

The next step in document management has to be true document intelligence

With sentient document-level AI, finding and accessing relevant information will become much more efficient, technologist and author of Thingalytics Dr. John Bates explains.

AI can now enable ‘sentient documents’—interactive documents that behave like intelligent beings or lifelike bots. While a significant operational advancement, the core concept is straightforward: engaging with documents as if they possess consciousness and can comprehend themselves and respond dynamically. The question will become not how soon we’ll use them, but if they’ll make us too dependent on them.

The context here is that, as useful as AI voice assistants like Alexa and Siri are, they haven’t been transformational technologies in business that we once considered they might be. Unlike simply being able to find your favourite Rolling Stones live album track without getting out of the chair, sentient documents are akin to having an army of intelligent domain experts working tirelessly 24/7 to deeply comprehend and engage with your content.

Envision being able to converse with them, asking ‘What are you?’ or ‘What’s your subject?’ for all types of documents—contracts, orders, policies, even handwritten notes. Instead of using code, you’ll converse naturally with intelligent, self-aware documents that comprehend their own content. Even foreign language documents can be queried seamlessly in your native tongue.

To grasp the potential, imagine being faced with a very complex legal contract that could even be in a foreign language. Imagine being able to ask ‘what is this contract?’, ‘who are the contracting parties?’, ‘what is the expiry date?’ or ‘what are the penalty clauses for breach?’ and receiving a full answer in your own language. And this same principle can apply to orders, invoices, job applications, change of address forms, customer onboarding forms – and just about any form of document. And it can even go into domain specialisms, such as legal, pharmaceutical, medical or other areas, with domain specific questions and answers.

The real game-changing potential of sentient documents is their ability to help manage the enormous amounts of content coming into every business yearly—estimated to be approximately 150 zettabytes of content this year alone. That’s 150 billion terrabytes!

And this sentient interaction isn’t limited to just text documents. Organisations will be able to interrogate video, audio, and any form of business content just as seamlessly through natural conversation.

The technology to empower sentient documents is a combination of intelligent document processing, embedding deep learning for image and language understanding, with conversational AI with enterprise content management for document and meta-data management, with process automation specialized around processing documents and other content.

Taking advantage of the ‘dark’ content you are accumulating

Another reason sentience at the content level is needed is that the business world has gone from a largely monolithic approach to ERP and ecommerce to a best-of-breed one. While each specialised solution offers unique capabilities, they operate in separate ecosystems. This risks critical documents, data and processes becoming trapped within their respective silos, hindering interaction and integration.

An intelligent content automation framework enables sentient documents to transcend ecosystem boundaries, accessing information across disparate systems. Moreover, since the pandemic ushered in remote collaboration tools like Teams and Zoom, enterprises are accumulating more ‘dark’ content—valuable data trapped in recorded meetings, chat logs, and presentations—effectively sealed off from corporate knowledge bases.

An intelligent content layer could illuminate this dark data, making the insights buried within those digital interactions accessible and actionable. Sentience will

also make housekeeping and version control simpler. All the versions will be retained, but the specific item a knowledge worker needs will be easily retrieved through a simple request, like, 'Show me the latest version' or 'Let's go back to Sarah's July draft.' Additionally, it can provide concise summaries highlighting the most salient points across document versions.

In summary, it is clear that sentient documents are coming and will revolutionise how we understand and summarise business information. By imbuing documents with intelligence, humans can quickly grasp key points and make well-informed, data-driven decisions without getting bogged down in excessive details.

Sentient documents also represent the culmination of what we've been doing for decades in enterprise content management, where organizations like yours and mine store, manage, search, or archive documents and other useful content.

Imagine what it will be like to dynamically engage with that organizational content and wisdom through natural conversation, almost as if it possesses consciousness. It's time to get ready for our future document manager overlords. I suspect in practice they'll only ever be wanting to help us.

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