

DATA MINING FOR ENHANCING REVENUE GENERATION CAPABILITIES IN THE INSURANCE INDUSTRY

YunXiao Ma

International Business Strategy Institute, University of International Business and Economics, Beijing 100105, China.

Corresponding Email: 202201920181@uibe.edu.cn

Abstract: The insurance industry is facing a crisis. Its revenue-generating talent resources are shrinking. As the industries aging population moves closer to retirement, the new young talent is not able to generate equivalent revenue. In this study, a data-mining-based model is proposed for dataset including 521,392 entries with information of insurance agents registered in LIMRA from 2010 to 2016. Bringing the principal component analysis (PCA) model to extract the low-dimensional and efficient feature information. After analyzing the dataset, decision tree model is employed, which proved to be robust to demonstrate the conclusion. It is determined that the industry would be obliged to make changes in distribution channels as well as how to reward employees. As a gesture to retain talents, a strategy to attract millennials is required, as well as some additional evaluations to provide better insights on recruiting future talents. Nothing indicates that the industry has made any significant changes in its business model to appeal to millennials. In addition, subsequent evaluations are recommended. “New Agent Financing” do not correspond to significant retention of agents. Licensing shows significant value in premium values depending on the company types, which indicates that it would be of a certain value to develop the education reimbursement programs for agent licensing. The whole industry ought to invest in technology to enable potential customers to do research and shopping. Geographic location makes a difference in premium totals, from which the strategies based on market penetration are recommended. Finally, moving to a consumer-centric culture is encouraged. The utilization of net promoter scores and a voice of the customer program is proposed to improve revenue with current resources.

Keywords: LIMRA; PCA; Decision tree; Revenue generation; Retention model

1 INTRODUCTION

The study was tasked with identifying areas to assist LIMRA members with talent development and distribution effectiveness strategies. This paper focused on the improvement of the talent pool within the insurance and financial services industry (IFS) and the improvement of revenue generation. Our paper focused specifically on the primary revenue generators and distribution mechanism for insurance policies, the insurance agent and the agencies they work for. To accomplish this, our goal was: Identify means of predicting agent retention and premium generation. Identify qualities of a successful agent among various company profiles

Tell a story about the opportunities the IFS industry has to improve its key performance indicators

Improve a balanced scorecard focused on generating stakeholder value within the industry.

The insurance agents' primary role is to create a pool of funds within a community to effectively mitigate the risk of a disaster for their customers. An insurance agent sells policies, which a customer pays a premium into. The customer is then afforded the opportunity to tap into this pool of funds that is generated from the premium that customers pay into in the event of a disaster. In the case of life insurance, this premium enable customer to tap into this pool for the protection of their loved ones in the event of their death. Insurance companies invest this pool of premiums to increase the value within the pool and insurance agencies recruit members of the community to participate in these pools. For insurance agencies to effectively create this pool of members, they must solicit their communities to engage in this pool and prove the value of their participation to their potential customers. They can only accomplish this by engaging agents to market and sell products offered by insurance companies. Insurance agencies, however, must reasonably recruit and enable agents to sell insurance policies to this pool and manage their ability to improve this pool. This whitepaper will explore how agencies can recruit, nurture and retain good agents that are capable of improving these community pools.

The insurance industry is facing a crisis. One in four of its employees is expected to reach retirement age, 59, by the end of 2018 [1]. Based on the Marshberry report the insurance industry will need to hire 3 new producers to make up the difference for older ones retiring out of the industry [1]. Alone this would be cause for concern but combine that with the fact that millennials are not interested in the industry as a whole, this is cause for catastrophe. Since agents are the primary revenue generators for the industry, this poses a problem to many companies' bottom lines if not mitigated. Millennials are expected to make up 70% of the workforce by 2030 and will need to be a consideration for the industries future producers [2]. The issue is that most millennials have little to no interest in becoming part of the insurance industry. The job overall does not appeal to that generation. Millennials differ more so than previous generations in the way they view work and the world. If companies want to continue to stay viable in the industry, they will need to develop a strategy to attract this generation.

2 RETAINING AGENTS

2.1 Qualities of a Top Performing Agent

Insurance agencies are facing a talent pool crisis that is the nightmare of Human Resources (HR) professionals around the world. Millennials consider the insurance industry as “boring” and are not interested in the industry as a whole. Culture and succession planning should be on the top of every HR Professional’s mind. With an emerging millennial workforce, HR professionals must begin to consider what impact millennials have in the current workforce and what they need to be successful. HR must work with upper management to define what HR programs will continue to add strategic value with these shifts in workforce generation. HR Analytics will play a crucial role in this evolution.

Retaining good employees and nurturing skilled and satisfied employees is a Darwinian imperative for life insurance agencies and the HR professional as this crisis continues to unfold. HR professional’s must use analytics to continuously improve their approaches to hiring. In order to do this they must first identify what good talent is and what value it adds to their organization.

HR professionals tend to acknowledge that good talent is hard to come by and for many organizations, good talent is also the lever that can lift them to greater heights. Talent management is among Human Resources’ (HR) most important tasks because high performers not only bring in more revenue, but can decrease costs, teach others, and transform culture. Great talent can be a source of competitive advantage for any company. By being able to identify the characteristics of a good agent, HR can strategically recruit from talent pools that carry characteristics of good agents. For example, talent sourced from industry associations may be much more effective than talent sourced from recruitment advertisements on monster.com. By measuring the effect of their talent pools on employee performance, this will allow HR professionals to make more effective hiring decisions. This will better align their hiring decisions with strategic value generation and thus directly impact stakeholder value and the bottom line. As the Life Insurance industry evolves, so too does the best recruit for the job. Good Insurance agents are customer centric and practice value driven sales [3].

They always put the needs of the customer first and can listen well enough to correctly identify customer needs. By putting a customer’s need first and promoting value driven sales, insurance agents reduce clawbacks by ensuring that the policies they sell are in the customers best interests and easy for them to maintain. Agents are able to more effectively identify opportunities to cross sell within their existing business relationships. This allows them to generate more revenue for the company and more value for the customer helping to improve the bottom line and ensure that they maintain customers. In order to be customer centric, a good insurance agent must also be knowledgeable. Good insurance agents are knowledgeable [3]. A good insurance agent must have a broad understanding of their products and the tax and legal considerations of the policies that they are selling. This helps them ensure that they are not only meeting their customers needs but that they are providing the best options for their customers. This allows them to personalize the sale to the customer and give them the best results. Many agents prove their knowledge by obtaining certifications to prove how knowledgeable in specific areas they are. This allows them to get a true understanding of what the product offerings are and what best fits a customer’s need. Our primary research supported this notion that knowledgeable agents are more effective. Our studies showed that licensed agents were much more productive on average (Figure 1 and licensed comparison in appendix).



