PRESCOUTER Boosting Productivity with ChatGPT

August, 2023

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WILL AI REPLACE HUMAN JOBS?

While Generative AI is a force for automating intellectual work, it still falls short of human intelligence. A new relationship between jobs, humans and AI is emerging. Organizations need to embrace AI as foundational to jobs as email has become since the late 1990s.

Generative AI allows for the automation of routine intellectual tasks, freeing up humans for more non-routine, higher-value work. This pattern of job automation, which has been seen throughout history, from the invention of the printing press to bank ATM machines, leads to job transformation across the global economy. It will, however, also lead to improvements in quality of life and act as a foundation for future societal advancements.

By making Al-based systems a foundation on which they operate, organizations can improve the efficiency of their processes as the technology continues to evolve. While current tools, such as ChatGPT, demonstrate the capabilities of Generative AI, future tools will likely be even better designed to automate routine work and enhance non-routine tasks. Embracing AI and adapting to its transformative potential will be crucial for organizations to stay competitive.

There is growing mass hysteria that jobs will be automated away by AI.

In recent times, news and media reports of Artificial Intelligence eliminating many jobs has grown. These have been backed up by reports from several credible sources. These include:

- Goldman Sachs economists estimate that 300 million jobs are expected to be lost to Al The investment bank estimates that two-thirds of U.S. occupations are exposed to some degree of automation by Al. (Source)
- The McKinsey Global Institute estimates that between 400 million and 800 million individuals could be displaced by automation and need to find new jobs by 2030 (Source)
- The World Economic Forum (WEF) predicts ٠ that 85 million jobs could be lost to automation by 2025. (Source)

The result of this attention has been growing concern among businesses and individuals about the potential impact of AI on jobs.



The front page of The Daily Mail highlights plans by British Telecom (BT) to lay off 55.000 workers, replacing 10,000 with Al.

IBM is pausing hiring for roles that could be replaced with Al in the coming years, reports Bloomberg. (Source)

Goodney/Bloomberg By Brody Ford +Follow May 1, 2023 at 4:08 PM CDT

Bloomberg

Technology AI

Could Do

International Business Machines Corp. Chief Executive Officer Arvind

IBM to Pause Hiring for Jobs That Al

Roughly 7,800 IBM jobs could be replaced by AI, automation

CEO Krishna says IBM to pause hiring for replaceable roles

Arvind Krishna during an interview in New York on May 1. Photographer: Christophe



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Seeing the human-like intelligence of AI *with their own eyes* has led many to join the hysteria.

For many users, who are only familiar with the clunky conversational experience of Apple's Siri and Amazon's Alexa, ChatGPT has an eye-opening experience. Interacting with ChatGPT, and similar Generative AI technologies, users immediately experience responses that are almost indistinguishable from human responses. This provides many with first-hand proof that AI is indeed on the verge of replacing humans for many activities.

Users have generally found that ChatGPT excels in helping them with three main problems:

- Creating first drafts of emails and other documents
- Acting as a thinking companion or expert on a wide range of topics
- Increasing accessibility to more technical skills, whether it be Excel formulas, English grammar or coding

Though ChatGPT largely acts as an assistant for users, its capabilities worry many that it may do more in the future.

A You are a food company looking to expand your range of dairy products in China. What are some strategies to enter this new market?

- When expanding your range of dairy products in China, it's important to consider the local market dynamics and develop effective strategies to enter and succeed in this new market. Here are some strategies you can consider:
 - Market Research: Conduct thorough market research to understand the Chinese dairy market, consumer preferences, local competitors, distribution channels, and regulatory requirements. This will help you identify opportunities and tailor your products and marketing strategies accordingly.
- Localize Your Products: Adapt your dairy products to suit Chinese consumer tastes and preferences. Consider incorporating popular local flavors, textures, and ingredients. Chinese consumers have different dairy consumption habits compared to Western markets, so it's important to customize your offerings accordingly.
- Build Partnerships: Collaborate with local partners, distributors, or retailers who have an established presence and distribution network in China. They can provide valuable insights, help navigate the local market, and assist with marketing, distribution, and regulatory compliance.
- Regulatory Compliance: Understand and comply with the Chinese food and dairy regulations, including labeling, product certifications, and food safety standards. Ensure your products meet the necessary requirements to gain consumer trust and government approval.
- Establish an Online Presence: China has a thriving e-commerce market, so consider selling your dairy products through popular online platforms such as Tmall, JD.com, or Taobac. Create a user-friendly website and utilize social media platforms like WeChat ar

Using ChatGPT for business strategy.

