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AI ADOPTION IN LIFE AND ANNUITIES IN NORTH AMERICA AND GLOBALLY

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ABSTRACT
Artificial Intelligence (AI) technologies changed the operation and customer interaction patterns of life insurance and annuity companies. This research investigates North American and worldwide AI adoption practices and details each system's implementation for underwriting assessment and claims management and risk evaluation and predictive technologies and customer interaction. Major players Prudential and Manulife along with other North American companies are using AI technologies to boost operational efficiencies as well as improve customer service delivery. This section investigates AI programs present in worldwide territories including Europe and Asia-Pacific and Latin America to identify regional enterprise difficulties alongside possible opportunities. The paper details advances in artificial intelligence while discussing its economic advantages and moral and legal barriers. Insurers seeking digital competitiveness in the evolving market can obtain future forecasts and recommendations through the study.

Keywords:
AI adoption, Life Insurance, Annuities, Underwriting, Predictive Analytics.

1. INTRODUCTION

Life insurance together with annuities serves as a vital industry to establish financial security through unexpected events protection and ensures retirement income availability. The sector demonstrates substantial worldwide growth while North America takes the lead through its substantial customer base and shifting regulatory regulations. Life insurance companies and annuity providers actively use technology platforms to boost customer service quality while optimizing their operational processes and creating improved insurance products. Artificial intelligence (AI) development enables transformation within the industry through predictive analytics functions and generates personalized policies and efficient claim processing (Adjekum et al., 2017).

This article evaluates how Artificial Intelligence will impact the life insurance and annuity sector both nowadays and in years to come. This paper evaluates AI implementation between North American and worldwide systems while identifying international and local distinctions in AI deployment techniques. The article explores both the difficulties organizations encounter when deploying AI technologies and future innovating trends that promise to transform their operations as well as improve customer experiences. Understanding how AI transforms life insurance and annuities becomes crucial for market domination among stakeholders as AI continues its marketwide expansion.

2. THE ROLE OF AI IN LIFE AND ANNUITIES

Computers designed to perform independently and solve problems like humans use Artificial Intelligence (AI) simulation to imitate human intelligence. AI maintains three main elements starting with Machine learning (ML) that builds itself stronger through iterative data processing and continuing with Natural language processing (NLP) which enables language interaction between humans and machines and ending with Computer vision which gives machines capacity to interpret visual data. The application of artificial intelligence drives industrial change across all major sectors because it handles operations and builds better decisions while enhancing the user experience (Bughin & Hazan, 2017). Insurance enterprises use artificial intelligence to enhance process optimization while making outcome predictions that deliver tailored services which serves as a vital market competitive advantage.

2.1 Specific Use Cases of AI in Life and Annuities

- **Customer Personalization**

AI technology enables life insurance and annuity businesses to provide customized solutions to their customers. Advanced predictive analytics systems alongside AI technology permit users to acquire customized policy

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suggestions by processing their health records combined with lifestyle choices and financial profiles. The analysis of customer conduct patterns through AI systems identifies optimal insurance solutions which boosts both customer contentment and boosts insurance plan acquisitions. Through personalized experiences both clients' distinct requirements get addressed and insurers develop better relationships with their policyholders (Bradlow et al., 2017).

- **Underwriting and Risk Assessment**

AI-based underwriting operations allow insurance companies to handle large amounts of data efficiently and with precision in their assessment process. The underwriting process depends on human assessments of limited information because human judgments have preference-based errors and factual inaccuracies. AI employs sophisticated ML algorithms to process broad datasets to produce advanced risk evaluation and system price precision. Such accurate examinations of application risks help both insurers cut expenses and provide customers with just prices. AI processing eliminates previous hidden data relationships which results in increased underwriting operations across the board (Lee et al., 2018).

- **Claims Processing**

AI technology in claims processing has brought substantial innovation to insurance organizations by enabling better automated task completion for validation testing, fraudulent claim identification and payment authorization. AI automation speeds up claims handling through data analysis of structured and unstructured formats thus increasing accuracy and rapidness. The artificial intelligence algorithms detect uncommon activity that may signify potential fraudulent situations then sends them to further examination. The application of this technology avoids putting strain on human employees and lowers operational expenditures so insurers run their claim processing operations with increased accuracy and efficiency (Hernandez & Zhang, 2017).

