



Season 3. Episode 21: Can Public Procurement Contracts Predict the Future? Analyzing Procurement Data with Malcolm Duff

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Hisham Allam: Hello everyone and welcome to the DevelopmentAid Dialogues. I'm your host, Hisham Allam. If you wanted to know what the economy will look like four years from now, where would you look? Most of us would turn it to economists or to markets or to the latest forecast. My guest looks somewhere most people never think to look.

The short official notices governments publish every time they award a contract. Who won, for how much, and for how long. Thousands appear every day, and almost nobody reads them. He believed that taken together, they are the most reliable forecast we have. It's a bold claim, and this is a good year to test it.

In twenty-twenty-five, the world's largest owner canceled thousands of contracts within weeks. In much of the world, most contracts are never published at all. Malcolm Duff is the founder and chief executive of DataTixx, a company that gathers contract award notices from one hundred and ninety-four countries to forecast where economics activity is heading.

Before that, he spent nearly forty years as an interpreter and translator working for UNESCO and for the European Court of Human Rights. Malcolm, welcome to the DevelopmentAid Dialogues.

Malcolm Duff: Thank you very much. Good morning.

Hisham Allam: Good morning. Before we get into the data, I want to start with you. Twenty years ago, your translation company won a contract with the European Commission. What changed for you and your staff after that?

Malcolm Duff: So, to be quite honest with you, everything changed after that.

First of all because when we won the contract, we knew that we were going to be given translation work for the next three years, and we knew the price that we were going to be paid, and we knew the approximate amount or volume of translation work we were going to have. So, we knew the sales figures we were going to have for the next three years.

The result, first of all, was that it was a very small company. There were four people in it. But all of the futures of those people were changed because of that contract. One of the translators I had was on a short-term



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contract. We gave him a full-time long-term contract as a result of that. The secretary we had wanted to buy a small apartment, and she hadn't been able to until we got that contract because we were able to confirm that she was going to have her income for the next three years, so the bank gave her a loan. So, it changed the futures of all the employees and of the company, and also, it changed the future of the company because we were able to publicize the fact that we had a contract with the European Commission, and that improved our public image.

And so, we had a lot of other contracts that came. So, it changed everything.

Hisham Allam: Let's pick up on that. Which contract anywhere in the world told you something before the market knew it?

Malcolm Duff: I can give you a very good example of that.

Hisham Allam: Yes, please.

Malcolm Duff: At the beginning of the COVID pandemic in the one of the regions in China where apparently the pandemic originated, I'm not accusing anybody of anything.

But the local municipality in the province in question started ordering large quantities of wood of the cheapest possible wood, but in very large quantities. And the reason they were doing that was to make coffins. Now and from then on, as what became the pandemic, as that spread, the orders for that wood increased in other provinces and then in other countries.

The next country was to order the wood in question was in Japan. Now if datixxia, the application we have now, had been in existence then, because we have intelligence artificial intelligence working behind it, the artificial intelligence would have said, "Okay, these are contracts for cheap wood to make coffins, therefore there must be a medical emergency."

And in fact, that turned out to be COVID. So those contracts would have allowed us to detect the COVID pandemic before anybody else knew about it.

Hisham Allam: This needs a deep investigation, a real investigation.

Malcolm Duff: Yes, I agree entirely. One of the organizations that we have invited to test our application is a series of investigative journalist networks.



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One of them is the Global Investigative Journalism Network. The program director of that network, her name is Sandrine Rigaud. She lives in Paris. She teaches journalism at Sciences Po Paris, and she has won Pulitzer Prizes.

And we've invited six other investigative journalist networks to use datixxia or to test it anyway. Because one of the things we can do with datixxia is analyze the potential for corruption.

Because corruption is in any country. It's everywhere. In any case. It can be at the very highest levels, and it can be at the very smallest levels.

Hisham Allam: So, let me push back a little. In 2025, the world's largest donor canceled about 5,000 contracts in a matter of weeks. Those notices said the work would run for years. What does your model do when a government simply changes its mind?

Malcolm Duff: First of all, the whole point about datixxia here is that we try to get all of the contracts in every country every day.

We have an input of about 125,000 contracts per day. But now normally when a contract is changed or canceled, in the case that you're talking about, a new notice is published which says that such and such contract has been changed or modified in some way in the volume or the value or the duration, or - even if it's canceled altogether.

And as I said, in that case, there is a new notice published saying what the change is, and that also we would have within twenty-four hours. So, what does our model do? Users will be informed almost immediately, at least within 24 hours of a change in the contract.

