# An Efficient Way to Access Knowledge

## Presentación

Hello all, and welcome. I am José Antonio González, senior software developer in R&D, here in Seville.

Today we have been talking about Innovation and I would like to share with you an idea that has to do with this matter, it is relatively new and I believe it can add value to Schneider.

The title is “An efficient way to access knowledge”. What does this idea aim to solve? As the title says, a crucial one, the problem of access to knowledge.

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The main problem is that retrieving the correct information is often expensive. The larger the volume of data, the greater the probability that the information is not located in a specific place. In other words, it is scattered and outdated.

There are thousands of files that have to be searched manually, in different places, such as Confluence, Sharepoint, OneDrive folders, or on the official Schneider website itself. Scattered data, with no references between them; and sometimes the system returns such a large number of documents that it is as useless as not getting anything at all.

We have many BFO cases with questions and queries from customers, hundreds of technical publications, help files, and thousands of documents of different types.

In our company, there are many people involved in extracting stored knowledge, such as L3/L4 support, programmers, testers, etc. But although Schneider has made an effort to have good knowledge manager systems, such as Sharepoint, they are not as efficient as we would like.

The use of technical documentation by employees in any company is very limited, many documents remain stored in a trunk, collecting dust for years. This is because most queries tend to be for a single specific data, and is often not easy to find that in technical manuals of several megabytes, in a sea of thousands of documents.

Very few people actually read user documentation, or product-specific technical documents, especially if the document is very long. People don't want to waste time reading a document just to find an answer to a question if they can get the answer from a colleague in much less time. If people don't even read the instructions for what they buy, how are they going to read a six hundred page technical manual just to look up a specific piece of information?

Therefore, it would be interesting to have a database with all the information specific to the department, which anyone could access quickly to ADVC, T300 or T500 information, without having to waste time.

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What I´m talking about here is having a good knowledge search system using artificial intelligence to make things easier, to improve the effectiveness of our search for specific knowledge of different areas.

I'm sure someone else here has asked themselves the following question, at some point: Could we use ChatGPT to chat with our own internal documents, and ask questions about them?

Well… the short answer is: yes… but no. We know that we cannot use ChatGPT or Gemini directly for that. And we also know that both Jo-ChatGPT and Copilot are insufficient. But there are alternatives. And right now, many companies have a similar system running in their offices.

Because no matter how sophisticated the way of searching in traditional systems could be, such as Sharepoint or PDM, with multiple search criteria or many filters and conditions, they will never be able to match the power of the logical reasoning of an AI, which only needs a simple phrase in natural language to get us what we want.

Here we can see two examples of how to search for information with an AI chatbot compared to a traditional system. You can see how simple it is when using AI. Because everything is more intuitive:

* We can make the query in natural language in different ways
* No need to learn any search syntax
* No filtering required
* And furthermore, normally a conversation with an AI maintains the context of the conversation, like when we talk to someone about a particular topic.

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We want something like this: to a specific question, a precise and direct answer, without hallucinations. And very important: it shows the source of the information from where it was taken, to be sure that it was not made up.

One important feature for our chatbot is that it runs with an open source language model, on a local server. Because this has two great advantages:

• lower cost: they are free

• and privacy: because no information leaves the local server and no one is going to use our data to train their language models

To answer a query, the chatbot would use its general culture with which it was trained in the factory, but giving priority to the specific knowledge that we have provided it.

Now… some of you might be thinking right now: "That’s very nice. But does this really work?"

Yes, here is the proof. This is a real sample made here at Schneider, with internal documents from my department.

Let's implement this on a big scale!

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Here are some more examples taken from the prototype with just a few documents.

All the chatbot responses you see on the slide are correct, according to the documentation provided.

We can customize the virtual assistant. As you can see we can give it a name and a description of what it is capable of doing for us. In fact, by autonomously using its own internal reasoning, it is able to tell us what the internal documents are about.

So, I think this is good for Schneider, and any company would save money with this. It can provide 24-hour support to the different levels, and also it can provide immediate knowledge to the employees to accurately answer a doubt or question about any matter related to a product.

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This chatbot system could have multiple useful applications in different levels of organization within Schneider.

• In technical support

• Human Resources

• Sales and Marketing

• Training and Development

• Project Management

• Customer Service

• And a long etc.

To summarise, I think that this idea, to improve access to knowledge using AI, can be very valuable for any department at Schneider, and I am convinced that this project or a similar one will come to Schneider sooner or later. Because AI is advancing very quickly I think it’s important not to be left behind, but to take advantage of everything it can bring to us, to be more efficient and productive.

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And that´s all. If anyone has questions or wants more information, you can email me and I will answer later. Thank you.