



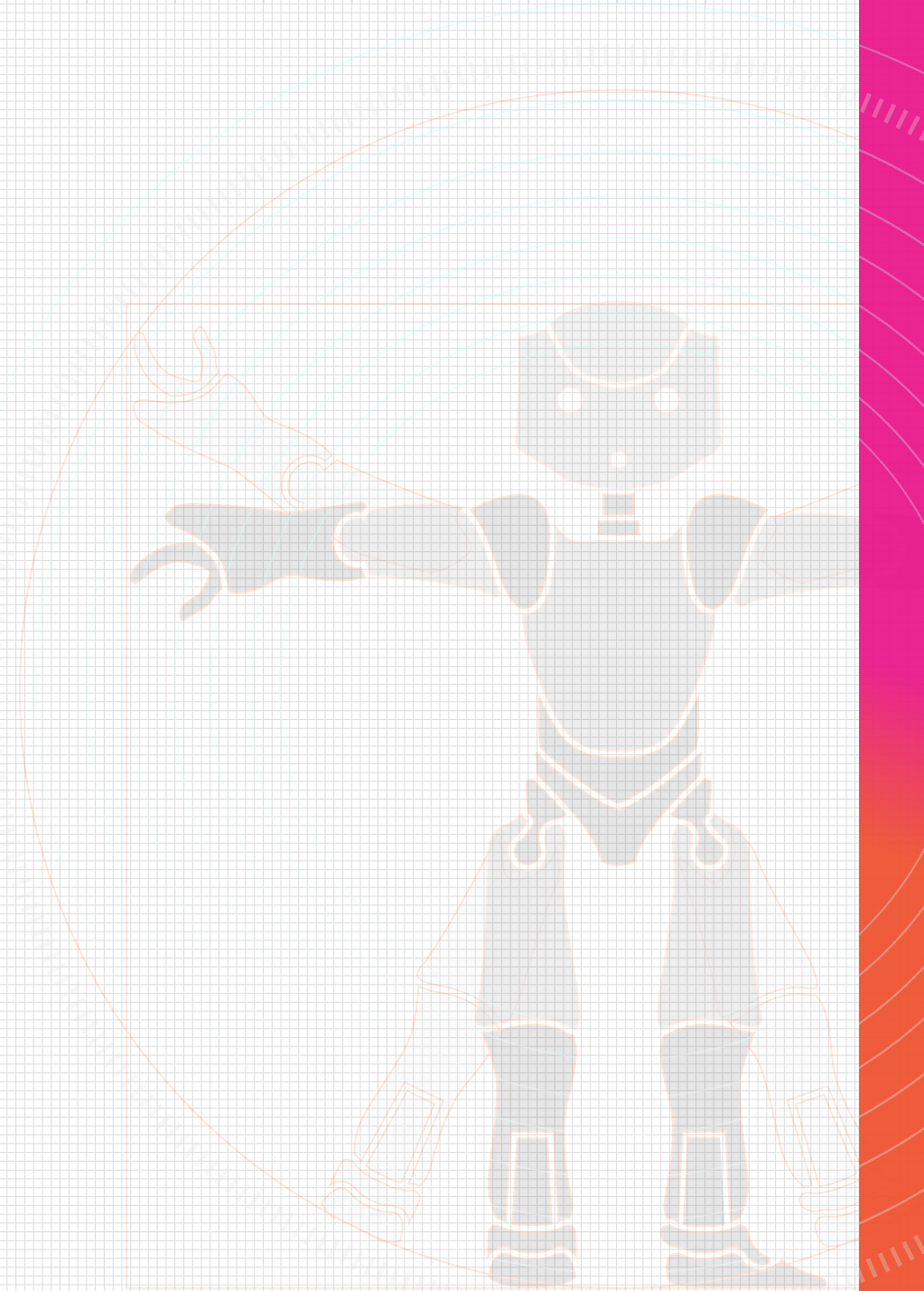
WHITE PAPER

CHATBOT CHINA: THE RISE OF CONVERSATIONAL COMMERCE

LEWIS is a global communications agency built to help and inspire brands to shape tomorrow. We provide full PR, marketing and digital services to drive tangible results for clients around the world. Consistently named as one of the industry's fastest-growing agencies, LEWIS has 550 staff across 29 offices throughout Asia, Europe and North America.

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THE COMING OF A NEW ERA

The age of the internet is constantly changing the way we live and connect, and at a time of mass digitization, Chinese netizens are relying more on their hands rather than their feet.

As one of the first whitepapers in the industry to explore the significance of chatbots in the mainland Chinese market, this paper aims to explore the applications, benefits and current limitations of this emerging technology.

Before we uncover how the Chinese chatbot market quickly gathered momentum to form into a sector led by industry giants, we will first examine the origins and rise of chatbots from a global perspective.

Supported by first-hand data from over 1,000 Chinese consumers, the analysis and conclusions in this paper are focused on answering a singular question — **what does the future hold for chatbots in China?**



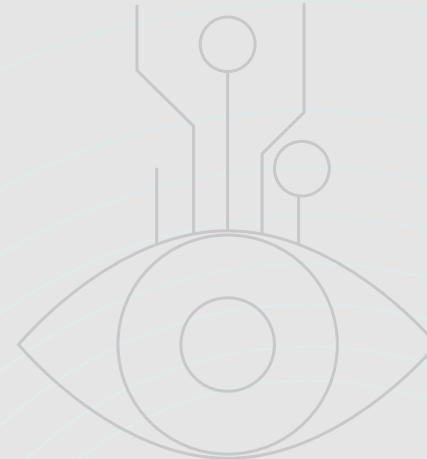
From Albert to Everywhere

China has witnessed a profound rise in all kinds of communication tools – from instant messaging to video calls, from QR codes to Augmented Reality and during this time, chatbots have evolved from an obscure concept to implementation among leading Chinese businesses.

The first ever chatbot - **named Albert** was invented in the 1980s and heralded the dawn of a new innovation that has witnessed significant rates of adoption in recent years. In fact, the global chatbot industry has grown at a compound annual growth rate of 35 percent¹ since 2015.

