INSTRUCTOR’S NOTES FOR
ENTREPRENEURSHIP IN THE DIGITAL ERA:
CREATING YOUR OWN ONLINE BUSINESS

CASE DESCRIPTION

This case describes Terry Smith and Jack Jones, two soon-to-be-graduates of the University of Washington (UW), who were looking to become entrepreneurs by creating their own online business. However, with no prior experience or knowledge of the opportunities, business models, and technical side of the online industry, they sought out expertise from a variety of sources. One such source was the Center for Entrepreneurship at UW, where they were exposed to a variety of opportunities, business models, and sources of technical assistance.

CASE SYNOPSIS

The case discusses how undergraduates with business degrees can learn the different steps involved in the creation of their own app. The traditional approach to owning brick and mortar stores was rapidly declining while online e-commerce was growing exponentially. Both Smith and Jones knew this and wanted to take advantage of opportunities in the online industry.

INTENDED COURSES, LEARNING OBJECTIVES, &
TEACHING APPROACH RECOMMENDATIONS

The case can be used in a variety of undergraduate courses in entrepreneurship and general business. Some of the courses may include Introduction to Business or Entrepreneurship, Creativity, Innovation & Entrepreneurship, Technology Entrepreneurship, and/or New Venture Creation. The estimated time to read and answer the questions for the case study is between 5-6 hours. Some of the learning objectives that instructors can focus on include:
To understand the process of creating an online business (an app).
To analyze different online business models that are available when creating an app.
To learn about the different options available to assist with the technical side of creating an app.
To analyze the costs involved in creating an app.

ENTREPRENEURIAL CONCEPTS/APPLICATIONS/IDEAS

It is recommended that this case study be used early in the progression of an entrepreneurship program. Exposure to the process and content of what it takes to build a technology company today is vital for our students. This case study was about students that have not been exposed to this and are squandering their last semester searching for someone with some technical expertise.

The case can be used early in the semester after the brainstorming and ideation sessions in entrepreneurship courses. It will give students the ability to learn about different business models and be proactive in their decisions on how to actually create their app. Far too often students state that they want to create an app, but they have no idea how to actually do it.

The case can be used without any prior discussion of other entrepreneurial topics however, the classroom discussion may be more enriching if students have a basic knowledge of the Business Model Canvas and have used it to describe existing or potential business models.

To learn more about the Business Model Canvas and business models, we recommend that instructors expose students to material from:


QUESTIONS

1. Based on the information of Terry Smith and Jack Jones, what in their backgrounds lead you to believe that they are or are not entrepreneurs?

2. Perform a SWOT analysis.
3. Based on your work experience and knowledge of entrepreneurship, what business model would you recommend the students use? Why did you recommend that business model? Create a Business Model Canvas to reflect your recommended business model.

4. Who should build their app: a) create it themselves, b) hire a tech person, or c) outsource it to a company to build? Why did you select this choice?

5. What legal and intellectual property issues do they need to address?

6. What platform should they put their app on? iPhone and/or Android? Why?

7. What resources do they need to start and grow their online business and where will they get them from? What would you recommend they do to structure the deal?

8. Based on the data and information in the case, would you do anything differently to test the idea? What specific recommendations would you make to Smith and Jones? What data would you like to collect to see if there was a market opportunity for their app?

QUESTIONS AND ANSWERS

1. Based on the information of Terry Smith and Jack Jones, what in their backgrounds leads you to believe that they are or are not entrepreneurs?

   Smith and Jones both came from entrepreneurial backgrounds. Smith’s father owned a restaurant and Jones’ father was a partner in a neighborhood bar. Their backgrounds influenced their current behavior, which led them to have the characteristics of entrepreneurs.

   Smith started working at the age of five. He was surrounded by entrepreneurship from his four brothers and his father. He sold lemonade, delivered papers, and sold light
bulbs and candy door-to-door. He started working at the age of 14 as a dishwasher and kitchen helper.