Please search the Internet to find references to Samsung executives mentioned in press releases.
Please provide the names of the executives as a table with first name, last name, job title and the
context in which they are mentioned

Searching for: Samsung executives press releases

Generating answers for you.

Microsoft Bing

Here is a table of some Samsung executives mentioned in press releases:

First Name	Last Name	Job Title	Context
Federico	Casalegno	Executive Vice President of Design, Head of Samsung Design Innovation Center	Bringing Calm to Our Connected World at CES 2023
Mark	Benson	Head of Samsung SmartThings U.S.	Bringing Calm to Our Connected World at CES 2023
Inhee	Chung	Vice President of the Corporate Sustainability Center	Bringing Calm to Our Connected World at CES 2023 ¹
arn more: 1. news	.samsung.com		1 of 20 ●

Using Bing Chat to identify business executives.



Using Midjourney for packaging design concepts. Source: https://www.youtube.com/@Designoutofthebox

In reality, ChatGPT and other AI still fall short in many aspects, compared to human intelligence.

Al technology, at present, is turn-based. In each turn, the user provides a prompt for ChatGPT, and it provides a response. The Al cannot, of its own will, say something to the user without first being prompted. The Al does not have "free will": it is an input-output machine.

Crucially, there is no evidence of any organizations actively working to resolve this limitation. There are efforts to create *agents* with broader goals, but these goals are still defined by humans. Agents break down goals into smaller tasks and attempt to perform these tasks. The most well known type of agent, self-driving cars, while focused on a single use case, is still taking decades to perfect. This is because the actions of agents can be unpredictable in situations not anticipated in their training data, such as a balloon flying across a street. Agents may be best analogized as an "automation of an automation" rather than possessing an intelligence similar to human intelligence.

While many of the shortcomings of AI, such as free will, are unsurprising and perhaps common sense, they are minimal requirements for AI to completely replace humans and human intelligence. Significant breakthroughs in AI technology are necessary to address these limitations, yet there is currently no line-of-sight to these occurring.

Al's Shortcomings

Limitations of AI that **will** be resolved in the near future include:



Hallucinations: Rather than storing data they are trained on in a table or database, ChatGPT and other Generative AI models use neural networks. Neural networks codify a representation of associations between words and sentences, to conjure up a response based on those associations for a given input. This can result in responses that have some associations with the input, but are completely false. There are now mechanisms coming into place to restrict the AI from providing outputs based on predefined factually correct information.



Multi-modality: Humans possess a range of senses (such as hearing, vision and smell) and can process information from multiple modalities simultaneously. Generative AI models have largely been of a single modality to date, with ChatGPT supporting text input/output and DALL-E supporting image generation, for example. In the coming years, ChatGPT and other Generative AI models are expected to be able to take in, as well as output, both images and text simultaneously.

Limitations of AI that *will not* be resolved in the near future include:



Free will: Al, such as ChatGPT, lack its own goals and motivations. All forms of Artificial Intelligence require a human "prompter" or operator to produce responses. The Al can not, of its own will, proactively take action.



Real-time learning: Unlike humans, who can learn iteratively and update their knowledge and skills in real-time, the neural network of generative AI is not actively updated during the interaction. Training updates typically occur offline and involve retraining the model on large datasets. Large Language Models, such as ChatGPT, take many months - and sometimes over a year - to be trained with new data.



Prompt sensitivity and lack of explainability: Generative AI models can generate different outputs based on the specific ways in which prompts are written. This means it is necessary to iterate and craft prompts to get the output that works best for a type of problem. Humans may need to review the outputs from the AI, since it is humanly impossible to trace the 140 billion connections of the neural network to trust the output was correctly formulated.