Figure 1 Avg Premium vs License series

It is found that when an agent was licensed they tended to generate significantly more premium than their counterparts on average who were not licensed. Good insurance agents are highly available [3]. They have begun to embrace forms of digital communication allowing customers to reach out to them through websites, chat, instant messages as well as traditional phone and face to face communication. These individuals have embraced the digital age and can market themselves through social media, identify clients needs and use digital communication to better prepare for their clients needs. They have mastered how to market and how to sell through multiple complementary platforms.

2.2 Optimal Agent Profile

While this is heuristic information sourced from industry professionals, this is not to say that this is the optimal agent profile for each type of company. Our research shows that the optimal agent profile may be different for different types of companies.

Optimal Agent Profiles had similar qualities across multiple companies but some qualities stand out as differentiators across company types (Figure 2).

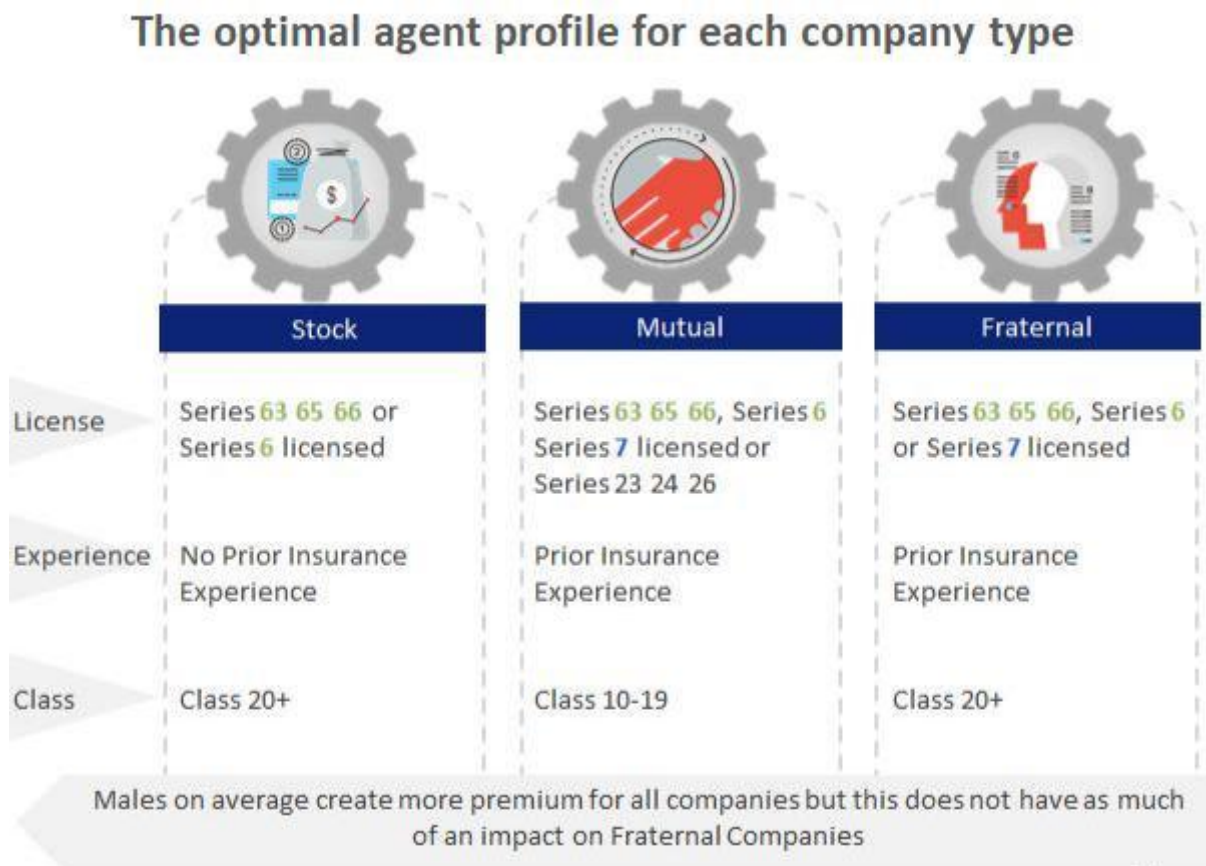


Figure 2 Optimal Agent Profile

The analysis concluded that the optimal profile for an agent differed across companies. While unable to determine why without understanding more about the companies and their strategies, strong correlations were derived between agent characteristics and high performance. At all agencies, it was determined that Series 63, 65, 66 licensing played a major role in sales performance. These licenses collectively focus on investment strategies, regulations, and ethics [4]. Each type of company significantly benefits from agents with these licenses (Figure 3).

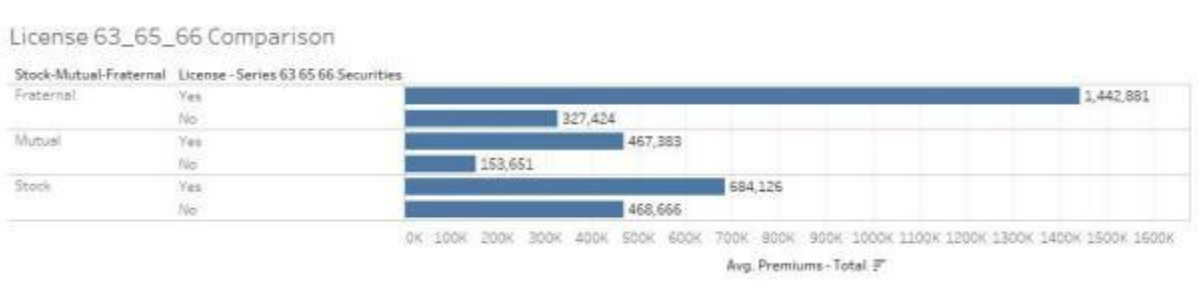


Figure 3 License vs Company Type

Each company also benefited when their employees obtained series 6 securities licenses, which focuses on regulations, securities markets and sales and administration of products. (<https://www.financialplannerworld.com/finra-exams/>)(Figure 4).

