

Realizing the Potential

Gen AI in Human Services Delivery

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Generative AI is a powerful tool that, when used in concert with other AI tools and appropriate governance mechanisms, can help the right services reach the right people more quickly.

Ask human services executives what keeps them up at night, and the workforce crisis nearly always tops the list. The staffing challenge is not new, but with the Great Resignation and the additional workload associated with the unwinding of the public health emergency, agencies' ability to carry out their mission and serve individuals and families in a timely fashion has been significantly impeded. This puts human services organizations in a tough spot. They can either treat each case with the requisite attention it deserves and watch the backlog grow, or try to move quickly to deal with the scale, potentially at the cost of quality, poor customer experience, and less equitable service delivery.

With the recent emergence of generative AI (Gen AI), there appears to be some hope. Gen AI has the ability to create personalized content at scale, potentially reducing the strain on the workforce. Gen AI can intelligently copilot a case with a caseworker, answering case-specific questions in the context of the system and policy, simplify policy guidance and rules, extract information from case notes, support training and onboarding, and help make data-driven decisions. In addition, core AI technologies can also be leveraged in tandem with Gen AI to reduce the burden on caseworkers by pre-populating data from paper applications, automating system actions, sending reminders and other communications to clients, and recommending interventions.

So is Gen AI the answer to human services organizations' capacity challenges? The short answer is no. Gen AI is not a savior, but when applied to the right tasks and paired with other tools and human judgment, Gen AI can be part of the solution.



Three Principles for Realizing the Potential of Gen AI

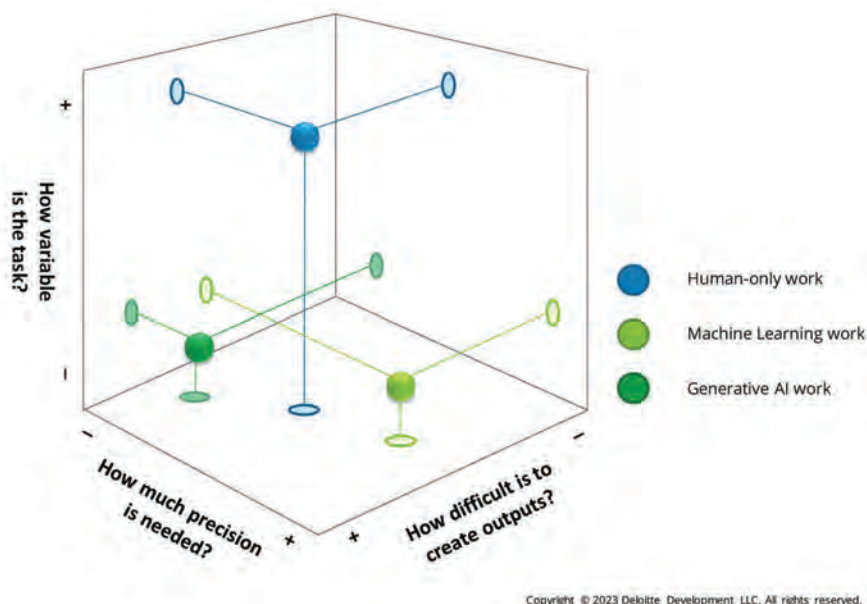
Human services organizations can realize the potential of Gen AI by embracing three key principles:

- Adopt a use case-driven approach to identify appropriate AI tools
- The best results come from the application of multiple tools
- Reimagine business processes and workflows

Adopt a use case-driven approach to identify appropriate AI tools

The strength of AI is that it operates differently than humans do. Moreover, different AI models work in different ways too, giving them each unique strengths and weaknesses. Gen AI, for example, essentially works in the reverse of more familiar machine learning

Figure 1. Humans and different AI tools work differently, making them suitable for different types of tasks



models, allowing it to do creative tasks those models cannot, but potentially at the cost of some degree of accuracy.

This means that not only do we need human-machine teams, but human-machine-machine teams where tasks are performed by the teammate best suited for them. Tasks requiring repetitively creating content like transcribing case notes or generating reports or analyzing client sentiment on a call could be given to Gen AI. Tasks involving

finding patterns in large volumes of data with a high degree of precision like predicting delinquencies or detecting fraud could be assigned to core AI technologies. Finally, tasks with high variability or social components would be reserved for human judgment (see Figure 1).

The best results come from the application of multiple tools

Because different AI models do different things, it follows that the best



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Figure 2. Transforming human services tasks through AI



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results are likely to come, not from the application of any single monolithic tool, but rather, when multiple tools are used in concert, with each playing to its particular strengths.

An agency wanting to improve its claims processing could have Gen AI try to process and respond to all claims forms, but this opens up problems with hallucination—when a model spits out information that is inconsistent with the data set it was trained on—and other issues. A better approach may be to layer tools onto discrete sub-tasks: using intelligent optical character recognition (i-OCR) to extract data from written forms and enter it into a central database; robotic process automation (RPA) to determine if the claim can be processed based on defined rules or if it needs human attention; and once a judgment is made, Gen AI can tailor text messages to specific recipients, letting them know the status of their claim and next steps. By leveraging an appropriate combination of traditional AI, Gen AI, and human intelligence, agencies can deliver a more seamless and integrated user experience.

