Grace Munyiri

Analytics Associate, Alcare

How can InsurTech make health insurance available and sustainable across borders?

www.ihif.global

Health Insurtech

How can InsurTech make health insurance available and sustainable across borders?

Presentation by Grace Munyiri
Data Analyst & Insurtech Enthusiast

Insurtech

The Insurtech concept represents the commitment to innovation, technology and development of new products and services within the insurance sector.

The recent application of innovative techniques such as artificial intelligence, machine learning or big data focused on offering this type of solution to create disruptive insurance products which has strengthened and consolidated Insurtech

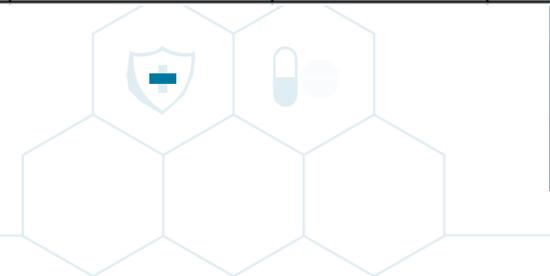# Traditional Health Insurance VS Health Insurtech

Currently, Traditional Health insurance processes are manual, leading to inefficient and time-consuming operations and customer experiences. Compared to the technology already in insurance, insurtech is far more cost-effective.

