Al 360 Ep. #3:

Challenges and Opportunities in the Age of Al



ChatPDF Summary:

- 1. The third episode of the Al 360 series features an interview with César Gon, founder and CEO of Cl&T, a company that offers Al-based solutions to help companies with their digital transformation journey.
- 2. Al is a transformative technology that has the potential to revolutionize industries and society.
- 3. The ethical considerations of AI are important, and there is a need for responsible development and deployment.
- 4. All has the potential to augment human capabilities and improve the quality of life for people around the world.
- 5. Collaboration and partnerships are key to driving Al innovation and adoption.
- 6. The financial industry is one of the sectors that is being most impacted by AI, and there are both challenges and opportunities associated with this.
- 7. All has the potential to help address some of the world's most pressing challenges, such as climate change and healthcare.
- 8. The future of work will be shaped by AI, and it is important to prepare for this transformation.
- 9. All has the potential to create new jobs and industries, but it is also likely to disrupt existing ones.
- 10. The development of Al requires a multidisciplinary approach that brings together experts from different fields.

Salomão

Hello, it's starting another episode of Al 360, the special series on artificial intelligence that Market Makers is doing to explore everything that is happening in this new frontier of technology and how this is inserting itself in the financial market. This is the third episode of the series. In the first episode, we talked a lot about concepts and definitions. In the second episode, we brought a little bit of IA in practice and we talked about this with the director of Magazine Luiza, to see how this is being implemented in practice. And now, in this third episode, we will talk with César Gon, the founder and CEO of Cl&T. It is one of the companies that is helping large companies in their digital transformation journey and has more recently filled its range of services with Al-based solutions for other companies to take advantage of this technology. Just remembering that Al is not only made by us, the Market Makers. We will have here helping us in all programs of the series, the founding partners of Aster Capital, one of the asset managers that are a reference in the financial market when it comes to technology.

Salomão

So here with me is Rodrigo Nasser once again. He is one of the partners and founders of Aster Capital. Nasser has over 20 years of experience in the technology market. Prior to Aster, he worked at TOTVS as Development Director and also at Netshoes as Technology Vice President. He was an Advisor to investment funds and Board of Directors of large companies on the topic of technology.

Salomão

So, I am once again in very good company to do this high level chat here at Al360. Oh, it is worth mentioning that in this third episode we will address what companies are discussing about Al, the main impacts on the Brazilian market and outside of Brazil, and what is going on in the minds of CEOs and board members on the subject. So, well, we have Rodrigo Nasser here. Are you ready, Rodrigo?

Nasser

Let's go!

Salomão

So, we are going to have a very important guest here. We have already prepared a short presentation about César.



Salomão

He is a digital tech entrepreneur. He founded and is CEO of CI&T. At the age of 23, he founded the company. The company has achieved 27 consecutive years of global growth and expansion. So it is a company that has been growing for a long time. César is a computer engineer with a master's degree in computer science from the State University of Campinas. He is the coauthor of the book "Faster, Faster, The Dawn of Lean Digital" and columnist for the MIT Sloan Management Review.

Salomão

He is a board member of the Lean Enterprise Institute, Banco Itaú and Sensedia. Sensedia?

Cesar

Yes, Sensedia.

Salomão

I got everything right and the easiest name I miss. In 2019, he was awarded Ernst & Young Entrepreneur of the Year in Brazil and in 2021 he led CI&T's IPO on the New York Stock Exchange. He has three children, loves technology, wine, soccer, and also, from what I studied before the recording, he's a great fan of rock and roll and even the band Titās, one of the culprits behind his coming to the big city and founding CI&T. Well, that's it then. Are you ready, Nasser?

Nasser

Ready, Salomão. Cesar, thanks for your time and super honored to have you here with us. For me, you're one of the main technology entrepreneurs in Brazil. Founder and CEO of a company that in my opinion is directly surfing what AI is disrupting in the market. Thanks for your time.

Cesar

It's a pleasure to be here. Thanks for the invitation, Salomão, Rodrigo.

Nasser

And, César, to kick off, tell us who CI&T is, how you got into the technology world, how CI&T has grown and what is CI&T most focused on today?

Cesar

Let's go, I'll summarize 28 years of history here. CI&T is a child of technological disruption, right? We were born in 1995. 1995 is the year that the Internet became available to companies. It already existed within the academic walls. In fact, at the end of 1994 in the United States and in Brazil, 1995 is the year that companies start to look at this and see what they can do with this so-called internet, you know? We worked with this technology in a naive way, I would say. I had just finished my master's degree in computer science, and I had the perception that many things would change, without knowing exactly what. From a very technological perspective, software engineering would have to transform itself, and CI&T was born as a niche company in software engineering for the Internet. And then a sequence of chapters begins. I'll summarize. We start working basically as a service provider for two IBM development research labs, one in France and the other in the United States.