Hisham Allam: So, what is your mechanism to watch this huge number of contracts every day?

Malcolm Duff: We use artificial intelligence, otherwise it would be impossible.

Our development team is in London, and all the developers are from Eastern European countries, and they're from Russia, from Belarus, from Ukraine and the Czech Republic, Poland. We have two common languages. One is English, which is good for me or it's otherwise it's Russian.

And my associate, Yana Levchenko, who is Ukrainian, she speaks fluent Russian. But every single member of the team that we have set up, including our lawyers, our accountants, our developers, they all use artificial intelligence.

And what I have done is I have written specifications to make certain calculations. I can give you an example of one of them. It's a very simple calculation that is called "upticks". An uptick is an increase in one data. But the metric which I've called upticks, records the volume and the value of contracts in each market sector.



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So, you have a curve day by day or week by week or month by month, and there is a standard deviation. It sometimes goes up a little or goes down a little or goes up. So, you have a standard deviation, and when a contract value goes above or below that standard deviation, the system indicates an alert.

For example, a given market sector can be in dental instruments- instruments for dentists. If there is a sudden increase in the orders for dental equipment, that will be - interesting for - the manufacturers of dental equipment.

So, a subscriber to our application who has indicated that the market sector as being the one in which they're interested would receive an alert.

Hisham Allam: But what would you do with contracts or tenders that are offline? Most of, or some of the Third World countries are still using paper advertisements and contracting, so they are not online, they are not available, and you have less transparency. So, what would you do?

Malcolm Duff: There's nothing we can do with that. Until those countries start using digital systems, we can't keep track of paperwork. That is one of the reasons why the European Commission published a recommendation for a change in the procurement system in Europe to increase accessibility to simplify the system so that anybody, anywhere, can use the system and access it.

But obviously you need computer and internet access, of course. One of the reasons why the European Commission is doing that is that, and I don't wish to be pretentious about Europe because I know from history all the mistakes that we have made in Europe and Europe has made in every other country around the world.

But one of the things we have done in Europe is to try to make markets fairer so that everybody has access to the market. I can give you a specific example that when we developed the prototype of our application, we were given, very kindly, we were given all the data for the United Kingdom for the contract awards in the United Kingdom in January of 2025.

There were 5,350 contracts. So, in 20 days, there were 5,350 contracts published in the United Kingdom in public procurement. The total value of that was £29.7 billion. It's a huge sum of money. But the smallest contract, and I have the Excel file, I can show it to you. The smallest contract was £400.

Hisham Allam: Okay. I can imagine that.

Malcolm Duff: And that's simply for a local municipality that wanted to buy some printers.



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Hisham Allam: But let's look at this from another angle. Most governments publish who won a contract. Far fewer publish whether the work was ever finished. How big is the gap between a contract signed and a contract delivered?

Malcolm Duff: I don't know. I simply do not know. But that is a very good question, and it's one of the questions we would like to try to answer with this application. That's the kind of question that investigative journalists will be able to look into. I'm not saying we have found all the answers, but we found means of finding the answers

Hisham Allam: Stressing on that in Europe only contracts above €140,000 must be published Europe-wide. In poorer countries, most contracts are smaller or never go online. Does your system see rich economies clearly and poor ones barely at all?

Malcolm Duff: Well, it depends on what you mean by poor countries. First of all, I have already explained to you the smallest contract in January of 2025 in the UK was £400. The threshold that you mentioned is of one €140,000. That is the threshold above which public contracts must be published. But in almost every country in Europe all of the local government contracts are published as well, so they're extremely small. The reason why they do that is because we have found in Europe, that to have a really good market, the idea is to obtain the best product or service for the lowest possible price, but it is the best possible product and service, and the best way to do that is to have competition. So, you publish calls or tenders on whatever marketplace you use, and then those tenders result in offers from bidders from different companies trying to get that contract.

And then there is a contract which is signed, and then the product or service is purchased and paid for. And we have found in Europe that is the best way of doing things, and that is why a lot of companies all around the world are more and more going to start working with companies in Europe to get access to those contracts

Hisham Allam: Okay, that's clear now. On a different note, in September, the European Commission proposed rewriting its procurement rules, including a preference for European suppliers. What happens to a supplier in Kenya or Bangladesh when Europe starts buying Europeans?

