

TRENDS IN DIGITIZATION OF THE CUSTOMER EXPERIENCE IN INSURANCE

VĂDUVA MARIA

ASSOC. PHD CONSTANTIN BRÂNCUSI UNIVERSITY TÂRGU-JIU

e-mail: vaduvamaria09@yahoo.com

Abstract

The insurance industry, traditionally conservative and heavily dependent on direct human interactions, is going through a period of profound transformation. Accelerated digitalization and the adoption of new technologies — especially online platforms, artificial intelligence and advanced data analytics — are fundamentally changing the way customers interact with insurance providers. From policy issuance to claims management or post-sales communication, the customer–insurer relationship is becoming increasingly automated, personalized and accessible in real time. This transition from the traditional agent-centric model to a digitalized one brings both strategic opportunities and significant challenges for insurance companies, which must rethink not only their IT infrastructure but also their entire customer relationship model. The article analyzes how digital transformation is influencing the customer experience in the insurance industry. The main technological trends, interaction personalization strategies, as well as challenges related to implementation, security and workforce adaptation are highlighted. The study highlights the impact of artificial intelligence, process automation and omnichannel platforms on the relationship between insurers and customers.

Keywords: insurance, customer, digitalization, artificial intelligence, personalization, trends.

1. Introduction

The insurance industry is undergoing an accelerated digital transformation driven by technological developments, changing consumer behavior, and competitive pressure from new market players. In this context, customer experience has become a central element of organizational strategies, as the way a customer perceives and interacts with an insurance company directly influences its loyalty and profitability. [1]

Digitalization is no longer limited to the simple automation of internal processes, but is redefining the entire customer journey — from product discovery to after-sales. Insurers are investing heavily in technologies that provide faster, more personalized, and more convenient interactions, while maintaining regulatory compliance.

The purpose of this article is to analyze current and emerging trends in the digitalization of the insurance customer experience, identify the related challenges and opportunities, and provide a synthesis of best practices in the field.

2. Online platforms and mobile applications: instant access to services

In the context of accelerated digitalization, online platforms and mobile applications have become essential elements in redefining the relationship between the customer and the insurance company. These digital tools are no longer just alternative communication channels, but constitute the core of the new digital customer experience, allowing fast, flexible and intuitive access to the entire range of insurance services [1].

The transition from traditional interaction, mediated by the physical agent, to a digital self-service ecosystem has fundamentally reshaped the customer journey – from obtaining the offer and issuing the policy, to managing claims and automatic renewal of contracts. The process that previously involved travel, meetings, physical forms and waiting time is now compressed into a few minutes, accessible from any location and mobile device.

These functionalities profoundly transform the customer experience, reducing waiting times and increasing the level of satisfaction. For companies, the benefits are clear: decreasing

operational costs, scalability and collecting valuable data on customer behavior. Example: The “Allianz MyMobility” mobile application allows reporting car damage by uploading photos and receiving a damage estimate in less than 15 minutes.

Currently, the most advanced applications allow [1]:

- Issuing, modifying and renewing policies completely digitally, through a secure customer account;
- Uploading supporting documents (ID cards, vehicle documents, reports, etc.) directly from the application, through OCR scanning functions;
- Reporting and tracking damage in real time, including sending photos and videos of damage;
- Access to secure online payment methods, transaction history and automatic notifications regarding due dates, missing documents or claim status;
- 24/7 digital assistance, through integration with chatbots and automated support centers.

This digital infrastructure not only provides maximum convenience to customers, but also generates significant operational efficiencies for insurance companies. By reducing repetitive human interactions, costs associated with labor, manual processing of claims and documents are significantly reduced. In addition, the digitalization of these processes allows for the real-time collection of user behavioral data, providing a solid basis for predictive analysis and personalization of offers.

From the customer perspective, these transformations lead to a smoother, more transparent and faster experience, essential features in an environment where consumers are increasingly oriented towards digital, fast and autonomous solutions. Response time is becoming a major competitive differentiator, as is the simplicity of the interface and the availability of the service.

From the strategic perspective of the organization, the digitalization of services through mobile platforms and applications is becoming an element of market positioning. Insurers that manage to develop intuitive, secure and high-performance applications can retain their customers, attract young segments (digital natives) and operationalize a scalable model, replicable in various geographical markets.

Digital platforms and mobile applications are no longer just technological enablers, but strategic tools that change the business model and the way in which value is delivered to the customer. In the era of mobility and constant connectivity, insurance companies must integrate these solutions at the center of their organizational vision, if they want to remain relevant, competitive and future-oriented [4].

Omnichannel platforms represent one of the most important directions of digital transformation in the insurance industry, playing a central role in redefining the customer experience. Unlike the multichannel model, which offers several independent communication channels (call center, email, mobile application, etc.), the omnichannel strategy integrates all these channels into a unified ecosystem, in which customer information and interactions are perfectly synchronized. Through omnichannel platforms, customers can start an interaction in one channel and continue it in another without losing context. For example, a request initiated by a chatbot can be later taken over by a human agent who has access to the complete history of the discussion. This continuity strengthens customer trust and reduces the level of frustration associated with fragmented interactions [5].

