Customer experience of the future

How intelligent virtual assistants and chatbots can enhance service interactions



Contents

Intelligent virtual assistants (IVAs): how they will change business and the world	3
Business case and benefits of IVAs	6
The evolution and maturation of IVAs	8
Moving forward with IVAs: planning and implementing to win	9



Consumers who want to use messaging to talk to businesses

Source: Twilio Global Mobile Messaging Consumer Report 2016



80%

Companies that already use or plan to use chatbots by 2020

Source: Business Insider

Intelligent virtual assistants: how they will change business and the world

"Alexa, what is the status of my auto insurance claim?" "Okay, Google, can you recommend discounts on my life insurance policy?"

"Siri, when is my premium due?"

Asking your insurer questions will soon be as easy as asking your in-home personal assistant about the weather. Thanks to the rise of intelligent virtual assistants, or IVAs, and chatbots, the day is closer than you think.

For many companies, across multiple sectors, IVAs have become an essential component of the customer experience (CX), as mobilebased messaging becomes the preferred method of communication. Chatbots are powered by artificial intelligence and natural language processing and are able to understand user requests and communicate via web- and mobile-based interfaces. Chatbots are the underlying technology behind IVAs. IVAs are designed to simulate human communication, either text-based or voice-based, and to handle common inquiries and service requests in automated fashion.

For insurance carriers, IVAs can be used to optimize the customer experience, increase revenue, lower costs and enhance risk management. For insurance customers, IVAs provide a simple, intuitive interface to access and navigate the full range of an insurer's content and service offerings.

For insurers, IVAs are capable of engaging users through multiple channels with many different messages:



Channels



Messaging

- Web widgets (mobile and desktop accessible)
- Mobile apps (native and hybrid)
- Text message and short message services (SMS)
- Instant messaging services and collaboration tools
- Smart speakers and virtual assistants connecting to intelligent voice services

- Payment and renewal reminders
- Updates on claims status
- Promotional offers and intelligent cross-selling
- Location-based conversations

The power and sophistication of IVAs are driven by integration with existing back-end systems (such as customer relationship management platforms), as well as the quality and quantity of data sources available. Ideally, IVAs securely share account details, policy documents and other necessary information to quickly complete transactions within secure interfaces. This behind-the-scenes process automation is critical to unlocking the value of IVAs.

The majority of initial IVA implementations start with a deterministic, query-based approach that helps satisfy customer intents and properly addresses business needs. NLU and other capabilities can be layered on, once intent and ontology are well defined and systems enablement is complete.

IVAs in insurance: difference-making use cases

The insurance industry's use of automated communications has lagged compared to other sectors. Thus, insurers have many opportunities to use IVAs and chatbots for immediate improvements across the entire insurance value chain (from underwriting and policy administration, to product, marketing and distribution, to claims management and corporate functions).

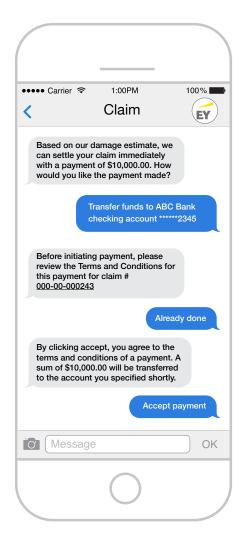
Consider how chatbots and IVAs enable two-way communication for specific tasks:

- Serving as virtual agents and streamlining direct messaging for customers who would like to upgrade existing policies with additional coverage
- Providing faster, more efficient access to roadside assistance for stranded policyholders
- Simplifying basic policy administration tasks, like updating an address
- Automating preliminary steps in application and renewal processes (see Figure 1)

The technology powering chatbots and IVAs

- Natural language processing (NLP) software
- Natural language understanding (NLU)
- Artificial intelligence (AI), machine learning
- Robotic process automation (RPA)

Figure 1: IVAs can both share information and complete transactions.



IVAs in context: creating the optimal digital insurance experience

While the cost and efficiency advantages of IVAs are compelling, insurers must look beyond the operational impacts to see how they enable a fundamentally better CX. Insurers that use IVAs effectively will be able to engage with their customers more deeply and frequently.

As a fundamental element of an insurer's digital strategy, IVAs enable and complement other technologies and capabilities in support of end-to-end customer service interactions and richer overall experiences. For instance, those insurers that leverage data from connected sensors and the Internet of Things (IoT) will be able to make their IVAs smarter and faster. Similarly, the returns on investment in customer portals and self-service toolsets will be enhanced by the use of chatbots and IVAs, because more customers will be able to use the tools more often and more conveniently.

In this sense, IVAs are best viewed as a foundational technology that offers substantial value on its own, but is most beneficial as it matures and is combined with other technologies, such as telematics and robotic process automation (see Figure 2).

IVAs enable insurers! digital strategies by complementing other technologies in support of end-to-end customer service and richer overall experiences.