Jones’ entrepreneurial father had an incredible work ethic. This influenced Jones as he worked full-time in his last year of high school. He was determined to make a success of himself. Due to a lack of money, Jones’s family did not have the means of helping Jones much, so he only applied to two universities (Sacramento State and the UW). Both schools offered him several grants, scholarships, loans, and work-study opportunities. Jones decided to take a risk and go to the UW because he wanted to go the best school that he could afford. He also wanted to get out of his comfort zone and move to a new area and start a new life.

Smith and Jones both studied Entrepreneurship & Innovation at the University of Washington. They were both high achievers getting degrees in Marketing, Finance, and Entrepreneurship & Innovation.

Both Smith and Jones knew that they wanted to become entrepreneurs but did not have the technical and entrepreneurial expertise due to a lack of online experience. Like true entrepreneurs, they realized their weaknesses and went to an expert to help them, Dr. Robert Johnson, the Director of the Center for Entrepreneurship and the Head of the Entrepreneurship & Innovation Program at UW.

2. **Perform a SWOT analysis.**

Students are required to perform an internal analysis of the company by examining the strengths and weaknesses. They are then required to examine the external factors related to the company by looking at opportunities and threats. Below are some of the topics that students should hit upon.
Internal Strengths

- Smith and Jones both have backgrounds in entrepreneurship. They realize that they are entrepreneurs. They are hungry and high achievers, which are keys to success to become an entrepreneur.
- Smith and Jones have a relevant educational background in both business and entrepreneurship. They are also visionaries in the sense they realize where business is heading, online.
- They have identified the steps involved in creating an app and spent time researching these steps.
- Smith and Jones have already been working on a business idea.
- Smith and Jones have set up the infrastructure for their app.
- They have a key mentor, Dr. Robert Johnson, the Director of the Center for Entrepreneurship at UW.

Internal Weaknesses

- They have no prior experience in building and running an online business. There is a learning curve for building an online business.
- They must build their reputation among potential investors, customers, and potential employees.
- They don’t have a lot of money, $20,000.
- They have yet to identify a competitive advantage for their online business.
- They lack the technical expertise to build out an app.

External Opportunities

- The online industry is exploding, especially for mobile devices.
• Startup costs can be low depending on the type of business selected.
• Growing community of online entrepreneurs: Can learn from their experiences.
• The university is located close by where they live, and they have relationships there to help them.
• Seattle is one of the hottest places in the country for technology entrepreneurship.
• There are a lot of bars and restaurants in Seattle.

External Threats
• Low barrier to entry due to the low cost, which could result in a lot of competition.
• Easy to replicate some of the business models.
• Intellectual property issues both within their new app and abiding by Internet law.
• Cybersecurity issues with their new site.

Smith and Jones are in an excellent situation, being located in one of the hottest technology areas in the country, Seattle. Seattle is home to technology giants like Microsoft, Amazon, and many up and coming startups. Their alma mater is located there along with their mentor, Dr. Johnson. They have an existing network to draw upon. Their location and connections should help them not only with building their app but also with future financing.

There are likely to be many organizations (Government and private) in Seattle that will be helpful to Smith and Jones. This will give them opportunities to access like-minded entrepreneurs, so they can talk about the exploding online opportunities. They could also work with the university in having them consult with their firm for free. On the negative side, due to the low barriers to entry, competition is always a potential threat. Just because there are no immediate competitors right now, this does not mean that a company like Uber may not
create a niche in this area or another startup may enter the industry. So they need to differentiate themselves and move quickly.

3. Based on your work experience and knowledge of entrepreneurship, what business model would you recommend the students use? Why did you recommend that business model? Create a Business Model Canvas to reflect your recommended business model.

Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers by Alexander Osterwilder and Yves Pigneur, (2010) reviews the different business models that are available to online startups. Smith and Jones created a multi-sided platform (Osterwilder & Pigneur, 2010, p. 84). Multi-sided platforms are platforms that bring together two or more distinct but interdependent groups of customers. The key is that the platform must attract and serve all groups simultaneously.

