5F Interview

Marco Bogendörfer, 5F Software GmbH (host) and Eli Fathi, MindBridge and Prof. Dr. Kai-Uwe Marten, Universität Ulm (guests)

Published 16.12.2020

00:00 (Marco): Good morning and good afternoon. Thank you very much for joining us. This is our first 5F Interview. We are grateful and honoured to have two great guests on our first interview. On the one hand we welcome the CEO of MindBridge, Eli Fathi, who is Tech Pioneer in Artificial Intelligence (AI) and working in this field for more than 30 years. Recently MindBridge was recognised by the World Economic Forum as an AI Pioneer – so we are really grateful and honoured to have you on our interview, Eli.

00:46 (Eli): My pleasure. I am very excited to participate.

00:49 (Marco): On the other hand we have Prof. Dr. Kai-Uwe Marten of the University of Ulm, who is a real expert in the field of auditing, regulation of audit and who gives various courses for auditors in Germany. He is internationally known for his knowledge and a sought-after speaker even in these – let me say "interesting" – times in Germany at the moment. Thank you for joining us.

01:23 (Kai): Thank you for inviting me.

01:29 (Marco): I would like to ask you a couple of questions because on the one hand side 5F and MindBridge are partnering since this year to bring MindBridge's Ai Auditor tool to the German market and on the other hand side we are currently having a huge discussion in Germany about how auditing can be improved and how situations like the one around the Wirecard scandal can be avoided in the future. So there is a lot to talk about. I would like to direct our first question to Eli.

02:24 (Marco to Eli): What do you think: How are AI and digitalization changing the processes of the existing audit?

02:36 (Eli): This is due to a combination of different factors. Covid-19 has currently accelerated the situation. Just last week, Accenture CEO Julie Sweet identified how the current situation is accelerating the move to the cloud. She says this will happen within five years instead of a decade. Today, we are 20 % in the cloud and we will move towards 80 %. So moving to the cloud and digital AI economy is here and it is going to happen fast. This is something we have to recognize.

Now we look at the profound impact of digitisation and AI on auditing. The way auditing has been done in the last 20 years and before relied on regulation written at a time when technology was not yet what it is today. This is the key aspect.

> *"When you read about Wirecard, Parmalat, Luckin Coffee and all the other problems that are happening: This is the result of the fact that there is nothing wrong with the regulation or with the auditors themselves. It is the process itself that is flawed."*

If you are dealing with sampling-functionality and rule-based, the problem is that you cannot handle the vast amount of data that exists. Finally, if you look at it right now we are dealing with structured data. But 90 % of all the data is unstructured, if you look at the invoices and things like that.

> *"Until we are able to digitize everything and look at it online as one whole in a holistic fashion, we are going to create issues and have audits that are suboptimal."*

04:42 (Marco to Kai): Is that how you see it as well? Is this part of the discussions during your lectures, seminars and workshops when you train the future auditors?

04:57 (Kai): What I see is that the young people who are interested in auditing are also very interested in becoming familiar with digital tools. So when I think back for example three or four years, the young people were not so much interested in this topic when I mentioned it. They told me that they could not find any literature on the subject and that they would rather talk about other issues. But times have changed: Since one or two years the interest of young people to become familiar with digital tools and to become experts for using digital tools has been growing and growing. Nowadays, when I talk to students about the topic of their master thesis, they ask me if they could write about certain aspects of the use of digital tools in auditing. All in all, I can say that young people are very interested in these digital tools and I am very happy about it. Because I suspect that they will become very good auditors and experts in using digital tools if they learn to use them at a young age.

07:00: (Marco to Eli): So things are changing at the moment. Eli, could you give us an example of the specific task areas where digital tools are used today? For example within an annual audit. How can digital tools change the way things are done?

07:47 (Eli): Of course. If you look at mapping taxonomies for example. This is something that can be automated. There are some smaller

elements of the audit process that are definitely landing themselves very well to automation.

