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Advancing Archives and Records Management: The Work and Future Directions of ISO/TC 46/SC 11

This article explores ISO/TC 46/SC 11's pivotal role in advancing global standards for records and archives management, with a focus on ISO 15489, the foundational standard for records management. It also examines the development of Management Systems for Records (MSR) product suite, highlighting the relationship between ISO 15489 and MSR, and how these frameworks support organizational success. Ongoing projects such as blockchain, distributed ledger technologies (DLT), artificial intelligence (AI) in records management, and records management capability models are also discussed. The article concludes by outlining future directions for ISO/TC 46/SC 11, emphasizing its expansion into digital transformation and emerging technologies.

1. Introduction

1.1 ISO/TC 46/SC 11's Role and Importance

ISO/TC 46/SC 11 leads the world in developing global standards for records and archives management. Its standards enable organizations to manage records consistently and reliably across physical and digital formats. By providing frameworks that ensure records serve as authoritative evidence of business activities, ISO/TC 46/SC 11 helps organizations meet legal, regulatory, and operational requirements while maintaining accountability and efficiency.

As digital transformation reshapes recordkeeping practices, ISO/TC 46/SC 11 addresses the complexities of modern records management, ensuring its standards are relevant and applicable to today's fast-evolving technological landscape.

1.2 Strategic Framework Overview

ISO/TC 46/SC 11's strategic framework is designed to meet the evolving needs of records management across various sectors. It emphasizes:

Our vision is to play a leading role in the international standardization of records/archives management and in collection, analysis and dissemination of best practices. To play a leading role in rethinking the theory and practice of records management, the advocacy of records management, and the records management profession. And to remain a hub for information sharing and collaboration between national standardization bodies and individual experts from across the world.

Our mission is to take a leading role in improving the management of records by providing standards and guidance for the design and application of records management practices, processes and systems and codifying best practices.

Our goals are to:

- define and promote good governance, transparency, accountability and effectiveness for the management of records,
- allow organizations to improve systems and strategies for the creation, management, and provision of ongoing access to records as evidence of activities, rights and decisions; and
- collect, develop and disseminate consistent theory and best practices of records management to respond to changing technological, societal and organizational contexts.

2. ISO 15489: The Foundational Standard for Records Management

2.1 Core Concepts and Principles

ISO 15489 is the world's foundational standard for records management. The standard establishes the core concepts and principles for creating, capturing, and managing records in any format, whether physical, digital, or structured data. It also provides organizations with a high-level framework for ensuring that records serve as authoritative evidence of business activities. Supported by

metadata, these records maintain their context and integrity over time, ensuring they meet legal, regulatory, and operational requirements.

The standard ensures that organizations create and capture records that are authentic, reliable, and usable while managing them properly throughout their lifecycle. Following ISO 15489 helps safeguard the integrity of records, thereby supporting business efficiency, accountability, and risk management.

2.2 Environmental Factors and Expanding Responsibilities

With businesses increasingly operating in digital environments, their records management responsibilities are expanding beyond traditional boundaries. Collaborative and multi-jurisdictional environments require records management practices that meet diverse stakeholder needs, including growing expectations for transparency and accountability.

ISO 15489 offers flexible principles that enable organizations to design and implement records controls that are suited to evolving business contexts. This flexibility allows records to meet immediate business requirements while ensuring their long-term integrity for future use, whether for compliance, legal, or operational purposes.

2.3 Benefits of ISO 15489

Organizations that implement ISO 15489 benefit from:

- Transparency and accountability: Ensuring visibility and traceability of business decisions.
- Risk management: Providing reliable records for managing business risks.
- Compliance: Supporting adherence to legal and regulatory requirements.
- Business continuity: Facilitating disaster recovery and long-term resilience.
- Litigation support: Ensuring reliable records are available for legal matters.
- Cost-efficiency: Reducing costs associated with inefficient records storage and management.
- Corporate memory: Safeguarding intellectual property and cultural heritage.

3. Management Systems for Records (MSR)

Organizational success depends on systems that drive continuous improvement and meet stakeholder needs. Management Systems for Records (MSR), such as those governed by ISO 30301, provide a method for aligning records management with broader business processes. MSRs integrate records into key areas of business efficiency, accountability, risk management, and continuity, transforming information resources into strategic assets that contribute to long-term organizational success.

An MSR formalizes the management of records by establishing policies, objectives, and systematic processes that ensure accountability through defined roles and ongoing evaluation.

3.1 Relationship Between ISO 15489 and MSR

ISO 15489 sets out the foundational principles for creating, capturing, and managing records as authoritative evidence of business activities. MSRs, such as those outlined in ISO 30301, build on ISO 15489 by providing a governance framework that ensures these principles are systematically implemented across the organization. This synergy ensures that records management practices align with organizational goals, risk management strategies, and regulatory compliance.

