# Al 360 Ep. #2:





## ChatPDF Summary:

- 1. The episode explores the practical use of AI in companies with the Vice-President of Technology at Magalu, André Fatala.
- 2. Al can be used to improve customer experience, increase efficiency, and drive revenue growth.
- 3. Magalu has implemented AI in various areas, including chatbots, personalized recommendations, and fraud detection.
- 4. One of the challenges of implementing AI is ensuring that it aligns with the company's overall strategy and goals.
- 5. Magalu has a team dedicated to innovation and improving proprietary technology.
- 6. All can be used to automate repetitive tasks and free up employees to focus on more strategic work.
- 7. Magalu has seen significant improvements in customer satisfaction and revenue growth since implementing Al.
- 8. Al can also be used to improve supply chain management and logistics.
- 9. Magalu has partnered with startups and other companies to leverage their Al expertise.
- 10. The use of AI is still in its early stages, and there is much potential for further innovation and growth.

### Salomão

We are starting another episode of Al 360, a Market Makers' special series on Artificial Intelligence. In this series, we will explore everything that is happening in this new frontier of technology and how it is being inserted in the corporate world and also in our financial market. Al 360 is not only made by us, but in every episode of the series, you will have the presence of one of the founding partners of Aster Capital, an equity manager that has a lot of experience in the technology sector and is a benchmark on the topic. So, they will help us conduct these conversations. In the first episode, which you already saw last week, we talked about introductory topics on Artificial Intelligence: what it is and how it works. And in this episode, we will talk about the application and practical use of Al in companies. And to talk about this, we will have here in the studios of Market Makers the Vice-President of Technology at Magalu, André Fatala. He has been at Magazine Luiza for 13 years, now Magalu, 23 years in this segment.

#### Salomão

He is one of the people responsible for LuizaLabs, which is perhaps the greatest symbol of the digital transformation that Magalu went through years ago.

## Salomão

And, to help me in this conversation, Rodrigo Nasser, one of the founders of Aster Capital, is here with me. He also has a lot of experience in the tech world and will help us conduct this conversation. Ready, Rodrigo?

## Nasser

Ready, Salomão. Thanks!

### Salomão

So, that's great! Thanks for being here helping me in this conversation. And, André Fatala, welcome to Market Makers. Are you ready for the conversation?

## Fatala

Ready. Thanks for the invitation.

### Salomão



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André, first, just to warm up the engines, tell us a little bit about your professional experience, so our listeners start getting used to your voice, before we start.

#### Fatala

Cool. Well, I am now 23 years working with technology. I started right at the beginning of E-commerce, back in 2000. I started working in a startup that worked with basically understanding behavioral data in the digital world to make campaigns that were targeted to advertisers and reached their goals. That was during the time I worked at Predicta, for 4 years. Then, in 2010, I started at Magalu as a technical leader in the E-commerce team, very focused on working with innovation on the digital front, but had a good bit of technological architecture work to allow that to happen at that time. So, first, we took a few steps back to prepare the house, enabling us to build these new products. And, there, the story of LuizaLabs began, which started with a research and development area and took the opposite path there, instead of being isolated working with the innovation front, it went to the core of the business and, there, as you mentioned, it worked very actively in the main wave of Magalu's digital transformation.

### Fatala

Everybody saw more results from 2016 and 2017, but that started around 2013 and 2014.

## Fatala

We started to reap the results a little bit later on.

### Salomão

I remember that time, because I, around 2016 and 2017, I think it was from 2017 to 2018, which is the first interview I did with you and I was at Infomoney at the time and we even made a call in Infomoney that was: The geek that conquered Faria Lima. Now, before Nasser asks the first question, the series is called AI 360, but do you guys inside Magalu use the term AI or do you use the Portuguese term "IA", the acronym "IA"? Or you don't use the acronym and already use Artificial Intelligence?

## Fatala

We, in general, so, for the company as a whole, we try to avoid a lot of English terms. So, we use more "IA", "inteligência artificial", "aprendizagem de maquina". And, it is a way for you to be more inclusive with the whole organization, without excluding people. There are a lot of people from the organization that work in physical stores and logistics and, as the company has to speak with everyone, we try to include everyone in this communication, so we avoid it. But, of course, in the technology team we use a lot of English terms. So we speak more Al, machine learning, so on, deep learning...

## Salomão

Well, Nasser is your turn.

### Nasser

Fatala, I think that this beginning that we talked about the importance of LuizaLabs and the whole process of digital transformation has a lot to do with understanding technology and working with architecture, but, there is a lot of change in the company, knowing how to work with a set of transformational technologies. I think from 2017 until 2022 or so, the market as a whole experienced a digital transformation process. Many publicly traded and privately held companies talked a lot about it, and now we are entering the next cycle of disruptive technology, which is Artificial Intelligence. So, we are right at the beginning. One of the ideas of this podcast is to explain to everyone about Artificial Intelligence and to start to provoke: what is happening in this beginning? From this beginning that we are living, I would like you to talk a little more about how companies deal with this adaptation to technological changes. And in this next cycle that we are going to live in, which will be a disruption, we will talk more about this here. But how do companies normally deal with this?



Where did you, at Magalu, learn and fail in the transformation process? How do you see this next change?

#### Fatala

Great. Well, I think we are going through another transformation. It is already starting, just like the Internet, which was a great revolution and, for those who were not born with a business focused on the Internet, on digital, they had to go through a transformation process. And, this transformation process, I think, it starts from the company's organization's understanding: "Okay, how is this new digital world going to impact the business?" And, once you have that understanding, I think you also look at what is already there and is part of the company's core and imagine that it is going to undergo a major transformation. In our case, it was Magazine, a traditional retailer, all on top of the physical store. Fred, back in 2000, starting an E-commerce, which took a long time to structure an operation that could scale. And, at some point it started to scale. So I think that this is where this questioning comes: "Man, is this going to be bigger than our core business today?"

## Fatala

And what kind of transformation will this generate for the business?

#### Fatala

I think this is the first inflection point that you go through. And, in Magalu, when I joined, it was already clear for the organization that the digital transformation was the future. And, we're going to make investments in order to make this transformation happen. So, a lot of the difficult conversations were already happening at that point in time. Then, another difficult conversation started, which I think goes back to your question about the technology itself. When I started in Magalu, they were a technology buyer, not a technology developer.

### Nasser

A contract administrator for technology companies.

## Fatala

Yes, exactly. Where there were other types of companies operating at that time. Several of them were going through digital transformation, towards the Internet. And, at that moment, when I joined, the conversations that I started having a lot with Fred were, "Gee, if we are going to do this kind of transformation, I think the main point of it, where everything is going to be based on technology, if we don't master it, it might be a lot harder to make it happen. And, looking back to that time, you didn't have as many players as you have today, you know, and technology providers with such advanced platforms to help you. So, when we looked at the global benchmarks, like Amazon, they were developing everything, because he couldn't find technology providers. He was in the process of disrupting retail, you know.

