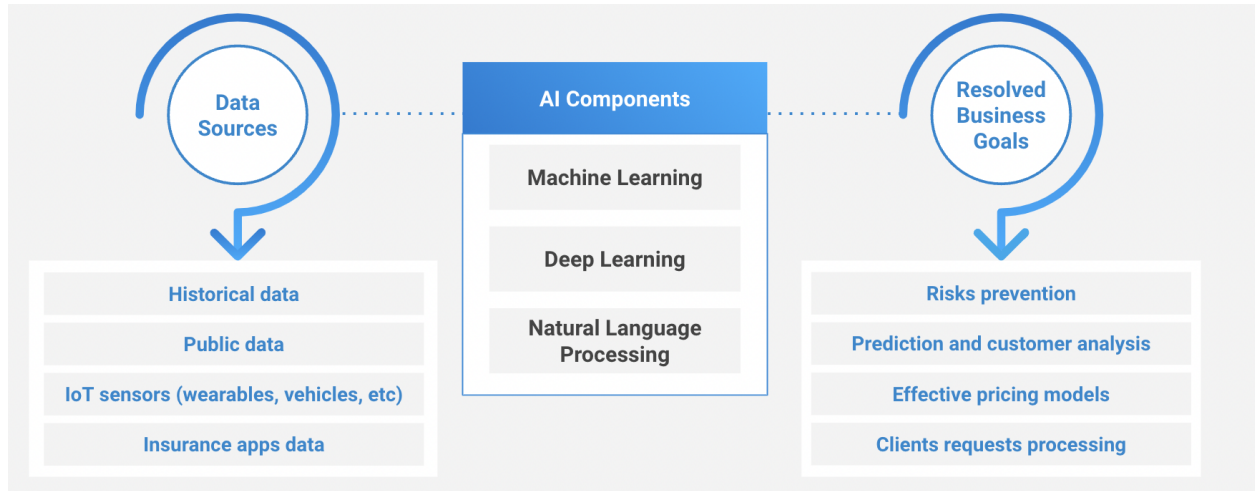


Value-creation Opportunities of AI in InsurTech



Artificial Intelligence is gaining traction within the insurance industry, and this time as more than just a fraud detection tool. It is completely revolutionizing how insurance products are experienced. Most insurers are experimenting with the technology. But those that do not use it as an opportunity to transform their business strategy and their focus risk being left behind.

AI Capabilities to Solve the Needs of Insurance Companies



AI Application Along the Insurance Value Chain

	Product development	Underwriting and risk-rating	Claims management
Text analytics and NLP	Scan and structure existing policies and product descriptions to develop future products faster and more efficiently	Scan for ambiguities and rate risks in insurance applications based on claims to detect fraud faster	Generate structured data sets based on claims reports to process claims faster
Recommendation engine	Analyze customer buying behavior based on sales data following product recommendations to improve offerings	Suggest risk categories for customers based on previous claims and events to prevent human errors	Recommend template for incoming claims based on historical similar claim reports to process claims more effectively
Conversational service solutions	Use feedback data based on customer conversations with virtual service agent to improve future products	Use a chatbot to lead risk related conversations based on natural language database to obtain specific facts from customers	Provide chatbot interface for claims reporting based on natural language base and historical claims data in order to improve efficiency
Speech recognition	Identify customer pain points with products through speech analytics of feedback to improve future products	Detect fraud based on voice analysis of customer calls in order to improve security measures	Automatic text production of speech claims including emotions and behavior based on phone calls in order to improve efficiency

Synergetic Intersection of AI, Longevity and InsurTech:

- Life and health insurance companies can use AI-based aging clocks for the underwriting process. Since these clocks are better predictors of mortality than chronological age, the biological age can be plugged into the actuarial tables to better assess the risks

- Aging clocks can be used for customer acquisition. People who are more aware of their biological age may be more interested in planning their future and buying life insurance products.
- Life insurance companies can benefit from AI to develop new products. There are some cutting-edge insurance companies that are actually planning to use these clocks to develop new exciting products that can help them get new customers, retain them longer and make them more engaged.

Application of Artificial Intelligence creates additional value opportunities for insurance companies. The practice has reaffirmed that the application of AI may optimize the internal processes of insurance companies (such as risk underwriting, data analysis, automation) as well as external activities (better engagement with customers, providing personalized services, etc.)