The barriers to the mainstream use of AI

Nevertheless, ChatGPT and other Generative AI <u>is</u> a game-changer: The barrier to using AI is now almost zero.

In the past, artificial intelligence has been a technology that has been shielded from mainstream users due its complexity. Leveraging AI required not only special skills, but also specialized infrastructure and large amounts of data – which typically had to be shaped and labelled in particular ways.

ChatGPT, and other Generative AI models, allow mainstream users to access this technology with merely a web browser. These pretrained, prebuilt Generative AI models are "ready to go". This is in stark contrast to the effort and cost required to custom build AI models, as has been the case in the past.

From recruiters pasting resumes into ChatGPT, along with with instructions on how to screen them, to hobbyists self-teaching themselves how to connect ChatGPT to their Alexa home device, Generative AI has made AI more accessible to a wider range of people. This is creating the potential to revolutionize the way we live and work.

	Barrier	For Al-based technologies of the past:	With ChatGPT and other Generative AI:
	The Skills You Need	Specialized: Building training data, training the neural network, deploying it, integrating with other applications	Basic writing skills
and the second sec	Ease of Access	Building your own interface to the Al or accessing it as an add-on to existing applications	Can be directly used by end-users, with a web browser
	Amount of Data Needed	Large amounts of training data, typically 10,000+ data points, need to be pre-labelled towards the outcomes sought from the AI model	At most a few examples, provided in the input prompt, so the AI leverages its pretraining
	Utility	The AI model works for a specific use-case, e.g. language translation, but not others	Works for a flexible range of use cases
Ş	Cost	Hiring a development team	None

While not a direct substitute to human intelligence, AI still has distinct advantages.

AI has several distinct advantages over human intelligence. These advantages include

- Speed of responses
- Consistency of responses
- Transferability of knowledge, skills and behaviors used to generate responses
- More directly interacting with digital systems that organizations operate on.

As AI continues to develop, it is likely that these advantages will become even more pronounced.

Al models are much more scalable than human intelligence. This is a significant benefit for organizations that want to "scale up" and "scale down" easily, without the need for hiring, training, layoffs and other concerns typically associated with human labor.

Al's Advantages



Speed of output: Generative AI models can generate output at high speeds. A document that may take a human several hours to compose, an AI model is able to generate in seconds. Humans require time to process thoughts, make deliberations, and generate responses, depending on the complexity of the task. AI can perform all this "computation" within seconds.

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Minimal experiential variation: Each human brain consists of unique neural networks, shaped through individual differences in cognitive abilities, experiences, and perspectives. Interacting with a human exposes users to these variations. In contrast, users of Generative AI models typically access the same pre-trained model, resulting in a standardized experience. Organizations seeking to create a consistent brand experience with Generative AI are able to do so. They can, for example, have 200 customer service chatbots that behave in a more consistent and similar way than having 200 human customer service representatives.



Transferability and copying: The intelligence of generative AI models can be easily copied and deployed across different systems or instances. In contrast, copying a human's intelligence, knowledge and skills involves a complex process of replicating their unique biological structure, experiences, and consciousness, which is far beyond current technological capabilities. Duplicating Generative AI models is relatively low-cost; it primarily involves reproducing the trained model and associated infrastructure.



Interfacing with digital infrastructure: Organizations increasingly now run on digital infrastructure, whether it be ERP systems, payroll systems, emails and cloud applications or "connected devices" – from manufacturing equipment to cell phones. Each part of the infrastructure presents a user interface, so that is easy for humans to interact with it. However, even after training to become proficient in these systems, humans are comparatively slow in using them. In contrast, AI systems can easily and directly work with an organization's digital infrastructure using application programming interfaces (APIs) to accomplish the same tasks instantaneously.



THE SHAPE OF FUTURE JOBS

Given that Al's shortcomings mean humans will still need to be *"in the loop"*, a new relationship is emerging between jobs, humans and Al.

The entire history of the human race is one of automating routine work. Significant technological waves of automation include:

- The invention of the printing press, automating information dissemination.
- The development of the steam engine, automating manufacturing processes.
- The invention of the computer, which has been automating processing of information, calculations and data.

