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Insurance Outlook Report 2019/2020East Africa



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Foreword

Insurers in the region have experienced better times than their financial performance in the recent years. The sustained economic growth in the region has not translated into a positive trajectory for insurers.

The operating environment has only become more competitive with premium rates being revised downwards in the more competitive business classes. Suboptimal investment returns on property and equity markets, which have been used as a safety net to compensate for underwriting losses, have further driven down the fortunes of insurance companies. Furthermore, the pace at which disruptive technologies have been taken up by incumbents and the entrance of non-traditional insurers in the market, is slower than expected.

Insurers need to look at ways of remaining relevant in the competitive scene while improving their operational efficiencies using technology.

Customers are becoming more enlightened, aware of their insurance needs, and are increasingly being sceptical of what insurers have to offer them. Globally, insurers have taken steps to modify their product and service offerings in line with customer behaviours. However, the trend is yet to be experienced in the East African Region.

In this report, we explore simple and practical ways of using technology to adapt products and processes, as seen from best practices and experiences globally. We also highlight the need to consider digitisation as insurers look to expand their talent base.

Although the operating environment has remained largely unchanged in the insurance industry, other industries such as banking, transportation and manufacturing have already started feeling the effects of disruptive technologies and unconventional competitors.

The first insurers who capitalise on the opportunities that digitisation and automation offer, will most likely be the biggest beneficiaries. It is up to insurers to start small without fearing to fail and make iterative changes to their business as usual approaches.

This report also provides a high-level overview of the macroeconomic environment, and international financial reporting standard changes that need to be given priority as insurers set their agendas in the short to medium term.

Our outlook is based on the first-hand experience and insights of Deloitte's subject matter specialists, supplemented with research and analysis by the Deloitte Center for Financial Services. We hope you find it thought provoking as you contemplate your strategic priorities and adjust your agenda for the year ahead.

Please share your feedback or questions with us. We would welcome the opportunity to discuss our report directly with you and your team.

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Where do insurers stand in 2019?

Kenya

According to the Economist Intelligence Unit (EIU), the real GDP increased to 6.3% in 2018 due to the strong agricultural performance and it is expected to moderate to 5.7% in 2019. This is mainly due to the late start of the wet season having an impact on the agricultural performance of the country. Nonetheless, growth in 2019 will be supported by public and private investment, regional integration and communication services. EIU predicts that the real GDP growth in Kenya will remain strong, averaging 5.9% a year in 2020-23. This is supported by urbanization, regional integration, structural reforms and investment in infrastructure.

Inflation fell to 4.7% in 2018 due to favorable rains and stable food prices but is expected to be higher in 2019 due to poor rainfall and rising cost of food. In the long term, inflation is expected to average 6.6% a year in 2020-23 mainly due to rising global oil prices and threat of drought. However, prudent monetary policy will offer some protection.

Based on our internal projections and the historical relationship between gross written premium growth and GDP growth, the insurance industry is expected to experience growth in gross written premium in line with historically observed growth rates.

Tanzania

According to the Economist Intelligence Unit, economic growth is expected to remain below the average of 6.7% registered in 2013 to 2017. Given the government's policy agenda and unsupportive mining legislation, economic growth is expected to ease to an average of 5.5% a year in 2019 to 2023.

Inflation was at an average of 3.5% in 2018 as low food prices offset the high global oil prices. It is expected that inflation will average 3.4% in 2019 and 3.7% in 2020 due to the elections. According to Fitch Insurance Report, economic improvements coupled with growth in car ownership, the introduction of mandatory health insurance system and investment in real estate and infrastructure are expected to boost insurance uptake and hence growth in insurance premiums in 2019 and beyond.

Uganda

According to the Economist Intelligence Unit, the real GDP growth is expected to slow from an estimated 5.7% in 2018 to 5.1% in 2019 mainly due to dry weather conditions impacting agricultural production. However, expansion in trade services and mining and construction industries is expected to support growth. Thereafter, growth is expected to average 5.7% annually throughout 2020-23 supported by expansion in telecoms services, tourism and partnerships that will boost agricultural production.

Inflation averaged 2.6% in 2018 and is expected to be higher at 3.6% in 2019 mainly due to higher taxes imposed on communications and the new fuel levies. It is expected that inflation will continue rising to 4.2% in 2020 due to rising food prices and 4.9% in 2021 because of election related volatilities. Although the insurance sector in Uganda is small with the market being dominated by non-life insurance, economic growth is boosting life insurance uptake which in turn result to growth in the overall premiums.

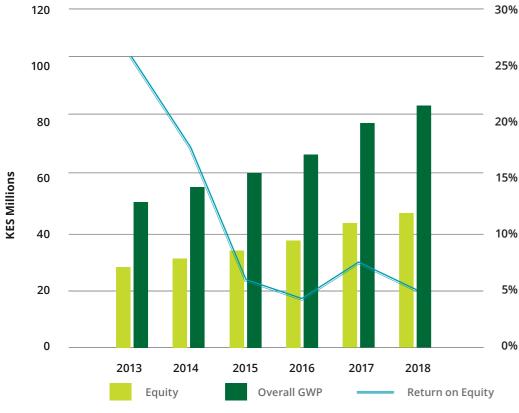
Kenya

Life Insurance - Kenya

Life insurance industry performance

In the last five years, the life insurance market in Kenya has experienced growth in both the level of direct premiums as well as in the equity held by the industry constituents. There has been a record of positive returns on shareholder's equity in this time frame. However, the return on equity has been varying year on year with a decline recorded over 2017 to 2018.

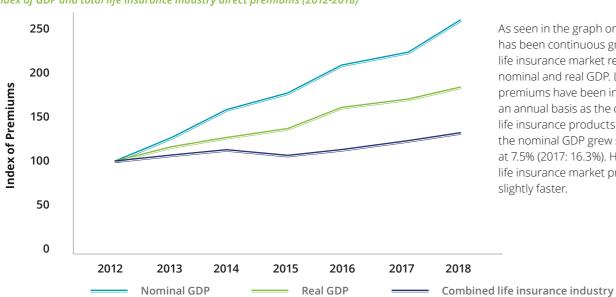
Life insurance industry overall performance (2013-2018)



Source: IRA Kenya Industry reports 2013 - 2018

GDP growth versus premium growth

Index of GDP and total life insurance industry direct premiums (2012-2018)



life insurance market relative to the nominal and real GDP. Life insurance premiums have been increasing on an annual basis as the demand for life insurance products rises. In 2018, the nominal GDP grew slightly slower at 7.5% (2017: 16.3%). However, the life insurance market premiums grew slightly faster.

As seen in the graph on the left, there

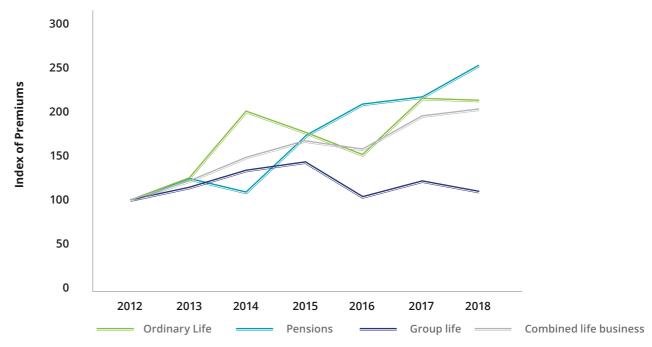
has been continuous growth in the

Source: IRA Kenya Industry reports 2012 - 2018, BMI Economic data

Constituents of life industry premiums

In 2018, there were observed declines in the overall direct premiums for both ordinary and group life businesses. However, these were counteracted by the increase in pension business direct premiums as shown in the graph below. The graph has been indexed with base year 2012.

Index of total L&A direct premiums (2012-2018)



Source: IRA Kenya Industry reports 2012 - 2018, BMI Economic data

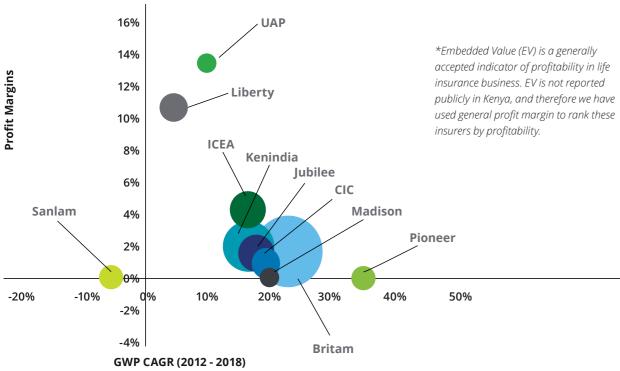
Group life has experienced a slower growth rate in comparison to other business classes within life insurance due to the price wars that have been prevalent among the industry players. On the other hand, pension business has had a growth since 2014 due to the increased demand and uptake of retirement and savings products.



Competitive landscape

Most of the top ten insurers have experienced reasonable premium growth. The larger insurers have not performed as well in profitability, due to the investment performance slump following elections in 2017, and high cost of acquiring policies through intermediaries. The size of the bubble represents the gross written premiums for the year 2018.

Kenya top ten life insurers performance*



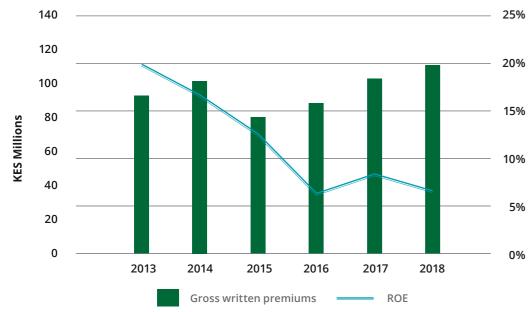
Source: IRA Kenya Industry reports 2012 - 2018

General Insurance- Kenya

Insurers experiencing diminishing returns on equity

The returns on equity have been on a downward trend despite a rising growth in gross written premium. A slow growth economy is expected to continue exerting downward pressure on return on equity as insurers compete with new and existing players for market share.