- **Chatbots and Customer Service**

Customers now experience better life insurance services due to the implementation of AI drives chatbots and virtual assistant platforms. These AI systems act as a front end support that handles regular enquiries and provides policy status updates as well as guides people during claims processes. The continuous availability of AI chatbots results in quick response times that lead to reduced waiting periods and superior customer outcomes. The addition of these systems enables human agents to handle complex problems which produces enhanced performance in the customer service department according to Kolbjørnsrud et al., 2017.

- **Predictive Analytics**

AI demonstrates its most substantial life insurance contribution through predictive analytics which helps companies forecast upcoming market changes. AI uses historical data analysis to produce accurate forecasts about how customers will behave in the future including their policy renewal decisions and claim patterns and life expectancy modifications. Insurers obtain clear vision into their policies which assists them in developing better product choices and risk control methods and estimating correct rates for purchase. Life insurer organizations use AI to forecast market directions and customer requirements therefore they can maintain a strategic advantage through strategy alignment with anticipated demands (Lin et al., 2017).

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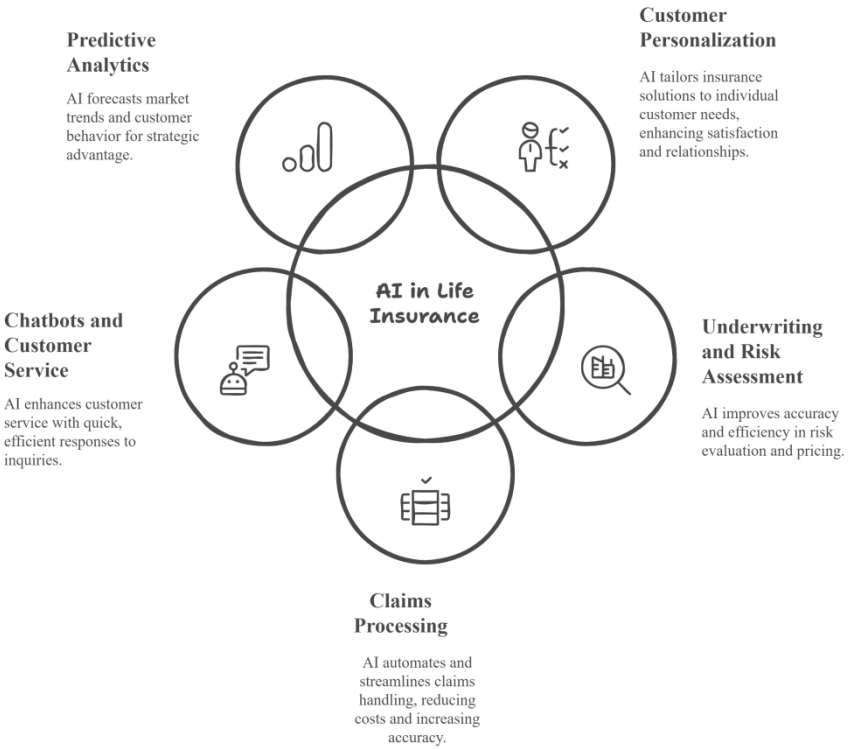

Figure 1: Transforming Life Insurance with AI-Driven Innovations

2.2 AI's Impact on Operational Efficiency

AI demonstrates its operational efficiency power by optimizing and simplifying the administration tasks within insurance organizations. Autonomous processing of routine work including data processing and claims evaluation and policy administration lowers operational expenses by both speeding up operations and minimizing human mistakes. Life insurance companies maintain flexibility through AI by having it monitor regulatory adjustments and automatically respond to regulatory changes. AI implementation provides industry-compliant solutions while cutting down the intensive manual operations that need to be performed (Saran, 2017). AI technology enhances both external interactions for customers within the life and annuity sector along with internal operational efficiency of businesses. Insurers can successfully maintain competitive advantage through their utilization of the tool because its capabilities for handling high volume data analysis and pattern recognition produce predictive outcomes.

