concourse
end-to-end group formation

concourse team

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Executive Summary

Concourse is a social EdTech platform that enables students to seamlessly search for teammates and form groups for classes, as well as learn about their classmates in the process. Currently, no single solution exists for students to search for groups in a high-quality, user-friendly website. The Concourse ecosystem can entirely house the beginning-to-end process needed to meet teammates, communicate, and formalize groups. Through the implementation of Concourse as a dynamic social platform, the team expects to witness 28,000+ monthly active users in the initial target market segment. Using an annual subscription-based with fixed fee implementation pricing model, Concourse is expected to generate upwards of $2.4mm in revenue.

Value Proposition

Concourse's integrated end-to-end ecosystem eliminates a multitude of frictions in the process of creating teams. These frictions include the chaos of self-coordinated multi-platform communication, opacity of group availability, and mismatch of skills and personalities. Concourse eliminates these challenges through charming profiles, organized user requests, built-in chat capabilities, group status visibility, and instructor oversight. The value proposition of Concourse aims to terminate such obstacles for the particular customer segment of university students. Concourse distinguishes itself from other major competitors by offering a seamless web-based platform accessible by students of all backgrounds and abilities. With a goal of bringing together a diverse set of students to collaborate on multidisciplinary courses, Concourse is the logical next step for innovation in education technology.

Stakeholders

Concourse is largely and primarily focused on benefitting the larger community at the University of Pennsylvania, with goals in mind to reach higher education institutions beyond Penn. The set of stakeholders include college undergraduate students, instructors, administrators, and universities. Students are the critical stakeholders and are the most invested in the success of Concourse. Gathering surveys from students and tailoring Concourse toward their needs will impact the app's development and innovation the most. Their input also influences the likelihood

of their home institutions to continue using Concourse services, along with recommending the platform to others and thus growing Concourse's market. Additionally, the Concourse team is an important stakeholder because the team draws from personal experiences, connections, and passions to develop this app. The team plans to work in a creative and collaborative workplace that reflects the business's core values and spirit. Teammates will have access to the latest tools and human resources alongside a sprint-based development ecosystem that will foster the constant growth of the web application. As the app evolves, Concourse will expand the features necessary to expand toward university graduate student programs, as well as primary and secondary educational institutions.

Market Opportunity

Concourse plans to address the efficiency and quality of team formation. To the point of efficiency, the amount of time that people currently spend on various platforms actively looking for potential teammates is bottlenecked by finding available people, longer than expected response times, dynamic group changes in real time, etc. The period for people to finalize teams averages 1-3 days, with another fifth of the population surveyed needing more than half a week. By displaying personality and skill-based profiles on Concourse alongside built-in chat and request functionality, Concourse can completely host and streamline each step. To the point of quality, teams are presently not formed to the utmost balance or diversity. They may be offset by tendencies to work with friends or existing relationships. Competing platforms feel impersonal, fragmented, and highly self-motivated. Concourse student profiles are a mix of personality, skillset, and defining characteristics that paint a more holistic picture of each person.

The Concourse team also noticed that many students, particularly freshmen, face greater difficulty in finding teammates. This process is particularly hard because they have not yet built their social networks, and they are still in the process of learning about their classmates. This is likely reflected in graduate student populations. With Concourse, communication is streamlined and uncomfortable confrontations are avoided. By onboarding freshmen first, they will be more likely to continue using Concourse throughout college. Concourse is also applicable throughout each semester, not just concentrated at the beginning, due to the dynamic nature of classes and teams recommended by the professors. Even when teams are formed at the beginning, there is

not a centralized location to learn about different classmates. With Concourse, on the other hand, users are able to find complete profiles of everyone in each of their classes.

The Concourse team observed a case study process of finding teammates for computer science classes, specifically CIS 380 Operating Systems. An important aspect is finding partners and groups throughout the semester to complete homework assignments and the final project. Each homework has different people and group sizes, and each member must contribute in order to complete tasks on time. If Concourse is implemented, teams will be more evenly distributed and balanced with regards to development skills. A similar case is found in Wharton classes. Case study oriented courses with intensive modeling or analysis require team formation, and the overall performance of the team has an enormous impact on the team's grade and performance. With Concourse, students can form successful teams and minimize worries from the beginning. People can filter on computer science and business fundamentals respectively to assemble groups.

