Applications, Risk, Challenges, and Future Prospects of ChatGPT in Electronic Records Management

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ARTICLE INFO

ABSTRACT

The widespread application and rapid development of ChatGPT are disrupting traditional models across industries, bringing revolutionary changes to electronic records management. ChatGPT can be applied in the following scenarios within electronic records management: intelligent classification and archiving, automatic summarization and information extraction, knowledge-based question answering, information retrieval, and semantic analysis with association building. Meanwhile, attention should be given to the following risks and challenges: data privacy and security concerns, legal and ethical issues, and technical sustainability and reliability challenges. Looking forward, the application of ChatGPT in electronic records management is expected to trend toward focusing on core archival areas, innovating record management methods, strengthening regulatory compliance, and enhancing personnel's data literacy.

1. Introduction

With the rapid development of information technology, a vast amount of information and data has been transformed into electronic formats, making electronic records management an essential research area. Electronic records management pertains to the orderly organization, efficient utilization, and secure storage of information resources, directly influencing decision-making efficiency and intellectual property protection across governments, enterprises, and various sectors of society. However, as the quantity and diversity of electronic records continue to grow, traditional methods of records management–such as classification, retrieval, and organization–are proving inadequate. Additionally, the modern demand for faster and more accurate data processing has presented significant challenges to records management.

In this context, ChatGPT, a type of artificial intelligence technology based on the GPT series models, offers significant potential in electronic records management [35]. With its powerful natural language processing (NLP) capabilities, ChatGPT can enable intelligent classification of records, automatic summarization, accurate information retrieval, and semantic association analysis, thereby significantly improving the efficiency of records management. Moreover, ChatGPT can assist records managers in uncovering the latent value within electronic records, providing data support for various decision-making processes. The introduction of ChatGPT technology into the ChatGPT: five priorities for researched of electronic records management can help optimize and upgrade traditional records management methods, driving innovation and development within the industry.

This paper first details the development history, fundamental principles, and characteristics of ChatGPT technology. Next, it delves into the specific application scenarios of ChatGPT in electronic records management, including, but not limited to, intelligent classification and archiving, automatic summarization and information extraction, knowledge-based question answering, information retrieval, semantic analysis, and association building. Furthermore, the paper focuses on the risks and challenges that may arise during practical operations, such as data privacy and security concerns, legal and ethical considerations, and issues surrounding technical sustainability and reliability. Finally, the paper discusses the future trends of ChatGPT's application in electronic records management, providing valuable insights for professionals, policymakers, and researchers in the field. By conducting an in-depth study on the application scenarios, risks, challenges, and future outlook of ChatGPT in electronic records management, this paper aims to promote the effective use of this advanced technology in the practice of records management, enhancing efficiency and quality, and providing more accurate and efficient data support for decision-making processes in government, enterprises, and society.

2. Literature Review

In the context of the digital age, research on electronic archive management has increasingly become a hot topic in the field of information resource management. Recent research findings indicate that the application of artificial intelligence (AI) technology in electronic archive management can significantly enhance the efficiency and quality of archive processing. The potential of ChatGPT in electronic records management is realized in several main areas:

Bouzid and Piron explored the potential of generative AI in short document indexing in their study [5]. They pointed out that in the case of short documents, the lack of indexing terms may lead to poor information representation.
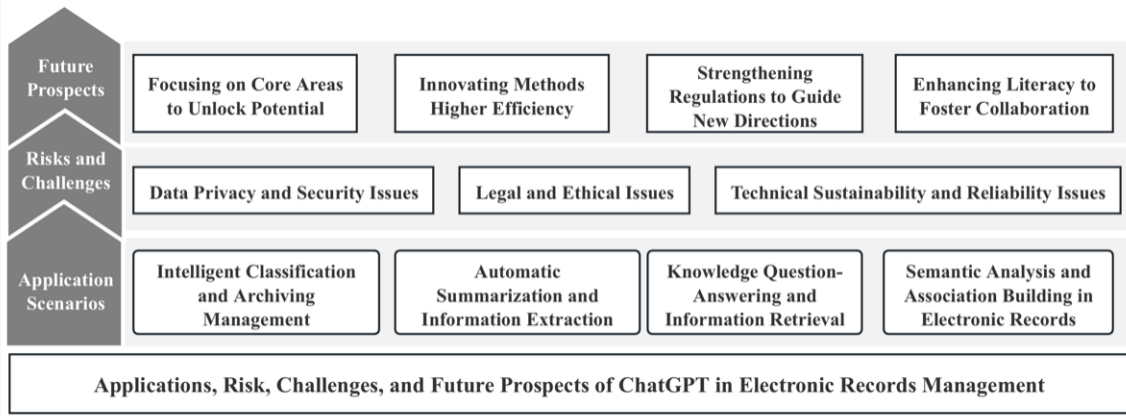
Figure 1: The overall framework of the article

To address this issue, they proposed a new approach using large language models (LLMs) to enrich relevant terms during the document indexing process, thereby improving the efficiency of information retrieval systems.

