

EPISODE 887

[INTRODUCTION]

[00:00:00] JM: A large sales organization has hundreds of sales people. Each of those sales people manages a set of accounts who they are trying to close sales deals on. Sales people are overseen by managers who ensure that the sales people are performing well. Directors and VPs ensure the scalability and health of the overall sales organization.

The sales lifecycle mostly takes place within a piece of software called a CRM, customer relationship management. This tool documents the interactions between sales people and accounts. CRMs have been around for many years and although CRM software is a useful repository of data, it does not fulfill all the needs of a sales person.

People.ai is a system of machine learning tools built around the sales tools ecosystem. People.ai helps a sales organization avoid manual data entry and understand areas of potential improvement and decide on who the highest value sales lead to pursue might be.

Andrey Akselrod is the CTO at people.ai and he joins the show to discuss the potential applications of machine learning in the domain of sales and the engineering work that his company has done.

I hope you enjoy this episode.

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[INTERVIEW CONTINUED]

[00:02:53] JM: Andrey Akselrod, welcome to Software Engineering Daily.

[00:02:55] AA: Jeff, thank you for having me.

[00:02:57] JM: Today we're going to talk about people.ai and we will very quickly get into the engineering of the company. But I want listeners to get a broad overview for sales, and that's because most of the listeners are not experts in sales. They don't have much idea about how sales at an organization that sells software works.

Could you just give us a brief overview of software sales and how those sales organizations typically work? What kinds of problems they encounter?

[00:03:29] AA: Yeah. So, I'm not an expert in sales. Having said that, when I started to look into this, I got really, really surprised how scientific the process is. It's really regimented. You go through a number of different phases in this process. In each phase you need to achieve certain things, you need to talk to certain people. The way that it works is you have your CRM, customer relationship management platform. Then within the CRM, everything is regimented, and as a sales person, you're sort of required to enter everything that is going on so that sales management can actually make decisions and predictions based on what they see.

So, this world existed for a long time. At this point, CRM has been around for a longtime. But that was my – Again, my biggest surprise was I thought sales, you just walk in, you start talking

to people, figure out what they need and sell to them. It's definitely not the case. There's a lot of science in it.

[00:04:32] JM: Definitely. Yeah, it seems like the world of sales has moved slowly from this – Well, completely relationship-based. I'm cold calling you. I'm showing up at your office in a suit and tie. It's gradually moved to a more and more programmatic process. Not that the suit and tie stuff doesn't exist anymore. Not that the sales calls don't exist anymore. But the people who are doing sales are more and more familiar with software and technical workflows such that there's a growing market. I mean, there're a big market and a growing market for tools to enable these sales professionals to operate more productively.

[00:05:13] AA: Yeah. So that's absolutely the case. I do want to say that relationship selling still exists. It's still there. People are people and you need to build relationships, and that's foundational one way or another. However, there is a whole, huge market of different tools that help you do so and it starts with a CRM, and then CRM becomes your integration points where a lot of different tools come together to form an ecosystem that is being used by pretty much every company out there, especially the companies that are doing B2B sales, but it's not limited to B2B.

So when you talk about people, yeah, my company, right? It's part of that ecosystem, and what we're doing is we're really taking it even further, modernizing how sales folks work with CRM and creating new flows, if you will, and simplifying a lot what needs to happen. Because for a long, long time – Again, coming back to manual data entry, for example. For a long, long time, sales reps have to manually go in after each meeting, after each email, everything that happened with that account. They have to go back to CRM and actually manually enter all that.

Sales people really don't like that process. Think of it as spending 20% to 30% of your time doing data entry, and this is for highly-paid, highly-intelligent sales people that would rather be creative and they would rather be out there talking to their prospects and customers

[00:06:56] JM: So I started becoming fascinated with the sales products on the market when we started doing lots of podcast ad sales, and the reason I got fascinated is because our sales process is basically as simple as it gets, right? We reach out to software companies and say,

“Do you want to buy podcast ads?” Then we eventually get on a sales call, hopefully, and maybe sell them some ads.

