Deep Analysis

Nuxeo Insight

Founded 2000 | HQ Paris, France | 150 employees (approx.) | $25M revenue (est.)

Nuxeo Insight has gone further than most in bridging the gap between highly trained data scientists and non-technical business users, making it one of the more effective and useful AI systems for content analysis that we have seen.

The Company

Nuxeo was founded in Paris, France, in 2000 by Stefane Fermigier, and is led by CEO Eric Barroca, who joined the firm in 2001. Nuxeo was the first company to release an open-source enterprise content management (ECM) platform to the market and remains one of the few commercial open-source ECM and digital asset management (DAM) platforms available. Initially bootstrapped, the company took on its first angel round of investment in 2007, moving through to its last venture round of funding in 2016, led by Goldman Sachs. As of 2020, the firm has raised around $40 million. Initially focused on the French market, Nuxeo has expanded its operations to the US, UK, Europe, and Japan. Over the past several years, the firm has concentrated its sales efforts on financial services and healthcare as well as brand asset-heavy sectors in CPG.

This report focuses specifically on the Nuxeo Insight products that deliver artificial intelligence services for content management.

The Technology

Nuxeo is one of the more advanced offerings we have seen from a content management vendor; the product set comes under the banner of Nuxeo Insight and provides a range of services. Like many other AI product sets, it leverages a range of off-the-shelf, third-party, and proprietary technologies. For example, Nuxeo Insight makes use of third-party services such as Amazon Rekognition and Google Vision for image and video recognition. However, it has gone much further than merely integrating these third-party services into its platform. Nuxeo has built a set of tools and applications, enhanced by its own machine learning (ML) models, to meet specific enterprise content and digital asset business needs. Those needs include automated extraction, enrichment, classification, and indexing across a range of information assets from standard documents to images and videos. In simple terms, Nuxeo uses established third-party technologies to undertake commonplace activities such as optical character recognition (OCR), speech to

text, and some basic classifications. It layers on its own ML models to undertake more granular analysis, with the end result being specific customer "bots" to meet specific customer needs, trained on the customer's data.

The Nuxeo Insight tools come somewhat pre-trained, so a commercial user does not have to train the system from scratch. Nuxeo Insight has a fundamental, if not extensive, knowledge of the task and its requirements and is trained quickly on the user's own data sets. Nuxeo claims that in some cases, training times on site can be as short as six hours to deliver 85-90% accuracy rates. Clearly, this will vary depending on the circumstances and data quality.

Another aspect of Nuxeo Insight is worth highlighting: its ability to identify which decisions are made by the AI and which are human-generated. Each content bot is versioned and saved, along with the associated models and data sets. This versioning process provides, in theory at least, a strong basis for a governance model. For if values are corrupted at any point, it will be possible to roll the system back in order to understand how the model was trained and how and why the error/corruption occurred, and to enable human-in-the-loop supervision throughout the process. Though this may be technically possible in other similar systems, the fact that this activity has been codified into Nuxeo Insight is important to note.

Though all of the machine learning and AI capabilities in Nuxeo Insight worked well in the demonstrations we observed, what caught our eye was the new UI (currently in a Beta release, with full release expected in Q1 2020). This is used to access and program the AI. The UI is wizard-driven and has been designed both to simplify the work of the data scientist and to be of use to business analysts. Like any such interface, there will be a learning curve, but

Figure 1
Nuxeo Insight Assessment

the Nuxeo Insight UI is intuitive and cleanly designed. It is one of the best we have seen and bridges the gap between data science and business. The first release is impressive, and it will presumably improve even further over time.

💬 Our Opinion

Nuxeo Insight has gone further than most in bridging the gap between highly trained data scientists and non-technical business users, making it one of the more effective and useful AI systems for content analysis that we have seen. Moreover, it has taken strides toward making its system auditable, transparent, and understandable. The firm claims that "anyone" can use this system, and though that may be a bit of a stretch, it is undoubtedly one of the most usable systems we have seen to date.

Figure 1 shows our assessment of Nuxeo Insight across four categories.

💡 Advice to Buyers

Nuxeo Insight's relative ease of use, along with its ability to provide an auditable trail to meet governance and data bias concerns, is impressive. All the tools and capabilities that an expert AI team would need are here, but so too are the non-technical tools and capabilities to involve less technical business teams. Nuxeo Insight is worth looking at closely if you are managing large volumes of content (documents, images, etc.) and considering automating some of that work with AI.

🔍 SOAR Analysis

Strengths
→ User-friendly approach to AI
→ Semi-trained modules that enable fast deployment

Aspirations
→ Grow its business internationally
→ Redefine and intelligently automate traditional ECM & DAM practices

Opportunities
→ Elevate and integrate DAM practices into broader lifecycle solutions
→ Drive non-technical business use of AI for common content processes

Results
→ Nuxeo Insight deployed and used in multiple organizations
→ New Insight UI currently in Beta, release expected in 2020

About Deep Analysis

Deep Analysis is an advisory firm that helps organizations understand and address the challenges of innovative and disruptive technologies in the enterprise software marketplace.

Its work is built on decades of experience in advising and consulting to global technology firms large and small, from IBM, Oracle, and HP to countless start-ups.

Led by Alan Pelz-Sharpe, the firm focuses on Information Management and the business application of Cloud, Artificial Intelligence, and Blockchain. Deep Analysis recently published the book "Practical Artificial Intelligence: An Enterprise Playbook," co-authored by Alan and Kashyap Kompella, outlining strategies for organizations to avoid pitfalls and successfully deploy AI.

Deep Analysis works with technology vendors to improve their understanding and provide actionable guidance on current and future market opportunities.

Yet, unlike traditional analyst firms, Deep Analysis takes a buyer-centric approach to its research and understands real-world buyer and market needs versus the "echo chamber" of the technology industry.

About the Author

Alan Pelz-Sharpe is the founder of Deep Analysis. He has over 25 years of experience in the IT industry, working with a wide variety of end-user organizations like FedEx, The Mayo Clinic, and Allstate, and vendors ranging from Oracle and IBM to start-ups around the world. Alan was formerly a Partner at The Real Story Group, Consulting Director at Indian Services firm Wipro, Research Director at 451, and VP for North America at industry analyst firm Ovum. He is regularly quoted in the press, including the *Wall Street Journal* and *The Guardian*, and has appeared on the BBC, CNBC, and ABC as an expert guest.

Contact us:

info@deep-analysis.net
+1 978 877 7915