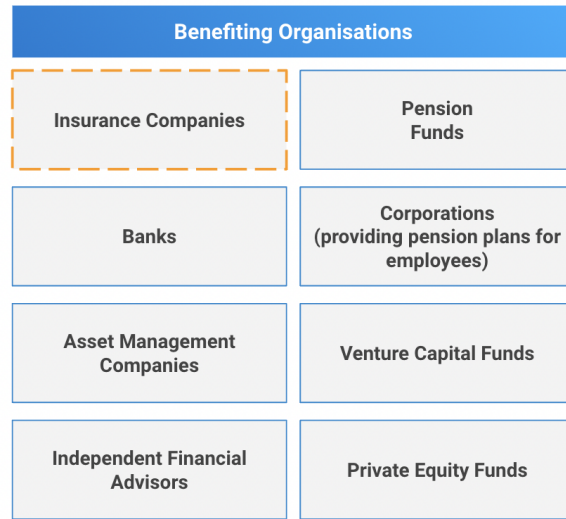
Application of Biomarkers in InsurTech

Many financial services and products can be optimized using biomarkers and, in particular, biomarkers of human Longevity. The current development of financial instruments tied to biological age (individual's physiological health status that is defined by a health-related biomarkers analysis) proves their efficiency in decreasing the Longevity risk.

Many financial services and products can be optimized using biomarkers and, in particular, biomarkers of human longevity. Such approaches show great value for a whole variety of entities, both governmental and privately held, providing optimized hedging solutions.

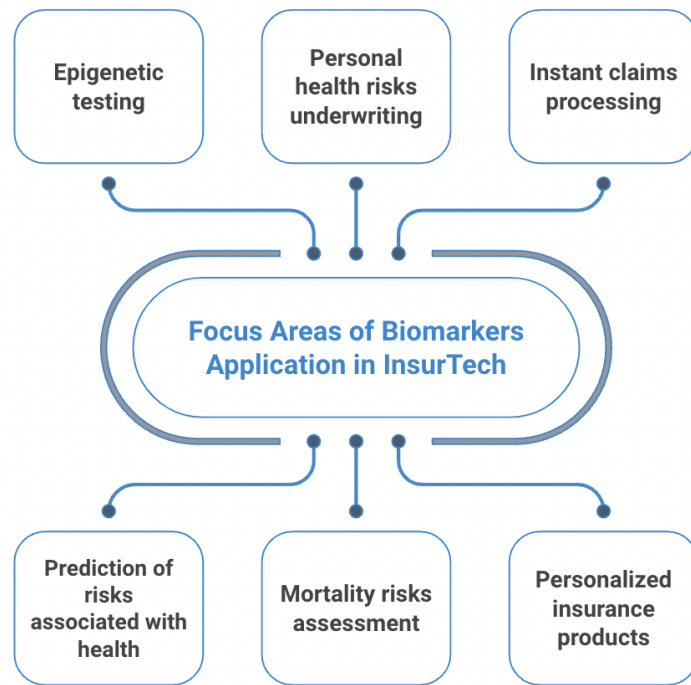
Over 150 financial and, in particular, insurance companies are already developing innovative products and services which creates information infrastructure and provides data about Health Adjusted Life Expectancy (HALE), disability-adjusted life year (DALY) etc. Main players include pension funds that have a lot of liabilities to shift, insurers and reinsurers that are actively working with pension funds to hedge their risks, and investment banks along with major financial services companies that are also eager to provide insurance to pension funds and to trade the longevity risk itself.

Due to the ecosystemic structure of the Longevity Industry, the interconnectedness and mutual influences of its sub-sectors make the growth of longevity infrastructure inevitable, since changes in one sector imply developments in others.