It is, however, a market that has so far been driven by tech giants. Globally this has included the likes of Facebook, Google, Microsoft, Apple and Amazon, while in

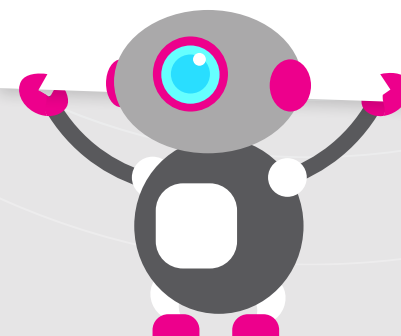
China, domestic heavy-weights like Baidu, Alibaba and Tencent (BAT) have so far lead the way. Many smaller high-tech players are now rapidly following suit - all driven by the need to keep up in a highly digitized market.



Processing speed
1,000
times faster than human

\$8bn
saved every year

80%
of firms are considering
deploying chatbot.



China's Shift to 'Conversational Commerce'

In the last five years, with the support of national policies, e-commerce has become the 'new normal' for business in China. And in order to be successful in this highly competitive arena, companies are being pushed to provide an ever more personalized user experience.

This has led to the emergence of 'conversational commerce' which allows consumers to regularly and easily engage in communication with brands across apps, social media and chat software.

However, an increasing number of contact points put great pressure on brands to provide an always on service to consumers that in turn can lead to spiraling customer service costs.

The rise of chatbot technology has provided brands with an all-in-one solution – one that can be deployed throughout the whole sales process and effectively reply to vast quantities of consumer questions.

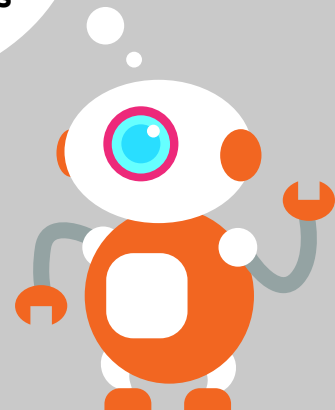
The demand for chatbots from consumers, who expect brands to answer their questions anytime and anywhere, is also increasing.

According to a recent Nielsen² report, 53% of consumers prefer retailers that provide instant chat functions; meanwhile Gartner³ predicts that by 2020, 85% of brand interactions with consumers will no longer be made by humans.

This presents a challenge, and an opportunity, for brands as all signs point towards a future that is increasingly dominated by conversational commerce.

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Accelerated Iterations of Innovation

In the past few years, Artificial Intelligence (AI) technology has developed at a rapid pace in China. According to McKinsey⁴, the Chinese AI market will grow by 50% annually; much faster than the expected 20% compound annual growth (CAGR) of the global market.

The government's 'Next Generation Artificial Intelligence Development Plan' also outlines a three-step strategy designed to support the domestic chatbot market. The first step outlined is the development of home-grown world-class capabilities in AI technologies and applications by 2020. The second step is to become a world leader in the production of AI technologies and applications by 2025, positioning AI as a major force that will drive economic transformation in China. The third step is to achieve a world leading position in AI theories, technologies and applications

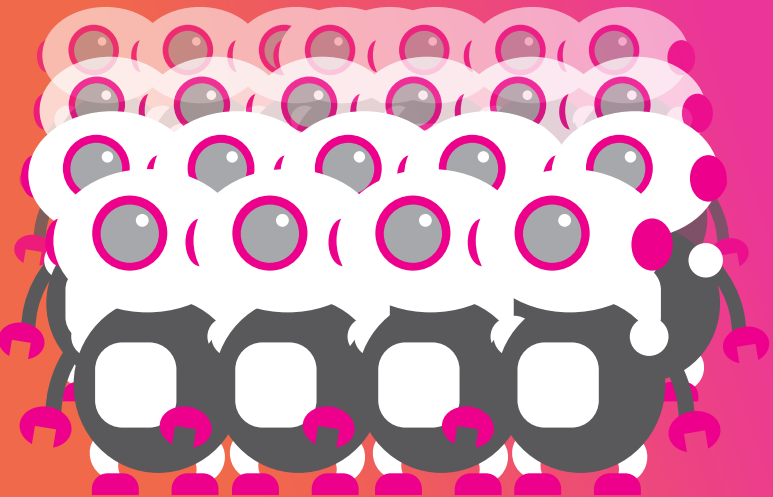
by 2030, and become a center for global AI innovation.

The development of this cognitive technology has been, and will continue to be, fundamental in the rise of chatbots meaning China stands to become the hotbed of chatbot development.



33,000

chatbots are currently
being launched and used on
communication platforms.



How Chatbots Are Changing The World

To understand the potential of chatbots, we first need to understand how they work. In simple terms, chatbots are a combination of AI and robots. The robot is the body and AI is the brain. The robot interacts with the physical world via sensors and actuators, while the AI provides real-time feedback and analysis.

It is the AI function that enables
chatbots to demonstrate intelligent,
human-like behaviors.

