

Legacy to Modern to Future

Simplify Case
Management Chaos.

NUXEO




Table of Contents

Case Management Challenges in the Digital Age	2
The Nuxeo Solution	4
Nuxeo Case Management Capabilities at a Glance	6
Architecture Matters	7
7 Key Attributes to Meet Case Management Requirements	9
8 Key Nuxeo Case Management Fundamentals	10
A New Approach: A New Partner	12



Case Management Challenges in the Digital Age

- **IDC estimates 90% of data created today is content.**
- **30% of knowledge workers' time and 19.8% of business time overall are wasted searching for information/content.**
- **The average video file is 10 million times larger than a standard text file.**
- **The average agency has 20 systems or more that store content.**
- **Digital content will grow at a CAGR of 42% by 2020, according to IDC Research.**

Content and process are central to every decision and function in government, and yet nowhere are they more important than in case management. As agencies move toward digitization to meet the demands of citizens and the functional needs of the organization, many are finding themselves locked into outdated, monolithic systems and processes that were not designed for digital-age technologies, such as mobile and cloud. Those systems lack the capability to digitize and automate workflows. They cannot manage the size, volume and complexity of modern digital content types such as videos, photos, social media or biometric information. Critical time and insight are lost. Workers' ability to complete tasks and make decisions is hampered by outdated and inefficient processes and by content that is scattered across the enterprise in multiple siloed systems.

1. Digital Data Storage is Undergoing Mind-Boggling Growth, EE Times, September, 14 2016

2. Various Survey Statistics: Workers Spend Too Much Time Searching for Information (Insights from IDC, McKinsey, etc.), Cottril Research

Unified Next-Gen Case Management

Expectations from citizens and employees and the imperative for the mission to operate as an efficient digital organization mandate a new, holistic approach to case management. In practical terms, only a modern content services platform (CSP) with native capabilities including version control, robust tracking, automated processes and workflow can provide the modern case management solutions needed. Crucially, a modern solution also leverages the latest technologies — such as cloud, open source and automation — and integrates with critical existing systems and applications to connect people, process and content and give business users and mission owners a complete end-to-end view of their cases. Finally, agencies need a solution with a lower total cost of ownership and native capabilities to help “de-risk” transformation by enabling agencies to think differently and more nimbly, deploy in an evolutionary manner, capture the value of existing technology investments, and continually take advantage of best-of-breed innovation in the industry. This will enable agencies to reduce costs and improve operational efficiency by completing tasks and making decisions faster.

Legacy to Modern to Future

That’s what Nuxeo helps its customers achieve without disrupting their day-to-day business processes while delivering a positive ROI. The Nuxeo platform is a modern, enterprise, commercial open source COTS solution that delivers all the functions critical for the success of a next-generation case management solution in one platform. It is the only modern solution built on a cloud-native, open source architecture. It was designed to help agencies transition and meet the challenges of doing business in today’s digital world. The Nuxeo platform is a holistic solution that ties together content from any source, enables you to customize your infrastructure and implement your own content-driven applications and workflows, and delivers out-of-the-box service modules so you can create the solution that fits your business needs.



The Nuxeo Solution

With Nuxeo, agencies can

- **Extract critical business knowledge**
- **Boost efficiency, and lower costs**
- **Improve citizen services**
- **Meet regulatory requirements**
- **Deliver on the mission**

Our solution empowers agencies to harness the full value of their digital information by fitting into their best-of-breed applications and systems, applying workflow and case management tools to drive critical processes and casework, and providing content within the context of applications the end user recognizes and can easily utilize. Your implementation strategy can be designed to suit you and reduce risk. Your partners can take advantage of existing relationships and capabilities — Solutions Integrators (SI's) with deep knowledge of the agency, the agency talent pool, Nuxeo's subject matter experts, and the customer success and leadership team — to successfully deliver the implementation.

Agencies benefit from working with Nuxeo because our technology and business processes embrace innovation — regardless of where it comes from. We leverage modernity and openness, positioning agencies to take full advantage of digital transformation and what's to come.

“No matter your agency size or requirements, Nuxeo offers a modern, high-performance, open source, highly extensible, and secure technology that enables rapid adoption and innovation with minimal risk.”

