

Agile for Social Good: How I built a Forbes Under 30 Video Game Startup

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This experience report covers my journey as a successful Forbes 30 Under 30 Video game startup founder. It specifically documents the challenges my teams and I faced to start and run 'Skyless Game Studios', an innovative technology startup built around social impact and how we were able to achieve quantifiable success by practically applying Agile values, principles, and frameworks with the guidance of our transformation partner Agile Brains Consulting. The primary goal of this report is to provide our audience with a roadmap on how to embrace Agility in their own entrepreneurial journey at a startup venture or as a leader in any company striving for a "lean-startup" like organizational culture.

1. INTRODUCTION

We live in a world today that is overflowing with buzzwords especially in the field of technology. From 'Innovation' and 'Disruption' to 'Lean Startups' and 'Scaling Agility' there are lots of trends, frameworks, training materials and coaching guidelines.

In this experience report, our goal is to try and demystify some of these buzzwords and share our journey from understanding these theoretical concepts and principles to applying the values and implementing them into actionable results. We will share the story of how my partners, Oleksandr Levtchenko and Chris Bennett, and I went from being three college students with an idea and no capital to a highly successful bootstrapped startup using video games as a vehicle for quantifiable social impact. We will discuss the ups and downs, the various challenges and how Abrar Hashmi, President of Agile Brains Consulting helped guide and coach us to navigate through this journey by truly embracing Agile Values and the associated tools, techniques, and processes.

We are going to share our failures, our success stories and our learnings to provide to YOU, our reader with a roadmap of how we created a successful socially conscious startup that can potentially make a difference in this materially driven world.

2. BACKGROUND

My name is Arad Malhotra and I am the Co-Founder and Chief Technology Officer of [Skyless Game Studios](#) [Sky], a multi-award-winning startup known for our innovative use of immersive video games to amplify awareness around social causes and help non-profits, governments and corporations to deliver their desired learning objectives in a fun, effective and interesting package.

I was born in New Delhi, India, educated in Dubai, United Arab Emirates and immigrated to Philadelphia, United States in 2008 with the goal of pursuing my undergraduate degree in Computer Science at Drexel University. Like most middle-class foreign students, my dream was to complete my education and land a lucrative job at major video game company like Microsoft Xbox or a large technology company like Google or Amazon. My destiny however, had different plans.

While I was attending university, I had the opportunity to intern at Independence Blue Cross and Siemens (in their Pennsylvania, New Jersey, and Munich offices respectively). This was my first exposure to working on Agile teams as a Software Developer and Systems Architect. While these internships were great and I learnt a lot about the Agile Software Delivery Lifecycle, I also quickly learnt about what I didn't want to do as a career—work as another cog in the wheel of a large corporation.

When I returned from Germany in 2012 after completing my last internship with Siemens, I had the privilege of meeting my co-founders Chris and Oleksandr, two ambitious young students with entrepreneurial goals, complementary skillsets in finance and business marketing and a strong passion for technology. We became good friends, started to experiment with business ideas and spent all our time outside of academics focused on learning about entrepreneurship through books, videos, events and engaging conversations with our professors.

Initially, we used the [Stanford D.School Design Thinking](#) methodology [Stan] and a [Business Model Canvas](#) [Strat] to identify problems and some 'cool' ideas that we thought were valuable. We then incorporated our

first mobile application company together called 'Hyperion Code'. We conducted user research, engaged many people in our network and I finally began coding our first app, while my partners focused on building the executive business plan, financial pro-forma, and value proposition. Things started off well and we even managed to secure a free co-working office space courtesy of Drexel University's [Baiada Incubator](#) [Drex] program.

We started gaining momentum and iterating on the app, but this traction was short-lived. After four months of hard work, collaboration and putting together the all foundations, we faced our first major challenge: one of the largest software companies in the world kicked off a project developing an almost exact competitor to our product with a business model that would distribute this for FREE! We were shocked, disheartened, and demoralized, but little did we know, this was the biggest blessing in disguise and just the start of our journey.

3. THE SKYLESS JOURNEY

3.1 The Pivot

Following our emotional rollercoaster, we learned the value of staying objective and started to understand what entrepreneurship truly meant. While we all knew the statistic of 90% of all new startups ending in failure [Bry], it definitely hurt to become a part of this statistic. However, this failure taught us a great lesson—**the value of retrospection and power of the pivot**. The three of us went back to the drawing board and spent days on the whiteboard of our basement co-working office to make sense of what went wrong and how we should proceed. There were many small learnings but the root cause of our failure was that while we were all passionate about creating a technology business, we really did not care much about the problem that we were trying to solve or the content of the solution we were building. This allowed us to fail forward and set us into brainstorming mode. It was imperative for us to figure out what really was our common vision and mission. After mind-mapping for hours, we finally had our 'AHA' moment. We realized two things that the three of us really cared about – the creativity of video games and our love for philanthropy. Voila, we had a breakthrough and married the two ideas into our now successful Pivot—a 'Philanthropic Game Design' studio to empower social causes without any limits '**Skyless Game Studios**'.