### Fatala

So, you had to master the technology. It was a part of the conversation we had about mastering and starting to develop in-house, especially for the E-commerce. And so it began. The Lab had a very strong role in being a lab, as well as a cultural change for the company. Magalu started developing technology in house and let's change a little bit the relationship of the business with technology

#### Fatala



Which is, let's stop taking orders here to fry pastries and try to understand what the business problems are, and then, internally, we can use technology to solve these problems.

#### Nasser

I think that people sometimes, Salomão, do not really understand the magnitude of this change, and this is something that, at least for us in the office, when we look at the company, we understand the relationship of that non-technical company with technology. So, you have a company that has decided: I do not use technology only for the services I provide and for the product I make. Technology is in the core of my business, in the way I create my product, in the way I create my service and in the way I serve my client. I will use technology for that. So, you incorporate a software engineering management and product development management capability into the technology product concept in a non-technical company. This is already a challenge in human resources, in finances, in purchasing, and in areas that we say "no, it will be fine," but it changes the way we do business. This is part of digital transformation, right?

### Fatala

Yes.

### Salomão

And, it depends a lot on the top of the company. Because that's what ends up overflowing to the other areas, right? I think HR is important, all this transformation is, but the example needs to come from the top, that ends up overflowing to the whole organization

## Nasser

If this is not aligned with the Board of Directors and the Finance Committee, with a separate budget to do this work, forget it, it is not going to happen. So, you have a management change in the company embracing technology.

## Salomão

Not to mention that when you are a publicly traded company, you are charged for short term results. Everybody invests for the long term, but they want results in the short term. When you are trying to implement something new, and when you don't know when you are going to get the results, you need to be able to convince the investors on your project. That's why communication has to be assertive.

### Fatala

Yes it is a challenge. Last week, well, for those who are listening, depending on it, they won't understand exactly, but just think, two weeks ago, I was at a cloud event in New York that was very interesting. There were big American companies that were participating in the event. And it was impressive to see that most of them, overwhelmingly, are in the process of convincing their top management to adopt the cloud. So, you say, "man, 2023, right? And you still don't use cloud". So, for those who, again, were not born as a digital native company, it is a challenge to undergo a digital transformation. Magalu was able to go through the digital transformation. Many times, you don't even understand the complexity of making a movement like this, right? But, talking to others who are still trying to pull this transformation or are in the middle of it, you see the amount of barriers, let's call them that, that exist.

## Fatala

And, then, I think that the role of the top, as Salomão said, who makes the decisions, right? When the top of the organization takes a top down decision, that we are going to go this way, knocks down a lot of obstacles.



#### Fatala

I think that in Magalu's case, this happened strongly, from Marcelo Silva, who was the CEO at the time, with Luisa, and then Fred, who was reinforcing that this was really the movement and accelerating the strategy. And then, today, more than 70% of the company's revenue comes from digital. Demonstrating that the digital transformation was done. Now, the next step is dealing with Artificial Intelligence, which will definitely be another transformation in the organization, I think in many organizations.

### Nasser

And then, Fatala, you commented on the digital transformation process of adding technology to the core of the business, LuizaLabs developing technology for the organization, and, how the relationship of the business with technology was changing. So, there was a change on the management model as well, from the organizational structure standpoint to how the Board of Directors communicates with the management team. Tell us a little bit about how this has changed at Magalu, before we got into AI, which will be the next, the next wave of transformation. How did this change at Magalu during the digital transformation process that you went through? And, how does the company deal with these discussions about disruption today? Because the wave that is starting now is AI, but soon there will be another wave, right? So, how was this competence solidified at Magalu, to deal with looking outside, looking at what is happening and seeing the next waves of transformation?

### Fatala

Cool. Well, I think that one of the key points for the transformation to happen was what we talked about a lot, about giving real decision autonomy to the teams. So, it seems like something very simple to say, but several management models end up tracing what everyone has to do along the lines of what should be done. And how it should be done, many times. So, the company, especially when Fred took over, went to the side of saying "What we expect as a result on several fronts are these here." Based on a more long-term strategy, something between three and five years, we define annually some indicators, all based on OKRs. Then we define the major goals and what are the key results we expect to achieve. And this is distributed in the organization and, with that, the employees have the possibility to have autonomy in deciding what needs to be done and how it needs to be done to achieve it. This accelerated a lot the evolution process of this transformation of the company, because, in fact, I think you engage people a lot more.

## Fatala

It was something we discussed a lot, there was a lack of motivation in the organization because there was no real intellectual challenge for the group. When we added challenges for the employees, it changed the environment completely.

## Fatala

And that, I think, is where most of the innovation comes from. In my case, we often talked about the Lab not being an innovation department, but rather Magalu's R&D. And innovation should be something that is part of the company's culture. Everyone can innovate... Or, should even innovate. So, when you go to this side of giving more freedom for employees on how to do it, that is when these different ideas come, right? And another important change that started to happen was to reduce this huge distance between 'My job is to generate product demand' and 'my job is to improve shipping delivery technology' to be able to introduce the role of product manager and end the mentality of 'I do projects' to.. "I build products". And, these employees that started in other organizations on the business side of the organization, started to work inside the technology structure.

#### Nasser

Cool!

## Fatala



For two reasons: one is to not be just another demand generator, and, what we joke later, also, is to be a guy that will be the inspector of the finished work, but, is on the side of the technology team working together in the development... In the development process.

### Fatala

So, I think that all of this contributed to the transformation of the way the company thinks. And, this was what made it possible for us to use a lot more technology as a tool to reach the company's goals. So, it opened more space to talk about technology, where to implement technologies and generate results, and to experiment and have experimentation on top of that. So it is a little bit of what I think has been prepared as a terrain so that when new technologies emerge we can consider that 'wow, now we have new tools to basically solve the problems we have here' or also build new businesses for the company on top of these new technologies, there is also this kind of discussion, especially with Artificial Intelligence, it goes a lot on both sides. On one side is very cool everything that is happening... I can be much more efficient in my day to day life, but I can also create new businesses for the future.

### Salomão

Let me make two considerations that I wanted to hear from Fatala about this. The first one, just to see if it was clear, the adjustments that were made to be able to go through all this digital transformation it went through, can it be totally replicated for this new wave of transformation? It is almost as if the company doesn't need to change, because it is already adjusted to an innovative culture of seeking to take advantage of these new waves? I wanted to hear your opinion about this, but also about this whole transformation. To what degree were the company and the employees important in this digital transformation? It keeps me thinking, why can't we replicate this success in other companies? It seems difficult to replicate this digital transformation in other companies. Not everybody can innovate, be disruptive, and revolutionary. So how much does it depend on people? How much does it depend of having the right people at the right place at the right time too? I wanted to hear a little bit about those two points.

