



Ritika Gunnar:

Hi, I'm Ritika Gunnar, and I'm the vice president of Expert Labs. And in this role, I have the opportunity to work with thousands of clients and almost every industry across the globe, and helping them drive outcomes leveraging their data, artificial intelligence and automation. Today, I'm going to share a few trends that we're seeing in the market and hope that they can help accelerate your journey.

So, let's start with a view of where we see most organizations. Most organizations know that they need to be data driven. We recently did a study with our IBM Institute for Business Values, a study of the global C suite, where data found that 165% of organizations feel like they're more out likely to perform in profitability if they apply knowledge of all their data, they're 163% more likely to outperform in revenue, 182% more success at managing change, if they are a data driven organization. Yet when you look at it, a recent Forbes study showed that only 14.6% of organizations actually use AI in their production environments. This is even less for mission critical workloads, yet we know AI is essential.

Let me give you an example to go a little bit deeper into. Let's take a look at the financial services trading process. This post trade processing is absolutely critical and has seen frequent changes across the different asset classes over the last years. If you add to this, a lot of the volume changes and the variety of the kinds of trades that actually happen, and the humans that are actually in the loop that make decisions across these processes and introduce inefficiencies into these process, we've seen change like no other, and the inhibitor to actually getting these wrong is significant.

It costs billions for organizations to be able to deal with the 2% of trades that are actually failed or an error. It costs hundreds of billions for regulatory and compliance issues that occur because of the trade regulations or compliance is not being followed. There are billions spent on the technology and the processes for these trade flows. Yet when you look at it, there is a lot of opportunity to infuse AI, to be able to make these processes more efficient and a lot more cost effective, leveraging artificial intelligence, data and automation.

Using these, we can predict risk and reduce the inefficient trades early in their life cycle. We can avoid regulatory interventions and fines, organizations can have a full view of their data to do a lot more across the multiple trading systems that exist. And they can reduce those manual interventions and decrease those error rates that we talked about. And these organizations can do that by becoming more data driven, by infusing AI across the life cycle that exists. And we think about how to become more AI focused by being more data driven, by reducing the silos that exist and really discovering meaningful insights into the clean data that exists within organizations.

And as you get that, being able to take processes that exist in the organization and automate them, automate everything that's possible across your real time systems. Now, as you do this, as you apply data and you automate things using AI, you need to be able to have trust and ensuring that AI is making the right decisions and that you're compliant against all the regulatory issues that may exist. And you're governing AI in the right way. I'd like to go through these three chapters with you in more detail, and show you what we've learned and what's happening in



data automation and in the trust parts of it. And then of course, the non-technological aspects to take into consideration.

Let's start with data. No amount of algorithmic sophistication can overcome bad data. In other words, you need to be able to have a good information architecture, good IA, to be able to deliver on good artificial intelligence or AI. You need IA for AI. And there are a lot of trends that we're seeing in the space of data. We had the data warehousing era where we took all the data from operational systems and in batch, we loaded them into a data warehouse. We then saw the data lake with the advent of Hadoop, where people wanted to put all of their data into Hadoop and be able to do things more in real time. We found that ended up being more of a data dump instead of a data lake.

And now we're seeing the trend of data being in multiple disparate systems and being able to access that data and being able to do analytics in and around that data where it exists. Well, why do we see that? We see that because AI in itself is now being infused into a lot of tooling, and it allows us to first auto discover where data exists. Second, to be able to take that data and do auto cleansing and to be able to do auto classification on that data. And then there are capabilities in and around auto sequel capabilities and data virtualization capabilities that allow you to access data where it exists.

So, with the advent of these three things, we now have a couple of market trends and shifts that are happening. Lines of businesses are asking for self-service access to their data. They don't want to wait for IT to be able to roll that all up and to give it to them. They have business needs to be able to address now, they want self-service access. Second, there's a lot more regulatory pressure in and around data. You've seen it, data privacy and a lot of regulations in and around CCPA, GDPR, the regulatory and compliance pressures are real, and all organizations have to adhere to them.

We also see a variety of different kinds of data, edge data being put together with unstructured data, with structured data and being able to create new insights. And all of this is leading to new sets of business models, where we can monetize data in an obfuscated way while still adhering to regulatory pressures. And we'll talk about that. This has led to the coming of what we call a data fabric. How do organizations become data driven? They really understand what it means to put together this concept of a data fabric, where they can have self-service access to data and to be able to augment data that exists within the fabric and be able to integrate into the multiple different systems and be able to have the right data for the right people at the right time.

And this is what becomes extremely critical and treating data across its complete life cycle, regardless of where it exists, in the public clouds, on any of the hyperscalers, on premises or at the edge, all of that is extremely critical and encapsulated in a data fabric. And when we see that, you can see intelligent cataloging where there's a 50% reduction in the time to deliver integrated data to users, you see outcomes like 25 to 65% reduction in ETL requests being accessed for the business. And you can do all this innovation while decreasing maintenance costs. We've seen up to 70% of maintenance costs be reduced.