But there are so many minutia along the way, and because marketing people at these different companies, they go in and out of the company and it's like do you have the email addresses of the right people to contact? What are the norms? Can you add somebody on LinkedIn? Can you message somebody on LinkedIn? How do you pricing? There're so many different questions. It ends up being just this deeply complex and strategic problem and also relationship problem.

There's plenty of room for software to improve things, but a lot of it is also these human dynamics. So it ends up being quite interesting even if you're just selling like Knick-Knacks or selling podcast ads. That brings me to kind of the modern dominant platform for sales, which is Salesforce. Salesforce has been the dominant platform for many years.

I don't know if you're an expert in this, but do you have any idea like why Salesforce became so dominant? Was it just first-mover advantage, or any idea there?

[00:08:30] AA: So CRM existed prior to Salesforce, and it was already a dominant system of how sales kept track of their data. Having said that, Salesforce was – During that time, and we're talking about 20 years ago. They were in a way unaware around software as a service and being in the cloud.

So imagine 20 years ago, all are highly sensitive, highly private sales data. Everyone had this data in their own data warehouses and the concept that you would actually ship this data into the cloud and it will be within Salesforce owned servers. It was pretty radical during those days.

Now, the value part of this conversation was that you could get up and run in very, very quickly without this huge major upfront investment that have to happen with other CRM providers in the early days. That was compelling enough for a lot of people to say, “Hmm, let me try this out,” and maybe there is something in it.

Salesforce I think is considered to be one of the first companies to bring sort of software as a service to the masses. They got there by being very innovative at that time by saying that, “Hey,

you don't really –" So their logo was literally no software sign. What it meant is that you don't need to spend millions and millions of dollars getting the CRM system installed in your own data center. You could get up and running with them without any investment upfront and just pay monthly. That was compelling enough for people to say, "Do we really need to have this data in our data centers?" This is how SaaS revolution started, literally with Salesforce. So, I think we owed the Salesforce to a degree.

[00:10:37] JM: Absolutely. I think of it as – This is maybe not a great analogy, but it's kind of like Java. Java became so dominant in the, I guess, late 90s, early 2000s, and it's continued to be dominant in many different environments. So, many people have expertise in Java. Some people don't really like to work in Java, because it just makes them think of large enterprise. But that's kind of thing, is like Java works for large enterprises. It's proven. We know how to scale Java-based systems. We know how to manage enterprises based around Java.

So, Java keeps getting used. I think that's kind of where we are with Salesforce, is like Salesforce is so dominant. It's in every large sales organization and it has so many pieces of tooling and integrations and plugins and it's gigantic ecosystem such that you can build platforms around Salesforce. You could build very big businesses that are entire business around this Salesforce CRM product. I think this kind of gets us to people.ai, because people.ai is built to augment the Salesforce-based workflow. I think you are moving into other CRMs or you have other CRMs available. But I think kind of the MVP was pretty aligned with the Salesforce-based workflow. Is that correct?

[00:12:02] AA: That's correct, and I love your analogy, by the way of Java. Once you develop a number of different applications, it's very, very hard to move away to a different language and redo them again in a different language. Similarly, Salesforce figured out very early days that applications is just not enough, and they have to be a serious player in this whole API-driven ecosystem where they would allow other people to integrate into their software and add more and more value having Salesforce to be as a system of record, as a database where all the information is being centralized from different systems.

So when people.ai started, we started with Salesforce. Again, this is dominant player in the world and in the U.S. market so that just it made sense to start there, but we're expanding into

other CRM platforms as well. I'm talking about Microsoft dynamics, Oracle, SAP. Those are the most widely used and most widely known CRM platforms.

[00:13:10] JM: Awesome. What is people.ai do?

[00:13:12] AA: People.ai is what we call a revenue intelligence system. It's a fairly new term, and what we do is we help people to generate more revenue in client services, sales, and marketing teams. We do this by analyzing what people do, specifically what sales reps do, but not only sales rep, also marketing and client services. Sometimes it's useful for other verticals as well. We look at their activities, email, calendar, phone calls. Based on those activities – So what we do is we analyze those activities as they come in. We add business context to it from CRM system to understand what those activities relate to in business context.