Figure 1: Skyless Game Studios founders winning the Drexel Baiada Institute incubator competition 2013 and office space

3.2 Ideation

Now that we had a new exciting name and a company vision that we were all passionate about, the next step was to find a keystone product idea that would create awareness around a major global problem. We created a physical 'idea dashboard' in our office where we would add sticky notes and a google document for when we were not in office. We each added many causes that we thought were valuable to tackle including childhood hunger, women empowerment, cognitive disabilities, learning disorders etc. and then discussed the pros and cons of creating solutions for each. We went through a lot of dialogue and discussion and then decided to use dot voting to pick out the idea that we thought had the most impact—Terrorism (specifically the psychology and circumstances that lead people to violent extremism with the intention of helping breakdown cultural and / or religious stereotypes around the topic). The next step was to validate this idea and get a Subject Matter Expert (SME) who had a deep understanding of this topic. We reached out to several academics, researchers,

and law enforcement professionals with the intention to find an advisor and gain as much knowledge about the subject as we could. We also spent hours reading research papers, books and watching videos / documentaries about the topic as well potential video game models that could elegantly encapsulate such a sensitive topic. We got some great insights through our conversations and mostly positive feedback on our idea, but we were still struggling to find someone who would invest their time as an SME without any monetary compensation. Then we finally experienced the part of entrepreneurship that unfortunately can't be taught or bought—a **sprinkle of luck**. We pitched the idea to my former professor, the head of the game design program at Drexel. He informed us that he gets pitched thousands of ideas a month, but he really liked our idea and just happened to hear a very aligned idea just a day before our conversation. He promptly went on to introduce us to two gentlemen who happened to be the top anti-corruption experts in the world—Jack Smith [GWU] and Tom Lasich [Basel]. We had a great first meeting and discussed how corruption was the root cause for terrorism and terrorist financing and decided to collaborate on a game that helps law enforcers across the world effectively investigate cases of corruption, money laundering and terrorist financing. We were relieved and happy to have our first concrete product idea—[Follow the Money](#) [Tak].

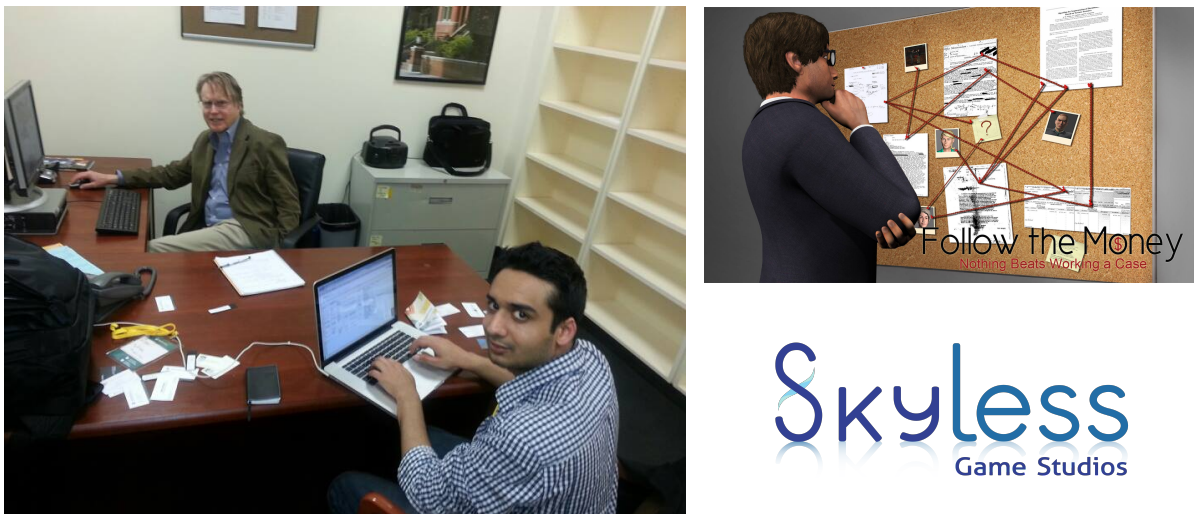


Figure 2: Skyless Co-Founder Arad Malhotra with Prof. Jack Smith, Follow The Money concept screenshot, Skyless Game Studios LLC logo