The MSR framework operationalizes the principles of ISO 15489 by defining clear roles and responsibilities, establishing systematic processes, and promoting continuous evaluation and improvement. By embedding records management into the broader organizational strategy, help maintain long-term accountability and transparency, ensuring that records management contributes to both business success and compliance with legal requirements. Additionally, MSR frameworks, such as those from ISO 30301, align with other management system standards, including ISO 9001 (quality management) and ISO 14001 (environmental management), ensuring an integrated and cohesive approach across all business functions.

3.2 MSR's Role in Business and Records Policy

MSRs align an organization's records management policy with its overall business strategy. By making records management a core component of decision-making, risk management, and legal compliance, MSRs ensure transparency and traceability in business decisions. By embedding records management within the strategic framework, MSRs provide reliable evidence for audits, legal inquiries, and regulatory reviews. This proactive approach helps organizations mitigate risks associated with recordkeeping failures and ensures that records are managed effectively throughout their lifecycle.

3.3 Compatibility and Integration with Other Management System Standards

The MSR framework is designed to work seamlessly with other Management System Standards (MSS), such as ISO 9001 (quality management) and ISO 14001 (environmental management). This compatibility allows organizations to integrate records management with other operational systems, promoting consistency and alignment across all business functions.

Additionally, MSRs support compliance with the documented information requirements found in other MSS, making them an essential tool for organizations seeking to streamline management processes while ensuring records management remains fully embedded within their operational framework.

4. Ongoing Projects: Blockchain, AI, and Capability Models

4.1 Joint Working Group on Blockchain and Distributed Ledger Technologies

ISO/TC 46/SC 11 has partnered with ISO/TC 307 (Blockchain and Distributed Ledger Technologies) to form a Joint Working Group exploring the application of blockchain and DLT in records management. Blockchain's key features – immutability, transparency, and distributed governance – offer opportunities to enhance the integrity and authenticity of records while also presenting challenges related to legal compliance and data retention.

The group will soon publish a Technical Report that examines how blockchain can be used to create and manage records while addressing the complexities of using DLT in records management. The goal is to provide records managers, IT professionals, and legal experts with insights into leveraging blockchain for compliant and secure records management systems.

4.2 Ongoing Development of Artificial Intelligence and Records Management (WG 22)

ISO/TC 46/SC 11's Working Group 22 is actively developing a comprehensive framework to address the evolving role of Artificial Intelligence (AI) in records management, as AI systems become increasingly integrated into organizational workflows. This integration is transforming how records are created, managed, and preserved, and WG 22 is focused on exploring these impacts while developing guidelines to address the emerging challenges in records management practices.

One key area under development is the examination of different AI systems and their implications for records management, including the regulatory and legal requirements specific to AI-generated records. The working group is also addressing the ethical and societal considerations of managing AI records, particularly in areas such as privacy, transparency, and accountability, which are gaining importance as AI systems become more autonomous and widespread.

Additionally, WG 22 is working on defining how Management Systems for Records (MSR) can be adapted to support the unique needs of AI environments. This includes developing principles for managing AI-generated records, ensuring they maintain the same standards of authenticity, reliability, and usability that apply to traditional records. The group is also exploring the appraisal and disposition of AI records, focusing on how to properly evaluate, retain, or dispose of these records over time, while ensuring compliance with legal and organizational requirements.

Another significant component of this ongoing project involves metadata and records controls specific to AI. WG 22 is assessing how AI systems require new approaches to managing metadata and ensuring the long-term preservation of records generated or maintained by AI. The working group is also developing impact assessments to evaluate how AI technologies influence current records

management frameworks and identifying the skills and competencies needed for records managers to effectively handle AI-related records.

As WG 22 continues its work, the project remains dynamic, with ongoing research and stakeholder engagement guiding the development of standards that will ensure AI records are managed to uphold organizational integrity and comply with emerging regulations. This ongoing project is set to play a crucial role in shaping how records management adapts to the rapidly advancing field of AI.

4.3 Capability Models for Records Management

Working Group 20, initially tasked with developing a Technical Report for a Records Management Capability Assessment Model, has now refocused its efforts on creating a Technical Specification. After reassessing the project's requirements and deliverables, the group collectively agreed that framing the project as a specification would better serve its goals, enabling more structured guidance, consistent standards, and precise criteria for assessment. This shift aims to support clearer communication, a more standardized approach and increased rigor, ultimately enhancing usability and stakeholder engagement.

The Capability Model will allow organizations to assess their records management capabilities and identify areas for improvement. It will help align records management practices with business needs, ensuring that organizations meet legal and operational requirements while improving efficiency and reducing risks associated with inadequate recordkeeping.