General Insurance Industry Performance (2013-2018)

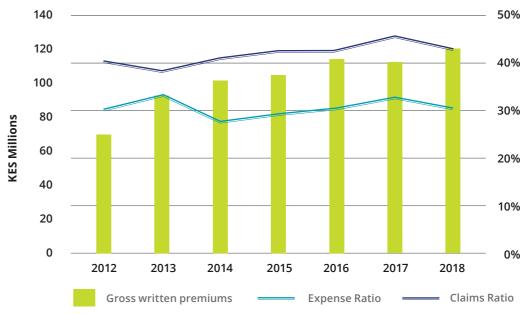


Source: IRA Kenya Industry reports 2012 - 2018

Reduced expense and claims ratios in 2018

The general insurance industry has experienced stable growth in gross written premiums from 2012 to 2018. The expense and claims ratios have been on a slightly upward trend for the past 6 years. However, this position has changed with decreased expense and claims ratios experienced in 2018.

General insurance industry expense ratio and claims ratio

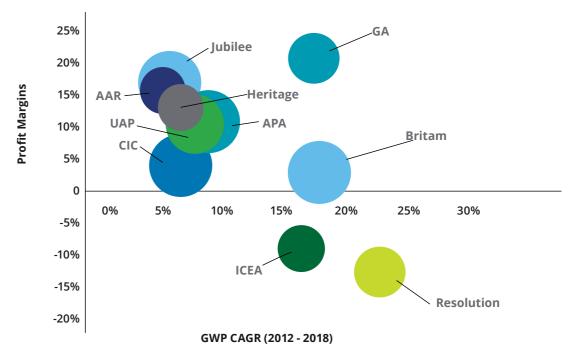


Source: IRA Kenya Industry reports 2012 - 2018

Profit margin vs CAGR vs GWP

The graph below shows an analysis of the top 10 general insurance companies in Kenya, highlighting their compounded growth vis-a-vis the profit margin. The size of the bubble represents the gross written premiums for the year 2018. The most established players in the market are growing at a relatively similar rate with high gross written premiums and profit margins in the 5 - 10% bracket.

Top ten general insurers performance

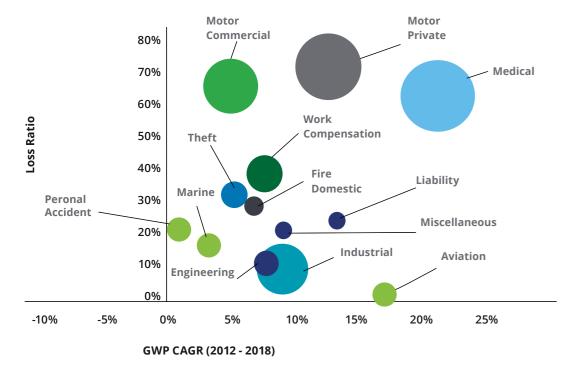


Source: IRA Kenya Industry reports 2012 - 2018

Insurers remaining in traditional business classes despite loss making behaviour

As seen in the graph below, motor private and medical business classes are the largest classes. However, they are also among the most loss-making businesses. Insurers could investigate other emerging business classes that have a potential for growth to diversify their business mix. Alternatively, insurers need to investigate means of reducing the loss ratios on the large business classes using big data and Al. The size of the bubble represents the gross written premiums for the year 2018.

Performance based on individual business classes



Source: IRA Kenya Industry reports 2012 - 2018



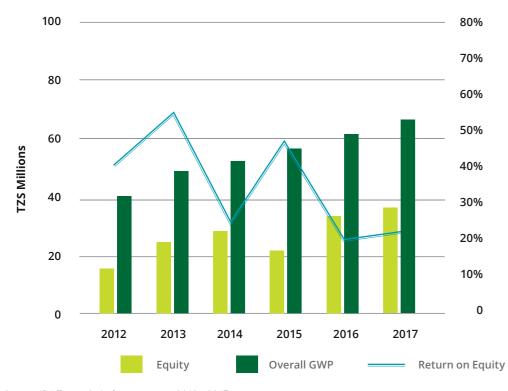
Tanzania

Life Insurance - Tanzania

Life insurance industry performance

There has been a persistent positive year on year growth in gross written premiums over the last five years from 2012 to 2017. Although equity values have been on the rise, returns on shareholders' equity have been fluctuating year on year from 2012 to 2017, registering a low of approximate 25% in the last two years. The graph below indicates that the shareholders' returns have remained flat 2016 and 2017.

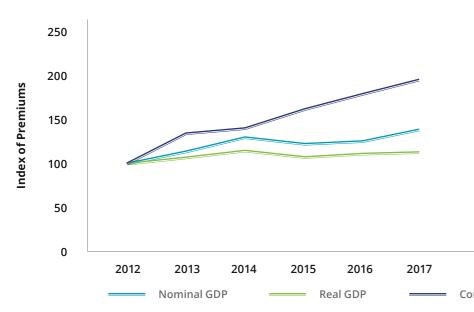
Life insurance industry overall performance (2012-2018)



Source: IRA Tanzania Industry reports 2012 - 2017

GDP growth versus premium growth

Index of GDP and total life insurance industry direct premiums (2012 - 2017)



The life insurance industry has been growing slightly faster than the growth in the nominal and real GDP. This has been due to increased demand for life insurance products in this growing economy.

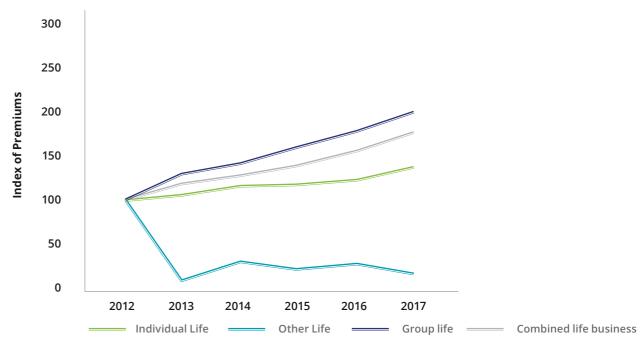
Combined life insurance industry

Source: IRA Tanzania Industry reports 2012 - 2017, BMI Economic data

Constituents of life insurance industry premiums

Group life has been largely contributing to the growth of the life insurance market in Tanzania. However, individual life constitutes a larger proportion of the overall life insurance premiums than its contribution to life insurance premiums in Kenya. The graph below has been indexed with base year 2012.

Index of total L&A direct premiums (2012 - 2017)



13

Source: IRA Tanzania Industry reports 2012 - 2017, BMI Economic data

Competitive landscape

The top 5 life insurance companies have been growing steadily, however their profitability is less comparable to the profit margins observed in Ugandan insurance companies. The size of the bubble represents the gross written premiums for the year 2017.

*Embedded Value (EV) is a

generally accepted indicator

business. EV is not reported

publicly in Tanzania, and

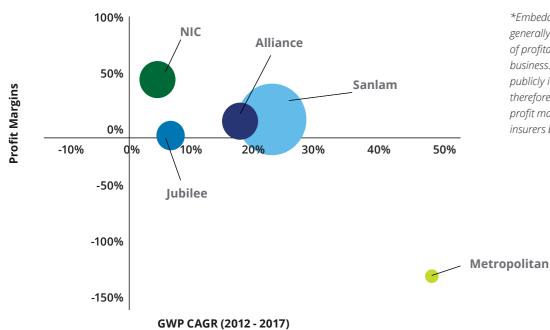
profit margin to rank these

insurers by profitability.

of profitability in life insurance

therefore we have used general

Tanzania life insurers performance



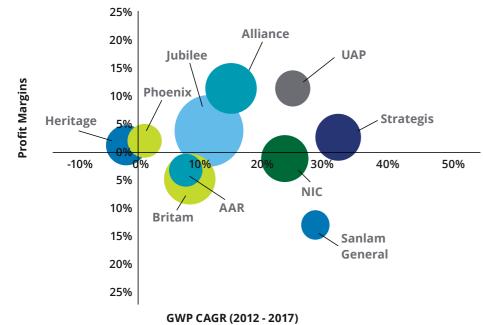
Source: IRA Tanzania Industry reports 2012 - 2017

General Insurance- Tanzania

CAGR vs Profit margin vs GWP

The graph below shows an analysis of the top 10 insurance companies, highlighting their compounded growth visa-vis the profit margin. The size of the bubble represents the gross written premiums for the year 2017.

Top ten general insurers performance

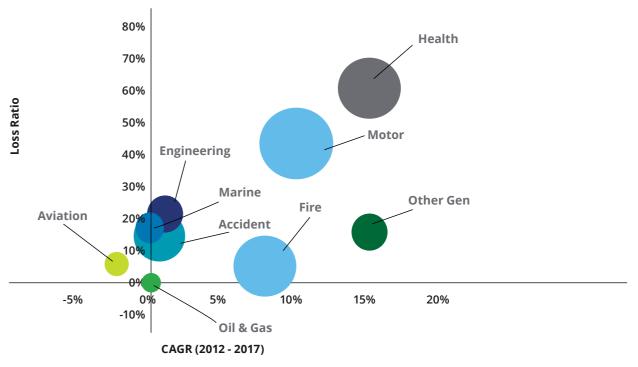


Source: IRA Tanzania Industry reports 2012 - 2017

Traditional business classes continue to be loss making

The largest growing business classes are motor and health as shown in the graph below, however, these are also the business classes with the highest loss ratios. The size of the bubble represents the gross written premiums for the year 2017.

Performance based on individual business classes

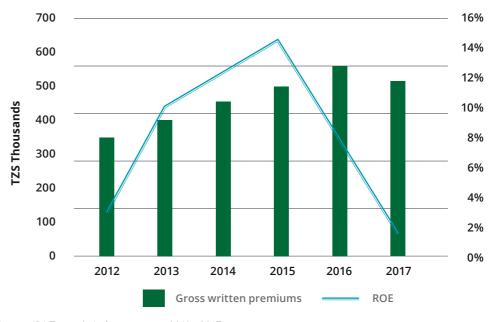


Source: IRA Tanzania Industry reports 2012 - 2017

Insurers are experiencing diminishing returns on equity

The return on equity was at its lowest at 2% in 2017 compared to the previous 5 years. The return on equity has been on a downward trajectory for the past 3 years as shown in the graph below.