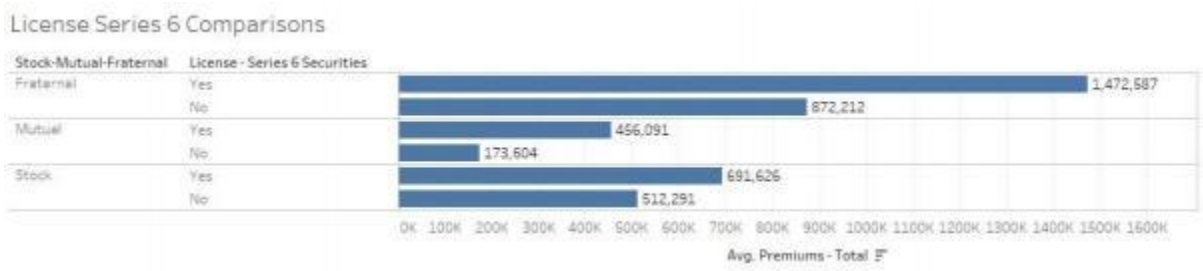


Figure 4 License Series 6 vs Company Type

All companies also enjoyed the perks of tenure as employees who achieved a longer tenure time, typically after 19 years of service, achieved significantly greater premium levels than their less tenured counterparts (Figure 5).



Figure 5 Average Premium – to Total Completed Years

While agents with these licenses were similar across companies some licensing differentiated employees of specific company types greatly. Series 7 licenses contributed enhanced premium sales at all companies on average, however those who held this license at fraternal companies drastically differentiated themselves, earning over 3 times that of their peers on average (Figure 6).

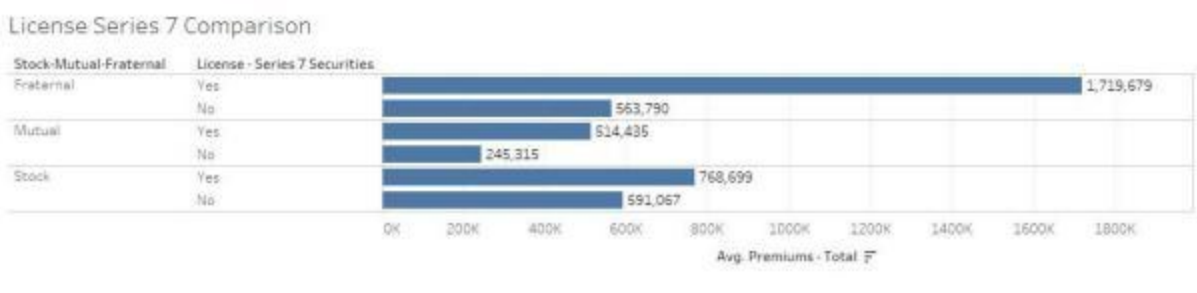


Figure 6 License Series 7 vs Company Type

Series 23, 24, and 26 licenses tended to only positively influence mutual companies with their licensed employees on average making double those who were not licensed (Figure 7).

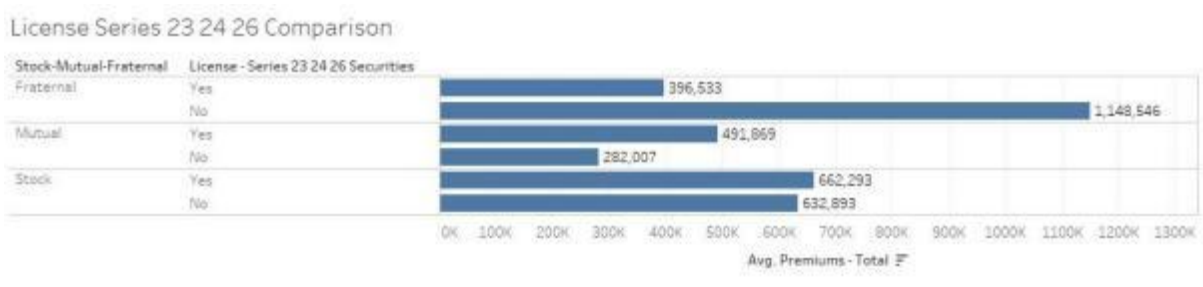


Figure 7 License Series 23_24_25 vs Company Type

Conversely, stock companies saw a negligible raise of premium sales for those licensed and fraternal companies actually saw a drastic drop in premium sales for those who had this license on average. Males overall sold more premium than their female counterparts, however, the significant percentage gaps existed to a lesser extent at fraternal companies (Figure 8).

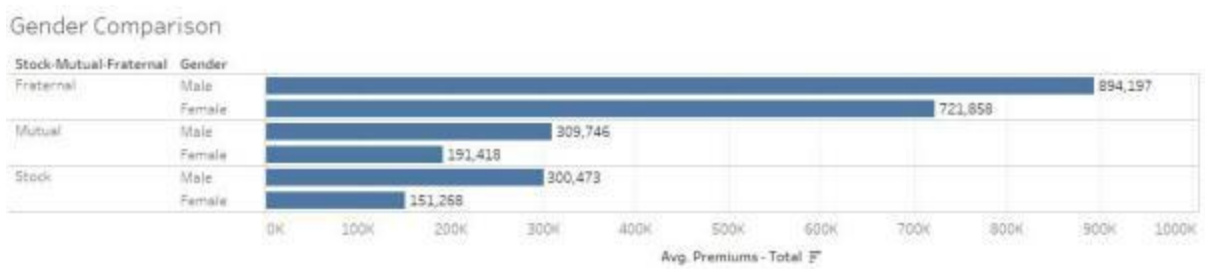


Figure 8 Gender vs Company Type

Prior insurance experience was a major differentiator at Fraternal companies and a minor one at mutual companies. Contrary to what one may believe, at stock companies those with prior insurance experience on average actually generated less premium than their peers without experience (Figure 9).

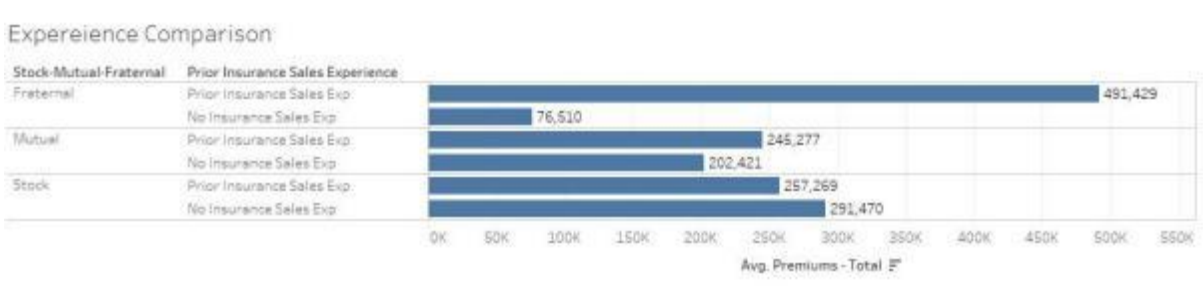


Figure 9 Experience vs Company Type

2.3 Recommendations and Analysis

These differentiators may be key factors in determining the best approaches to training programs within these companies. If companies were to establish educational reimbursement programs to encourage agents to become licensed, they may want to target these programs at those licenses that add the most value for their unique optimal agent profile. In this way, they can maximize their return on investment in these licensing programs and be able to build a business case for the investment in these agents to become licensed. While knowing from the above research that agents who are licensed are able to sell more premium, it can also be seen in (figure 10) that those agents who are licensed also tend to be retained by agencies longer. By influencing agents to become licensed, HR is able to align strategic value with its retention goals.