Specifically, Generative AI is allowing humans to automate routine intellectual tasks, freeing them up to undertake more non-routine - often higher value - work.

Generative AI is likely to follow the pattern of the other technological waves of automation that have preceded it. While some jobs are lost in such waves, new non-routine jobs are created. Additionally, technology will allow more people to more easily undertake these new jobs.

The entire history of the human race is one of automation. Jobs are reinvented, productivity accelerated and the standard of living increased.

<u>و</u>

The Invention	The Impact	Old and New Jobs
The Printing Press The invention of the printing press in the mid-15th century enabled the mass production of books and other printed materials. It led to the Printing Revolution.	Prior to the invention of the printing press, creating 1000 copies of a book could take years. Mass production made books more affordable and accessible to a broader range of people, revolutionizing the dissemination of knowledge and ideas, and increasing literacy. The printing press created entirely new industries, from papermaking and ink manufacture, to newspapers, bookstores and print marketing. It also spurred the growth of higher education and dissemination scientific advancements.	 Before: Parchment Maker: Preparing animal skin for writing on. Scribe: Copying and transcribing manuscripts by hand. Illuminator: Decorating manuscripts with intricate illustrations After: Typesetter: Arranged individual characters for each page. Ink Maker: Prepared the ink used in the printing process. Bookbinders: Assembly and finishing of printed materials.
The Steam Engine The steam engine converts heat into mechanical energy. Invented in the 1700s, it was used to power locomotives, steamships, and factory machinery – sparking the Industrial Revolution.	During the 1800s, textile factories used the steam engine to drive power looms and other textile manufacturing equipment, providing a reliable and continuous source of power that replaced human and animal labor. Compared to weaving done by hand to that point, the amount of coarse cloth that could be produced in an hour increased by a factor of 50. The amount of labour required per yard of cloth fell by 98%. Cheaper cloth meant increasing demand and the creation of jobs.	 Before: Wool combers: Combing and preparing wool fibers for spinning Spinners: Spinning fibers into yarn using spinning wheels. Weaver: Creating textiles manually using hand looms. After: Machine Operators: Running textile machinery Mechanics: Maintaining and repairing the textile machinery. Warehouse Worker: Handling storage of fibers and finished textile
Computers Starting in the mid-1900s, computers made manual tasks and those done with analog systems more efficient. Computers led to the Digital Revolution, which is still ongoing.	Computers, in the form of automated teller machines (ATMs), were introduced in the 1970s. There are now 470,135 ATMs in the US. By reducing the routine cash-handling work at branches, through the use of ATMs, banks were able to start offering higher-value products, such as credit cards, loans, and investment options. Bank staff were redirected to help customers understand and access these more complex financial products.	Before: • Clerk: Filing, record-keeping, and document management • Bookkeeper: Recording daily transactions in the bank's books. • Vault Custodian: Responsible for security of the bank's cash vau After: • ATM Technicians: installing, maintaining, and troubleshooting AT • Fraud Experts: Detecting and preventing e-banking fraud. • Personal Banker: Assisting clients with complex financial product

Each major technological advancement has automated routine jobs, while creating non-routine jobs.

The digital revolution has been reshaping the the US job market. As shown in the chart on the right, between 1983 and 2013, the number of people employed in jobs that are routine, whether manual or cognitive in nature, saw only a minimal increase. This is in spite of the number of people able to work increasing by 43M, from 112M to 155M.

In industries such as manufacturing, robots have replaced human workers doing rote work on assembly lines. In industries such as call centers, offshoring has moved rote cognitive work away from the US. Offshoring itself has been made easier through advances in digital technology.

As routine tasks have become automated, the demand for non-routine work has increased. Non-routine work involves. tasks that require problem-solving, critical thinking, creativity, and interpersonal skills. These may include jobs that involve coming up with a new new legal strategy or marketing strategy, for example. These may also be jobs that require sophisticated interpersonal relationships, whether they be nurses or business consultants.

Automation has also been creating new jobs related to developing, operating, and maintaining these automated systems, such as AI specialists, data analysts and software developers.