General Insurance Industry Performance (2012-2017)



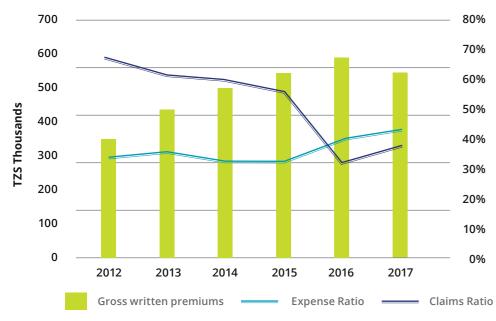
15

Source: IRA Tanzania Industry reports 2012 - 2017

Increasing expense and claims ratios in 2017

The gross written premiums have been growing at a stable rate from 2012 to 2016 with a slight decline in 2017. The expense ratio has been on a downward trend since 2013, however, there has been an increase in the ratio from 2016 to 2017. Generally, the claims ratio has been on a downward trend for the past 5 years and increased in the period 2016 to 2017.

General insurance industry expense ratio and claims ratio



Source: IRA Tanzania Industry reports 2012 - 2017



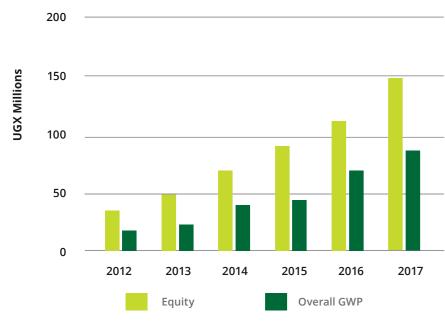
17

Uganda

Life Insurance - Uganda

Life insurance industry performance

Life insurance industry overall performance (2012-2017)

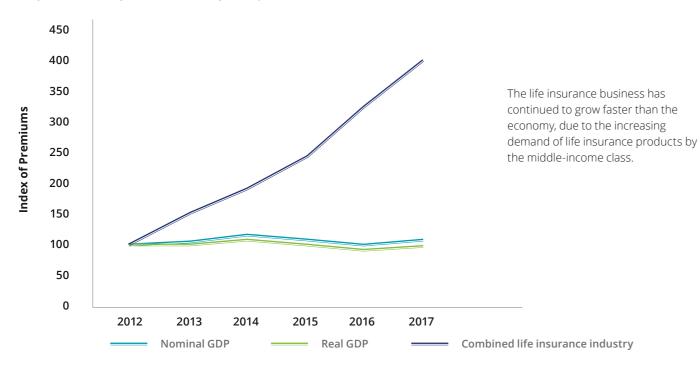


Source: IRA Uganda Industry reports 2012-2017

There has been a steady growth in the level of direct premiums and equity held by industry constituents in the life insurance market in Uganda.

Premium growth is surpassing economic growth

Index of GDP and total life insurance industry direct premiums (2012-2017)

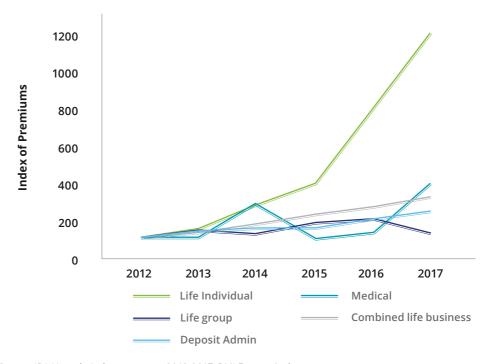


Source: IRA Uganda Industry reports 2012-2017, BMI Economic data

Constituents of life insurance industry premiums

Individual life is the fastest growing business class, with deposit administration and group life experiencing a slower growth than the combined life business in the last three years. The slower growth in group business in Uganda in comparison to Tanzania and Kenya has been influenced by the pension's act that is yet to be liberalised. The graph below has been indexed with base year 2012.

Index of total L&A direct premiums (2012-2017)

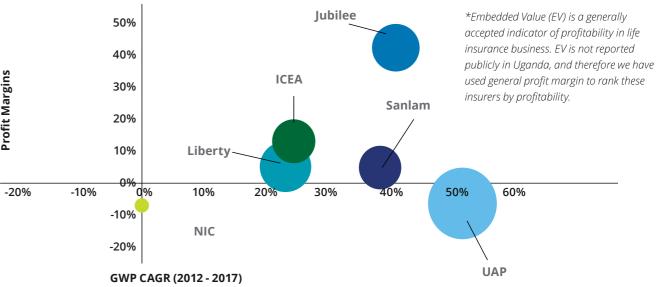


Source: IRA Uganda Industry reports 2012-2017, BMI Economic data

Competitive landscape

The competitive landscape shows a wider margin in gross written premium growth, however most insurers have been growing at rapid paces, in line with the rapid growth in the middle-income class. The size of the bubble represents the gross written premiums for the year 2017.

Uganda life insurers performance*



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Source: IRA Uganda Industry reports 2012-2017

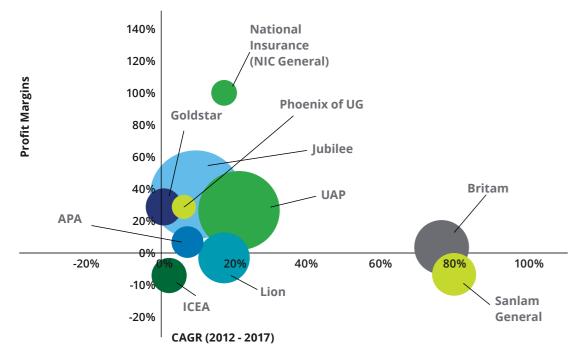
^{*}Medical has been classified under life business

General Insurance- Uganda

CAGR vs Profit margin vs GWP

The graph below shows an analysis of the top 10 insurance companies, highlighting their compounded growth vis-a-vis the profit margin. The size of the bubble represents the gross written premiums for the year 2017. Most players in the market are experiencing low growth and low profitability. Britam and Sanlam General were the fastest growing players in the market, with low and negative profit margins. The largest insurer by premiums, Jubilee, has focussed on niche business classes that generally experience lower loss ratios than the larger business classes.

Top ten general insurers performance (2012-2017)

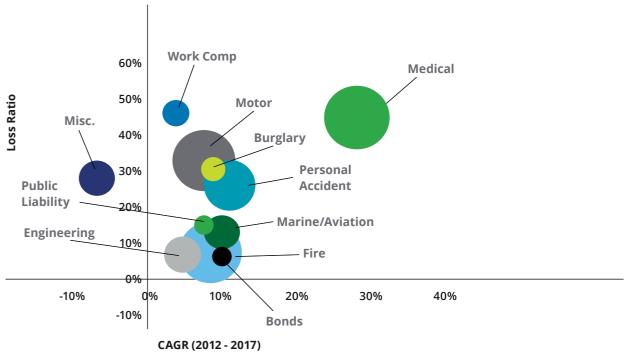


Source: IRA Uganda Industry reports 2012-2017

Insurers remaining in traditional business classes despite loss making behaviour

The fastest growing business classes are personal accident and medical as shown in the graph below, however, the personal accident class has shown lower loss ratios than some of the slower growing classes such as motor. The size of the bubble represents the gross written premiums for the year 2017.

Performance based on individual business classes

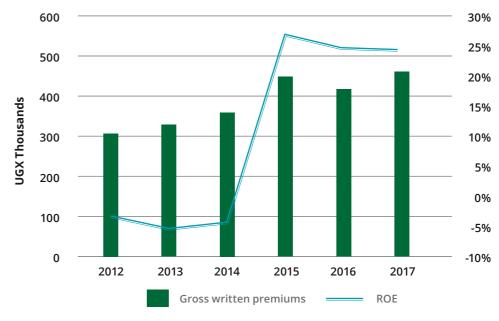


Source: IRA Uganda Industry reports 2012-2017

Insurers are experiencing diminishing returns on equity

The return on equity has been flat over the past 3 years as seen in the graph above, however, significantly higher than the return from shareholders' of Kenyan entities.

General Insurance Industry Performance (2012-2017)



21

Source: IRA Uganda Industry reports 2012-2017



Big Data as a priority for insurers

Why should big data be a priority for insurers in 2019?

Big data is the key to digital transformation – without it, the artificial intelligence tools and applications would not be able to yield the desired outcomes that they are capable of achieving.

The use of big data in insurance is expected to increase significantly in the years to come. The amount of digital data created is constantly increasing and this growth brings about opportunities for insurers to leverage big data. It is estimated that by 2020, new information generated on average for every human being will approximately amount to 1.7 megabytes per second. 40,000 search queries are performed per second on Google alone which equates to 3.46 million searches per day. The number of smartphone users is also expected to grow to 6.1 billion by 2020, therefore increasing the amount of digital data available at an exponential pace. Insurers can tap into the increasing amount of data to aid in their business development, strategic choices and decision making.

Insurance companies will have to re-consider their pricing models, underwriting and risk selection processes by finding ways to incorporate the use of big data. Big data will allow development of products that will cater to specific customer needs as opposed to one size fits all products. For example, individual fitness trackers would enable people who lead active lives to get discounts on their life insurance while those who lead sedentary lives would be charged an additional premium. In the East African market, we have already seen non-traditional companies starting to use big data to capitalize on inefficiencies experienced by insurers. The issue of big data is only a matter of who capitalizes on this opportunity first.

Big data will enable improved claims management. For example, telematics data has enabled insurers to have improved claims prevention and handling as they are able to track their customer's usage. Insurers are increasingly capitalizing on the use of data on customers' smartphones to develop products such as usage-based insurance to meet customers' evolving

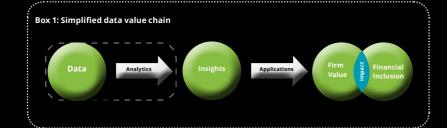
Fraud in the insurance sector is a constant threat. Insurers could make use of big data to establish trends based on historical data which will allow them to come up with possible indicators for fraud. Internally, data on employee transactions, phone conversations and website visits could be used to determine a behavioral pattern that would help in detecting fraudulent activity.