> *"I want to point out to the fact that Albert Einstein used to say that a sign of insanity is when you repeat the same process over and over again and expect different results. And this is really the key to what we are doing, if we are going to continue to do the audit the same way as we have been doing it in the last 20 years and expect that we will have different results. We are not going to do that."*

Right now what we have seen is that there is a lot of small companies that are taking small elements of the whole audit process and are actually automating small processes. Clearly the whole notion of what AI is all about. And when Prof. Marten talks about the change in terms of the young people in the last two to four years – this is what we are facing in the Fourth Industrial Revolution when we are looking at the AI. And what we see is that a lot of small companies are popping everywhere tackling a small part of the audit process and automating it. And especially when it comes to regulation, when it comes to specifically adherence to compliance, it is perfect to take this just narrow part of the audit and automate it. And this is where we are going to look at. But in addition to just doing it piecemeal what the Ai Auditor is doing is really looking at holistically across the whole audit process. And eventually you are going to combine all of these little automation tools and all together it is going to become very much a digital audit that is orchestrated by the audit people themselves.

09:29 (Marco): This is really a great aspect. So there is a vision of an ecosystem behind of small automation tools working together to provide value to even small and medium sized audit companies, right?

09:48 (Eli): Absolutely. That is the key. Because it is like "How do you eat an elephant?" One bite at a time. Right, the same thing here.

> *"It takes a lot of effort for one single company to make the whole audit process digital. It is a very complicated process that has been done over the last 50 or 60 years since 1934. So if you look at it from that perspective, it is an ecosystem where you have a consortium of many different companies – including start-ups and other smaller companies – all tackling small pieces of the audit process orchestrated then together to an ecosystem that will enable the new audit way to perform."*

10:33 (Marco): Okay. So Kai, what do you think is from your university perspective the biggest challenges in bringing these ecosystems, these new tools, to a wide range of auditors into use?

10:57 (Kai): Right. I think this is one of the challenges we face nowadays. From my point of view I think we need to split up the auditor markets. On the one hand side we have the so called Big Four audit firms and on the other side we have the medium sized audit firms – especially the second-tier firms. So as I know the Big Four network they are developing their own tools to meet the new challenges. That does not mean that they do not work together with firms like for example MindBridge, who have a very good knowledge in this field, but mainly they are working on their own tools. This means that Non-Big-Four firms, which normally do not have the financial and human resources to do their own development, are dependent on the products which will be offered by the market. In this field there are a couple of companies that have offered digital tools, but there are only very few companies like MindBridge that can offer an AI tool. And it is up to these companies like MindBridge to bring these tools to the smaller and medium sized audit firms. Because otherwise, if these auditors from these smaller and medium sized firms do not accept to use these new tools, then I would fear that they will lose their clients within the next couple of years.

13:13 (Marco): Okay. Of course, many smaller and medium sized companies do not have the resources or the capacity for this. Eli, is it really hard for these companies to use AI technologies? Or does this ecosystem help with adoption?

13:39 (Eli): It is absolutely not difficult. You have to recognize that the forces against or the friction to adoption of AI-based systems are routed in opinions. On the one hand there is a well established process of how the audit will be done and has been done like that for many years. So companies are concerned that if they will start to use tools that have not been given – you can say royal assent – to be used and they are waiting for approval. But in reality I can go through many reasons for the adoption process of AI-based systems – the availability of digital data, the acquisition of data and things like that. The whole usage of these things is obviously normal and these things are being done right now as we move to the cloud. So the technical problems are going to be resolved. It is the other aspect. Prof. Marten talked about the young people. Whenever you have new technology it is young people. If you look at any of the previous revolutions that took place – and this is the Fourth Industrial Revolution – it is always the young people's game that they are the first adopters. And if you look at the typical audit firm generally it is run by more experienced, more senior people that are partners. And as a partner that is a about to retire in five years, trying to get new technology and learn it makes sincerely no financial sense. But as Prof. Marten said, if you do not adopt, you will die. And this is one of the comments that you hear

from many CEOs that say adoption to AI-based system – adoption to the cloud – is an essential in today's environment. One of the key reasons for not using these systems is the mental challenge associated with the people running the current audit firm. These people are often not ready to invest in new technology and are unwilling to shift because they want to do things the way they did before. But in today's environment with Covid-19 and moving to the web it is essential that they do it – or they are going to be left behind.