A little bit later we have what I call our first Brazil phase, in which we start serving relevant companies in Brazil, such as Natura, Vale, Globo.

Cesar

And perhaps a fundamental decision that came from our conception of the company was "Man, we need to go global". This game cannot be played only in Brazil, even though there is a market, there is potential room to create a technology-based enterprise. From the competitive point of view, unfortunately, Brazil is peripheral. Things happen earlier in the United States and in other technological centers. So we opened CI&T's first branch outside of Brazil in 2006, in the United States, and that was a magical moment, when another disruption was coming, led by smartphones, cloud computing, and the beginning of bigdata. We started with an offer in the US market that combined design with engineering, with software engineering, and this enabled CI&T to grow for a decade, from 2006 to 2016, at 30% per year. And working with big names. Our first landmark client in the United States was Yahoo. And Yahoo was an iconic company, it was Google at the time, in 2006.

Cesar

This eventually led us to Johnson & Johnson, Coca Cola, and we ended up achieving an impressive decade of growth and internationalization. It was at this time that we took our first steps in Europe and Asia, and managed to structure a business that later gained a category in the capital markets, which are the Global Digital Specialists, companies that fall under the umbrella of IT Services, but are absolutely specialized in digital transformation, in disruptive technologies. I like to say that as of 2016, 2017, we added another piece to our puzzle, which is the digital strategy part. This is the perception that design is not enough, and here I will use the current names and not the ones from that time, customer journey design, technology platform design, and full stack engineering to put this on air, but you would have to take a step back and discuss business strategy, discuss what is the intersection between changes in consumer behavior and technological possibilities. It is from this relationship that the great opportunities for disruption and innovation arise.

Cesar

So from then on CI&T has positioned itself as a company that we call "end to end" because it does digital strategy, customer-centered design and full stack engineering.

Cesar

This leveraged our growth from 2006, 2007, to even higher rates. In the last four years, our average annual growth rate is 48% in revenue. This even allowed CI&T to go public, which was part of the plan designed with ADVENT in 2019. So, that's how we became a global player that does strategy, design, and engineering for large companies.

Nasser

And, César, you made a point that I think is important about going to the US in 2006. This is our third episode of the series. We talked a lot about the technical terms of AI. We talked about Machine Learning, we talked about Deep Learning, we talked about GenAI, about LLMs, and we brought Fatala to talk about the use of IA at Magalu. You have been through a few waves of disruption, and I think CI&T has adapted to serve the big companies in the best possible way in these waves. I think in 2007 we had the iPhone launch, the apps, and coincidentally, I think in 2017, Google publishes the Transformer paper, which is the letter T of the GPT. And we talked in the first episode, about the importance of Google in this whole journey.

Nasser



And then I would like you to comment a little bit on this. Are we living a new disruption with AI, as we experienced with the apps? And we even joked in the episode, the first apps were horrible. And then you even had new business models, like Uber, coming up.

Nasser

In your view, are we at a similar moment? How do you see this moment?

Cesar

Rodrigo, I have said that this year marks 77 years since the invention of the ENIAC, which was the first digital computer. At Philadelphia University, financed by the American DoD, it was the first digital computer and the history of computing begins. I think that we, 77 years later, are at the frontier of what is probably the most disruptive moment in this industry, and it is an industry that has been innovating and transforming at an absurd speed. I even wrote about this recently, I am a columnist at MIT Sloan, and I think this new disruption is happening so broadly that it is general purpose. Suddenly, everything that human beings do can be accelerated, augmented, and revised in a fantastic way. This has implications, obviously, that start in the technology industry itself, it is turning upside down, we are seeing it, it starts in the Big Tech wars, but this unfolds to the whole chain. But this reaches any segment, any company, in an overwhelming way. I think we are at the beginning of this, it is not easy to see the ways in which this disruption will not happen, but it seems obvious to me that we are talking about something that is much bigger than the internet itself, that is much bigger than the combination of smartphones and cloud, but obviously it feeds a lot on these previous revolutions.

Cesar

But from an economic, intellectual, and societal point of view, I think we are going to experience the greatest technological disruption of all time.