The students were building a two-sided platform (Eisenmann, Parker, & Alstyne, 2006). On one side there were the college students looking for something fun to do. On the other side, there were business owners hungry for more volume.

During a consulting session with their former professor, Dr. Robert Johnson, Smith and Jones decided to sketch out a business model canvas of their ideas. They wrote the following under each section of the canvas: Value Proposition: Attracting users and business owners to the app, matchmaking users with owners. Key Resource: The app (platform). Key Activities: Platform management, platform promotion. Costs: Develop the app, maintain the app, promote the app. Customer segments: Users of WildAround, business (restaurant) owners. Revenue Stream: Ads or App payment or restaurant payment. These ideas are reflected in the example business model canvas in Figure 1.
The students felt fairly confident in most aspects of the business model with a few exceptions: What was the proper revenue stream? They felt that they must choose the proper revenue stream if they wanted the platform to grow quickly and be profitable in the long-term. They saw three options: 1) charge people to download the app, 2) make the app free and insert advertisements in the app, or 3) make the app free and charge restaurant owners.

Because they wanted to gain many users quickly (to create value for restaurant owners), they decided against charging for the app. They did some back of the napkin calculations (based on data in the case) and estimated that with 1,000 daily users who use the app for on average 1 minute a day, they would generate 2,000 ad impressions (1,000 user sessions * 2 ads shown per minute). With a click-through rate (CTR) of 1.5% and an average revenue per thousand times the ad was displayed (CPM) of $.23, this would yield $6.90 dollars a day in revenue (2,000 * .015 * .23 = $6.90). Based on their analysis, ads could generate revenue but would take too long to offset the high cost of developing the app. Additionally, ads would diminish the user experience in the app. They noted how Instagram did not have ads until it had hundreds of millions of users.

Charging restaurant owners seemed to be the best idea. Users would be able to have a high-quality app experience, the free app would help bring in new users, and restaurants would hopefully start to line-up to get access to these users. But, how much should restaurant owners pay to get access to these users?

The students realized that as they acquired more users, WildAround would become more valuable to restaurant owners. Accordingly, as their number of users grew,
they would be able to command higher fees for restaurant owners. To lower barriers for restaurant owners to get on board, they decided to charge $1 per customer delivered. As the new app experienced success, they could start to charge businesses additional fees (such as a monthly fee etc.).

As WildAround’s main concern was user growth, charging money or showing ads would both negatively impact this goal. It is recommended that once WildAround grew their business to a million users or more they could start using advertising or other models, but not initially. Facebook and Instagram started to put ads in their apps only when they had hundreds of millions of users.

It was clear that if anyone should pay, it should be the restaurant owners. A fee for every person who ate at the restaurants could be around $1. But how could the students get the restaurants to sign on? They could contact the restaurant after sending several users there and ask if they would like to continue the service. If so, they could sign on to pay the fee for each diner and download the app to be notified when diners might be arriving.

The students also have an option of allowing restaurants to pay for special priority. Once paid, the app would route more users to the restaurant. However, initially it is recommended that they focus on the randomness of the WildAround experience. Users might have grown skeptical if certain restaurants were given a higher priority. This could lead to the users figuring out that the WildAround was not truly “wild”. For the restaurant owners, this recommendation of free customers initially followed by a flat fee per diner seemed to be the best choice.
4. Who should build their app: a) create it themselves, b) hire a tech person, or c) outsource it to a company to build? Why did you select this choice?

According to Capron and Mitchell (2014), businesses have three main paths to growth: 1. Build on their existing internal resources; 2. Borrow from others via contracts or alliance agreements; or 3. Buy other companies.

