



# GENERAL LEDGER RECOMMENDER SOLUTION

## TRANSCRIPT

TRICIA MILLER: The user experience is critical for us. We, as a procurement function, are on a journey to frictionless procurement. And so, we're looking at this as an example and a great opportunity to address that.

STEPHEN REDMOND: Hi, I'm Stephen Redman, Enterprise Insight Studio Lead within Accenture's Internal IT organization. And I'm glad to be here today with Tricia Miller, who's the Digital Transformation Director for the Procurement Plus organization and Lisa Pearson, who's the Enterprise Insight Procurement Zone Lead.

We're talking today about the General Ledger Recommendation Model Project, where we use predictive analytics to identify and assign the correct general ledger code to requisitions on non-purchase order invoices in SAP Ariba.

Thanks both for joining me today.

TRICIA MILLER: Thank you very much.

STEPHEN REDMOND: So Tricia, we paired our procurement process with AI to drive better accounting and more frictionless processing. Can you explain the volume of invoices our global procurement organization deals with on an annual basis?

TRICIA MILLER: Yeah, absolutely. We at Accenture at this point process 1.2 million invoices a year. Even in the last two to three years, that's up from about 800,000. So a significant volume of invoices coming through every year and a significant volume of them

are non-PO invoices, meaning that accounting information capture is even more difficult within that process.

STEPHEN REDMOND: Okay, so that large volume of invoices adds a lot of friction, kind of inefficiency, additional costs to the process, especially if people are having to fill in the account information they don't know. How does the General Ledger recommendations that the artificial intelligence model that was built improve the accounts payable accuracy and efficiency?

TRICIA MILLER: Yeah, there is multiple benefits and elements to find we were eager to put this solution in, but I'll start with what I think is probably the best way describing this. Within Accenture, we have 450,000 plus people and at any time, any one of them can buy. What we have in that 450,000 people are people who are out there and need to procure things to run our organization or to serve our client. What we don't have are 450,000 accountants. So when you need to buy something in Accenture, you can't buy it without defining where the cost is going to end up. But our people don't instinctively know that. And when we, whether it's their purchases or their invoices, put that effort on them, it creates confusion or as you've talked about it here, friction in the process for them.

So our initial motivation here was to say how do we make that easier for that person? How do we improve their experience as they create that purchase order or approve that non-PO invoice? Over and above that though, there's much more value and potential we can get from this.



We're using this stage and this accurate historical data around what GL was applied on hundreds of thousands of requisitions and invoices in the past, so that our AP people don't need to add it or our assisted buy people, who are looking at a requisition, don't need to check it. We even have potential to shift how our finance teams interact with requisitions and invoices.

STEPHEN REDMOND: Yeah, so it really makes things a very more efficient for them.

TRICIA MILLER: Huge potential for across the organization to say, why and who has cared about an accurate GL and over and above the groups that we control are AP and our Prod Ops teams, how can we show them the value of this GL solution and show them that accuracy that we're getting, we're at 95% plus accuracy on some of our POs in a few countries as we roll this out already. How do we prove to the other groups that care about GL that the accuracy is even high enough that not only do we see in procurement the efficiencies in our teams and we see the user experience improvement, but we see a change in even how our finance teams interact with the process because they trust that the recommendation engine is good enough to get it right, particularly on low dollar transactions. The vast majority of the Accenture spend, believe it or not, is low dollar transactions.

STEPHEN REDMOND: That sounds really good. Lisa, from a technology perspective, what was the process to build and train that General Ledger Recommendation model with the AI machine learning algorithm.

LISA PEARSON: So this all started by bringing together experts from the payables world and also finance people, who Tricia talked about are involved in the process whenever items are purchased and they came up with a list of factors that are considered when purchases are made. And there are things like the commodity code on the transaction, the text descriptions, WBS element that's used. And so, based on all those

factors, the idea was that the AI model could use this historical data over a rolling one-year period to predict the correct General Ledger account.

After some initial research and data mining efforts, there were data scientists involved who created the first model, showing various combinations that were required for the predictions and then also the confidence level of the prediction. And it was done using something called a Random Forest Algorithm. So that's a statistical model. And so, that model was then tested and reviewed with the business and it started to evolve. It resulted in improved confidence and improved accuracy along the way and better efficiencies. There's continued collaboration across Enterprise Insight and the business and the teams who own the purchasing, the data, that we're using to train the model. They assessed discrepancies between the recommendation and the ultimate General Ledger account that's used during the purchasing process to understand what business changes and changes in patterns are happening, which then will continue to trigger fine-tuning of the model. So that's kind of the background on the technology side.

STEPHEN REDMOND: I guess when there's a lot of different features like that and especially when you're dealing with the tax descriptions, you can't really just put it in a simple if/then else model. It's got to be more complicated. So once that model was trained and running, what was involved from Enterprise Insights?

