



Desai Accelerator 2023 Application Sample

The questions below are what you will find on the Desai Accelerator 2023 application. THIS IS NOT THE APPLICATION. You will submit your answers via an Airtable form we will email to you if you meet the eligibility requirements (at least one founder is a graduate of the University of Michigan - Ann Arbor, and a majority of the founders can participate in the program full-time).

The application must be completed in one session - your progress won't be saved. We strongly suggest using this document to consider and separately answer the questions, then cut and paste your responses into the form.

The deadline to submit your application is 12:00 AM, Monday, March 6, 2023. However, we will review applications on a rolling basis, so we encourage you to submit yours early. If you have any questions, please contact Desai's Managing Director Angela Kujava (amkujava@umich.edu)

Basic Information

- Contact information
- Founder resumes
- Company information (website, stage, ownership)

Founders

1. Why are you an entrepreneur?

I feel bothered when I see knowledge being preserved only amongst professionals. I felt disheartened when I witnessed literacy only being exclusive to the elite. These feelings are unbridled because, to me, all knowledge shall be accessible. There is the privatization of the so-called "professional knowledge" and barriers to obtaining even the crucial skills in one's everyday life. Hence, I am determined to democratize knowledge sharing and learning. To accomplish this, I have been fusing my expertise in the day-to-day skill of

financial investing and technical skills in data science to create curriculums that teach data-driven trading. This is the first-ever curriculum in the education market that concentrates on training learners of all ages how to trade assets using data.

I set my mind to seeing everyday life as a business. For instance, a 9 to 5 job to me is a vehicle that generates cash to build your own project. Then your project can later turn into a cash cow that helps build your net worth. I feel most fulfilled living with this mental framework, and felt the urge to democratize this philosophy of mine. That's why I incorporated this mental model into my teaching curriculums because financial trading is exactly a business in an everyday life, and understanding this is equivalent to understanding what it means to work for yourself. Becoming an entrepreneur allows me to promote both hard and soft skills on a much greater scale, particularly, inspiring learners from all backgrounds to become technically equipped and self-sustaining through harvesting knowledge.

2. What other entrepreneurial experiences does your founding team have?

As the founder of the business, I have pitched my curriculum to multiple institutions. One highlight is the "Data Science in Quantitative Finance and Risk Management" course that I pitched to the University of Chicago in the Spring of 2022. During the market research phase, I found that statistics, mathematics, and computer science are the three most popular undergraduate courses at the university and that finance is one of the most invested sectors in the Chicagoland areas. My vision then was to create a course that meets these academic and industry demands. In the planning and launching phases, I spent my time creating technical content, target marketing strategies, recruitment process, etc. before introducing this course to global learners of all disciplines. As students enroll in my course in Summer 2022, I learned how to use Microsoft's Azure DevOps Server to help manage work capacity and Canvas to perform student analytics. After the course ended, I continued to incorporate student feedback into the curriculum to refine this course and expanded marketing efforts to target minorities and underprivileged learners from around the world. The major part of the pitch lies in the negotiation of funding with the institutional board. Despite the fact that I am not affiliated with the university, I insisted that I could bring a new lens and learning culture to the classroom, and got the board to raise \$13500 to fund my course.

3. What motivated you to apply to an accelerator? To Desai specifically?

The Desai Accelerator appeals to me as a pathway to enrich my marketing knowledge, an avenue to communicate technological, artistic, and business challenges, and a community to guide me toward viable solutions to these challenges. I am driven to learn about ways to succinctly

represent my business to public audiences, craft a marketing schedule that touches the audience's eagerness to learn about my business and negotiate stable funding from investors to scale and sustain the business in the long run. I want to gain hands-on experience in executing these tasks because they can create opportunities for the business to increase its visibility through client outreach and marketing campaigns, revenue generation through turnovers of relatable products/services, and resource allocation through strategic planning cycles. I enjoy experimenting with structures that govern the operations of a business, for example, exploring how much to invest in the advertisement to acquire the expected number of clients. Because of this, I mostly appreciate Desai's program which provides a step-by-step guide for founders to set goals and sharpen their financial/business senses, which are crucial to maintaining the operations and resilience of a business.

Collaborating with teams of interns and mentors throughout Desai's program captures my attention not only because of the technical, artistic, and business advice they possess but also because of the collaborative environment which can provoke valuable ideas, especially when an idea is built upon another. I see these ideas as the intellectual and creative muscles for sustaining the charm of a business and hence would like to participate in their development. Furthermore, networking with alumni who are invested in their own startups in Desai's program also stands out to me as a form of moral support, an entrepreneurial outlet to discuss relevant values behind starting one's own business, which can help me reflect and even grow on my own values. I believe that having exposure to other visionaries can help me understand my goal through other lenses and to perceive the market from different angles. This is an especially strong motivation for me to apply to Desai's program because it fuels me with the urge and curiosity to explore other opportunities to which I can relate my values.

