



In Conversation with Dr John Bates

Demand for digital enterprise content management solutions surged during the pandemic and, as customer expectations and the urgency around enhanced process efficiency continue to soar, many companies are now looking to take such capabilities to the next level. Year after year, Gartner names SER as a Visionary in its field. We sat down with the company's CEO, Dr John Bates, to ask the secret of SER's success.

Dr John Bates is the Chief Executive Officer at SER (<https://www.sergroup.com>) and a respected technical expert in AI, dating back to his university days. He has spent the last 20+ years successfully creating and shaping innovative software companies in areas including algorithmic trading, real-time analytics and the Internet of Things, as well as serving in executive roles with a number of publicly-listed tech companies.

Most recently, John served as CEO of Eggplant, a leading provider and pioneer of AI-powered intelligent software test automation. He also currently serves as an independent Non-Executive Director of Sage, a FTSE 100 leader in cloud-based business applications.

John holds a PhD in Computer Science from the University of Cambridge and lives with his family in London.

Tell our readers a little about yourself

I'm a serial CEO. I was a Cambridge don but gave up the gown in 2000 when I became addicted to starting businesses. Initially, I commercialized some of my Cambridge research (in AI), setting up Apama, the first company in the streaming analytics space. Apama's work centered around applying machine learning to find patterns in fast-moving data and acting on them with low latency. At Apama, we applied this to the rise of algorithmic and high-frequency trading, where you could plug together strategies that could essentially sieve the market for opportunities and act on them in sub-microsecond latency. Apama was bought by Progress Software, a NASDAQ-listed company, in 2005, and I moved to the US where I spent 12 years living in Boston and Silicon Valley before eventually moving back to London.

In the intervening time I have transformed, grown, and exited many businesses – all now public companies. I have also spent over ten years as a C-level executive in public software companies. Today I am the CEO of SER Group, a leader and major player in enterprise content management, headquartered in Bonn, Germany, which is backed by the Carlyle Group, a leading private equity firm. I am also on the board of Sage, a UK FTSE 100 company and a leader in cloud-based software for finance, accounting, HR and Payroll.

What sets SER Group apart from its competitors?

SER Group's differentiated proposition is around what we call intelligent content automation – that is the convergence of content management (this is about capturing, storing, searching, archiving, and managing

enterprise content), along with process automation – particularly process automation around heavily content-oriented tasks such as processing invoices, contracts, or HR documents. Add to this AI-powered content understanding, to interpret content, and then you can bring together all the elements so that you're able to intelligently automate processes around content, as well as managing that content.

We are what I call a 'pure-play' provider in our field. Many of the big players in the market are a Frankenstein's monster, assembled from the acquisition of several different businesses whose solutions have never been integrated. The result is a horrible experience for customers who often don't know what they're going to get, or which products they're going to be offered, and whether those solutions will work together in a frictionless manner. With SER, by contrast, they get a seamless, elegant, pure-play platform.

We are also differentiated by the breadth of our offering. Unlike many AI-powered startups, we offer an end-to-end suite – with a platform that supports multiple solutions, with a cool user experience, and a strong business focus. It also comes with a no-code Business Studio that allows the rapid rollout of new solutions. Add to that our scale and experience, and it's an unbeatable proposition. We've been in this space for a long time, but remain firmly at the cutting edge – making us exceptionally well positioned to help organizations tackle their evolving challenges business head on.

What is happening in the market right now, and how is SER developing its solutions to handle the transition?

Undoubtedly, the theme of last year has been global inflation, combined with what we saw in the pandemic – the Great Resignation. Businesses were faced with the dual challenge of nobody wanting to work while simultaneously struggling to afford to pay people. This has intensified the need to automate processes. While we have seen the growth of technologies such as robotic process automation (RPA) for taking over some simpler automated tasks, the next era of automation is around automating content management in an intelligent way. This is a massive opportunity.