17:12 (Marco): I totally agree. From the perspective of 5F as a client collaboration provider there is no doubt that this is true. When I talk to clients an often raised question is: "How deep does an auditor needs to understand the algorithm – how is the AI tool working?" To ensure to give a statement – to ensure to have this evidence.

17:49 (Kai): The question which Marco raised is one of the most important questions we face nowadays when auditors talk about whether they use this kind of digital tools. Indeed they ask: "How can we trust the algorithms behind these tools?" We need to be able to provide a very good answer to this question because at the end of the day the auditor must approve the financial statements, which must be in line with the laws and accounting standards that the company applies. And one important aspect is that the auditor can trust the algorithms which stand behind these tools. There is one aspect that could help us: Most auditors, and not only those in Germany, are not experts in the field of algorithms. So they do not have the knowledge to check the algorithms and then say: "I can trust the result that these tools deliver". And at this point it could be the job of experts to help these auditors. Experts could join these audit firms to carry out these checks. So the auditor who is overall responsible could trust the algorithm. That is one of the possibilities I see. Another aspect is that I know that the German Institute of Public Auditors is working on a kind of standard that will help auditors to rely on the algorithms. To the best of my knowledge, parts of the profession in Germany are already waiting for this standard, which is a kind of certification of these tools. I expect that many auditors will be more open to the new tools in the near future because of this certification.

20:45 (Eli): May I add to that: If you look at it, MindBridge is the first company that signed a Montreal Declaration for responsible AI. We basically look at our algorithms – and I agree with Prof. Marten.

> *"So we went through and if you talk to us and you ask for it, we will actually give you what we call 'self-certification'. We looked at the different algorithms – our CTO looked at the different algorithms – that he developed together with the team. And he actually went through one by one and proved that the*

algorithm is doing what it is supposed to do. And we can make this available to people that are asking us – to all of them that are asking us."

We also deal with explainable AI. When you look at the result it is not a black box, it is actually a glass box. We allow you to read when we show any transaction. That is at a risk. We actually show you details that explain what triggered this particular one. There is no question that the trust in the AI system is still in the infancy. But if you look at what happened is time progresses: We have no issues right now going on a plane and having the autopilot fly the plane and land it. Right? With no one question it at all. We give our life in the plane and we trust it. So that is much more serious from a personal perspective, that you are up in the air and trust a machine to land you. Whereas here we are talking about financial elements. And that is not yet going to be automating it alone. You are still relying on the human to take the information interpreted and make the final decisions. So it is a tool that is in the hand of the human as opposed to a machine that is doing all the activities.

"The machine is only there to make the difficult calculation where human just can not handle the amount of data that is available. But in the end of the day it is the human that is going to make the decision."

23:13 (Marco): I think that is really a great statement. Because sometimes we are confronted with the question or the fear that all these tools will replace the auditor – or even the whole audit. I think it is like you say, Eli: The decision always lies with the human. The technologies can only help and support and in the end the auditor needs to decide. Another thing I would like to ask you both is about the challenges and new possibilities of this development. At the moment we are having a huge discussion in Germany about the outcome of the Wirecard scandal. So we have a discussion about the introduction of a rotation system, which is a little bit earlier and shorter than the one we have now. There is also a discussion about a joined audit. So what do you think: How can these new tools and especially the AI auditor enrich the upcoming discussions? And, if they are fitted in new regulations, how can they support the way audit will be done in the future?

25:07 (Kai): Marco is absolutely right. The discussion we are currently having in Germany on the political side focuses on a few issues. One is the so-called "mandatory audit firm rotation", which should be finished after 10 years. We just have this after 20 years. All over Europe, not only in Germany. The second issue discussed on the political side is that an audit firm is allowed to consult or advise

clients. And the third issue is to increase the so-called "liability sum", which is quite low in Germany. The increase should be from 4 million euro per audit to 20 million euro. And the question is absolutely right. In the discussion with the experts, they can not see any link between these proposals and the causes for the Wirecard scandal. For example, as far as I know, the auditor EY did not give advice to Wirecard. So it is not the combination of auditing and consulting that was the reason for the so-called scandal. But this is the political discussion. Sometimes the political discussion is a little different from the discussion between experts. To come back to your question of how a tool like the Ai Auditor can help to uncover for example frauds in such cases: One of the biggest advantages of using AI tools, in my view, is that the auditors can use these tools to do a much better risk identification and risk assessment right at the beginning of an audit. I then assume that if a much better risk identification is made, the audit plan, which is a consequence of the risk analysis, will be much more efficient. This is one of the biggest advantages I see – that auditors can do a much better risk analysis at the beginning of an audit. I hope that auditors will be open to these new technologies, because risk identification assessment is very important at the first stage of an audit.

