

ACADEMIC RESEARCH IN ACTION

Generative AI for Personalized Incentives, Rewards, and Recognition

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Generative A.I. is likely to have the most profound impact on the business world of any technology since the PC. And the best way to remain relevant will be to learn how to use it smartly.

- Alan Murray, Fortune.com

The arrival of generative AI in November 2022 set off an unprecedented surge of interest, making ChatGPT the fastest technology in history to reach 100 million users. ⁱ Its near human abilities have since inspired hundreds of articles about the potential ramifications across virtually every industry and profession. HR is no exception. The transformative power of generative AI and large language models is set to revolutionize workplace processes and the employee experience, including those related to incentives, rewards, and recognition (IRR).

While these technologies offer a vast array of applications relevant to IRR, one of the most immediate applications lies in personalization and individualization of incentives, recognition, and rewards. ⁱⁱ Generative AI can now enable greater personalization in rewards and shift towards true individualization, tailoring benefits to specific employees. This has the potential to foster a greater sense of appreciation leading to increased productivity. Companies investing in these AI-powered methodologies might gradually leverage them as predictive tools to determine optimal reward strategies. ⁱⁱⁱ



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By integrating Al-fueled performance management tools with a robust reward system, organizations will shift from a generalized to a more individualized approach to IRR. Al and machine learning will monitor and analyze employee performance in real-time, identifying achievements and accomplishments that merit recognition, thus ensuring timely feedback and appreciation. iv

This might include awarding points based on accomplishments such as learning, achieving sales quotas or other objectives, exhibiting behaviors aligned with values, or sharing knowledge with colleagues. All applications could integrate learning and performance management systems with recognition platforms to enable dynamic recognition and feedback, bolstering employee motivation and engagement, potentially enhancing the organization's employer brand.

For IRR, the promise of generative and large language model Al tools, such as chatbots, co-working robots, and collaborative platforms, is that they will enable organizations to tap into deep data pools to design meaningful, personalized recognition and rewards for every employee. Yet only the largest firms and those that have been most active in amassing workforce data will have the necessary "deep data pools" at their disposal. Moreover, predictive tools can't work on newly-hired employees until the system collects sufficient data on their preferences, which could take many months.

In a world dominated by data, the need for vast amounts of information and a steady flow of information can seem daunting. However, synthetic data – computer-generated information – has already established a track record of success as a cost-effective, automatic, and ethically sound solution for testing and training Al models (depending, of course on the learning data it starts with). Advanced Al, such as AlphaGo, cannot possibly learn the trillions of potential moves in the ancient game of Go, for example. Instead, it first learned the basics – the very tip of the iceberg – from direct learning content provided by the DeepMind team at Google. Then, on its own, it created content to keep learning from. Next through reinforcement learning (trial and error essentially), it quickly became the greatest Go player in history (much as it has done with chess and even poker in which it has learned to bluff). V

Generative AI and advancements in foundational models are indeed pioneering a new era, allowing machines to produce original content from input data. This transformative technology could dramatically and very quickly expand small data sets into deep and constantly refreshed data pools, enriching the understanding of which incentives yield the most significant impacts on employees. In other words, generative AI tools may be able to synthesize data in significant quantities to make accurate, individual predictions regarding the most effective incentives and rewards for organizations of almost any size. vi

Of course, success – as with any AI or machine learning application – depends on various factors, such as the quality of the input data and the design of the AI model. Provided the system doesn't share the data on which it makes its recommendations, individual privacy is protected up to the point where personal reward preferences might or might not be revealed depending on the nature of the reward.

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For an IRR recommendation system, generative language models (like GPT-4) might formulate "hypothetical search queries" based on a user's history, and then retrieve relevant items for recommendation. By adopting a "multi-query beam search" technique (used in AI and machine learning—particularly in the context of natural language processing and recommendation systems—to generate multiple queries at once) it can cater to users with diverse interests. VII This platform could tackle the difficulty of making recommendations even for new employees, and adapt to changing inventories in a reward catalogue, for example. VIII

Thus, generative AI, along with other advanced AI and machine learning technologies, can be applied to employee reward and recognition systems to augment their effectiveness and engagement, and promote personalization. Embracing these advanced AI technologies can lead to more effective, engaging, and personalized employee reward and recognition systems, resulting in enhanced motivation, satisfaction, and retention.

Other and related implications of generative AI on incentives, rewards & recognition

- <u>Sentiment analysis</u>: Al-powered sentiment analysis can evaluate employee communication and gauge overall satisfaction and engagement, enabling organizations to address concerns and acknowledge positive contributions.
- <u>Gamification</u>: Advanced AI can help design engaging gamification elements in reward and recognition systems, fostering healthy competition and collaboration while keeping employees motivated and involved.
- <u>Data-driven insights</u>: All can analyze vast amounts of employee data to identify patterns, trends, and correlations, enabling organizations to make informed decisions on reward programs and policies that align with company goals and values.
- <u>Predictive analytics</u>: Al can use historical data to predict future performance and potential employee achievements, allowing companies to proactively recognize and reward top performers and high-potential employees.
- <u>Chatbots and virtual assistants</u>: Al-powered chatbots and virtual assistants can be integrated into reward and recognition systems, streamlining the nomination process, answering questions about the program, and providing instant feedback.
- <u>Bias reduction</u>: Al can help reduce potential biases in reward and recognition systems by analyzing employee performance data objectively, ensuring fair and equitable distribution of rewards.

By leveraging generative AI and other advanced AI technologies, organizations will create more effective, engaging, and personalized employee reward and recognition systems. As Alan Murray advises in the quote at the top of this article: "The best way to remain relevant will be to learn how to use it (AI) smartly." ix

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