4. What do you hope to achieve in our program?

The first objective that I want to achieve is to increase the visibility of my business. I want to share my philosophy that knowledge shall be accessible to learners from all disciplines through the format of an online school. To do this, I would like to consult existing entrepreneurs to understand the branding phase of an online business and connect with industry experts and faculties to learn about the current demands in the education market. I also hope to work with community leaders to initiate events that address the discourse of the privatization of finance and technological knowledge as well as ways to democratize such knowledge. I plan to incorporate the learned business tactics into my startup practice and slice and dice the research findings to target the right cohort of audiences throughout the marketing phase. Moreover, I would like to leverage the University of Michigan and the national resources, namely AWS technologies and market data libraries, to my advantage when I plan my marketing campaigns.

My second objective is to learn how to build an effective, yet realistic, business proposal to obtain funding. Innovating impactful products has always been a passion of mine, and

pitching them to potential investors or ventures has been my goal. I want to be financially engaged with fundraisers to create a sustainable cash flow structure on the operations and accounting sides of the business, which are crucial for acquiring customers, hiring supporting staff, crafting advertisements, etc. Especially since my business outreach covers audiences of all races, gender, age, and financial classes from around the world, it would require adequate assets and capital to maintain or upgrade its scale. I also hope to obtain financial advice from Desai peers and staff about how to allocate revenue (e.g., reinvest in human capital for expansion), manage debts (e.g., losses caused by malfunction of the business), and recover from adverse events (e.g., digital crisis).

My third objective is to develop a high-level lens for launching, scaling, and sustaining my business. For product launching, I aim to be both the learner and leader to acquire hands-on design, user interface, and business administration skills through collaborations with interns. For business scaling, I look forward to discussing actionable methods and strategies with mentors to attain set goals (e.g., meeting target ROI, and minimizing consumer acquisition cost). I also plan to leverage networks with experts and alumni to find potential partnerships and sponsors who share a similar vision with me. As I expand into different markets, I am extremely eager to seek advice on managing the brand and competition. To sustain the business, I would like to use analytics to track customer behaviors, optimize product pricing, project quarterly revenue, and more. Access to the University of Michigan facilities and research centers can certainly help me deliver these reports. Furthermore, I cannot wait to explore the program's tips on maintaining founder wellness and time management, especially because I believe that a happy founder makes a happy business.

Problem, Solution, and Product

5. What is the problem you are solving?

Through my 7 years of experience in the financial sector, I have learned that retail and professional traders all share the same concern, that is, the problem of seeking accessible and affordable market data tools at different stages of their trading journey. For example, it is not necessary for a beginner student to spend \$1000 on a charting program while still struggling to profit from his or her trades. I also want to dismiss the saying that "financial knowledge should be kept amongst the profession", especially since it is such a crucial part of our everyday lives and because of this, prioritizes self-management more than ever. For instance, there are few to no encyclopedias that assure enough confidence for an average mother with limited financial knowledge to manage her family's account, let alone invest her family's money.

The financial field nowadays is so privatized that even if you have past training in traditional finance, accounting, or economics, despite that these skills are important, they are not enough to help you identify the warnings or opportunities in the financial market, simply because they don't reflect market realities. Even students with advanced institutional training in the academic discipline of Finance are precluded from many financial syllabi considered by the “professionals,” such as algorithmic trading and wealth dashboarding, which by nature deserve to be known by the public. These barriers make it hard for people to learn in an open-source format and even harder for less-privileged communities to acquire necessary resources. Without extrapolation, I sincerely believe that they spur inefficiency in financial or technical literacy sharing, which in turn perpetuates wealth inequality in a nation's economy.

6. What is your unique solution to the problem? What does your product do?

My unique solution to the problem is to create an online school for data science and finance, which is purposed to teach traders how to use data to help make more informed decisions in their investments and trades, specifically to leverage them to create another source of income for themselves through the financial market. The suite of products includes on-demand online courses, group coaching, and one-on-one mentorship sessions. The first two aim to teach students how to engineer their own data science tools to detect complex patterns that are not observable in the markets, which helps them gain an informational advantage over other market participants and generate consistent profits in their investing and trading. These training contain curriculum contents that are proprietary and are not available for retail. The last one directs learners to build their own products for purposes ranging from corporate reporting to resume-building, which serves as consultation to help affirm the client's technical and financial capabilities devoted to achieving their project goals.

I created this platform because there are too many educational resources online that learners don't know where to start. So then they attend many online courses, read through all sorts of articles and newsletters, subscribe to expensive software that goes beyond their expertise, and are let down the wrong path. The curriculums in my video courses, group coaching, and one-on-one mentorship sessions are designed to handhold learners step-by-step, to show them how to incorporate quantitative research into their day-to-day trading, how to optimize their asset allocations, how to apply machine learning to their trading strategies, how to profile their risks, and more. These elements are crucial to succeed in proprietary trading, yet they haven't been disclosed educationally to retail traders. The product curriculums of my online school are the first to democratize the knowledge behind them.