#### Fatala

Cool. Man, I consider it a lot that it is first culture. It's kind of a cliché, but, from the colleagues that I have, I see the level of discussion of extremely competent and intelligent people with several barriers to work and execute and try new things. So, you see that the problem is not the people or the talents that exist there, but there is something in the company's culture that does not allow you, for example, something more open to autonomy in decision making that does not belong to a specific group, which has to give all the direction. And, it is much more difficult to centralize in this way, right? Because unless that small group is studying everything, understanding everything, and then directing the use of several new technologies or work methods. Nothing will happen. Because a culture has been built that is like this, "man, I am here waiting for the demand to come and how I should execute to deliver. So, you have this part of really having a much more open culture".

## **Fatala**

I think it starts from there. Magalu has always been, you listen to it, it's very funny, you listen to Luiza Helena talking in videos from 1990, when she disappeared, and, she said things like "tear down the CPD walls", which was the technology people there at the time.

## Nasser

Data Processing Center.

## Fatala

To get closer to those who were in the business side, because there was no point in them being close minded there and not understanding what the business problems were. So, it's pretty crazy, right? You see, it was already part of the company's culture. It



is a very open culture to share everything that is happening, even though it is extremely risky nowadays, right? A lot of information leaking out and everything else. As you said, it is a publicly traded company, but there is a lot of trust that without this nobody will make the right decision. Without this transparency, you will be in the dark that will again direct you to come back to everything extremely chewed up so that you can collaborate. So, the company is very transparent, to say 'here it is, this is the strategy, these are the problems, this is what we are looking for, looking at the market, this is the way we are going'. I think it helps a lot, this part of the culture.

## **Fatala**

And, of course, you have to have the right talents to work in this model here. Because if you employ a person with a profile that does not make decisions out of fear, you know? Who are afraid of making mistakes, who do not take risks and everything else, and put them in leadership positions, it will not work.

### Fatala

So, then, this culture shapes exactly the type of profile of the people you are going to have in there. I, particularly, think that there is no right or wrong. Each one builds its own model, and this goes a long way towards what you believe in there, in terms of managing the business as a whole. We know the story of several places that are extremely centralized and the company is very competent in managing that model. But there are people a little out of the curve that are making decisions all the time and being very assertive in what has to be done. I think there is no right or wrong, but there is a point where you can change the culture and people due, in factor work better

### Salomão

The fact that there is no right and wrong, I agree, but it depends a lot on the person.

### **Fatala**

Culture is the most important

### Nasser

Perpetuity will depend on this person and not on the company

### Salomão

In the financial market we call it the One Man Show.

### Nasser

One Man Show.

## Salomão

It depends a lot on that genius manager who is going to make the decision. Fuck, when he's not there, what's it going to be like?

### Fatala

That is the risk.

## Salomão

If he goes on vacation, what do I do?



#### Fatala

That's the risk

#### Nasser

And then, Fatala, we talked about management's model, talked about people and how this management model can analyze what is happening outside, noticing disruptive technologies and applying, testing this in-house, right. So, now getting into Artificial Intelligence, in fact, I would like you to comment on two things. We talked in the previous episode a lot, in a summarized way, that Artificial Intelligence is a prediction. So, it is a better, faster, more automated way to predict things. Every challenge, you ask the machine to predict and it gives you an answer about it. How did the digital transformation change, what you went through: architecture review, data, within the company, help to start working with Artificial Intelligence? And, this ability to work with technology in-house, how was it a differential in those first initiatives, or, first works with Artificial Intelligence in Magalu?

### Fatala

Cool. Well, I think there are two challenges there, right? One addresses this part of what are the possible obstacles to this transformation of the part of implementing Artificial Intelligence within the organization, which I think is very much based on people and behavior, because you start to get to the point of saying "what you do today, I can train the machine to do it. Even, in scale, it will do it much better than you. It's a powerful message to take to the supply guys, "Hey, you guys are doing a lot of algorithm creation and a lot of statistics to try to predict what we should put in the stores.

### Nasser

Store inventory placement.

## Fatala

Store inventory placement and so on. Or even in the DCs, so you can do it better and faster, right? So

### Salomão

There's even a meme that sums it up, right? Which is the guy with the happy face like this, "Wow, Al can do my job." Then, underneath, he's like, "Wow, Al."

### Fatala

I think this is the first barrier. That goes into the point of showing that one is not a magical thing, you know. At the end of the day it is mathematics underneath. There are a lot of things that these teams already work with statistics. But, again, you can do this at scale. You can improve a lot the training part of the models. So, you can get a lot of efficiency. And, this kind of challenge is very much along the lines of, I think, working together with this group. This group needs to deal with the whole process of making the change from "how do I do this today" to "how the machine can do it". And from there on... Demonstrate that, gee, all your time that used to be spent on manual work, now comes down to becoming more strategic and being able to keep constantly evolving. The models that exist will become even more efficient.

#### Fatala

The role changes a little. So, we have been working on some challenges in order to be able to implement some things. And it is a real challenge, like, man...

## Fatala



People are a little bit afraid of you going there and saying, "It's going to be done now by a machine. What did we really start to implement? It started in the supply and logistics departments the first works with machine learning. So, because you have some types of more classic problems, which are not so new. And for retail, when it comes to scale, any level you can bring of optimization, the return is great. And for those who have such tight margins, any kind of efficiency, optimization, generates great results. So we started to implement new technologies in routing for deliveries to become more efficient and in time. For example "how can I deliver 50 packages using only one car in eight hours? What is the best route?"

### Nasser

In other words, predict the best route

#### Fatala

It predicts for me the best route based on all the historical information. So, with this we can make it so that, in a simple way, we delay as few orders as possible.

### Nasser

Perfect.

### Fatala

So to maintain a high service level. It was implemented for that. Another classic challenge is the replenishment of stores. So, "how do you manage, based on this X number of SKUs that we buy, to allocate the SKUs in the best DCs, that will eventually be sold on the e-commerce and physical stores. Ship from store has been a challenge, because the good is invoiced in the physical store, but the good must be delivered at the client's home, sometimes the same day or the next day, as we have been doing. So this implementation is important, because if you don't manage to do this part of the supply correctly, the product might have rupture and you won't be able to deliver. You also lose a lot of sales and you can't meet the consumer's expectations. And there is challenge of being able to deliver with the lowest cost. One of the largest costs is shipping, which is delivery in general.