You can't use technologies like RPA to do intelligent and contextualized things with content, because it is a 'surface' technology – that is, it merely scrapes the screen from one app and paste that lifted content into another; it doesn't understand what it is doing. For next-level process transformation, organizations now need to understand and embed their institutional wisdom into the systems that can both bring in documents (understanding what to do with them, automating this right across the enterprise, inserting and cross-referencing information), and managing that

content over time. This is a huge opportunity, especially in the upper mid-market and among enterprise organizations.

If you look at our customer base, we're particularly strong across a number of different sectors including banking, insurance, industrial, transportation and logistics, retail, e-government and health.

Some solutions are horizontal with a vertical flavour. You might sell invoice automation into the finance department, human resources document management to the HR department, contract management to the legal department, for instance but then all those systems need to be able to interact with each other.

Other spaces, such as healthcare, are more overtly vertical. Here we're looking at patient information management, bringing together structured and unstructured information around a patient and combining this with their case notes which may be handwritten or typed; with X-rays and MRI reports, and other medical findings. Doing this successfully requires a complete understanding of Health Insurance Portability and Accountability Act (HIPAA), and Health Level Seven (HL7) standards. This isn't something just any software vendor can do; it requires specialist knowhow. Sometimes you have to go quite deep to make connections to systems, but we have that skill and experience.

SER **DOXIS**

Doxis Intelligent Content Automation

The next generation of ECM

What is Doxis and how can it be used to create a frictionless content management environment across an organization?

Doxis is our solution platform for intelligent content automation. On the same metadata kernel, we bring together the key capabilities of enterprise content management, with process automation, and AI-powered content understanding. Doxis also has a solution framework, supporting a number of different content apps living on top of the platform – to deliver functionality like invoice automation, contract management, HR powered document management, and so on. And then there's all the connectivity for linking with popular business applications like SAP, Salesforce.com, Microsoft Office 365, etc. So, you have the core – around the capabilities of intelligent content automation – with built-in/embedded AI, along

with the ability to expand this with new AI frameworks and features. You've got your connectivity, plus your apps – all under the Doxis umbrella.

One of the challenges most companies face in bringing content together in a meaningful and advanced way is that each system across the enterprise will have its own particular representation of customers, suppliers, colleagues, patients etc. This means that achieving a true 360-degree view requires what we call 'content bridges', capable of connecting these systems together – even though a customer might be represented differently in SAP, and Salesforce.com, etc.

Strategically, organizations need to understand what's happening right across those systems because it can help them grow their business value.

For example, the support team might be logging a customer request. If the sales team knew about that, they might want to upsell to that customer, or at the very least touch base with them. In other words, if you're able to cross-reference those systems, reflect and update information across them, it can uncover new opportunities that might otherwise be missed. The finance department might know there is an unpaid invoice from a customer, for instance, at the same time that the legal team and the sales team are working on a new contract with that customer – being able to see the fuller perspective would enable respective teams to think and act differently. Integrating content intelligence seamlessly across all systems offers that real, 360-degree, enterprise-wide intelligence.

How do you explain your solutions to non-technical corporate leaders?

These are the people dealing with the pace of business, and the need to keep up with the ever-

increasing document flow – as well as mounting cost pressures. So the kinds of decisions being taken here are how to make each employee 10 to 100 times more productive – for example, by giving each of them an army of intelligent content assistants.

This could help move a team from being stressed-out 'do-ers' to being validators, or exception handlers (where automation reaches its limits).

Intelligent content assistants can take up an awful lot of the burden now that they can understand the documents, as AI-powered bots. They can interact with enterprise systems, amass institutional wisdom, and take intelligent actions to automate common tasks – such as processing invoices, or contracts, or onboarding employees. This can all help radically improve productivity, reduce costs, and enhance revenue – as well as the organization's competitive position.



With supply chains constantly being challenged can SER's solutions be used to help companies struggling with their sustainability and Environmental, Social and Governance (ESG) issues?

This is a hot topic. I know from sitting on the Sage board, for example, that irrespective of whether a company is large or small, its employees/colleagues are passionate about ESG – as are investors. ESG is something we think a lot about at SER.