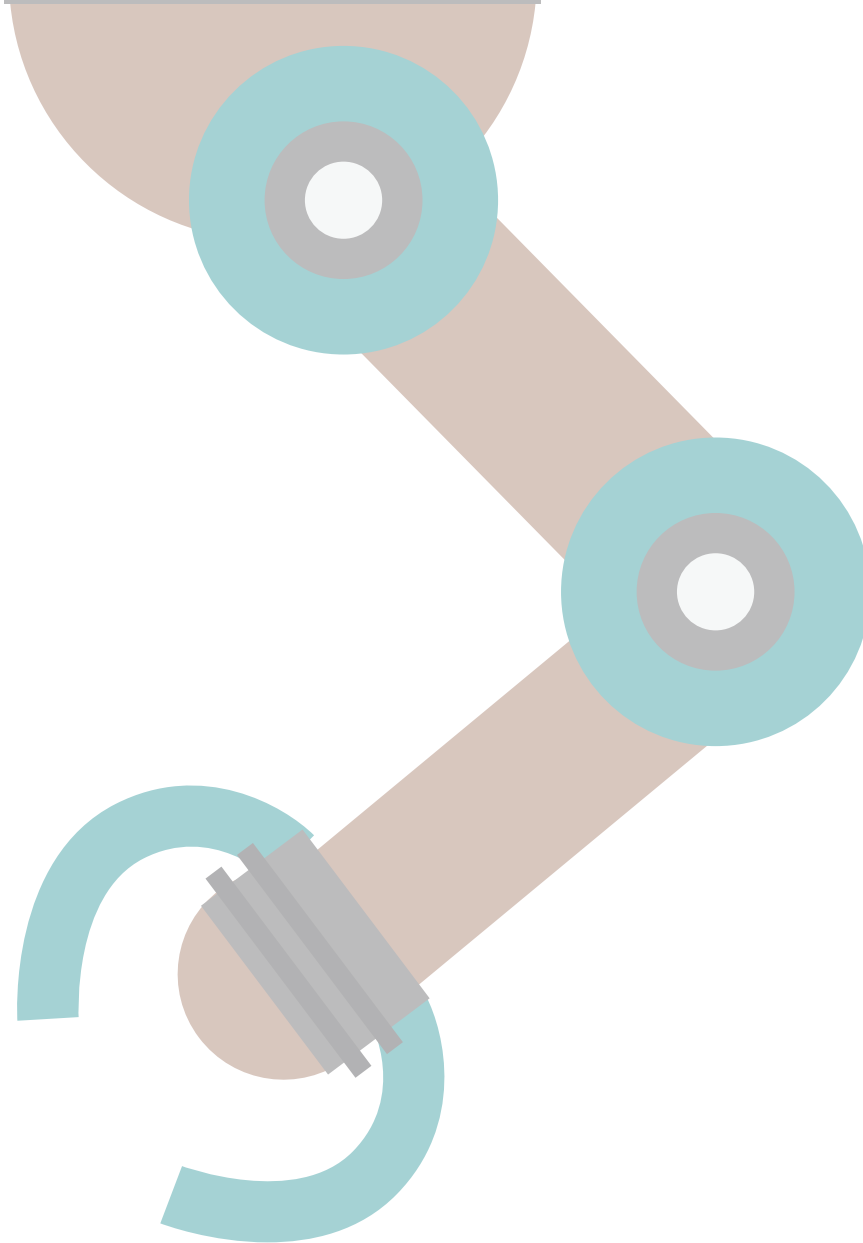
To achieve this, there are multiple processing layers in the robot which form a neural network to calculate complex data. The structure of these neural networks is based on the human brain and designed to determine the importance of each task assigned to them before carrying it out. This network can keep adding new layers and change its structure to achieve deep learning and self-development, meaning its intelligence will grow with the amount of data it acquires.

This makes chatbots a welcome addition to customer service departments. They can clearly define the value of each interaction by tracking conversations, visitor origins, frequently asked questions, and the number of times users have had to switch to manual services.

Currently, most online chatbots are integrated into social media channels like WeChat, and can support multiple message types such as text, image, voice, video and links. Facebook has integrated chatbots into its Messenger application to further engage users and offer brands new means of interactions with their customers. Chatbots are also increasingly being integrated into websites, offering visitors yet another way to communicate directly with the brands they love.

Chatbots are no longer just an obscure scientific concept, they have already become an efficient communication tool. Based on the results of our research for this whitepaper, almost all 1,000+ respondents had heard about chatbots, and almost a fifth (19%) have used them.

They are expected to bring revolutionary changes to many industries, largely replacing repetitive work and performing multiple simple tasks like guiding customers, problem solving, handling orders and redirecting traffic. Chatbots can also support in improving brand awareness and product coverage through personalized features, increasing customer loyalty and decreasing customer turnover.



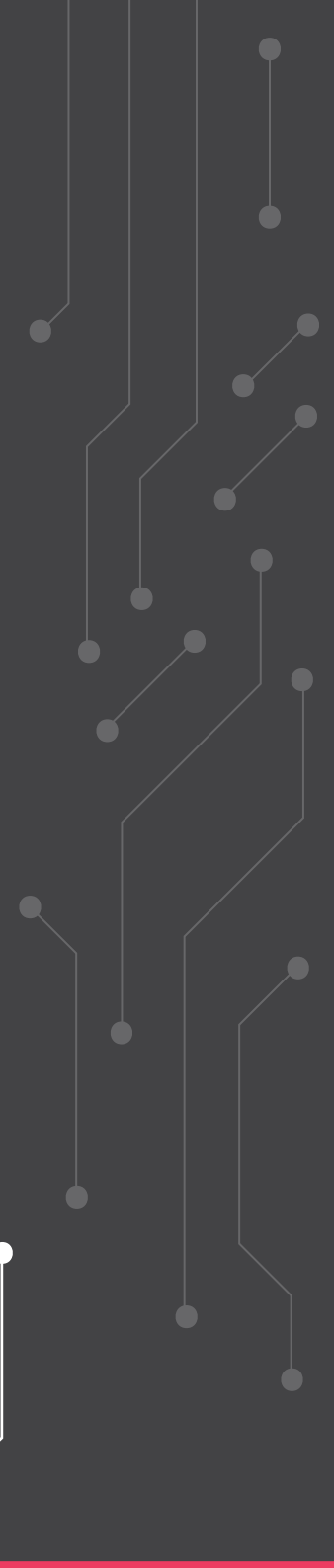
Chatbots in China

The applications of chatbots in China have been applied to multiple industries. Baidu launched its virtual personal assistant 'Duer' to help consumers search information, buy tickets, and order meals. Taobao.com introduced its AI bot 'Alime', which has been gradually taking on more of platform's huge customer service operations. **China Mobile launched its customer service bot 'Yiwa'; Pacific Life launched 'Xiaomai'. Even NetEase has started to build its own AI team, launching a fully intelligent cloud customer service product 'NetEase Qiyu'.**

AI chatbots are also prevalent in the finance, insurance and tourism sectors, delivering intelligent self-service support to customers around the clock and alleviating the burden on traditional customer service staff. Prominent examples of those businesses already using chatbots include Alipay's Ant financial platform and Home Inn.