Malcolm Duff: The best thing would be for those companies in Kenya or Bangladesh to contact their equivalent in Europe- and to set up partnerships with those companies in Europe. Again, this is one of the things that our application is going to be able to offer. At present I'm not trying to sell the application. I'm trying to explain why it is useful. Today, in our database, we have about 25 million contracts dating back to 2006, and that database is updated every single day with up to 125,000 contracts per day in our database. That means we have contact details of 25 million companies. In each contract, you have a purchaser and a supplier. The purchaser is because these are public procurement contracts, so you have its local government, local municipalities, central governments.



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The suppliers are all companies. So, we have the contact details of 25 million companies, but we also know that each one of those companies, in what market sector they work, because the contracts are classified by a code.

There is a standard code in Europe. It's called the Common Procurement Vocabulary, CPV. There are 9,458 families of products and services, and every country around the world, India, Argentina, they all use similar systems. They're not the same codes, but they are similar systems in which they give a code to every kind of product and service that are included in these calls for tenders.

One of the things we have done with our application is to have a cross-referencing system. It's called "semantix," so that we can compare contracts in any country on a similar basis. We can compare instead of apples and oranges, we can change them all to apples, so we can compare all of them.

Hisham Allam: So, you can help also in the process of decision-making.

Malcolm Duff: Again, that's not what we're trying to do. Because we have the contact details of those 25 million companies, to take your example, if you are a company in Kenya or in Bangladesh, and you manufacture dental equipment, to take the same example, with our application, you will be able to find a company in a European country that also makes dental equipment, and you know that they have already won a contract award. What we are doing is making it possible for, again, for companies in Kenya or Bangladesh to find equivalent companies inside Europe or anywhere else, in Argentina or the United States or Canada or wherever. So, the users of our application can set up their own network.

Hisham Allam: The UN procurement fell by more than 11% last year. For a consultancy that lives on these contracts, what does your data say is still growing?

Malcolm Duff: What our data tells users is where markets are growing.

Again, because we have information about public procurement every single day from every country. Except of course, not for paper contracts. As you say, we're talking about digital information. Companies in countries that have lost markets because UN contracts have been canceled will be able to use our application to find other markets in other countries.

Hisham Allam: Okay, let's switch the gears. Almost every forecasting tool says it runs on artificial intelligence. What is the difference between these tools and DataTixx?

Malcolm Duff: First of all, the contracts that we obtain are in digital format, which is why we can receive 125,000 contracts per day from every country around the world.



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And we have written a certain number of metrics, the things that we can calculate, so that there is a dashboard where you can see various standard tendencies or trends in marketplaces, in whichever marketplace you want. You can specify which country you're interested in; you can specify which market sector you're interested in, and the system simply displays graphics or tables of what is happening and what is going to happen in that particular market.

But at the same time, we do use artificial intelligence because they're inside our application. Today, the interface is in English and French. It will be translated into every other language later on. But inside the application, there is a chat interface which uses artificial intelligence, and that chat interface is, first of all, available today in every language.

Doesn't matter which language you use. You can query our database in whatever language you want, and you can ask it any question in your own language, and the artificial intelligence then looks at public data that we have - obtained from everywhere, and that is the interest of this application. It's all of the information from everywhere, and artificial intelligence is used to reply to your question.

So, if you're in Bangladesh and you're speaking the Bengalese. Then our chat interface will reply to you in Bengalese, and it will give you the information using the numerical data which is in our database.

Hisham Allam: This is clear now, but where exactly does the AI stop?

Malcolm Duff: It's a very good question. One of the things we wanted to make absolutely certain was that artificial intelligence doesn't take our data. Our data stays as our data. To be absolutely exact, we use Microsoft servers, and because we are in Europe, we need to comply with European data regulations, which are very stringent, and we don't want our data being stored, for example, in the United States, for example.

So, our data is stored on series of servers in France, which complies with French legislation and with European legislation. You ask in our application a question about the data; you will get the answer using our data.

But if you go onto ChatGPT and ask the same question, you won't get the same answer because ChatGPT doesn't have access to our data. You have to be inside our application to get access to our data.

Hisham Allam: Let me push back a little. Large firms already have teams that read tenders all day. Does a tool like the app close the gap for a small firm in Nairobi, for example, or give one more advantage to a firm that can already pay?

Malcolm Duff: One of the things we wanted to make sure is that access to the application is available not to any individual because it would probably be expensive for some individuals in the developing countries.



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But for companies it's extremely inexpensive. The cost of our application is 100 euros per month for the subscription. But that subscription is for five, up to five people. So, it means - each user costs about 20 euros a month to use our application.