Insurance organizations that adopt AI technology will receive improved risk evaluation outcomes and superior customer interactions together with streamlined processing and increased operation efficiency resulting in better profits alongside faithful customer relationships.

3. AI ADOPTION IN NORTH AMERICA

3.1 Overview of the North American Life and Annuities Market

Life and annuities in the North American market represent a major international sector because it serves a broad array of insurance requirements for its population. The U.S. life insurance market exceeds $800 billion according to recent market estimates and the Canadian market gives substantial support to these numbers. Prudential together

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with MetLife and Manulife and Sun Life Financial are dominant forces that drive market development trends in the industry. These days the market is moving toward digital transformation where artificial intelligence functions as an essential part of this evolution. The sector-wide adoption of artificial intelligence continues to grow because organizations require sophisticated risk assessment tools and want to modernize their customer service operations and achieve greater product personalization.

The rules and regulations of North America determine how quickly AI gets implemented in business operations. Canadian regulatory policies provide more flexible conditions yet the United States and Canada intend to achieve innovation equilibrium with consumer protection standards. The U.S. states enforce strict regulations about data privacy through the California Consumer Privacy Act (CCPA) at the state level while doing the same for security at both state and national levels. Canadian institutions enforce privacy standards through the actions of their Office of the Privacy Commissioner. Organizations need to handle regulatory requirements that concern customer data while deploying AI life insurance applications to determine AI integration in business activities (Amron et al., 2018).

3.2 Current State of AI Adoption

The adoption of AI technologies continues to increase steadily throughout the life insurance sector especially within Canada and the United States. Multiple organizations within the industry leadership group have started implementing AI technologies to support their diverse business operations. The largest U.S. insurer Prudential utilizes artificial intelligence for its underwriting activities to upgrade risk evaluations while creating customized policy costs (Bradlow et al., 2017). The Canadian and U.S. market of Manulife operates AI technologies to automate customer service interactions through virtual assistants as well as chatbots for continuous support availability.

The AI technology continues advancing in three important areas which include claims processing as well as fraud detection systems and improved customer support. Predictive analytics tools are becoming more prevalent in insurance businesses to prevent fraudulent claims better and detect common patterns associated with fraud (Hernandez & Zhang, 2017). Organizations develop competitive product options because their decreased operational costs and enhanced efficiency enable such benefits.

The deployment of artificial intelligence serves to make the customer service process more efficient through automated solutions. Life insurance providers rely on AI-powered customer service representatives together with chatbots for providing efficient solutions to client inquiries. Customer perception demands faster service and individualized assistance so the trend holds strategic value (Lee et al., 2018).

3.3 Challenges to AI Adoption in North America

Several barriers exist despite the increasing AI use in North America. Data privacy security regulations stand as the most substantial obstacles that prevent AI implementation from occurring. CNSSA and other U.S. state control how businesses gather and maintain consumer data and use this information. The use of extensive sensitive personal data that AI models in the life insurance industry need (Kolbjørnsrud et al., 2017) makes AI implementation more challenging.

AI implementation faces problems because of difficulties which occur from working with data. Life insurers face challenges from scattered data systems which create obstacles when trying to build and study complete datasets needed for successful artificial intelligence integration. Life insurers must commit substantial resources toward data cleaning combined with disparate system consolidation since this approach drives accurate and compliant AI model operation (Bughin & Hazan, 2017).

Many insurers face organizational acceptance problems while moving away from traditional business methods. Long-established companies having years of operational history encounter problems with AI system implementation because of established business frameworks and staff-related transition obstacles. Some insurance companies face major hurdles because they need to invest substantial funds into outdated system modernization according to Nguyen et al. (2018).