### Fatala

So, optimizing as much as possible is another relevant step in gaining efficiency. Now starting to work on logistics, including the construction of the logistics network. So, we already had a network built. But the consumer demand is changing so much that it needs to gain more flexibility. So, the logistics network comes in. On top of this, we need to offer a delivery time frame for customers. Again, a prediction, because you are going to analyze a certain route with a certain service level of over 95%, 98%, whatever it is, whatever you define, I can promise a deadline, with some degree of confidence that I will deliver in the promised time. And you have a lot of input to check if you are really managing to deliver within that timeframe. Keeping delivery at this level of service, you can start to lower this deadline because it is so high and I am delivering faster than what I am promising, and so on.

## Fatala

So there in logistics is a place where you can...

### Fatala

Ah, another cool point that we have been working on is to work on the logistics delivery for sellers, in the marketplace, we have hundreds of hubs spread throughout the country. And you have, sometimes, peaks in sales due to campaigns that are happening, or some product that was very successful.... And then, if I can't predict the volume that will be allocated to the logistics hub, then they won't be able to cope with this peak in volume. So, if you can't demonstrate to the logistics guys that there is going to be an overflow of volume in a certain region, there is a chance that it will be delayed and it will be very high. So, you have to analyze, make a prediction like, "Look, based on what we're seeing, the demand for a certain item, etc., this can happen here and start



delivering." It was one of the things that I found very interesting, including, opening a parenthesis here, from a visit we made to Amazon's Fulfillment Center in the United States.

#### Fatala

We imagine that the fulfillment center is run by robots, but it is divided between robots and

### Fatala

There is still some automation there on the conveyor belts, but there are still people doing the picking of goods and so on. And those who have people, they work on getting all the behavior of the users in the sales channels, up to the time they start the checkout process such as cart abandonment, which products are trendy and etc. And they try to predict in up to two weeks what is going to happen inside the fulfillment center. Cool. And basically, because they even move storage areas, for some items that are being consumed a lot. They change the layout to gain more efficiency. It is very easy to do the picking after the change in layout. And the other prediction is to help allocate personnel on each shift, based on the demand of the season. All predicts in plenty of time what is going to happen there.

### Nasser

So, you take the concept of Al that you have an input, you put that input of data into a prediction in a prediction machine that spits out an output. You took a logistics problem that in retail is very relevant, where you now sell in multi channel, so you have the multi channel and omni-channel retail challenge along with the logistics challenge. In addition, the 3P, the seller part, together in this whole ecosystem. And you are using artificial intelligence to predict the best routes, the best inventory, where to allocate that product. Because you start to gain scalability from the customization of each situation that you experience in the company. Something that only humans doing in a size X would be impossible to do, you know.

### Fatala

Exactly. And another application was on the sales channel. We started to use a lot of Machine Learning, Brand Learning, to define in the search which would be the best offers that we have and rank them where they have more relevance, which is at the top. So we use the concept of "Learn to Rank", which is what it does, it takes a lot of information from the clients' navigation, from how they are interacting in the search box, but also what is happening from there to the transactional part. So, on top of that, the machine starts to learn which are the offers that really lead to higher conversion and the ranking that happens from the search is based on. And what is cool about this? Because before, with more locked algorithms, this result is fixed. And now, what happens is that it depends a lot on what is happening, on the behavior of these users in the channel, it starts to change a lot.

### Nasser

In other words, the search result index can change during the day, given the user's behavior on the site.

## **Fatala**

And now we are going to another way that is even based on the region he is accessing.

### Nasser

Yeah, that's what I was going to get into. First, you said something very important, and in a very crude way. We sometimes divide technology into technology used for efficiency, to decrease cost, expenses, and technology for revenue, for revenue generation. And Fatala is giving examples of both. He has already given the logistics part here very clearly, margin control, etc., gains of scale that you can have, and he has now given an example of revenue, of technology applied to revenue. But we didn't do that back then, we already used statistics in retail, we already used in-store window recommendations based on navigation. What is different today, Fatala, from what you are seeing, for us to get into a discussion of GPT, of generative AI? What do you think is different from



what we did in database marketing in the 90's, with clustering, what we did with those tools boom in 2010, 2008, where you worked on pricing and product recommendation back then? What changed from thato to what are you doing today, what are you seeing today in terms of AI?

### Fatala

Well, honestly, not that much has changed. I think what happened is that, as with all kinds of technology, there comes a time when it sort of reaches democratization. Then everyone starts to look at it and it becomes much simpler to use as well. I think that before you needed to have all this knowledge to be done practically in house, and now you have several platforms that even give you APIs for integration ready and that give you the output already. So this has changed a lot. I think it is easier for you to use artificial intelligence methods and apply them to your business at the end of the day. Now, what is happening, at this moment, with the Generative AI, right?

#### Nasser

Or "generative artificial intelligence".

### Fatala

Yeah, generative artificial intelligence, which gives rise to something, which I think enters a moment where artificial intelligence definitely creates something. So, here you start to enter a new world, which is different from anything that you could do before. Even this new line of AI, this type of AI, I think will allow something we were talking about before, which will be much more advanced, that is, to stop treating things based on patterns, what happened, the way of classifying, to say, "No, man, Nasser is an individual, right? And he has all his own characteristics there, and I'm going to deliver something extremely personalized. I think this is a great watershed. Because until now, everything that has been done, was very much based on "I kind of let myself find patterns, and based on these patterns..."

## Nasser

Classify you into a standard, right? And that even for all these other techniques, even recommendation, right? Even recommendation, until yesterday it was very much based on a collaborative filter. So, what the masses do, that has a certain standard, they deliver to everybody. And now we are going to another level. And this part of creation, right? Creating content. So, there are things we are already doing, of experimentation, there are things in production. So, to optimize our channels for search engines, the famous SEO there. Before, the multimedia people created content. Today, we are already using Gen AI to create content.

### Nasser

That is, folks were creating content in that format, following Google's templates, to improve SEO. But there was a human understanding the model, writing for SEO and doing it. Now you can have a machine that generates the text for the product page, for the recommendation page.

### Nasser

It fills in all the tags. Don't forget any tag: H1, H2, H3.

## Fatala

Exactly. There is that. Another implementation that we are doing is in front of the catalog, right? For the catalog we can look at an image, identify what it is, build labels and, based on those labels, it helps classify the categories where we are going to put the products. Before we had people looking at this business, saying "Ah, this is dog food, so where am I going to classify this business?"



That in a marketplace with sellers is even more difficult, because you work with a gigantic product catalog.