Nasser

In the text that you mentioned from Sloan, you talk about this and you also talk a lot about how specifically Generative Al does this, how this capability that we have reached with Generative Al is transformative. Give us more color on this subject. Give us examples. As a computer engineer, you write in your text that not even in your wildest dreams could you imagine that we would reach this moment now. What scared you when, after a long time, you went back to coding and had your assistant there coding with you? What helped you so much to have this vision?

Cesar

Rodrigo, let's go. First, obviously, there is a lot of hype, there is a lot of misconception and a lot of inflated expectations around artificial intelligence. But, on the other hand, it is a real transformational technology and for a lot of things it is already ready. For a lot of things, it is moving at a very fast speed, but it is already has practical use for a lot of things. And right off the bat, I always separate that into two immediate opportunities, I would say. One is hyper productivity in the technology industry itself, in the production of digital solutions, in the end-to-end of designing digital platforms and solutions. And the second is customer experience. It is a hyper-personalization, the possibility of an unprecedented hyper-personalization of the experience. And the moment when we can see that we are going to leave the small screens, the smartphone, the apps and this interaction that is not very human, for a much more human interaction, based on natural language. This is kind of obvious.

Cesar

And for things that come in the sequence that we will still have to invent. I think that this is the cool thing and the excitement of living a moment like this, because most of the unfolding of this technology we will have to invent.



But I have an academic vein. I skipped here, but I did my undergrad and master's at Unicamp, and even started my PhD. I'm very passionate about computer theory and the unfoldings for algorithms and computer graphics. So, in one way or another, either by my more academic vein or by my day to day work, by leading a technology company, I follow very closely the evolution of the subject artificial intelligence. And I think that, like many others, I was absolutely taken by surprise by the speed. We had been following GPTs, OpenAI, etc, but with the skepticism that there is still a long way to go for this to become a mass technology. And, suddenly, in November, GPT 3.5 comes out, which is a baby compared to the 4.0. And then I said, "Gee, let me try it out, let me program with this new fellow here". And then I had an epiphany, I said, "Wow, if this is already like this, then it is a mega revolution of possibilities".

Cesar

So that was it and then, obviously, the next reasoning was "what changes for CI&T?" Today I'm 150% involved in understanding and capturing this from a business opportunity standpoint in CI&T's own business.

Cesar

I think that it is a mega opportunity in these two dimensions, a hyperproductivity that I think will separate, will generate big gaps between the industry players. And the other is hyper-personalization and the unfolding of this from the consumer's perspective. So, and again, I think this article, it was an "aha moment". I published this article which is "Software is eating the world, and AI is changing the menu". It's a reference to Marc Andreessen, that software was eating the world, but now artificial intelligence is going to change the menu. And this is the coolest part, because this productivity equation is very welcome. At some point we are going to talk about the technology talent shortage, but it is just one side of this equation. What happens in the history of computing is that every time you have a leap in productivity, you also change the nature of the problems you want to solve. Looking at this, if you take the ENIAC, how would you program with ENIAC?

Cesar

You would connect wires, and then comes the punch card.

Cesar

It was 100 times more efficient than plugging in wires. But then you no longer wanted to solve just the initial problems that ENIAC solved, you wanted to solve more sophisticated problems. Then Assembly came along. Suddenly you don't have to use punch cards anymore, you can write machine code. I started programming in Assembly, it was the beginning of my computer journey in my childhood. And that was probably 100 times more efficient than the punch card. But then come things like Fortran. That is 100 times more productive than Assembly. But you don't capture that in reduction. You actually say, "Well, then let's solve more complex problems." So scientific computing is built on top of Fortran. Well, then comes the sequence of languages, etc. But we, from Fortran, C++, Java, Python, we didn't really change productivity in scale. We are in this third generation of the ability to solve problems with computation. And now comes Al.

Cesar

Al is a new layer. We are going to call a lot of new technologies Al, it is going to be the king of the forest for this matter, not only Al, but it is potentially the moment where we change the abstraction level to solve problems with software by 100 times.

Cesar



This solves the problem I address in my article. Maybe the question I have received the most in the last decade was "César, will everyone have to learn to program?" Because every year there is more demand, more demand. In a short time, one third of the world's population would have to learn to program. Today, 1% of the world's population knows how to code. And my answer was no, it is because we are in a transition, we are crafting for the technological possibilities. A layer of abstraction is coming soon. And the "aha moment" was "come on, now we are starting to see it". Of course it will take many years for us to see this transition happening, but it is already here. So, no, not everyone will have to learn to program, but everyone, in some way, will have to redefine themselves with artificial intelligence.

