

Let's talk about innovation

How large language models like ChatGPT can change the way we practice

By David Haworth

Few technologies generate conflicting emotions as much as artificial intelligence. Although it's been around in some form for years and the inevitability of Moore's Law should have left no one surprised we were going to see these tools, the volume of the conversation dramatically increased in November 2022 with the release of ChatGPT, the first publicly available large language model. ChatGPT is a chatbot that makes it possible to hold a very-close-to-real conversation with a computer. Since then, other types of AI models have been released that create images, movies or audio files that are sometimes indistinguishable from those generated by humans alone. I think we can all be forgiven for some degree of future shock.

That said, there is truth in the saying that you will either use AI tools or be displaced by AI tools, and the sooner we understand the basis of these technologies and how they might be used in our profession, the faster we can utilize them to make our lives easier and more efficient. The fact is these are flawed (but improving) tools that, when incorporated into our work patterns, can make our lives immensely better. The core of our profession, the technical skills of evaluating, diagnosing and forming treatment plans for animals, will not

change or be replaced. But the ease and efficiency with which we can perform these tasks can, in fact, be radically improved.

What is a large language model?

At their core, chatbots like ChatGPT are AI engines coupled with a conversational interface. They are computer constructs that have been fed massive amounts of open-source data, that are designed to calculate what words, in which order, have the highest probability of making the reader satisfied. This is the key to both their great potential as well as their biggest flaws. They really want to please us, and just like human employees who want to please us, they sometimes go a little overboard.

The conversational aspect is the breakthrough here, compared to previous computer interfaces. If anyone can remember when the computer mouse was introduced, I predict large language models are on the same scale of improvement over function keys. The answers to questions or requests are interactional and the responses can be refined to more accurately address the issue we are pursuing through a conversation. Yes, you can have them respond in the style of a famous actor or character, but you can also have them more

Highlights:

- Artificial intelligence won't change the core of veterinary medicine—technical skills like evaluation, diagnosis and treatment—but it can radically improve ease and efficiency of key tasks.
- Tools like ChatGPT can help practice leaders generate revenue-building ideas and personalized instructions for clients, saving staff time since all they have to do is review the copy and make sure it's accurate.
- As the technology improves and becomes more accurate, it will be able to help practice teams save time on the tasks they don't love so they can focus on what they really care about: treating patients, working as a team and serving clients.

specifically address a question, shorten their response to a certain number of words, make an argument both for and against a particular viewpoint or frame the response in a more conciliatory manner—or a compassionate manner, or a firm manner. That aspect initially feels like a party trick, but it has serious applications, especially in veterinary medicine.

What can they be used for?

Which leads us to ask about the big “so what?” Do I really need a computer program that can write a wedding speech in the style of Liam Neeson's character in the “Taken” series? Large language models like ChatGPT can be used for a huge number of applications,

and more are being explored every day. The most obvious are: 1) help generating new ideas, and 2) generating text that's sort of a pain to write yourself (especially if you are not a naturally prolific writer) that you can then edit.

Prompts like "Give me 50 ideas for attracting new clients to my two-doctor veterinary practice in rural east Ohio" will provide you with exactly that, in less than 20 seconds. Now, to be clear, many of these ideas will be terrible or blindingly obvious (i.e., "Utilize SEO to gain web traffic"), but some may spur an idea that would not have occurred to you by yourself (i.e., "Invest in mobile practice tools to better serve nearby rural townships without veterinary services"). ChatGPT can only create from the sources it has been fed, so it is not a great fact-finding tool (that is what Google searches and Wikipedia are for), but it is an untiring idea generator.

The same process can work for "reasons this 2-year-old Chihuahua is vomiting," "ideas for staff enrichment activities" or "witty sayings for the entrance sign." And ChatGPT yields better results the more detailed your request becomes. Again, the computer constructs are using probability equations to predict which words follow one another in an order that will yield a "positive" result, so some of these will be crazy or factually wrong (these are called "hallucinations"), but some will be pretty good. Maybe better than you could do yourself, especially at the end of a long day. Computers don't have long days.

You can also use ChatGPT to generate personalized text much faster than you could yourself.

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This could be a huge help in client communication. "Please provide detailed discharge instructions for a 2-year-old, female, 5-kg Yorkshire Terrier named Lucky who just had a cranial cruciate repair surgery" yields a passable first draft, outlining nine areas for owners to be aware of, ranging from pain control to patience (literally writing "...please make your dog feel safe, comfortable and secure at home... Lucky has been through a lot"). It is personalized in terms of the dog's name, breed and surgery. It is not perfect, but it could save a staff member 10 minutes or spare you sending home a generic, photocopied set of discharge instructions—increasing the bond between the client and your practice in the process. Maybe not critical to your business' future, but an excellent example of how this technology could help you practice better and more efficiently.

What does the future hold?

Chatbots clearly have limitations. Because they are designed to generate the "right" answers, they sometimes make up facts, link to non-existent websites and confidently claim realities that do not exist. But these are easily identifiable and fixable problems. Imagine all the things you don't like doing—scheduling appointments, documenting performance issues or successes, deciding if something is a

business expense—you'll be able to get all these things done with a few typed commands or, soon, a spoken request. Now think of all the things you really like to do—ideate as part of a team, perform a tricky surgery, interact effortlessly with clients. These are things AI can free you up to do more and more easily.

Just like cell phones were not our pathway to communication Nirvana and anti-locking brakes didn't eliminate car accidents, AI and conversational interfaces won't make our lives uninterrupted bliss. But it is kind of nice being able to take calls in your car, and I know there are at least a few times my anti-locking brakes saved me from a fender bender. The point is these are tools that can be very helpful, but only if they are incorporated into your work. Now is a great time to head over to www.chat-gpt.org and start a conversation. Close your eyes and imagine a really well-read, slightly socially awkward team member, then ask them to do something to make your life easier. You might be surprised what you get back.



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