A hand is shown holding a glowing, stylized chatbot icon. The background is a deep purple with a grid of white lines and various digital icons, including speech bubbles, circular progress indicators, and data charts. The chatbot icon has a round head with two antennae, a rectangular visor with two circular eyes, and a small body with a circular base. The overall aesthetic is futuristic and technological.

Six steps for conversational bot success: A helpful primer for chatbot implementation

 **TELUS**® International

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Introduction

So, you've decided to add chatbots to your customer service strategy? Congratulations, you're now one of a growing number of innovators using next-gen technology to take their customer experience (CX) to the next level. Time and time again chatbots, or virtual assistants, have proven their ability to increase performance, reduce cost and propel live agents into more rewarding roles. The result is not just happy and loyal customers, but also a more engaged workforce.

To get the best return on your investment, this technology must be integrated holistically, with careful consideration of people, processes and technology. You may have heard some of the horror stories and seen examples of badly rolled-out digital strategies, where poorly optimized chatbots result in unhappy customers and disengaged staff. Indeed, analyst firm Forrester even predicts an overall drop in customer satisfaction levels when enterprises rush to reduce cost with poorly designed programs.

But, it doesn't have to be this way. As with most things in life, the more you put into your bots, the more you'll get out of them. Artificial intelligence (AI) and machine learning are not 'set it and forget it' solutions; they take planning, care, and constant fine-tuning. With a clear strategy, adaptive technology and the right partner, you can make this next phase of your growth journey the most transformative to date.

We have designed this easy-to-follow guide to help you get there by setting the right foundation. With cutting-edge digital customer experience capabilities and a global reach, TELUS International creates unique technology solutions with the modern consumer in mind. We've taken what we've learned through our partnerships with some of the world's most innovative and disruptive brands and packed this short guide full of insights and tips that you can apply to your own digital transformation journey.

Decision-makers say automation of workflows or processes (65%), reducing human error (58%), and improving data quality (49%) are the top three primary drivers for investing in AI.**



Chatbots: Everything you need to know at a glance

A chatbot is a software program built to handle particular types of customer interactions. They are programmed to interact with customers via various text or voice-based interfaces and complete functions ranging from basic (e.g., changing passwords) to complex (e.g., completing banking transactions).

The tasks they can handle depend on the goal of the program and the type of bot.

Three types of chatbots

1. Informational

Informational bots understand natural language and deal with basic questions posed by customers, including initiating a feedback chat or providing answers to generic FAQs to reduce call volume.

2. Personalized

Integrated with a brand's enterprise system, personalized bots have access to specific customer data, enabling interaction and resolution on a deeply individual level. From troubleshooting Wi-Fi connections, to targeted online shopping offers, personalized bots have proven effective in improving First Contact Resolution (FCR).

3. Transactional

Pulling data directly from back-end systems, transactional bots execute specific transactions on behalf of customers, such as changing payment methods or account plans. They have the potential to improve operational efficiency of the enterprise while also increasing Customer Satisfaction (CSAT) scores.

TELUS International automated the knowledge base for a global transportation company's support team. Using the intelligent TELUS International Assistant platform, an agent assist bot was built to effortlessly deliver relevant information to the customer care team from the more than 1,300 articles.



Chatbots start with data

Every chatbot starts with AI training data that needs to be collected, annotated and validated

Annotation, also known as labeling, is reliant on human expertise. Trained annotators need to manually label the media so that machine learning algorithms can understand the samples they are fed. This comes in many different forms including video annotation, text categorization or semantic annotation, to name a few. Without this, no machine learning algorithm will be able to compute the attributes relevant to its work.

Data validation is a means to check the accuracy and quality of source data to ensure the proper output. We can help your data scientists confirm that only important parameters are included while adjusting hyperparameters to improve model accuracy.

Our global AI Community of more than 1 million members includes native speakers of more than 500 languages and dialects. Discover how our team of experts can enhance your conversational AI with our [AI Data Solutions](#).



The many benefits of chatbots

Call deflection – A high number of the contacts that would have come straight to the contact center can be handled by chatbots, allowing agents to concentrate on the most complex cases. A survey conducted by TELUS International found that one of the most time-consuming work interactions that respondents wanted a bot to do for them was answering simple HR-related queries (50%).***

Voice of the Customer – Bots can capture vast amounts of customer data and analyze it through Natural Language Processing (NLP) and text analytics to determine patterns of behavior.