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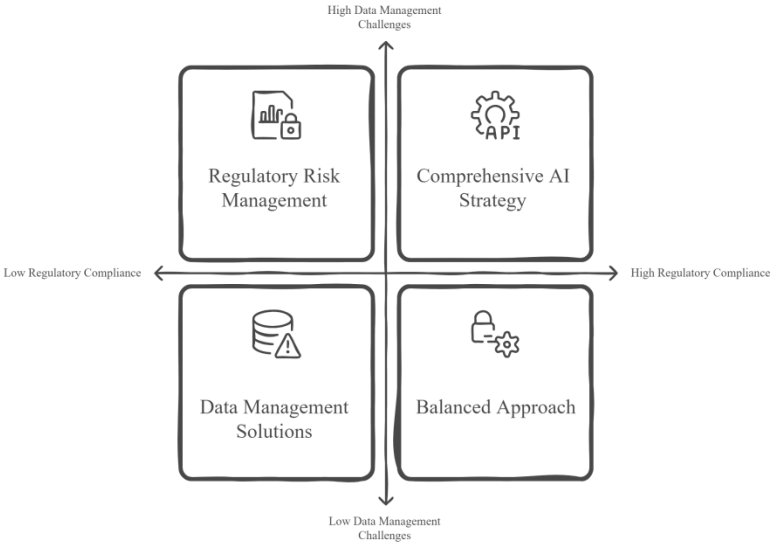

Figure 2: Challenges to AI Adoption in Life Insurance

3.4 Opportunities in North America

The North American life insurance sector maintains many possibilities for artificial intelligence to catalyze development and technological advancement despite existing obstacles. The elevated interest from customers in individualized insurance products constitutes a key business opportunity for insurance companies. Modern customers want insurance products made to their individual requirements. AI technology enables insurers to create customized insurance solutions through customer behavior evaluation which generates enhanced customer contentment along with improved loyalty (Paredes, 2017).

AI delivers fast accurate customer service processes that align with the present-day requirement for quick responses from businesses. Insurance companies who automate their standard operational steps through claims processing and underwriting can provide speedier services to customers which creates better satisfaction and enables superior market position (Saran, 2017). Through artificial intelligence insurers can establish stronger position in their market sector. Through its ability to forecast market movements companies can identify customer preferences and operating system efficiency to maintain an advantage over business competition in an industry experiencing rapid change. AI helps insurers optimize their internal operations and market intelligence thus they can establish leadership positions by embracing innovation (Adjekum et al., 2017).

Although the path to complete AI adoption in North American life insurance comes with difficulties the advantages substantially surpass them. The transformation of the industry is enabled by AI technology which provides better experiences to customers while raising operational efficiency and delivering market performance benefits in this shifting industry.

4. AI ADOPTION GLOBALLY

4.1 Overview of Global Trends in AI Adoption

Artificial Intelligence (AI) has received different levels of global acceptance throughout the life and annuities market ranging from high to low across various world regions. AI integration has accelerated in North America and Europe because organizations there need better customer service and operational excellence as well as customized products. Artificial intelligence adoption in Asia-Pacific and Latin America is advancing substantially but at different speeds because of their local financial conditions together with their technology frameworks along with regulatory requirements.

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The European insurance sector welcomes AI adoption at an increasing rate because leading organizations such as AXA and Allianz adopt AI technologies to enhance customer service operations along with claim processing and risk management functionalities. AI adoption experiences explosive growth across Asia-Pacific regions although China Japan and India lead as substantial drivers of AI advancement in the region. New generation digital-first insurers in the Southeast Asia region drive sectorwide digital transformation of the insurance industry. AI adoption has started to accelerate across Latin American regions because Mexican and Brazilian firms use AI to bring digital transformation and enhance services targeting underprivileged populations.

The worldwide life and annuities market exceeds trillions in value and its key companies operate in regions including Europe and Asia as well as the United States and Canada. Key players in the European life insurance sector consist of Allianz and AXA together with Swiss Re yet Asian-Pacific markets rely on Ping An Insurance and Tokio Marine as major players. Global insurance corporations use artificial intelligence as a competitive tool while developing innovative products to stay ahead in the market.