The study by [11] focused on the field of marketing analysis, investigating how to leverage ChatGPT for document retrieval and fine-tuning to obtain dynamic marketing insights. They proposed a paradigm shift from model fine-tuning to strategic application of document retrieval technologies. Through innovative methods such as retrieval-augmented generation and low-rank adaptation, they activated the analysis of large and unstructured datasets, revealing valuable insights that were previously overlooked.

Gray et al., through a case study, explored the method of using ChatGPT to classify free text in regulatory documents into predefined sections, specifically for drug labeling documents [16]. They evaluated AI-based natural language processing (NLP) methods, such as Transformer, to automatically categorize free text information into standardized sections, supporting a comprehensive review of drug safety and efficacy.

These studies demonstrate that the application of AI technology in electronic archive management can not only increase the level of automation in document processing but also enhance the retrieval and analysis capabilities of documents. By utilizing advanced AI models, information within electronic archives can be organized, retrieved, and utilized more efficiently, which is of great significance for improving the efficiency and quality of archive management.

3. Overview of ChatGPT Technology

3.1. Development History of the GPT Series

The GPT (Generative Pre-trained Transformer) series of models originated in the field of Natural Language Processing (NLP) and has been a major breakthrough in artificial intelligence technology in recent years [39]. The GPT series stems from the Transformer architecture, first introduced by [36]. The Transformer architecture features a self-attention mechanism and multi-head attention mechanism, which efficiently handle long-sequence data, overcoming issues faced by traditional Recurrent Neural Networks (RNNs) and Long Short-Term Memory (LSTM) networks in processing lengthy text [21, 33]. Based on this architecture, the GPT series has evolved, consistently pushing the boundaries of NLP performance [25].

GPT-1, the first model in the series, was released by OpenAI in 2018 [31]. GPT-1 utilized unsupervised pre-training methods, allowing it to learn from large-scale text data, acquiring extensive language knowledge. After pre-training, GPT-1 could be adapted to various NLP tasks, such as text classification, semantic role labeling, and question answering systems. Despite its achievements, GPT-1 still had limitations in handling long texts and generating coherent content. GPT-2, released in 2019, marked a significant improvement over GPT-1. With a larger model size and more training data, GPT-2 exhibited superior performance in NLP tasks, such as understanding long texts and generating coherent articles. However, the powerful generative capabilities of GPT-2 also raised concerns about the potential spread of misinformation, leading OpenAI to initially withhold full public release of the model and its training data.

In 2020, GPT-3, the third generation of the GPT series, was introduced, breaking previous limitations with its unprecedented scale, boasting 175 billion parameters, making it the largest NLP model at the time. GPT-3 achieved leading performance in numerous NLP tasks, such as text generation, summarization, translation, and question answering. Additionally, GPT-3 demonstrated a degree of "zero-shot learning" capability, meaning it could complete tasks based solely on natural language instructions without specific task training. The release of GPT-3 garnered widespread attention and sparked discussions about its potential applications across various fields. Despite its success, GPT-3's massive scale and resource demands posed significant challenges, leading OpenAI to explore more efficient and scalable model structures in future research [41].

Building on the GPT-4 architecture, ChatGPT was developed as a specialized NLP model for conversation scenarios, offering more precise and seamless dialogue experiences

Table 1
The evolutionary history of ChatGPT

Name	Year	Function	Limitations
GPT-1	2018	Unsupervised pre-training, Transfer learning for various NLP tasks	Ability to handle long texts and generate coherent text
GPT-2	2019	Larger model size, More training data, Ability to generate coherent articles	Raises concerns about false information dissemination and misuse
GPT-3	2020	175 billion parameters, Leading performance in NLP tasks, Zero-shot learning ability	Massive model size and high computational resource requirements
GPT-4	2023	Optimized for conversational scenarios, Precise and fluent conversation experience, Enhanced natural language understanding and generation capabilities	Requires substantial computational resources, Potential ethical and safety issues

[12]. Compared to GPT-3, ChatGPT further enhances natural language understanding and generation capabilities, making it better suited for complex language tasks and application contexts [29].