3.3 Building our army

With Jack and Tom's subject matter input and our creative research, we put together the first iteration of our Game Design Document (GDD—the industry equivalent of a Business Requirements Document). This document contained storyboards, level design, wireframes, functional requirements, and non-functional requirements. At this point we did not have structured user stories, but we did have a target Minimum Viable Product (MVP) in mind that would showcase 1/3rd of the simulated anti-corruption case. We spent significant time learning about our target audience, previously successful training content and inspiring stories of how Jack and Tom oversaw \$6 billion dollars in Asset Recovery for the U.S Government through their illustrious careers. Together we had an engaging story and a good plan, but we lacked the most essential part to our puzzle – a team to help build out our vision. We started putting together documents for fundraising through investors and grants but knew that securing the same would be a long, arduous process especially because of the novelty of this training method and infancy of the 'serious games' industry in general. Unlike the app company, where I was the sole coder, building a video game required multiple disciplines beyond software development including 2D art, 3D modelling, animation, sound engineering and game testing. **We had to think outside the box to be able to find a reliable team to kick things off without any preliminary budget.** This 'out of the box' thinking led us inward! We realized that we had a great opportunity to leverage Drexel's CO-OP (6-month internship) system to lay the foundations for our game. We quickly worked out the logistics of how to become CO-OP employers and started posting jobs for 8 cross-functional positions. Considering the average CO-OP pay for most disciplines and our lack of previous track record, the department handling CO-OPs for Drexel warned us not to expect many resumes if any at all. We took our chances, articulated our vision and out of nowhere we had over 55 resumes in our first round posting for the 8 positions! As we vetted the resumes and started the interviewing process, we were pleasantly surprised to have candidates who were not just

extremely talented but were so enthusiastic about our vision for social good, that they were willing to turn down highly paid offers to come join us in our journey. After 3 rounds of rigorous interviews for each candidate, we picked our dream team and got straight to the grind.

3.4 Forming, Storming, Norming, Performing and...Growth Pains



Figure 3: Skyless Game Studios first team of Drexel CO-OPS

Our talented team kicked off development with great enthusiasm and we initially started managing our work in an ad-hoc fashion without any defined process. We initially did not have any structured sprints or cadences and our deliverables were based on Jack and Tom's asynchronous feedback and availability. Since the team was small, it was relatively easy to help coordinate the work through a simple shared server and need-based meetings for design, development, reviews and client demos. The environment was fun, our conversations were transparent, our culture was creative and my partners and I practiced servant leadership by providing our team with anything that they needed to do their work successfully (from new computer screens and digital drawing pads to software subscriptions and technical guides to a coffee machine and more comfortable chairs). The team members worked hard and built good relationships, but these were soon challenged when we had our 3rd demo about 5 months into the production cycle. While the first 2 demos (focused on isolated functionality like suspect interviewing mechanics and surveillance techniques) were promising and got good reviews and feedback from Jack and Tom, the 3rd demo was quite a disaster. Jack and Tom felt that we had started going in the wrong direction in terms of gameplay, were unhappy with the quality of the graphics and animations and were concerned about the quality of the integrated experience for the end users (law enforcers who would attend the training). We carefully recorded their feedback, had a detailed conversation to understand our misalignments and re-assured them that our team would re-align to overcome the concerns. We realized that while our individual modules worked well technically, we needed a stronger storyline and user focused UI / UX design to overcome the major misalignments. When we assessed the feedback with the team however, we had our first experience of finger-pointing, unhealthy conflict, and lowered team morale. Based on my understanding of the Bruce Tuckman model [Stein] for team maturity, we were surely 'Storming'. This was a major hiccup and as I personally introspected, I realized that the reason for this situation was the lack of a process that had disciplined cadences and shorter communication loops to avoid large catastrophic failures. **We needed to learn how to fail fast.**

In order to get the team 'Norming', I knew that the first thing I needed to do was to get the team out of conflict mode. This led to our first official retrospective. My partners and I invited the team members for beer, pizza, and ice cream, re-established our common goals, individually listened to and addressed each member's challenges and then facilitated the creation of our first team Working Agreement. We wrapped up the meeting

discussing the need for a process to overcome our communication gaps and established an action plan to implement SCRUM moving forward.