Size and Growth of Market Segment

According to data from the National Center for Education Statistics (NCES)[1], there are 5,900+ postsecondary Title IV institutions across the United States, which include public, private nonprofit, and proprietary schools. These range from niche trade schools to Ivy League research institutions. The number of formal and informal educational institutions will only increase, which is where Concourse comes into play. The ability for Concourse's market segment to grow is boundless. Upon identifying the opportunity to enter the undergraduate market at Penn and expand beyond, there is high potential for continued user activity.

Concourse plans to first enter the undergraduate market at Penn, which supports 28,000+ students composed of 10,000+ full time undergraduates, 13,000+ full time graduate students, and additional part-time students[2]. Penn hosts 5,000+ faculty members to support these students, perform research, etc. Penn's four undergraduate schools– College of Arts and Sciences, School of Engineering and Applied Science, the Wharton School, and School of Nursing– each are

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[1] https://nces.ed.gov/fastfacts/display.asp?id=1122#:~:text=There%20were%20a%20total%20of%203%2C931%20Title%20IV%20degree%2Dgranting,with%204%2C599%20in%202010%E2%80%9311.

[2] https://www.upenn.edu/about/facts

high-tiered education systems with courses that require team formation. Even though not all classes have a need for group-based projects, there is still a significant portion among undergraduates who seek such a platform like Concourse. Upon conducting preliminary research on Penn undergraduates, the Concourse team found that on average, on average, half the number of classes that a student takes per semester require formal team formation. Several students even reported that six of their classes– the maximum load of course units +- 0.5– require teams. With such numbers, it is apparent that an efficient way for team formation is necessary.

Concourse is highly scalable. Upon growing Concourse activity from Penn to 5,900+ postsecondary institutions in the US, there is enormous access and market growth potential. After attaining success at Penn, Concourse can branch to other postsecondary institutions through its network of connections across the country. This can be done through campus networks, professors' networks, and communication among university officials. Universities are likely to support Concourse because of its mission to improve the quality of higher-education and arguably the most important four years of formal education before entering the workforce. Within several iterations, Concourse has the ability to access a breadth of institutions, from the East Coast to the West.

Customer Segment

The direct customers of Concourse are multi-disciplinary universities that offer courses encouraging teamwork and collaborative learning. In the past, many institutions supported independent study and achievement. Moving forward, we see greater attention to fostering a team-based environment for students to learn together. However, universities still require students themselves to form their own teams, which causes much stress and social maneuverings. With Concourse, universities will see greater collective efforts to form successful teams for classes, which in turn will attain higher academic achievements and an overall better educational environment for students.

Within a university, class instructors want a way to facilitate and stimulate group formation. Currently, there is little variety in the level of instructor oversight. Typically, they either completely randomize groups, or leave the entire process of formation to the students themselves, with no intermediate-level supervision or transparency. Instructors most interested

and loyal to our platform would be those who seek greater involvement and connection with their students. With higher visibility in group formation, professors will have the opportunity to learn more about students' skills, witness the intricacies of group formation, and take action to lend a helping hand when students need help finding teammates. Concourse plans to incentivize instructors to join the platform, regardless of tech-savviness, through its ease of use and transparency. Through the survey conducted on Penn students, there is a right-skewed distribution for wanting instructor supervision.

Students will be the largest proponents of our platform. Finding teammates for each class is quite the laborious process. Students bear the greatest pressure of finding groupmates. Currently, they lean toward friends or existing acquaintances with complementary personalities. This is a tradeoff to finding people with complementary, diverse skill sets. Interpersonal and technical expertise are crucial to forming successful teams, so the use of student profiles and selective search functionality on Concourse will identify both. Concourse can be used by undergraduates, graduate students, and MBAs alike. In the future, the Concourse team plans to expand beyond universities to other institutions along the education spectrum.

The highest volume of traffic will be seen at the beginning of the semester when students first join classes and groups. Concourse users will consistently return to the platform to search for new teammates throughout the semester. Upon building the Concourse ecosystem, there will be strong customer retention and network effects.

Competition

There currently does not exist a single integrated platform that envelopes the group formation process to the extent that Concourse does. There were several competitors that we took a deep dive analysis into.

