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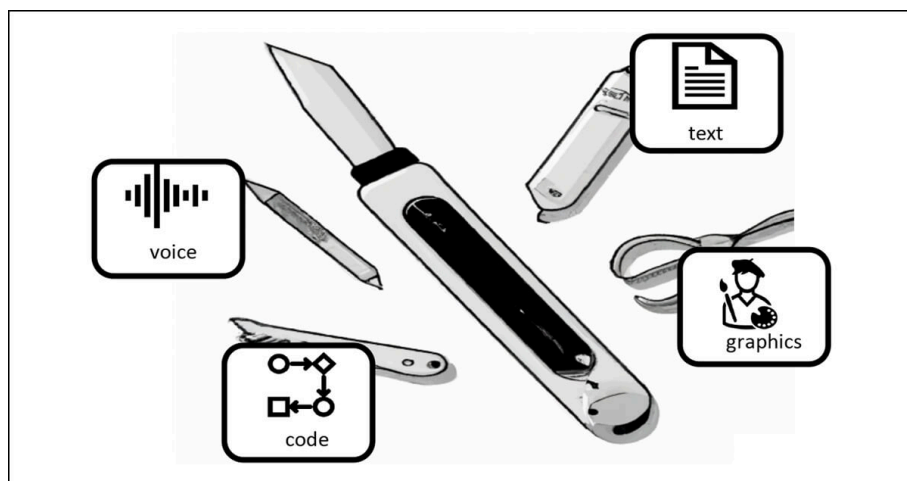
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Forward Thinking

Generative AI Is the Swiss Army Knife for Today's Conversational Assistants



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The Swiss Army knife, invented by Karl Elsener in 1891, is a multi-tool pocketknife that includes blades, a can opener, a screwdriver, and a corkscrew; it's often used by hikers and campers.

It's also often used as a helpful metaphor for multifunctional flexibility, and in that sense it captures how useful generative artificial intelligence has become for conversational assistants.

Conversational assistants are themselves Swiss Army knives of a sort; they can speak and listen to people using voice, text, and graphics, and they're embedded in all types of devices, ranging from hearing aids, microphones, and remote controls to mobile devices, desktop computers, household appliances, automobiles, and mechanical robots.

But they reach a whole other level of utility when paired with generative AI. The genAI "pocketknife" contains four "blades" for creating voice, text, image, and code content. These four blades support many of the creative tasks people perform using computers.

Generative AI does not directly search the Internet for data. Instead, it uses large language models (LLMs), which are special representations created from large datasets that may include internet data, as well as other bodies of knowledge. Generative AI systems use LLMs to

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When embedded within devices of all kinds, conversational assistants that use content created by generative AI will help us perform a wide variety of tasks in both our personal and professional lives. The table on the opposite page summarizes many of the tasks performed by conversational assistants based on generative AI applications from IBM and Open AI:

Text: Conversational assistants can create written content for advertisements, product descriptions, blog posts, announcements, email responses, and more. It can generate tailored and high-quality text, saving time and resources while enhancing customer engagement and overall business performance. By harnessing the power of conversational assistants, you can stay competitive in the digital age and deliver impactful messaging that resonates with their target audience.

Code: Conversational assistants are powerful tools for code generation, automation, and optimization. By leveraging the capabilities and understanding programming logic and patterns, conversational assistants can accelerate product development, reduce errors, improve productivity, and enhance the overall quality of codebases. As a result, you can streamline software development processes, save time and resources, and deliver more robust and efficient solutions to meet customers' needs.

Graphics: Generative AI has opened new avenues for businesses to create visually stunning and engaging images. From design and branding to product visualization, marketing content, and data visualization, conversational assistants generate customized and high-quality images that resonate with the target audiences. You can elevate a visual presence, enhance customer engagement, and drive the overall success of your brand.

Voice: Generative AI can produce voice applications that leverage natural language processing and voice synthesis capabilities. The ability to generate humanlike voices and responses empowers businesses to create engaging audio content, voice menus, customer service applications, and more.

With all the wonderful capabilities, the future looks bright. However, bad actors can use conversational assistants to create fabricated content and turbocharge the spread of disinformation, sow political discord, and significantly impact media organizations to create chaos locally, nationally, and worldwide. My hope is that people and organizations at all levels in society will be able to address these problems.

Conversational assistants will automate many of the mundane tasks that employees perform daily, giving them more time to concentrate on other important tasks. Use conversational assistants as you would handle assistance from any entry-level employee: Give precise instructions and always check their work for accuracy and completeness. I wrote this article with assistance from DALL-E, a graphics generation tool from Open AI, which generated the parts for the Swiss Army illustration; and from Bard, a large language model chatbot developed by Google AI, which generated some of the background text, which I then edited. I don't feel threatened by conversational agents using generative AI—they don't always follow my instructions, and they sometimes make mistakes. I have the ultimate responsibility for any errors in this article.

The capabilities promised by conversational assistants may seem threatening for your job security. Keep the following in mind in today's changing world:

- Be open and flexible to the new advances in conversational assistants.
- Recognize that conversational assistants are changing the world, and that your job may change.
- Reassess your job skillset and abilities to see where you fit into your current job or other jobs within your company. Learning as much as you can about conversational assistants can help, so take classes, acquire new skills, and talk with experts.
- Explore new ideas, interests, and projects inside and outside of your company to learn about new career possibilities.

Generative AI is a new game for everyone. Let's accept the challenges that generative AI brings to conversational assistants.

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