So again, for companies, whether it's in Bangladesh or in Great Britain can afford that.

Hisham Allam: So, what does a country representative do today to turn global contract data into decisions for local businesses?

Malcolm Duff: What our country representatives do is try to find subscribers to our application. That's their job. And it is to help people who use the application to understand how to use it and to solve any problems they have if there are any standard user problems. If there are technical problems, we have a technical support team that will reply to them.

Hisham Allam: Okay. I want to go back to something you shared with me before we recorded. You came back to this idea after losing your wife in 2022. What did this time change about what you wanted to build?

Malcolm Duff: My wife died of Alzheimer's disease and, when she started to have the symptoms of that which about 11 years before she died was when the first symptoms occurred. I was still running my translation company, and it became increasingly difficult to run the company and to help her. So, I retired.

I sold the company. I retired, and I started working from home as a self-employed translator. But about five years before she died, one day she said to me, "What's your name?" And I said it's Malcolm. And she said that's funny. "My husband's name is Malcolm." And that was the first time I realized that she didn't know who I was. Okay, so anyway Alzheimer's disease is a fatal disease.

It's not something that goes wrong in people's brains. It kills them eventually because they don't know how to eat or how to swallow. There are all sorts of complications. But anyway, so she died about 11 years later in 2022. And what changed for me.

First of all, I thought, "what the hell am I going to do now?" I was in this house which is a nice house out in the country in Normandy with my dog, my old dog, who was extremely sad as sad as I was because he looked after his mistress for 15 years. And I decided that I wanted to do something that I thought would be useful.

And that is what I think datixxia is. It's useful. I probably could make a lot of money, but I'm not particularly interested in that. What I'm interested in is seeing it used. One of the organizations or the types of organizations that can use datixxia, I've told you, first of all, is investigative journalists.

I translated for an organization called Reporters Without Borders for about 20 years because I think reporters who find the truth about what is happening everywhere are extremely important. The free press, I think, is an extremely important part of any country.



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And so, as I said, we've invited several of these journalists, investigative journalists' organizations to test datixxia. But another type of organization is business schools, and there are about 15,000 business schools everywhere in the world.

In every country, in Bangladesh, in Kenya, in Japan, Argentina, United States, everywhere. And some of them are extremely rich, and some of them are less wealthy. But all of them do research into economics, into business, and they also obviously teach because they're business schools. And so, I would like datixxia to be used by business schools everywhere. And one of the organizations in Rouen, in Normandy, where I live, there is a very good business school and they're interested.

And we've invited all the economics professors to that business school to test the application. We start testing it in the middle of October.

Hisham Allam: Malcolm, I'm so sorry for your loss and for losing your beloved wife.

Malcolm Duff: That's very kind of you. Thank you.

Hisham Allam: One last thing. Your company's motto is Facts for Futures. After everything we have said about what the data can and cannot see, how much of the future do the facts really cover?

Malcolm Duff: If I can talk about Europe, public procurement is an extremely important part of economic strategy everywhere. Public procurement represents about ten percent of the GDP, of the gross domestic product of each European country, about thirteen percent. That is the direct impact of public procurement.

When I say direct, for example, when there is a contract to build a school or a hospital, the company that wins that contract will then send out calls for tenders for all the products and services that are needed to build that hospital or that school. There will be plumbers, electricians, builders, concrete suppliers, windows, et cetera, dental equipment, medical equipment, and whatever.

Public procurement in Europe represents about thirteen percent of gross domestic products in direct terms. But in indirect terms, that is the cascade effect of tenders that then generate other tenders for other products and services to manufacture the initial product or service which is required, the public procurement represents on in indirect terms between forty and sixty percent of the GDP. So again, in Europe and in North America, I think I can safely say also in North America we can calculate about between forty and sixty percent of what is going to happen in the future for up to four years

Hisham Allam: Thank you, Malcolm. A contract is a promise about the future written down. Malcolm's work rests on reading those promises at scale, and today we tested where that holds and where it breaks. When



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governments cancel, when they never publish, and when the smallest contracts, often the ones that matter most in poor countries, stay out of sight.

If you bid for development contracts, there is something practical in that. The data about your market already exists. Knowing what it leaves out may be worth as much as knowing what it shows. Malcolm, thank you for your time. This has been DevelopmentAid Dialogues. I'm Hisham Allam signing off. Keep asking the harder questions, and we will see you next time.

Goodbye.