Based on this data, we're actually able to do a couple of things for our customers. Number one is we are able to fully automate data entry into a CRM system. So just imagine, it's 2019 out there, and all our highly paid intelligent sales reps are using 20% to 30% of their time to manually enter data. It just doesn't make sense at this point.

Not only we're doing that, we're also keeping CRM evergreen, because when we look at the data that you have in your CRM, 30% of it is getting out of date within the year. It's actually remarkable how fluid the companies and businesses are. People leave companies. They join other companies. They get promoted and so forth. All of that information needs to be tracked, because you do want to market and sell to the right people.

If you can't send your market in emails and other messages to the right people in the company, your probability of selling is not as high as you could communicate to the right people, and you know who the right people are. So that's one aspect of what we do.

The second aspect of what we do is we provide a lot of intelligence based on the data that we're accumulating, and we provide this insights and intelligence to our customers and there is no really other way to get the data to understand like where the time is being spent. How many patches did we have with a particular customer or a prospect? Are we multithreading, for example?

Multithreading is an interesting term. I'm sure all the engineers recognize the term. In sales, it means something completely different. Multithreading is when you talk to multiple, unrelated people within one organization. Sort of communicating your value to the organization. So you attack it from multiple angles. That's what multithreading in sales.

Having visibility into what is actually happening through the lens of the activity of what people actually do is super useful for a number of use cases. The third part of what we do is when people come to work, we call it wire right now. When people come to work, they get a feed of the recommended action or best next actions around what they're working on.

So, best sales people, when they come to work, what they do in the morning is they sit down with a piece of paper and they're like, "Okay. How do I maximize the value to-date? What do I need to do today to get the best outcome of my work?" and they create a prioritized list.

So what we're doing is we're actually doing it for them. We're analyzing what happened. We look at the business context. We look at where the deals are, and we're identifying the best next action within each deal and we're given a feed of those actions to our sales reps to know what to do next and, again, to maximize the outcome of their work.

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[INTERVIEW CONTINUED]

[00:18:37] JM: Let's run through maybe a few example workflows. So could you talk about some specific problems that people.ai solves? How would a sales rep use people.ai or how would a sales manager use people.ai?

[00:18:54] AA: Right. So we provide visibility into data like what is the best path within the organization to follow to make a sale? So, if we start, for example, with a CMO then we go and talk to potential – So the engineering part of this, or a key part needs to get involved, security part needs to get involved. The sales of the organization may get involved.

What we're identifying is what is the best path and what are the right people to talk to. We may see things like, "Oh, the director of IT is not the best person to talk to or is not the best person to talk to at this phase of this sale," and you need to bring that person later on in the process. So, effectively, we're identifying the best way to navigate organization that works for your particular sales process. So that's one of the examples of what we help people to do and to identify.

Another example is what we call champion tracking internally, is we are detecting when people leave the company and join another company is an example. This particular action should trigger two things. Number one is if your champion – In sales speak, champion is someone who wants to buy from you, who wants to bring you into the company. If that person is leaving the company, you need to immediately jump in and figure out who can replace him in that company. You need to know about that. Otherwise, the return profile of that customer is going to go up, because who is overseeing your installation of your software in that company, or your product. How that product works in that company?

Then the second thing that it should trigger is the sales action. If that person bought from you in this particular company, they may be buying from you again in the next company that they

joined. So, you got to jump in there very quickly before your competition gets there. So that would be another example of things that we monitor and that we do, and we could get things like that down to an API call into your system so that you could take appropriate actions.

[00:21:15] JM: So, there's obvious opportunities for "AI", or machine learning, or just whatever we want to call it, regressions, to improve the sales process. The friction as in many "AI" platforms is that collecting this data is not so straightforward. In many cases, there is this manual entry process where the sales rep needs to figure out like a block of time every day to enter in a bunch of information into the CRM about like what happened today. Because a lot of the stuff takes place over email and a lot of the stuff takes place over phone calls. There may not be a straightforward path for that information to make it into the CRM.

In fact, there's almost unimaginable amounts of latent information that is not making it into the CRM, that is not making it into data formats, that are unstructured, let alone structured. So we got all these problems of like how do we get this data in here? What kinds of LinkedIn data do we need? What kinds of social network information? What kinds of news could be helpful? How are we figuring out who is leaving companies and who is joining companies and all these kind of data stuff? Tell me about the data problems of sales?