Sources of big data

The expected sources of big data are both internal and external including telematics, web clickstreams, customer-agent interactions, smart home data, social media and machine learning techniques. The ability of insurers to use public sources of data makes it easier to begin the process of incorporating big data in their business process. This is over and above the large data sets that are at their fingertips from current and historic policy data.

Big data value chain

Having big data is not valuable, but correct use and application of the data is.



Once the data is obtained, analytics is then applied to generate insights from the data. Thereafter, these insights are applied to business functions such as product development and marketing. This now results in an impact which could be in the form of increased revenue, better utilization of resources and improved customer experience.

For example, data on grocery purchases could be used to provide insights on a person's consumption of processed products, hence, determine whether that person is at risk of contracting health disorders. These insights would then be applied to the pricing of a life insurance cover which leads to charging the appropriate level of premiums for that customer. Insurers will need to think strategically about potential partnerships with companies who would be resourceful in providing such data insights.

Challenges faced

Insurers are faced with several obstacles. Majority of insurers indicate that lack of appropriate IT infrastructure and human resources are significant inhibitors to exploring big data as a solution for their businesses. Some insurers are not aware of the potential that big data presents and how they can tap into it. Finding a cost-efficient way of making the transition is at the forefront of insurers' concerns as the transition may require new and enhanced IT systems, and acquisition and retention of staff with both the technology and insurance knowledge, who are already in short supply. In addition to that, many insurers do not know how to access this data that is greatly sought. Data protection and privacy is also a key concern as organizations need to consider the extent to which the big data projects are compliant with local and international regulations on privacy.

What should insurers be doing?

Insurers need to find ways of making the transition to using big data more cost effective and efficient. Insurance companies could seek partnerships with tech firms to develop the necessary systems that could leverage on the company's existing data. These partnerships could also extend to other organizations that may have data that is valuable to the insurance business for example, Google could provide data on most searched types of policies in a particular region while Uber and National Transport and Safety Authority of Kenya (NTSA) or equivalent authorities in other regions could provide data that is beneficial to companies that provide motor insurance.

Insurance companies could also consider sharing information with each other and with regulators using blockchain technology. The shared information would be useful even in fraud detection since companies can detect fraud patterns from the shared data. In addition to that, insurers could make

use of artificial intelligence to make sense of the data obtained and analyze the data to generate value adding results. Current sources of data could be used as a stepping stone in the initial transition phases. As the insurance companies advance, they could integrate these sources of data with big data to achieve more meaningful results.

Big data is not purely a Chief Information Officer's responsibility. It is crucial that the organization buys in to the idea of becoming a data-driven institution. This could be achieved through trainings and workshops at all levels in the organization.

Case studies

Celina Insurance Group

Celina Insurance Group is an American mutual insurance enterprise headquartered in Celina, Ohio. The group operates in six US states. The company distributed its products in specific geographic areas, resulting in flat premium growth rates. The challenge that they faced was to identify potential geographical areas to place new agents. Initially, they used a process that was driven by judgement to determine the appropriate agent locations to setup. The company investigated the use of predictive analytics to identify geographical areas that had the potential for profitability and policy retention. The goal was to consider lines of business written and performance measures of existing agents in making decisions on locations in which to expand. Examples of such performance measures are policy retention and potential profitability.

Machine learning was then used to determine the best geographical areas to place the new agents within the six states in which the company operates. This resulted in 25 data-based performance indicators for each of the zip codes in the operating states, which were added to the judgement process of selecting appropriate agent setup locations. The performance measures were developed using 227 risk characteristics including climate, financial, economic and demographic data on the areas. Weights were then assigned to each line of business and performance measure, to determine a score for each zip code.

This exercise enabled the marketing staff to get the information necessary to find out zip codes that had the potential for a successful long-term agency appointment. Celina was able to determine that 65% of the operating areas tested had potential for successful agency appointments. The company was able to allocate resources more effectively towards the areas with the most potential, based on the data analytics exercise performed.

Digital transformation trends

Digital transformation is revolutionizing different industries at a faster than anticipated pace. Despite the success with digital transformation in other industries, insurance companies are yet to join the bandwagon. As we move into the future, data is growing at a fast rate and insurance companies need to see the value in this and be prepared to take advantage of the opportunities that artificial intelligence offers.

After long periods of working with outdated software, manual operational processes and masses of paper work, a few insurance companies in the global scene are starting to adopt new digital technologies. A major driver for the shift is due to changing consumer behaviours and increased competition that has resulted in the need to reduce operational costs.

Customers desire innovation, on-demand policies, and faster claim payments while insurance companies' desire reduced operational costs and growth in their bottom lines. This is evident in the East African Insurance Industry where premiums in the general insurance business have been increasing, but the bottom line has been shrinking.

To achieve a win-win situation for customers, insurance companies and their shareholders, insurers require technology and automation that can satisfy the customer's needs while at the same time, utilises limited resources more efficiently. Digital transformation will play a key role in solving these challenges.

Level of digital innovation

Globally, there has been a rise in the level of digital innovations in insurance, what was advanced three years ago has become less sophisticated today. Most of the largest insurers in the world are making major investments in digital technologies

that will transform the way they conduct insurance business. Some few examples from the US include: CSAA Insurance which partnered with Owl Cameras Inc. to allow it to place video cameras in policyholders' vehicles to record crashes and jump start the claims process; Farmers Insurance is testing a product that utilizes high-resolution photos to create a repair estimate that can later be fine-tuned by a loss adjuster.

In the East African context, there have been several digital innovations mostly observed by developments of smartphone apps that streamline how insurance is provided. Some of the smartphone apps that have been launched in Kenya include: MY DAWA, M-Tiba and Hello Doctor. These apps not only make purchasing of insurance products faster but also more flexible and convenient to customers.

Artificial intelligence

Insurance companies that are yet to start applying artificial intelligence need to start now. Al can be applied to simple use cases in the initial processes as data is being gathered and as better understanding of the technology is gained. A small application can always be improved with time.

Al types and application in insurance

- Speech/voice recognition: Where an AI is able to understand and interpret what has been spoken. This is applicable in insurance where customers can have access to round the clock customer service at an efficient cost.
- Sentiment detection: Where an AI is able to detect and analyse emotions in the written and spoken word. This is useful in insurance in handling fraudulent cases as companies are able to come up with indicators that can help in early detection.

- Recommendation engine: Where an Al is able to interpret
 results and recommend appropriate actions. This is
 applicable in insurance where chatbots could be used to help
 customers throughout the process of picking a suitable policy
 that meets their needs or during filing a claim, among others.
 The chatbots can pull on customer's geographic and social
 data for personalized interactions with the customers.
- Text analytics: Where an AI is able to understand and interpret written text and whole documents. This is applicable in insurance in processing of filed claims which makes the process more efficient.
- Pattern/anomaly detection: Where an Al detects patterns and anomalies and comes up with conclusions based on that.
 This is valuable to insurance companies as it could be used to detect fraudulent activity within the insurance company.
- Automatic decision making: This applies logic in certain circumstances for example, in insurance it could be used to market products to target customers whose needs are satisfied by those products.
- Self-service portals: Self-service portals offers an easier channel for customers to explore insurance products. This is similar to self-service models that are in use in places like grocery stores and restaurant which offer the customer a one stop platform to access everything they need as quickly and easy as possible. For insurers, this would mean having a customer portal that manages everything from searching for the right policy and lodging a claim, to tracking the status of the claim until settlement.

How to leverage AI in business

Insurance companies need to identify use cases for Al instead of focusing on the technology and machine learning aspect of it all without context. These use cases describe the value that can be derived from the Al technology.

Identify areas of value creation

The matrix on the next page segments use cases based on the type of result and the type of impact. The key areas of value creation are a function of customer experience and operational efficiency.

The matrix on the next page gives more detail regarding the specific niche for the segments of value creation that we have defined.

Use case development

Insurance companies can develop use cases based on functionality, input data and customer need. For example, an Al system could be developed that recommends new insurance policies (functionality) based on previously purchased policies (input data) in order to ensure that a customer is able to purchase a policy that meets their needs (customer need).

Use Case Developments in the East African region

In 2017, MYDAWA, a technology-based service that makes it possible for consumers to purchase high quality healthcare, fitness and wellness products on their mobile phones, was launched in Kenya. It gained traction and popularity as it hit 10,000 subscribers in 4 months. It also offers value for money as it does not charge any service, transaction or delivery costs.

M-Tiba, which was launched in Kenya by Safaricom in partnership with PharmAccess Foundation and CarePay, is a service that allows its customers to set aside funds aside for healthcare. These funds can then be accessed at a future date and used to pay for services and medication at approved healthcare facilities.

Hello Doctor, introduced in Kenya as Sema Doctor through a partnership between Commercial Bank of Africa and Safaricom, allows its customers to get information regarding healthcare ranging from answers to health questions. It also allows a one on one text message conversation with a doctor. Although not an insurer-led development, there is opportunity for insurers to use such apps to manage their operational costs and claims processes.

Claims processes digitization

As customers continue to demand high-speed claims resolution and improved customer experience, insurers should aim to be at the fore-front to digitize claims processes. Digital transformation of the insurance industry isn't just for insurtech companies but should also be implemented on a customer experience level. For some US insurers, claims filing is done using smartphones applications that allow policyholders to take photos of the damage. Some insurers use high resolution photos to come up with a repair estimate that can then be fined-tuned by a claim's adjuster. There's also use of video cameras placed in policyholders' vehicles to record crashes and jump start the claims process and assist to estimate claim pay-outs.



Unknown

Solution generates a new result previously not known to exist

Known

Solution replicates one (or several) results from a set of predetermined results

Operations Discovery

Ability to discover novel answers or actions that serves to improve speed and accuracy of internal processes/decisions

Examples: Process mining, scenerio planning

Customer Discovery

Ability to discover novel answers or actions that serves to improve customer conversion and loyalty

Examples: Market segmentation, product development

Operations Efficacy

Ability to produce intended answers or actions that serve to improve speed and accuracy of internal processes/decisions

Examples: Customer service automation, fraud detention

Customer Efficacy

Ability to produce intended answers or actions that serve to improve customer conversion and loyalty

Examples: Recommedation systems, pricing automation

Bottom-line

Cost reductions

Top-line

Revenue increases

Type of Impact

•

Primary intended financial contribution of the AI solution

Efficacy = ability to produce a desired or intended result Top-line = measure of revenue or gross sales Bottom-line = measure of net income

Machine learning

Insurers can use machine learning techniques to shape policy underwriting, manage claims and price products. With machine learning, insurers' information systems can quickly adapt to changing customer data and result in new information that is relevant and useful.