### Fatala

Yeah, people, for example, in our case, right? That is why it is nice what I said before about you being able to make this transformation in the company's culture and having this ability to use technology to help the company face its challenges. Because, man, before, we had 30, 50 thousand products. That's what Magalu sold. From 2017 to now, there are 90 million. So, how do you create content for all of that? How do you classify it, keep it up to date? You can't do it with human beings anymore, right? So, that's where several of these parts of implementing artificial intelligence and helping to be more efficient started to come in. As you said, there are a lot of things directed to optimization and efficiency, others to revenue generation, like now we work with conversion increase and everything else, using it. There is a lot going on in the field that helps on a daily basis, but I imagine that with this new transformation, we are going to get into a point, man, that you will even have an Al guiding you on what you need to do

### Fatala

Like, it is the machine that is definitely guiding you, as you said, everything at the end of the story is a prediction.

### Fatala

But it will bring this power to generate, the content to generate things, it will bring in a new line of thought of what you should do and it didn't cross your mind. I think this is where things start to change a lot, because you will direct the business strategy, the business in general, based on a machine and not a human being. It is the machine.

### Salomão

It is almost like the machine making the prediction of the prediction?

## **Fatala**

It is almost the machine doing the prediction of the prediction. So, and it's interesting, because when you look, it's cool to look at YouTube, right? Regarding what people are doing. And you see a lot of cases popping up of guys building businesses based on this machine prediction of what is a business that would make sense now. And the guys putting it into production. Even with it generating code on their website, on their app. So that is the crazy part. I saw a case that was very cool that he took... It is an app that recommends only five movies for you to watch. So that's it. There are five movies. That's the recommendation it makes. And then it takes a lot of data, information from... Which is public, from several sites per review, for a lot of things. It takes a little bit of your profile, of who you are, the things you like. And you say, "Dude, here are the movies you should see".

### **Fatala**

So it's like those wine signatures there, that you know, a bunch of wine that you didn't even know about. He's doing this and you watch it and you're like, "Amazing, like, how did he do that ..."

### **Fatala**

I heard about today Netflix, when you look at the thumbnails of the recommendations it makes, of the episodes, of the movies, series and everything else, they're different for each one of us. It generates that based on your characteristics, on what you watch, and generates more stickiness there. And that's the way it builds the thumbnail.

## Nasser

Including the cut scenes



#### Fatala

Including the cut scenes that appears there

#### Nasser

It is not exactly the first 30 seconds. It could be in the middle of the movie.

### Fatala

In the middle of the movie. Then it starts... again. Imagining that you are going to originate content from image, audio, video and everything else, I think opens up a... It opens up another world of possibilities.

### Nasser

And what you said, this insight you had, Salomão, is true, because the machine starts to predict the prediction. Why? Its output, especially in natural language, is a sentence, is a text, which are predictions of sequences of words. So it gets so good at doing this that it tells you what is the next prediction to make. So we get to a level that What is the impact of this on the business? This hyperpersonalization. So, we are leaving a model where, due to technology limitations, due to mathematical limitations, we were obliged to cluster people or products or whatever in groups, in standard behaviors. So, credit, for example, I had to fit Solomon in a group that I had studied of how much credit, what was the credit risk I could give. This technology allows me to predict and give a specific level, in the comma of a penny of credit to Salomão, by his historical data points, by his view, not him in relation to a pattern. This kind of change, it makes the margin of error decrease so much and the efficiency increase so much, that before it was impossible to achieve this for mathematical and technological reasons.

### Nasser

What is the impact of this on the business? That's what André is talking about. Well, we start to have a hyper-personalization and a hyper-scale. And this scale in business that we always have to pay attention to, is based on an asset, a technology, that the cost for each extra one you add is almost zero. So this scale, it is real in relation to the margin. And this change here is very crazy, right, Fatala?

### Fatala

It's been a very, very interesting moment to live. I am even thinking about it when I was coming here, like this. Because it will open many possibilities. And I think that we are not even seeing clearly yet, it is still very cloudy.

### Nasser

Yes, of course.

## Fatala

The feeling of "What's is on our front?"

#### Nasser

What we have already understood today, right, that there is prediction, a artificial intelligence. When we talk about machine learning, we are talking about a hyper-personalization of this output. So I have an input, I have a task that I give, a task that I give there to solve, it predicts an output. But now this output is more and more personalized. Now, what can you do with this? Wow, both in efficiency and revenue in companies. But one thing you said that caught my attention is, do you think that for a company to use all of this, it needs to have 100% in-house development? Because you said that more and more artificial intelligence solutions are



appearing almost ready-made. Do you think that those companies that did not do their homework to have in-house development, are they going to be able to make use of it? And the second is, gee, we have already gone through very large investments in technology in the last four, five years, and some legacy of this investment should be used for AI, should help the artificial intelligence process.

### Nasser

You mentioned data and the use of that data.

#### Nasser

Tell us a little bit about these two themes?

### Fatala

Cool. Well, taking the second one, I think it all starts with you having the data. Having generated it and having this data stored in a way that you can easily use. I remember when we started the transformation part there at Magalu, and the business was moving very much towards the business of becoming a technology platform, we always said, "Man, the greatest value of this whole business is in this data." So, I don't know what we're going to use it for, but we need to store it.

### Nasser

Store it

### Fatala

Yes, let's store it. And we also saw the cost of storage reducing, as the cloud market matured

## Nasser

It just falls.

## Fatala

So it was cheap.

## Nasser

The dollar per terabyte declines over time.

### Fatala

Over time. And we see with the cloud part, the cloud adoption, the evolution, that business is going to decline a lot more. The only thing that rises is GPU. IT'S GPU. Simple to understand. So, we started doing that. The first thing was to store. The second step was that we had a strategy that was "how we do we allow, in a simple way that all departments could access this data, could do analysis on top of it in an easy way. So we got out of that business of visualizing data, of building reports. That is not what the areas need to do, they need to manipulate. So, we set up, after the famous Data Lake structure, we launched a data platform to allow everyone to access date and manipulate the database

## Nasser

Simple, with security and with governance. And all that.



#### Fatala

Governance and everything else. So, that was the second step. So, based on the fact that I am storing everything, it becomes easier to access, consult, manipulate, and do an analysis, so that this data becomes information and someone can take some action

#### Nasser

Perfect. Someone or some system.

### Fatala

Or in the future too, like, some artificial intelligence could take advantage of this. So, that's what we did. This was our journey from the part of transformation in data. This helped the company a lot in digital transformation, to become more data-driven, even in decisions. Before, many things were based on feeling than on the amount of data we could look at and make decisions. Today, it is very different. You go into meetings where we have to make a kind of decision, there are always numbers showing what we expect the impact to be and where it is going to go. So, this helped a lot. And I think that without this structure, you cannot even use it for the systems, for a lot of cases that we were talking about before. How can I get the best offer if I don't know historically what the prices were? How do I know that now the price is good, for example? And this advanced, including how I identify that this is not only good within my platform, but looking at the market.

### Fatala

And then you start to take data from outside and bring it in-house.