I want to get a picture for how these data inputs and ingestion pipelines work. What kinds of data are available to you? Because I think eventually we'll get into engineering, but we need to like layout these problems a little bit more directly to the listeners.

[00:22:58] AA: Right. That's a great question. Let's start with the fact that no one likes to do manual data entry. People hate doing that, right? So, even if they want to do it right, it's very, very difficult to get it right for people. Events happen, things happen, email goes back and forth. People add more people into the events, into the calendars. Figuring all of these out on-the-fly and add all of these data into Salesforce or CRM in general is closely impossible in the first place.

So, thinking about – And all sales teams, they all operate on the data available. So, the best ones out there I would say operate on just having, I'd say, 50% of that data, if not less. If you

only have 50% of the data, you're making a decision on a coin flip, on a flip of a coin, right? How crazy is that?

[00:23:57] JM: It's quite crazy.

[00:23:59] AA: This is what we do, is we do help to collect all of that data. We do help to make sense out of it. It is not something that is easy, because if it would be easy, it would have been done a long time ago. It's something that requires a lot of computational power to figure out. But at the end, by looking at what people do – Again, it's emails, calendars, phone calls. We could get a very interesting story together by mapping that information to your business context, which is typically stored in CRM. All of a sudden, you are getting closer to 100% of the data that you should have. All of a sudden, you're affecting – Almost 100% of your pipeline is getting affected, because all of a sudden you get a lot more people to market to, a lot more people to sell to, and it's a remarkable difference.

[00:24:55] JM: All right. Well, give me a framing for the software architecture of people.ai.

[00:25:02] AA: I would characterize the company as a big data company. So what we do is there is a data pipeline where we're ingesting all of the activities and we're ingesting the CRM data, and this is sort of the foundational element. Then as data moves through the pipeline, we process the data. We figure out how it matches. We figure out what's included in the data.

So to give you one example, as we look at all the emails that are coming in, we're looking for signatures. Signatures contain a ton of interesting information, but even something that sounds simple. I mean, how difficult is it to find a signature in an email? That's actually very complex. You look at emails, you have different email clients that do things differently.

Signatures are usually not identified in any way, shape or form for computer processing. You have multithreaded emails that you need to parse. Then when you even find your signature block, you could have very wild differences in how people – The formats, and how people talk about themselves and so forth. So something innocent like that is actually a very complex problem, and we haven't even started talking about what we do.

So as data moves through the pipeline, it's being processed, it's being normalized, it's being stored in various databases. So this is the pipeline. This is ingestion. Then we have the application itself that surfaces the data, and we have a number of different components that specific for ingestion from different systems that we ingest from. I would say roughly this is it, right? It's ingesting the data, processing the data and surfacing the data.

[00:26:50] JM: All right. Well, to dive a little bit deeper, can you talk about some of the tooling you're using? Maybe we could start with the data pipeline. What does the data pipeline look like? What kinds of operations is it doing? What tools are you using?

[00:27:08] AA: Right. So, pipeline itself, I think we're doing a number of typical things that everyone else would do. So there is software that facilitates pipeline. We use a bunch of different libraries. We use Kafka in certain cases. We use some other messaging queues in other places. The storage I think is an interesting component of this, because when the company started, we naturally – The fastest thing that you could do is to just throw in a few Postgres databases. Throw in Mongo and then just start accumulating data in there. What we quickly found is that it worked really well when the company was small. As we were growing, that just stopped working altogether.

So, one of the transitions that we had to make pretty early on actually is to shift to S3 as sort of this distributed storage for most things. We still use databases, but most of the sort of raw data is being stored on S3, even a lot of structured data is being stored on S3, and we're processing sort of Spark in a distributed way. As we get in, we need to handle spikes of the ingestion. So when a new customer is coming in, we're processing like really huge amounts of data from that customer and we need to be able to handle those spikes.

[00:28:31] JM: Are you entirely on AWS? Are you using Google Cloud? What's your cloud provider story?