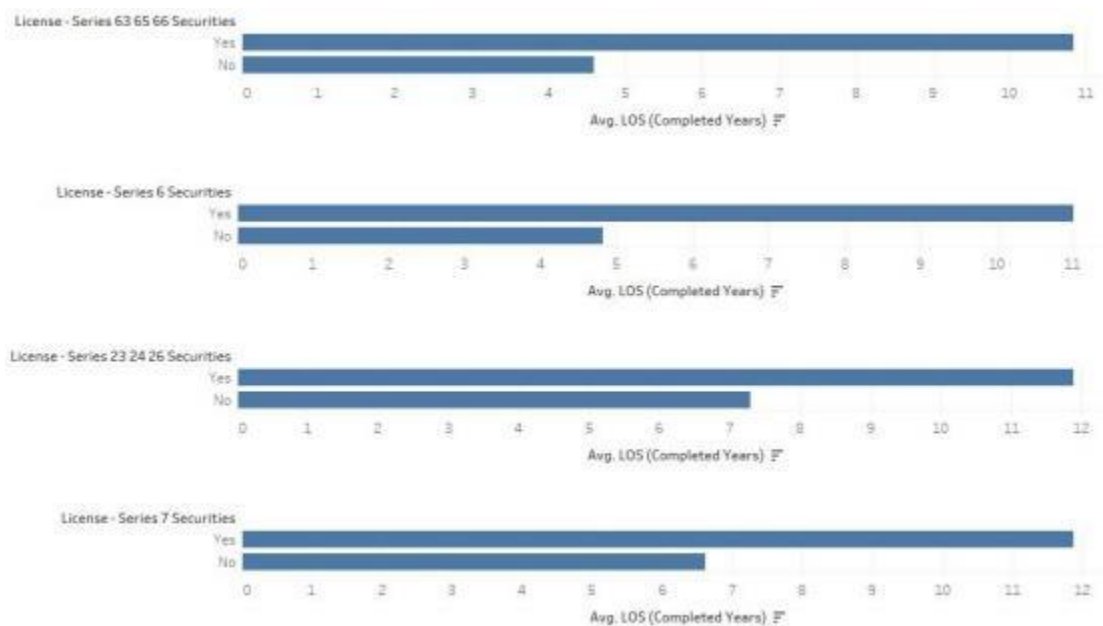


Figure 10 License series vs Completed Years

With a quarter of the workforce expected to retire by 2018, insurance agencies must create strategies to retain their workforce and replace their workforce. If insurance agencies continue to rely on agencies as a primary distribution center and source of revenue generation. Without such a plan they will suffer tremendously as the workforce retires and they find that with the workforce leave many relationships and insights into a customers needs. With eighty-nine percent of insurance agents quitting in three years on average this is even more important that the industry develop a solution to maintain agent relationships and retain their workforce.

While it is clear that people leave often because their commission cannot support their lifestyle, what is less clear is why individuals leave when it is not benefits related. HR experience has taught that onboarding processes must be strengthened, training within the workforce must be facilitated, and employee satisfaction must be increased. Measuring these indicators of success can be difficult. Companies use employee surveys to measure the success of these trainings. While not all data may be reliable, even in surveys that are anonymous, it's important to be able to look for trends and analyze feedback. If a company sees a trend that agents feel they are not being set up for success, or that they were promised great leads but these leads are not as great as advertised, then HR has the opportunity to partner with agency management to generate more effective leads, or set better expectations.

Onboarding must continue to focus on the customer journey, education about insurance carrier policy benefits and risks. Education about the resources that employees have to use to understand the products that they are trying to sell and the needs and experiences of the customers that they are trying to sell to. By training employees, they can be ensured to be extremely knowledgeable and able to align the products they sell with the needs of the customer and by increasing employee satisfaction, employees can be encouraged to stay longer by eliminating concerns that are not typically quantified in the workplace. This could help them to sell more premiums, increase their commission intakes and ensure that they are successful as a long-term agent.

Insurance agencies sit on the cusp of an opportunity to transform the employee experience in order to improve the customer experience, but they must seize it. With millennials positioned to be the largest players in the workforce by 2030, insurance agencies must adopt practices that cater to millennial success in the workforce. The insurance industry is not considered very millennial friendly. Only two percent of graduates want to work in insurance [5]. The reason behind this is because the insurance industry is seen as less technically sophisticated. According to an article published by Forbes "The customer experience is wholly out-of-sync with the ways in which modern consumers wish to buy products and services. Paperwork as well as human brokers and agents are still the norm. Of the \$100B in US homeowners insurance, only 6% is sold online, which is a stark contrast to say, the travel industry, where nearly 90% of travel bookings are made online. Self-serve is not an option; websites are barely functional, let alone on mobile [6]."

According to a Salesforce blog, millennials, including millennial employees desire self-service and technical efficiency, which is something they do not see in the insurance world [7]. Insurance agencies must redefine what the employee experience is. While traditionally relying on just domain knowledge and people to deliver effective sales solutions, in today's markets that is not enough. By creating knowledge bases that are easily referenceable and customer-centric solutions that enable agents to select policies that are the best fit for customers, the knowledge gap among new insurance agents can be filled with less training and ensure that they are delivering to customers the best policies that meet their needs. This would enable agents to meet the fiduciary responsibility to their customers as well as allow millennials to have the self-service and technical efficiencies in the processes they so desperately crave within the industry. By embracing technology and allowing millennials to redefine the employee and customer experience, the

millennial talent pool can be more effectively tapped and set up for success. Today, millennials are the most likely to leave an insurance agency and the least likely to be effective agents (Figure 11).