#### Fatala

So that was step one. I think if that's not done, you kind of have no way to move forward. It's hard. Yeah, going into the, the 'nerdiness' part of the Generative AI thing as well, things fail because you don't have either the right model or enough data

## Nasser

Or right data input

### **Fatala**

The right data input. And then it starts to get really bad. Although there are already other projects attacking this challenge as well.

## Nasser

Generating synthetic data on top of the unfinished data you have.

## **Fatala**

On top of the unfinished data and so on. What I am talking about is very crazy. From here on out. But going back, this is the main thing and it has to be in your domain. Now, talking about the technologies that you can use for the artificial intelligence part, there are a lot of things emerging from open source

## Nasser

Yeah

### Fatala



And that is, man, advancing very fast and reaching Open Al level. I particularly believe that this business, as well as many others, who will won in the end, will be the open source solutions

#### Nasser

I believe that too.

### **Fatala**

I believe that. I think that it is difficult for player A, B or C having the complete solution, because it already generates a huge lock-in. You can only work with that one supplier. And it is not so easy afterwards to migrate to the other. It's the same story with the cloud, and it all starts that way.

### Nasser

ERP System. All that we have experienced

#### Fatala

Browser, which we already have only two options. And then a guy came along saying that his core was open source with Chrome. And then a bunch of things started to come out and I believe that it will be the same in the future. I think open source will win again. But going back, today, for companies that do not have this part of the technology domain, I think it just comes down to overcoming the barrier of culture and people, because it is much easier, as long as you have the data, right, to use a tool from the market

#### Nasser

In other words, this company that does not have this culture, it can even use IA. It will have an efficiency gain, a gain of perhaps even revenue generation based on a third party solution, but it is perhaps limited to how much it could use this, how much gain it could use this.

### Fatala

Because if you get to a company and you say "Man, do you have historical data from your business for the last five years?" "Oh, no." "Our retention is only for 12 months." You're going to get X result that won't compare if you had that amount of data to work with.

### Salomão

Let me ask you a question on the subject of bringing innovations to improve revenue, customer usability, new technologies, and others. In the financial market, we don't have a very restrict routine, but everything revolves around finding the best investment opportunities. So, whether you are traveling, following a conference call, you have that goal. Fatala, how is your routine? Do you have a team for innovation? A team for improvements in proprietary technology? How is your schedule? Because I keep seeing so many new things being implemented, but at the same time there is a huge company running so that there are no problems with user experience and everything else, even with suppliers. How is your routine divided up in all of this?

## Fatala

Yes, there is a point that I learned that is discipline, because at the end of the day, if we have defined a strategy, we have already defined very well what are the results that we are expecting and, you focus on taking all this that you are learning and reading and manage to connect, to bring better results, that is the part of having discipline, because it is a world that you start to travel in a bunch of possibilities that you have. But also, as I said about the point of having in the culture of innovating, you have to have an openness to say, "Gee, but this can bring something new. And, then, it depends on the moment to explore and see if it makes sense



to invest time and money in it or not. I'll give you an example. When all this Native AI stuff came out, we stopped and said, "Let's study a little deeper, let's set up a squad that will have the mission of trying to implement challenges that we have internally.

#### Fatala

And from that we are going to try to learn something and take it to various areas and pains that we have to try to solve some kinds of problems."

#### Fatala

And in this dedicated squad, we also said, "Well, we can do some new things. Let's also experiment." So it got into a point of what do I solve that's basic, how do you build the content generator for SEO, is one of them, just as came the journey of like, "No, wait a minute. Can the moon now have a brain, then?" So we went to two lines like this, one is, let's solve trivial everyday things and the other is, like, "Hey, there's something very new here that we can fit in and it can become a new business", which, one of the things we are exploring is, today Lu ends up being an assistant that is inside the social networks, that provides customer service on the digital channels, but at the end of the day we have little automation, right, and many people working for this to work, even by the point that Nasser mentioned, so that it is not so robotic and to really have a certain level of personalization.

## Fatala

And man, unfortunately, today, with what you had until then, what you had of tools, you couldn't do a business as personalized as chat. You used to use solutions there that are based on a dialog flow, where you identify intentions and give back a text that is standard, that is a script.

### Fatala

You can see, all the places that are automated, you see things like this. Then we started to get, "No, wait, now I can generate content?" So it doesn't have to be these scripts, it can be something very targeted than like Lu and all their quirks, plus the person, she puts it in. Why? An example, silly, but Lu has a more stripped down way about her and so on. There are clients, when you, unfortunately, fail to deliver what you have offered of value to them, man, the guy is 'pissed'. Then, you make a little joke in the way you talk, you completely worsen the situation. So, imagine that there is a possibility that we have this understanding of the criticality of the incident, let's call it that

## Nasser

Of the feeling that is being used

## Fatala

The feeling all right, there's feeling analysis and everything else, which we already know that... But again, building these scripts for all these variations is very difficult. Not now, man. You can see it and say, "Hey, Lu is now a bank manager, formal treatment, because it's serious what's happening here. Which is what we do, depending on the situation.

## Fatala

The way some do. But some understand that and say "Oh, you have to act this way". That is a little of what we do… And the other is that it is able to solve a problem in a part that it has not yet worked on, which is… Now she can even do this personalization of which product, for a certain occasion, or the problem really fits the person in scale. Tomorrow, I am going to the birthday party of my friend, of my son who likes such and such a thing, and I have no idea what to buy. And then all the suggestions come in, including being able to do the whole purchase flow. So, things like this…



That it has nothing to do with your purchase history.

### Nasser

That used to be the model we used.

### Fatala

That we used. You would get there and ask for a recommendation again, you would go back to your historical patterns. What you have done or who is like you. What you have been doing. And then it changes to be extremely personalized to you, to your need for that moment and so on. So, it has for us, kind of in those two lines. Taking everything that is happening, there is, one, how I address problems that are already here and we can solve with these new technologies. And, the other, is to think about what the new possibilities are. And how I put effort and energy. Generally what we have always done is the same way the Lab was born. A small team, we have this subject here to explore. Let's do a little proof of concept, try to explore. Because something will come out of this that we'll say "Um, here's something"

### Salomão

So I imagine that your team, you can't have too many daily tasks. You have to have some of this, I don't even say flexibility, that you have to work a lot with everybody in technology, but you have to have this research and development time, like this, almost all the time. Or do you also have to balance the little things?

#### Fatala

No, it does. And, everything depends on moments, Salomão. I believe that, even now that we are living in a time when we are more and more focused on getting results, it is the efficiency that commands us now and not the growth, as it was before. Because when you are in this agenda of growing, it is very easy to say "Let me find other ways that bring new lines of revenue and everything else. So, this also shapes the behavior of the organization of where to implement. So, of course, since 2021 we are much more focused on making the business give the maximum possible result, you know, and you don't have so much time to get exposed to new things. And it requires investment, as I said. But, if you have the capacity to have a small, dedicated team, still doing this work that we did in data and also exists within the structure, for example, in the Lab, a team that works with consumer experience and R&D

### Fatala

It is the team that provokes innovation in the organization. The decision point is where we are going to put energy. It goes on, it goes on. It is there, it is coming. It will put energy or not to be done. Today, we don't put in as much energy as we used to, but it is there.