4.2 Case Studies of Global AI Adoption

- The adoption of AI technologies in Europe advances directly from market requirements and governmental AI regulation standards. The insurer AXA applies AI to underwriting functions to improve operational precision and workflow speed. The business utilizes AI-powered chatbots to modernize customer service operations by delivering individualized answers to insurance policyholders. The insurance provider Allianz applies AI technology across multiple aspects such as claims automation, predictive analytics and fraud detection to deliver elevated services to customers and employees. The operational enhancement from these initiatives supports European insurers as they aim to serve consumers by providing modernized personalized services (Bughin & Hazan, 2017).
- The Asia-Pacific territory experiences quick AI adoption because it benefits from fast economic development and superior digital infrastructure progress. The Chinese insurance company Ping An Insurance demonstrates remarkable AI applications by implementing automated claims processing in addition to risk assessment capabilities and automated customer interactions. The company uses artificial intelligence to anticipate healthcare results along with health risk evaluations of its policyholders and individualized insurance plan development. The Japanese insurance leader Tokio Marine uses AI technology to detect insurance fraud and process claims which further establishes its powerful market position within the industry. The leadership of these firms focuses on AI implementation to serve digitally connected customers while transforming basic insurance practices (Kolbjørnsrud et al., 2017).
- The Latin American insurance sector is presently discovering AI opportunities which they can leverage. Grupo Nacional Provincial operates in Mexico and is the leading organization that adopts AI technologies across the region. GNP uses predictive analytics through AI to enhance risk evaluations and split customers into specialized groups during its underwriting operations. GNP makes use of AI to strengthen its operations for claims processing along with customer service delivery. Brazilian insurers adopt AI systems because they need better operation efficiency and cost saving capabilities to withstand the country's market fragmentation which leads to expensive customer acquisition challenges (Lee et al., 2018).

4.3 Challenges to AI Adoption Globally

The worldwide acceptance of AI encounters multiple continuing difficulties between regions even though adoption rates keep increasing. The main challenge comes from varying regulatory systems operating worldwide. Customers in European markets face restrictions through GDPR regulations which create strict constraints for managing customer data. Prudent insurance companies need to confirm adherence to regulatory standards during their deployment of AI systems. The absence of complete data protection legislation in emerging marketplace countries generates doubts about data collection procedures and storage methods as well as permissible data usage practices. New markets face additional obstacles due to both cultural obstacles and insufficient cutting-edge technology systems. Developing nations encounter challenges because their insurers work without proper digital systems and possess limited technological expertise alongside employee reluctance to embrace new approaches. The pace of AI industry transformation remains limited because AI technology adoption processes become slower. The application of AI attracts doubt about ethical standards mainly due to lacking oversight in certain areas which results in concerns about superior decision-making frameworks in AI systems (Paredes, 2017).

A big obstacle exists because different regions maintain inconsistent standards regarding data quality. The acquisition of available high-quality data needed for AI model training remains a challenge for insurers operating

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in unregulated or developing markets. Insufficient data quantity will cause AI systems to create unreliable results that diminish their effectiveness and restrict insurance providers' benefits (Amron et al., 2018).

4.4 Opportunities in Global Markets

AI systems create multiple business prospects for worldwide markets particularly through emerging markets worldwide. South EAST Asian digital-first insurance businesses have launched AI-powered solutions which provide affordable insurance options to technology-based youth consumers. The startups use AI technologies to manage underwriting operations while providing automated claims processing automated claims handling in addition to personalized insurance coverage that helps new insurers challenge traditional insurance companies.

AI has the potential to boost financial inclusion in Africa and Southeast Asia while at the same time extending insurance product accessibility to these regions. Insurers benefit from AI to produce affordable insurance plans that match the specific requirements of less-prosperous communities and unrepresented populations. Artificial Intelligence lowers operational expenses thus enabling insurers to launch affordable micro-insurance plans that serve customers excluded through traditional insurance systems (Adjekum et al., 2017).

The implementation of AI has brought forth substantial business possibilities to insurers throughout the global market system despite its implementation difficulties in emerging markets. Global insurers who invest in AI technologies open new possibilities for improved market functionality, customer joy and more accessible financial services thus creating future possibilities that AI will transform life and annuities markets throughout the world.

5. BENEFITS OF AI IN LIFE AND ANNUITIES

5.1 Enhanced Customer Experience

Through AI technology customers receive enhanced experiences with insurers of life and annuities products. Insurers create high degree customization through machine learning and natural language processing for all their policy interactions. AI-powered chatbots and virtual assistants assist customers during policy applications and provide real-time answers and policy management support. When incorporated into customer service operations these systems permit faster and better service delivery thereby reducing waiting times and creating more content customers.

