AI-Driven Efficiency in Workday: Automating Article Summarization in AI and Article Translation in AI

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Abstract:

Generative AI (Gen AI) is transforming knowledge management by automating content creation and updates. In the context of Help Articles, where content creators traditionally spend hours drafting and revising, Gen AI can quickly summarize lengthy documents into digestible formats like FAQs, summaries, or talking points. By leveraging AI models to distill complex information, organizations can keep their knowledge bases current and relevant, reducing the manual effort required to update content as policies and procedures change. This not only improves efficiency but also enhances the user experience, enabling employees to access clear and up-to-date information more easily, ultimately creating a more dynamic and responsive knowledge management system.

Workday Help combines knowledge and case management capabilities, enhancing employee engagement and reducing the demand for HR and IT support. The integration of generative Artificial Intelligence (AI) into Workday's Knowledge Management system optimizes content creation and translation, enabling a more efficient and scalable solution. Two key AI features are introduced: Article Summarization with AI and Article Translations with AI.

Article Summarization with AI helps content creators streamline the publishing process by summarizing extensive documents (e.g., DOCX, PDF, Help Articles) into concise summaries, FAQs, or talking points, reducing the time spent on content creation. This feature leverages the Google Vertex AI model to process and organize content efficiently.

Article Translations with AI addresses the need for global organizations to support multi-language Help Articles. By utilizing Google's Cloud Translation API, this feature automates the translation of Help Articles into various languages, ensuring up-to-date content is available to a diverse, global workforce.

Both features are designed to enhance knowledge management by improving content accessibility and reducing manual workload. These AI-driven tools empower employees to self-serve, deflecting new cases from being created and enhancing overall operational efficiency. However, users must review and verify AI-generated content before use, as the system does not leverage user feedback for training or monitoring the models.

This paper outlines the functionality, training, limitations, and deployment of these AI-powered features, with a focus on enhancing Workday's knowledge management system for organizations of all sizes

Introduction:

Workday Help offers a powerful combination of knowledge and case management capabilities, designed to improve the employee experience, streamline support processes, and reduce the operational burden on Human Resources (HR) and Information Technology (IT) teams. As organizations increasingly look to optimize their internal support systems, leveraging the potential of generative Artificial Intelligence (AI) offers an opportunity to enhance the efficiency, scalability, and effectiveness of Workday's Knowledge Management solutions.

A well-functioning knowledge management system empowers employees to self-serve, reducing the need for direct support, and increasing overall engagement with company resources. This, in turn, helps to deflect incoming service requests and ensures that employees have access to the most up-to-date, relevant information when they need it. However, creating and maintaining an effective knowledge management system, particularly in a rapidly evolving business environment, can be time-consuming and complex. Workday addresses these challenges with two innovative AI-driven features: Article Summarization with AI and Article Translations with AI. The Article Summarization with AI feature helps content creators by reducing the time and effort required to publish new Help Articles. By leveraging generative AI, it automatically condenses large amounts of text into clear, concise summaries, FAQs, or talking points, ensuring that employees have quick access to essential information. This feature also ensures that Help Articles are kept up to date in response to shifting organizational policies, reducing the risk of outdated content.

Workday's AI tools for summarizing and translating articles make managing knowledge much easier. Usually, it takes content creators up to two days to publish a new Help Article, and these articles can quickly become outdated due to constant policy changes. The AI summarization tool fixes this by turning long documents into clear summaries, FAQs, or talking points, making updates faster and keeping content relevant. The translation tool helps global organizations translate Help Articles into multiple languages, making it easier to keep information up to date for everyone. Together, these tools make the process more efficient, save time, and ensure employees always have access to current and accurate information.

In addition, Article Translations with AI offers a solution to global organizations that need to provide support to a diverse, multi-lingual workforce. This feature uses AI-powered translation tools to quickly and accurately translate Help Articles into multiple languages, making it easier for organizations to keep content accessible and current for their international teams. These two features exemplify how generative AI can improve both the quality and the speed of knowledge content creation and distribution, making it easier for employees to access the information they need while minimizing the administrative workload for HR, IT, and content creators. In this paper, we explore the functionality, deployment, and potential benefits of these AI-driven tools, as well as the safeguards in place to ensure their responsible and ethical use.