### **Fatala**

Otherwise you stop too, stick your head in the ostrich hole, and don't look at anything anymore. And, man, somebody else, your competitor out there, is doing it. So you can't lose by any means. Even to have the discussion of whether it is the moment or not, but I am aware that there is this possibility.

## Nasser

Another question I was going to ask, but I think you've answered it. The management model that you have chosen at Magalu, it allows you, just like a Portfolio Manager, to choose how much you are going to direct resources to something more focused on efficiency, or more on growth, given the market, company and planning moment that Magalu, in this case, is going through. And we, in the budgeting process that every company goes through, when we looked to 2023, I think that this was the focus, right? To continue efficiency, to continue seeking results, and this has an impact on the use of technology, as Solomon is talking about, in the



exploration of new technologies. You explained a little bit about what it is like at Magalu, but how did this decision affect what you were already doing? So, I think you commented a little bit on that, but considering all this stuff that is appearing that we can work on, what is the recommendation that you have or that you see in the companies in the best way not to lose the moment to test this, not to lose the moment to, even if it is a POC, you know.

### Nasser

A Proof of Concept. How do you see this situation of less investment now and a vision of results in a moment of discovery of the beginning of a disruptive wave of technology?

#### Fatala

Cool. Yeah, I believe very much in this part of the organization that there is still a piece of the organization that is going to be working more focused on this front of what may come up ahead. Like it is still a dedication to R&D. We will take certain subjects, we will try to explore, there will appear something that fits

### Nasser

Perfect.

#### Fatala

I think that if you don't have this and you don't have a group that provokes this, as Salomão said, then everyone will focus on the day to day and it will be very difficult for these things to appear. It will even appear, but the poor person who is 'drowned' in the day to day will not be able to take it forward. Then it's just one frustration after another. So, I think it is important to have. And they are small teams, not to mention for big companies, sometimes it seems like a very big deal Man, the Lab started with two people. And the Lab's size in R&D went to eight. That was it. For a Magalu revenue, it's not something that... So I think it's very important to have a group that is just thinking about it. And it is provoking the rest of the organization about "Look, you could..." We did some proof of concept, here the results of it, but this could be implemented in other places.

### Fatala

I once saw the guy there who is the head of Google Ads showing about a lot of things about how it was born, from their research, and in the end where it was applied. And it changes a lot! It is very difficult to be exactly the way you imagined and built the concept itself and for the product to be that, really. So, I think this is very worthwhile, it is really a very well done investment by the companies in these teams. And again, it's open to provocation from there. Also, just leaving the isolated team there and no one following up and seeing how to connect this inside the business, then, it won't do you any good unless you generate PR that you have in the R&D department. So this is the point that I see as something that is, let's say, could be replicated, that can be done in all companies. And, then comes the decision, which I think this decision point has to be made at the top level, let's say, to really have that investment and take it forward.

## Fatala

Because if it becomes just a "pirate project", another priority will arrive and, this one, will fall. Now, in our case, several of these initiatives that were born within structures like this ended up becoming a goal of the organization.

## Fatala

Like, then you have to make it happen. Do you get it? It's there on your dashboard and you have to deliver it from here.

## Nasser



Exactly. It's there in your incentive group that you have.

## Fatala

There are monthly meetings where you have to show progress, and quarterly meetings where you have to show the results so far. So, there is a mechanism that pulls, saying "Look, this is one of the priorities here. And it is open for everyone to see within the organization. If not, it's just a dedicated business, a "little pirate project", even for you to put it on the air and see it happen, you don't have any help at all, you know. So, I think these two points are important for

### Nasser

Cool.

### Salomão

Hey Nasser, can I ask you a question?

### Nasser

Of course.

## Salomão

Also because of your background in this world of technology, do you think that the financial market can already discern all this, all this part, both the information and the practical application? I am not even talking about AI, because it is still a very new thing, but this kind of development that makes sense to the company's long term, but will not necessarily give results in the short term. You have lived well, you are now more in the financial market world, but you have lived well on technology. How do you see your peers that don't have your background following this?

## Nasser

I even looked at Marcello who is hiding in the background there.

### Salomão

Marcello, Aster's partner at the back here.

### Nasser

I think it is an interesting provocation because we have been entering the financial market and working in the financial market for a while now, you realize that the way of doing the core of the financial market, I think it hasn't caught on yet. It is not in scale. I think there are very interesting ad hoc things that are done. I think there is a search for people with knowledge in programming, in technology, but to do it the way it was done before and automated, you know. Changing the way research is done, changing the way a company is evaluated, changing the way an investment is considered because of technology or having found an insight, because of technology, to do something different in these processes, I think we are still a little bit far away. I see some houses where I talk that have understood this and we exchange ideas about how to do this. At Aster, we are evolving the research process based on technology. In line with what Fatala said, "from day zero we started collecting data. So, we had to find some kind of data related to the investments we made".

### Nasser

But not because the data would come and say "ah, because this number went from 10 to 15, let's sell this stock".



No. The data point leads to a conversation about the business. The data leads to a series of questions, that the investment analysts takes to the companies. What was very interesting is that the feedback from the companies was always positive in relation to "how did you come to this conclusion, why did this question come up? We said, "we did this study, this data generated this." So, this exchange with the company was based on data, and came based on technology and changed a little bit the research process on our side, but I don't see this in scale in our market yet.

#### Salomão

I think Fatala might be feeling a little bit of the same as the market, the change in interest rates also ends up taking a short term result for everyone here. So, I think that maybe in a little while the interest rate will fall again and we will have more time to look for these implements. Well, for my part, I don't know if you have any questions to finish

## Nasser

No, I just wanted one last question

### Salomão

I don't even know if you have any more questions

### Nasser

No, no, I just have one more question to get away from Magalu and all that you are living. When we talk about Magalu, there are a lot of very clear opportunities, because you work with the final consumer. So, you think about AI, especially generative artificial intelligence, you think about consumers. And the sectors or the initial areas that you are using AI are those of consumer relationship, as you commented, or efficiency in logistics. Thinking outside of retail, thinking about other sectors, is there one that comes to your mind where you say "Wow, all this stuff we are studying there at Magalu, I think that in this sector, in this kind of company, maybe it has a transformational effect and I haven't seen or seen anyone talking about it?

### **Fatala**

Good question.

### Nasser

Out of retail and out of Magalu.