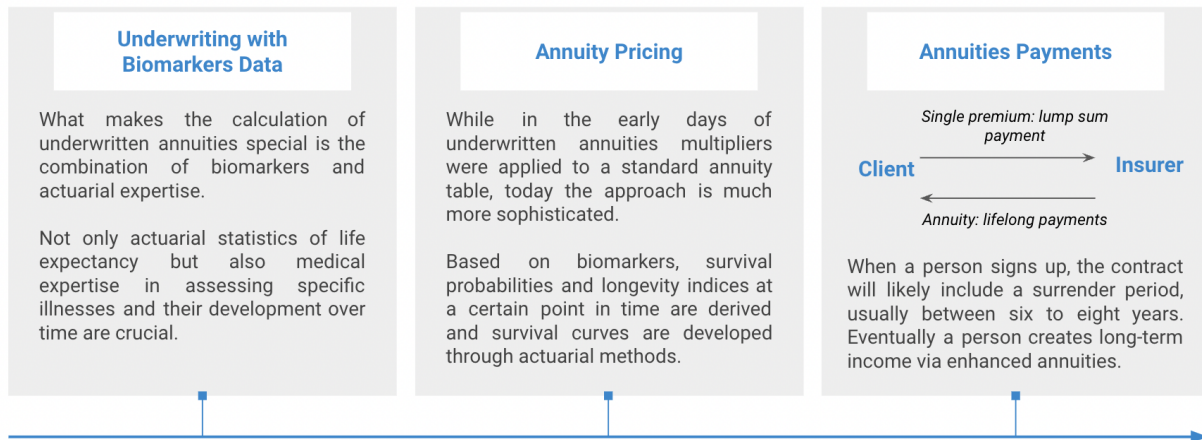
While the InsurTech sector is the leading example today of financial companies onboarding the practical application of Biomarkers of Longevity, it is just the start of a much larger trend that will involve the Financial Industry (across many sectors) incorporating the use of Biomarkers of Human Longevity – and potentially other market-ready, tangible forms of human validation – into their products, services, and strategies in a number of different ways.

The most recent trend shaping the InsurTech Industry is the measurement and analysis of epigenetic biomarkers. The epigenetic clock measures biological aging in a unique way. Studies have shown that individuals who have faster epigenetic clocks are aging faster biologically and, subsequently, are at greater risk for all-cause mortality. Epigenetic measurements also provide insights into how and why we age, making them an important new tool in longevity research.



At the same time, the need for in-depth medical assessment to eliminate the negative consequences of improper medical underwriting is becoming more evident for the insurance companies. Currently, providers of insurance products use a common medical questionnaire, the retirement health form. However, given the traction of the longevity, the enhanced annuity market requires more sophisticated approaches. Biomarkers of aging are of great potential to meet this need. The following example describes the positive effect of biomarkers data use for pricing of insurance annuity contracts.

Use of Biomarkers Data for Risks Underwriting



Insurance and InsurTech, in particular, are the sectors that are already onboarding biomarkers of health, aging and longevity into their business models and practices in order to transform a source of risk (aging) into a source of profit, growth and stability (Longevity), which serves as an ideal case study of how other sectors (such as the pensions industry) can do the same.

The following content summarizes the examples of biomarkers application in insurance industry already witnessed on the market:

- YouSurance, a digital managing general agency (MGA), is the first company to use epigenetic biomarkers to assess life insurance applicants' health and lifespan. YouSurance's patent-pending process of predicting biological aging and all-cause mortality is step-change technology for the life insurance industry.
- FOXO: The company is developing a new underwriting protocol and consumer engagement platform based on epigenetic biomarkers and insights. Epigenetic Clocks of different types are used for predicting all-cause mortality in different cohorts based on an advanced database of biomarkers detected in blood and saliva. Measuring one's biological clock through epigenetics provides insights into how and why people age.
- Lapetus Solutions develops the first facial analysis product, Janus, designed to be integrated into the online application process for life insurance, taking a single "medical selfie" and returning accurate gender, age, and BMI estimates. The company's cloud-based software offers a life insurance underwriting engine that uses biodemography and facial study insights to engage consumers online and rapidly approve them for coverage

- Vivametrica’s device-agnostic platform is going to deliver predictive analytics for insurers and wellness. Leveraging smartphone and wearable technology, Vivametrica uses digital biomarkers to predict risk for disease, mortality, and overall health status. Their platform provides tools for digital underwriting and new ways to engage policyholders and potential customers. Vivametrica’s platform has the ability to streamline underwriting using data and technology to potentially replace lengthy questionnaires, blood tests and medical examinations.
- LifeNome is a B2B2C AI company that leverages biological, physiological, and behavioral data to provide science-based precision needs and risk assessments and targeted health and wellness interventions in nutrition, health, and insurance. The company takes DNA data alongside with wearables data and lifestyle data to provide B2B personalized health and wellness analytics for nutrition, fitness, and insurance.

Wider application of biomarkers may unlock new opportunities in the InsurTech Industry. Biomarkers hold the immense potential to bring more efficiency to the products and services provided by InsurTech companies, namely for the assessment of personal health, biological age, the complex of risks associated with health conditions etc.

The market has already witnessed the emergence of solutions and their practical applications designed for insurance based on the data of biomarkers. sectors that are already onboarding biomarkers of health, aging and longevity into their business models and practices in order to transform a source of risk (aging) into a source of profit, growth and stability (Longevity), which serves as an ideal case study of how other sectors (such as the pensions industry) can do the same.