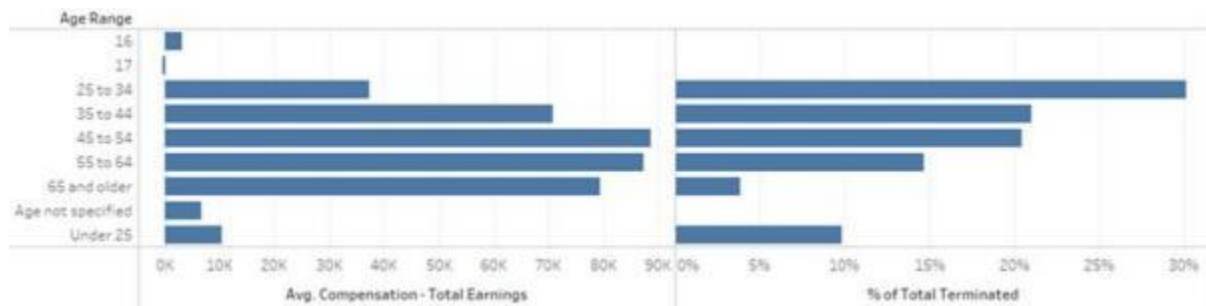


Figure 11 Age vs Earnings vs Attrition Rate

Technology may be the best solution to enable them and allow insurance agencies to meet the desires of their millennial employees. Augmenting human knowledge may be a solution to help millennials. If good agents are knowledgeable, we should provide solutions that enable agents to serve their customers by offering recommendations for offerings that best suit customers needs. This could help bridge the knowledge gap of new agents and help an agency maintain more effective customer relationships, thus allowing agents to sell more, and stay longer. In example, Amazon Web Services (AWS) offers a solution that replaces many of their professional services services called Amazon Trusted Advisor. This tool offers recommendations to customers on how to improve their security, save money that they do not need to spend with Amazon and how to improve their AWS experience. Imagine if agents in insurance had a similar technology at their fingertips. They would be able to tell customers what policies were best for their specific needs, how to meet their financial goals and help explain the single loss expectancy probability and cost for that customer in order to help them make educated financial decisions. While agents would still be expected to be knowledgeable, by bridging the knowledge gap to enable them to perform better, and work on building relationships with the customer. This could also enable them to understand beneficial cross selling opportunities, helping them help customers and themselves. This may fill an unmet need for the millennial agent.

HR leaders within insurance agencies must first understand its employees, assess their needs and understand why they leave the company. Understanding the root cause for employee separation and levels of satisfaction, is the key enabler to accomplish this. Many companies have embraced exit interviews and employee satisfaction surveys in order to accomplish this goal. Employee satisfaction surveys provide employees a means to provide quantitative feedback to management on their general satisfaction with management, company strategy and the holistic work environment. It is important that these surveys are guaranteed to be anonymous to ensure that employees give honest feedback without fear of repercussions.

While some professionals may have doubts about the validity of this data on an individual level, it allows the company to look for trends among their employees' feelings and take action by continuing what they are doing effectively and taking corrective action on trends where their employees are generally dissatisfied. This allows agencies to continuously improve their employee satisfaction and thus improve their companies success. According to a study of employee performance and corporate success in the UK, happier employees drive better corporate results. "On average, the study finds having a 1-star higher rating on Glassdoor predicts about a 1 percent higher annual return on company assets – a statistically significant boost. According to the authors, "firms rated highly by their current employees in terms of satisfaction [on Glassdoor] achieve superior profitability compared to those rated poorly [8]." Exit interviews also allow management to assess the trending root causes of why employees are leaving the company. According to the Harvard Business Review, "The greater goal for any company, of course, is to retain valued employees. Research has shown that high turnover predicts low performance and that an organization with turnover lower than its competitors' can be at a considerable advantage—particularly if it retains its top performers. If people are leaving an organization in ever-increasing numbers, figuring out why is crucial. And the most useful tool for doing so is one that too few leaders pay attention to: exit interviews [9]." For example, if a company sees that agents under one manager are generally leaving because they are dissatisfied with their manager, it may mean an opportunity to train that manager or even that the manager is not a proper fit for his position. Exit interviews thus afford the opportunity for companies to take action to ensure that their good performers do not leave the company and thus enable the company to more effectively keep the relationships and talent that those performers may have left with. By conducting employee satisfaction surveys and exit interviews and analyzing their results, companies will gain a strategic edge to keep their top performers, retain their employees and thus generate better business results.

2.4 Retention Model and Insights

HR leaders within insurance agencies must embrace technology and analytics to improve succession planning and hire more effective agents. This is a practice that is emerging within human resource management to ensure that HR is able to continuously recruit good talent that can help their business meet their strategic goals. To prove this, predictive models are generated based on a de-identified data set provided by LIMRA that would improve HR's capability to plan

when they should recruit new talent. The research derived through the methods described in the “Primary Research Methods” section of the appendix found that the study could predict with 42% improved accuracy from models based on the average retention of an agent how long an agent would stay with an agency. While predictive modeling does not replace the needs for heuristic methods, it would enable HR leaders within agencies to more effectively plan the succession of their agents and recruit and train new talent in an effort to mitigate the cost of their separation from the company. By embracing analytics and improving the data used to predict their retention (Appendix: Improving Data Quality for Analytical models) HR leaders can improve their ability to plan for succession and improve the bottom line for their agencies. Additionally, HR leaders can derive insights from their models that may be worth investigating. From the models, the study derived some interesting insights into what a good agent consists of and what it can be done to improve agent success. It is found that those agents that received new agent financing but made over 6 figures actually tended to separate from the company after shorter tenures of service than their peers making less. Since new agent financing is typically designed to help agents get acclimated to a new environment and is meant as a retention tool this insight is alarming. While it could be beneficial heuristically for agents, it may not be helping us keep our top performing new agents. Terminated agents who sold greater than or equal to 10806.385 dollars premium and who received new agent financing or did not have report if they had stayed on average 2.4342 years, while their counterparts who did not have new agent financing stayed on average 4.3522 years on average. If new agent financing is meant as a retention tool, these results are counterintuitive to what the investment was designed for. It is believed that LIMRA and the industry should explore this more extensively to see if companies are creating true business value from new agent financing and if it is achieving the goals it was designed for. Our models also confirmed our hypothesis that pay is a significant contributor to retention. It is found that terminated agents tended to stay longer if they earned more. Additionally, older agents typically tended to stay longer. Agents above the age of 47.5 tended to stay longer with 2.3217 years being the average for those above 47.5 and 1.6450 for those younger than 47.5. It is also found that specific groups of companies and states (Figure 12) had vastly higher retention levels than their peers. The study shows why specific states and companies have higher retention rates than their peers with additional information. The only correlation that can be seen with the data of this study is that states with higher average compensations for their agents also retain agents longer. While all information in this study points to a link between compensation rates and retention, this may not be the only factor at play. It can, however, be concluded that retention rates are vastly different between states and that compensation may play a role in this. These companies should be investigated and researched to understand if they have retention policies that the rest of the industry could take advantage of and to see why retention may be different across states.