[00:28:37] AA: We are on AWS. We've tried Azure, and I know I'm on the record, but we found it way more difficult to use with inadequate documentation. So we very quickly said no to that idea. But I think the biggest benefit of AWS is it's very easy to hire engineers who are familiar

with AWS and used it before. It's much harder to do for – It's possible, but not as easy for Google and Microsoft.

[00:29:12] JM: So let's put these pieces a little bit closer together. So, you win over a customer, and the customer needs to go through an integration process in order for you to get their data into the system. Tell me about that integration process in more detail, and then we can talk about what the customer actually gets post-integration.

[00:29:35] AA: Right. So, the integration is actually more or less straightforward, the technical integration part. You're going into the administrative console of our application. You connect to your exchange or your G Suite to get the activities from. Then you go into a different section and you connect your CRM. It's all OAuths. So through OAuth, you're connecting it to different places. So Salesforce is connected, your exchange is connected, or G Suite is connected, and we can start ingesting data.

How we ingest data and actually sync data back into Salesforce. It's actually interesting, because all the different providers, they all going to limit how much information you could pass back and forth and what you can do. So you got to be very careful. For example, at Salesforce, it's very easy to exceed your daily limits of using your Salesforce account. Then pretty much every single integration that the company has is going to be locked out of Salesforce for the rest of the day. So it's tricky and you have to really understand how to properly integrate, how to respect those limits, when to stop, how much you can ingest within a day. So all of those things come into play.

[00:30:53] JM: Okay. Then after the integration, what is typically the first thing that customers are doing? How are they leveraging the integration afterwards?

[00:31:07] AA: Right. So once we integrate, what we start doing is we start ingesting data and we start creating historical representation. So we go back in time, if you will, to reproduce everything that has happened over that time. Because people have their email, calendar data and so forth, the retention rules are different for everyone, but sometimes we can get like 5 years back even and process all of that data, and we're creating all of those historical context

now. Going five years back is probably not as interesting as about like a year back, or six months back. But still, we are extracting a lot of that historical data going back in time.

Then once we have the data surface, and it can take time to get there. Depending on how much data a customer has, it literally take like one to two weeks to get into our system because of the API limitations. So it's not instant at all. Then we need to choose through all of that data to organize it.

So once the data is in, our client's RSS team is actually engaging with the customer and they start the analysis. They start to analyze the data and – Essentially, there's a bit of a change management that may happen in the customer's side and we are walking our customers through this journey of understanding how they could use the data, because this data is new to a lot of people.

So they walk in the customers through how to use it and how to look at it. Make sure that everyone understands both the value and the best ways of using it. By the way, one of the other things that we deliver, we actually deliver normalized data to our customers into their data centers so that their data science teams could actually combine it with some of the other data that they have in their data lakes and do a lot of analysis on their own. This is also an interesting concept, because people are not used to see activity data. So, at first, they may not even know what to do with it. So that's our onboarding process.

[00:33:23] JM: Okay. As times goes on, how do the workflows of sales people change as they are leveraging people.ai? Could you just tell me more about how the workflows throughout the organization have changed?

[00:33:42] AA: So, workflows themselves may change depending on some of the information that we extract and delivery to customers. So an example that we've talked earlier about the best path to navigate, the company may actually introduce changes into different phases of the sales process to fine tune and go to the right people during each stage of the process.

But mostly what we're doing is we're accelerating sales. We're accelerating getting to the deal, get into the result by providing information that is sort of optimizes your overall approach to

sales. So, let me give you an example. So let's say stage four of the process. What we're figuring out is that if you don't have a C-level person within that deal if you're not talking to a C-level person, that deal is very unlikely to succeed at the end.

So what we do is we actually do two things. First is we make sure that rep knows about it, and we're like, "Hey, you should bring a C-level person at this phase of the deal. So here are some people you could talk to potentially."

The management side of this, right? If this was not done in that phase and the deal moved to the next phase, we could notify the management side and we could give them a reporter. We could give them a warning saying, "Hey, you think this deal is much farther along, but it's not, because the key C-person is not a part of this deal." Those are some example of things we're doing.