LISA PEARSON: So Enterprise Insight has kind of been the driver of kind of the collaborative effort between the business owners and the solution delivery team, obviously, that's kind of the business that we're in. We developed a reporting dashboard to display the results for our business partners in a way that is meaningful to them from a business perspective and shows the success of the model and the benefits.

And as Tricia said, the model, we actually initially piloted it in a few countries. So we're



continuing to roll it out to more and more countries and continuing to analyze the results and identify ways to improve the model's confidence level. We've also found as we've rolled out to more countries, we can also use the results to find out whether there's some gaps in the business process itself and then working with the business, try to figure out does it make sense to change the business process or do we adapt the model?

So it's really kind of understanding the solution's only going to work as well as the historical inputs and the patterns that we see. And we all know that we kind of have to view this as an evolving model that needs constant learning and tuning and observations.

**STEPHEN REDMOND:** Right, very good. And so, Tricia, what's the kind of business value that this General Ledger Recommendation Solution will provide?

**TRICIA MILLER:** There are many interesting elements over and above even what I've already talked about. The user experience is critical for us. We, as a procurement function, are on a journey to frictionless procurement. And so, we're looking at this as an example and a great opportunity to address that. And over and above what we'll do with our payables teams and potential within our finance teams has actually allowed us to have a level of understanding of data and how the GL is used that we couldn't have even imagined before.

So Lisa talked about we're seeing differences in some of the countries and we have to figure out whether we're going to retrain the model or we're going to change the processes. The understanding now is we look at the specifics of the countries and how we're going to take this forward even with the finance organization to address the huge differences in how GLs are applied across countries and look to drive out that consistency is an absolutely unexpected benefit that we are seeing, that we're very excited about as well.

So we really anticipate that if we do this right, honestly, the end user should never know because our end users don't interact with our systems often enough to know that the GL is painful, but it should be one of the many things that we do that would contribute to that removal, as I mentioned, of friction from the process. At the end of the day, when our end user interact with our process, they will appreciate it to be something simpler than the perception they're left with today.

**STEPHEN REDMOND:** Okay, and would it be safe to say that the people who were previously checking all of this manually, we're not replacing those people, those people are now freed up to do higher value work?

**LISA PEARSON:** Absolutely. Huge amount of demand is, as many of you might be aware, from all the new industries that we're bringing in. There's a huge amount of demand for us as a function and the rest of our corporate function to operate differently. And that's requiring us to have new people, new focus, new service. Solutions like this allow us to create that capacity to provide those services coming in and the services being demanded by the new businesses coming in.

**STEPHEN REDMOND:** Okay, really good. Thanks so much for telling us all about the General Ledger Recommender. Just to finish up, right, this is a fun question for both of you. If you could wave a magic wand and have a new AI in your life tomorrow morning, what would that AI be and why? Tricia?

**TRICIA MILLER:** Well, you'd had to start with me, didn't you? Let's start with a new AI for work. Honestly, for me, there's something needed as we look at on the contractor side. Maybe not the fun answer you wanted, but we're excited to say that as Accenture grows dependency, I would say, on contractor workforce or flexible workforce, we got to get better at anticipating where they're needed and when and where they can be filled by the bench and not. Because I think we know that there's a huge



amount of opportunity to use AI and predictive analytics to really help us make that process faster. And, again, not the fun answer, but definitely the one that as I look and where and what we want to do next in this space is top of mind for us.

STEPHEN REDMOND: Okay, Lisa?

LISA PEARSON: Well, I give you one business answer and one fun answer. And what I thought about is related to the capability that we discussed today that I think there's are other sort of use cases where it could be extended to any kind of transactional process like onboarding employees and predicting the attributes that need to be set up in the system when they're setup in the personnel administration system. Also, like master data, when we're setting up master data in our system, we could have something similar that could use historical data or some patterns to predict those kinds of things. So I think that's pretty exciting.

But then personally, I have thought about AI that would help me is like as a working parent to better balance my work schedule with things like getting kids off to school in the morning and figuring out what to make for dinner. So something that could help me predict if I'm on a call at 7 o'clock in the morning when my daughter needs to be walking out the door, has she stayed up too late the night before, can you alert me to that and predict that she's going to oversleep, so that I know when I need to breakaway and go get her out of bed or things like alerting to produce that's going bad in the fridge. And, hey, I know you have chicken in the freezer and these spices on hand and so, here's a dinner you can make, so the produce doesn't go bad. 'Cause I do throw away a lot of produce. So those are my fun answers, Stephen.

STEPHEN REDMOND: Yeah, really good.

TRICIA MILLER: I think if you manage to create that, Lisa, there will be no shortage of the demand.

STEPHEN REDMOND: Thanks so much to both of you to joining me today and a big thanks to you, the listener, for listening in. I hope you found this really informative. We got through quite a few things today. So just some of the problems associated with dealing with huge volumes of invoices in such a large organization, how our General Ledger Recommendation engine has improved that process and how the Recommender AI was trained and built and how it's supported through in the long term and the business value deploying in AI like this and been able to free up valuable resources to do higher value work.

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