Cost reduction – Automating processes previously carried out by agents helps to reduce operational costs in your contact center. According to recent findings, chatbot technology has shown returns on investment for 82% of technology executives who found cost savings of up to 50%.*

Reduce customer effort – By reducing resolution times and unnecessary agent handling, chatbots decrease customer friction to improve brand loyalty and customer lifetime value.

Empower agents – By handling routine customer service interactions, chatbots free up human agents to focus on higher-value transactions.



FAQs when getting started



As with any degree of change, you will naturally have some concerns before jumping in head first. But with the right approach, resources, and collaboration, every obstacle is surmountable. Here are some of the most common questions related to chatbot implementation.

How big does the initial commitment need to be?

With any enterprise-wide rollout, ROI will be top of mind. And if this is your first bot project, you may be unclear as to just how much of an investment is required to get started. The answer is dependent on what you hope to accomplish, but you can always start small and scale from there.

What's the best way to get cross-departmental buy-in?

Not everyone in the company may be immediately enthusiastic about the introduction of chatbots, particularly those that fear any impact this technology may have on work functions. The first thing to note is that, when correctly integrated, bots make people more, not less, important to the customer experience. Secondly, in our experience, many digital transformation strategies fail because their benefits are not relayed early enough, and key stakeholders are omitted from the critical planning stage. Communication is key! (More on these points in the next section.)

Where do I start with creating the right flow documentation?

For a successful integration, chatbots must be taught the processes they are being brought in to optimize, and those processes must be correctly and comprehensively documented. If you don't have this documentation handy, consider engaging a [Process Consulting](#) partner with expertise in Business Process Improvement (BPI). Experienced in high-performing organizational structures, such a partner will understand 'what good looks like' and can create the right blueprint.

How do I build the best chatbot?

Bots should be built to meet the specific needs of your company and your customer. The more granular the detail you have on both, the better the bot you'll be able to create. Applying Business Intelligence (data mining, benchmarking, predictive and prescriptive analytics, etc.) will allow you to make sense of this data and feed it into a high-performing chatbot.

How do I know if my bot is getting results?

Central to proving ROI is the ability to measure success. By applying the right chatbot metrics, you will ensure not just a successful rollout, but one that evolves and improves over time, delivering ongoing benefits to your company.

Step 1

Communicate the value of a high-tech, high-touch approach

According to a TELUS International survey, 90% of U.S. employees believe bots will play a key role as companies transition from temporary hybrid and remote working models to more permanent virtual constructs.***

One of the greatest misconceptions about chatbots is that they are designed to replace humans, making the latter redundant. However, the opposite is true. Not only are people central to the integration and long-term success of this technology, but they can become more valuable and engaged as a result.

Understanding the valuable role of people is key to getting large scale buy-in for the project. One of the most common reasons why bot strategies don't work is failure to prepare the company culture – IT feels overwhelmed and underappreciated, frontline staff naturally fear for their jobs, and the vast professional opportunities bots create are not communicated. By first understanding, and then articulating, the opportunities this technology presents for the entire company, you'll get buy-in and cultural alignment – a foundation upon which you can build a durable, scaling technology structure. Here are three key features to highlight:

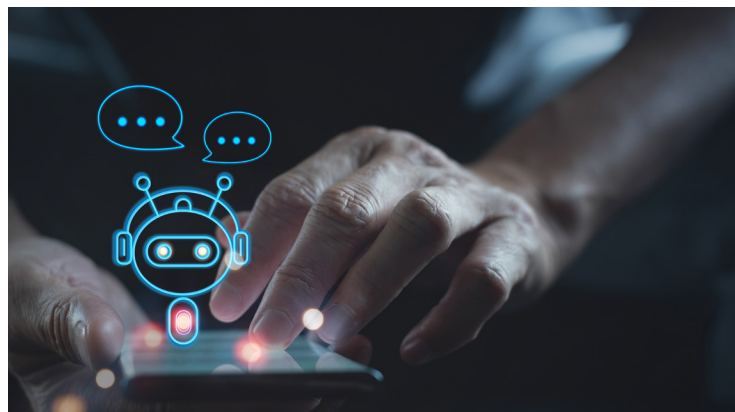
An enhanced customer experience

The most powerful bot strategy aims to complement, not replace, the human agent, leading to more personalized, efficient and consistent interactions that increase

customer satisfaction scores, brand value and customer loyalty. As an example of this perfect partnership, bots equipped with NLP have the ability to detect customer frustration, and can automatically route the caller directly to the appropriate team member for seamless escalation.