US Jobs Trends

Routine vs. Non-Routine & Cognitive vs. Manual

Sources: Federal Reserve Bank of St Louis. US Bureau of Labor Statistics

Each major technological advancement has also made non-routine jobs accessible to more people.

As well as transforming jobs, technology has been augmenting human capabilities. New tools have enabled human workers to focus on higher-value tasks that require creativity, problem-solving, and complex decision-making, giving, rise to the concept of "augmented intelligence," where automation enhances human productivity and expertise.

To adapt to the changing job landscape, workers need to develop skills that are complementary to automation. This includes cultivating:

- critical thinking abilities,
- creativity and adaptability
- emotional intelligence
- continuous learning

Non-routine work that require these skills are less likely to be automated in the foreseeable future.

Photography



1980s

Limited to people able to take good pictures with a limited viewfinder. Need a darkroom to develop photos.

Now



Smartphones provide filters, color correction and other facilities to make everyone a good photographer.

Graphic Design



Required drawing boards, drafting tables, and an ability to work with pens, pencils, and markers.



Software applications with templates mean more people can create professional looking documents.

Accounting



Involved ledger entries and manual calculations to produce paper-based financial reports.



QuickBooks and similar tools automate calculations and generating reports.



AUTOMATING & EMPOWERING JOBS

Organizations need to rethink their business processes so that they are working *hand-in-hand* with Generative AI. This will allow the efficiency of their processes to improve as the technology improves.

Organizations will want to

- Review their workflows to identify where "flashes of intelligence" from AI can be applied in a repeated and predictable way to automate routine intellectual tasks.
- Investigate how AI can be used to empower and upskill staff to undertake more non-routine work, which is likely to be of higher value than the routine work they previously performed.

Beyond looking at their own business processes, organizations will need to also consider how the processes of their customers is changing. Are customers now using ChatGPT for particular uses cases that were once the domain of the organization? To what extent do organizations' offerings need to change to keep up with changing customer needs?



For each job, map out workflows. Identify where AI can be applied, so staff are freed up for more valuable, non-routine work.

The steps organizations should take to automate repetitive or time-consuming tasks for the staff are:

- (1) Understanding the workflows: This step allows for a comprehensive understanding of the worker's responsibilities and the various stages and interactions within their workflow.
- (2) Identifying automation opportunities: With the workflows mapped out, it becomes easier to identify repetitive, time-consuming, or mundane tasks where AI can be applied.
- (3) Iterate using the AI: Not all tasks are equally automatable. Some tasks, such as summarization, email response generation, and meeting note-taking may be immediately automatable. Others may require iteration of the prompts used to perfect them for that task.
- (4) Quality assure the results: The AI's outputs may only be acceptable 80% of the time, for example. Even when successful, the output may require touch-ups.
- (5) Customization and adaptation: Generative AI models can be trained and fine-tuned to meet the specific requirements of different knowledge work domains. By understanding the nuances of each knowledge worker's workflow, organizations can customize and adapt Generative AI solutions to effectively automate tasks in a way that aligns with their unique needs.

Simply automating existing workflows may not lead to substantial enough gains. Organizations may need to rethink job descriptions, team structures, and end-to-end processes to really take advantage of Generative AI. Workflows may need to be simplified, or even overhauled.

Example Workflow For A B2B Salesperson

Before Applying Generative Al	
Workflow Steps	Time Taken
Preparation: Ahead of meeting with a new client, salesperson researches the client and brainstorms ways in which the salesperson's company could help.	1 hour
Meeting: Client and salesperson meet to discuss client's needs and the range of services the salesperson is able to sell to the client.	1 hour
Email: Salesperson drafts and sends email to to client, to confirm understanding of client's needs. Client responds affirmatively.	30 mins
Proposal: Salesperson drafts proposal with details of budget, scope of work and timeline, to deliver the services that the client desires.	4 hours
Total	: 6.5 hours
After Applying Generative Al	
Workflow Steps	Time Taken
Preparation: Ahead of meeting with a new client, salesperson brainstorms with a ChatGPT-like tool on how the salesperson's company could help the client.	30 mins
Meeting: Client and salesperson meet to discuss client's needs and the range of services the salesperson is able to sell to the client.	1 hour
Email: Salesperson gives the ChatGPT-like tool bullet points of a client conversation to generate an email draft. Salesperson makes minor changes and emails it to the client. Client responds affirmatively.	15 mins
Proposal: Salesperson provides the ChatGPT-like tool with the earlier used bullet points of the client conversation and other past similar proposals. The salespersor asks the ChatGPT-like tool to generate a proposal using the given information. Adjustments to the draft are made and shared with the client.	l hour 1
Tota	2.75 hours
The ChatGPT-like tool is tailored to the company's requirements and may have access to the compar are discussed in the next section.	ıy's data. Tools