In summary, the GPT series has evolved from GPT-1 to GPT-4-based ChatGPT, consistently breaking through technical limitations in NLP and providing innovative solutions for artificial intelligence. As the application of the GPT series continues to deepen across various fields, its potential use in electronic records management also holds promising prospects.

3.2. Principles and Features of ChatGPT

ChatGPT, as part of the GPT series, is also based on the Transformer architecture and inherits the excellent features of GPT models. In this section, we will explore the core principles and characteristics of ChatGPT.

The core mechanism of ChatGPT derives from the Transformer architecture, which consists of two main components: the encoder and the decoder [14]. During the training process, the encoder encodes the input text, converting it into vector representations while capturing the semantic and structural information of the text. The decoder then receives the output from the encoder and gradually generates a predicted output sequence using self-attention and multi-head attention mechanisms [22]. Additionally, ChatGPT employs a masked auto-regressive strategy, ensuring that each prediction depends only on previously generated outputs, thus maintaining coherence and accuracy in the generation process [23, 45].

Like other GPT models, ChatGPT uses large-scale unsupervised pre-training. During the pre-training stage, the model learns linguistic knowledge and semantic rules from massive amounts of text data, equipping it with rich language expression capabilities. After pre-training, the model can be fine-tuned for specific tasks and scenarios through transfer learning, allowing it to adapt to various application needs [42].

ChatGPT exhibits several notable features that make it highly effective in NLP tasks and provides robust support for applications in different fields. First, ChatGPT demonstrates powerful natural language understanding capabilities, accurately capturing the semantic and structural information of text, enabling efficient handling of complex language tasks [37]. Additionally, ChatGPT's text generation quality is exceptionally high, producing coherent, fluent, and creative content. Compared to traditional natural language generation methods, ChatGPT-generated text more closely resembles human expression.

Moreover, ChatGPT's large-scale pre-training and fine-tuning strategies give the model high flexibility. Large-scale pre-training allows the model to learn extensive linguistic knowledge and semantic rules from vast text data, enriching its language expression capabilities [34]. The fine-tuning strategy enables the model to quickly adapt to specific tasks and scenarios, meeting diverse application needs. These strategies allow ChatGPT to be applied to various NLP tasks, such as text classification, summarization, machine translation, and more.

ChatGPT also showcases a degree of zero-shot learning, enabling the model to complete relevant tasks through natural language instructions, even without specific task training [38]. This enhances the model's scalability and flexibility in practical applications, reducing deployment costs and technical barriers. Finally, ChatGPT offers an open API interface, allowing developers to easily integrate it into various applications and systems. Through the API, developers can quickly add intelligent dialogue functions to their projects or products, enhancing user experience. As the GPT series continues to evolve, ethical and safety improvements have also been made, including model review and user feedback mechanisms, reducing the risk of generating inappropriate or harmful content.

3.3. Advantages and Challenges of ChatGPT

In terms of advantages, ChatGPT, with its powerful natural language processing (NLP) abilities, brings significant benefits to electronic records management [4]. The model can understand complex text structures and semantic relationships, making electronic record classification, retrieval, and analysis more efficient. Additionally, ChatGPT's high-quality text generation capabilities enable it to automatically generate summaries, reports, and other documents based on

Table 2
The advantages and challenges of ChatGPT in archives management

	Advantages	Chanllenges
1	Powerful natural language processing capabilities, enabling intelligent classification, automatic summarization, precise information retrieval, and semantic association analysis of electronic records.	High computational resource requirements, especially during training and fine-tuning stages, which may pose challenges for small to medium-sized institutions.
2	Provides an open API interface, facilitating integration into various applications and systems.	Data privacy and security issues requires measures such as encryption and access control to protect sensitive information.
3	Capable of completing tasks based on natural language instructions, exhibiting zero-shot learning abilities.	Ethical and safety concerns necessitate the establishment of model review and user feedback mechanisms to reduce the risk of generating inappropriate or harmful content.
4	Through pre-training and fine-tuning strategies, it possesses rich language expression capabilities and can quickly adapt to specific tasks.	Legal and ethical issues require compliance with relevant laws and regulations, and respect for intellectual property rights and copyright laws.
5	Assists archivists in mining the potential value within electronic records, providing data support for decision-making.	Technical sustainability and reliability issues require improving the stability and reliability of technical applications to meet long-term electronic records management needs.

record content, greatly enhancing the efficiency of records management.