Within the span of 2 weeks, we established our Skyless Games SCRUM guide, conducted a one-day training session for our team members, implemented a Kanban board to identify bottlenecks / lean waste, and set our meeting cadences. By the next 2 weeks, we were up and running with stronger communication and visibly higher quality product improvements especially owing to our daily stand-up sessions. We had a wonderful bonding moment during this phase. Our lead designer had a physical disability that made it difficult for him to 'stand-up' during the daily scrum. While the team working agreement explicitly mentioned that all members would 'stand-up' they proposed that we made an exception for him. However, he refused to accept the exception insisted that he would stand-up with the rest of the team even if the 15 minutes were a bit uncomfortable. This was a truly inspirational moment for the team and a proud moment for us as founders.



Figure 4: Skyless Game Studios teams growing and in-action working on Follow the Money

As team members approached the end of their 6-month CO-OP contracts with us, we had some challenges with handover procedures and had a short 'Adjourning' phase. However, because our team enjoyed working with us so much, most members decided to extend their contracts with us part-time as we started hiring for the next phase. This was our first phase of growth. With excellent word of mouth, a continuously improving product and increasingly positive feedback on our demos, we soon grew our initial team of 8 to 3 teams of over 25 members within the span of 1 year and started gaining traction through winning competitions, demoing at local, national and international events (which gave us an opportunity to get widespread feedback) and making a mark in many various media publications (which helped us build credibility). My founders and I started to shift our focus on business development and growing our brand while coaching our lead designer and lead developer to expand hiring and lead the day-to-day project management efforts. While the traction was great and we started leverage tools such as Agilefant, google sheets and shared version control to better manage our teams, we started to face growing pains. As we demoed the latest, more robust version of 'Follow the Money' and started to gain some fame, we started getting a lot of incoming proposals from clients who wanted us to apply video games to their social causes. We started working on simultaneous projects for helping children with Autism ([Assemble It](#) [Hunt]), empowering health education in developing nations ([Life Leap](#) [Sky2]) and helping governments be more transparent ([City Hall](#) [Baker]) which helped us generate revenues but make

cross-team collaboration increasingly difficult especially given the diversity of architecture, gameplay mechanics and technical expertise required for these projects.

Scrum worked well within teams, but as we grew past 40 people we knew that our rate of growth would not be sustainable without re-evaluating and enhancing our processes and best practices especially because it became difficult to address impediments and dependencies without a more robust system. This is when we decided to approach [Agile Brains Consulting](#) [ABC], a niche process management firm with a relatively new, but stellar track record in helping startups and large Fortune 100 companies in their Agile transformation journeys. We interacted directly with Abrar Hashmi, the President and Chief Evangelist of Agile Brains Consulting, who conducted a 1-week assessment of our culture, agile practices, processes and tools and then laid out for us a customized coaching roadmap that would allow us to scale at our desired rate. Through several conversations with us and our teams and observing our meetings over a 3 month micro-consulting engagement, Agile Brains Consulting helped us to formulate an inclusive plan, implement the SCRUM of SCRUMS framework, train our team members on **prioritization, estimation, facilitation techniques** and architect JIRA to accommodate our project management needs. They then spent another month with us to educate us on organizing our products into Programs and Portfolios that were aligned with our company vision and helped my partners and me implement a comprehensive structure using value stream mapping, a lean portfolio canvas and the tool JIRA Portfolio (now known as Jira Advanced Roadmaps) so we no longer needed to micro-manage our teams. They also helped train and coach our lead designers, lead architects, product owners and scrum masters to better coordinate their respective programs and become self-organizing servant leaders. With our processes in place, a few more months of practice and our monthly consultations with Abrar, it was only a matter of time before we started to see our growth scale rapidly and our achievements increase based on our company's KPIs including but not limited to customer / employee satisfaction, financial ROI, social impact per dollar spent and brand awareness.

3.5 Results

With the help of our high performing team members, our brilliant SMEs, our highly immersed clients and process guidance from our partner Agile Brains Consulting, we have been able to turn Skyless Game Studios from a concept to a highly successful lean startup in the EdTech / Serious Games industry with a large office in Philadelphia. As of today, we have won multiple national and international awards (including Forbes 30 under 30), been recognized for our social impact efforts, have hired over 70+ diverse team members and are a go-to choice for any organization looking to leverage video games, Augmented Reality / Virtual reality for creating social impact or training people about a specific skillset. While we are proud of the accolades we have received for our company, we are prouder that we have been able help our clients achieve success in their social impact goals. Together with their help, we have helped numerous families engage in peer-supported therapy for their children with Autism, created an interactive way to empower cultural exchange between Middle Eastern and American college students, helped governments leverage open data to better budget their cities through citizen engagement and leveraged a casual, fun mobile game to help raise both awareness and funds to support health education and vaccinations in rural India amongst other areas of success.