7. Who are your competitors (include URLs)? What makes your product and/or approach different?

My competitors are:

1) QuantInsti

https://www.quantinsti.com/?utm_source=google&utm_medium=cpc&utm_campaign=performance_max_us_ca&utm_content=&gclid=CjwKCAiAl9efBhAkEiwA4To rilA0O69jwu9PILAdsol378kxMIbgIN3X0-YzbiJHHBMN0G1s9x16zRoCONwQAvD_BwE

QuantInsti is an online education and training institute that offers courses and programs in quantitative trading, algorithmic trading, and financial technology (FinTech). The first differentiation of my courses from the QuantInsti's is that courses offered by my company do not require any prior knowledge of programming or finance, while courses on QuantInsti require pre-requisite training in these areas. The goal of my business is to make topics in my courses more accessible to learners from all backgrounds and disciplines. The second differentiation is that the structure of products for my business contains simply 3 levels of courses for each asset class with guidance to help learners choose the right course for them, while QuantInsti contains 48+ course videos grouped by 8 topical tracks without guidance as to which tracks are appropriate for learners. The goal for my products is to create an easier process to help learners, especially beginners, understand their knowledge needs and help select a plan that fulfills them. The third differentiation is that courses provided by my business help retail and professional learners obtain consistent trading profits in real life using technical intellect, while courses provided by QuantInsti are purposed to solely fill the knowledge banks of learners with litter to no real-life application. My courses are designed to help learners equip result-driven skills in investing and trading, no matter where they are and what they do.

2) Quantitative Finance Institute (<https://www.cgfinstitute.org/>)

Certificate in Quantitative Finance Institute (CQF) is a financial certification program offered by Fitch Learning, a global leader in financial education and training. The first differentiation of my program from CQF is that my program targets both retail and professional learners, while the CQF program targets only target employees who are already in the financial industry. For instance, one can be a full-time housewife while self-learning quantitative finance in my program. My program aims to democratize and improve the accessibility of financial knowledge to reach a greater scale of audience. The second differentiation is that my program trains the mindsets and psychologies on top of the technical knowledge to help retail traders succeed in earning income independently for themselves, while the CQF program only aims at training hard knowledge and getting a certificate to boost one's chance in the industry. The goal of my program is to enlighten the

path to becoming an entrepreneur, not a corporate employee. The third differentiation is that curriculum provided by my business is applicational and fluid enough that learners can innovate and implement their own trading strategies on the spot, while the syllabi provided by CQF focus heavily on theoretical/on-paper mathematics behind the strategies, hence, making it difficult for learners to execute. My business aims to condense textbook knowledge into a simple and easy workflow so that learners can quickly exercise what they've learned in real life.

3) Piranha Profits (<https://www.piranhaprofits.com/>)

Piranha Profits is an online education provider that offers courses and training programs related to trading, investing, and financial markets. The first differentiation of my courses from Piranha Profits' is that my program aims to equip students with proprietary data science skills to engineer tools that help them make investment and trading decisions, while Piranha Profits teaches discretionary/manual trading methods. My business aims to add a quantitative view to help traders gain a statistical edge in the financial market. The second differentiation of my business from Piranha Profits' is that my business includes product lines that offer both group coaching and one-on-one mentoring live with students from around the globe, while Piranha Profits only has a group coaching program. My business aims to connect with each and every one of my students and customize learning advice and opportunities for them. The third differentiation of my business from Piranha Profits' is that the knowledge that my business teaches is highly transferable to other areas so learners can apply them to their passion outside of the financial market, while knowledge obtained through Piranha Profits is limited to the financial market. My business goal is to create a space for learners to innovate and grow in any direction they want.

Discovery and Market Insights

8. What discovery and research did you do prior to creating your product or business? What new insights did you uncover? How did those insights inform your product or business?

I started with industry and market research, by investigating education platforms (competitors) that help democratize the needy "professional" knowledge in investing/trading and found that there is a plethora of resources that fulfill this need, with the majority of them being online courses. When browsing through these course curriculums, the first problem that I notice immediately is that all curriculums contain the same topics, for example, those on stock chart reading, trading indicators, position sizing, etc. I realized that there would be intense competition in this market unless I put a spin on the course content. So I combined my technical skills in data science with the existing financial investing/trading curriculums.

This leads to the second problem I spotted in my business value discovery, that is, 90% of the quantitative finance curriculum is purposed to help students get certified or get a job in the financial industry. All these businesses advertise strongly on working in quantitative roles within investment banks, hedge funds, and asset management firms, which are highly paid. I realized that my business must have a mission that stands out as more than just a job-oriented training. So I combined my fervent attitude in innovation with the financial knowledge that I want to convey to reflect my business mission. My business aims to utilize quantitative finance to inspire learners to confidently earn for themselves in the financial market, specifically through creating a portfolio vehicle that help generate regular income.

I conducted product research and discovered the third issue, which is interrelated with the prior. That is, all the quantitative finance courses that are currently in the market spend the majority of the time explaining theoretical/textbook knowledge with little practical emphasis. I went on to release a survey about learning theoretical knowledge vs practical knowledge in financial trading to my previous students at the University of Michigan and found that more than 80% of them preferred learning practical knowledge. Since then, I have required my product courses to contain at least one case study under each topic as well as a full live demo of how to develop a trading routine that suits the learners.