2. Overview of Workday and AI Integration in Knowledge Management

Workday Help combines knowledge and case management capabilities to empower employees and optimize organizational processes. By integrating generative Artificial Intelligence (AI) into Workday's Knowledge Management system, these features significantly enhance content accessibility, improve employee self-service, and reduce the demand for direct support from Human Resources (HR) and Information Technology (IT). AI-driven tools in Workday Help enable organizations to manage and deliver content more efficiently, ultimately creating a richer, more dynamic experience for employees and users alike
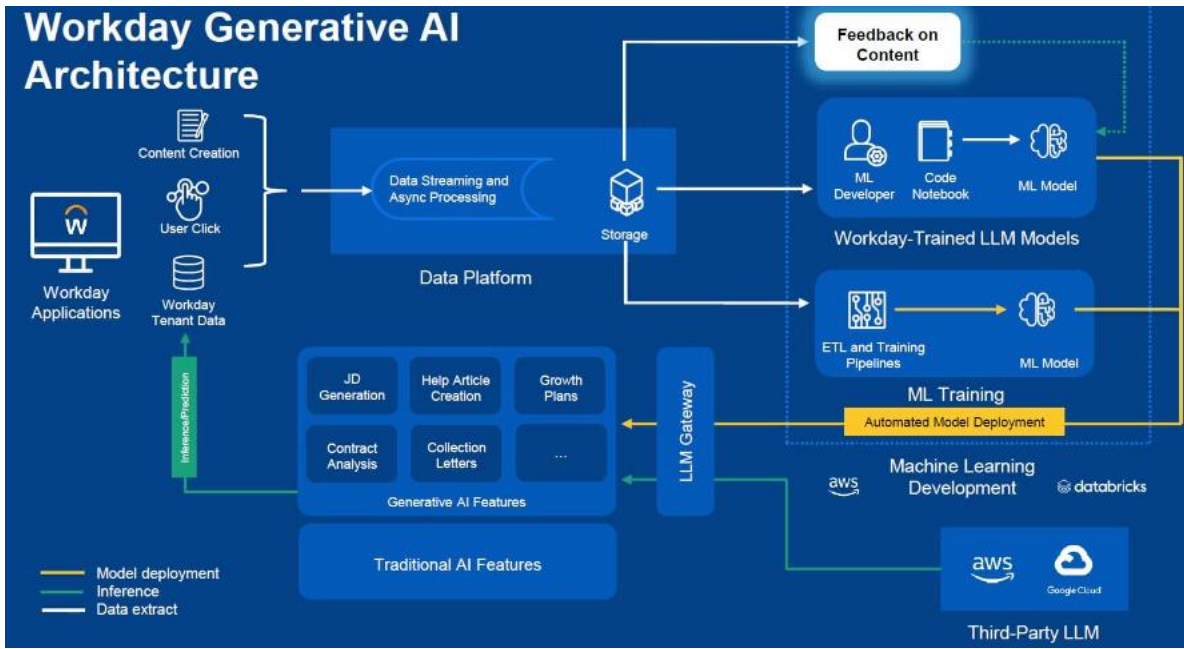
Figure: Workday Generative AI Architecture | Source: joshbersin.com

2.1-Article Summarization with AI

Content creation and management can be time-consuming, especially as policies and procedures evolve rapidly. On average, content creators spend two full working days to publish a new Help Article, and due to the frequency of organizational updates, articles quickly become outdated. Workday's AI-powered Article Summarization feature helps mitigate this challenge by automatically summarizing existing Help Articles or policy documents into concise summaries, FAQs, or talking points. This ensures that information remains relevant and accessible, ultimately enhancing the self-service capabilities of the platform.

The Workday Article Summarization with AI feature helps create content for Help Articles by using files that are uploaded to Knowledge Management or by taking information from existing Help Articles.