28:52 (Eli): I agree with Prof. Marten completely. We have to separate the reaction of the politics as a result of the public demand for action. Politics can only provide guidance in regulation to the high level to support potential issues. And if you are dealing with a complex company like Wirecard, which probably has 20 to 40 people in the accounting companies – how many auditors are there for the audit itself? Right now you are dealing with a smaller team that has to deal with a massive amount of data. And the way the auditor is structured today, there is no limited dollar value. There is compression of audit fees. You have to look at it from the perspective of the auditors. They have a limited time to do the audit and they rely on the professional scepticism in order to define where to look. But that is not good enough when you only look at the small subset of the overall transactions. So I can tell you:

> *"Our average file size that we are dealing with is about a quarter of a million transactions. I will tell you that most audits that are done are probably looking at about maybe 100 transactions. How are you going to find anything when you are dealing with 100 out of a quarter of a million? It is just not going to happen."*

So at the end of the day I agree with Prof. Marten. It is all about technology. We have to look historically. It was always technologies

that solved the key problems. And we move the human aspect from the loop but let the human make the decisions based on the information that technology is providing.

31:51 (Marco): Absolutely. And what we have experienced with our clients in Germany who use the Ai Auditor and 5F is: They start creating new scenarios of using this technology. Not only for annual audit but also for a case like a due diligence for their processes or even like in continuous auditing manner to do consultancy work for their client. And this I think, is the beginning of total new business models and total new services which are not explored at the moment. Do you have same experiences in Canada with audit firms using Ai Auditor?

32:52 (Eli): Absolutely. If it is forensics, if it is M&A (Mergers & Acquisitions) – the usage is very significant. But furthermore, which is what we talked about earlier: The companies themselves, the enterprise, should utilise these technologies. So when they are – and this is the key – you just do not want the auditors to try to find what is wrong with the company. If the company utilises the same technology to do continuous audit – and this what we are going to. There is no question if you talk about the future companies are going to go through continuous audit. It is going to happen. And the way that the audit will this going to change is that you are going to move from number crunching and paying attention to numbers to more advisory. We are going to give guidance and look about the oppression of the company as opposed to just trying to find out what is wrong with it. So the audit world is going to change from that perspective to what I call "change a dollar for four quarters". You are going to have the same amount of money, but you are going to do a different function.

34:08 (Marco): I see. So how can we involve the client in all of this? How can we invite the client working together with the auditor by sharing the results during continuous audit or during annual audit?

34:41 (Kai): I think we can convince clients and companies if we can present the benefits of using this new technology. If clients do not see the benefits, they will not do it. So how can we present these benefits? As we talked about at the beginning of this discussion – and this is totally in line with what Eli said – I expect that the more young people with knowledge of the new technology join audit firms and the client's companies, the more they will work together in the sense as you described. For example, when we talk about continuous auditing: If an auditor is able to present the benefits of continuous auditing, clients are more likely to accept that the use of tools like the Ai Auditor has advantages. Then we will see that auditors and clients

work together. If we take the Wirecard scandal: Then I am sure that if we were to talk about such a company in a few years' time, audit firms would avoid such a company – which does not accept the use of new technologies that can identify risks on a continuous basis, not just on an annual basis. A company that does not accept a technology for identifying risk on a continuous basis? This will be a kind of red flag for the auditor in the near future. From my perspective, this will be one of the future directions we will see in a couple of years.