I probed more into the customer experience in consuming similar course contents (both in academic and industry) and identified the fourth problem, which is that all existing quantitative finance curriculums in the market require some prior knowledge in programming. This was the same type of obstacle that I faced when I enrolled in my elementary-level econometric course during my undergraduate study. I want to resolve this problem, to smoothen the accessibility and learning curve for learners of quantitative finance. Therefore, in my program, there is a wide content-based support system that helps learners to be technically equipped in financial application.

I also conducted target market research to identify potential customers for my courses, starting from the University of Chicago's undergraduate population. I found that many students have already started their own investing/trading account in the first year of their undergraduate study, especially since they self-learned some financial market skills during the COVID-19 pandemic. In addition, based on my interaction with high school students in my part-time mentorship work, I found that even middle and high schoolers have started building their own trading bots for science fairs and planning their study in quantitative finance in college. In other words, many young learners are starting to jump into programs for learning programming and finance, and because of this, I was enlightened by the

concentration and demand for such knowledge. Through this market research, I have determined a clearer group of customers who would likely be interested in my business products. This way, I am able to perform target marketing to start pooling them upon the launch.

I have looked into challenges for the online education industry and found the first key to creating a sustainable business model is to maintain student engagement and motivation. This prompted me to incorporate more interactive services like group coaching and one-to-one mentoring to connect with students on a more personal level. Not only that, I have also developed plans to constantly update my curriculums and ensure that they are delivering high-quality knowledge for learners. The second key is a responsible customer service system, one which students always feel supported when they need help. I have also created a pipeline to enhance communication and content debugging in my online school. One of the greatest challenges I found is the social perception that retail trading training is of lower quality compared to professional training. This is why my business advocates for the accessibility and democratization of quantitative finance knowledge, and creates products that promote equity and help create an inclusive learning atmosphere.

I have also researched marketing approaches for my products. Knowing that target audiences would mostly be middle school teenagers to middle-aged adults, I find using content, social media, and influencer marketing to be the most effective. Specifically, communicating the goals of my business and products through blog posts, videos, and webinars can help engage potential students. Also, having a thought leader or an influential image in my marketing campaign can help reach a wider customer base. I also discovered tools that I could not wait to learn, including Search Engine Optimization (SEO), Google Ads & Analytics, and LinkedIn Ads, which can all drive traffic to my business.

I further conducted research on the revenue and cost model of the business and learned that the market size for e-learning in the United States is estimated to be USD 6.43 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 9.9% from 2020 to 2027. I see opportunity in this market as (partly thanks to inflation), people are earning higher disposable income, have better financial literacy awareness, and have a growing interest in investing and trading. This information reminds me to track the market conditions in the upcoming years of financial education development, and because of this, I have planned out various market analytics (e.g., demographics) and metrics (e.g., ROI, customer retention in a new digital product) to report regularly throughout my business operations.

9. Who is your target customer? What are their motivations to buy your product/service?

My target is learners from 15 to 55. This includes middle schoolers, high schoolers, undergraduates, graduates, industry professionals, freelancers, and those who are self-employed. These customers come from countries all around the world at all genders, races, ethnicities, and financial classes. Learners consume my products/service either because they want to use data to help make more informed decisions in their investments and trades, or because they have some technical skills and want to leverage them to create another source of income for themselves through the financial market. In the first case, learners want to start their investing/ trading journey and have tried learning on their own but there is too much information on the internet they are often misdirected or don't know where to look. My business appeals to them as a step-by-step guide to help them trade at ease, no matter how little of capital their accounts may have. For the second case, learners might have attended some trading lessons taught by professionals but either the tools required are too expensive or the trading strategies do not match their style. My products appeal to them as guidances to realize their trading styles and to equip the intellect and skills to develop their own trading tools anytime, anywhere, however, they want. For the third case, learners made some trading profits just to give it all back in the next few trades because they had little time to do market research. My programs share time-tested systems that help me profit consistently to traders, especially those who have a 9 to 5 job and have little time to analyze the market themselves. My programs moreover share the mental models of seeing trading as a business and help learners establish and journal health trading routines tailored for each and every one of them.

10. What is your customer discovery process today? Who performs discovery? How do you analyze your data?

I am performing the customer discovery work on a high level for now, specifically through outreach to current students, social media and email analytics, and interviews. However, in the future, I plan to utilize funding to recruit marketing partners/consultants to help expand customer research or to hire professional marketers and advertisers to explore a wider customer base.

The first method of my customer discovery process is through my current connections with students. As a statistics lecturer at the University of Chicago in 2022, I have connections with my past students from my course "Data Science in Quantitative Finance and Risk Management". I have been sending out surveys to the 30+ students to gather feedback about the course contents, delivery styles, and anything that they need that is not yet incorporated into the course curriculum. For example, the majority of the survey suggests topics cover a trader's mind & psychology for my future course. I then gather valuable feedback and update my current retail

courses to include the suggested content. I followed up with students from my Statistics and Data Analytics course at the University of Michigan to survey the amount of interest that the 800+ students have in applying their skills in the area of financial trading/investing. If they are interested, I also ask about their favorite topics to learn.