Input
- DOCX or PDF files
- Help Articles

Output

Article content in the Article Editor as one of the following:
- Summarize the content
- Organize the content into FAQs
- Organize the content into talking points for managers.

How It Works

This feature leverages a Google Vertex AI model. When a Help Article or document is selected, the content is sent to the model to be summarized or organized according to the user's selection. The output is then presented back to the user in the Article Editor.

How It Was Trained

The Google model made available through Google Vertex AI, was pre-trained, and no additional training or fine-tuning was performed by Workday.

2.2. Article Translations with AI

In today's global work environment, supporting Help Articles in multiple languages is essential. However, frequently updating and translating content into different languages can be an inefficient and resource-intensive process. Workday's AI-powered Article Translation feature automates the translation of Help

Articles, enabling organizations to quickly and easily provide the same resources to a diverse workforce, regardless of language. The AI-powered translations streamline internal workflows and ensure that global teams have access to the most up-to-date information in their preferred language.

The Article Translations with AI feature creates content for Help Articles by translating published Help Articles into a new language.

Input

- Help Articles

Output

- Article Content in a new language in the Article Editor

How It Works

When navigating to a published Help Article, there's the option to translate the article into a new language using Google's Cloud Translation API. The output is then presented back to the user in the Article Editor.

How It Was Trained

This feature uses Google's Cloud Translation API, which connects to a Google model that is trained and retrained on Google's own dataset, with model updates released at a regular cadence once quality metrics are met.

Both AI features leverage advanced technologies from Google, including Google Vertex AI for Article Summarization and Google Cloud Translation API for Article Translations. By utilizing these powerful AI tools, Workday reduces manual effort, enhances the speed and accuracy of content delivery, and improves the overall user experience. The integration of AI not only accelerates content creation and translation but also helps mitigate risks associated with outdated or inconsistent information across multiple languages and regions.

3. Model QA and Model Testing

Workday tested different AI models to make sure they could meet the needs for Article Summarization and Translation. After confirming the models could perform well, they tested them with sample documents and checked the results to ensure they met the required standards during development.

4. Monitoring

If a new version of the Google models is released, Workday will compare the results from the current version with the new one. They will only update the feature to use the new model once they have fully tested and reviewed it.

5. Responsible Artificial Intelligence (AI)

Workday's AI tools are built to support, not replace, human decision-making by offering helpful insights and predictions that enable better, more informed choices. We believe AI will transform how we work and shape the future of work itself, but we also recognize that trust is essential for this transformation. To ensure that AI is developed responsibly, Workday follows four guiding principles rooted in our core values. Our Responsible AI approach ensures that we identify and manage risks in our AI features, helping to create a trustworthy and safe environment for users.

6. Workday Lifecycle Approach to Responsible AI

The decisions made during the design and development of an AI tool can impact how trustworthy and useful it is, and whether it could have unintended negative effects. Workday uses a lifecycle review process to assess AI products throughout their development, based on the phase they're in, how mature they are, and any ethical risks they might pose. This approach ensures that AI tools are continuously evaluated as they evolve.

A key part of this process is an initial risk evaluation. In this phase, we look at the potential impact of the AI feature and check if it could create unfair outcomes, such as inequalities in job opportunities or finances. If any risks are found, we take steps to address them before and after the tool is released. Our focus is on reducing risks related to bias, transparency, reliability, and decision-making.

Workday's lifecycle approach helps improve the quality of our AI products and supports our commitment to developing responsible AI. Customers are responsible for understanding any legal requirements related to the use of these features, including testing or documentation needed by law.

7. Bias Review

As part of Workday's approach to managing Machine Learning (ML) bias, we carefully review the potential unintended consequences of using ML and continue to monitor them. The Article Summarization with AI feature extracts and summarizes content from Help Articles or documents, while the Article Translations with AI translates content into different languages. Both features focus on processing and summarizing content, not on evaluating or making decisions about individuals in areas like employment or finances. We have assessed these features as low risk for bias or unfair outcomes.

