“Analyze and predict anything!”: TENFIFTY AB as a case study

Introduction

“So long story short, we were four guys who started Tenfifty, about 10 years ago, where we do AI, interesting AI projects that we think are fun”. This quote from the interview we made with Johannes Öhlin, co-founder and tech lead at Tenfifty AB, reflects the spirit and vision of the Gothenburg, Sweden based company. Tenfifty AB is a Swedish for-profit company; a subscription-based AI service provider with over two decades of experience. The company's name “Tenfifty” translates to “ML” in roman numerals, an abbreviation commonly used to refer to “Machine Learning”.

The mindset at Tenfifty is: AI allows the “analy[sis] and predict[ion of] anything[1]”. Tenfifty is specialized in developing customized AI solutions for any industry sector with clients ranging from private actors like Boliden, to governmental organizations like Sweco. The aim of Tenfifty is to understand its customers. In doing so, problems and challenging tasks are identified and solved through innovative problem solving, resulting in profitable improvements within the company. The development of innovative solutions for their customers is achieved through applied machine learning, artificial intelligence and web crawling. Along with the implementation of automated statistics, the value creation is based on continuous consulting and customer support through workshops and a mentoring program.

Many years of experience with their network of partnerships make Tenfifty a leading actor in AI development in Sweden. As a general-purpose technology Tenfifty is committed to making AI faster, more accessible and more efficient. Through participation in the Swedish AI initiative Tenfifty contributes to the Swedish AI ecosystem to accelerate the use of AI for the benefit of Swedish society and competitiveness.

The purpose of this report is to explore the company’s perspective and vision on AI technology, its applications, broader societal implications, its present and future, through an in-depth interview with a representative of the company and secondary research.

[1] Tenfifty. (n.d.). Home. Tenfifty. Retrieved 7 May 2024, from https://tenfifty.io/en/home/

Methods

We adopted a qualitative research approach, both in the formulation of the questions, the interview, and the analysis process. An informed consent was signed by the interviewee, who agreed, among others, to make public his statements for the purposes of this research, as well as producing an audio and transcript of the interview. Two AI software (ChatGPT and Claude Opus) were used in the research process, respecting the course's guidelines (similarly to a search engine, and for language support).

The primary source for this report is a one and a half hour interview [2]we conducted with Johannes Öhlin on May 13th at Tenfifty's offices in Gothenburg, as well as academic texts from the course. Öhlin is a key figure at Tenfifty, being one of the co-founders and currently tech lead and senior developer: a developer and entrepreneur[3]. In his own words, his "work is divided between actual programming in delivering AI projects, architecture and tech lead stuff to help other people deliver the project, and also some project management, sometimes sales support, like help when our CEO or someone is selling". Over the years, as the company grew, his focus has shifted from hands-on coding and development to more managerial tasks. Still, he relishes the opportunity to work on the most engaging aspects of Tenfifty's work, as he shared: "I get to work more with the interesting parts of it [AI development] and less with the general stuff".

Secondary sources, mainly Tenfifty's website, were used to gather background information and formulate the interview questions. Their website highlights the company's commitment to making AI more accessible, faster, and more efficient for Sweden business and society, showcasing a long and diverse experience based on a personalized, collaborative, pragmatic, and solution-driven approach, as well as their belief that "The time for your AI revolution is now. The risk is in delaying.[4]"

The interview guide consisted of 23 questions, organized into thematic areas ranging from questions aimed at understanding the operations, the purpose and vision of the company, to questions aimed at getting their perspective on AI, its present and future, benefit and risks, as

[2] Öhlin, J. (2024, May 13). *A Talk With Johannes Öhlin, Co-Founder of Tenfifty AB.* [Audio transcript].
[3] As we can see from his self-presentation on the job related social media LinkedIn: https://www.linkedin.com/in/johannesohlin/?originalSubdomain=se (accessed 10 May 2024)
[4] Tenfifty. (n.d.). Home. Tenfifty. Retrieved 7 May 2024, from https://tenfifty.io/en/home/

well as specific questions regarding their position on EU and Swedish AI regulatory ecosystem and politics, and cooperation in AI development.