In addition, I have also crowdsourced opinions from the past mentoring organizations that I worked at such as Polygence and Inspirit AI. I received 100+ student feedbacks, which is particularly valuable in helping me consolidate the delivery of my one-on-one mentorship product. I plan on leveraging the viewpoints and open interests of my student connections to create the main customer target for my video course, group coaching, and one-on-one mentorship programs. After establishing this outreach, I plan to start a referral program that offers credits and discounts to the students if they assist in passing along my business offering to their friends and families.

The second method of my customer discovery process is social media sourcing. For example, I have joined learning communities/groups on Facebook that help content creators and educators promote their courses. I plan to regularly post my notes and topical reports in these groups to appeal to more people to comment, so then I will be able to direct message them about my business. Other creators'/instructors' posts also inspire me in ways to engage with students. For example, I attempted the "flipped classroom" method in one of my mentoring sessions after seeing a post about this. There are other channels like discord and youtube where I can enjoy streaming and sharing views on numerous trading/investing topics whenever capacity allows. Furthermore, I also plan to compile an email list and send regular newsletters and promotional content to keep in touch with potential customers, obtaining data about the open rate, customer conversion rate, unsubscribe rate, and forward and share rate can substantially help me gauge the types of customer pool that my business appeals.

The third method of my customer discovery process is through interviews with faculties from the university who specializes in statistics, computer science, finance, and business/economics to obtain a high-level understanding of the marketability of my courses, coaching, and mentorship products. For example, in an interview with a statistics& finance professor, Jay Vadiveeloo, from the University of Connecticut, professor Vadiveeloo claims that "The finance industry doesn't offer courses that share such an extent of knowledge because they are way too busy building their own money-making programs. It is now a great opportunity to exploit this, to create training for retail traders while the professionals aren't capitalizing on it yet. This implies that it is a timely opportunity to break into the Financial Education market targeting retail traders. Such conversation helps validate the feasibility of my business products, and that there are indeed demands in the market. I also consulted the founders and CEOs at Polygence and InspiritAI and evaluated their outlooks from an entrepreneurial standpoint on how they acquire their learning cohorts. This includes discussion on email marketing tools, adapting to customer preferences, partnership networks, etc.

11. Tell us about any product testing you have done with customers and the feedback you received. What changes did you make based on feedback?

As a statistics lecturer at the University of Chicago, I delivered my self-designed course, “Data Science in Quantitative Finance and Risk Management”, to 30+ pre-college students during the summer of 2022. The course is conveyed in a group coaching format, where I hosted a cohort of learners through live zoom sessions. It started by teaching data structure and algorithm concepts in Python programming then progressed to applying statistical and machine learning techniques to build profitable trading strategies. Students also got a chance to deploy their trading strategies in a team-based stock market game online. This is the prototype version of my current retail course. I received feedback from the students about the practicality of the course contents, specifically, they suggested having lab sessions to learn about the live trading workflow since the topics are sliced and diced without any standard order. I adjusted my course to include live case studies at the end of each lesson to demonstrate the utility of the techniques learned. The live case study covers the administrative setups and planning works that go beyond what a university teaches. For example, I started incorporating demos that teach the students how to set up their brokerage accounts. I have introduced this real-world demo component into my retail courses and group coaching program. Another feedback given to me was to include the topics of mental models possessed by traders in my course content, specifically, my students are passionate about topics that shed light on the trading mindset and routine adopted by full-time traders. Since then, I have added workshops that guide learners to create their psychological journals to record their emotions and doubts during trades. For example, I included a lesson at the end of every course to introduce concepts in neurolinguistic programming. This refinement in my retail products has two goals, which are to first, raise self-awareness in trading actions, and second, to build a conscious discipline to follow through with trades. I will be hosting the same course again during the summer of 2023 and look forward to getting more in-depth feedback that can help me understand the need and pain points of the students.

As a research mentor at Polygence and InspiritAI, which are online educational platforms that provide mentorship for high school students in fields such as STEM and, social/physical sciences, I have guided 100+ student to complete research projects on topics related to quantitative finance. One feedback I received is about improving the productivity of students’ research, especially when a fixed weekly 10-session mentoring can add deadline pressure for student and make it less flexible for them to produce quality research. I have adjusted my mentorship program to be task-based as opposed to time-based; this means that students do not have a set timeline to finish their tasks, but rather have a set task to finish before setting time for their next mentoring session. I have tested this strategy with several of my mentees, and from their responses, it was stated that the flexible timeline gave them more space to reflect on their research and allowed for more imagination throughout the project. Another feedback is about establishing some form of check-in system, which can remind students of project objectives, recommended tasks, and progress results. I have updated my mentorship program to provide regular feedback emails/messages and optional check-in times for learners to schedule, essentially tracking the mentee's progress and offering instant guidance where

needed. I have tested this strategy with several of my mentees, and have helped all of them stay on track. However, I realized that the help of other mentors or instructors might be needed given the current limited capacity of the business.