AI systems have a vital position in both claims processing and other operations. Through predictive analytics insurers obtain quick claim assessment services that help verify details more effectively which leads to accurate claim processing. This process reduces both claim errors and delays. AI-based personalized communication tools help organizations send timely updates about policy claims which offers a smoother more transparent claims experience to customers. The enhanced digital procedures draw loyal customers and newcomers who seek convenient digital environments (Bradlow et al., 2017).

5.2 Improved Efficiency and Cost Reduction

Through AI technology insurers optimize operational strategies that enhance both business speed and decrease expenses substantially. Through underwriting AI processes enormous data quantities of health records combined with financial data to perform risk assessments which exceed traditional human underwriting abilities. The technology leads to faster policy production and reduced dependence on human operators for interventions. Automating simple operations which include data entry and document verification reduces insurance administrative costs so companies can use freed resources for strategic functions.

The identification of irregularities and potential cases of fraud during claims processing through AI pattern recognition functions helps lower fraudulent claims occurrence and strengthens risk management operations. The automation of administrative operations leads insurers to minimize operational expenses while enhancing accuracy rates during claims processing that happens promptly (Kolbjørnsrud et al., 2017).

5.3 Data-Driven Decision Making

AI is the most advantageous capability because it enables organizations to base their choices on measurable data. Insurers can use predictive analytics systems to analyze both present-time information and past performance trends which yields better quality decisions. Compilations of substantial data enable AI models to generate predictions about industry patterns which help insurers revise their coverages along with their premium rates and risk control approaches before outcomes become realized.

Artificial intelligence enables better customer behavior analysis within the insurance sector which leads to risk-oriented policyholder division according to their factors and preferences. Strategic insurance products become possible through AI technology because it allows exact customer requirements to be identified for precise

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coverage development. Insurance companies can create more efficient pricing calculations through these methods which generates better profits and maintains customer loyalty (Hernandez & Zhang, 2017).

5.4 Increased Competitive Advantage

The combination of operational effectiveness and market superiority comes from AI implementation by insurers in their operations. The use of AI by insurers enables their development of new products targeted at modern consumers who prioritize technology. The strategic use of AI delivers remarkable personalization value to insurers because it enables them to design customized insurance packages and prices alongside specific services which target individual customer requirements.

Using AI technology enables insurers to process market and customer trend fluctuations in swift and effective ways. The constant analysis of customer data enables insurers to make immediate changes to their products and marketing plans. The ability of insurers to adapt quickly lets them surpass competitors in addition to fulfilling changing market needs especially regarding on-demand insurance solutions and microinsurance strategies preferred by digital-savvy younger customers (Paredes, 2017).

The life and annuities industry depends completely on AI because it provides improved customer experiences alongside enhanced efficiency together with data-driven choices and market-leading abilities. These growing adoption trends will intensify the identified benefits which will in turn fuel industry evolution and cutting-edge developments.

6. FUTURE OF AI IN LIFE AND ANNUITIES

6.1 AI Trends and Predictions for the Next Decade

AI will experience explosive growth in the life and annuities market during the upcoming decade. The tendency to use artificial intelligence solutions for policyholder interactions will rapidly expand over the coming years. Such predictions will make personalized customer interactions a standard practice. AI technology enables insurance companies to develop customized policy solutions through current operational analysis of client activity and collected health records and personal decisions. Machines learn through artificial intelligence to process claims through automated algorithms which enhance both claim processing accuracy and resolution speed (Bradlow et al., 2017).

Machine learning algorithms in conjunction with natural language processing technology will grant insurers better ability to work with large volumes of unorganized information that includes customer dialogues together with medical documents and insurance reports. Sessions involving autonomous systems including virtual assistants will evolve towards stronger capabilities when it comes to policy underwriting decisions together with handling customer inquiries. The integration of these technologies will support insurer operations through improved streamlined activities, enhanced customer service capabilities and better decision systems (Lee et al., 2018).