As staff are freed of rote tasks, the Al can augment staff with skills that enable them to undertake higher value non-routine work.

Non-routine work tasks are, by nature, often unique, with complex and open-ended elements. What if staff had available, on-hand, an expert to help them work through the ambiguities of these non-routine tasks?

ChatGPT and other similar Generative AI models can be asked to take on the role of such experts, helping staff troubleshoot the nuances of their work.

For the AI to act effectively as an expert or "thinking companion", it is necessary to:

- **Teach the AI the role:** Generative AI systems need to be explicitly guided into the role they are expected to play. It will not magically become a "virtual subject matter expert" without substantial input from its human users. If the AI is playing the role of a product design expert, for example, the firm's "design principles" and preferred aesthetics ought to be taught to the AI in the prompt.
- Connect the AI technology to relevant knowledge: This could include company-specific data, as well as other relevant knowledge bases. This will help the AI to provide the most accurate responses.
- Fine-tune the AI model: For many use cases, ChatGPT and other "out of the box" AI models may be adapted for an organization's purpose. In some highly specialized fields, the AI model may need to be trained on further data to ensure it has a conceptual understanding of the domain, rather than simply conducting knowledge lookups.

Simple Roleplay Example In A Food Context

- A You are an ingredient specialist that is able to provide substitutes for food suggested to you. For each food item suggested to you, you will provide a sensory profile of the item I suggest, as well as for 3 substitutes. Your responses will consist only of one sentence for the food item I suggest and one sentence for each of the substitutes.
- Sure, I can help you with that! Please go ahead and suggest a food item for which you would like substitutes, and I'll provide you with sensory profiles and alternative options.

Q pea protein

Pea Protein (Food Item): Pea protein is a plant-based protein powder derived from yellow peas, often used as a vegan protein source, with a neutral taste and a slightly grainy texture.

Substitute 1: Soy Protein - Soy protein is another popular plant-based protein option, offering a mild flavor and a smooth texture.

Substitute 2: Hemp Protein - Hemp protein is derived from hemp seeds, providing a nutty flavor and a slightly gritty texture.

Substitute 3: Brown Rice Protein - Brown rice protein is a hypoallergenic option with a mild flavor and a slightly chalky texture.

A cumin

© Cumin (Food Item): Cumin is a fragrant spice with a warm, earthy flavor and a slightly bitter undertone.

Substitute 1: Coriander - Coriander has a similar warm and earthy flavor profile to cumin but with a milder and slightly citrusy taste.

Beyond workforce productivity, organizations need to consider whether they face technological disruption, as the barriers to AI fall to zero.

Businesses should adopt a proactive approach to assessing the potential implications of Generative AI on the industry it operates in. Here are some steps businesses can take:

- Understand the technology: Gain a deep understanding of Generative AI, its capabilities, its limitations and relevant use cases. In doing so, businesses can better anticipate its potential impact.
- Assess the value chain: Evaluate the various stages of the industry's value chain and identify the specific functions and processes that could be affected by Generative AI.
- Identify competitive advantages: Can these can be enhanced or leveraged through the use of Generative AI?
- Consider customer needs and expectations: Assess how Generative AI can help address those needs more effectively or create new value propositions.
- Collaborate with Al experts: Collaborating with experts can help uncover potential risks, opportunities, and strategies.
- Test and experiment: Conduct pilot projects or proofs of concept to test the viability and impact of Generative AI in specific areas.
- Continuously monitor the landscape: Keep a close eye on developments within the industry and the broader AI landscape that could disrupt the industry.
- Foster a culture of learning and agility to position the business to navigate potential disruptions effectively