On the one hand, I strongly believe that quantitative trading/investing is NOT only about technical skills and greatly emphasizes emotional control as well. That's why my course curriculums aim to help students master both hard knowledge and soft skills, which are prominent in putting retail trading concepts to work. On the other hand, I believe that a meaningful project is built in a meaningful space. That's why my one-on-one mentorship program helps provide a firm and flexible structure, to help them develop a need-oriented learning plan, and after that, to touch base with them to ensure project progress. These product features are implemented based on the prior feedback for improvement that I received from my test customers (learners). And of course, I have kept the attributes of my course and mentorship curriculums that received positive reviews as well. I am excited to continue absorbing the impactful feedback and to try my best to improve the product content and service quality of my business moving forward.

Monetization and Growth

12. Explain your business model – who are the stakeholders, and how does the money flow?

In my business, the stakeholders include students, instructors/mentors, content creators, website and UI developers, and digital marketers.

The first way that the money flow in this business model involves charging fees for video course access. There are typically 3 levels for each course. A level 1 course is expected to charge around the \$640 range; a level 2 course is expected to charge around the \$1280 range; a level 3 course is expected to charge around the \$1920 range. 80% of earnings from this course go to the instructors who created them, and the remaining 20% goes to advertisements for the course. For example, for a \$640 course, the video course creators will receive a total of \$512 and the remaining \$128 will be allocated to build digital campaigns, email marketing, and customer analytics tools for the video courses.

The second way of money flow is through enrollment in the group coaching program. The group coaching program accepts 6 cohorts throughout the year, specifically 1 cohort every other month. Each cohort contains up to 60 students and meets 2 hours every day from Monday to Friday over the month. Each student pays for the entirety of the 20 live lessons upfront. 40% of earnings from group coaching goes to the writer of the course, 40% of earnings goes to the instructor who delivers the course, and the remaining 20% goes to operations of the business to refine course structures, maintain chat communities/groups for students to learn collectively, manage referral programs and

benefits, and to contribute to course marketing/social media campaigns. Pricing for this program is yet to be determined.

The third way of money flow is through registrations to the one-on-one mentorship program. The mentorship program typically spans a 10-week period with 1 mentorship session held each week. Each mentorship session is priced at around \$80, for a total of around \$800 for 10 sessions. 80% of earnings from the mentorship program are used to compensate mentors, and the remaining 20% goes to the areas like mentor recruitment & training, software & technological support, and marketing outreach. For example, for member registration, \$640 is distributed to mentors as a salary and \$160 is allocated for advertising on job boards or social media, attending industry events, or partnering with schools and educational institutions for marketing purposes.

13. What's your 2023 revenue target? What are the obstacles to achieving that target?

My 2023 revenue target is \$12000 from video courses, \$8000 from the group coaching program, and \$4000 from the one-on-one mentorship program. This totals \$24000 as the annual revenue target in 2023. Components that are driving these numbers are first, the sale price of my products/services, and second, the number of customers that subscribed to each of these products/services (demand).

The first obstacle to achieving this target is price competition, forcing my products to sell at a lower price. This can be due to cases when the competitors are able to create similar products at lower costs. For example, a competing business is able to lower the price of their online courses all year round because the prices of technologies (e.g., APIs) used to deliver the course became tremendously low. This implies low switching costs for customers to switch to a different platform to learn similar subjects, and can cut the business' current revenue. During times when prices of the tools my business use to create products rise, my business will have to raise the price of the products, which can in turn drive away the demand. For example, as wages rise to keep up with inflation, my business has to pay more wages to the instructors and developers of the live courses; the price of the group coaching program will then increase accordingly to make up for the higher spending on employee/contractor wages (this can, of course, be mitigated if my brand is more established).

The second obstacle to achieving this target is the low student enrollment, meaning an excess supply of the course and mentoring products/services. This can be due to a change in preferences of the customers. For example, as more people are relying on virtual assistants or AI interfaces (e.g., ChatGPT) to help them learn data science and financial trading, they will stop subscribing to video-based online teaching programs. The changing customer preferences in the course formats can make it more challenging to adapt products based on their learning styles. Once their preferences have changed, my business' past marketing campaign about say, on-demand course videos, will no longer be as appealing, hence requiring the business to invest more money into new

market campaigns about say, robo-assisted lessons to interact with students. This can eat up parts of our revenue as we invest in such advanced technology. The content and timing of the a campaign are also important because existing customers may be sensitive to the new product/service update, which can lead to retention issues and drive away existing customers. For example, students who learn more by interacting with a real person in the one-on-one mentorship program may consider switching programs if the mentorship is now delivered by a virtual AI assistant.

14. How many paying customers do you have? How many users do you have? Are you primarily targeting revenue or user growth? Have customers stopped using it, and why?