Work smarter, not harder with bots

Hard at work in the backend, bots pull large amounts of personal customer information from the enterprise systems and pop them straight to the agent's screen, allowing them to have a personalized and time-efficient engagement. The lucrative cross and up-sell opportunities that this technology provides creates further opportunities for frontline agents.





Bots are a popular addition to the workplace with 81% of employees stating that they have enhanced their work environment since the beginning of the pandemic. The majority of respondents said that bots are helpful (88%) and that they feel comfortable with integrating automation/bot programs at work (88%). Finally, 84% of those surveyed reported that they trust bots.***

Professional development opportunities

In addition to training agents in the optimal application of chatbots, consider going a step further and involving them in the initial design and build phase. Frontline agents have a direct connection with the customer and possess valuable insights into behavior, preferences and expectations. Tapping into this knowledge will ensure that your chatbot delivers an exceptional level of service and truly represents your brand. Furthermore, seeking the input of agents on an ongoing basis will help continually improve the technology.

Chatbots can be used internally to assist team members in their role and reduce cost in the process. For example, the intelligent TELUS International Assistant helped a company's customer experience team efficiently respond to queries and reduce their average handle time by 73%.

Step 2

Prep for success

In the rush to add next-gen technology to the enterprise, many companies roll out chatbots without a clear goal for what they want to achieve. The technology is also commonly deployed in isolation to address particular pain points rather than as one part of a systematic overhaul or improvement. Careful planning and incremental steps forward make for a more successful integration.

Create cross-functional teams early

It's a familiar story. One department gets the green light for the use of a new technology for the company. Deals are made, products are bought, and only then are other key departments, like IT or HR, informed about what's happening. Don't let this happen with your chatbot rollout. It is essential that the architectural implications of this new technology are blueprinted before a single step is taken, giving you the perfect opportunity to make all departments part of the entire process. Not only will this approach make for a more successful project, it will also sweep away old organizational silos, and boost cross-departmental collaboration and engagement.

The top three activities currently being automated by bots are IT troubleshooting (57%), data entry (45%) and schedule management (44%). However, the most time-consuming work interactions that respondents want a bot to do for them are answering simple HR-related queries (50%), communicating paycheck information (50%) and confirming the receipt of emails (47%).***



Financial planning

Think of a chatbot in the same way you would a human agent; they require training and education for the job at hand, and they need to be monitored and nurtured. In addition, bots require 'upgrading' as new systems and protocols are introduced to the enterprise. All of this requires an ongoing investment.

Some of the additional costs you will need to consider include:

- Documentation
- Design
- Re/Training of staff
- Technical consulting
- Reporting and analytics
- Moderation

While this financial outlay may initially seem daunting, it is essential to know that without it, there is no guaranteed ROI. However, by viewing your chatbot strategy as an ongoing relationship that takes long-term financial commitment, you will see a multi-faceted return.

TELUS International found that nearly three-quarters of executives surveyed (74%) saw improvement in customer satisfaction scores after chatbot implementation.*

Establish the right processes

Bots are designed to optimize existing processes and systems, not create them. For best results, the architecture and workflow to which they are introduced should already be strong and highly-functioning. A consulting partner with a strong Business Process Improvement track record can help you achieve this before you start the rollout of your bot implementation.

In addition to documentation, one of the processes most central to a successful chatbot strategy is your Voice of the Customer feedback loop. Straight out of the box, bots are incoherent. In order to perform the task at hand in a style and tone consistent with your brand, they must be fed with lots and lots of data, specifically, information they will need to understand what customers are asking them and how they should respond. Many enterprises don't realize that they already have all or most of the content they need in their Customer Relationship Management platform. This is just one example of how careful planning and preparation before a single piece of code is written can significantly boost the long-term success of the project.



Step 3

Consider the customer perspective

The beauty of chatbots is that they can be designed to look, sound, feel and interact in any manner and tone that you like – but this can also be their greatest challenge. In order for your bot to connect and resonate with your customers in the optimal way, you must have a clear understanding of users' needs, behavior and expectations. Only then can you deploy the type of chatbot that will move the customer experience on to the next level of engagement.