In entertainment, chatbots are helping to promote new games, movies and TV programs by selling to target customers. Chatbots are also being applied to journalism to recommend global news to users by capturing and analyzing data to deliver a customized news feed.

Moreover, chatbots will play an increasingly crucial role in business management and human resources. For instance, helping HR departments collect candidate information, screen job seekers and make reasonable job matching suggestions.





CURRENT STATE OF CHATBOTS IN CHINA

Understanding Consumer Perceptions

To understand why chatbots have become increasingly popular, we first need to analyze the changing Chinese consumer. LEWIS surveyed 1,064 Chinese consumers, to get a better understanding of their habits and thoughts about the applications of chatbots.

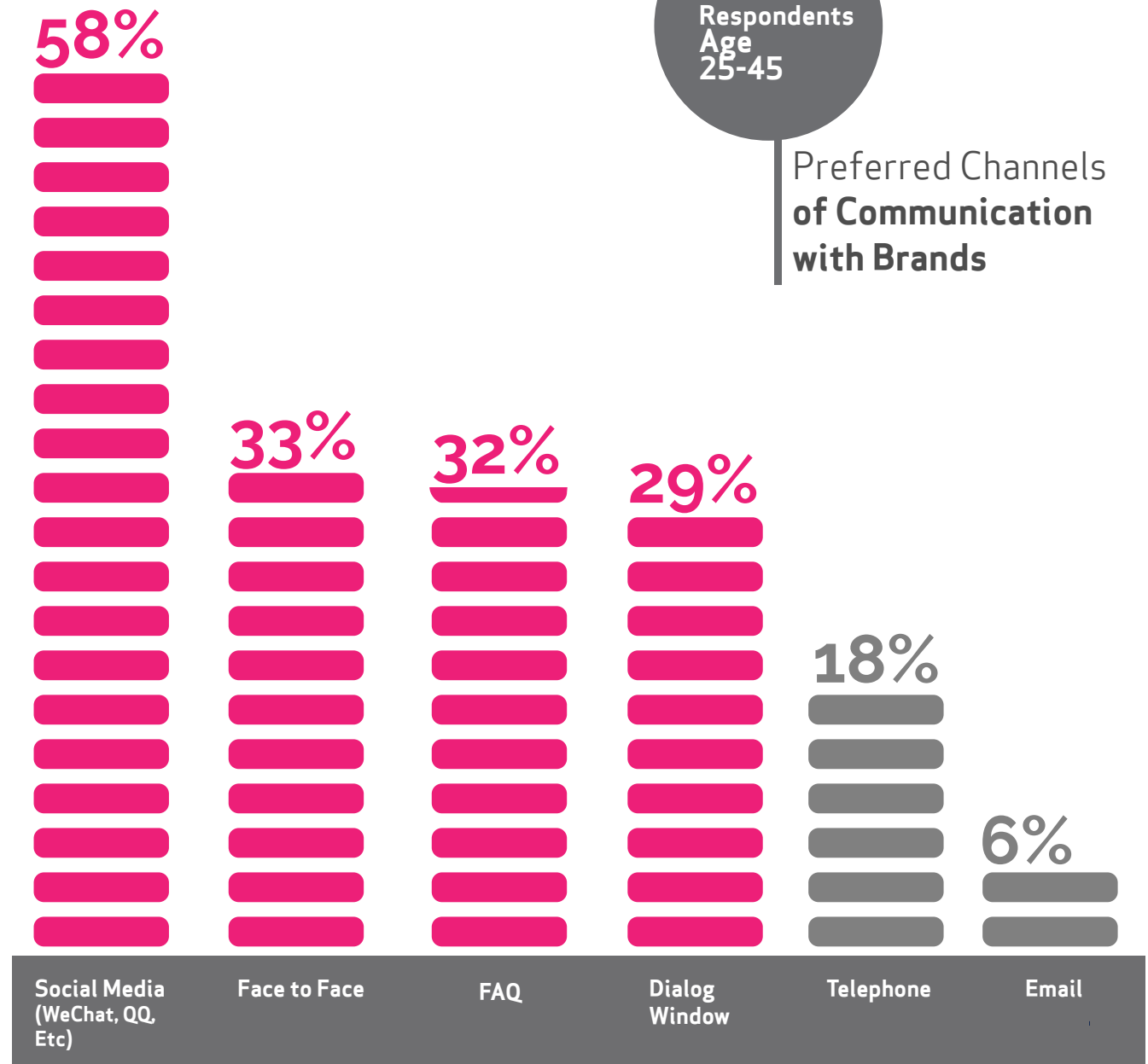
The respondents were made up of 205 marketing practitioners from 12 major industries including marketing, advertisement, media relations, IT, manufacturing, tourism, catering, entertainment, real estate and retail. The majority are based in Beijing, Shanghai, Guangzhou and Shenzhen and all are aged between 25-45.

The results reveal Chinese consumers' interactions with brands are moving away from human exchanges, towards digitized ones.