Reimagine business processes and workflows

In 1959, the postal service successfully tested sending snail mail using a rocket missile. In hindsight, it is clear that if the goal is to increase the speed of communication, then email is a better choice.¹ Here, too, bolting new tools onto processes designed for humans can not only miss out

on the benefits of AI, it can also be counter-productive.

To avoid similar problems, agencies should consider first reimagining what they want the business process to be, based on the outcomes desired and then apply AI to streamline. A recent Deloitte survey found that agencies that significantly change their workflows are 36 percent more likely to achieve the desired outcomes from their AI projects.²

So How Can AI Transform Human Services?

The strengths of AI and other technologies—handling large volumes of data, automation, and accuracy—can help human services agencies augment the capacity of their workforces. Using these three principles as a guide, human services organizations can use a combination of traditional AI and Gen AI to transform how they deliver services (see Figure 2).

Processing intake forms and case management

Applying for benefits can be a lengthy and cumbersome process. Even though many applications have been moved online, agencies still receive a lot of paper applications. i-OCR can extract information from these applications and put it in a master data management system with the help of RPA. A rules-engine software can do the first evaluation and case setup, with caseworkers validating the output and

spending more of their time on complex cases. Then, Gen AI can provide detailed reasoning behind eligibility determinations, which can be conveyed to eligible and non-eligible applicants while simultaneously helping the caseworker with any remaining questions. Agencies can then use Gen AI to tailor messages to eligible individuals about how to access services. When additional policy questions arise, Gen AI can assist in answering them, using policy manuals, system documents, and process maps as inputs, and providing citations to relevant documents that caseworkers can reference.

Moreover, Gen AI can also improve the experience of individuals and families applying for benefits. Through interactive forms or a chat interface, Gen AI can provide personalized guidance and responses to applicant questions, drawing on information from existing policy and procedure documents in simple language. It can also assist residents in completing their applications by nudging them with appropriate information and proactively identifying data gaps. Further, Gen AI can analyze the inputted data and suggest additional programs for which they are eligible, ensuring that applicants are aware of the full range of services available to them.

Onboarding new caseworkers

Attrition has been a long-standing Achilles heel for human services agencies. One problem with high

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turnover is the associated loss of institutional knowledge. Quality and efficiency can vary greatly as new workers get up to speed.

To improve the onboarding process, Gen AI can automatically code exit interviews of retiring, more experienced caseworkers to distill important lessons for new hires. Additionally, Gen AI can automatically generate onboarding documents and provide assistance to new hires so they can benefit from the wisdom of more experienced caseworkers. Further, Gen AI—trained on many policy manuals, program rules, and historical cases—can help to answer questions and provide live “on-the-job” support when they get stuck.

Reducing the administrative burden for caseworkers


Documenting and recording information is the most time-consuming task in government—averaging 10 percent of federal and state workers’ time and totaling more than 400 million hours annually for federal workers alone.³ Caseworkers are required to document their client interactions and regularly submit assessment and intervention reports. AI can extract key information from case notes and “key” it into the system. Gen AI can then use that information to generate first drafts of reports that can be reviewed by a caseworker. Beyond speeding up paperwork, AI can also augment decision making by analyzing historical cases, identifying patterns, and generating summaries of interventions. Moreover, Gen AI can assist caseworkers in researching best practices, policies, and legal guidelines, helping caseworkers to make well-informed decisions.

Getting Started

Gen AI is not magic, but it does open up transformative possibilities for human services when thoughtfully paired with complementary AI tools and human judgment. Yet the path to adopting this new technology can be daunting. To improve the chances of

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transforming processes, rather than simply adding more steps, human services agencies should take the following steps as they embark on their Gen AI journey:

- **Become familiar with underlying technology:** Because Gen AI is a rapidly evolving technology, it’s important to establish a baseline level of knowledge about the technology, the risks it carries, and its capabilities, and to continually monitor its evolution. This includes understanding the attendant legal and cyber issues that must be considered as solutions are evaluated.
- **Reimagine use cases:** Think big and identify ways human services agencies can leverage Gen AI to address problems that haven’t yet been solved. An outcome-driven approach, aligned to an agency’s mission, can help maximize use of the technology.
- **Put users at the center:** Gen AI can produce impressive concepts—but without the human, it will not work. Design and solutioning should start with the perspectives of end-users, including caseworkers and clients.
- **Invest in trust and governance:** Trust is critical to the adoption of AI by caseworkers and clients. Ethical controls should be embedded in every step of model development, underlying data and bias protection, and change management for adoption. 

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Reference Notes

1. Eschner, K. (June 8, 2017). Mail delivery by rocket never took off. *Smithsonian Magazine*. <https://www.smithsonianmag.com/smart-news/mail-delivery-rocket-never-took-180963557/>
2. Van Buren, E., Eggers, W. D., Austin, T., Mariani, J., & Kishnani P. K. (December 13, 2021). Scaling AI in government: How to reach the heights of enterprisewide adoption of AI. *Deloitte Insights*. <https://www2.deloitte.com/us/en/insights/industry/public-sector/government-ai-survey.html>
3. Viechnicki, P. & Eggers, W. (April 26, 2017). How much time and money can AI save government? Cognitive technologies could free up hundreds of millions of public sector worker hours. *Deloitte Insights*. <https://www2.deloitte.com/us/en/insights/focus/cognitive-technologies/artificial-intelligence-government-analysis.html>