8. Key Benefits of Workday's AI-Powered Knowledge Management System

8.1 Empowered Employees: With AI-driven tools, employees are better equipped to find answers and resolve issues independently through self-service options, reducing the need for direct intervention from HR or IT.

8.2 Increased Efficiency: AI tools help speed up the process of content creation and translation, allowing teams to maintain current, high-quality information without the burden of manual updates.

8.3 Global Reach: AI-powered translations enable seamless, multi-lingual support for global organizations, ensuring that employees worldwide can access critical resources in their native languages.

8.4 Cost Savings: By automating content summarization and translations, Workday helps organizations reduce operational costs, improve efficiency, and allow HR and IT teams to focus on higher-priority tasks.

9. Responsible AI and Data Privacy

Workday is committed to responsible AI that amplifies human decision-making rather than replacing it. The company's AI development follows a lifecycle review process that assesses ethical risks, bias, and the potential impact of AI technologies. Workday places significant emphasis on transparency, fairness, and data privacy, ensuring that AI tools are used ethically and comply with relevant legal standards, including GDPR. The AI features offered in Workday Help are designed to give customers full control over their data and ensure that it is processed securely and responsibly.

Through its AI-powered Knowledge Management tools, Workday can deliver cutting-edge solutions that not only improve operational efficiencies but also foster a more informed and engaged workforce, while maintaining strict adherence to ethical AI practices.

Conclusion

In conclusion, Workday's AI-driven Knowledge Management tools, including Article Summarization and Translation, significantly enhance the efficiency of internal support systems and improve employee self-service. By leveraging generative AI, Workday helps organizations streamline content creation, ensuring employees have quick access to up-to-date and relevant information. These tools save time, reduce administrative workloads, and support global teams with multi-lingual content. Additionally, Workday's commitment to responsible AI ensures that these technologies are ethical, transparent, and reliable, fostering trust and minimizing bias. Ultimately, Workday's integration of AI is transforming how organizations manage

knowledge, improve employee engagement, and scale operations effectively

References

1. JOSH BERSIN "Why I'm Bullish On Workday: News From The Innovation Summit" (29 Apr 2024) https://joshbersin.com/2024/04/why-im-bullish-on-workday-again-the-innovation-summit/
2. Rich Sauer "Responsible AI Governance at Workday" (August 08,2023) https://blog.workday.com/en-us/2023/responsible-ai-governance-workday.html
3. "Generative artificial intelligence in the metaverse era" Volume 3, 2023, Pages 208-217 https://doi.org/10.1016/j.cogr.2023.06.001
4. Onur Asan, Alparslan Emrah Bayrak, Avishek Choudhury "Artificial Intelligence and Human Trust in Healthcare: Focus on Clinicians" (Jun 24, 2019) https://www.jmir.org/2020/6/e15154/
5. Michael Haenlein Icon, Andreas Kaplan, Chee-Wee Tan Icon & Pengzhu Zhang "Artificial intelligence (AI) and management analytics" (18 Dec 2019) https://doi.org/10.1080/23270012.2019.1699876
6. Avinash Malladhi "Transforming Information Extraction: AI and Machine Learning in Optical Character Recognition Systems and applications Across Industries" (30 Apr 2023) https://ijcttjournal.org/2023/Volume-71%20Issue-4/IJCTT-V71I4P110.pdf
7. Tijn van der Zant,Matthijs Kouw,Lambert Schomaker "Generative Artificial Intelligence" (January 2012) https://www.researchgate.net/publication/230708329_Generative_Artificial_Intelligence
8. Dr. Suryakiran Navath Ph.D. "Transforming Healthcare: The Impact and Future of Artificial Intelligence in Healthcare" (10.23.2018) https://doi.org/10.55124/jaim.v1i1.234
9. Madhavi Vinayak Godbole "Revolutionizing Enterprise Resource Planning (ERP) Systems through Artificial Intelligence" (10.12.2023) https://injmr.com/index.php/fewfewf/article/view/31
10. Leonardo Banh,Gero Strobel "Generative artificial intelligence" (06 December 2023) https://doi.org/10.1007/s12525-023-00680-1