When asked which channels of communication they prefer,

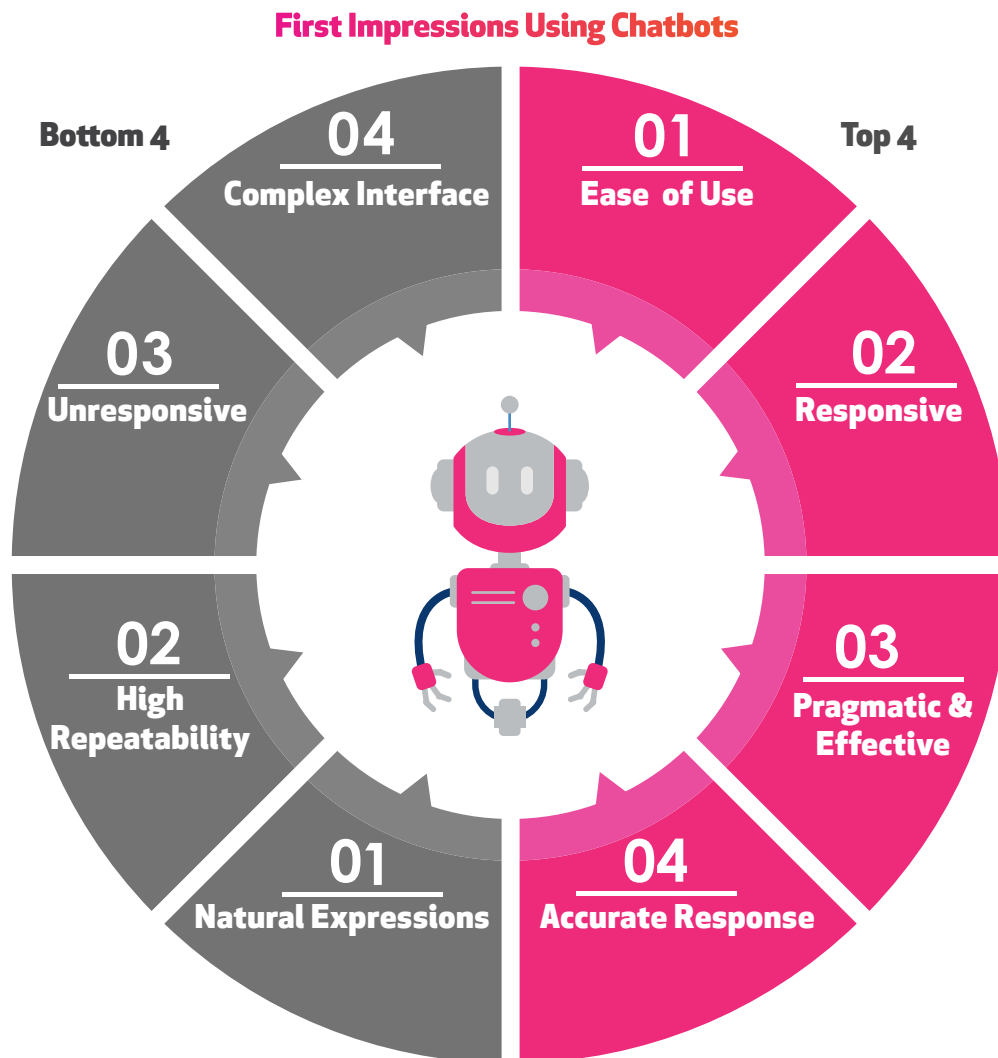
most respondents choose to interact via social media channels like WeChat, QQ, and Alitalk. This is 25% more than those who prefer face-to-face interactions (33%) or reading FAQs (32%). Once the dominant method, interacting via the telephone is now ranked fifth, with just 18% of respondents preferring to communicate this way.

Chatbots have risen in part because of their ability to fulfill the needs of these consumers and offer the best of both worlds – combining the simplicity and accessibility of social media interactions, with the personalized interactions of face-to-face or telephone communications.



Chatbots in Action

In their first interactions with chatbots, respondents found them easy to use, responsive, effective and accurate. However, they also expect more when it comes to verbal naturalness, response speed and interface design.



Marketing respondents in particular were impressed with the speed and accuracy the technology can offer, highlighting that many marketers view it as being able to solve key pain-points in the consumer journey.

This is further reflected in the responses of those in the marketing sector when asked about the problems they experience when receiving customer service. Severe service gaps were revealed in two aspects: **customer feedback being processed in a timely manner and training/labor costs remaining high.**



Unsurprisingly, when asked about the advantages of chatbots, marketers were most impressed by the technology's **ability to help save on these labor costs (74%)**, followed by **efficient communications (56%)** and **improved customer experience (43%)**.

Advantages of Chatbot According to Marketing Respondents

74%
**Saved
Labour Costs**

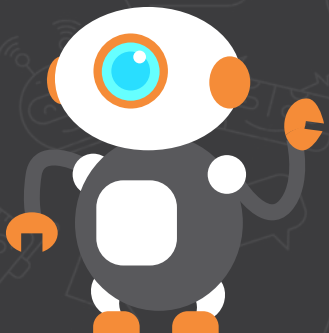
56%
**Efficient
Communications**

**Improved
Customer Service**
43%

19% **Enhanced
Branding**

21% **No Hard Sell**

**Increased
Revenue** **32%**



Those outside of the marketing function also recognize the merits of chatbots. Over half of them value their ability to provide intelligent responses (54%) and that they are always online (50%). Many also described chatbots as 'handy' (42%), and 'patient' (29%).

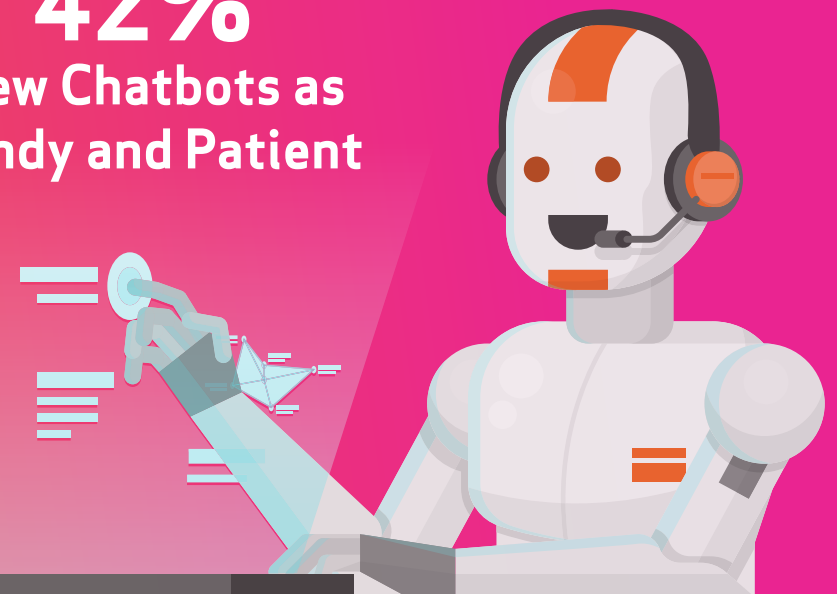
When it comes to the disadvantages of chatbots 44% are frustrated at receiving irrelevant answers, while 42% highlight a lack of emotional connection.