The integration of digital channels allows the collection and analysis of real-time data about customer behavior and preferences. This information is used to personalize offers, send relevant notifications and create a proactive experience. Omnichannel platforms thus support a relationship based on relevance, not just reaction.

3. Product personalization through customer behavior analysis

Digitalization brings with it access to massive volumes of data — demographic, behavioral, and transactional — that can be analyzed by artificial intelligence and machine learning algorithms to create personalized insurance products.

One of the most important competitive advantages offered by digitalization in the insurance sector is the ability of companies to personalize products and services in a profound way, adapted to the needs, behavior, and risk of each individual customer. This personalization is possible thanks to the intelligent exploitation of data generated by users in their digital interactions and the application of artificial intelligence (AI) and machine learning (ML) technologies in decision-making processes [2].

In the traditional model, customers were divided into broad segments (e.g., by age, income, or claims history), and policies were designed to meet the general needs of each group. This approach, although functional, did not capture the real nuances of individual behavior nor the particularities of each customer.

Today, however, insurers using AI can access and analyze data from multiple sources [3]:

- browsing behavior on the company’s platforms;
- purchase history;
- payment and application usage patterns;
- claims history;
- geographic location and mobility;
- interactions with support services or chatbots.

By processing this data in real time, companies can create dynamic risk and preference profiles, based on which they generate personalized offers, precisely calculated for each individual.

In this context, AI algorithms become an invisible “digital consultant”, which continuously optimizes the relationship with the customer [3]:

- Anticipates customers’ needs based on key moments in their lives (marriage, birth of a child, purchase of a vehicle);
- Recommends complementary products (e.g. health insurance if the user visits sections related to this area);
- Adjusts coverage in real time, based on behavioral or contextual changes;
- Calibrates prices according to calculated risk, maximizing the balance between attractiveness for the customer and profitability for the company.

This hyper-personalization has a major impact on customer loyalty, who feel understood and served individually, and contributes to increasing customer lifetime value.

To support this level of personalization, organizations must adapt not only their technological infrastructure, but also their managerial approach [6]:

- Cross-functional teams (data science, marketing, IT) are needed to collaborate on the development and validation of algorithms;
- Data governance becomes a strategic area, as data quality and protection directly influence the accuracy of personalization;
- Algorithmic ethics must be integrated into processes, to prevent discrimination, systemic errors or lack of transparency in decisions.

Personalization through behavioral analysis is not just a technological trend, but a paradigm shift in the relationship between the customer and the insurance company. In a market where customers expect fast, relevant and easy-to-access services, the ability to deliver personalized products and interactions in real time becomes an essential strategic differentiator.

4. Customer service automation: from call center to chatbot

Digital transformation in the insurance sector is not limited to underwriting or policy management processes. One of the areas with the greatest potential for impact is the customer relationship, especially through the automation of interaction through chatbots, virtual assistants and self-service platforms. This process marks a strategic transition: from reactive human communication to proactive, constant and scalable support.

Another pillar of digitalization is the automation of interactions through intelligent chatbots and virtual assistants integrated into websites and mobile applications. These digital agents [7]:

- Provide quick answers to frequently asked questions;
- Guide the customer through the purchase or claim reporting process;
- Can escalate complex requests to human operators.

The advantages are multiple: 24/7 availability, consistency in responses and reduced pressure on the call center. However, the success of these solutions depends on the quality of algorithm training and maintaining empathy in automated interactions. Example: Groupama Romania introduced the “Eva” chatbot for instant assistance, with an average response time of less than 10 seconds and an 80% request resolution rate without human intervention.

Instead of traditional call centers, where waiting times, limited availability and variations in service quality were frequent points of friction, insurance companies are implementing AI-based chatbots, available 24/7, capable of automatically and contextually responding to a wide range of requests [1]:

- checking the status of a policy or claim;
- sending documents and forms;
- explanations of contract clauses;
- generating instant offers based on customer responses;
- automatic renewal of policies;
- escalating complex cases to a human agent, if necessary.

These virtual assistants can be integrated directly into mobile applications, websites or messaging platforms (WhatsApp, Facebook Messenger, etc.), providing a natural, fast and continuous conversational experience.

Automating customer interaction brings significant benefits from both an operational and strategic perspective:

- Reduction of costs associated with call center staff and manual handling of routine requests;
- Increased scalability, with the ability to simultaneously handle thousands of interactions, regardless of time zone or location;
- Standardization of service quality, eliminating variations caused by human factors (fatigue, misinterpretations);
- Real-time data collection and analysis of recurring issues, customer preferences, and points of friction in their journey.

Despite the obvious advantages, automation is not without its challenges. Interacting with an automated system can be frustrating if: the chatbot does not understand the context of the request, the conversation becomes stiff or robotic, and there is no clear option to escalate to a human operator.