— Julie Rushin, Consultant – Tax Administration and Tax IT; Former Deputy CIO for Operations Support, IRS; Former Director of the Business Modernization Office, IRS

Enterprise Ready

Our solution is fundamentally different, and its characteristics are what enable accelerated delivery in complex enterprise environments. It combines native content, process and case management capabilities in a single system architected from the ground up for full-scale enterprise case and content management — eliminating the need to stitch together separate and technologically different systems to form a core solution. Configuration and extension capabilities are based on industry-standard, nonproprietary, Java-based technologies, enabling the use of widely-available skill sets and a rich talent pool.

Best-of-Breed

Our approach is not to reinvent the wheel. For example, if you have invested heavily in analytics, reporting or rule engine tools that you are used to, you can easily continue to use them with the Nuxeo platform. Nuxeo's ability to work with both legacy and future environments is a unique advantage to moderate transition risk. And it is one of many examples of Nuxeo's innovative and open capabilities.

Future-Proof

Technologies are always evolving. Nuxeo helps agencies future-proof their organizations with a modern platform that uses cloud-native and open source technologies to deliver content-driven applications and content services with massive scalability and flexibility. The modern architecture gives developers and users the control to quickly and easily make changes and updates to applications without costly upgrades and replacement without affecting platform customizations as business and mission requirements change. This ensures that agencies will be able to consistently innovate to provide better business applications and adopt new business models to better serve citizens and deliver on the mission.

Nuxeo Case Management Capabilities at a Glance

“I spent 35 years working at the IRS in every facet of the business, including 15 years focused on technology and serving as a business modernization executive. My experience has given me a unique perspective and insight into the critical success factors for an enterprise content management, case management or digital asset transformation program.

This is why I am unwavering in my belief that the Nuxeo platform is the ideal fit for agencies now and for the foreseeable future.”

— Julie Rushin, Former Director of the Business Modernization Office, IRS

Intuitive, Low-Code Design and Configuration Capability	Integrated Mobile and Off-Line Capability
Robust and Accessible Workflow for Diverse and Complex Processes	Synchronous and Asynchronous Collaboration Tools
Automated, Manual and Event-Driven Activity Assignment	Robust Analytics and Data Visualization Capability
Complex Permission Management Based on Diverse Attributes	Robust Rule Creation and Management Tools
Shared, Reusable Services	Logical and Efficient Inventory Management
Search, Store and Analyze Structured and Unstructured Data	Automated Identification of Potentially Related Cases
Seamless Microsoft Office Product Integration	Accurate Recording and Monitoring of Case Work Time
Robust and Reliable Audit Log and Information Integrity	Intuitive End User Messaging and Notification



Architecture Matters

We believe that architecture matters and that architecture and technology are the primary factors that will enable agencies to operate more efficiently over a longer period, with much greater flexibility and adaptability and with a significantly lower total cost of ownership than does any other solution on the market today.

Modularity

This enables us to continuously update the technology that underpins our platform without disrupting our customers' systems and solutions that run on top of it.

Independent Scalability

Each of the core software components is independent and adapts to the needs of the application, eliminating performance bottlenecks.

Deployment Flexibility

Deploy the way you want, using commodity hardware or enterprise infrastructure. Our use of open standards means Nuxeo easily fits within any enterprise environment, including physical servers, virtual machines or container platforms. Nuxeo runs on any operating system that can run Java, and it supports a variety of SQL and NoSQL databases.

DevOps, CI/CD Friendly

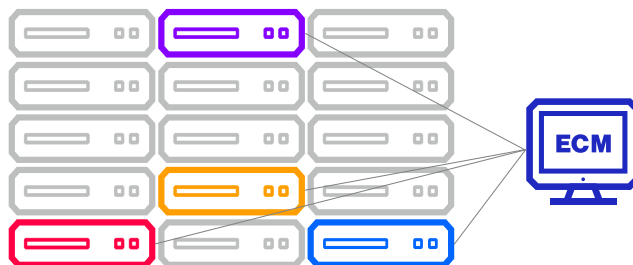
Our metadata model and design enable you to adopt an agile, DevOps approach to deploying and continuously adapting the case management solutions to best meet the needs of employees and customers.

1 Billion Documents Processes

1 billion documents ingested and **6,000** requests per second

Compared to previous 1 billion industry benchmarks, Nuxeo did it **30 times faster** and on **1/3 the infrastructure**.