Figure 12 Map: State wise Premium Generation & Termination Rate

3 IMPROVE REVENUE

3.1 Recommendations and Analysis for Revenue Generation

Distribution centers are the primary revenue generators for insurance companies. For our purposes, distribution centers are made up of traditional channels such as agents and newer technologies such as portals. Since the traditional channels as revenue generators are dwindling any insight to increase effectiveness will increase stockholder and stakeholder value. Improving revenue generation strategies and distribution channels will allow companies to improve stakeholder value and overcome the talent crisis to come.

The insurance industry is not known for technology or keeping up with the market expectation. For many of the more complex companies, they are still relying on the traditional distribution channels and their technology may support them but there is no seamless end to end experience for the consumer [10].

The face of the consumer is changing. Not only are millennials going to be the largest population in the workforce, they will also be the majority consumer in the coming years. Millennials view as a consumer is much different than that of the early generations. They have grown up in the digital age having knowledge at their fingertips. They view relationships as very important and are brand loyal. Technology isn't only a tool it's a way of life for them. The industry

as a whole needs to develop technology so potential customers can research and determine their needs online. The following technology will support a move to a better expectation of the market.

Self-service tools provide a place where new potential customers can research and determine what works best for them. The platforms should include the ability to conduct comparison shopping. For innovative companies, it can include what a potential customer would receive from a competitor thus gaining the potential customer's trust. In other words, provide an omni-channel experience.

Automated advisory services are one way to help meet customer's best interests. Based on criteria from a potential customer the robo advisor can steer them to products that work best for them. Robo advisors have already begun to show up in the financial advice industry in places such as Vanguard. The traditional agent can be incorporated into this option for those potential customers who may want to finalize with a person.

Utilize social media to identify new business. Tools like Facebook graph, and the analytical methods used by social media platforms allow for high lift targeted marketing campaigns. The life insurance industry can take advantage of these platforms to target new consumer bases and engage audiences that they have previously been unable to engage in the past. They can also further target their primary customer demographic profiles to obtain further market penetration.

Many of the technologies are new to this industry and companies are unlikely to have the skill set in house to develop and maintain the technology. In most cases the company would have to go to a vendor possibly outside of the industry. In this regard it will be critical for companies to do their homework and identify vendors that can provide the best value for a given technological need.

Another area that technology can support the effectiveness of agents is technology that supports training. Gamification to support training and productivity has been an inventive way to train companies on subjects that can be tedious or boring. It also can be applied to new hires to help them navigate through behaviors that will increase their ability to sell the right products to customers. Typically badges are earned as part of a gamification training program once criteria or a threshold has been hit.

Besides the effect technology could have on an agent's productivity. A comparison across the different states shows certain states sell more premiums than others. As shown in Fig 13, there are states that do better than others for selling premiums. A map such as this can be used to develop marketing strategies based on state.

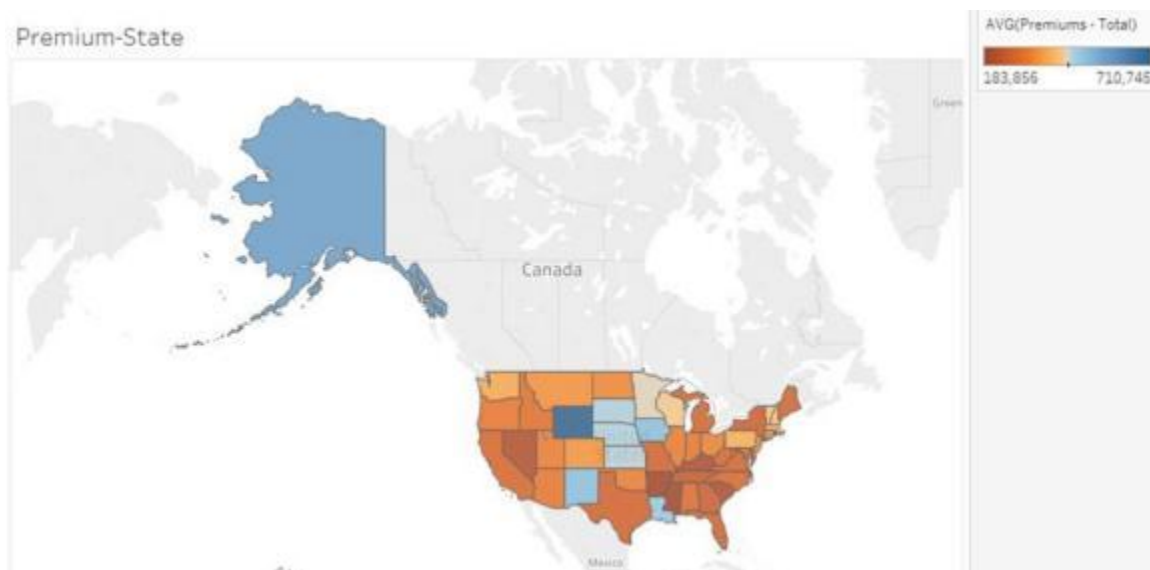


Figure 13 Map State-wise Total Premium Collection

Developing a marketing campaign for states that takes into consideration the penetration into the market as well as the renewal rates can support revenue growth. States that have strong premium showings may be a solid campaign for renewals. States that are at medium levels may be a good place for new business and growth within that state. However, there is no granular detail for why one state does better than another and it is recommended more analysis is conducted on state differences. One concern is for employees that live in states where it is deemed "not worth" putting marketing budget dollars for growth. Those employees may feel that they are being put at a disadvantage to selling in a state that doesn't have a strong marketing brand. In states where the traditional marketing strategies are not worthwhile, it may be worthwhile to test some of the newer avenues to reach new business. Millennials are a great resource for these types of opportunities.

By engaging them in the business plan it keeps them interested in the future of the company. They also will be able to develop and test new ways of marketing products and selling such as a "virtual agent" [2]. Understanding that millennials are brand loyal, it makes sense to understand what a customer's loyalty is to a company (or brand). By developing consumer centric culture companies can improve the loyalty of their consumers and accelerate their growth in the market. One way of understanding the loyalty to a brand is by analyzing net promoter scores. Net Promoter Score is a way of measuring the percentage of people that would recommend your company to a peer.

Customers are categorized into three buckets based on one question in a survey. “Would you recommend this company to your friends or family?”