Figure 2: The benefits of combining IVAs with other transformational digital technologies

Intelligent virtual assistants **Telematics** Robotic process Mobile and Artificial Internet of automation intelligence portal Things Expedited Streamlined process Improved analytics Multi-channel Improved data hand-offs and intelligent enablement quantity and processing cross-selling quality ► Front-end Optimized customer Handling communications for experience responses to Personalization Real-time analytics automated back-end systems and user ▶ Increased Omni-channel notifications experience ► Cost reduction communications experience and alerts through automation Increased Real-time efficiency communications

Business case and benefits of IVAs

The business case and value proposition for IVAs have been proven by the proliferating implementations across financial services and other industries. This growth is driven by four primary benefits:

1 Increased efficiency

IVAs improve efficiency by managing repetitive tasks and addressing frequently asked questions. With back-end system integration, IVAs can be set up to record customer inputs, which maintains context throughout all interactions and reduces repetitive conversations. Integrated systems can also provide account-specific outputs instantaneously, which provides an efficient and customized CX across all digital touchpoints.

More sophisticated IVAs can handle entire processes, such as claims submissions or policy renewals and upgrades. This automation frees human resources in marketing, sales and customer service to focus on more complex inquiries and higher-value transactions, including those that lead to higher revenue.

Enhanced customer experience

Due to ever-rising customer expectations, CX is no longer about pushing content to the customer at the right time through the right channel. Instead, it's about eliminating user pain points across customer journeys and allowing customers to control the interactions and pull the information from their preferred channel, on their own time. IVAs may also leverage real-time and behavioral data to provide the highly personalized, highly intuitive and highly convenient on-demand experiences that customers desire.

IVAs operate within a broader suite of communications and touchpoints, including advertisements, websites, emails, apps, call centers, and other channels. IVAs must take a user-centric approach and communicate harmoniously across all channels to create a consistent CX; for example, using key terms to create a unique and meaningful vocabulary specific to the company. Creating a similar tone and voice across all channels will help establish the persona of the company's brand. Such alignment is the way for insurers to realize the value of – and seize the competitive advantage from – enhanced customer experiences.

Intelligent upselling and cross-selling

Converging IVAs with AI, machine learning and RPA will generate new methods for acquiring new customers, and upselling and cross-selling existing customers. For example, a fully integrated system can assess and prioritize up-sell opportunities by pulling data insights from marketing, sales and other internal and external data sources. Once a qualified lead list is generated, IVAs can automatically send intelligent upselling and cross-selling messages proactively to targeted customers.

According to *VentureBeat*, every Fortune 1000 business was predicted to add chatbots to its technology marketing stack by 2017.

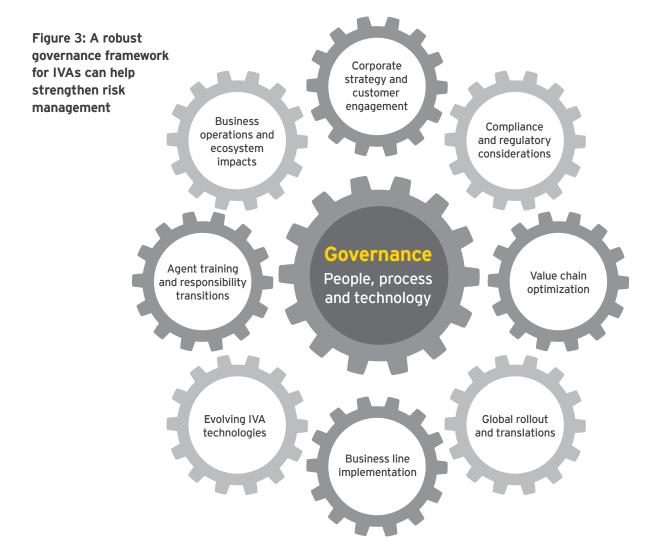
Business case and benefits of IVAs (continued)



Stronger risk management

With proper governance and back-end system integration, IVAs reduce the risk in customer communications by increasing efficiencies and reducing human errors. IVAs also provide an auditable digital trail for compliance officers and regulators, and offer the ability to incorporate advanced authentication procedures.

To instill these stronger risk management practices, robust governance structures must be in place during IVA implementation and rollout to the enterprise. Governance helps enable visibility and proactive control over potential risks, including operational and reputational risks (see Figure 3).



According to customer experience (CX) consulting firm Walker, 2020 is said to be the year customer experience will surpass price and product as the key competitive differentiator.

The evolution and maturation of IVAs

The basic technology behind IVAs has been around since the 1960s, but has matured rapidly in recent years, thanks to advances in technical capabilities, new communication platforms, enhanced user interfaces and improved data sources.

IVAs can be designed with varying degrees of sophistication and programmed to perform a variety of tasks. The maturity of IVAs is largely derived from their use of NLP, NLU, AI, machine learning, RPA and back-end system integration (see Figure 4).