Scale Only What You Need



Unmatched Performance

The Nuxeo platform has been benchmarked to process 30,000 records per second (1 billion records in 8.5 hours), as demonstrated in real-world customer deployments. We have customers with hundreds of thousands of users and hundreds of millions of assets. This capability to perform at scale mitigates one of the greatest risks of realizing a single deployment model for ECM.

Integration Capability

Nuxeo's efficient, flexible, composable and extensible REST API and API-first design methodology provides an unprecedented level of access to both content and features of the application. This means that all application content, workflow activities, audit logs and even business logic are available for integration with data mining and analysis tools. Additionally, Nuxeo can integrate with virtually any existing cloud-based and on-premises system or database, including Office 365, Box, Sharepoint, AWS, OpenShift and MongoDB.

Security and Compliance

Security is at the core of the Nuxeo platform. Nuxeo has incredibly flexible access controls; supports encryption at rest and in flight, FIPS 140-2 compliance controls and pluggable integration with other solutions for enhanced compliance needs; comprehensive versioning, audit control and data integrity oversight; support for CMIS standards; and the flexibility to meet evolving needs.



7 Key Nuxeo Attributes to Meet Case Management Requirements

Although every agency will have a unique set of priorities and requirements, there is a set of key attributes that characterize the challenges that every agency's business stakeholders and technology enablers must meet when considering a next-generation case management solution. The Nuxeo solution leverages all the capabilities of the Nuxeo platform to successfully address these in a cost-effective and operationally sustainable manner.

Simplicity

Nuxeo makes the experience more intuitive, accessible and less burdensome for users, technology enablers, operations administrators and citizens.

Flexibility and Adaptability

The technology can keep pace and enable fulfillment of business requirements in a timely manner as they evolve.

Diversity

The platform handles high volumes of varied systems, processes, data and content types (structured and unstructured), and user permissions and privileges — all of which must align to meet the shared objective of efficient case management and resolution.

Complexity

The processes, tasks, data and user interaction range from the simple (e.g., low-step, low-variable, static) to the extremely sophisticated and complicated (e.g., multibranch, multistep, multiactor, multivariable, dynamic).

Data and Process Integrity

Actions and records are accurate, traceable, secure and reliable.

Scalability

Nuxeo component architecture supports scalability and high availability to ensure mission-critical performance and success. NoSQL databases offer distinct advantages for scalability and for performance and overcome the traditional limitations of SQL databases. The platform can independently scale components of the platform horizontally and can elastically accommodate peak loads rather than having to scale everything vertically with costly hardware.

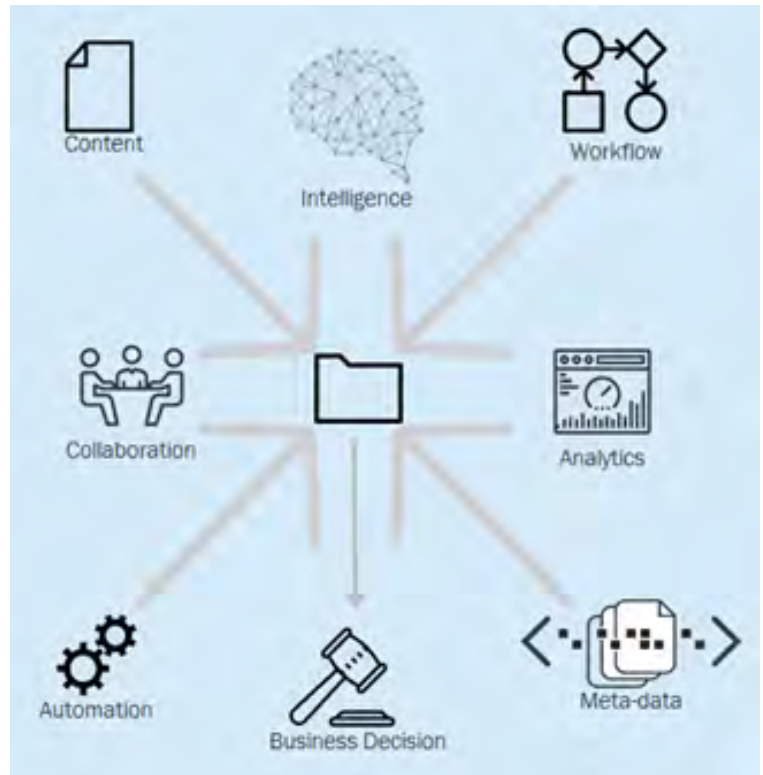
8 Key Nuxeo Case Management Fundamentals

The Nuxeo case management solution brings together all of the key case management fundamentals you require in one modern, holistic solution.