- Furthermore, in sensitive situations – such as managing a serious claim or a death – human interaction remains essential to maintaining empathy and a relationship of trust. Thus, effective automation strategies must include a hybrid component, where technology and human resources complement each other, not exclude each other. Modern insurance management is no longer just about optimizing resources and increasing efficiency, but about building a digital relationship that preserves the human component where it matters most. The solution is not complete automation, but a well-calibrated omnichannel experience, where the customer can choose the level of interaction they want and always has access to empathetic support in sensitive cases [8].

Customer service automation, supported by conversational AI, offers insurance companies a major opportunity to increase operational efficiency and provide customers with fast, consistent and available service at any time. However, long-term success depends on how companies manage to combine technological innovation with emotional intelligence, building authentic relationships, even in a digital environment.

5. Challenges and risks of digitalizing the customer relationship

Although digital transformation brings multiple benefits to the insurance sector — efficiency, personalization, accessibility — this transition is not without risks, limitations and strategic dilemmas. Integrating technology into customer interaction requires not only investments in infrastructure, but also a careful reconfiguration of organizational culture, business models and the relationship with the customer as an active partner in the digital environment.

One of the most frequent criticisms of excessive digitalization is the loss of the human dimension of interaction. The complete replacement of agents with digital interfaces or chatbots can lead to [9]:

- a feeling of anonymity in the relationship with the service provider;
- a decrease in trust in the automated decision-making process;
- difficulties in managing emotional or complex situations (e.g. death, serious accident), where empathy is essential.

This “cooling” of the customer–insurer relationship can affect long-term loyalty, especially among customers who associate service quality with the personal attention received.

Not all customers benefit from the same level of digital literacy or access to technology. Elderly, rural or lower-income people may be marginalized by total digitalization strategies. Thus, the risk is that [6]:

- certain customer segments are left out of the digital ecosystem;
- the company loses opportunities to build loyalty or attract diverse categories;
- inequities are created in the customer experience, contrary to the principles of inclusion and social responsibility.

The managerial approach must provide hybrid solutions and digital assistance adapted to these categories. Digitalization involves the collection, processing and interpretation of a large volume of data. Although algorithms can be extremely efficient, they are not infallible. Some notable risks:

- algorithmic biases that can lead to discrimination or incorrect decisions (e.g. risk scores affected by incomplete data or historical prejudices);
- non-transparent automated decisions, difficult to explain to the customer and difficult to challenge;
- errors in data processing that can generate negative experiences (wrongly issued policies, automatic denials of compensation, incorrect interpretations of the client's intentions).

These factors require the development of AI audit mechanisms, human validation of critical decisions and a clear data governance strategy.

With the digitalization of the customer relationship, the volume of personal data managed by insurers also increases exponentially: financial data, health information, location, online behavior, etc. This creates major vulnerabilities [9]:

- cyber attacks that can compromise millions of digital files;
- security breaches that can seriously affect the company's reputation;
- difficulties in aligning with legal requirements (e.g. GDPR) regarding consent, data portability and deletion.

In such a context, data protection becomes not only a matter of legal compliance, but also a strategic component of reputation and trust.

Last but not least, digitalization involves major changes in organizational skills, structure and culture. Traditional agents, call center staff, claims adjusters – all must redefine their roles in a digitalized landscape [7]:

- Internal resistance to new processes and technologies may arise;
- Extensive training and retraining programs are needed;
- Management must build a clear and participatory vision that transforms fears into opportunities.

While digitalization brings immense potential to improve the customer experience, its success depends on the fine balance between automation and humanity, between efficiency and ethics, between innovation and inclusion. Companies that manage to navigate these challenges responsibly will be the ones that will earn customer trust and ensure the sustainability of their business model in an increasingly competitive market.

6. Conclusions

Digitalization has profoundly redefined the way insurance companies relate to customers, shifting the focus from classic transactional interaction to an integrated, personalized and accessible digital experience anytime. In an increasingly connected ecosystem, where technology is part of everyday life, customers no longer view insurance services as simple financial products, but as continuous experiences of protection, prevention and support.

Throughout this paper, three major directions of innovation in digital interaction were analyzed: online platforms and mobile applications — which provide instant and self-service access to the entire policy lifecycle, reducing operational times and costs; personalization through behavioral analysis — which transforms the standardized product into a flexible offer, adapted to individual needs and risk; customer relationship automation — which ensures non-stop availability and efficiency in responses, through chatbots and conversational AI.

At the same time, we also highlighted the challenges associated with this process: the risks of depersonalization, digital exclusion, algorithmic errors, cybersecurity and organizational resistance to change. These aspects should not be ignored, but managed strategically, through clear leadership, investment in digital culture and prioritizing ethics in the use of data.

Looking ahead, the digitalization of the customer relationship in the insurance sector will not slow down, but will accelerate, stimulated by the continuous advance of emerging technologies (generative artificial intelligence, blockchain, Internet of Things). In this context, differentiation will not only be given by the degree of automation, but especially by the way in which companies manage to build trust, empathy and relevance in a digital universe.

Organizations that will succeed in transforming digitalization into a strategy focused on added value for the customer will be the ones that will lead the new wave of insurance — faster, smarter and more human.

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