37:38 (Eli): The interest of the auditor and the interest of the public and the interest of the shareholders all have to be aligned. And the only way to align that right now is with the use of technology. As Prof. Marten said: If the client of my client is not willing to use the technology – that is a red flag. Because we want the auditor and the company to be aligned. Right now it is a cat-and-mouse: The auditor is doing it to try to find what is wrong. But if you look at it the auditors come to any CEO including myself and say: "These are any fraud that was in the business." I am sure that they asked the CEO of Wirecard as part of that checklist: "Did you have any fraud in the system?" And I do not think he is going to say "Yes, there is". Right? He may not even know about it. Things can happen that you do not even know in the company. It is a matter of fact I will share with you: One of the companies, BlackLine, did a survey with 1100 different CEOs and CFOs and financial stewards last year in November. And their results are striking:

> "Only 34 % of the respondents believe that the data that they are signing is correct. 66 %, two out of three, believe that they sign for data they are not sure that is correct. This is really scaring. Two out of three do not trust what they just signed."

But it is such a large. I talk about a quarter of a million of transactions. For the large companies, this is probably two hundred million or billion transactions. So how are you going to find it unless you have the technology embedded in the company itself and they utilise continuous auditing? The company itself is to do it in order to find what is going on. Because by the way it is not only a deliberate problem. It is also mistakes. The majority of problems are mistakes and errors. And this is the thing that you want to find as well.

40:19 (Marco): Definitely, yes. So I guess we are very close to the end of our interview. Before we close I would like both of you to have a look into the future. So where do you see the audit in five years from now and what would be your wish for the community of auditors, audit firms and their clients?

41:09 (Kai): That is a very good question. First, I expect auditing to remain a fascinating job in the future. There will be a great demand for auditors who are able to use new technologies in bringing credibility to the financial and non-financial information which a company will be publishing to the shareholder and to the stakeholder and to the public in total. I think that the need for this kind of credibility will not reduce but increase. Because more and more stakeholder groups will be interested in this kind of information from companies. And there is a need to have an independent person who has the knowledge and the resources to bring this credibility to this information of a company. As we discussed over the last 60 minutes it is up to the auditors to be open for using these new technology tools like the Ai Auditor of MindBridge. But I think very positively about it. When we started our discussion, you asked me how the younger people think about it. Let me tell you that there are many students who send me an e-mail and ask me: "When will the next course take place in which we discuss the case studies of MindBridge? When can we use these tools?"

> *"This is a sign for me that young people are very interested in this combination of – let me say 'traditional knowledge' – like accounting and auditing – and new technology. This is a great opportunity for the auditing profession to offer young people an exciting job for the future. I am very optimistic that in five years we will have one – let me say 'kind of auditor' – who can combine traditional knowledge with new knowledge. This is very important for the challenges we have discussed."*

44:36 (Marco): Thank you very much.

44:38 (Eli): Again I agree with Prof. Marten 100 %. But I like to refer to an expert in the field about what he thinks about the audit of the future: Dr. Klaus Schwab, who is the chairman and founder of The World Economic Forum. In his book "The Fourth Industrial Revolution" in 2017 he identified about more than 20 different trends with tipping points that are going to be shaping the world in the next decade because of the Fourth Industrial Revolution. And one of them, interesting enough, was auditing and accounting. And here he talked to different experts about what will be the tipping point. So he identified that by year 2025 he expected that 30 % of all audits will be done by AI. And that will be the tipping point if that takes place – and about over 70 % said that that is what they expect. Now if you look at the way that we are considering it: What we are saying is that auditors and the audit will continue to stay – the audit is not going anywhere. What will happen is that auditors that use AI will replace auditors that do not use AI. And it is all about the use of technology. But the size of

the audit firms is not going to shrink. They are just going to do a different functionality utilizing tools that are available on the market to make their job much more precise and accurate. And that is the difference. It does not mean that their position would disappear. On the contrary it will continue to grow but they are going to utilise tools to make their work a lot better. And in line with what Prof. Marten talked about, we have over 110 universities around the world that are teaching young accounting students with this tool. I am very appreciative that Prof. Marten is teaching students with our tool, too. So we are definitely very much in line with what Prof. Marten is saying:

> *"The world of audit is not going to disappear, it is going to grow, but we are going to be a lot more relying on technology to do an amazing job for the public, the stakeholders and the companies."*

47:27 (Marco): Thank you very much, Kai. Thank you very much, Eli. It was really a pleasure to have you here for this great discussion. Thank you for your time. Goodbye.