This illustration applies Clayton Christensen's theory of *Disruptive Innovation* to Management Consulting firms, as compared to ChatGPT, both of which are represented by the red lines. The blue lines represents a market segment with a particular particular level of "willingness to pay" for a particular "level of service". As per the theory of Disruptive Innovation, established companies, represented by the upper red line, introduce higher-quality offerings to cater to the high-end market where profitability is at its peak. However, in doing so, they exceed the requirements of lower-end customers. This creates an opportunity for new players - such as ChatGPT - to enter the market and target the less lucrative segments that incumbents are neglecting. These new entrants follow a disruptive trajectory represented by the lower red line. They enhance the performance of their offerings and gradually move upmarket, where profitability is also highest for them. As a result, they challenge the dominance of the established companies.

Is ChatGPT a threat to Management Consulting?



THE TOOLS ORGANIZATIONS NEED

Al will become as foundational to the way companies operate as email. While ChatGPT showcases the capabilities of this new technology, organizations can expect future tools to be better designed to maximally automate routine work and enhance non-routine work.

In considering the Generative AI tools that organizations provide to staff to enhance their productivity, organizations will want to consider whether the tools meet requirements such as:

- > Plugging in the knowledge bases and data specific to their organization
- Allowing staff to leverage a shared library of prompts known to work well for common use cases for each role in an organization
- Allowing for outputs from the AI to be shared between team members, so they can collaborate on how they use that output

In considering the options available, PreScouter has made the decision to build its own version of ChatGPT, called *Auxzee*. Auxzee is tailored to the specific needs of PreScouter and similar organizations. Auxzee provides a secure, safe environment for staff to use the ChatGPT technology without fear of organizational data becoming exposed. The features of Auxzee are highlighted in the following pages, to better demonstrate the requirements mentioned above.

PRESCOUTER EXPERT INSIGHT

In the same way that there are a range of solutions for building websites, from simple website builders (such as SquareSpace) to bespoke web development, organizations can expect to see a range of options emerge for Generative Al implementation. Organizations will need to tradeoff the investment required for each against how tailored they need their Al to be.



Dino Gane-Palmer CEO, PreScouter

The more knowledge-bases that are connected to the AI, the more effective it can be in accelerating productivity.

ChatGPT can help staff with general tasks, such as drafting emails and summarizing long documents. The extent to which tools such as these can truly boost productivity, however, is limited by the extent to which they have access to relevant company, department and role-based data and knowledge bases.

These said data and knowledge bases can include structured databases, unstructured documents, research papers, or other repositories of information specific to the domain or industry. By integrating with these knowledge bases, the AI system can leverage the information and insights contained within them to provide accurate and up-to-date responses to non-routine questions or tasks.

Organizations need Generative AI tools that allow them to securely and confidentially use various organizational knowledge bases and data.

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ChatGPT Plugins

OpenAl, the makers of ChatGPT, have introduced Plugins. Plugins are a way to connect external applications to ChatGPT. These range from grocery store shopping app Instacart to real-estate apps, such as Redfin and Zillow. ChatGPT's Plugin Store allows users to choose from a range of plugins that ChatGPT can be connected to for each conversation. Once a plugin is enabled, conversations with ChatGPT related to the plugin's areas of specialization will utilize the plugin's capabilities and data. For example, if the Zillow plugin is enabled and ChatGPT is asked for recommendations for apartments to buy in Chicago, ChatGPT would make a query to Zillow, parse the data provided by Zillow and provide a response using that data. Organizations may consider building their own plugins to give their ChatGPT users access to their organizational data. However, ChatGPT is itself not the most secure environment. since users have to take special precautions to ensure their data is not used for further training ChatGPT. Additionally, users would also need to take a number of steps to set themselves up with the right plugins.

PreScouter Auxzee

While using the same underlying AI models as ChatGPT, Auxzee uses plugin-style data connectors to allow organizations to use their data within the Auxzee environment, so staff is able to safely use the AI for work purposes.