- (1) Promoters (score 9- 10) are loyal enthusiasts who will keep buying and refer others, fueling growth
- (2) Passives (score 7-8) are satisfied but unenthusiastic customers who are vulnerable to competitive offerings
- (3) Detractors (score 0-6) are unhappy customers who can damage your brand and impede growth through negative word-of-mouth. The goal of the survey is to keep it simple, so the feedback is quick and actionable.

Frederick Reichheld conducted research that linked survey responses with actual customer behavior and found that companies that focused on improving net promoter score also found significant growth compared to companies in the same industry that did not. In the Figure 14 below you can see a comparison of several airline industries.

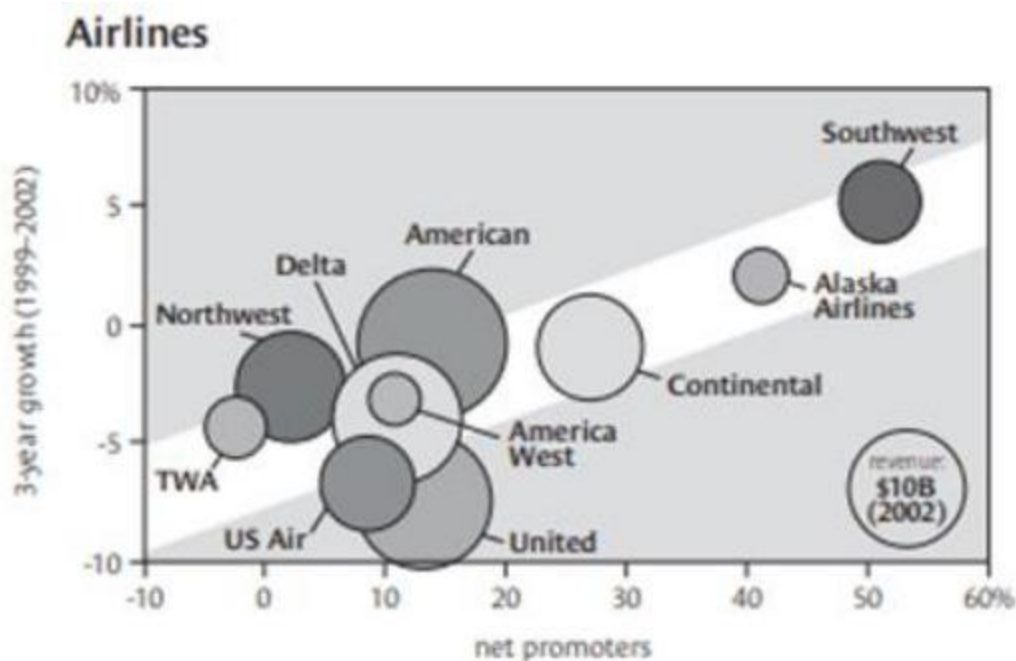


Figure 14 Airlines, Netpromoters vs 3 year growth

Those that have the higher NPS also have significant more growth than others. NPS can be applied to any industry. In addition to the net promoter score developing a voice of the customer program was recommended. The voice of the customer program is able to develop customer loyalty in two ways. First, responses from customers are resolved immediately, in other words reviewed daily and resolved for an individual consumer. Second, responses are aggregated into process improvement opportunities within the company. Process improvement is not a new concept, it was developed and improved by individuals such as W Edwards Deming, Genichi Taguchi, and Bill Smith. The idea is a process can be improved upon time and time again which in turns improves quality and reduces the time to get things done. There are several companies today that facilitate the survey questions and provide a dashboard for voice of the customer. The dashboard can measure customer metrics such as customer satisfaction, effort, etc. By aggregating these the company can then identify projects to improve metrics and ultimately improve their net income.

3.2 Super Agents Analysis and Recommendations

During the analysis, a subset of agents were reviewed separately because of their significant yearly premium generation (on average > 10 million for two years or more.) The study dubbed them super agents. In total, twenty five agents met this criteria. Agents whose total premium is over 10 million for only one year were censored as they were most likely outliers. The agents came from the different backgrounds such as company sizes and diversified licenses. The following is a summary of the trends, it is identified within this data set (graphs available to view in the appendix under the super agents' data analysis):

- (1) Gender – Only one of the super agents is Female which is not surprising since in the full data set males tended to generate high premiums on average.
- (2) LOS (Completed Years) – The distribution among agents is skewed left. Nearly a half of super agents have 20-30 years experience
- (3) Age – Most of the super agents are in the age range of 45-55, consistent with our larger data set that the older generations are finding more success in this industry.
- (4) State – Not every state has a super agent most are in California, Michigan, Massachusetts, and Texas. California has the most.
- (5) Company – Super agents work for mutual more than stock; They tend to be in management agency (MA) distribution.

Assuming these agents are not crossing any ethical lines, there is an opportunity for companies to leverage them. Here are some recommendations:

Treat them like everyone else- although the first inclination may be to put them on the pedestal and give them special treatment, it could in fact reduce the performance of others on the team. It also will contribute to team divisiveness. Instead get them involved in the success of the team.

Help them represent your company - there's no reason not to share the knowledge and have this group become leaders in the industry. Blogs and conferences is a great way for this group to share what they know. It could in fact be a way to grow new business

Save them time - Find out what activities are wasting their time. Identify opportunities to enhance a process using technology such as mobile apps

Add coaching to their week - one of the best ways to leverage your top performers is for them to help coach others on the team. Unlike putting these folks on a pedestal, this will improve team dynamics. It will also have the added benefit of freeing up a managers time by reducing coaching time.

Keep training them - nothing says I value you more than I'm willing to invest in you. Training is one way that companies can send the message they matter. It keeps their own skills sharp and introduces them to new ways to continually improve their own game.

Use gamification - gamification is a great way to challenge a team to the next level and your top performers can drive significant change. This environment allows for them to share their knowledge in a way that will improve team's overall.

3.3 Premium Model and Insights

The study model the overall agent premium generation per agent, removing super agents from our data set as outliers. Modeling this would allow agencies to more effectively forecast revenue to make better investment decisions. It is found that the model could predict 29% improved accuracy from a baseline model using the average premium generation of an agent. Where you are working and who you are working for is a significant predictor of how much premium you will sell. This shows that there are not only major differences in state premium opportunities among the market but also that specific companies are able to more effectively reach and sell customers policies. This may speak to the management, specific book of business or the reputation of the company. LIMRA should continue to study different company strategies to understand what is more effective.