[00:35:31] JM: Is people.ai itself a CRM?

[00:35:34] AA: We are definitely not a CRM. CRM is a very complex beast, I would say. The power of CRM nowadays is not the CRM itself, but rather an ecosystem of all the integrations around it. Our goal is not necessarily to build another CRM, and we're playing very friendly with all the CRM systems out there. We integrate with them. We help them to be more successful by pushing more data, more relevant data into CRMs, but we're not building one.

[00:36:14] JM: What are the hardest engineering problems that you're working on right?

[00:36:17] AA: I would identify the hardest problem as a lot of the decisions that we're making are non-deterministic. It's not like we could do if then else, do this. A lot of it is based on probabilities and thresholds. So as we are analyzing the data, we're getting 75% probability that this person left this company and joined another company, as an example. We're like, is 75% probability enough? Or we're matching this email to this deal, and matching is actually a very complex problem. You need to do identity resolution. You need to understand who is who. Which emails belong to which people?

Salesforce, for example, they don't have a concept of a person. They have a concept of a contact, which is very, very different. Because a person, think of it as your LinkedIn account. You go through different jobs and different times. You have different contact informations for different times. Salesforce does not have it. Salesforce only has a contact representation. So imagine all of that information. It's fairly complex.

In a lot of cases, it's probabilistic. We're like, "If we have 75% probability, is it good enough?" We're doing a lot of data validation. We're trying to make sure that even though we validated the data, like at this point, 6 months down the line it may be different. The thresholds may be very different. The data may be very different. So you need to sort of continue to keep ongoing validation of your data and where you are. So those I would call probably most challenging parts.

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[INTERVIEW CONTINUED]

[00:39:59] JM: In my experience, those kinds of probabilistic things, sometimes they matter a lot and sometimes they don't matter at all. The times when they don't matter at all is like you have an extra prospect in your database and you end up sending an extra email to a prospect who doesn't work at a company anymore. In that case it's like not a big deal. But there are other cases where like it's actually really bad if let's say you're 40% sure that this prospect should exist and you decide to leave that prospect out of a dataset to send them an email.

So you don't send them an email or you recommend the sales rep like, "You don't need to send this person an email. They probably don't exist." But then that person ends up being like the key decision maker, like the one key decision maker that you needed to win over in a deal. So I can imagine how these probabilistic estimates can end up really moving the needle on the product quality.

[00:41:00] AA: They could absolutely could, and it's a balance at the end and it's a very careful consideration at the end. We have instances where recall matters and precision matters less. We have a lot more instances where precision matters a lot.

[00:41:16] JM: Like what?

[00:41:17] AA: So here's an example where a precision matters, right? GDPR, GDPR and security in general, privacy security in general. So if we do not identify the country of that person in our database properly, and let's say they're in Europe and the company has no business talking to them or sending them emails, and they do, because we did not identify the country properly. It's a huge liability.

So this is an example where precision really matters, and we better be absolutely sure that we're playing people properly. We know where they are from. Every state – Like in the United States, usually it was county by country, or Europe is a little different than the United States. But now we're living in a world where each state has their own privacy laws.

[00:42:12] JM: Right. I mean, I've heard this – I was having an interesting – I did an interview with somebody from Stripe, Will Larson, a while ago, and I asked him if he had any ideas for if he wasn't working at Stripe, what would he be working on? He said something like a geo-specific database. Like something around just basically the idea that all these different geos have these different data policies.

I've actually heard – This is one thing that separates CockroachDB and why they've been quite successful is that they have this API into the database that allows you to kind of look at the database as a unified set of information, but the way that they do data governance in different geos is adherent to the geo's local data policy. This sounds like, "Oh, God! Who cares? That sounds really boring."

But if you're a gigantic organization, you're very worried about these data liabilities. You don't want to get charged with like \$150 million data fine. So you actually have to adhere to these crazy things that most of us only hear about in the news and just like, "Oh, well. Whatever. Data policy. Who cares." This stuff is actually making quite a big difference in engineering and purchasing decisions.

[00:43:27] AA: Those are very real problems, and not only in large organizations. We're a fairly small company. We're a three-year-old startup, but we're selling to these huge corporations and they would simply not buy from us if we cannot guarantee the information that we're delivering.

