The economic value of Customizable AI (Skitag) explained

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Spoiler. This is not about a new Large Language Model (LLM). It's completely the opposite concept. It is about a fully decentralized Customizable AI that is small, simple, overfits a lot, can only do one simple task, it has an economic value (the hypothesis), and probably the most important above all, it's yours. You own it.

To see that working, a few words about the path from "Lab to Market" of Skitag, a mobile application that implements Customizable AI. Then, a brief description of what it takes to gain an economic AI advantage. Finally, the business model (the aggregation of Customizable AI) derived from the ownership of digital assets and the technology that enables this to be possible.

The (Skitag) inception

It started back in 2016/2017. What was the problem to be solved? Back then it was difficult to find data in streaming to train and test AI Systems. So, we thought that fixing an Inertial Movement Unit (IMU) into a ski board could be a good way to collect that kind of data. At first, it was kind of a hobby. But then, we found that every skier we presented this concept to was excited about the idea of having information in real time about their carving, their speed and their efficiency while they were going downhills. It was like a WOW moment.

Though we tried many ways to get a cost efficient IMU device that fits with all the needs (e.g. reliable fixing system, waterproof, battery autonomy, etc.), after too many tries and a bunch of lost devices, we abandoned the IoT approach. The whole idea seemed to work the way we wanted, but we felt like we were missing something. The years 2021 and 2022 were an impasse period. Although we tried a few more prototypes of the IMU device, we started to think: What if the smartphone could do the IMU's job?

We executed that idea in 2023. We designed a new App that does all the job (Customizable AI systems), including labeling the data and training the ML engine. Machine Learning Operations (MLOPs) in your smartphone. You (the user) collect your own data. You process your input datasets (labeling). You train your own AI Engine. You test your ML Engine (your CARBIO). You can update your CARBIO, remove it and start back again. Your DATA. Your ASSET. Your customizable AI. All in your own device. All YOURS.

AI advantage

The user must collect the data, label the turns, understand how to do it well, train the ML engine, evaluate it, use it, and fine tune it. In terms of customer experience, there are lots of pain points. Lots of reasons to quit the App. So, why should you even try to work all that process to have your own customizable AI? Because you own it, and because there is a sense of psychological ownership tied to it. This ownership of a digital asset means that you have a right on it, but it also means that it could have a subjective value (how much you appreciate your work), and a market value (how much others appreciate your work). It could have a price. So you can trade with it.

The hypothesis is that there is some intrinsic economic value derived from your work. Some kind of AI advantage that pays the prices for all these pain points. The value will be a function of how relevant the metrics are obtained (e.g. carving biometrics), how important is the value of sharing that information among other users, and how useful could be for others to have access to one of the many Customizable AIs that will be built within the Skitag ecosystem. And finally, how well structured could be a marketplace where millions of Customizable AIs could be aggregated into a few thousands of Customizable AIs that fulfills the needs of most of the users.

Business model

Apparently, most of the new business models recently published are all (at least those that gain public attraction) derived from the implementation of Foundational AI models. This trend is commonly introduced as an evolution of the "older" narrow AI implementations where one model is trained to fulfill one and only specific task vs a General Purpose AI that could be implemented downstream to introduce some kind of

reasoning that lets them solve more complex tasks. This old vs new seems to be in conflict. A zero sum game. Nevertheless, there is room for plenty of implementations yet. Narrow AI is still useful as well as General Purpose IA (GPAI) is a great step into the implementation of AI systems. Not only because of the amazing tasks delivered by technologies such as Large Language Models (LLMs) but for the "superhuman capability" already seen in some GPAIs implementations.

Customizable AI is just another business model suitable to implement within the mobile device ecosystem. Every user can have its own digital asset. Completely decentralized. Moreover, nowadays there are lots of technology enablers that make it easy to trade with this kind of digital assets. The users may already have learned about some similar concepts like the issuing of assets that are completely digital, based in cryptographic tokens and stored in decentralized ledgers (datasets). Sharing and trading with these assets requires a secure and private ecosystem where ownership is protected by identity verification (whether it is augmented or an extended identity). The mobile ecosystem is already set for the implementation of such a Customizable AI market, and there is room for an AI advantage that pays the effort of building this kind of asset. The challenge lies in giving the user a frictionless "commercially relevant solution". It could be better metrics, information sharing, carving biometrics comparison, or the sense of ownership. The AI economic (advantage) value.

What's next

So far (June 2023) Skitag allows you to build your own AI system (your Customizable AI). Next generation of Skitag (coming soon) will allow you to share your assets with your contacts. Your turns. Your carving biometrics. Your CARBIO. Trading with your assets in a secure and trustworthy ecosystem takes a lot of effort and resources. This possible future will be available when you (the Skitag users), massively using the Skitag App (Network Effect), prove the hypothesis that all that effort to build a customizable AI asset could have a market value (price), and could make it worth the effort to trade with it. The Customizable AI advantage.

PS: A few words about **Trustworthy AI**.

Skitag AI is committed to design products that are compliant with AI Ethics. The Skitag App is designed to deal with human agency and oversight (the user owns the entire lifecycle of the AI system, is informed about the inputs and outputs of the model, and can use it or not while enjoying its favorite sport), with data governance (there is no data leakage outside the user's ecosystem), with ML explicability (to train its own AI system, the user is aware of the input, the model, and the output), and transparency (the ML

architecture that is behind Skitag is publicly available at
https://github.com/msluparelli/LSTM-SWIFTUI), among others requirements for a
trustworthy AI system. For further information, please visit https://skitag.eu/ai-ethics.html.

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