It is also found that being licensed plays a significant factor in how much premium you will sell. An agent obtaining a series 6, 7 and especially 63, 65 and 66 series license was a significant predictor in how much premium an agent could sell. This goes to show that more knowledgeable agents are indeed more effective agents as these licenses represented a significant increase in premium sales. Length of service also played a significant role in predicting how much premium an agent would make. Agents with longer tenures typically made much more in premium. While this could speak to an increased knowledge of products and ability to sell with longer tenure, it could also be an indicator as simple as longer tenured agents will have more renewal premium. Furthermore, New agent financing was a predictor that decreases the amount of premium an agent sold for those already selling significant amounts of premium. While this can be expected since this financing is meant as a transition income, it could also be indicative of the investment in agents not being an effective business decision for top performers. Further studies should be done on how this affects top performing new agents as this financing was also indicative of a decrease in retention period among top performers in our retention models. Overall, agencies should invest in predictive models to more effectively forecast the premiums their agents will sell.

3.4 Lifetime Value of an Agent

Agent Lifetime Value represents the total net value over time that an Agent would generate in a company. This value can be utilized to calculate the Return on Investment on a an employee or an agent.

Ability of have the LTV of an agent helps the organization to maximize. Company can achieve this goal by developing and executing programs that impact the outputs (premiums in this case) that drive it.

Building a model to predict the agent's lifetime value would also help a company decide on what set of agents would give a higher overall value to the organization and thus hire better suited talent.

However, with the existing data it's NOT possible to derive an effective model which can predict the lifetime value of an agent.

No predictive model was constructed for arriving at lifetime value. A simplified approach was to calculate Value generated by an average agent by

1. Adding - Cumulative average-premium generated by an agent
2. Removing – Cumulative average-compensation taken up by agent
3. Removing – the cumulative retention cost (Assumed \$9,500/ and inflation adjusted at 4%)

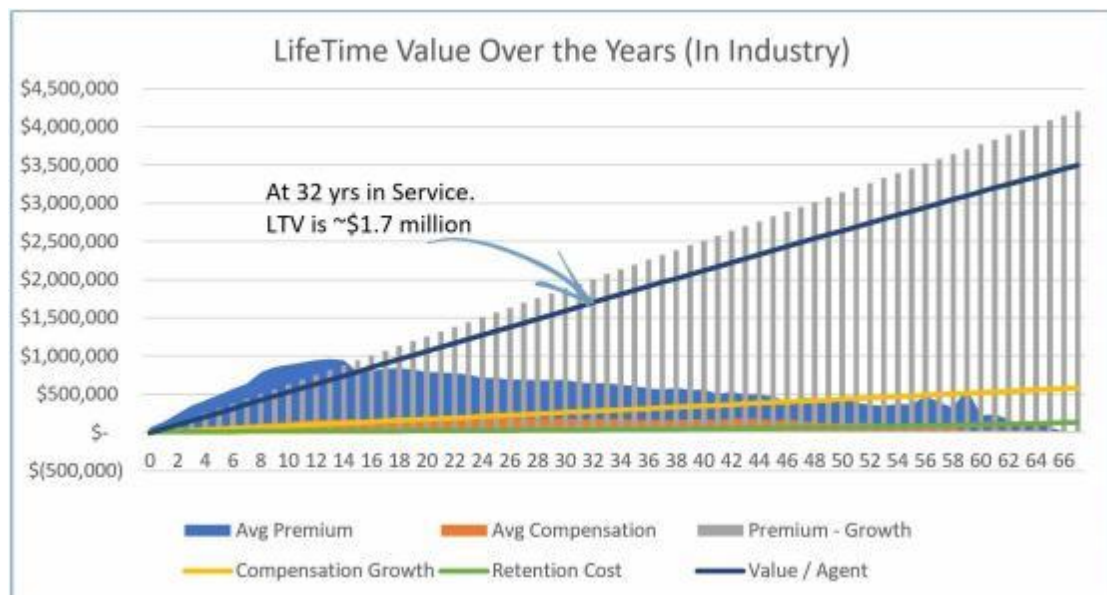


Figure 15 Life-Time Value

The graph -Figure 15 - represents how over the career, an agent would

- (1) generate premiums (a)
- (2) collect compensation (b)
- (3) consume retention costs – beyond commission (c)
- (4) generate the value for the company (a-b-c)

With this it can be seen that the upfront cost of hiring and training an agent would be recovered in the first year of the service.

However, as the service life of an agent progresses, the cumulative value generated by the agent would also progress. An agent would have generated ~ 1.7 million in value for the company over a 32-year service.

This visualization which is based only on current dataset shows that longer an agent stays in the company, higher overall value is generated. With enough information, HR professionals could use lifetime value predictions of agents to more accurately forecast revenue and understand the profit per headcount they can get to make better hiring decisions.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

REFERENCES

- [1] Cussen Mark. 8 Qualities That Make A Good Insurance Agent. Investopedia, 2024, 05. <https://www.investopedia.com/financial-edge/1212/8-qualities-that-make-a-good-insurance-agent.aspx>.
- [2] Malhotra Ravi. The cool new insurers: How to attract and retain millennials. ThinkAdvisor, 2015, 10. <https://www.thinkadvisor.com/2015/10/05/the-cool-new-insurers-how-to-attract-and-retain-mi/?slreturn=20180313165947>.
- [3] Sommer Cari. Why These Millennials Think Insurance Marketing Needs a Makeover. Forbes, 2017, 04. <https://www.forbes.com/sites/carissommer/2017/04/04/why-these-millennials-think-insurance-marketing-needs-a-makeover>.
- [4] Zhang Vivian. 6 Ways Millennials are Redefining Customer Service. Vocalcom, 2017, 08. <https://www.salesforce.com/blog/2017/08/how-millennials-are-redefining-customer-service.html>.
- [5] Spain Everett, Groysberg Boris. Making Exit Interviews Count. Harvard Business Review, 2016, 04. <https://hbr.org/2016/04/making-exit-interviews-count>.
- [6] Cappiello Antonella. Technology and the Insurance Industry: Re-configuring the Competitive Landscape, Palgrave Pivot, 2018.
- [7] Reichheld Frederick F. The One Number You Need to Grow. Harvard Business Review, 2003, 11. <https://hbr.org/2003/12/the-one-number-you-need-to-grow>.
- [8] How to Leverage Top Performers to Win as a Team. 2017, 10. <https://www.showpad.com/blog/how-to-leverage-top-performers-to-win-as-a-team>.
- [9] Statista Research Department. Written insurance premiums in the UK 2009-2025. 2014, 11. <https://www.statista.com/statistics/288947/uk-market-total-premiums-breakdown-by-market/>.
- [10] Financial Conduct Authority. Post-implementation review of Retail Distribution Review. 2014, 11. <https://www.fca.org.uk/publication/research/post-implementation-review-rdr-phase-1.pdf>.