Figure 4: Maturity levels of IVAs

Basic



Simple implementation, with limited or no back-end system integration, is powered by preset menus and conversational flows to drive efficiencies. Examples include:

- Proactive customer service
- Simple questions and answers
- ► Low-complexity workflows

Intermediate



Moderate to advanced implementation, with back-end system

- Contextualized and personalized responses
- Self-service automation
- Inquiry responses and timely status updates

Advanced



Complex implementation, with a wide breadth of integration, that is powered by AI and machine learning to more effectively address changing business needs. Examples include:

- Automated decision making
- Complex inquiries and transactions
- Seamless customer experience

Moving forward with IVAs: planning and implementing to win

As a technology, IVAs are relatively easy to script and implement, though many fail because companies do not have a robust implementation strategy, assigned management for ongoing maintenance and conversational improvement, or a designed digital experience across platforms. Companies also face unique challenges based on the constraints of their legacy infrastructure and existing technical ecosystems.

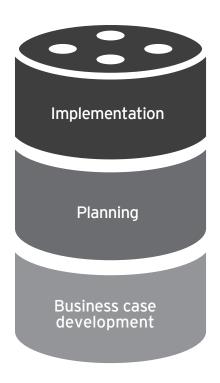
Thus, the guestion of where and how to release IVAs may be somewhat complicated. A strategic approach with distinct prioritization, planning and implementation phases can help insurers navigate a range of challenges and realize the full value proposition of IVAs.

Business case development: This phase includes thorough research and data analysis to identify economic value, prioritize use case opportunities and ensure alignment with the company's overall business strategy.

Planning: Critical steps during this phase include sketching IVA blueprints and communication flow designs, creating customer experience maps, initiating the vendor selection process and preparing the technical architecture for system integration.

Implementation: The implementation phase includes the actual development and launch of the IVAs, thorough user acceptance testing and final iterations and integrations. Post-launch, insurers should track adoption to identify areas for enhancement and opportunities to increase usage.

Three phases of successful chatbot/IVA adoption



Defining the opportunity

To determine the optimal areas to introduce IVAs in the insurance value chain, carriers should conduct a thorough opportunity assessment. This assessment will analyze business use cases across key domains. In assessing the best use cases, insurers should assess a range of criteria, including:

- Complexity and frequency of inquiries IVAs could manage
- Customer segments involved
- Economic impact and business urgency
- Security, integration and technical infrastructure requirements
- ► Implementation costs

Evaluating these factors will help insurers understand the overall value proposition for deploying IVAs, as well as the fastest and most direct paths to return on their investments. Again, the top opportunities will be those that drive to the best combination of lower costs, higher revenue, a better CX and reduced risks.

Many insurers may choose to focus on "quick wins" – use cases with high business value, low complexity and low technical requirements. For example, predefined scripts to guide customers through common and straightforward processes typically combine high business value with relatively simple technical requirements.

Automating the employee self-service is another potential quick win. Digitizing this common but important part of the user journey would remove the agent as an intermediary and provide an auditable trail from quoting a coverage price to binding a contract with a new customer.

As a technology, IVAs are relatively easy to implement, though many fail because companies lack the right strategy, fully designed experience or maintenance plans.

Based on extensive research and analysis, EY has developed a library of deployment-ready IVA use cases across the property and casualty (P&C) insurance value chain.

EY's experience confirms that insurers have many opportunities for quick wins, as well as more advanced "strategic" opportunities – use cases with high business value and high technical requirements. However, every insurer must evaluate and pursue these deployment opportunities based on a number of factors, starting with their overall objectives (see Figure 5).

Early adopters have had success with brief pilots and proof-of-concept projects before rolling out more broadly across the organization. Carriers that will be using IVAs as a new capability may consider a center of excellence as an effective model to strategize, develop, design, launch, manage and operationalize IVAs.

Figure 5: The range of IVA deployment opportunities for insurers



The bottom line: driving the future CX

As insurers move aggressively to meet the imperative of digital transformation, IVAs can – and should – be a critical part of their business strategy and digital road map. IVAs are uniquely ready for deployment, flexible enough to support a wide range of use cases and have a proven track record in delivering strong and near-term ROI. Given how they help insurers meet the conflicting objectives of reducing costs and improving customer experience, IVAs are a technology whose time has clearly come.

Contacts

David Connolly

EY Global Digital Insurance Leader Ernst & Young LLP +1 650 802 4508





Preetham Peddanagari

Principal Ernst & Young UK LLP +44 207 951 6979





Chris Raimondo

Partner/Principal, Advisory, Pl Ernst & Young LLP +1 312 879 2835





Puneet Singh

Senior Manager, Digital Enterprise Transformation **Ernst & Young LLP** +1 415 984 7279





Kaila Grafeman

FSO Advisory, Digital Enterprise Transformation Ernst & Young LLP +1 415 984 7430





Rob Webb

Life and P&C Digital Insurance E&Y Asia-Pacific Serv (HK) Ltd +64 21 36 33 36





EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited. Each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

© 2018 EYGM Limited All Rights Reserved.

EYG no. 00024-184GBL ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com