Whereas, Insurtech platforms are quick and cheap for providers to bring new products into markets.
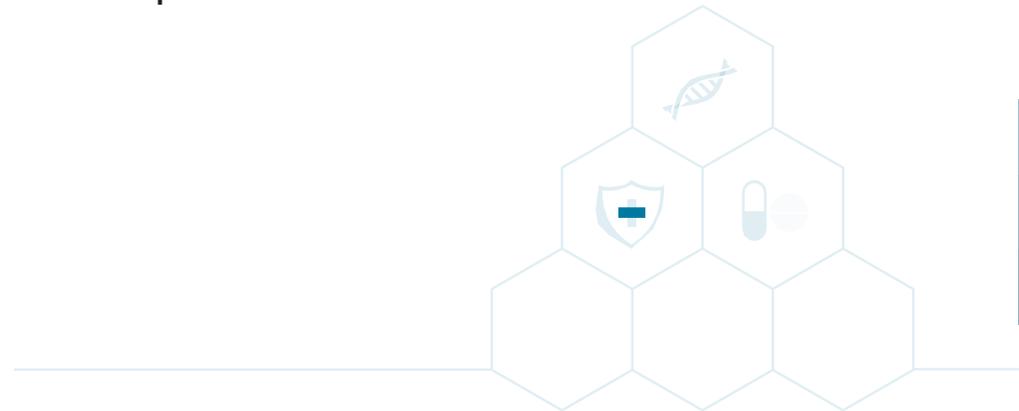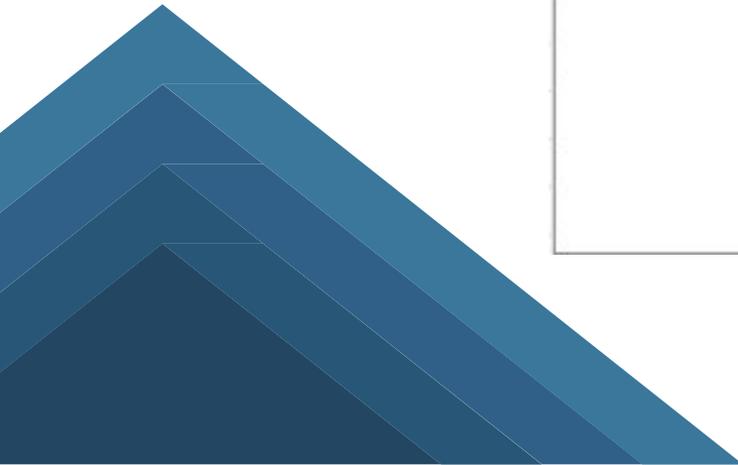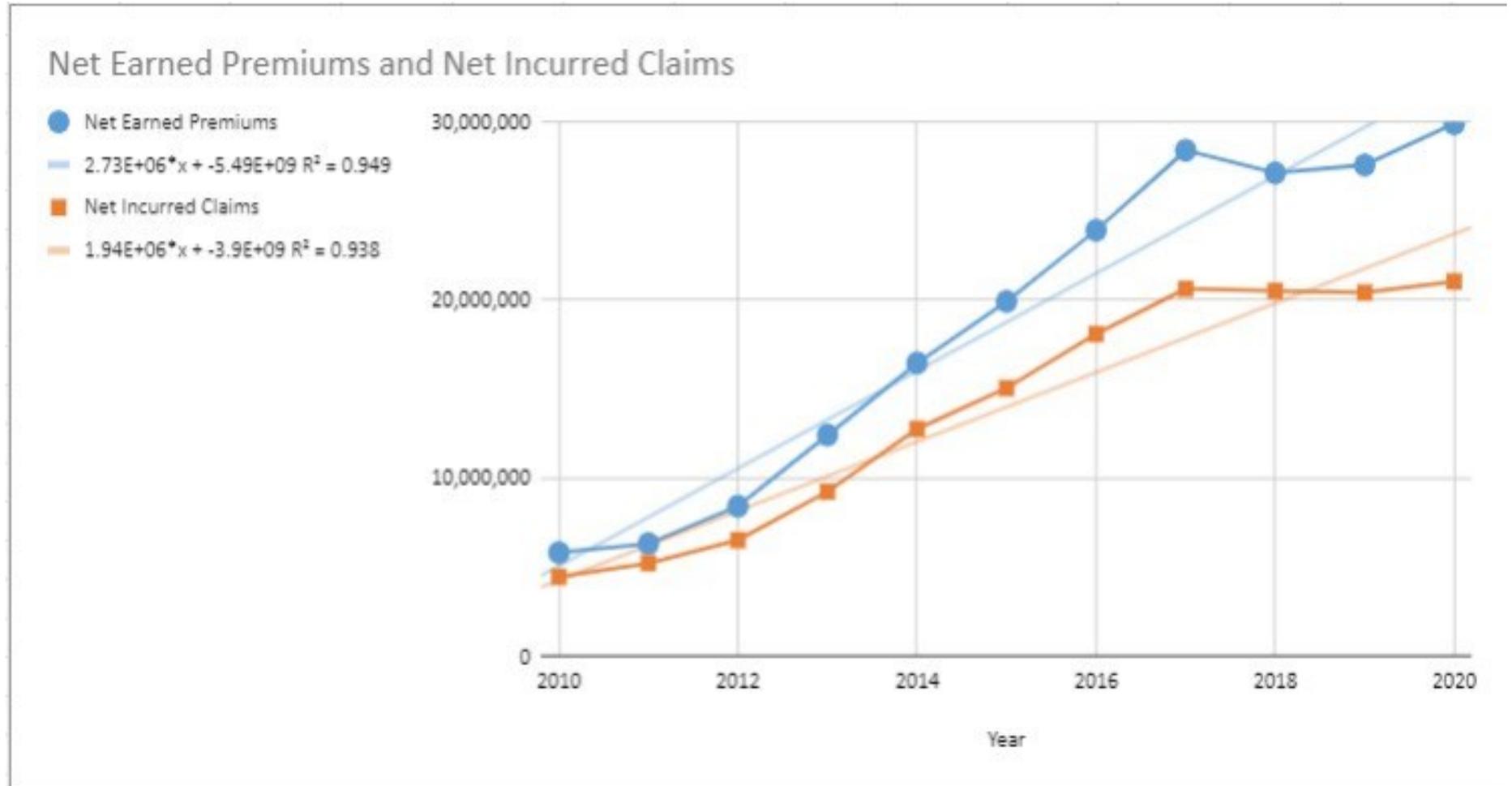
Health Insurance in Kenya