Nasser

We have a bit of that feeling that AI is going to replace the human being. It can happen in some cases, but I think people forget a little bit how much it can help the human being in developing things. Me too, as a rusty coder, I was amazed by my ability to do things that otherwise would have taken me much longer. It's scary.

Cesar

I see it this way too, it's the human being in the loop, but absolutely having his capacity increased by an order of magnitude. But he is, of course, leading the problem solving process.

Salomão

For those who are looking from the outside, it is agonizing to see the amount of things, opportunities and changes. Because, in fact, it is a sea of opportunities, but we don't know what they are yet, how they will be and how to implement them. So, my question, in the midst of all this, I don't think you have the ability to guess what these opportunities are, but as the CEO of a company that is here to solve these problems and help companies to adapt to this, what is it like to work on culture and team building with this "something big is coming" mentality? We just don't know what is it yet, and what we are going to do with it, but something is coming... What is it like to work with this in the company's culture?

Cesar

Nice question. I think this is quite a challenge. The corporate world is always lagging behind society and technological possibilities. Both... Both behavior and technology...the two great forces. And companies had been transforming themselves, it's the digital transformation fever, based on an earlier set of technological possibilities. And that meant changing the culture, having more collaborative environments, having a less departamental and more multifunctional team organization structure. You have a flow, a "one piece flow" of Lean happening between the customer and the value generation that the company can generate for that customer with technology and without technology. So companies were in this process of translating from the industrial century to the digital century. This was happening in 100% of the companies... This was, at root, about culture and, obviously, about customer centricity, business impact, and more aggressive use of technology. Then, suddenly, another tectonic plate shift comes along.

Cesar

This chapter is not ready yet. And if we want to go to specific aspects, companies do not have a complete data strategy... the data lakes, the security issues, the democratization of data, the culture of making decisions based on data.

Cesar

Then comes an avalanche that will be built on top of these fundamentals. But you also can't wait...from a competitive point of view, it seems like suicide to ignore something that has this potential for competitive disruption. So, in fact, it generates a sense of urgency in relation to the evolution of corporate cultures towards more aggressive cultures in innovation, in experimentation. It's a bit of this



story that you don't know what's going to happen...this is actually another chapter of the need for a culture that experiments, that tests, that doesn't try to guess the future, but immerses itself into it to build it. So in a way, it's a radicalization of the digital transformation chapter for this post agile world. My questioning to companies is that they are still setting up the squads, but it's not going to be like that anymore. The topology will be different, the capabilities will be different. Without going into the chapter that touches me the most, which is that the leadership model will also have to evolve. Because we came from command and control to a collaborative leadership, but now we will have to invent, perhaps, a new layer that is this leadership augmented by artificial intelligence.

Cesar

I think it's a beautiful chapter in the history of culture and evolution of leadership models in the corporate world.

Nasser

When we did the Mercado Libre podcast, I taught you the word iteration, remember?

Salomão

Yes.

Nasser

So, iteration is another layer of Lean, which we talk about a lot. Iterating, iterating, iterating... Companies are going to have to learn to do this at some point.

Salomão

Listening to you, you know what's curious? The companies that didn't get into the first wave of squads and all that... maybe they are even better positioned than the ones that were just getting into it now, and are kind of in the middle of this transformation path.

Cesar

No, I don't think so...because the big bottleneck for this change is culture... culture and the leadership model. And if you haven't done that, which is the first leg of the journey, you're not going to be able to do that second leg. So I think that, pragmatically, you have much less time now to do it...

Salomão

At least these companies have been given a second chance...They didn't take the first chance...maybe now

Nasser

And we... When we were talking with Fatala, we talked about... And also with Everton... We talked exactly about this. Prediction...The power of prediction that Al has, and hyper-personalization, that is, personalization at scale... which seems strange at first glance...Personalization and scale in the same sentence. When you put all of this together, along with the culture change issue that you've mentioned, which has certainly been shocked by digital transformation...New working methods, different mentality and culture, and technology architecture...We talked about those three things with Fatala... Put it all together and take the tradicional executive, who is an amalgam of angst and anxiety. When you talk to those executives, where does the conversation start? Where is the greatest angst of these leaders?



Nasser

...Both those who are already in the digital transformation process, and those who have already missed the first wave.