In the majority of organizations, about 80% of data is what you might call dark data – hidden insights that, if surfaced, could be used to help identify new opportunities for, or threats to, the business. The ability to combine structured and unstructured data with such insights could help improve team wellbeing, by uncovering patterns of behaviour that suggest

employee dissatisfaction or pressures on their mental health.

On the environmental side, meanwhile, the whole idea of optimizing processes through intelligent content automation is about not just saving time, but also resources and waste as you streamline and optimize tasks and save power. Once tasks can be absorbed into the digital world, the scope to manage them through efficient automation grows exponentially.

A great example of this is our work helping the UK's Natural History Museum in London to modernize its collections management system. This in turn is helping the Museum to deliver on its vision of digitizing and managing over 80 million objects and 250 million+ records to share knowledge for the greater good, including enriching climate change research.

How are we likely to see AI used in content management in the future?

The general pace of business today means there is an ever-increasing flow of documents to teams that then need to process their contents and decide and take next actions.

If you can use intelligent content management systems like SER's Doxis, the opportunity is to let the AI take the strain – to interpret those documents and other content and determine which process to put them through – saving a tremendous amount of manual work.

Intelligent content management systems can be used to flag challenges and opportunities, too, as I've noted – allowing organizations to optimize their businesses by spotting opportunities and threats, joining the dots, improving productivity, and reducing cost.

What are some of the automation challenges when it comes to creating automated workflow solutions for content-oriented information?

There are three different challenges. The first is connecting to multiple systems. This is about being able to plug in at a content bridging level – not just being able to get the data flowing between all of your enterprise systems (your best-of-breed systems), but being able to actually map different entities between those systems to get that seamless end-to-end view.

Second is the need to understand the content. This is where SER solutions have harnessed all the latest deep learning and natural language processing frameworks which are available, embedding capabilities to create 'composable AI'. This means it's possible to add new AI frameworks into our platform as these emerge – allowing organizations to stay at the cutting edge, rather than be held back by whichever AI tool was most popular at the time the content platform was developed.

The third challenge is understanding the content and the written languages in play, using graphical deep learning to identify the different elements and the natural language within them. There are many frameworks out there, including Ernie, BERT, Elmo GPT, and of course there's a lot about ChatGPT in the news at the moment.

You need to be able to harness all of these capabilities for failsafe content management. Organizations need flexible workflows, where information flow can be tailored in a no-code way, so that the business can do this for themselves.

These are some of the challenges, then – flexibility, connectivity, and intelligence.

How can SER's solutions be used to streamline invoice and financial management?

We make it possible to automate the correct handling of an invoice or of an order. But it's also about the way you might interact with other systems and connect these things together. For example, in a healthcare setting, you might have an order or an invoice processing solution, then also a patient management solution. If you can plug these together, you're on the way to having a patient billing system that is more intelligent and informed about patients. Connecting these systems together, and bridging the silos between the different departments, means being able to use pan-organizational wisdom to drive greater value.

What drives the passion in your work? What gets you out of bed in the morning?

I got up this morning and went for a lovely run at 6am around Battersea Park in South London. Exercise is often something that gets me out of bed – although on a chilly morning it's not always the most fun thing to do!

But generally, what drives my passion is building great businesses. I find that so many businesses have fantastic value locked up in them - with amazing customers, great products, great people. Yet sometimes these assets just need a bit of refacing or repositioning. It's a bit like renovating a beautiful old building, or taking a business that's great and taking it to the next level, or making it more modern.

Sometimes those companies' leaders have simply run out of steam, which is holding them back from taking things to the next level. I've had the opportunity to come into some really great businesses and be involved in transformation projects that have had fantastic results. I feel my mission is to help businesses to be better. These are the things which excite my passion, for sure.

What is a closing thought you would like to get over to our readers?

All the things we've talked about intelligent content automation, or ICA, are highly relevant to the world of business and public service provision today. The next big automation challenge is around heavily content-oriented processes. This is going to be bigger than robotic process automation. It's massive. The challenge is going to be to bring together everything, harnessing AI automation and content management. This is the next frontier – and I'm excited to be working right at the heart of this.