Secondly, ChatGPT's fine-tuning strategy and zero-shot learning capabilities give it a high degree of flexibility. With targeted fine-tuning, ChatGPT can quickly adapt to various application scenarios and meet diverse records management needs [15]. Zero-shot learning allows the model to perform tasks through natural language instructions without specific training, opening up broad application possibilities for records management while reducing deployment costs and technical barriers.

However, ChatGPT also faces certain challenges in practical applications. The first challenge lies in the high computational resource requirements, especially during training and fine-tuning stages. For many small to mid-sized institutions, providing sufficient computational resources and storage space could be a significant hurdle. Moreover, with the increasing size of models, the environmental impact of energy consumption becomes a concern [27]. To address these challenges, researchers and developers must seek more efficient and scalable technological solutions to reduce resource demands.

Another challenge is related to the ethical and safety aspects of the model. While ChatGPT has made improvements in mitigating harmful or inappropriate content generation, there are still risks involved. In sensitive fields like electronic records management, ensuring the ethical and secure use of AI models is critical. Therefore, it is essential to establish comprehensive model review and user feedback mechanisms to ensure compliance with legal and ethical standards. Safeguarding user privacy and data security is another important challenge that must be considered during model design and deployment.

4. Application Scenarios of ChatGPT in Electronic Records Management

4.1. Intelligent Classification and Archiving Management

Traditional methods of electronic records classification often rely heavily on manual operations, which involve considerable labor, time, and difficulty in ensuring accuracy and consistency. With the development of artificial intelligence (AI), the use of AI technologies in records management has become an important approach to addressing these issues. Among them, ChatGPT, built on the GPT-4 architecture, possesses powerful NLP capabilities that can be leveraged to improve the efficiency of intelligent classification and archiving in electronic records management.

ChatGPT can categorize electronic records based on content, metadata, and contextual relationships, enabling intelligent classification and archiving.

Firstly, ChatGPT can classify records based on their content. By performing deep analysis on various forms of information, such as text, images, and videos, ChatGPT can understand the themes and key information within records [1]. For example, ChatGPT can identify key elements from reports, such as research methods, data sources, and research results, and categorize the records according to these elements into appropriate thematic groups. Additionally, ChatGPT can analyze sentiments, viewpoints, and attitudes, allowing further refinement in classification [10].

Secondly, ChatGPT can utilize metadata in the classification and archiving of electronic records. Metadata describes information about a record, such as its content, characteristics, source, and creator, which facilitates efficient retrieval and management. By analyzing metadata, ChatGPT can comprehend the background and attributes of the

records. For instance, it can classify records based on the document's creation time, author, or department, placing files in the appropriate folders or systems. This makes it easier for records managers to locate and manage records.

Additionally, ChatGPT can carry out intelligent archiving based on contextual relationships. In records management, there are often connections between different records. For example, multiple documents from the same project may relate to different research stages, data sources, or research methods, but they share a strong interrelationship. By analyzing these connections, ChatGPT can intelligently link and archive related records. This helps improve the overall efficiency of records management and facilitates cross-topic and cross-departmental retrieval and usage of records.

To ensure the accuracy of intelligent classification and archiving, ChatGPT can also engage in self-learning and optimization. By collecting feedback from records managers, the model can identify errors in classification and archiving processes and adjust its algorithms and parameters to reduce similar mistakes. As the volume of records grows, ChatGPT can also learn new themes and types, improving its ability to manage emerging records effectively.

4.2. Automatic Summarization and Information Extraction

In electronic records management, automatic summarization and information extraction are crucial applications. These functions help records managers quickly grasp the main content of records, improve retrieval efficiency, and facilitate further analysis and research. ChatGPT excels in these areas, offering efficient and accurate automatic summarization and information extraction services for electronic records management [26].

Automatic summarization refers to using algorithms to extract key information from original documents to generate concise, representative summaries. ChatGPT's strong capabilities in natural language generation make it highly effective in automatic summarization tasks [44]. By analyzing the content of records, the model can accurately identify the text's main themes and key points, expressing these in a coherent and concise manner. Compared to traditional keyword extraction methods, ChatGPT-generated summaries are more readable and valuable in terms of information.