Currently, 75% of marketing respondents have already used chatbots in some capacity. The same percentage (75%) of them are also willing to use this technology to promote their products and brands.

Among the marketing respondents who are already using chatbots in their brand building efforts, 45% have been using them for less than a year, and 42% for between 1-3 years.

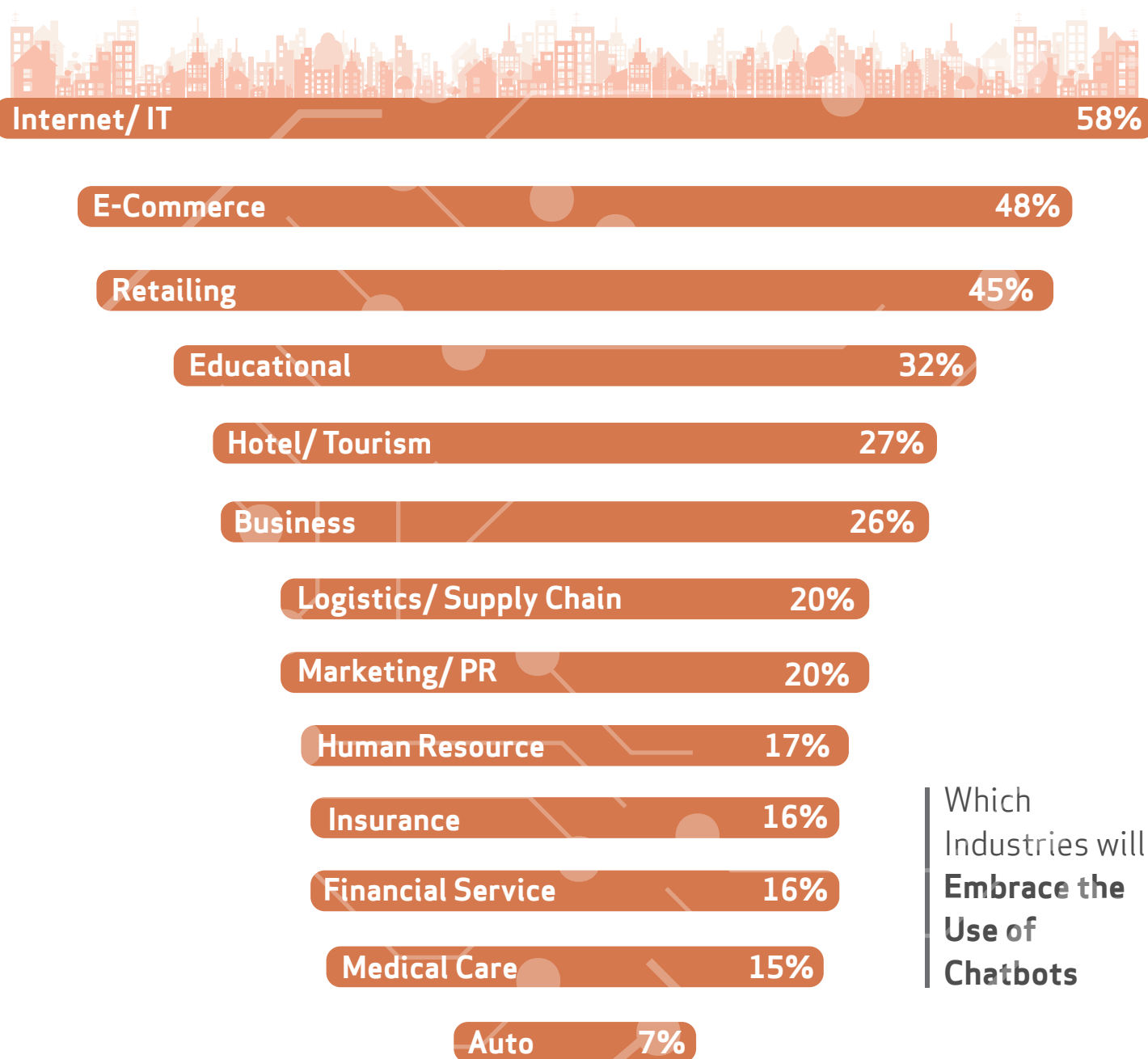
Respondents have come across chatbots in a variety of scenarios – when researching new products or services, reading company or brand news, searching for sales promotions and discounts, receiving after-sales services, ordering products or making payments.