Machine learning is one of the applications of artificial intelligence, where an algorithm learns the transformation rules to create a desired output based on a given input by itself. Traditional technology relies on known concepts and creates inferences from them, however, machine learning is able to make inferences independently.

Machine learning could be used through supervised learning, where an algorithm is trained based on labelled data, unsupervised learning where an algorithm is trained on unlabelled data and reinforcement learning where an algorithm is trained on unlabelled data and the output is rated by the researcher as either correct or in-correct.

Blockchain technology

Information is an insurance company's lifeblood. Properly acquiring, processing, sharing, securing, and using that information to make decisions in a timely manner is crucial—but some of today's transactions may take days (or weeks) to locate and process.

Many insurers are using claims systems that were originally built more than 3 decades ago. Maintaining these outdated technologies has become costly for insurers and may hamper their efforts to adopt new value-based payment strategies that will change the way insurers approach network development, provider contracting, and payments.

Why blockchain?

Blockchain can be viewed as an enabler in recording and storing data in a way that can be used for other digitisation initiatives such as artificial intelligence.

Millions of transactions and data exchanges between an insurance company and its customers, providers, vendors, employers, auditors, and regulators should become much easier to access and view securely with blockchain environment, saving time and resources. Blockchain could automatically collect records of agreements, transactions, and other valuable

information sets, then link together the information and act on the data using smart contracts.

Blockchain as an operational efficiency enhancer

Back-office administrative processes such as underwriting, pricing, and claims processing may become faster and easier by using smart contracts' rules-based systems and automatic verification of terms and conditions. In the case of claims processing, as soon as services are rendered by a provider and the patient's updated medical record is uploaded to and verified by the blockchain, smart contracts can initiate payment to the provider. This reduces the need to file and review each claim.

Smart contracts, which are policies that are fully automated and updated based on a blockchain database, are continually being adopted by insurers. Smart contracts could automate the process of developing complex value-based contracts between insurers and their services providers, and decrease the time and resources needed to execute the terms and conditions. And because smart contracts are decentralized and cannot be changed, all parties can be confident that terms will be consistently executed. Furthermore, blockchains could make the full payment record available to all to see and review.

Both health and life insurance are heavily regulated industries and would benefit from the increased transparency into organizational transactions and other activities.

Looking ahead, 2019 will likely see the industry move past basic education and proofs of concept to preparing for the launch of an increasing number of real-world blockchain applications impacting day-to-day operations.

In Asia, for example, AIA Hong Kong launched a blockchainenabled bancassurance platform allowing the life insurer and its bank distributors to share policy data and digital documents in real time, streamlining the on boarding process, improving transparency, and reconciling commissions automatically through smart contracts. In Europe, AXA is offering flight-delay insurance over a blockchain platform with parametric triggers and smart contracts.

Insurers' IT environment should be adapted to handle emerging technologies

Cloud computing in insurance

Many insurers consider the cloud to be a good option for processing and storage of insurance data.

For example, insurers can leverage the use of cloud computing to store customer records including policy details and claims history. This will enable all agents to have access to similar information and hence reduce the time and effort of obtaining the same information from a customer when the customer is transferred from one agent to another agent.

Virtual reality

This technology has the potential to transform the way underwriting information is gathered as well claims settlement. For example, an insurer could use virtual reality to create a three-dimensional image of a property that has been damaged or reconstruct an accident in minute detail.

Internet of Things

Networked devices in automobiles and buildings can protect individuals and property and thereby reducing accidents and claims. Telematics and data analysis have become leading use cases of IoT, and these technologies are yet to be taken up in the region to gain insight into customer behaviour.



The sharing economy

The sharing economy, also called "peer to peer" or "on demand" economy refers to businesses offering goods and services through mobile apps and other digital platforms that quickly match demand and supply. As the sharing economy progresses, insurers should keep pace. While on demand and sharing economy offerings are more diverse and with many options, it's not easy to find insurance options for customers who specialize in making their business easy. To keep up with the trends in the sharing economy, insurers should try the following:

Develop new telematics-based services

Adopting telematics technology will result in a more cost efficient and enhanced customer experience. This could be achieved by taking up telematics via partnerships. Insurers need to think of partnering with companies who already possess vast amounts of data – in return for insights into this data. For example, home contents insurers can partner with utility companies to obtain data for telematics-based home insurance.



Develop new products for digital risk

Digital technology is leading to changes in customer behaviour in most economies as people are increasingly transacting in online market places. Insurers should be keen in preparing for the sharing economy and pioneer products and initiatives that would protect companies against risks that would arise from the sharing economy practices. Blockchain is a concept that would require several organisations to share information through the technology in a way that does not compromise them to data regulatory rules and cyber risk. Insurers can be involved in developing risk-based products at adequately cover institutions from risks such as cyber risks.

Prepare now for self-driving cars

In the evolving digital world, motor risk continues to become more complicated, insurers should be on the front to adopt telematics-based insurance. Insurers will capture and analyse data that allows them to understand the impact of self-driving cars on motor insurance. This will not only serve to win the current customers but also a means to understand and price future risks in a more data-driven approach.

Partnering with application developers on smartphones

With just above 50% of individuals in Kenya possessing a smartphone, insurers should take the opportunity to embed their products in location-enabled or voice-enabled applications. The data from these applications could be used understand customer behaviours and improve customer experience through other AI tools such as recommendation engines and customer service chatbots.

Strengthen defences against cyber-attacks

As the threat of cyber-attacks continues to become a reality for many organisations, insurers should take clear defence actions to protect themselves against such risks. Insurers can step up their assessments of the maturity and strength of their internal IT security systems. According to a cyber-security report by Serianu, firms in Kenya lost approximately USD 200 million in 2017 in relation to cybercrimes. The highest cost and threats in relation to these crimes stemming from insider threats, investments in anti-cybercrime technologies, banking malware and ATM skimming.

What should insurers be doing?

The global rising trend of digitization and the sharing economy have progressively put heat on insurers to rethink their business strategies by leveraging more disruptive technologies, collaborations across the ecosystem and more innovative partnership models. Insurers who can embrace emerging technology such as blockchain, to enhance their company efficiency and develop new ways of doing business (while staying on top of all compliance requirements) could be the future winners.

To actualize the digital transformation dream, insurers should be rethinking on how they evaluate and approach digitization investments. Digitization plans should be long term focused and integrated in business projects that will transform underwriting, enhance operational efficiency and improve customer service.

Various statistics and polls on what insurers are doing today, form a good starting point to come up with digitization strategies. However, insurers need to ask themselves what they should be doing to actualize digital transformation. Where does the drive to digitise begin? What strategies to digitization are feasible to insurance firms?

The following principles provide guidance for insurers who are looking to steer their digital transformation journey in the right

- **01. Digital strategy:** This is key to ensuring that insurers place limited resources on the highest priority focus areas for digital transformation initiatives. It will also indicate the key gaps that the insurer needs to close to successfully digitise their business
- **02. Data is the key:** Insurers should start by determining what type of data they need consider accessing public data sources or partnering with a business
- **03. Start small:** By starting small, insurers can release technology applications and build them over time. Companies can expand their capabilities and capture increasing value over time. This is important for the smaller insurance players who may not have the benefit of large balance sheets to fund costly digital initiatives.
- **04. Fail fast, fail early:** A key to success in digital transformation is to fail fast and fail early. Digitisation projects can be challenging and require a lot of time and resources to implement, however, in order to succeed it is important to accept that failure is a part of it. A lot of applications and tools may fail in the initial stages but what is important is that companies learn from the failures and keep on improving with each iteration.

Fraud in insurance

Tackling insurance fraud remains a priority for insurers. According to the Association of British Insurers, in 2016, insurers detected 125,000 dishonest insurance claims valued at £1.3 billion and it is estimated that a similar amount of fraud goes undetected each

It is also estimated that 25% of insurance industry income in Kenya is fraudulently claimed. It is of key concern that insurers come up with ways of early detection and prevention of fraud in order to prevent the large amounts of losses.

Prevention of fraudulent claims

To avoid losing millions every year due to fraudulent activity, insurance companies need to put in place processes that would • Artificial intelligence provide the ability to respond quickly when fraud is detected. Some techniques applicable include;

Data mining techniques could be used to determine patterns from data. These techniques use machine learning where it could be supervised learning or unsupervised learning. With supervised learning, all of the available data is classified as fraudulent or not fraudulent then the machines are trained to classify future pieces of data into these categories. Unsupervised learning identifies the likelihood of certain claims being more fraudulent than others.

For example, a machine learning tool could be developed that examines each line of entry on claims, compares these entries against predetermined rules for example the amount claimed and area code, then ranks the claims in the order of the most likely to be fraudulent. The tool would then display the results

and further investigation can be undertaken on those that had the highest probability of fraud.

Different types of AI tools could be applied for example sentiment detection would be used to analyze emotions, feelings and attitudes in written reports. The insurance company could develop a list of keywords that can be strong indicators of a sentiment. For example, internally one could identify warning signs of fraud by searching employee reports or emails for words that would imply that an employee is disgruntled for example, exhausted, inconsiderate etc. This would then allow management to follow up and carry out further investigations.

Anomaly detection would be useful in deriving patterns. For example it can determine the frequency and amount of claims for particular individuals, therefore give a warning indicator if a claim exceeds the usual amount or give an indicator when a policyholder submits more claims than usual within a particular period.

· Making use of big data

Big data makes algorithms more accurate since machine algorithms are able to learn from large amounts of data, therefore providing more accurate results. The data could be derived from interactions on social media, smart devices like Fitbit and telematics. Artificial intelligence and machine learning tools would be utilized in order to derive meaning from the vast amounts of data and come up with rules that would be used as criteria in determining fraudulent claims.