About roles and group work, we were all involved in the decision-making process, firstly agreeing on a common approach, dividing roles, and then putting together our individual work. The interview was conducted by two group members, with the rest of the team providing support and taking notes. One member transcribed the interview, while everyone was involved in the report writing. Importantly, the work highly benefited from diversity of background within the group, both in terms of nationality (5 different), and educational backgrounds (Engineering, Social Sciences), also reflected by having members coming from both Chalmers and GU. This diversity led to a smooth and cooperative work process. Minor 'challenges' included language barriers, with only one group member knowing Swedish, and the interview being conducted in English, which is noone's primary language. Overall, the interview exceeded our expectations and allowed us to gain valuable insights: 1:26:55 hours of audio recording, resulting in approximately 17 pages of written information.

From a methodological point of view, one should also reflect on the interview situation itself, as it contributes to building the material that we were able to collect. The interview took place in offices of the company, i.e. a non neutral space regarding professional socialization of the interviewee, encouraging him to speak on the behalf of the company. As the interviewee is an expert of his field, and as we (the students that led the interviews) are not experts of AI development, the interview raised methodological questions often discussed in social sciences research[5]. It is possible that being two asking the questions, as well as having students from Chalmers helped reduce the potential gap between the interviewee and us.

[5] Döringer, Stephanie, "The problem-centred expert interview": Combining qualitative interviewing approaches for investigating implicit expert knowledge" (2021), *International Journal of Social Research Methodology*, p. 265-278

Analysis and Interpretation

"Problem-solving" orientation and solutionist ethics

During the interview, when discussing environmental consequences of AI, Öhlin spontaneously identified himself as a "techno-optimist". He views AI as a powerful tool with great potential to solve practical challenges and improve business efficiency. This optimism is reflected in the following statement:

> "I think technology will solve the problems. And with better AI, we will be able to come up with better solutions to small and big environmental problems."

Öhlin's discourse (and through his discourse, the company's visions) can remind us of the "solutionist ethics" identified by Olivier Nachtwey and Timo Seidl when considering the tech elites. In their words, "Solutionism refers to the idea that the use of technologies - by inventive and cunning entrepreneurs - is the royal road to fixing social problems" [6]. Öhlin's perspective shows that Tenfifty focuses on creating real, usable solutions, reinforcing the idea of AI as a positive tool for solving various challenges. Tenfifty sees technology, and especially AI, as a tool for solving problems efficiently and creating value for their clients. Öhlin emphasizes their focus on delivering impactful solutions, stating

> "We want to do fun and interesting things that we will do well, that we will **solve** for you, or where we will have a positive impact, and we will **solve the problem** in a good way."

In this interview excerpt, we can see the recurrence of terms referring to the operation of problem-solving, indicating the importance of this frame of thought in the interviewee's apprehension of its work and more generally of the role of AI in the society. Another key aspect of the solutionist ethics identified by Nachtwey and Seidl is the idea that doing business is *per se* a good thing. The interviewee made some assertions going in that direction.

> "A lot of our industry clients, they come to us with problems that are about **saving money**, but that always translates to reduce needs for energy or like non-renewable resources. So, I mean, if you want to make a process more efficient, then you will save

[6] Nachtwey, Olivier & Seidl, Timo, "The Solutionist Ethic and the Spirit of Digital Capitalism" (2020). p 1.

> money. You will save money, but it comes from saving electricity, or saving chemicals that you add to the process or something like that. So they're really **there's always a positive environmental side effect**, even if you're focusing on saving money."

This interview excerpt is really interesting as it shows the equation that the interviewee is doing between saving money, saving energy and resources, and therefore having a positive environmental side effect.

The embeddedness of AI technology in social and political contexts

Even though the interviewee's vision of AI shares traits with what can be called a "solutionist ethics", he also underlined several times the importance to take account of the human or political variable in "delivering AI solutions". This is illustrated by the assertion "there is always a political element to every project".