42%
view Chatbots as
Handy and Patient

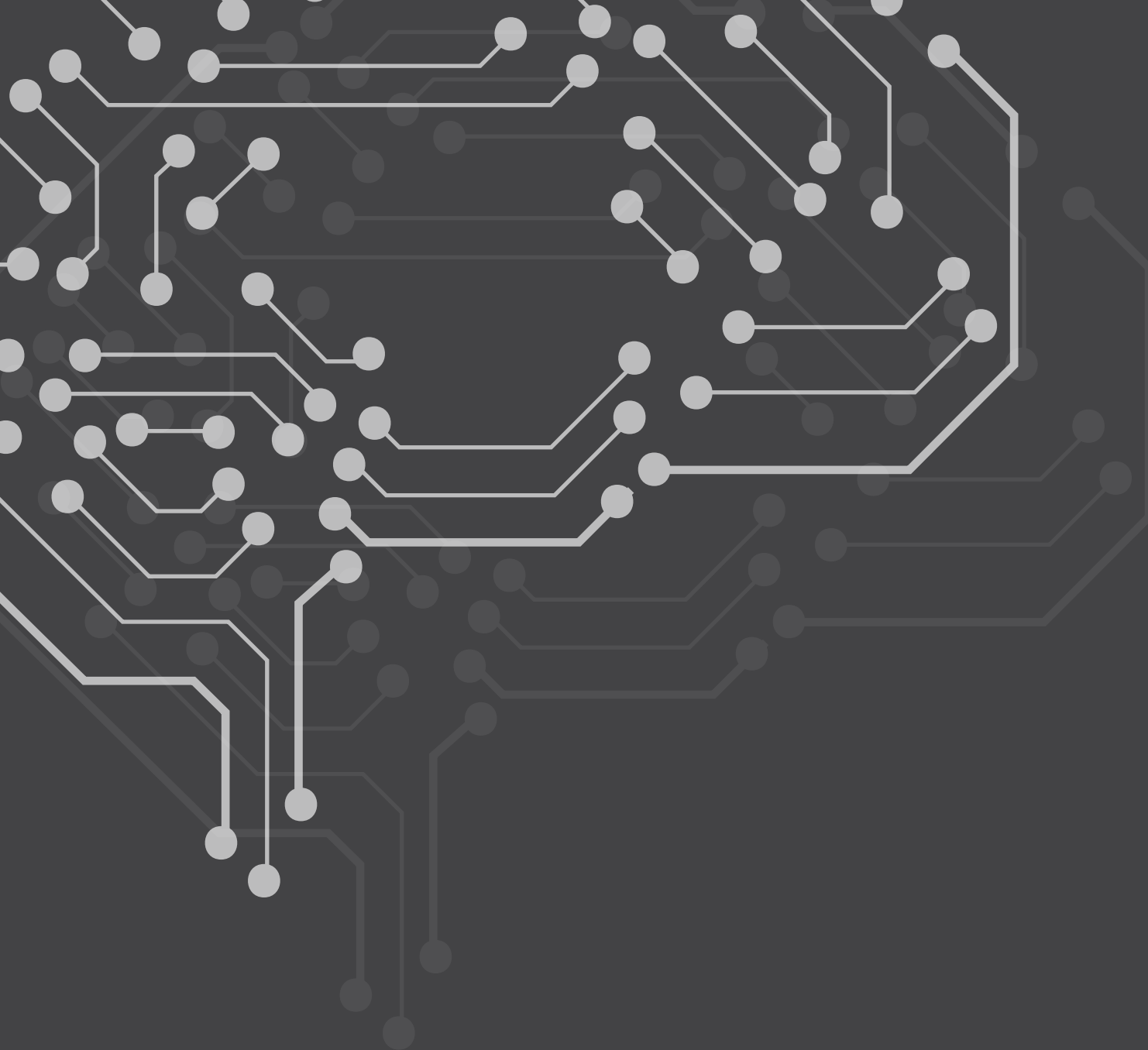


As a result, the spread of industries in which respondents expect them to be applied is wide. Most expect online technology companies will be the first to use them, followed by retail and FMCGs, and finally by industries as diverse as education, tourism, consultation, logistics, and PR.

Company websites and WeChat accounts are where the majority have been rolled out and the most companies have been pleased with the outcomes, with 77% of respondents stating they were satisfied with chatbot results and 23% feeling they are average. None came away feeling unsatisfied.



Which Industries will
Embrace the Use of Chatbots





Areas of Improvement

Perhaps due to these positive initial results, marketing respondents have high expectations for chatbots in the future. They hope chatbots can be smarter and expect significant improvement in the following areas:

- Verbal naturalness 54%
- Logicality 35%
- Information security 33%
- Conversational interface design 28%
- Information usability 25%

Interestingly, a quarter of respondents also hope that there can be more seamless integration between chatbots and human service, highlighting that many see the value in chatbots acting as auxiliary tools to human interactions.

When it comes to expectations on new features, 68% of marketing respondents hope chatbots will be able to easily switch between languages, while 58% look forward to better integration of user information across channels.