Use of drones

Drones are aircrafts that carry no human pilot or passengers and they may be remotely controlled or fly autonomously through software-controlled flight plans. These drones can be equipped with tools such as infrared cameras, license plate readers or sensors that gather data about weather or temperature. In terms of fraud prevention, at the point of purchase of an insurance policy, a drone can be deployed to the site for example in property insurance in order to inspect the state of the property. Having photographic documentation showing the state of the property at the time of purchasing the insurance policy provides the insurer with a benchmark to compare future states of the property against.

In addition to that, regular drone inspection can enable the insurance company to more readily determine if a subsequent claim is accurately describing the damage reported. As soon as an insurance claim is made, a drone can be dispatched to the site in order to obtain photographic evidence and keep a record of the actual damage sustained. Therefore, any other damages that the claimant includes will be benchmarked against the initial report.

Detection of fraudulent claims

Some methods used by insurance companies to detect fraudulent claims include;

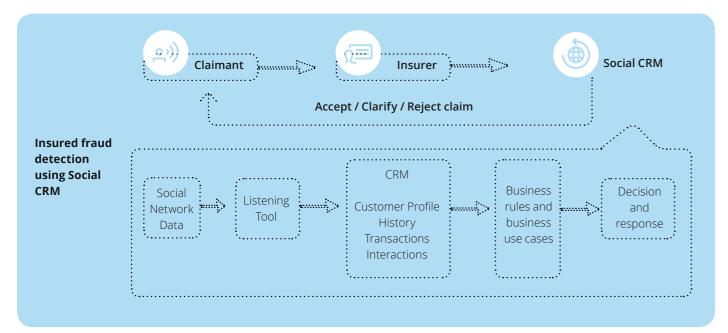
Use of technology.

Insurance companies can leverage technology by using data analytics where an algorithm is used to determine whether a transaction is fraudulent. For example, data mining techniques like clustering could help in classifying claims into various groups with similar characteristics. Thereafter, a different degree of attention is given to each of the groups e.g. high claim frequency groups might be formed around specific addresses. The groups could also be assigned certain thresholds and an analytical tool for example Artificial Neural Networks (ANN) used to flag any claim that goes beyond the predetermined threshold. These Artificial Neural Networks are computing systems that learn to perform tasks by analyzing examples for example they might learn to identify a large claim by analyzing examples of large claims.

These computer software could also be used to detect suspicious billing for example in medical claims. Physicians may bill insurance companies for services that were not rendered or inflate the costs of certain services. These computer systems could be programmed to compare billed amounts with the other claim information and check whether the amount is reasonable within the said circumstances.

• Use of social media.

Insurers are now using social media to detect suspicious claims. Social media information could also be integrated with the company's client relationship management system (CRM). The Social CRM gathers data from various social media platforms and uses a tool to extract data that is fed into a case management system. The system then analyzes the information based on the organization's business rules and sends a response.



Data analytics

Traditionally, insurance companies used statistical models to identify fraudulent claims, however, these methods may lead to some frauds going undetected. The diagram below shows the three step approach used traditionally;





Analyze

Suspicious claims are analyzed by special investigation units, claim adjuster and computers



Recommend

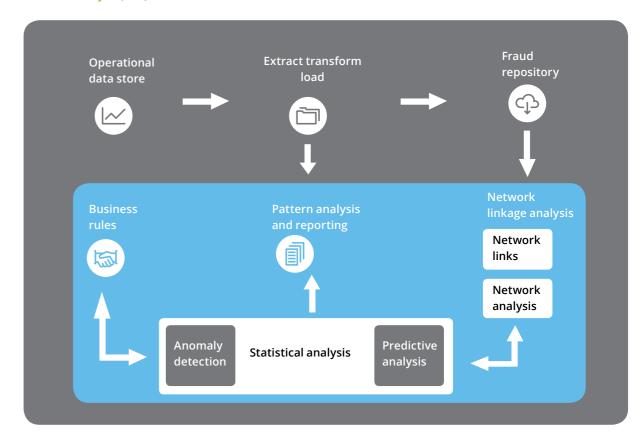
If the claim is confirmed false or illegal, a recommendation is made for claim denial and in some cases it can lead to legal action

 Analytics provides a better solution for fraud detection since it provides an enterprise-wide solution, it can integrate data from different sources and is able to derive value from unstructured data. In the context of insurance, unstructured data could be in the form of handwritten reports, opinions given by customers on a product or their experience after filing a claim, medical reports and court decisions.

• Some examples of data analytics include; Social Network Analysis (SNA) and predictive analysis for big data.

Social Network Analysis (SNA)

analysis, referrals)



Data from various sources is fed into the extract transform and load tool and is then transformed and loaded into a data warehouse. The extract transform and load tool is able to derive meaning from unstructured data for example, trying to derive meaning from a video posted on social media of a claimant on holiday and linking it with a possible claim made on disability.

Information from a wide variety of sources is used to score the risk of fraud based on factors for example, prior conviction, multiple rejected claims or a relationship to another individual with a prior case.

Technologies such as text mining (enables analysis of the text of insurance claims and reports submitted as support for example medical reports) and sentiment analysis (helps to analyze opinions and emotions expressed through text or voice for example interactions on social media) are integrated into the fraud identification and predictive modelling process. An alert is generated depending on the score and further investigation can begin.

Predictive analysis for big data

Predictive analytics include the use of text analytics and sentiment analysis to look at big data for fraud detection. When a claim is being investigated, claim adjusters write long reports with the details of how the insured event occurred. Certain clues may be hidden in the reports that may go unnoticed, however, the analytics tool that is based on business rules will be able to spot evidence of possible fraud.

Steps for implementing analytics for fraud detection

• Perform SWOT.

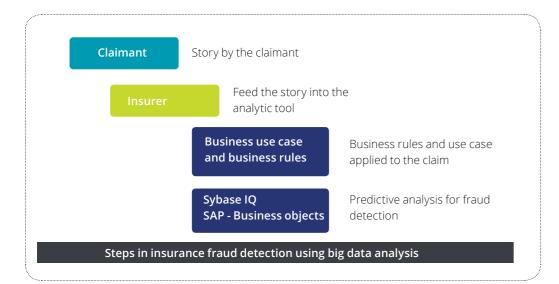
Insurance companies need to do a SWOT analysis of existing fraud detection frameworks and processes in order to identify gaps. This will help them align a fraud solution with the company's strengths and weaknesses.

- Build a dedicated fraud management team.
 Much like credit risk or enterprise risk, companies need to
 have internal staff whose priority is fraud detection and
 prevention. This team would be made accountable for all
 things fraud and would report to senior management.
- Whether to build or buy.
 Insurance companies need to determine how they want to implement analytics by assessing whether they have the right skill set to build an in house model or whether they need to hire external consultants to implement the solutions. External consultants should be evaluated on their cost, ease of integration, ability to add new data sources and the user integrate.
- Clean data.
 Insurance companies need to assess the data that they have and remove any inefficiencies from the data sources. This would ensure that the analytics solution is deriving meaning from correct data.
- Come up with relevant business rules.
 It is important that insurance companies look into their history and experience when coming up with business rules.

 Some business rules may be used at an industry level to detect fraud, however, they make have little impact unless they have a relation to the company's history with fraud.
- Come up with pre-determined anomaly detection thresholds. Insurance companies should provide inputs for threshold values for different anomalies e.g. for claim amounts. It is important that statistical analyses are carried out to determine whether the threshold is representative of the historical experience. Thresholds that are too high may result in many fraudulent claims going undetected while those that are too low will result in resources being spent where they shouldn't have been.

- Use predictive modeling.
- Data mining tools would be employed in order to determine the likelihood that a claim is fraudulent. These tools would give a score to each of the claims and rank the claims in order of fraud propensity. The results can then be made available to management for further analysis.
- Use of Social Network Analysis.
- Social Network Analysis is effective in modelling relationships between various entities involved in the claim. For example, it can identify relationships with policyholders that have filed claims in the past or it can provide linkages between locations which would be useful to assess against a pre-determined threshold for a certain location.
- Build an integrated case management system leveraging on social media.
- An integrated case management system would allow the insurance company to capture all key findings that are relevant to an investigation. Social media carries with it a lot of information that may be useful for example, one may be able to identify the physical location of the policyholder at the time the insured event occurred or assess disability through videos and photos posted.

Forward-looking analytics solutions.
 Insurance companies should continue adding new sources
of data and updating their current sources of data into their
analytics solutions. This will ensure that the fraud detection
system is able to address a variety of new frauds that may
emerge in the future.



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Talent and product development in the automation age

Matching talent with automated environment

With the introduction of artificial intelligence in the market, the new and robust technology systems and automation call for recruitment of talent that has the right skill set. This could be in the form of IT experts, data scientists and actuarial talent. Insurers will likely be required to take up one of two options which is, train their existing workforce to handle the evolving market or hire new talent that possess the right skills to spear head the developments. Insurance companies need to change their recruitment processes and have creative procedures that ensure the right people with the required skill set are selected. The new technology will attract a younger workforce and employers will need to look into ways of providing an appealing environment to work in. However, it is important that employers don't forget the older talent and work towards retaining them as they may provide mentorship to the young upcoming talent.

On the other hand, certain manual processes in claims and underwriting departments will become semi-automated. This will free up employees so that they can get involved in other areas that require higher talent and cognitive skills, such as business strategy and decision making.

Where is product development heading in the next 1-3

Insurers should look for ways to modernize and personalise policies to make it easier and more meaningful to consumers in tracking of trends and results. In a sharing economy, consumers want more control over specific coverage of the products they have bought. InsurTechs have already started leveraging on engaging in real time with customers to provide products which are tailored to meet specific coverage.

A survey of life insurance consumers in the USA indicated that 90% of buyers revealed a preference for self-management of existing policies through digital channels. Self-managed insurance products such as usage-based policies, allow the customer to purchase and monitor the usage of their cover and only pay for the cover when they need it. This is certainly a trend that we expect the increasingly aware consumer in East Africa to take on, if the opportunity arises.