Since the official products/services of my business are still in their final stage of development, they wouldn't be available for purchase until June 2023. However, my prototype course "Data Science in Quantitative Finance and Risk Management" has attracted 30+ paying customers in the summer of 2022. My retail course, which is very similar to this course, aims to target user growth at the early stage of the business, particularly through free lessons that introduce the importance and concept of trading as a business. This is primarily because I want to help aspiring traders get past the most challenging part of retail trading, which is to realize their technical and psychological capabilities. I want to expand the user base to reach a global scale and create a wider market outreach, so then the business can effectively target the users and potentially convert them into paying customers. Based on the survey responses of the paid customers, 100% responded that they would return to take other courses, hence I am confident for customers to continue using similar products once they are launched.

My one-on-one mentorship program will be available in May. However, my side mentorship businesses at Polygence and InspiritAI have attracted 100+ paying customers since the summer of 2022. The one-on-one mentorship program is very similar to the mentorship format I provided at Polygence and InspiritAI, and aims to target user growth, particularly through free trial mentoring sessions to help users brainstorm project ideas that suit their personality. This is primarily because I want to help high school to professional learners design impactful projects and research outputs. Like my course products, I want to increase my consultancy footprint across the international education market so that I can build networks with mentees from all disciplines around the world and in turn improve my business services to become more tailored to individual needs. Based on the survey responses of the paid customers, 100% responded that they would return to see consultancy with me, hence I am confident for customers to continue using this service once it is launched.

15. How do you plan to fund your company (e.g. venture capital, bootstrapping, grants, etc.)?

I plan to bootstrap my company with a \$10000 capital in the starting phase of the business. Specifically, I have allocated \$1000 to create my company website; this includes domain name registration, web hosting, web/brand/digital product design, and

content/blog creation. I plan to allocate around \$6400 to hire course creators and instructors to deliver my video course and online group coaching programs; this includes costs for writing and delivering at least one course in either format. I also plan to allocate around \$2600 to recruit mentors or consultants for the one-on-one mentorship program; hires are expected to provide project/research advice to learners for a total of 10 hours. In addition to bootstrapping, I also plan to acquire monetary capital through the \$25000 funding by the Desai Accelerator if suited. Out of the \$25000, \$10000 will be spent to create initial marketing campaigns, which include Search Engine Optimization (SEO), digital arts & designs, partnering with social media influencers and sponsors, developing customer email acquisition systems, etc. The other \$10000 will be spent on staffing, essentially used to expand the administrative and instructional capacities of the business. The remaining \$5000 will be reserved for administrative fees like legal and accounting procedures through professional services.

As the business enters the customer-funded stage, I plan to use the revenue generated through the sales of my courses and mentorships to fund business operations and growth. The priority here is to cover the operating expenses with the revenue. Once the revenue exceeds the total cost, the business will start reinvesting its profits into wider areas of marketing and research, as well as developing new products and services; a service lined up in the bucket list is an application that provides research insights to help traders assess and analyze their trades (e.g., pre-trade and post-trade analyses). These products/services will be subscription-based and can generate an additional stream of cashflow to support the business expenses in the long run. As profits start to advance, I plan to further reinvest a majority of it to improve the technological interface of the online learning platform, for example, creating a matching engine to automatically match knowledge traders with their mentees for the one-on-one mentorship program.

At this stage, the business could also partner with industry and academic institutions to access funding sources such as grants or venture capital to support product development and marketing efforts. Another option is to obtain funds through crowdfunding/fundraising sources, for example, through platforms like Kickstarter, which can help communicate my idea, mission, and goals to potential investors. I am also excited to build investor connections through the Desai Accelerator program in November and to seek funding from supporters who shares the same vision. The funds raised through these pipelines will be used in the areas mentioned above - to staff instructional designers, content creators, and marketers, to invest in the website's infrastructure and technology, and to expand my business' product/service lines.

Company Goals

16. What is the next major milestone for your company? How long will it take to reach it? How much capital do you need?

The next major milestone for my company is to make back the \$10000 capital I bootstrapped to fund the business startup. It requires the business to convert paying customers to collect revenue. This milestone can confirm that there is indeed a market for the courses and programs that my business provides, and implies the capacity for growth. It will take approximately 1 year to achieve this milestone based on the targetted turnover of \$24000 for the year 2023. I have already had the initial capital of \$10000 deposited in the business. So to achieve this milestone, I need at least \$25000 more to fund administrative and education team hires, marketing campaigns, and legal activities throughout business operations. This way, more customers can be reached as our revenue sustains a fast enough growth rate over the next year to achieve this milestone.

17. What metrics are you currently tracking? How do those data inform your decisions?

The first metric that my business tracks are website traffic, which tracks the number of users who visits my business website via tools like Google Analytics. Trending this figure over time shows how the user base evolves as my business grows. For example, if website traffic declines consistently for a few months in a row, this raises a concern about the business strategies for user outreach, so I can re-evaluate the target audience and marketing content that drives this motion.

The second metric is the Click-through rate (CTR), which measures the number of clicks on my business' ads or other links that lead to the business' website. Trending this figure over time measures the effectiveness of the online advertising campaigns that introduce users and potential customers to my business, be it through digital, email, or social media platforms. For example, if the CTR is lower this year than the last, this means that my business' is less successful in its marketing campaigns, and I have to make adjustments to adapt to audience tastes.