For records management, automatic summarization provides significant practical benefits, allowing managers to quickly understand the core content of large volumes of records, thereby improving work efficiency [8]. Additionally, automatic summarization helps optimize the records retrieval process, enabling users to quickly locate relevant documents based on summaries and save retrieval time.

Information extraction involves identifying and extracting specific types of key information from a text, such as names, locations, dates, and events. This information is critical for understanding the background and content of records and aids in deeper analysis [19].

ChatGPT's abilities in natural language understanding and pattern recognition make it highly accurate and efficient in performing key information extraction tasks. Unlike traditional rule-based information extraction methods, ChatGPT can adapt to various linguistic contexts and text structures, improving the accuracy of information extraction. Specifically, ChatGPT can deeply analyze the content of records, identifying and extracting key information for managers to review and use. Moreover, ChatGPT can automatically learn and extract relevant key information based on different types of records and field characteristics.

In electronic records management, information extraction has broad application value. It helps managers quickly grasp the core content and critical details of records, improving the efficiency of records management. Additionally, key information extraction helps optimize the retrieval and analysis processes of records, providing strong support for subsequent research and use.

4.3. Knowledge Question-answering and Information Retrieval

Knowledge-based question-answering (QA) and information retrieval are key aspects of electronic records management, involving retrieving relevant information from vast archives, answering user questions, and meeting specific needs [19]. With the help of ChatGPT technology, electronic records management systems can achieve more intelligent and efficient QA and information retrieval functions [13]. Built on the GPT-4 architecture, ChatGPT has strong natural language understanding and generation capabilities, allowing it to interpret users' queries and locate relevant information in large archives. Furthermore, through in-depth analysis of record content, metadata, and contextual relationships, ChatGPT can provide accurate and relevant responses to meet users' inquiries about records [9].

In the context of knowledge-based question-answering, ChatGPT can comprehend the questions posed by users, convert them into records retrieval tasks, and extract the required information from the archives. For example, in a government records management system, a user might inquire about specific policy details; in a corporate system, a user may need information on a product's development history. By analyzing the semantics of the question, ChatGPT can locate records related to the query and extract key information, thereby generating a tailored response. This intelligent QA function not only improves the utilization of records but also alleviates the workload of records managers.

In information retrieval, ChatGPT can retrieve relevant records from the records management system based on user needs and prioritize them. Traditional keyword-based retrieval methods often have limitations, such as insufficient handling of synonyms, polysemes, and ignoring the semantic relationships between keywords. In contrast, ChatGPT can interpret the true intent behind the user's request and locate records highly relevant to the need through semantic analysis [40]. Additionally, ChatGPT can rank the retrieval results based on factors like record importance, relevance, and novelty, allowing users to quickly find the records that best meet their needs.

4.4. Semantic Analysis and Association Building in Electronic Records

Semantic analysis and association building are critical elements of electronic records management, involving a deep understanding of the content of records and uncovering inherent relationships between them to enable more intelligent retrieval, utilization, and management. With ChatGPT technology, electronic records management systems can conduct efficient semantic analysis and build associations between records at the semantic level.

Semantic analysis refers to extracting and understanding the deeper meaning within records. As a natural language processing model based on the GPT-4 architecture, ChatGPT excels in semantic understanding. By deeply analyzing the content of records, ChatGPT can identify the key concepts within the records, such as themes, entities, and events, providing strong support for the classification, archiving, retrieval, and use of records [18]. Additionally, semantic analysis can assist records managers in identifying potential issues within records, such as redundant content or inaccurate information, thereby improving the quality of records [24].

Association building involves identifying and uncovering relationships between records at the semantic level. Leveraging ChatGPT technology, electronic records management systems can automatically detect relationships between records, enabling more intelligent organization and retrieval of records [13]. For example, ChatGPT can recognize sections of different records that pertain to the same theme or event and link these records, allowing users to gain a more comprehensive understanding of the related information. Furthermore, association building facilitates knowledge discovery, integration, and interdisciplinary research, promoting innovation and knowledge dissemination.