Cesar

Rodrigo, just to show the interest and how this has become a strategic issue, this mentioned article... I published it four weeks ago. I looked at it yesterday, 41,000 downloads on my Linkedln. And then Linkedln gives the demographics of who is downloading. First of all, tech guys, obviously. Second, founders and cofounders. Third, which is the most surprising part, CEOs... In front of managers. In other words, there are more CEOs downloading my article than managers. I'm also in touch with the company's boards, you know? And it is the most talked about strategic subject at the moment. It is, obviously, more talked about than implemented, because it is not a simple subject. But I think that this shows, first, that there is this realization that it is not a hype... And our industry, it creates a lot of hypes... I think that this smoke has cleared. Of course there are still a lot of misconceptions and incorrect expectations... and a lot of stuff about artificial general intelligence, sci-fi like, which we are decades away from. But from the point of view of applicability in the corporate world, this has already started.

Cesar

So, I would say that this is a moment when companies are starting to look at this in a serious, structured way. I think there is the low hanging fruit, which is productivity gain, especially in technology intensive companies. And then an exercise, still exploratory, of use cases... business cases. In a large company, you need to start exercising issues that transcend technology itself, which is compliance, governance, security, how am I going to fit this into this framework of companies that in general lead their markets, that use a lot of technology, but are within regulatory and compliance umbrellas, quite different from the world of startups.

Cesar

This innovation environment... It has fewer barriers and fewer complexities. That, I think, is part of competitive history...

Nasser

Since CI&T operates both outside of Brazil and in Brazil, do you sense a difference between the reaction of companies outside of Brazil and in Brazil? And is there any sector that you have noticed that is more concerned than the others... That would help us understand the impact of IA faster in a specific sector than the other?

Cesar

Rodrigo, I think I will start with the second part. I think that companies that are more exposed, that rely more on technology, or are more exposed to customer... so "customer facing industries".

Nasser

B2C companies.

Cesar

Yes, the classic B2C, or B2B2C. But... Customer Facing and technology dependence... I think this is where the biggest opportunities and threats are. When you go backwards in this chain, going further away from the client or you go to industries where the use of technology...Not that it doesn't happen, but it is more occasional... It is not at the center of the business models, I think this will happen in a slower way. So, I would look through these two prisms...The level of exposure to the consumer and how much technology, in the



broadest sense, especially digital technology, is important. About Brazil and outside Brazil, I think it is happening in a very horizontal way all over the world... I think that perhaps the unexpected twist in this matter is the geopolitical issues. The world is in a complex geopolitical moment... War in Europe, China distancing itself...

Cesar

So, apart from this variable, I would say that this topic has moved on a lot in recent weeks...including discussions on the regulation of artificial intelligence, which are happening all over the world.

Cesar

You may have seen it, China itself has published the first regulation menu... Singapore, the United States discussing it... Even Brazil, with our somewhat strange way of doing things, has started to put this issue on the agenda from the point of view of society and government. So, I think this is horizontal... It is such a general purpose evolution and it affects so many things in human life, that it is natural that this is happening across the board. Getting more into the tech industry, the main boom of this is going to happen in the Silicon Valley. And, obviously, these are non-trivial movements, but it's happening all over the world... There are very cool things happening in Canada, Israel... We see it less, but we know that there is a lot of cool stuff going on in China as well. So, in a broad way, I think it is an unstoppable process, but one that needs to be somehow managed by society.

Nasser

One theme that we have been trying to better understand is that we have AI, we have this transformation... and unlike other moments of disruption, I think the technology market offers "as a service", much of what is developed fast comes much faster... the speed with which ChatGPT gained users...Looking at companies from the outside, and trying to observe the impact of AI on companies... if everybody uses AI, everybody will gain efficiency. So, basic concept of microeconomics... If everybody has the same access, it doesn't change anything about differential... Where is this differential? Where is the differential of my company compared to Salomão's company in terms of data use? Our financial market... I think our financial market is a little behind in some things... At Aster, I work with Data Science, and I always joke a lot that I started to do some things that I thought were kind of basic and the team looked at me and said "Wow, we have never done this before."

Nasser

Where do you think the differential lies compared to what everyone else is going to have access to?

Cesar

Let's go... I think some of this disruption happens horizontally anyway. And it has to do with access to the models, chat GPT, suddenly a coding tool starts generating code...

Nasser

Copilot from GitHub that everyone is using...

Cesar

Exactly, but this is more horizontal... Soon, the collaboration tools will record, summarize meetings, write e-mails, etc... This is going to be very horizontal, but it is an important productivity for everybody in the corporate world and even in our personal lives. We are all accelerating our activities with GPT.



Nasser

I hope I don't have to answer any more e mails...

Cesar

But a few comments... First, it is not only about Generative Al. We are talking about... When we talk about Generative Al, we are talking about Large Language Models, and a subset of the Artificial Intelligence universe. There are many other things going on at the same time. And these things are meeting one another. And when they meet, you have big leaps of possibilities. Now, with the innovation industry being flooded with money to make these things happen... this would already be exponential in nature and is now turbocharged by an unprecedented amount of venture capital and private equity in this industry.