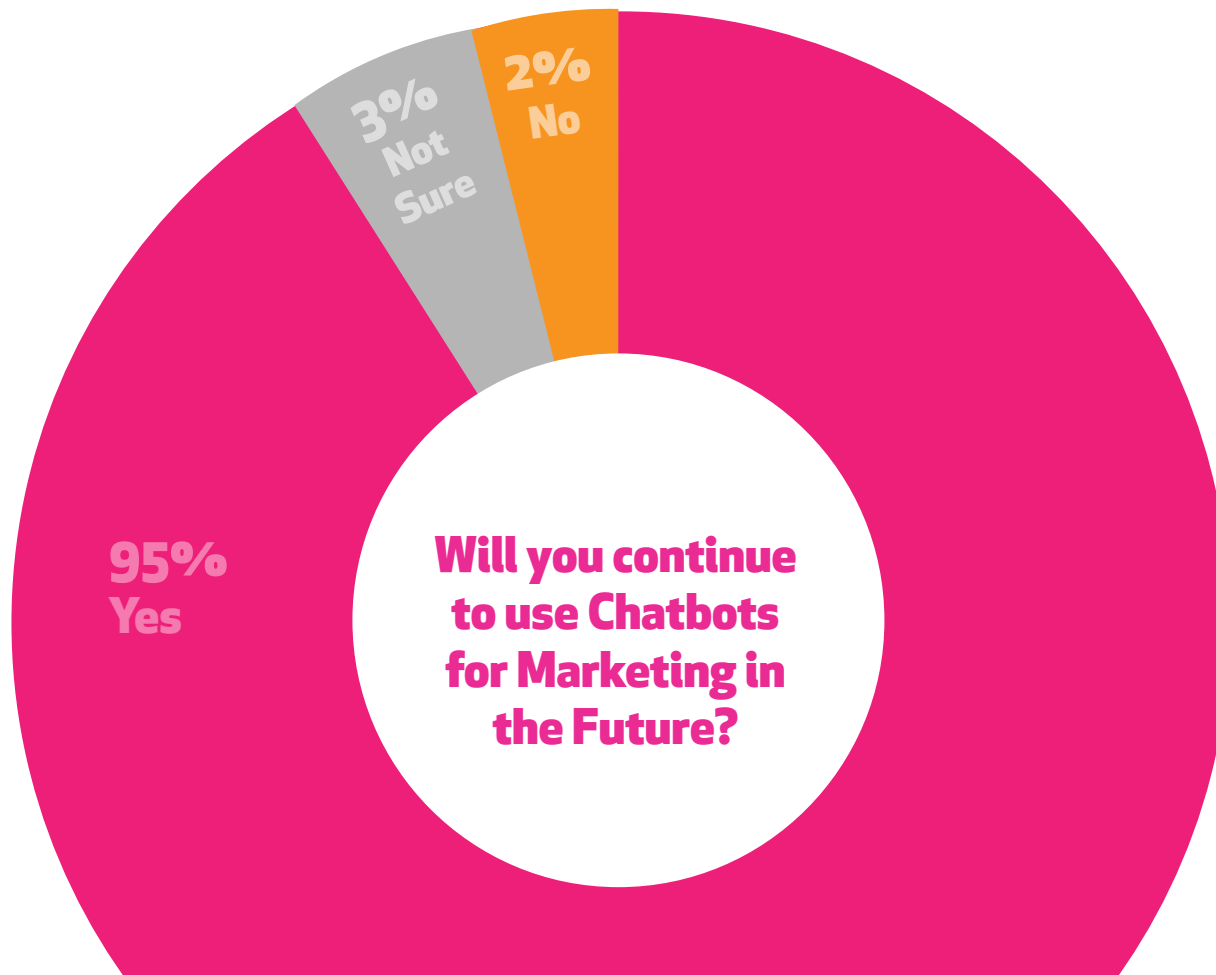




WHAT DOES THE FUTURE HOLD FOR CHATBOTS?

A Future Filled with Bots

One thing is clear, chatbots are on the agenda for marketing professionals in China. Among those who are not currently using chatbots, 41% say they plan to build chatbots into their offerings within the next twelve months. And among those who are currently using them, 95% say they will continue to use chatbots for the foreseeable future.



The greatest concern surrounding chatbots is whether they can offer superior functions when compared to human interactions.

Queuing problems are often unavoidable for human customer service systems, particularly in China where companies often handle inquiries from extremely large volumes of customers, a process that can be both time and resource consuming. Chatbots largely eliminate this problem, delivering consistent operations regardless of time or volume.

This is why chatbots have won support from over 60% of marketing respondents who say they plan to replace traditional customer service reps with chatbots in the future. Moreover, nearly 90% of respondents are optimistic about the future applications of chatbots technology.

Will Chatbots Replace Traditional Customer Service in the Future?

**13%
No**

**24%
Not Sure**

**63%
Yes**

Restrictions in Application

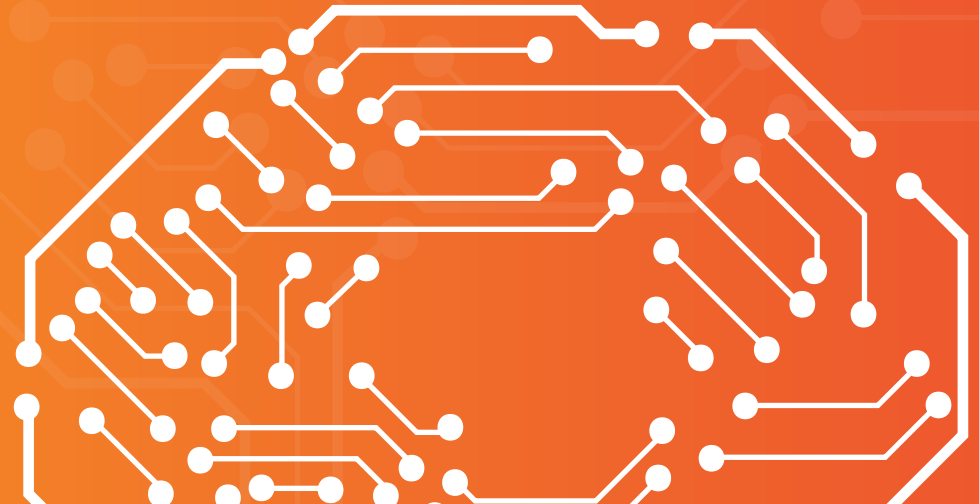
As with any new technology, the distance between conception and mass adoption can vary. Understanding the limitations of chatbots can shorten this distance and speed up their development. Current restrictions include:

- **Natural Language Processing (NLP)** – 54% of marketing respondents feel chatbots require urgent improvement in verbal naturalness. The hope is for chatbots to eventually be able to communicate smoothly and express themselves in a colloquial manner
- **Empathy** - Humans are empathetic and are drawn to emotive storytelling. For chatbot

interactions to meet this need, they must constantly be fed with data, then analyze and learn from it to create responses that are sensitive to customer needs

- **Data Security** - Data security has become a common concern in the digital age. Users do not want their information to be exposed or used without their permission. Unless platforms can ensure end-to-end encryption of data shared with chatbots, consumers will be hesitant about the data they share with them

CONCLUSIONS



Conversations with the Future

The birth of new retail and development of e-commerce has created a market of Chinese consumers that demand efficient and individual experiences – a zero moment of truth.

In this everchanging business world, the competition for attention is intensifying as brands target consumers at multiple touch points. Building new conversational mechanisms, such as chatbots, will be key to cutting through this noise and reaching audiences in new ways.

As AI capabilities in China accelerate, the application of chatbots will become faster and their responses more accurate, facilitating a more user-friendly and intelligent AI-driven conversational interface. Chinese organizations have

already seen the potential of automatic conversation via chatbots - they can be integrated into diversified scenarios and used in various industries such as finance, retailing, e-commerce, business management and entertainment.

Chatbots will continue to revolutionize Chinese customer service by providing real-time and individualized interactions. Instead of replacing human conversations, chatbots will build a bridge between brands and consumers, effectively improving user loyalty and reducing customer churn, whilst offering significant cost savings for enterprises.

The era of chatbot China has just begun.

For more insights visit teamlewis.asia or get in touch with your local LEWIS office.

1 - <https://yourstory.com/2017/11/chatbot-market-in-india-in-2017/>
2 - NA

3 - https://www.gartner.com/imagesrv/summits/docs/na/customer-360/C360_2011_brochure_FINAL.pdf

4 - <https://www.mckinsey.com/-/media/McKinsey/Industries/Advanced%20Electronics/Our%20Insights/How%20artificial%20intelligence%20can%20deliver%20real%20value%20to%20companies/MGI-Artificial-Intelligence-Discussion-paper.ashx>



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