Having staff work from the same library of optimized prompts improves team-wide productivity.

While ChatGPT allows users to experiment with ad-hoc prompts, the inputs that are fed into the tool to generate an output, the quality of the output provided by the Al depends on the quality of the prompt that it is given. For example, longer, more descriptive and explanatory prompts can typically provide better outputs.

Crafting a prompt that works well for a given use case, such as evaluating resumes, can take several iterations of adjusting the prompt until it works just as the user would like it to. This can take time, and sometimes, skill.

In a team or organization, there can be many users whose productivity can be boosted with the right prompts. Having each person develop their own prompt for a task is not efficient or optimal. Instead, the tools used must allow team members to share their prompts and to continue to iterate and improve on them as a team.

With access to a shared library of prompts, managers and company leaders can be assured that all their team members have access to the same set of tools.

Organizations need Generative AI tools that allow their staff to use a common library of "optimized" prompts.

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Chrome Extensions

A number of browser extensions, once installed, modify the ChatGPT interface to allow prompts to be saved for future use. Some of them also allow the prompts to be shared with the public.

Left: AIRPM Chrome Extension Source: <u>AIRPM</u>

PreScouter Auxzee - Shortcuts	
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Auxzee allows users to store prompts as *shortcuts*. This allows users to retain long and elaborate, but useful, prompts, and share them with colleagues.

Shortcuts also allow users to templatize prompts - selecting words in the prompt that can be substituted out when the user runs the shortcut the next time. For example, a "summarize concept" shortcut could be defined as:

Summarize the concept ___ in 100 words, in the style of a scientist with an IQ of 200.

The ____ is a variable that would be filled in each time the shortcut is run.

	Aun Por	natting
Proposal Generation		
Create a draft proposal based on p	aet nronoeale	from the
proposal database	ast proposais	itoin ule
Name		0
Zero Calorie Chocolate Bar		Ø
Add the name here		
Details		
Client would like to investiga	te ingredient	s that
can be used to reduce the ca	lories in	
chocolate to zero.		
Please provide details relating the pro	posal	

Allowing staff to share, and collaborate on, output from the AI builds trust in human-AI produced work.

Organizations often have staff working together in teams. In these situations, it is often necessary for colleagues, and managers, to understand "how the work was done". With Excel, for example, this might simply be a case of hovering over cells and looking at formulas.

The conversations that are had with ChatGPT and other Generative AI tools are only known to the user and the AI. These tools are, "single player" experiences. It is not easy for a colleague to inspect the prompt that was used to generate an output, the conversational dialog with the AI that followed to adjust it, or to see how much the output differs from what is shared with the colleague.

Such sharing of the work done with the AI allows teams and managers to more quickly calibrate the capabilities and limitations of the AI, as well as build trust and understanding of the output of the work that is produced as a result of human-AI collaboration.

Organizations need Generative AI tools that allow teams to share their AI produced content with each other.

ChatGPT Sharing

ChatGPT allows users to generate a unique URL for a ChatGPT conversation. The URL presents a read-only web page of the chat session, but includes the option for users to continue the conversation in their own ChatGPT window. Anyone with the URL link is able to access the chat conversation.



Source: <u>OpenAl</u>

PreScouter Auxzee Spaces

In Auxzee, chat sessions can be saved to spaces. Spaces have team members. Only members of a space can see the chat sessions saved to a space. Spaces also allow related chat sessions to be saved and retained together.



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ChatGPT & The Future Of Everything

This Intelligence Brief explores the long-term effects of ChatGPT and similar large AI models on knowledge work and society as a whole. As these models become more advanced and widespread, they have the potential to transform industries and disrupt traditional ways of working. The brief considers the implications of these changes and examines how individuals and organizations can adapt to stay ahead of the curve.



How ChatGPT Works

Large Language Models (LLMs) such as ChatGPT are taking the world by storm, and are evolving faster than we can keep up with. It is vital for tech companies to understand the details behind the architecture underpinning this new technology. This Intelligence Brief covers the breakthrough technology behind ChatGPT, how it works, its current shortcomings, and how to integrate it into applications.

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