[00:43:45] JM: What a headache.

[00:43:48] AA: It's a headache, yes.

[00:43:49] JM: Ugh! It's painful for me to watch, because I'm just like, "You know, there's a lot of room for innovation here that we're not capitalizing on as a human society, because we're so worried about these data policies." But, yeah, I get it. It does affect people in negative ways and etc., etc. But it's just kind of a shame.

[00:44:10] AA: It's good intentions that are implemented in a way that is hard to properly follow and implement. Again, this is probably nothing comparing to the issues that companies like Facebook are facing right now. That is even worse. I sympathize.

[00:44:33] JM: I really sympathize with them too. Yeah, I guess it's always good to be grateful. I'm sure whenever you're going through one of these painful data provenance questions, you have to check yourself as, "Thankfully I'm not a data provenance person at Facebook right now." No offence to the people at Facebook. I'm sure they're very well-paid and I'm sure the problems are interesting in a certain light and I'm really glad there's somebody working on it, but I wouldn't want to be working on it myself.

Okay. So, nearing the end of our conversation, I'd like to get your thoughts on the future. How will sales change in the next 5 to 10 years?

[00:45:12] AA: Right. It's a great question. I think we're going through the transformation of how – I would generalize it beyond sales. I'd say we go through a transformation of how people work in the offices in general. All of the office work. So, if you look at manufacturing, for example, manufacturing in the last hundred years transformed immensely. So we're talking about Henry Ford introducing the – What's the system called when they – Oh, conveyor, conveyor belt, right?

[00:45:45] JM: Conveyor belt, right.

[00:45:46] AA: So, prior to this, you needed to build a car. You needed to get a bunch of people that know how to build the car from soup to nuts, and each one of them would build a car for a year and then you have your car and it's super expensive because you can only do a few of them every year.

So Henry Ford came in, created the conveyor belt, and the work really transformed. You didn't need a lot of those experts and everything. People would do their part along the way, and this way they really optimize the work. After that, Japanese invested – So they started to use more and more robots to replace people doing the work along the way, right?

So if we look at it right now, if we look at manufacturing right now, a lot of it is robots building things, building cars, and that was like a huge, huge transformation that happened over the last hundred years. If we look at what do in the office, that work didn't really changed much. Yes, we've replaced paper, notepads with computers, but in the end, it's the same kind of a record that you're typing instead of writing it down. It's definitely, but we've been doing what we've been doing before for a long, long time.

The way that this is going to change and the way that what people.ai is doing is we are long-term as a vision. We're trying to remove all of these repetitive, boring work from people's lives, but you should not be doing data entry into 2019. You just shouldn't. It just sounds wrong. Let people focus on the creative parts of their jobs. This is where a computer shine working with data. Computers shine when they search for patterns. They really shine at this boring aspect that we used to do manually.

If you think about it, they're really good at the creative part of this. The way that we've done relationship sales before, it's going to continue to be relationship sales. You need to meet people. You need to trust them. This is what humans are all about. But what we're doing is we're removing the boring part of the work. That's actually what makes me super excited about people.ai and what we're doing, is I think where we're going is actually a much better future.

[00:48:14] JM: All right. Well, I share your vision. I can't wait to see the people.ai equivalence for all kinds of operations in the world. I think these kinds of technologies will liberate people to do more creative work and to jobs that feel autonomous today or boring or rote today will get increasingly creative as the rote processes becomes more handled by automation.

[00:48:46] AA: Just last thought. People I think are afraid a little bit that AI and computers are going to take their jobs. My opinion, I think it's like I don't think is the case.

[00:49:00] JM: No way.

[00:49:00] AA: I think computers are going to continue to be super helpful, and thanks to computers, thanks to AI, we're going to be able to focus on the creative side. Again, I like that

feature when we're focusing on creative and don't have to deal with all the boring aspects of the work.

[00:49:20] JM: I'm with you. Andrey, thanks for coming on the show. It's been a real pleasure talking.

[00:49:23] AA: Thank you. It was a pleasure to be here.

[END OF INTERVIEW]

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