6.2 AI Integration with Other Emerging Technologies

AI functions as a technological foundation that will unite with blockchain and IoT systems to produce revolutionary modifications in life and annuity operations. Claims processing achieves improved security and enhanced transparency through blockchain technology because AI functions as an automatized system to validate claims using blockchain data records. Real-time policyholder health monitoring will become possible after the integration of AI with IoT technologies allows insurers to remotely track client health data. Wearable devices transmit constant health data to AI systems that use this information to anticipate health dangers for making proper policy modifications and premium changes (Kolbjørnsrud et al., 2017).

Insurance companies will develop customized insurance packages through technological combinations enabling them to adjust policies rapidly based on their policyholders' altered behaviors or life events. Thankfully AI can process enormous amounts of data collected through IoT devices to produce improved risk identification and pricing methods for enhanced operational efficiency (Saran, 2017).

6.3 AI Ethics and Regulation

AI will develop further because life and annuity operations are increasingly using AI however ethical factors along with governance challenges will steer both implementation and growth patterns. The industry will have to maintain clear disclosure and ethical consistency throughout its Artificial Intelligence when making approval decisions. Underwriting and claims processing algorithms need to avoid creating adverse effects against particular insurance groups because they contain built-in biases. Insurers must develop strict governance systems to maintain the responsible operation of AI systems that meet industry standards as ethical AI usage becomes more vital to the market (Adjekum et al., 2017).

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The emerging regulatory frameworks that aim to protect data privacy and security and handle ethical issues of AI need attention from insurers due to their international implementation requirements. Insurance companies should follow evolving data privacy regulations like GDPR across Europe and CCPA in California since these regulations control AI applications using personal data. The effective implementation of these regulations guarantees customer trust while protecting business operations from legal problems (Bughin & Hazan, 2017).

6.4 Adoption Roadmap for Insurers

A comprehensive strategic plan will help insurers achieve successful AI integration at their company. AI readiness creation begins with workforce preparation that enables staff to master effective usage of AI tools at the organizational level. The core success factor for AI implementation includes building an infrastructure that supplies well-managed data because machine learning relies on quality data to work (Fader, 2018). Leadership within legacy insurers needs a strong commitment to drive change and create an innovative culture in order to overcome cultural barriers (Kolbjørnsrud et al., 2017).

Insurers must establish essential strategic partnerships with technology companies to obtain modern AI tools to speed up business digitalization initiatives. Through strategic alliances insurers gain specialized knowledge and access state-of-the-art solutions without constructing them internally (Saran, 2017).

6.5 The Global AI Landscape

Insurers can benefit from international leader insights in the AI field because global AI development presents many possible collaborative opportunities. Through mutual knowledge exchange about best practices and AI insights multiple insurers gain the ability to quicken their AI implementation while addressing mutual challenges. Insurers using global collaboration will benefit from both compliance regulations and maximum AI value through coordinated approaches to different international regions as per Lee et al. (2018). Professional alignment with worldwide market developments gives insurers access to the leading AI technology solutions allowing them to operate successfully within the AI-driven industry.

Predictions show that AI will transform life and annuity operations by providing businesses with more efficient processes together with better client relationships while enabling effective risk analysis. The adoption of AI systems necessitates proper planning together with ethical reflections and a dedicated approach to innovation to achieve success. Insurance organizations that use AI technology and emerging solutions will transform their business practices and maintain market competitiveness in the fast-changing market environment.

7. CONCLUSION

The life and annuities market allows artificial intelligence to shape North American and worldwide operations. The technology exists as a fundamental component which drives better efficiency while making customers happier and strengthens insurer market positions. The North American insurance giants Prudential and Manulife use AI to automate customer service functions while detecting fraud due to the proven advantages AI technology provides according to Kolbjørnsrud et al. (2017). Insurance companies across Europe along with Asia-Pacific and Latin America currently implement AI solutions for digital transformation initiatives and improved underwriting activities while strengthening risk management capabilities (Bughin & Hazan, 2017).

The life and annuities sector expects favorable prospects for AI implementation because insurers depend more heavily on AI technologies to gain competitive advantage in modern data-intensive markets. Businesses must organize proactive AI implementation to reach customer goals of obtaining individualized services with quick precise solutions. The industry will be influenced by AI and its operational enhancement capabilities and its ability to reveal comprehensive customer behavior information. The implementation of these technologies by insurers in the present delivers better competitive advantages for the long term within a changing market (Saran, 2017). The digital evolution will make artificial intelligence in the life and annuities market fundamental for continuing reformation of the sector.