Now, if you have, and you harness all your data, then chapter two is, what are the things in your organization that you are going to automate? And automation is an extremely important use case that we see out in the market today. And this is especially prevalent with a lot of the labor market and the labor forces that exist, where there's a lot of demand and the supply for the sophisticated skills that are out there are in less supply, if you will. And so when we see automation, we think about repetitive tasks, time consuming tasks, and using automation to allow human labor to be able to focus on higher value portions of the work.

We see automation happening across IT organizations, and here we see it as AIOps where there's a big demand to take IT organizations and really optimize how those organizations are being leveraged to find better insights, better efficiencies across the organization. We see it in business automation, where in areas like HR, finance and the different lines of business in an organization, you can optimize process workflows and you can make things that used to take months, take minutes. And this is the power of automation.

Now, we see automation working in three particular areas. People want to be able to automate to be more efficient. Now this was the example I gave, where if something took months or days, you can do that now in minutes. And this is about continuous automated resource allocation and optimization. The second thing we see is in around the space of observability, and that is really taking a look at the inputs of things to determine if the outputs are actually correct, or if there's something that you need to be able to change based on where the outputs are, and to be able to make automated decisions using observability data and those AI powered insights.

The third area we see is correlations, and correlations can be positive correlations or negative correlations. Negative in the sense of, if something's wrong, I can do problem determination and do remediation or avoid something that happens. Positive, in terms of, if something happens with the particular types of trends, you're guaranteed to see something that happens in a more positive way. Now, as we automate processes and workflows, we're able to remove the manual processes, we're also able to minimize a lot more of the human error and to keep costs and checks all while really innovating on the outcomes that actually happen.

Now, if we've done the data piece and now we've started to automate, I'll tell you, the next chapter is trust. And this is one that I talk to organizations every day about, and it's becoming even more important in this highly regulated environment. I'll start with a little bit of a story. I was talking to one CIO a few years ago and he said, "I have a thousand flowers of AI blooming. Yet if you ask me, I only have a handful of models into production. And the reason is, I need to be able to trust, I need to be able to trust AI when it's making a decision, that it's made the right decision. I need to be able to explain to the regulators that AI is making a decision based on these factors. I need to be able to have a view of ethics in AI."

And so when we think about trusting AI, you can think about it starting from the data component, which we talked about in the first chapter, where you need to be able to understand your data. You need to be able to observe and make sure that you have clean data, and that you're building that model from clean data. But then as you get into the model building part, as



you deploy those models into production, you need to have observability in and around the models.

In the same way you do your applications and your data, you need to be able to observe your models in production environments. You need to be able to trust those models so that you know that if there is bias in a model that you can detect it, so that you can de-bias that model if necessary, so that you can explain with fact sheets or other components, how AI came to make such a decision, and make it easier for that auditing process that we know in heavily regulated environments are absolutely critical.

Now, while there's a lot of technological components here, I would tell you that there's also a piece in the governance and privacy component where AI ethics play a huge role in the governance space. How your AI is not only meeting regulatory standards, how the AI is used to be able to make decisions becomes extremely important. As we think about these three chapters to really become a more AI driven organization of data, automation and trust, I would be remiss to say that the technological components do everything.

It always comes back to a very holistic approach. You need to have the technological components of data, AI and automation. But just as important, if not more important, is to really inspect the processes that need to change and the cultural transformation and behavior of the actual people in the organization. When we think about the processes, you've got to think about artificial intelligence and automation as an ingredient into an overall end to end process. And therefore things that you established in one way will definitely need to change.

And this means that an organization really needs to think about the cultural transformation that needs to happen, because as you're infusing more AI and more automation across your organization, you're breaking down silos that may have existed between the data scientists, the line of business owner, the IT organization, and therefore the cultural transformation is actually the most important thing that we've seen. And that cultural transformation starts at the lowest level to the mid tier, to the very highest level in an organization to have that holistic approach, to be able to transform the org. And I don't want the process and culture pieces to be lost, and the technology pieces of what's necessary for data and AI and automation to transform your org. So, do think about that.

Now, as we move forward, I want to discuss a little bit in and around some of the key takeaways we talked about. I want to leave you with really focusing on what it means to be a data driven culture that is fueled by business transformation, to leverage AI automation, to unleash your predictive and intelligent workflows, to apply trusted AI across all of your organization, to have the confidence that you can adhere to a lot of the compliance pieces in your organization. And again, don't forget about the culture and process components.

Our organization is partnering together with many of our clients to invest in their success, whether that being helping them figure out the easiest areas to be able to infuse data and AI and automation capabilities, to be able to help them set up environments and to be able to prove that out so they understand the power of what they can do by harnessing the new



advancements in data, AI and automation. With that, I want to thank you for your time and feel free to reach out anytime.