## Fatala

I found some things cool, and, I'm talking about the financial market, application to the financial market

#### Salomão

Man, I wanted to ask that

### Fatala

There was a guy that I saw that built a model that looks at all the results of the companies, plus the part correlated to the economic, macroeconomic part, and he predicts what is going to happen in the future, based on that performance and the scenario. And then, this prediction that he made. He did a backtest to see what it would look like. Some companies, like, nailed it. Because, like this, "look, the result looks super good, but what is going to happen is that the stock price is going to decline, because



this stock is cyclical and always happens, and then it starts to survive like this. So, it is a kind of application, because I, honestly, as a mega investor..., there is a part that I think is totally esoteric, you know? No matter how much you study the company and understand the fundamentals and everything, you go there and something happens completely the opposite. It is very difficult for you to really be very good at getting it right.

## Fatala

I think that with a little bit more use of the AI in financial markets, it can work, it can be something that has a positive impact. There are people who make investments based on the bottom line, it's a lot of statistics, right?

#### Fatala

He looks at the charts and says, "Ah, here we have already reached the maximum point of growth, here it will only fall, or here it is already". It is an initial path, but we are talking about predictions and having these predictions in a way that is very based on analyzing data, much broader than just the results of the company itself, I think it can be a very interesting business of you being able to get a little bit closer to being right, what is going to happen. Because in the end you even read analysts' reports and everything else, but what they can see, what the human is seeing there, and based on the end, I learned during the time I've been talking here, everyone is analyzing you and getting... It is as if you were a data point for him to play within his model, which he already has, based on the understanding of what he has read, right? And then the possibilities goes all over the place. I think that here you can end up having an output from that company and everything else that is maybe much better than what people are doing there in terms of analysis and perception and putting it inside the model to see where it goes.

### Fatala

I think this is going to be very interesting. There is another thing that I think is really cool, but it's personal, I am really lazy about planning trips, like planning everything

## Nasser

Day by day, hour by hour, what.

## Fatala

Going to do. What are you going to do, where are you going to go, etc. Because I am one of those people that, like, I wake up in a certain mood and then you will see that I think it can have a gigantic transformation in this part of tourism, of traveling, because you can say "ah, I'm in such and such place and today I'm in this mood here, I don't know what I can really do and you can have an itinerary there that will surprise you absurdly. What I expect a lot from Gen AI is things like this, we as human beings build patterns of the way we live at the end of the day. And we get older and we get worse. You restrict a lot of what you have to do. And this part of discovery So, a silly analogy is... "Geez, man, I only like macadamia nut ice cream." And what I expect is that this kind of technology is going to help you discover by guiding you, for example, it is going to say:... "Man, try pistachio, that will change your life.

### Fatala

"And do this now that I'm talking about and you have an experience that you say "Man, how come I didn't.... How did I stay locked in this little box here?" Because it's something that for us, I think for the brain, it gets lazier and lazier, right?

#### Fatala

In fact, we as human beings try to absurdly maximize all tasks so we don't have to work so hard, I think it's instinctive. Now, if you have something that will do that for you and you just have the ability to do the action and be surprised and it works well, it will be a transformational thing for us. So, I think that the smartphone, at the end of the day, we call it a smartphone, but it has very little to



do with being smart, because we are giving our common life to this screen all the time. This here will be a completely different business in 10 years.

### Salomão

Wow, I can't wait for that to come, because I think until then, of the macadamia ice cream, it's going to get a lot of recommendations with people who like that. I like it too. Then, the day it arrives taste this here.

### Salomão

It may be completely different, but it is based on several other inputs you have given

### **Fatala**

Another one emerges. I think that this is a big change that will occur in business too, as we talked about this, I don't know, hyper customization. It is just like me, I like bike, I ride bikes, I buy bike stuff, then everyone will recommend me something, it is not something that I was not imagining that I could do with the bike, it is what everyone is doing of the same standard as mine, you know? I also didn't see the time to say, no man, I understand that you are a guy who likes bikes a lot, you have already done a lot of things, but let me tell you, now you are riding a gravel bike and gravel is uncomfortable on the dirt because a new product came out that absorbs the irregularities of the pavement and you put this table and it completely changes your experience of riding on dirt roads with a gravel bike. Because then you will start to make a kind of impact on the consumer, talking about the retail side, which is, you know, expensive?

### Fatala

So, I think we have reached this possibility also, now, in technology.

## Salomão

Cool. Well, can we wrap it up?

### Nasser

We can. Can I make a 'quick summary' of what we talked about?

### Salomão

Absolutely, already.

## Nasser

Cool. Well, I think we've gone over the importance of the management model that Magalu has built. Already there since 2010, 2013, but mainly the legacy it brought from the digital transformation process. Legacy that is linked to culture, people, with a management model capable of leveraging the understanding of these disruptive technologies and how to use these disruptive technologies in the business. Artificial intelligence is starting, it's a new wave of disruption. Magalu, as Fatala told here, has already done a lot of things using this management model and learning the impacts, both in very short term things and in things that can be transformational going forward. This one is from Magalu's brain, and I am very curious to see how it will look like going forward. We talked a lot about this capacity that Magalu has built of internal development of technology, not only for the development itself, but for having a lot of data stored and using this data itself to absorb the best effect of new technologies such as artificial intelligence. And we started talking a lot about prediction Al, which had been in use for quite some time in the company and in the market.



And we start talking now about hyper-personalization and generative Al. Generative Al building content, building suggestions and changing the output of the generative Al, it is looking much more like a business than a 23% chance of being that product. So that difference, I think is very impactful on the business. It has an output very much like a business. Do such-and-such action, such-and-such action is here, this is the result, and this is transformational. Fatala brought us several examples of how Magalu is working, and then we closed with this discussion about how, in a time of lower investment, higher interest rates, budget restrictions, the company continues to allocate part of the budget to the discovery and use of technology.

## Salomão

Excellent. In the next series that we do, we will already have an artificial intelligence that will do this summary right away.

### Nasser

On the spot. That's right. She's going to talk to us here.

#### Fatala

And it is one of the points that Generative AI works very well, which is the summarization of when you throw everything in there and the main points come up. You can even do a live one.

## Salomão

Excellent, everyone. I learned too much here. Thanks a lot, Rodrigo Nasser, thanks for conducting this chat with André Fatala, Magalu's VP of Technology.

## Nasser

Thanks, Salomão. Thank you, Salomão. Thank you, Fatala.

## **Fatala**

Thank you. I wanted to say that I now answer e-mails because of Gen Al. I had stopped answering and now I do

### Nasser

Good I'll do that

## Fatala

It responds all the emails.

## Salomão

Sensational. Well, I hope you enjoyed another episode of Al 360, a series from Market Makers with Aster Capital. There will be a next episode next week. Until the next one.