5. Future Directions for ISO/TC 46/SC 11

ISO/TC 46/SC 11 is well-positioned to address the growing complexities of records management in an era marked by rapid technological advancement, regulatory shifts, and the increasing importance of digital information. The subcommittee's future work will focus on ensuring that records management standards are adaptable, comprehensive, and aligned with organizational goals across diverse industries and global jurisdictions.

5.1 Integration of Emerging Technologies

ISO/TC 46/SC 11 will continue refining its approach to emerging technologies such as blockchain, artificial intelligence (AI), machine learning (ML), and cloud computing. Future efforts will focus on integrating these technologies into records management practices while addressing key challenges like security, privacy, and compliance.

Blockchain and DLT: Blockchain technology will play an increasing role in ensuring the authenticity and security of records. ISO/TC 46/SC 11 will continue its collaboration with ISO/TC 308 to establish standards that ensure blockchain's immutability and transparency align with global records management requirements.

AI and Machine Learning: AI-driven automation in records classification, appraisal, and preservation is becoming more prevalent. Future standards will address how AI-generated records should be managed to ensure their reliability, authenticity, and usability, particularly in compliance-heavy industries like finance and healthcare.

5.2 Digital Preservation and Long-Term Accessibility

The subcommittee will enhance its focus on digital preservation by exploring standards that ensure the long-term accessibility of digital records, particularly in cloud and hybrid environments.

Sustainability of Digital Formats: Addressing the risks of technological obsolescence, ISO/TC 46/SC 11 will develop guidelines to ensure that digital records remain accessible over time, regardless of the evolving technological landscape.

Metadata and Migration: Future standards will also focus on managing metadata and ensuring effective migration strategies for digital records to avoid loss of context and usability during technological transitions.

5.3 Enhancing Global Regulatory Compliance

As global regulatory environments become more complex, ISO/TC 46/SC 11 will prioritize the development of standards that help organizations navigate compliance challenges in multiple jurisdictions.

Data Privacy Regulations: With laws like GDPR and CCPA enforcing stricter requirements around personal data, ISO/TC 46/SC 11 will ensure that its standards support organizations in meeting these requirements while still preserving necessary business records.

Cross-Border Data Management: The subcommittee will focus on harmonizing records management practices across jurisdictions, providing organizations with frameworks to manage records internationally while complying with varying legal requirements.

5.4 Proactive Engagement with Stakeholders and Global Collaboration

Moving forward, ISO/TC 46/SC 11 will intensify its efforts to engage with global stakeholders and foster collaboration across various sectors. Strengthening relationships with international bodies, governments, and the private sector will be essential for ensuring that records management standards remain relevant and responsive to evolving needs.

Partnerships with Global Organizations: The subcommittee will strengthen its partnerships with key global bodies such as the International Council on Archives (ICA), UNESCO, and WIPO to ensure records management standards contribute to the preservation of cultural heritage, the protection of intellectual property, and the support of transparent governance.

Private Sector Engagement: In industries like healthcare, finance, and technology, where records management plays a crucial role in regulatory compliance and data security, ISO/TC 46/SC 11 will engage directly with private-sector stakeholders. By gathering input from these sectors, the subcommittee will ensure that future standards address the unique challenges they face.

Harmonizing Global Standards: Collaboration with governments and international regulatory bodies will help align records management practices globally, ensuring consistency across legal frameworks and reducing compliance risks for multinational organizations.

Social Media and Digital Engagement: To enhance its collaboration efforts, ISO/TC 46/SC 11 is expanding its online presence through social media platforms, including a dedicated LinkedIn page, a newly established YouTube channel, and its subcommittee website. These platforms will serve as central hubs for knowledge sharing, featuring updates on standards development, educational content, interviews with experts, and interactive webinars. This approach aims to engage a broader audience and provide real-time insights into the evolving field of records management.

5.5 Resource Development for Practical Implementation

ISO/TC 46/SC 11 will continue to develop practical resources that help organizations implement the latest records management standards effectively. These resources will be designed to provide guidance on real-world application, focusing on areas like digital records preservation, metadata management, and compliance with data protection laws.

Practical Toolkits: In addition to its standards, ISO/TC 46/SC 11 will produce toolkits and best practice documents to support organizations in adapting to technological and regulatory changes. These resources will be shared through its social media channels and digital platforms to ensure global access.

6. Conclusion

ISO/TC 46/SC 11 plays a critical role in advancing global standards for records management. By providing foundational principles through ISO 15489 and operationalizing these principles through the Management Systems for Records (MSR) framework, the subcommittee ensures that organizations can manage records efficiently, consistently, and in alignment with broader business objectives.

The development of capability models, projects focused on blockchain and artificial intelligence, and ongoing work to address emerging technologies demonstrate ISO/TC 46/SC 11's commitment to future-focused innovation. Moving forward, the subcommittee will continue to offer standards that ensure

records management remains a cornerstone of organizational governance in a rapidly changing digital landscape.

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