Year	Net Earned Premiums	Net Incurred Claims	Incurred Claims Ratios	Expenses	Premiums - Claims	Net commisions	Underwriting Profits
2020	29,892,468	21,044,511	70.4	7,552,812	1,295,145		1,295,145
2019	27,577,190	20,424,313	74.1	6,347,176	805,701	666,064	139,637
2018	27,133,652	20,515,402	75.6	6,447,497	170,753	1,178,983	-1,008,230
2017	28,399,766	20,632,162	72.6	5,973,951	1,793,653	1,711,127	82,526
2016	23,920,288	18,095,201	75.6	5,686,204	138,883	988,423	-849,540
2015	19,929,257	15,063,107	75.6	4,488,071	378,079	496,108	-118,029
2014	16,474,600	12,774,064	77.5	3,768,534	-67,998	328,896	-396,894
2013	12,433,137	9,260,252	74.5	2,943,862	229,023	-53,502	282,525
2012	8,440,074	6,538,485	77.5	1,857,500	44,089	321,284	-277,195
2011	6,344,416	5,248,086	82.7	1,279,921	-183,591	524,048	-1,082,454
2010	5,838,676	4,479,354	76.7	963,639	395,683	454,190	-58,507
Mean	18,762,139	14,006,812		4,300,833	454,493	661,562	-181,001
Variance	86,557,396,380,234	44,211,436,118,142		5,248,204,96	371,222,432,542	255,914,460,380	458,482,162,284
SD	9,303,623	6,649,168		2,290,896	609,280	505,880	677,113
Max	29,892,468	21,044,511		7,552,812	1,793,653	1,711,127	1,295,145
Min	5,838,676	4,479,354		963,639	-183,591	-53,502	-1,082,454

Premiums collected and Claims paid

Net Earned Premiums and Net Incurred Claims

Net Earned Premiums
2.73E+06*x + -5.49E+09 R² = 0.949
Net Incurred Claims
1.94E+06*x + -3.9E+09 R² = 0.938

Underwriting Income = Premiums Collected –
Claims Paid – Expenses

Underwriting Profits vs. Year

Underwriting Profits vs. Year

Legend: ✕ Underwriting Profits   — Trendline for Underwriting Profits

Data labels:
- (58,507.00)
- (1,082,454.00)
- (277,195.00)
- 282,525.00
- (396,894.00)
- (118,029.00)
- (849,540.00)
- 82,526.00
- (1,008,230.00)
- 139,637.00

Y-axis: Underwriting Profits (1,500,000 / 1,000,000 / 500,000 / 0 / -500,000 / -1,000,000 / -1,500,000)

X-axis: Year (2010, 2012, 2014, 2016, 2018, 2020)

How can InsurTech make health insurance available and sustainable across borders?

1. Personalized marketing

Have you ever noticed that as soon as you search for something on the internet, you start seeing that thing on every platform you use as an ad?
How does that happen, how does the system know what to present before you? The answer is simple- through data.

Data is powerful and insurance companies are using this power wisely. Insurance companies can deliver personalized advice, and products or services tailored to their specific needs.

The customers are always willing to get personalized services which would match their needs and lifestyle perfectly well. The insurance industry is not an exception in this case. The insurers face the challenge of assuring digital communication with their customers to meet these demands.

Highly personalized and relevant insurance experiences are assured with the help of the artificial intelligence and advanced analytics extracting the insights from a vast amount of the demographic data, preferences, interaction, behavior, attitude, lifestyle details, interests, hobbies, etc. The consumers tend to look for personalized offers, policies, loyalty programs, recommendations, and other options.
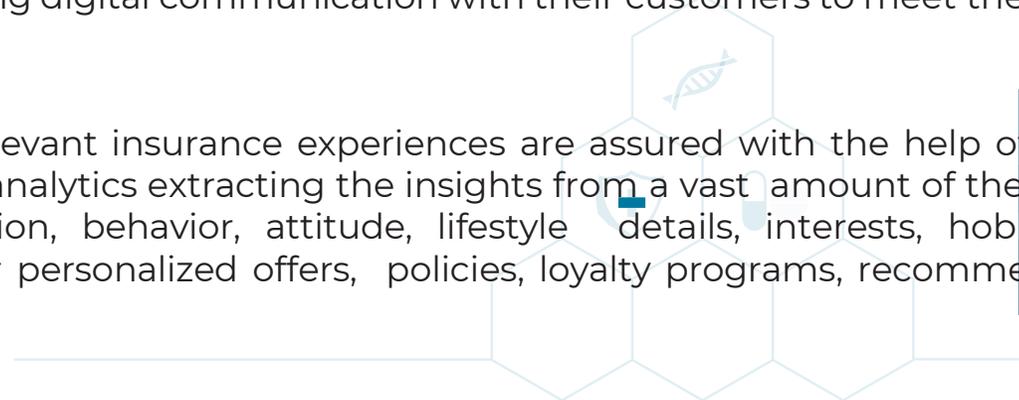
2. Customer segmentation