Cesar

Then companies will have to put this into their business processes, their business models... And there is a lot of difference between the companies, the current stage of their architectures... We have talked about culture, about leadership, but there is also the architecture of technology. Are you already in the cloud? Aren't you in the cloud? Legacy system... do you have legacy system? Or are you already in a more distributed architecture?

Cesar

So, in general, you will find all these "flavors". It has to do with what the real possibilities to capture value with this technology are. And obviously, I think that like any disruption, you start off doing the same things in a more efficient way, but then comes a moment when you realize that you can actually do things where the sequence of steps or processes are different. You can innovate a lot... And that is when business models that were not possible will become possible with such a powerful technology. Possibly, I say that... Companies are still not feeling the main transforming pressure, which is that of the consumer. The good parallel is with smartphones... What were the first apps that everybody said "Wow, how great is this!" Uber, Spotify, these were "aha moments," right?

Cesar

Airbnb as well... And then this consumer started to pressure companies, saying "Gee, my airline, my bank, my insurance company, I need a similar experience". Why is it so easy to do things on Spotify and so difficult to make a bank transfer?

Cesar

We are going to have absolutely fantastic experiences happening, and the GPT itself is already one of them, but this goes to voice, to natural language. And, all of a sudden, this consumer is going to start pushing companies for a level of experience, of personalization, and "don't ask me what you already know", and so on, which again creates competitive challenges in all segments, especially those most exposed to the consumer.

Cesar

So, this game is a puzzle of competencies, technology park, infrastructure, data, etc, and on top of this umbrella, leadership, culture... So, all the best for entrepreneurship, because when these tectonic plates move, the big steps for entrepreneurship emerge.

Nasser

There is a very good book that came out recently, "Prediction Machines", where the author explains it almost exactly the way you did. He talks about how technology can change things in three big steps. First, you use the new tech with an old system and it gets



better right away. This is the 'one-time effect'. Next, you start to use the tech to make something new - a product, a service, or whatever. This is called the 'application model'. The last big step is called the 'system moment'. That's when you use the tech to change the whole way you do business. Each step can make a huge difference. The author also thinks that IA can help a lot with this whole process.

Cesar

And we will see this cycle happening... I like this book a lot too.

Nasser

And then, when we were talking... Back again in the culture part, I wanted to go into the people part, which we talked about at the beginning. For me, CI&T is one of the most successful companies in the process of training people, not only technically, but in the way they work. When the Agile commandments came out, I remember Aminadab and several people from CI&T translating that in an easy-to-understand way and applying it in the company. And I think this has always been a differential of the company... To have this capacity to train people. And we were just discussing, will everyone have to learn how to program?

Nasser

We've been through an era where it was very expensive for the market to hire tech talent, like those specializing in UI, UX, and other tech fields. Now, things have shifted. We're in a new phase, but finding skilled individuals is still challenging. How does this affect things, in your view? Does AI make things easier or harder?

Cesar

Rodrigo, there's a lot to consider here. I can look back at how Lean and Agile worked, and forecast what might happen . When CI&T started its offer in the United States, back in 2006, we were a certified company in Brazil, similar to Russian state software production company. And it was the company that could offer what at the time was gold in this industry, which no longer exists, which was predictability. This was the main value. But then came the Agile Revolution, and we were very fortunate to understand that Agile was better than the old way, methodologically, even though it was rustic. Diving deeper into lean helped us connect the dots. When you look at the five Lean principles like customer value and one piece flow, and line them up with agile, it's like "Wow, now there is a science here explaining why this business works".

Cesar

And we, at the time, as our world was always the world of the big companies, and Agile came from the innovation ecosystem, startups, etc., we translated that and said "We will have to add some elements here so that this will work in a traditional, big, complex company." So, at the first moment we created the Enterprise Agile and then it became Lean Delivery.

Cesar

But the fit that was perhaps even more fortunate was when we added digital to the mix and came up with Lean Digital. And we moved the discussion up not only to the production belts, the agile teams and the value streams, but we also discussed management systems and leadership models.

Nasser

So, governance and people leadership.



Because if the company doesn't change the way it does budgeting, that it does reporting activities, incentives...

Nasser

How you evaluate people...