Tenfifty customizes their approach for each client, starting with in-depth workshops to understand their specific goals and challenges. They don't stop at project delivery; they offer ongoing support like workshops and mentorship programs to improve their clients' skills and knowledge. Joe Dumit's inquiry into the cultural values embedded in technology focuses on how societal norms and beliefs shape technological development and use. When Öhlin talks about the company's focus on delivering impactful solutions, and the challenges and various actors in doing it, this resonates with Dumit's post-structuralist exploration of how cultural values influence the way technology is viewed and applied [7]. However, implementing AI solutions isn't always straightforward. Öhlin mentions instances where clients' IT departments resist certain solutions, indicating a gap between the company's expertise and clients' agency. He states that :

> "We don't have time for this or, and then there can be some conflicts at the client's company between the business area and the IT department or one business area and other business area and so on like that, that's where there can be issues. Okay, I think then I can recall projects where we have, like, given them a solution, and then people have taken it somewhere else".

[7] Dumit, J. (2014). Writing the Implosion: Teaching the World One Thing at a Time. Cultural Anthropology, 29(2), 344–362. https://doi.org/10.14506/ca29.2.10

This reflects the complex ways in which technologies are understood and used, as Joe Dumit's idea that technologies are not simply tools that people use in straightforward ways. Instead, they are embedded in social and cultural contexts.

On AI and Tenfifty's Evolution and Future

In the interview Öhlin also discussed the rapid pace of AI development, that particularly since the advent of GenAI and ChatGPT, has created both opportunities and challenges for companies like Tenfifty.

> "Since we started this company, AI has grown a lot, mainly because of GPT. But there are the other things that influenced us as well. And, but we've also always had you talk about AI winters that occurred previously, when, after an AI bubble. People didn't like AI at all. And then there were so forth. Before we started this company. We couldn't really talk about AI sometimes, because people didn't really like it at all. And now of course, it's completely different. Everyone wants AI and AI will solve everything"

What emerges is that he too shares the highly popularized metaphor of AI springs and winters[8], or the idea that AI has experienced an evolution characterized by alternating phases of rapid new discoveries and renewed public interest (like nowadays), and phases of stagnation and disinterestedness. This is a crucial concept to highlight how new developments can trigger both regulatory and public frenzy around AI technologies, the implications of this, and how a company like Tenfifty is currently enjoying an advantageous position given its long experience in the sector and ability to adapt. Öhlin also acknowledges that software like ChatGPT will have a deep impact on their work:

> "it will affect how we do our work a lot in the coming years […] It will probably influence what kind of solutions we deliver to our customers, and probably affect how our customers do their work as well"

[8] European Commission. Joint Research Centre. (2020). AI Watch, historical evolution of artificial intelligence: Analysis of the three main paradigm shifts in AI. Publications Office. p. 3. https://data.europa.eu/doi/10.2760/801580.

In this sense, he believes that the company is, given its experience and actual composition, well-positioned, prepared to benefit from the integration of GenAI, reflecting the pragmatic mindset of both Tenfifty and his founder, in which being prepared and flexibly vis-à-vis future developments is crucial for business success:

> "It's most likely something we have in the back of our heads to keep an eye out […] When it starts to change, because we think that we are a small, agile company […] we can adapt faster than bigger companies that are maybe less flexible"

Finally, when asked about the possible and future impacts of AI and its work in society, Öhlin, as highlighted before, acknowledges the potential for significant changes, particularly in terms of job displacement:

> "If you start replacing the people doing the boring, easy work with AI, you won't get any people who have the experience and become senior. So that's going to lead to some kind of employment crisis"

At the same time, when asked to develop more, particularly in terms of environmental implications and costs of developing AI technologies, he expresses a degree of personal distance:

> "Kind of I think that there will be societal effects. That will be interesting, and probably challenging; for some I don't have a solution to this problem. I think for myself, I will be retired by that time"

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