Content | Metadata | Workflow | Automation | Collaboration | Business Decisions | Analytics | Intelligence

Content

The Nuxeo platform delivers flexible, centralized management and access to content across the enterprise. It integrates with existing systems, connects to core content repositories and applies a rich metadata layer to them, and enables agencies to view content in one place and also apply new content-driven applications without the disruption of moving legacy applications onto a new platform. Nuxeo manages all content, no matter the complexity, including traditional content types like documents (MS Office, PDF) and digital assets like emails and rich media (audio, video, geospatial), using a boundless data model that has customizable versioning, tagging, metadata and rendering capabilities.



Metadata

The Nuxeo platform's data model is fully configurable and extensible. All the fields you need to capture data can be configured — all data types (e.g., string, number, Boolean) are supported, and field validation and parameters (e.g., format, max length, max value) can be defined. As part of the data model, the life cycles of each document type (e.g., a case, a task) are defined. Nuxeo's advanced metadata model also supports machine learning algorithms and the use of artificial intelligence and Google Analytics to extract insights.

Workflow

Workflow is a built-in component of the Nuxeo platform. The workflow designer and workflow engine leverage other configurable features within the platform — including the data model, document model, permissions model and automation chains — to drive simple, complex and highly diverse processes from the beginning to the end of their life cycle. The workflow toolset enables graphical definition of task flows, drag-and-drop transitions between tasks, and definition of task properties (e.g., due data, assignee, notification mail, automation chains incorporated in the task and escalation rules).

Automation

An automation chain assembles operations (e.g., create/move/update a case, send a mail notification, query the repository, start a workflow, dynamically change permissions) to create complex business rules and logic without writing any code.

Collaboration

The Nuxeo solution enables a diverse set of users to simultaneously collaborate on case activities transparently across geographies. It is designed to support content, workflow and multiuser collaboration in all parts of the case management life cycle and can integrate with various Enterprise File Synchron and Share (EFSS) collaboration tools to enable simultaneous collaboration.

Business Decisions

By combining data model, automation, workflow and security capabilities, agencies will be able to build very strong business rule handling for all phases of case management. These rules will be triggered automatically (typically based on metadata) or manually (user interaction) or even by API and inbound actions/requests from other systems.

Analytics

The Nuxeo platform provides comprehensive solutions for robust analytics and data visualization capabilities, including the ability to capture, store, and make data and metadata sets available to authorized users, who can leverage search and automation features to deliver context-sensitive analysis in a particular view, such as a case view or a manager view.

Intelligence

Leverage Nuxeo's integration capabilities with existing purpose-built enterprise analytics and reporting toolsets as well as comprehensive operational and management reporting to ensure tasks are completed and decisions are made with the most relevant, real-time information available.



A New Approach: A New Partner

A common theme in customer feedback is the speed of implementing the Nuxeo platform and how quickly customers were able to gain value from their investment. Over 60% of respondents said the implementation took less than six months; over half of those said it took less than three months.

—2017 Gartner Magic Quadrant for Content Services Platforms

In today's digital world, agencies face enormous pressure to meet the demands of citizens and employees to modernize while delivering on the mission and improving efficiencies. To achieve this, you need modern technologies and a nimble, cloud-native, agile approach. Nuxeo helps customers achieve their goals with a lower total cost of ownership and rapid ROI. Nuxeo's ability to provide a full case management solution — as well as document management, content management and enterprise digital asset management — in a single component-based platform with a service-oriented architecture creates the conditions to deliver a better experience for citizens and caseworkers and help agencies transition from legacy to modern to future.

“Nuxeo helps their customers go from legacy to modern to future by enabling them to think differently about how they modernize at scale with a highly configurable solution that aligns with their organization rather than forcing their business to fit the solution.”

—Julie Rushin, Consultant – Tax Administration and Tax IT; Former Deputy CIO for Operations Support, IRS; Former Director of the Business Modernization Office, IRS

1. 2017 Gartner Magic Quadrant for Content Services Platforms, Gartner Report, October 2017