At the heart of a smooth, coherent journey towards resolution lies a carefully crafted 'decision tree'. Decision trees define exactly how the chatbot will handle each situation – they contain the mapped-out, step-by-step process of how the user will flow smoothly from the initial 'root' problem or query, to the solution at the tip of the leaf. Some of the questions to ask while designing your 'decision tree' include:

of emojis and GIFs as part of the process? Probably not. How your bot behaves and interacts with users depends on a number of factors including the customer's age, the kind of tasks it is there to help with and your own brand image. Ensure that your bot's personality is aligned with all of these variables, but also closely monitor feedback and prepare to tweak and evolve as necessary.

What do customers want from the chatbot?

While it is crucial to know what your business wants to achieve from its chatbot strategy, it's equally important to know what the customer wants to achieve from a bot. Perhaps they just want self-serve options around FAQs. Or, maybe they are looking for more advanced functions like the ability to change passwords or place orders. Knowing what customers want will determine the level of functionality and types of features the bot will need.

What kind of personality should my chatbot have?

If a customer is making financial transactions online with the help of a chatbot, do they want that bot to have a quirky tone, using lots

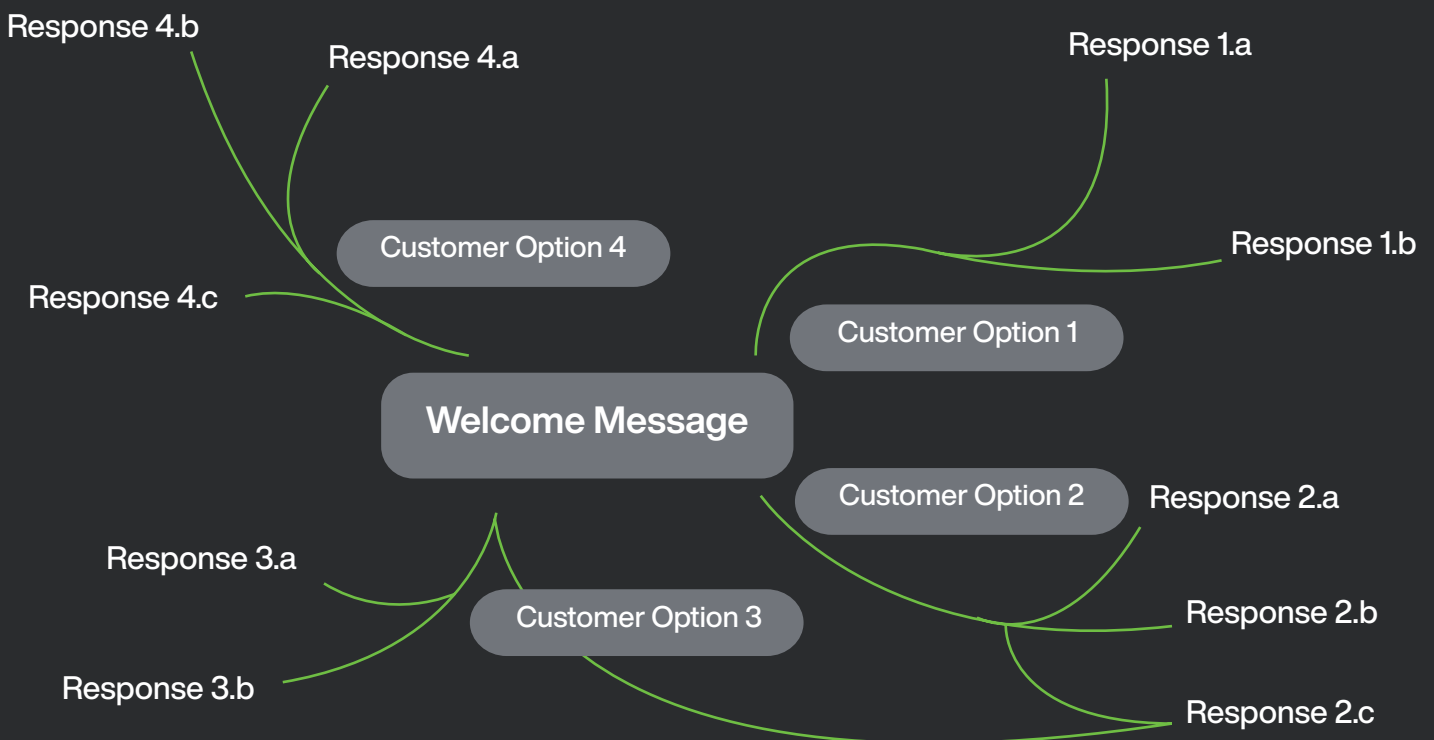


At what stage do we give customers an out?