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The first two metrics cover user acquisition by measuring new users who enter or at least know about our business. The third metric is the conversion rate, which is the proportion

of website visitors/users who becomes paying customer for my products/services. This metric helps me evaluate the effectiveness of the marketing campaigns in driving people's desire to learn quantitative finance through my website. For example, a consistently rising conversion rate over the months indicates that more learners are willing to purchase or subscribe to my online courses or mentorship programs, which helps me realize the market desire for my business' product lines.

The fourth metric is Cost Per Acquisition (CPA), which measures the cost of acquiring one customer or converting a user into a customer, such that they start signing up for my products/services. This metric helps my business estimate how much spending it needs in order to attract paying customers for my online courses or mentorship programs. For example, a consistently rising CPA over the months indicates that it costs more to gain a new customer via the existing marketing and advertising, which may be concerning because it could eat into the profits of the business. In this case, the marketing budget needs to be refined in order to acquire the most customers with the lowest cost possible.

The fifth metric is the customer retention rate, which measures the proportion of customers who continue to subscribe to the products/services over time. This metric helps track customer loyalty as they keep returning to my online offerings. For example, a high retention rate implies that my online courses or mentorship programs are valuable and effective and that the platform is providing a good user experience. Since it is generally more cost-effective to retain existing customers than to acquire new ones, as my business grows, the goal is to maintain a steady retention rate by offering discounts and rewards to loyal customers.

The sixth metric is the course/program completion rate, which measures the proportion of users who complete a course or program they have enrolled in. This metric tracks how engaged customers are with the course contents and are finding value in the programs. For example, a low completion rate over some period may suggest issues with the course design or content that is not engaging enough for the learners and may lower the business' chance to retain existing customers. In this case, my business will have to take action to improve the quality of my products/services for the sake of sustaining markets in a long run.

The seventh metric is the churn rate, which measures the proportion of customers who cancel their enrollment or stop using my products/services. This metric helps identify courses and programs for improvement in order to retain more learners and reduce the cost of acquiring new ones. For example, a high churn rate can indicate issues with the course content, instructor, learning platform, or support services, and eventually can take

a toll on the business' growth. I plan to use this metric to alert any learning experience issues on my platform.

The eighth metric is customer satisfaction, which measures how satisfied customers are with my products/services. This metric is tracked by monitoring feedback and reviews from learners to gauge satisfaction levels and identify areas for improvement. For example, if my course's average score is lower this year compared to last year, I would have to refer to the feedback this year to refine the course (e.g., shorten video length). I will use this metric as an indicator to guide product performance over time.

The ninth metric is referral rate, which measures the proportion of existing users who refer my products/services to others new users. This metric is a form of word-of-mouth marketing that indicates customer loyalty and engagement. For example, a high referral rate suggests that my business is delivering quality courses and programs that meet the needs of its target audience. I plan to look at shares, likes, and comments of my business on social media to ensure that customers are actively getting value from my products and that there is continuously more user base to explore.

The tenth metric is the business' net profit margin. Trending this measure over time can suggest the earning power and profitability of my business. For example, if the business' net profit margin rises consistently over the past, say 3 years, this implies that the business is converting more profit for every dollar of revenue it receives and that the company may be able to sustain its scale by either cutting cost or increasing product prices. I would also compare my NPM with the industry benchmark, which currently falls in the 5% to 20% range. There are other financial metrics related to the business fundamentals that I would look at alongside the NPM to decide on the action courses; for example, I want to see the net profit, revenues, and operating cash flows all trending upward to ensure that my business's earning power is growing; I want to see a positive Return on Investment (ROI) to confirm that my business' revenue is able to catch up with the investment cost. I would look at the current ratio and long-term debt to earnings ratio (LTDER), and ensure that they stay at low levels (< 1 for the current ratio and < 3 for LTDER) so that debts and liabilities are well managed. There are other financial metrics like Return on Equity (ROE) and Gross Profit Margins that help gauge the effectiveness of earnings for my company.

18. What is the best possible outcome for this company?

The best possible outcome for my company is for it to be recognized as a brand name. This means that whenever topics in learning quantitative financial trading come up, the name

Aries Profits comes up as well. Just like big brand companies like Nike for sneakers and McDonalds for fast food, I want my courses and coaching/mentorship programs to become trademark products in the financial education domain. It is important for the company to maintain a strong brand name because it helps create a positive image and perception of the company in the minds of stakeholders, which can lead to increased sales, customer loyalty, and community engagement. It helps to differentiate my company from its competitors, build trust and credibility with customers, and attract and retain quality talent. It also helps provide the company with a competitive advantage and increase the company's value in the market. Overall, having a brand name makes the company more durable by providing a wide economic moat. This is crucial to helping the company cope with operation problems during challenging economic times. For example, during times of high inflation, while competitors raise product prices at the cost of their sales, a brand name business can raise product prices with little to no cost of their sales because of the trust and credibility it built with customers. Moreover, at such a dominant scale in the financial education market, my business can have the flexibility to allocate its resources to not only fulfill the goal of accessibility and affordability in financial knowledge but also contribute to other areas like innovating educational technologies.