5. Risks and Challenges of Applying ChatGPT in Electronic Records Management

5.1. Data Privacy and Security Issues

When applying ChatGPT to electronic records management, data privacy and security are critical concerns. Records may contain sensitive information, such as personal data, commercial secrets, or government policies, which must be adequately protected [2]. To address these challenges, several measures can be implemented:

Firstly, encryption technologies should be used to safeguard the integrity and confidentiality of records during storage, transmission, and processing. For example, AES encryption can be employed for data storage, and TLS/SSL protocols can be used to secure data transmission [20]. When using ChatGPT to process records, privacy-preserving computing techniques, such as homomorphic encryption or secure multi-party computation, can ensure that the analysis and processing of records are completed without exposing the original data [6].

Secondly, strict access control strategies should be enforced to ensure data security. By assigning appropriate access rights to different users and roles, only authorized individuals can access and manage specific records. Techniques like identity authentication and role-based authorization can prevent unauthorized access and data breaches. Furthermore, user behavior should be audited and monitored to detect and respond to potential security threats promptly [2].

Additionally, records management practices must comply with relevant laws and regulations to ensure ethical and legal compliance. For example, compliance with the European Union's General Data Protection Regulation (GDPR) or the California Consumer Privacy Act (CCPA) is necessary. Policies and procedures for data protection should also be established to ensure the protection of individual privacy rights and intellectual property during data processing [17].

Lastly, cooperation among stakeholders is essential for improving data protection levels. Designers, developers, operations personnel, and users of electronic records management systems should work together to cultivate a culture of privacy protection and security awareness [43]. Regular training on data protection can help employees develop better awareness and skills for securely handling sensitive data.

5.2. Legal and Ethical Issues

Since records often contain sensitive and confidential data, the application of ChatGPT in electronic records management also faces legal and ethical challenges. For instance, during knowledge-based QA and information retrieval, intellectual property and copyright issues must be considered [46]. During intelligent classification and archiving, compliance with relevant records management regulations and standards is necessary. In semantic analysis and association building, it is crucial to protect users' privacy and data rights [28].

To tackle these legal and ethical challenges, several effective measures can be taken. First, understanding and adhering to relevant laws and regulations is crucial. Respecting intellectual property and copyright laws while avoiding violations of users' privacy and data protection rights is essential. Second, establishing standards and guidelines for records management can help standardize the use and management processes, ensuring the safety and reliability of records data [7]. Additionally, ethics education and training for records management professionals should be strengthened to raise their ethical awareness and moral standards, fostering a culture of compliance in electronic records management.

When processing electronic records, strict compliance with legal and ethical standards is required to safeguard users' legitimate rights and privacy [30]. Moreover, continual improvements in records management standards and practices are necessary to enhance efficiency and reliability.

5.3. Technical Sustainability and Reliability Issues

Technical sustainability and reliability are also critical challenges when using ChatGPT for electronic records management. Although ChatGPT has strong NLP and text generation capabilities, managing large-scale records data requires further improvement in technical sustainability and reliability [3].

Technical sustainability refers to the longevity and persistence of technology applications, ensuring they meet the long-term needs and changes of electronic records management. Several measures can be implemented to achieve sustainability, such as standardizing technical applications and processes, formulating long-term development plans, and strengthening research and development efforts. Additionally, building a robust technical support system for records management will provide ongoing support and services, ensuring the continuous reliability of technological applications.

Technical reliability refers to the stability and dependability of the technology application. To enhance reliability, several effective measures can be taken, such as improving the quality and reliability of technology, establishing a sound technical support system, and promptly addressing technical issues and failures. Furthermore, providing adequate training and education to technical personnel will help ensure stable and reliable technical applications.

When using ChatGPT for electronic records management, it is essential to pay attention to both technical sustainability and reliability to ensure long-term management and dependable usage of electronic records. Moreover, continued innovation and development in technology applications are required to enhance efficiency and effectiveness, providing more reliable and efficient technical support for electronic records management.

6. Future Prospects of ChatGPT in Electronic Records Management

6.1. Focusing on Core Archival Areas to Unlock ChatGPT's Potential

Although ChatGPT's application in electronic records management is still in its early stages, it holds considerable potential. ChatGPT has already been widely applied in natural language processing, text generation, and question-answering systems, all of which can be integrated into records management to provide more intelligent and efficient services.

Potential application scenarios of ChatGPT in electronic records management include intelligent records management, automated record processing, intelligent recommendations, and semantic analysis and association building. By utilizing ChatGPT's text generation, NLP, QA, and deep learning technologies, records can be intelligently classified, archived, retrieved, and processed, enhancing the efficiency and accuracy of records management while offering personalized services for records inquiries [32].