Nobody wants to end up in 'chatbot limbo,' stuck in an interaction that is not solving the issue and appears to have no way out. When the customer feels that it's time to talk to a human, make sure they have that option. Or if you plan to automate after-hours, consider giving customers the ability to request a call back at a specific time. This will avoid your investment reducing customer satisfaction instead of boosting it.

The key to gaining critical insights into these and many more questions lies in Business Intelligence (BI) and analytics. Enterprises now have the power to gather vast amounts of data on their customers and teams, and BI helps to make actionable sense of it all. Using tools and systems such as data mining, benchmarking, and predictive and prescriptive analytics, companies can paint an incredibly vivid picture of their customers' journey, needs and behavior; and also their internal systems and processes.

Combined, these insights empower the enterprise to design an incredibly detailed and accurate decision tree, from which a successful bot rollout can begin.



Step 4

Prioritize chatbot security

Chatbots are a game-changing innovation, but they can be vulnerable to security flaws and risks. Examples of such vulnerabilities include:

- **Man-in-the-middle attacks** - when an attacker intercepts communications between two parties either to secretly eavesdrop or modify traffic traveling between the two
- **Data poisoning** - this refers to polluting training data
- **Security flaws that lead to leaked data** - this could be recycled passwords or poor social engineering

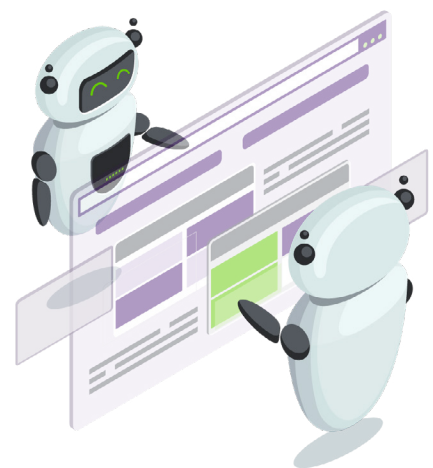
The good news is that you can protect machine learning chatbots with the proper design process.




Here are a few considerations when building your next chatbot:

Adversarial training - You can train chatbots to recognize adversarial inputs. This is a brute force solution that teaches the chatbot not to be fooled by certain images or text strings.

Defensive distillation - This encourages the machine learning model to output probabilities of classes rather than making a hard decision. This makes it more difficult for an attacker to sway the chatbot to an incorrect answer through data poisoning.





End-to-end encryption - This stops anyone but the sender and receiver from seeing a message. It's widely used and is a very robust method of ensuring chatbot and machine learning security. It's also vital for fulfilling legal obligations surrounding data protection.

Authentication - Authentication verifies the identity of the user. This is important to protect your chatbots from unauthorized access. Both authentication and authorization can come in a number of forms, from biometric scans (iris or fingerprint) to two-factor authentication.

Testing - Along with the training of your machine learning chatbots, it's important to test them, too. Not only will this help you improve the customer experience, but it may also uncover potential flaws that might be exploited.

Education of employees - Training employees on basic cybersecurity practices can help avoid a range of issues. Encouraging team members to use two-factor authentication, complex passwords and secure connections can help ensure your chatbots are protected. This training, alongside the practice of locking any machine as soon as the user steps away, is an easy way to make all your systems more secure.

Step 5

Establish the right KPIs

You can't manage what you don't measure, and chatbots are no exception. In order to get the best out of them and keep track of the return on your investment, getting familiar with the most relevant key performance indicators (KPIs) is critical. Here are six important metrics that will help you evaluate the value of this technology to your customer service strategy.

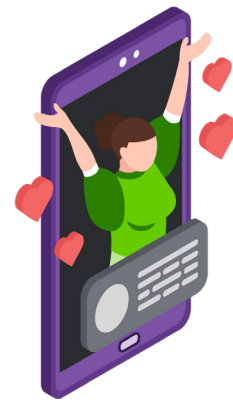
Activation Rate

Before you can measure the overall effectiveness of your chatbot, you first have to make sure that people are using it. This KPI takes in multiple metrics, including the total number of users, how many users opened a message they received from a chatbot and the number of users who engaged with the bot by sending back a message. Best practice involves measuring new, active and engaged users separately and on a monthly basis.