Modern technologies have brought the promotion of products and services to a qualitatively new level. Different customers tend to have specific expectations for the insurance business. Insurance marketing applies various techniques to increase the number of customers and to assure targeted marketing strategies. In this regard, customer segmentation proves to be a key method.

The algorithms perform customers' segmentation according to their financial sophistication, age, location, etc. Thus, all the customers are classified into groups by spotting coincidences in their attitude, preferences, behavior, or personal information. This grouping allows developing attitude and solutions especially relevant for the particular customers.

In addition to that, localised big data can draw on data trends to provide area-specific wellness and safety information that considers environmental factors, such as pollution, solar strength, local safety alerts, and other relevant information.

3. Lifetime value prediction

Customers lifetime value (CLV) is a complex phenomenon representing the value of a customer to a company in the form of the difference between the revenues gained and the expenses made projected into the entire future relationship with a customer.

Prediction of the CLV is typically assessed via customer behavior data in order to predict the customer's profitability for the insurer. Thus, the behavior-based models are widely applied to forecast cross-buying and retention. Hence, it is an as important factor to calculate future income. In addition, the CLV prediction may be useful for the marketing strategy development, as it renders the customers' insights at your disposal.

4. Claims prediction

The insurance companies are extremely interested in the prediction of the future.
Accurate prediction gives a chance to reduce financial loss for the company.

Hence, the insurers use algorithms that involve detection of relations between claims, implementation of high dimensionality to reach all the levels, detection of the missing observations, etc. In this way, the individual customer's portfolio is made.

5. Digitisation

As per a report, automation can reduce the cost of a claims journey by as much as 30%, which is fantastic! Using outdated methods or tools can no longer serve the needs of the rapidly changing customer expectations.

Therefore, it is imperative for insurance companies to adopt digital strategies. Without digitisation, providing customers with a seamless user experience seems clearly impossible. Digitisation allows insurance companies to reach out to customers in a way never seen before. The use of tools such as websites, apps, social media, chatbots, emails, etc. makes the communication between the customers and the insurance companies much smoother.

6. Insurance on the go

In this digital age, mobile applications are a must-have for customers. This is because mobile apps offer exceptional user experience, speed, additional features, and easy accessibility to services. Millennials love in-app shopping: 58% of millennials say that they prefer purchasing through apps. Besides making the purchasing process much easier, mobile apps also act as a great point of contact between customers and insurers for any transaction. These are some of the trends that are going to transform the way insurtech operates.

7. Artificial Intelligence (AI)

AI and machine learning make insurance processes more efficient. By adopting artificial intelligence insurance companies can identify emerging risks and can easily prevent fraudulent activities and money laundering.

AI can significantly speed up functions like data collection, loss assessment, and cost estimation, etc. When it comes to claims management, damage analysis through image recognition, automated self-service guidance, and others, AI is a big help. This enables insurance companies to offer a hassle-free experience to their customers.

8. Price optimization

Price optimization give the insurers the opportunity to adjust the quoted premiums dynamically.

As a key positive feature, price optimization helps to increase the customers' loyalty in long perspective. Along with this, comes the maximization of profit and income.

Is there a possibility of combining Health Tech and Smart Insurtech?

Smart Health tech and insurtech can be combined to provide personalised solutions — with the help of predictive algorithms and powerful data analytics to provide valuable insights for insurance providers.