Below are some of the emerging trends in insurance products:

In cases where users do not own specific assets or properties, insuring these will entail purchase of commercial policies. Commercial policies basically aggregate the various individual risks that are associated with the specific users of these assets or properties. These companies that have different users utilising the same assets tend to purchase commercial fleet insurance to cover for risks and includes the cost of insurance as the per-usage fees for every user. Also, in cases where owners of assets offer others to use them for a period, commercial policies are preferred to offer cover based on

The sharing economy that is continuing to become prevalent may lead to a portfolio shift from individually owned to commercial policies. For example, ride sharing apps allows commercially owned cars to be used by different individuals and are insured under a commercial policy.

Usage based policies

Insurance cover that is offered on annual period may be unattractive to a customer who wants to purchase a cover for a shorter period. This is applicable to a wide range of insurance products such as motor insurance. For example, a driver who drives for a short-term period in a year may find an annual based motor policy quite unattractive and expensive.

As digitization continues to disrupt the insurance industry, we expect to see more use of smartphones in purchasing usagebased policies. With just a few swipes on the mobile phone, cover can be purchased for a tailored circumstance. By use of telematics and sensors in cars, insurers can monitor the behaviour of drivers and price the policies appropriately. In this The implication of this is that old risk pools might go away sense, insurance customers will purchase cover for the specific period that they need the cover.

As these usage-based policies will be for a short term, they will attract a higher base unit premium. On the other hand, cross subsidization of active and inactive policy periods will be lost as people will only buy insurance when their risks are higher. Such policies will also lead to changes in billing as premiums will be variable and irregular.

Unbundling of risks

Typical traditional policies such as general insurance motor policies are sold as an all-risk, comprehensive policy. This means that a policy covers several perils and will pay out if any of the perils were to occur. For example, a motor policy could cover liability for bodily injury, property damage, collision and so on. In this way risks are bundled up and covered in a single

In the situation of a sharing economy where, we may have different assets being owned and used by different individuals, it may be preferable to consume insurance in smaller units. This is in such a way that a policy covers more specific fewer or single risks and hence the cost of loss is attributed to the specific policy that covers it. For example, a car may have multiple users each of whom may take up a cover for bodily injury, but property liability cover being taken up by the owner of the car.

Commoditization of risk

Commoditization of insurance is the idea that insurance has become so widely accessible to consumers that they are able to place a heavy emphasis on price over other factors. Aggregator tools and internet shopping have become the major drivers of commoditization. As these offer an avenue for policy quotes comparison for different insurers, customers tend to overlook at other factors such as agent experience and customer support while focus is placed on the price charged.

This trend is likely to continue as sharing economy platforms and peer-to-peer insurers homogenize their customer base and risks. Self-driving auto cars and IoT will have a commoditizing effect. For example, as self-driving cars continue to reduce accident levels, variability among customer profile will decline, this will further reduce insurers' ability to differentiate based on

Unpooling of risks

It is a common concept for general insurance companies to pool risks from different consumers to cover losses that occur. In the digital era, insurers have begun to explore the IoT and big data for more behavioural and contextual detail about their customers' risk. On the other hand, insurance customers are gaining more insight about their own risk by use of wearables and other connected devices.

and along with them, insurers' ability to subsidize high risk customers with premiums from low risk customers. This may also motivate customers to self-insure through monthly savings especially if they know the exact likelihood and magnitude of expected losses.

Health and wealth life products

These are life products that integrates mental and physical wellness with insurance, investment or retirement. Bundling these aspects into a single financial product will attract insurance customers to it up based on individual needs. The financial product selling firm combine forces with wearables, new data sources and other benefit organizations to produce a better-quality life rather than a competitive quote for customers. These products can be sold through doctors, gym representatives or technology companies that offer wearable

Product-in-a-product models

A typical insurer thinks of itself as a retail brand that offers products to its customers. But what if there is another firm with a strong consumer brand and have natural customer segments? This model offers a combination of predictive models, simplified product, instant issue, self-service and virtual agents that add value to the retailer. Telecommunications firms, membership organizations, travel/experience providers and high-end retailers would be more likely to possess these aspects. Bu use of this model there could potentially be many added advantages to the final consumer such as seamless purchases and wider customer reach.

Dynamic insurance pricing

Dynamic policy pricing links improved consumer behaviours to prices that they are charged for a cover. Through these pricing mechanisms, those previously uninsurable, high-risk, or low budget consumer will have a way forward in obtaining insurance policies. It can also be in the form of insurers lowering the barriers to purchase thereby engaging the customers further. Ultimately, this may also lead to much deeper customer insights that can drive future products development.

Mergers and acquisition trends

Global M&A activity dropped during the third quarter of 2018. So far, 2019 has registered approximately \$2.72 trillion across 13,575 deals globally, which is the second highest global value on record. The highest global M&A value was \$2.94 trillion which was posted in 2007. Some of the factors that have contributed to increase M&A activity are:

- Increased liquidity within firms as tax law reforms continue to become favourable for companies
- As disruptive technology advances continue to emerge, innovation centred sector such as healthcare should continue to see more M&A activity
- Increased operational efficiency brought about by synergies and competitiveness that result from M&A transactions

However, there are various factors that may impact M&A activity such as rising interest rates, ongoing trade wars and stock market volatility.

East African market M&A activity

East Africa's mergers and acquisitions market have started to boom as companies look for ways to protect their market share in a constantly evolving competitive market. Most of the M&A transactions that have materialised over the past 2-3 years occurred in the telecommunications, financial, industrial and health sectors. This emerging trend has seen many deal makers venture into the East African market to obtain a portion of this growing business.

We have recently observed the following M&A transactions in the East African insurance space:

- In Kenya, Barclays Africa Group acquired Kenya's First Assurance for an estimated \$29 million
- Kenya's Plum Holding acquiring an additional 23.34% in the regional insurer Britam Holdings Limited
- Swiss Re in 2018 acquired a 13.8% stake in Kenya based insurer Britam
- Africa Merchant Assurance, which is a Kenya based insurance firm, is seeking to raise \$5 \$7 million through an unspecified stake sale to finance its growth.

• In Tanzania, MGen Insurance is aiming to expand to other African countries and is looking to raise \$10 million by selling an unspecified shareholding to an industry player. Bumaco insurance, a Tanzania-based company, plans to list on the Dar es Salaam stock exchange in a bid to raise \$15 million to finance expansion.

Stiff competition, difficulty in securing additional capital to meet solvency requirements and an intense competitive operating environment have been a common challenge for insurers. We expect to see more M&A activity in the light of the issues above. Kenyan insurers have up to June 2020 to meet minimum solvency requirements – there are several insurers who have not met the minimum and some of them will most likely resort to additional investors.

International companies are likely to see the capital regulatory reforms in the region as an opportunity to extend their footprint in East Africa, given its strong economic growth prospects.

Going forward

Insurance companies contemplating M&A to transform their bottom line, increase their product portfolio or expand their geographical reach and strengthen future competitiveness should:

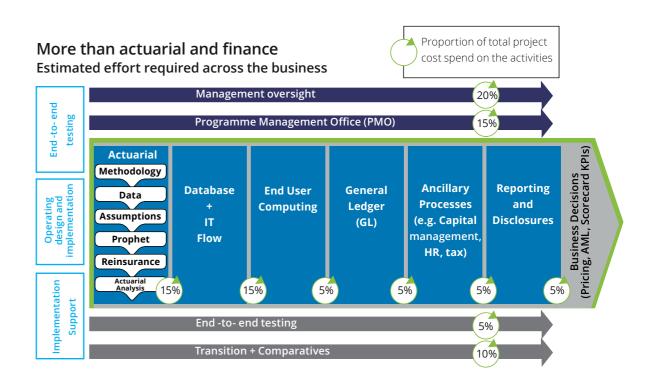
- Evaluate where the industry is going, where their business is going, and where the two meet and align.
- Conduct scenario planning that accounts for a potential economic correction in the next periods.
- Develop an M&A strategy that supports their goals and shapes their appetite in approaching market opportunities.
- Select targets consistent with their overall strategy. Avoid chasing a shiny object that may not support long-term goals.
- Be mindful of the changing tax and regulatory landscape.
- Examine in-house corporate development and overall integration capabilities to facilitate efficient and successful transactions.

IFRS 17 – Lessons learnt from implementation

With less than 1,000 days to implementation date, insurers should start formally assessing the impacts and gaps in their processes and systems now. The IFRS 17 implementation program will be more than an actuarial and finance initiative.

Deloitte's estimated effort required across the business, below, indicates the level of integration and collaboration required by different teams in the organisation. A steering committee will be required to oversee the initiatives, ensuring the effort and cost is distributed across each of the key areas of organisation as indicated in the gap and business impact assessments.

Based on implementations performed globally to date, the key learning lessons can be summarised as follows:



Resourcing is a key challenge

There is a likely to be a resource crunch as more insurers start preparing for IFRS 17 implementation programmes. Boards and senior management still require significant sensitization and education, to better understand the financial and operational impacts of implementing IFRS 17.

IFRS 17 as a driver for finance transformation

Given the requirements of the standard that will require more complex computation engines, journal entries and accounting systems, insurers across the world are taking IFRS 17 as an opportunity to undertake a broader finance transformation project.

Accounting choices as a key area of implementation

The accounting choices and technical interpretations made, will have significant impacts on the emergence of profits going forward. Companies are increasingly giving this area of the standard much more attention, ensuring that they take their boards and senior managements along as key choices and decisions are made.

The auditor is likely to play an increasingly crucial role, to avoid surprises once insurers have gone far down the implementation route.

Increased data requirements to comply with IFRS 17

IFRS 17 requires more granular data as cash flows are required to be split into 'units of accounts' and cash flow variations need to be segmented by type. Each portfolio of insurance contracts would need to be split into three separate annual profitability groups which will require and increased volume of data to be produced.

Companies will need to come up with an efficient way to process large volumes of data, and this may require a re-look into their data infrastructure from end to end. This will form a critical component of an IFRS 17 gap assessment, as historic data also needs to be maintained and stored appropriately depending on the retrospective reporting approach that is chosen by the company.

Generally, IFRS 17 implementation projects have taken longer than expected, and insurers who have invested in a dedicated IFRS 17 project management team have been able to complete milestones earlier than companies who do not have dedicated project managers.