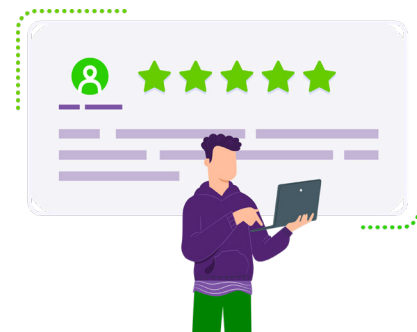
Volunteer Users

These customers choose to interact with a bot on their own accord, rather than waiting for the chatbot to engage first. Volunteer users often come to your site with real purpose and are typically more engaged than others, making them a highly valuable group to monitor.



Retention Rate

Users may interact with the bot at first, but how many are coming back to interact again within a given time frame? The higher that number, the more value customers are finding in the automated interaction. And by applying another layer of AI-powered technology, insights into exactly why those users are coming back can be gleaned through text and speech analytics.



Response Time

Automated systems are typically available 24/7 and can cut response times down to a few seconds, allowing customers to avoid waiting in queues. In fact, Juniper Research has found that bots deliver an average time saving of four minutes per inquiry when compared to traditional call centers.



Error Rate

Immediate response means nothing to the customer if it's not correct or doesn't fully address their issue. Therefore, it's critical to monitor whether the chatbot is providing accurate information that resolves the customer issue. Incorporating a "Did I answer your question?" to conclude the interaction, followed by a thumbs up or thumbs down visual cue for the customer, is a good way to take a pulse of whether your bot is delivering the correct information.

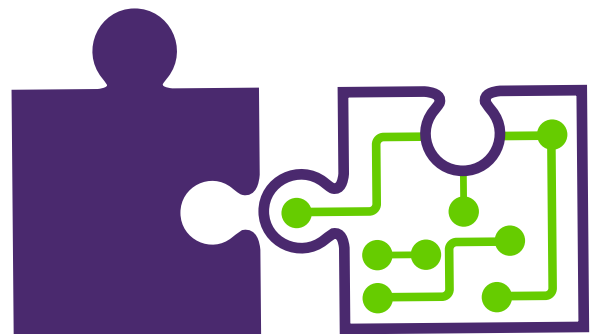


Customer Satisfaction (CSAT)

Ultimately, all roads lead to Customer Satisfaction. The goal of your digital customer experience strategy is to create happier, loyal customers, which in turn will boost the bottom line. Chatbots are designed to deliver rapid response, immediate resolution, intuitive interfaces and a frictionless experience for the customer – all of which have been proven to increase CSAT. If your chatbot is having the opposite effect, then it's time to regroup.



The three most common reasons technology executives turn to chatbot technology are to improve efficiency (64%), increase customer satisfaction (57%) and save costs (52%).*



Step 6

Explore the benefits of a partnership

When first embarking on a journey of digital transformation, a number of questions will arise, such as, 'How much work is this going to involve?' 'What resources do I need to make this happen?' And, 'Do I have the right skill sets to make this happen successfully?'

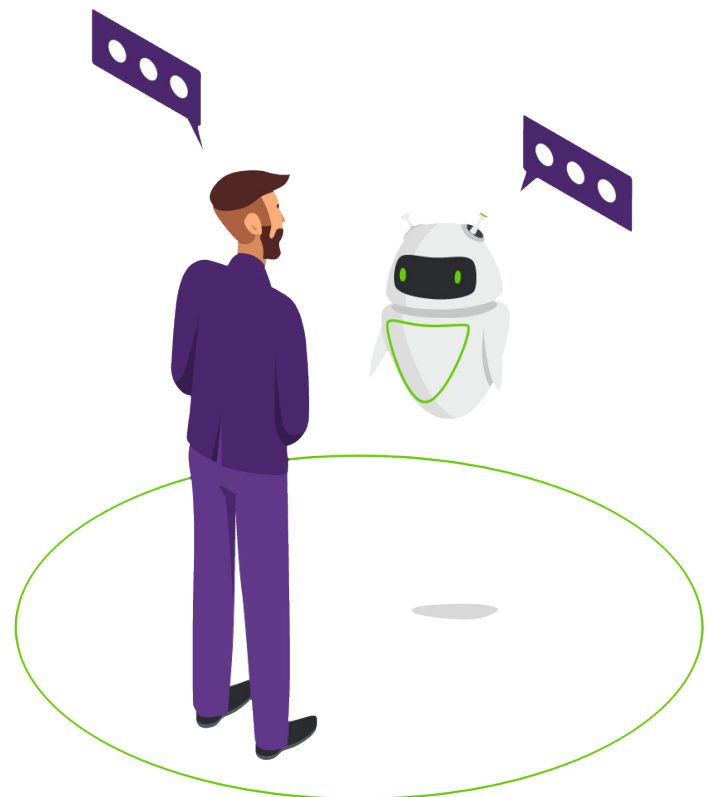
How you answer these questions will have a large bearing on what deployment route you take. Some companies choose to build their own bots or buy a white-label technology off the shelf. But without the extensive technical skills and considerable resources to dedicate solely to this project, the DIY approach can end up costing more, taking longer to deploy, and ultimately proving ineffective.