Cesar

The whole PDCA chain, etc. And if the company changes its leadership model, evaluation, what are the habits of leadership, how do they happen here, that cycle moves along. This was the essence of Lean Digital, and the creation of Lean Digital is the book that you mentioned when you quoted my bio, "Faster Faster". If companies want to be really fast, they need to mess not only with this aggressive use of technology, and the topology of the teams, but in these other two elements that are just as important, but less visible... the Management system and the leadership model. And that transformation made CI&T radically attractive. "Gee, it's agile, it's lean,etc." And we made this change in two steps, actually.

Cesar

Everything we did in the US was Lean, agile, but in Brazil we did not change at first.

Nasser

When the Russian process was still there

Cesar

For a short time, I had two companies. And people applied to work at CI&T, making it clear that "I only work at the Agile company, I will not work at the Waterfall company." That was the big motivation to say "we won't be able to live with this, let's burn the caravels and turn the whole company to be Lean Digital." It was a very good decision, because then things exploded. And I think we are going to experience the same thing. And that's why I say that CI&T, Powered by Artificial Intelligence, will also win the market war, in productivity, in hyper-personalization, but the main war of our industry is not the market war. In a way, the demand is easier to understand than the supply, which is people...Capabilities. So, a company where, end to end, everything we do is going to be turbocharged by AI, it is much more attractive for someone to work. And typically, in our industry, whoever wins the game of tech talent, of capability, wins the game.

Nasser

And this also happens in companies in non-tech industries. Companies that heavily invest in people are likely to experience the same shift. We joked with Everton, and with Fatala too, about FinTech, RetailTech, HealthTech, anything tech... It brings this, it brings this vision of how to deal with people, how to work culture, management, all of this you mentioned. Can we imagine that what you said, what you are experiencing at Cl&T, for business, for example, financial services, which is very people-based, retail, which is very people-based, will also happen?

Cesar

It will happen, I think so. And I think there is another important point that I think is an advantage of our industry and the way we see our industry, which is a gigantic market, but extremely fragmented. Because in a vision, I would say, almost static, if I double the productivity, it means that I need half as many people. But in our industry, any productivity delta becomes growth. Because there is a



lot of room for growth, because the industry is fragmented, customers generally feel underserved. Technology is expensive. And we are still in this transition. We have not yet climbed the abstraction layer. We have raised our ambitions, from the point of view of experience, the use of technology, data, etc. But it is still handcrafted. This limits the use cases that provide a good return on investment for most companies. But we're heading towards a more positive direction.

Cesar

So, being in a business model where productivity becomes growth, I think it also generates this ability to mobilize the whole company in that direction, because if you win the game, you win the growth game, not only the efficiency game.

Cesar

I think that aligning business strategy with culture and message is fundamental, because more than ever digital turbocharged by AI is a team sport. It requires a team, because there are more skills, more capabilities, more need for collective intelligence to make this happen.

Nasser

So when you say that, it's less command and control, less structure, several hierarchical levels and all that. And then, when you talk, not necessarily on the boards where you are, but you talk to a lot of boards, I imagine they invite you to make a lot of presentation about IA and everything else... In publicly traded companies, especially in Brazil, do you feel this receptivity to revisit issues that have nothing to do with technology, but rather pertain to culture, people management, and so on. Do you see this receptivity?

Cesar

I think this menu of challenges was already there for the companies. I think that at this point, it only gains a sense of urgency. But we'll still need to discover developments in leadership. But clearly, we are not saying that this level of disruption is possible with a classic leadership, with a command and control. But what is going to happen, the chapters that are going to be written on the subject of culture and leadership, I think we are just beginning to grope. But, in a way, I think that what is cool is that the agenda that already existed, which I say is important, is going to the urgent quadrant. Because it is easy, from the executive point of view, from the strategy point of view, and this is the view of the board, the executive committee, the CEO, it is easy to see that this changes the game. Then it's about identifying which of our capabilities need to speed up so we can play this game effectively.

Nasser

This is the way they have been discussing. Since we are talking about a lot of books, we will later list all the books for the listeners... One that I think is spectacular about this topic is called "Good Rebels and Bad Rebels", which has two authors, one of whom worked for 20 years in the CIA, recruiting operatives in the field. So she was designing the model of people who would help the organization and who would not. And she breaks this down in the good rebel and the bad rebel in the organizational structure... And how the leadership is not prepared to deal with this profile of people. And I think that companies will struggle a lot with this.

Cesar

Rodrigo, one comment. I think this is so fast, that I am seeing very little denialism these days.

Nasser

This is great. Aren't you sensing any resistance from companies?



Yeah, I would say just a few months ago, there was still a lot of skepticism. "Oh, this is just another wave. This is not for me."