REFERENCES

[1] Adjekum, A., Ienca, M., & Vayena, E. (2017). What Is Trust? Ethics and Risk Governance in Precision Medicine and Predictive Analytics. OMICS A Journal of Integrative Biology, 21(12), 704–710. https://doi.org/10.1089/omi.2017.0156

[2] Amron, Usman, & Mursid, A. (2018). Buying decision in the marketing of Sharia life insurance (evidence from Indonesia). Journal of Islamic Marketing, 9(2), 370–383. https://doi.org/10.1108/JIMA-02-2017-0013

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https://www.ijetrm.com/

[3] Bradlow, E. T., Gangwar, M., Kopalle, P., & Voleti, S. (2017). The Role of Big Data and Predictive Analytics in Retailing. Journal of Retailing, 93(1), 79–95. https://doi.org/10.1016/j.jretai.2016.12.004
[4] Bughin, J., & Hazan, E. (2017). Five Management Strategies for Getting the Most From AI. MIT Sloan Management Review, 1–5. Retrieved from http://mitsmr.com/2zH3hOa
[5] Hernandez, I., & Zhang, Y. (2017). Using predictive analytics and big data to optimize pharmaceutical outcomes. American Journal of Health-System Pharmacy, 74(18), 1494–1500. https://doi.org/10.2146/ajhp161011
[6] Kolbjørnsrud, V., Amico, R., & Thomas, R. J. (2017). Partnering with Al: How organizations can win over skeptical managers. Strategy and Leadership, 45(1), 37–43. https://doi.org/10.1108/SL-12-2016-0085
[7] Lee, H. S., Low, K. L. T., Chong, S. C., & Sia, B. K. (2018). Influence of Secondary and Tertiary Literacy on Life Insurance Consumption: Case of Selected ASEAN Countries. Geneva Papers on Risk and Insurance: Issues and Practice, 43(1), 1–15. https://doi.org/10.1057/s41288-017-0050-7
[8] Lin, Y. K., Chen, H., Brown, R. A., Li, S. H., & Yang, H. J. (2017). Healthcare predictive analytics for risk profiling in chronic care: A Bayesian multitask learning approach. MIS Quarterly: Management Information Systems, 41(2), 473–495. https://doi.org/10.25300/MISQ/2017/41.2.07
[9] Liu, C., & Sherris, M. (2017). Immunization and hedging of post retirement income annuity products. Risks, 5(1). https://doi.org/10.3390/risks5010019
[10] Nguyen, H. T., Nguyen, H., Nguyen, N. D., & Phan, A. C. (2018). Determinants of customer satisfaction and loyalty in Vietnamese life-insurance setting. Sustainability (Switzerland), 10(4). https://doi.org/10.3390/su10041151
[11] Nosi, C., D'Agostino, A., Pagliuca, M., & Pratesi, C. A. (2017). Securing retirement at a young age. exploring the intention to buy longevity annuities through an extended version of the Theory of Planned Behavior. Sustainability (Switzerland), 9(6). https://doi.org/10.3390/su9061069
[12] Paredes, D. (2017). Despite the hype, AI adoption still in early stages. CIO (13284045), 1. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib,custuid&custid=s1123183&db=bth&AN=125794878&site=ehost-live
[13] Saran, C. (2017). Data skills could improve employment options as adoption of AI accelerates. Computer Weekly, 9–11. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=126465915&site=ehost-live
[14] Soualhi, Y. (2017). Challenges of developing a takāful retirement annuity plan in Malaysia. ISRA International Journal of Islamic Finance, 9(1), 95–99. https://doi.org/10.1108/ijif-07-2017-009
[15] Zainudin, R., Ahmad Mahdzan, N. S., & Leong, E. S. (2018). Firm-specific internal determinants of profitability performance: an exploratory study of selected life insurance firms in Asia. Journal of Asia Business Studies, 12(4), 533–550. https://doi.org/10.1108/JABS-09-2016-0129