Real-time data allows insurers to evolve with individual customers' needs over time while taking into account specific risk models while offering a more personalised, predictive, and even preventive health insurance service.

Connected devices and wearables are increasingly being recognised as a golden opportunity for insurers. This is simply because the devices help them get to know their customers better and reward them with lower premiums. Health connectivity helps insurers to better understand and exploit risk profiles, assess all elements and conditions required to enable it to be gathered, and translate the data into a bespoke commercial product.

Successfully harnessing customer data and insurtech informs just-in-time policies and products that offer value to the end customer in a clear and transparent way while simultaneously preserving precious company budget

What is the signigicance of Innovative Health Insurance Products?

To Customers:

Innovative health insurance products can improve customer experience, establish greater trust, and foster credibility among customers. In fact, consumers rank customer service, communication, and feeling respected by the company they're engaging with as the biggest reasons for choosing a health insurance provider.

Customers also benefit as healthtech actively encourages healthy behaviour and lifestyle decisions. Healthtech helps people stay healthy, reduce the need to seek medical care, or seek early interventions that can lower the need for medical insurance.
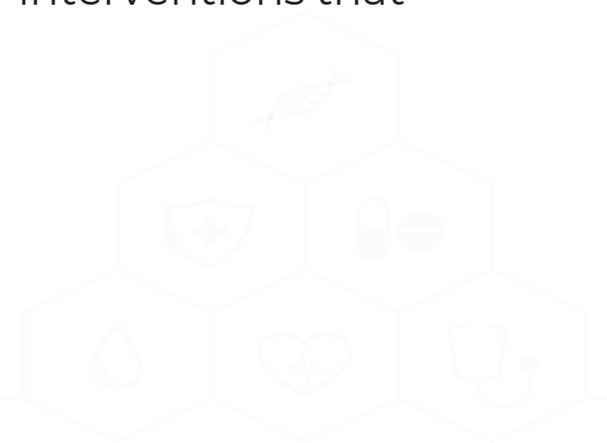
What is the signigicance of Innovative Health Insurance Products?

To Underwriters:

Combining smart insurtech with healthtech results in increased competitiveness in the marketplace. Compiling new data allows underwriters to do their job more effectively (and ultimately increase the profitability of the organisations they work for). Data-fueled insights lead to better policy cover and risk identification for customers in less time.

Besides, digital health ecosystems also hold promise in improving administrative efficiency based on lower overhead costs and faster turnaround times for insurance companies. By enabling more seamless data sharing among all parties,there's a strong foundation to reduce the need for manual processing or time- consuming data collection.
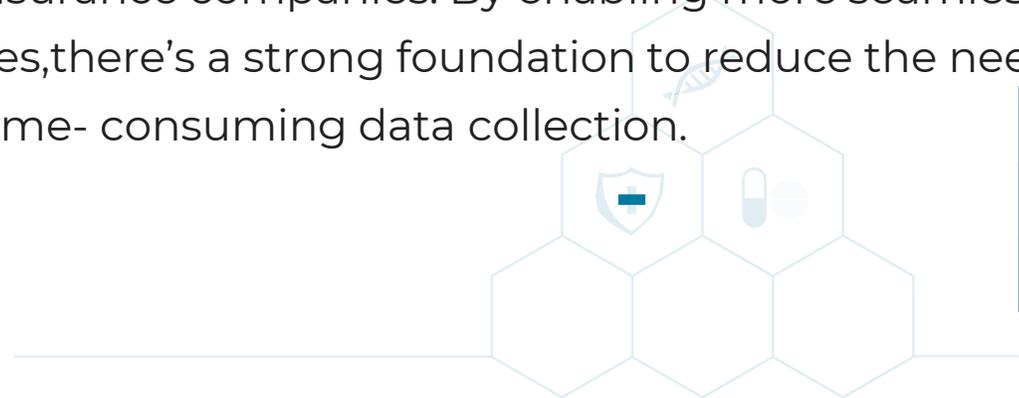
Conclusion

In essence, insurtech will greatly impact the health insurance companies by optimizing marketing strategies, improving the business, enhancing the income, and reducing costs and claims.

THANK YOU