- <u>Piazza and Ed</u>: These platforms are primarily used by students to make posts to ask questions. There is an additional feature for finding teammates. However, the process is opaque and still relies on students to make posts, do research on potential teammates, and manually form teams. It is difficult to see which available groups are looking for people and seeing information about each member. Our app makes it clearer to see individuals and groups, as well as information on each group member. Furthermore, our platform handles

team formation from start to finish, keeping users within our ecosystem to find potential members, communicate with them, and form their groups

- Canvas: This platform is used by courses to distribute course material, and one of the functions is group formation. However, this does not encompass group finding. Canvas only provides the names of students in a given course, but no contact information or messaging system. Users cannot see an intro or biography about potential teammates, and users must know the person or be friends before contacting them on social media platforms. From an instructor point of view, they have the greatest visibility of group formation on the Canvas level. The extent of their power is setting group size.

- iOS Apps (ie Team Shake): Team Shake allows people to quickly group students or randomize groups. However, there is no social network or interactive component to curate skill and personality balanced teams.

- Email/Messenger/Other Messaging Platforms: This is an online messaging platform for students to communicate and form group chats. However, this still does not smoothen the process, and students must continue to confront the tedious, unorganized, and informal process. Also, users must have people's contact information already, or ask other sources, before reaching out.

- Social Media Platforms (Instagram, Facebook, LinkedIn): Similar to messaging platforms, users usually need to know or be connected with potential teammates already in order to reach out. Otherwise, users will need to go through the friend request steps before even mentioning team formation. This way funnels the tendency for people to form teams with people they already know and not branch out to new people. Social media may also bias profiles in a single direction, whether by social personality on Instagram or an intensely professional aura on LinkedIn.

Cost Model

The most significant costs to the Concourse business model is owed to cloud costs used to store student, instructor, and course information in the database. Concourse uses the AWS database, and deployment through AWS will cost $50,000 annually. Additional costs are noted in hosting the web application, credits to the domain host name, server fees, and licensing costs. From an internal perspective, Concourse will also incur costs of human capital from the current team and

any additional employees such as software engineering, design, management, and constant maintenance. With these costs combined, Concourse expects $600,000 in annual costs. With respect to revenue calculated below, Concourse stands at a reasonable level of sustainability and growth for the initial market. The business model is scalable because as Concourse grows, high fixed costs to build the platform are offset by smaller variable costs. With steady revenue, there is opportunity for profit and value creation.

Revenue Model

The Concourse revenue model is built upon two streams of revenue: (1) a fixed fee for school-specific integration and (2) an annual subscription fee based on activity on a per student basis. The fixed fee is used to cover expenses for developing a customizable platform for the specific institution. Customization can include color theme tailoring, icons, potential features, and additional support as specified. The annual subscription fee is charged on a per student basis, depending on the number of active users per month. This revenue will further support maintenance as usage increases over time.

Concourse plans to offer different tiered plans, Standard and Premium. The Standard plan is accompanied by all features of our value proposition and is priced at $5,000 implementation costs with $5 per active user registered for a class per month. This plan provides a secure stream of revenue to Concourse to maintain operations and continue development. The Premium plan provides more accessibility to instructors, customization by students, and is priced at $9,000 for implementation with $9 per active user registered for a class per month. Concourse will charge a 15% Administrative fee, similar to the business model of Canvas. Revenue generation is scalable depending on the size and complexity of a university's course infrastructure. As institutions shift more toward group work, there is growth within each course, as well as the institution as a whole.

Team Concourse chose this business revenue model because it provides upfront revenue through the fixed fee for the team to have a sustainable income to devote time to develop the app. This also serves as a form of insurance in the case that contracts are terminated, within legal reason. Beyond the fixed rate, Concourse wants to increase its revenue inflow to eventually generate steady profits. Concourse will grow its revenues on a per university basis, as well as overall as it

gains more contracts with the institutions. With an estimated 28,000 users in our initial target segment at an average $7 per user, Concourse will generate roughly $196,000 in monthly revenue through the platform. This translates to $2.4mm per year. Given that this is just for the University of Pennsylvania, Concourse has promising revenues with each institution added to the network. This monthly revenue will scale quickly as Concourse gains more market traction and strengthens its presence in existing markets.