Increasingly, many enterprises are seeing the value in partnering with a digital customer experience provider that builds and deploys this technology in a highly collaborative way. Leveraging their partners' experience, tech expertise and workforce management knowledge, enterprises can carry out the digital transformation of the organization while staying focused on their core mission. Here are some of the qualities to look for in a chatbot partner:

Combined next-gen tech and customer experience expertise – Look for a partner that knows what it takes to delight customers, and can enrich and customize the technology to that end.

Knowledge of processes - Chatbots are so much more than a piece of software; they're built to replicate human actions and to learn from experience. To set the bot up for

success, the creator must deeply understand the processes they're designed to take over. A great outsourcing partner will take the time to truly understand your company and how all of the moving parts work, before building the technology designed to bring your customer experience to the next level.





A belief in 'Blended AI' – While some companies see bots as a way to replace humans, our experience shows that the ROI is far higher when the two work closely together. The best partnership is going to be based on a mutual understanding of how to blend human and machine for optimal performance.

Aligned corporate cultures – Engaged team members are high-performing team members. The more included and trusted your people feel, the more they will give back and the longer they will stay, which ultimately saves the company time and money. Look for a partner that puts their people first across all functions, from contact center outsourcing to digital expertise and beyond.

Innovation and continuous improvement – Service Level Agreements (SLAs) and targets are a key part of every partnership, but a great customer experience provider will view them as a place to start, not stop. In other words, the right outsourcing partner will strive to continually improve every process and system connected with your business, far beyond the base level set out in the contract.

Conclusion

The global chatbot market size is expected to reach USD 2.49 billion by 2028, according to a new report by Grand View Research, Inc. Further, the market is anticipated to expand at a CAGR of 24.9% from 2021 to 2028. This makes it clear that enterprises have no choice but to consider integrating this technology into their operations in order to stay ahead of the competition. Most importantly when launching bot applications, the entire project must be executed with one person in mind: the customer.

As a customer experience innovator that designs, builds and delivers next-gen digital solutions for global and disruptive brands, our team of experts can assess your specific business needs and map out the most effective and efficient bot program for your brand. Connect with us to learn more.

telusinternational.com/contact

- * Pulse survey of global technology leaders who have implemented chatbot technology at their business. (June 2021)
- ** Pulse survey of global technology leaders on AI strategy. (July 2021)
- *** Pollfish survey of 1,000 employed Americans who currently work in a desk-based job for an employer that uses bots to automate one or more work tasks. (Sept 2021)

About TELUS International

TELUS International (NYSE & TSX: TIXT) is a global customer experience and digital transformation solutions provider with delivery centers around the world, including in North and Central America, Europe and Asia.

TELUS International designs, builds and delivers next-generation digital solutions to enhance the customer experience (CX) for global and disruptive brands. The company's services support the full lifecycle of its clients' digital transformation journeys, enabling them to more quickly embrace next-generation digital technologies to deliver better business outcomes. TELUS International's integrated solutions span digital strategy, innovation, consulting and design, IT lifecycle including managed solutions, intelligent automation and end-to-end AI data solutions including computer vision capabilities, as well as omnichannel CX and trust and safety solutions including content moderation. Fueling all stages of company growth, TELUS International partners with brands across high growth industry verticals, including tech and games, communications and media, eCommerce and fintech, healthcare, and travel and hospitality.

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