Survey results

A survey conducted on Kenyan insurers in 2017 indicates that: 55% of the attendants cited that the senior managers and boards of their companies do not have an appropriate understanding of the impact of IFRS 17 on their business and the budgetary requirements to implement IFRS 17. Another

57% indicated that they had not started performing impact studies to identify the operational, skills and systems gaps that are required to meet IFRS 17 requirements.

52% of the attendants expressed that they did not have the required skills and appropriate number of actuarial and finance resources to be able to build the capabilities and deliver on the ongoing requirement of IFRS 17. For 48% of the attendants, IFRS 17 is an opportunity to transform processes and integration with finance or is part of a broader financial transformation project.

Approximately 92% of the attendants believe that they would need to be reliant on the implementation of a technology solution to comply with the requirements of IFRS 17.

Based on the results above, insurers have a long way to go in the IFRS 17 implementation process. Insurance companies need to have a better understanding of the impact that the new standard will have on their business and how they could use this as an opportunity to extract value from complying with the standard

It is important that insurance companies conduct an internal assessment of their operating systems including IT and data systems to determine their problem areas and work toward finding a solution before the implementation date. In addition to that, companies could leverage on industry experts where they may be lacking for example in terms of actuarial skills. They could factor that in while setting the financial year budgets to ensure that they are well equipped to begin the transition process.

IFRS 9 – looking back

While many local insurers opted to delay implementation of IFRS 9 to 1 January 2022, the large players in the region published the estimated impacts of IFRS 9 in their 2018 financial results. Most insurers who estimated the impact of IFRS 9, experienced increased impairments between 5% and 40% in comparison to their IAS 39 impairment.

Challenges upon implementation

Many insurance companies have used a simplified loss rate approach in determining the provision for premium receivables while credit ratings have been used for financial instruments.

Insurers also struggled to incorporate the IFRS 9 requirement to incorporate macroeconomic and forward-looking information as well as multiple scenarios in their default assumptions.

As expected, many insurance companies had not adopted an appropriate governance framework to continually assess the impact of IFRS 9 in a controlled environment.

Implementation of IFRS 9 has mostly been about compliance as opposed to a method of credit risk management.

Way forward

Moving forward, insurance companies may need to consider obtaining information about the economy and generating macro-economic forecasts that inform the impact of the changes in the economy to their business.

A governance framework should be established at the very beginning to ensure there is an audit trail around all key decisions. This should include design and development of the IFRS 9 provisions and incorporate any changes made to the model. This will result in successful implementation as key stakeholders will have a guideline and will be able to make unified decisions.

It is important that companies understand the impact that IFRS 9 has, both current and future. This will enable them to develop appropriate models for their customer debtors, and therefore develop plans to enable them to lower their credit risk in the future.





Recent laws and reforms in East Africa insurance industry

East Africa Community Insurance Bill 2018

As part of the East Africa Community's integration agenda, the EAC Secretariat in collaboration with World Bank and other development partners established the EAC Financial Sector Development and Regionalization Project I. The project's objective is to support the establishment of a single market in financial services among the EAC Partner States.

To realize harmonization of financial laws and regulations the EAC Secretariat embarked on having in place the EAC Insurance Policy. The policy envisions a world class integrated insurance sector within the EAC and its mission towards an integrated, safe, stable and inclusive insurance sector within the EAC.

Insurance law amendments to edge out insurance brokers

In Kenya, the proposed changes to the Insurance Act will ensure that no insurer will assume a risk in respect of insurance business unless and until the premium payable thereon is received by the insurer. Furthermore, it will ensure that no insurance intermediaries will receive any premiums on behalf of an insurer with a hefty penalty of Ksh. one million charged on each contravention.

The implication of this is that it will result to un-delayed receipt of premiums by insurers and on the other hand result to reduction in policyholder claims of not being paid for covers that they hold. Insurers should be wary and keen to ensure that their agents and brokers adhere to these new regulations.

Similarly in Uganda, the government amended the Insurance Act forbidding brokers and agents from accepting payments from policyholders or prospective policyholders. Any payments made by the policy holder will be directed to the insurance company directly. This took effect from 1st January 2019.

Bank's role in Insurance

In 2018, the Bancassurance Regulations 2018 were published in Kenya. The regulations gives the Insurance Regulatory Authority the powers to supervise commercial banks offering insurance services. Prior to the regulations, banks offering insurance business operated under the regulations governing insurance brokers. The new regulations state that a person licensed to conduct bancassurance business shall only act as an insurance intermediary and shall not undertake or engage in actual business of underwriting. This will result in bancassurance being an avenue for distribution of insurance products and also contribute to the uptake of insurance.

In Tanzania, The Insurance Regulatory Authority of Tanzania in its effort to foster the development of an inclusive insurance market launched the Insurance (Bancassurance) Regulations in May 2019. The articles of the regulation expounds on the dynamics of bancassurance while considering the challenges, concerns and the solutions to the success of bancassurance in Tanzania. It is expected to take a central role in the strategy of many banks and financial institutions because it enriches the customer portfolio and generates income in form of commission at a minimum set-up cost.

Amendments to the Kenya Insurance Act

Recently in June 2019, the Insurance Regulatory Authority made a few amendments to the Insurance Act under valuation of technical provisions for life insurance business and capital adequacy guidelines.

For life valuations, the assumption under interest rate risk margin was revised from 20% to 10%. The implication this has is that insurers will need to be wary and look out for and manage various interest rate stress factors to remain well within the assumptions set forth in the guidelines.

For capital adequacy computations, the amendments made include: the insurance risk factor relating to interest rates being revised from 10% to 18%. Insurance risk factors relating to the premium and claim reserve risk charges revised to new percentages for the different classes of insurance business.

These changes will affect reinsurers and also general and life insurers. Market risk capital charges for insurance and reinsurance companies were also revised to new rates. The implication is that these changes may lead to probable higher risk based capital requirements to be held by insurers and reinsurers



End Notes

- 01. "Case studies of effective technology use in insurance", Celent Model Insurer, 2016 see
 - https://www.guidewire.com/sites/default/files/media/pdfs/industry-recog/report-celent-model-insurer-2016-celina-reprint.pdf
- 02. "Big data in banking", EVRY see https://www.evry.com/globalassets/insight/bank2020/bank-2020---big-data---whitepaper.pdf
- 03. "IFRS 17 Data management and process improvement", Deloitte see https://www2.deloitte.com/us/en/pages/risk/articles/ifrs-insurance-data-management-process-improvement.html
- 04. "The real-world applications of big data in healthcare", Research Nest see https://medium.com/the-research-nest/real-world-applications-of-big-data-in-healthcare-5c84696fd3d4
- 05. "Data and analytics for business decision-making: Breakdown of data value chain", Krista Nordin, 2016 see http://access.i2ifacility.org/ Publications/ScopingNote2 DataValueChain.pdf
- 06. The Actuarial Society of Kenya (TASK) magazine 2018.
- 07. "21 Big Data statistics & predictions on the future of Big Data", New Generation Applications 2018 see https://www.newgenapps.com/blog/big-data-statistics-predictions-on-the-future-of-big-data
- 08. "IFRS 17: Lessons learned from initial implementation", Actuarial Society of South Africa, 2016 see https://actuarialsociety.org.za/convention/2016/wp-content/uploads/2016/11/Yura-Kaliazin.pdf
- 09. "The Drive to Digitization in insurance: Turning 'Big Paper' into Big Profit", SMA White Paper, 2012
- 10. "Insurance disrupted: General insurance in a connected world", Deloitte
- 11. "Introducing MYDAWA: Innovative online service that enables consumers to securely buy quality medicine", March 30 2017, see https://www.techarena.co.ke/2017/03/30/introducing-mydawa-in-kenya/
- 12. "Mergers and acquisitions in East Africa on the rise as firms seek capital, expansion", June 18 2016, see https://www.businessdailyafrica.com/markets/Mergers-and-acquisitions-in-East-Africa-on-the-rise/539552-3255678-knqhigz/index.html
- 13. "The 5 biggest trends in mergers and acquisitions for 2019", SunTrust Bank, 2018, see https://www.suntrust.com/resource-center/commercial-corporate/article/the-5-biggest-trends-in-mergers-and-acquisitions-for-2019#.XOO7ekxuLIU
- 14. Mergermarket, An Acuris company, Report 2019
- 15. "M-shwari to offer customers emergency medical loans", August 12, 2015, see https://techweez.com/2015/08/12/m-shwari-loans/
- 16. Economist Intelligence Unit, Country Report, Kenya, May 14, 2019
- 17. IRA Kenya Industry reports 2012-2018, BMI Economic data
- 18. Economist Intelligence Unit, Country Report, Uganda, May 13, 2019
- 19. IRA Uganda Industry reports 2012-2017, BMI Economic data
- 20. Economist Intelligence Unit, Country Report, Tanzania, May 7, 2019
- 21. TIRA Industry reports 2012-2017, BMI Economic data
- 22. "From mystery to mastery: Unlocking the business value of Artificial Intelligence in the insurance industry", Deloitte Digital.
- 23. "2019 Insurance Outlook: Growing economy bolsters insurers, but longer-term trends may require transformation", Deloitte Center for Financial Services
- 24. "How insurers are digitizing claims with apps, photos, videos, e-payments and more" by Jim Sams, The Insurance Journal, June 11, 2019 see https://www.insurancejournal.com/news/national/2019/06/11/528877.htm
- 25. "Disruption and disinterest: Two existential threats to the life and annuity industry" Deloitte, 2018
- 26. "Using analytics for insurance fraud detection" Digital Insurer see https://www.the-digital-insurer.com/wp-content/uploads/2013/12/53-insurance-fraud-detection.pdf
- 27. "6 steps for preventing insurance fraud" DXC Technology see https://www.dxc.technology/insurance/insights/139238-6_steps_for_preventing insurance fraud
- 28. Association of British Insurers see https://www.abi.org.uk/products-and-issues/topics-and-issues/fraud/
- 29. "Insurance Industry drone use is flying higher and farther" see https://www.km.deloitteresources.com/sites/live/industries/KAM%20 Documents/United%20States/KMIP-5458474/01_us-fsi-infocus-drones-for-insurance.pdf

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