Cesar

And that is an element that increases the complexity of dealing with this issue. You have companies with less room for investment, a complex year from a macroeconomic point of view, but having to move, because it is a marathon, and you have to start running... So, there's a significant shift in the conversations and even the actions being planned for the second half of the year, compared to the beginning of the year. I think this is just a hint of what this could turn into, starting in 2024, 2025, and in the years ahead. But it is, again, technology making its leaps and preventing this slowing down of the innovation curve.

Salomão

Let me bring up another question... The financial market client, I don't know how active, questioning, or present they are, but also with the investor, since you have recently opened Capital. How do you engage with the market, and how do you perceive their understanding of what your company does? As the CEO of a publicly traded company in the New York Stock Exchange, how is the interaction with the market?

Cesar

Salomão, I think you have all the flavors there. The technology industry, in particular the digital transformation services industry, had been gaining analytical robustness, from people who know the industry... More companies being covered by the research analysts, so the vocabulary, I think, has been maturing at a good speed. Explaining what CI&T does today is much simpler than it was ten years ago, despite the fact that CI&T is much more complex today. What happens now is that it we're facing a disruption. Again, it generates a big gap and the need for learning, diving, understanding. It is a subject full of developments. So, I think that, again, I see a lot of interest. I would say that this topic takes up 80% of all the meetings I have with investors and potential investors, because it is a moment of education, of understanding, of trying to connect the dots, those that can be connected, because some dots we will only be able to connect later.

Cesar

So, again, I see a lot of interest, but I think there is still a bit of a knowledge gap, because it is not a simple subject.

Cesar

So trying to simplify it is very dangerous, but I think it is natural and it happens in these moments of great disruption. So it's a good agenda.

Salomão

I would like to finish with a very genuine question from someone who has followed a little bit of your story. We talked about your passion for rock music in the beginning... How did the Titās band brought you here to the big city? It's one of those interesting stories of a Brazilian entrepreneur that deserves to be spread.

Cesar

Okay. Well, I'll try to summarize. Actually, I started programming very early, at the age of 11, kind of by chance. I'll skip this part, but then, not so by chance, I started selling software at the age of 13. That's even in my biography. I sold a chess game when I was 13.



And then I said, wow, this computing business could be interesting. And actually I wanted to buy bigger computers. I got into the world of computing, not just for the art of it, but also for the joy I found in coding and the potential to make a difference. The entrepreneurial idea came to me much later in life. But then rock music comes into the story. What I did was sell games... I made games, sold them and bought computers. And I won, I think it was a contest. And I won a prize, it was a record voucher at that time.

Cesar

And I said, "Well, I wanted the money, actually. I didn't want to buy a record". Then I couldn't turn that disk voucher into money, because what I wanted was to save money to speed up my next computer purchase.

Cesar

And then I went, I went into a store that existed at the time, the vinyl stores, and I bought Cabeça Dinossauro. And I wasn't a music guy. But this record, I went crazy for it. So I tell this story... this rock rebellion made me think that I needed to leave Amparo. I need to go to the world, run after this computer dream of mine. In fact, I wanted to be a researcher, I'm a failed researcher in the area that ended up becoming an entrepreneur. So, deep down, I was not naturally a rebellious child. I was a kid who was very immersed in books, computers and soccer, basically. That was basically it, 100% of my time. And then, I think that this record, this dive into rock, starting with "Titās", I think it brought a trace of rebelliousness that I carry to CI&T, right?

Cesar

I like to see CI&T as a rebel company, a company that challenges, a company that is always bothered, you know? So that's why we had our rock festivals, etc. And I think a trace of this remained. So, it was this "Vale Disco" and "Cabeça Dinossauro" that maybe set me on this path.

Salomão

Nice, very nice, very nice. That's it then? That's it. César, thank you very much for your time, for the lesson you gave us. Nasser, thanks a lot for another partnership, bringing together people who are not only very intelligent, but who also like a good rock and roll, right? So, the second episode with rockers was really cool. Remembering that this is a special series on artificial intelligence from Market Makers, which will be out every Tuesday here on our channel. And the next episode is the last episode, we will host Jeff Towson. He is an American who has lived for years in several countries in Asia, he's an investor and today is a consultant for companies, discussing new business models. The interview will be remote, right? He doesn't live in Brazil.

Salomão

I really appreciate everyone's attendance. If you are following along, leave a "like" on the video, subscribe to the channel. This way, the algorithm will understand that you want to see more content like this and will reward you with our episodes, not only of Market Makers, but also of the Al 360 series.