However, challenges still remain. Data privacy and security issues must be addressed, and the technical sustainability and reliability of ChatGPT need further improvement. To address these challenges, future research on ChatGPT's applications in electronic records management is essential, alongside the development of policies and regulations. Strengthening interaction and collaboration between AI professionals and records management experts will also be key to promoting the adoption and advancement of ChatGPT in this field, ultimately leading to intelligent and modernized records management.

6.2. Innovating Records Management Methods by Integrating New Technologies for Higher Efficiency

In electronic records management, the integration of new technologies to improve management efficiency is an inevitable trend. Besides ChatGPT, other emerging technologies such as artificial intelligence, big data, and blockchain can also be applied to records management [6]. These technologies can work together to transform records management from traditional one-way data processing to intelligent, bi-directional data management.

On the one hand, using new technologies in records management can improve accuracy and efficiency. ChatGPT's NLP and text generation technologies allow for the intelligent classification, archiving, and retrieval of records, alleviating the workload of records managers and improving management accuracy and efficiency. On the other hand, the use of new technologies requires consideration of data privacy and security. As the application scope of new technologies expands, the confidentiality and privacy of records become increasingly important. Effective measures must be taken to ensure data security and privacy while adopting new technologies.

In the future, the integration of new technologies to enhance records management efficiency will be a key direction. Innovating management methods, combining multiple technologies, and continually improving efficiency and accuracy will offer users more efficient and convenient services. At the same time, ensuring data privacy and security, along with improving technical reliability, will be essential.

6.3. Strengthening Legal and Policy Regulations to Guide New Directions in Electronic Records Management

To promote the sustainable development of AI technologies in the records management sector, governments and related industries need to formulate relevant policies and regulations. Policies and regulations should emphasize the core values and significance of records management and clarify the role and importance of AI technologies in this field.

Furthermore, these policies and regulations should define the application scope and standards for AI technologies in records management to ensure their normative and secure use. During the policy-making process, collaboration with

related industries is crucial to fostering interaction and integration between records management and AI technologies.

At the same time, governments and industries should actively promote innovation and application of AI technologies in records management. Policies and regulations should provide strong support for technological innovation, encouraging AI companies and records management institutions to participate in smart records management practices. Additionally, educational initiatives should be strengthened to raise awareness of AI technologies in the records management sector, promoting talent development and technological progress for the sustainable growth of the industry.

6.4. Enhancing Personnel Data Literacy to Foster Collaboration Between AI Technologies and Records Professionals

As AI technologies and records management rapidly develop, nurturing professionals skilled in both AI and records management is crucial for driving growth in both fields. Such cross-disciplinary talent must understand the practical needs of records management and be capable of using AI technologies to improve efficiency and accuracy.

To achieve this goal, interaction and collaboration between AI experts and records management professionals should be promoted through cross-disciplinary team projects and joint training programs. Cross-disciplinary teamwork is especially important as it encourages information sharing and communication between fields, fostering innovation and successful practices.

In addition, measures such as joint training and research collaborations can promote the exchange and cooperation between cross-disciplinary professionals. AI experts can better understand the specific needs of records management, while records professionals can acquire foundational AI knowledge to effectively apply AI technologies in improving records management efficiency.

By enhancing cross-disciplinary collaboration, the application level of AI technologies in records management can be significantly improved, leading to more intelligent, efficient, and secure records management.

7. Conclusion

This paper has explored the application scenarios, risks, challenges, and future prospects of ChatGPT in electronic records management. In today's information age, traditional records management methods can no longer meet the demands for efficiency, accuracy, and security. ChatGPT presents a powerful solution to the challenges in electronic records management, especially in scenarios such as intelligent classification and archiving, automatic summarization, knowledge question-answering, information retrieval, and semantic analysis and association building.

However, the application of ChatGPT also comes with risks and challenges, such as data privacy and security concerns, legal and ethical considerations, and issues regarding technical sustainability and reliability. In the future,

as technology continues to evolve and improve, the use of ChatGPT in electronic records management will become more widespread and in-depth.

To realize its extensive application in document management, all stakeholders must actively address these challenges, implement effective measures to ensure data security, comply with legal regulations, and pay attention to ethical issues. Only by doing so can we fully leverage the potential of ChatGPT, promote the development of the electronic document management industry, and bring greater convenience and value to society.

Acknowledgement

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