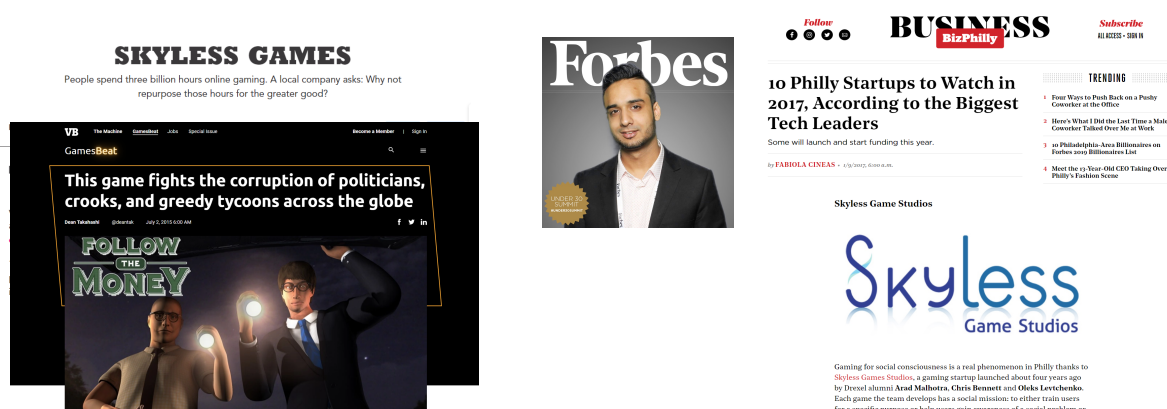


Figure 5: Skyless Game Studios awards, media recognition and traction

Embracing agility over the years has helped us so much, that we have decided to pay-it forward by creating a joint venture with Agile Brains Consulting to soon launch a series of Agile Video Games that helps organizations of all scales train their employees and experience the benefits of enterprise agility with a special focus on doing so with remote/distributed teams in a post-pandemic world.



Figure 6: The LEARN platform: Skyless Game Studios and Agile Brains Consulting joint venture video game for the future of immersive Agile training

4. WHAT WE LEARNED

We have learnt a lot through the various phases of our Skyless Games experience and are still constantly overcoming new challenges as we face rapidly changing environmental factors, human behaviors, and evolving competition. These are some of our key learnings:

- **The value of retrospection and power of the pivot:** Having frequent, honest, and collaborative retrospectives have really allowed us to improve continuously throughout the journey. In addition to the incremental process /product improvements, our decision to pivot our entire business idea early on from an app company to a video game company was intimidating but extremely consequential. If we had not applied the retrospective process or had decided to blindly pursue our original idea without evaluating online feedback and market circumstances, we would have most likely failed as company with no sustainable path to revenues or investment. We learnt that timing is everything and pivoting at the right time can be very positive and powerful even if it might initially seem like simply cutting your losses.
- **A sprinkle of luck:** Metrics are great, processes are important, and people are the most essential part of any successful enterprise, whether that is a small business, a technology startup or even a giant conglomerate. However, there are elements that even the smartest Artificial Intelligence programs cannot accurately predict and there is no fool-proof formula for success. It is here, that we must acknowledge the role of a 'sprinkle of luck' that can differentiate a successful product / company from one that fails. In our journey, we were lucky to find our SME's for Follow the Money when we did, but it's important to state that luck can only survive and thrive in an environment that is strongly grounded in hard work, persistence and tireless perseverance.

- **Learning how to fail fast:** Human beings make mistakes and the only path to sustainable success is to navigate failure by learning from these mistakes. Not failing at all while trying to achieve any goal is impossible, whether that is at the personal, team or organizational level. Not only did we learn to embrace and accept this fact as a part of our culture, we learnt that Agile ceremonies really helped us to formally record, discuss and analyze these 'failures' quickly and most importantly use our learnings to adapt as well as amplify this knowledge sharing to avoid big, catastrophic mistakes. The personal blame game must be avoided at all costs and we should always view 'failing' as the learning opportunities for growth.
- **Consulting and Transformation Partner:** Thanks to the coaching from Agile Brains Consulting, we realized that while having a strong culture, a clear vision, immersed clients, and a talented team are fundamental to organizational success, they are not the only factors. To align these factors, it is quintessential to promote consistent practices, knowledge of effective communication / facilitation techniques and a disciplined yet flexible way of cross-functional collaboration on methods for prioritization, estimation, and value driven delivery. Positivity, empowerment, and growth mindsets are phenomenal but creating a structure with the appropriate roles, cadences and training are equally important especially while scaling from a small team to a growth startup and eventually into an enterprise.

5. ACKNOWLEDGEMENTS

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