Building upon Capron and Mitchell (2014), the students considered three choices to build the app: build it themselves (#1 above), find a technical co-founder (#3), or outsource the development (#2). After taking a few online courses, they decided that they did not have the time to build it themselves. While it was tempting to just outsource the app and get a version to market quickly, the app was the core of their business. Given their lack of expertise in this area, they decided to outsource the development of their app.

While outsourcing the app was certainly a possibility, it is recommended that they spend a few months networking with local young professionals and recent college graduates in Seattle to find a technical co-founder. If they cannot find a co-founder after a reasonable time (two months), it is recommended that they look at soon-to-be-graduating students at their university who have experience making iPhone apps. They could also visit other universities. They should check for schools that had computer science and information systems clubs. They could even schedule to speak to the students in the club about their app and opportunity.

With a technical co-founder, it would be far easier to raise venture capital money. Without a technical co-founder, investors may view their founding team as fundamentally
broken. The students would also be subject to a “hold up” problem by using the outsourcer. The outsourcer could go out of business, or change their fees.

In addition, having a technical co-founder would enable scaling and growth to occur much more rapidly. The constant back-and-forth with an outsourcer would lengthen the times between new releases of the app, potentially slowing the exponential growth they were seeking.

5. **What legal and intellectual property issues do they need to address?**

They performed research and decided to form a Limited Liability Company (LLC) called WildAround, LLC. They also needed to register their trade name for the business. A trade name was generally considered the name a business used for advertising and sales purposes, in contrast, a legal name was used in articles of incorporation or other organization documents. They used WildAround for their trade name. It is recommended that they each own 50% of the company. This will give them limited liability and they will be taxed at the personal rate.

The next step was the registration of their domain name. They learned that trade and domain names were separate entities. They could only be trademarked after their business was in use, however if they used this for commercial purposes, and then someone infringed on their name, they could have the legal rights to the name.

They searched for domain names through two websites; GoDaddy.com and Namecheap.com and registered [www.WildAround.com](http://www.WildAround.com) on Namecheap.com. They also made sure to have their personal information secret through WHOIS Privacy. This was a protection service offered by most domain name registrars and third-party providers.
This service prevented other companies and people from sending them spam and protected their personal information.

They will need to copyright their website. Copyrights can protect, pictures, movies, books, music, poetry, architecture, and computer software. This can be done easily by inserting the following in the footer of the website: Copyright © 2018 Name of Their Company All Rights Reserved. They can register this at the national level with the U.S. Copyright Office, but this is not required.

Any pictures they use on their website must not be copywritten or their site will be flagged and may not show up on online searches. They could also be held liable. There were several sites that had “open source” pictures that could be used for no fees (e.g., Google Images, Adobe Stock, Pexels.com, Feeimages.com, etc.).

Trademarks play a huge role in online businesses. A trademark is either a name, logo, theme, symbol, design, image, or combination of these. They will need to make sure that no one has a trademark on any of the above that they are using. They will need to do both a local and national search. The national search would be done on the U.S. Patent and Trademark web site.

Finally, according to the Digital Millennium Copyright Notice Act (DMCA) websites are required to provide a privacy policy and terms of agreement. The privacy rule requires websites to disclosure several things. For instance, banks may develop one initial privacy notice that covers their sharing practices with third parties. The terms and conditions agreement policies are a set of rules and guidelines that users must agree to use their website. Finally, the DMCA is a group of laws that protect copyrighted content
on digital mediums. The DMCA is the go-to source for copyright infringement issues that arise out of the proliferation of digital media.

6. What platform should they put their app on? iPhone and/or Android? Why?

Smith and Jones had to make a decision on whether or not to build their app so people could have access through both iOS and Android. They were surprised to find out that Android held an 80% market share globally.

The median iPhone user's income was $85,000 dollars a year, which is 40% more than the median android user's income of $61,000 a year. Additionally, iPhone users on average spent four times as much on in-app purchases. iPhone spending was growing faster as well. In 2017, iPhone spending increased by 45%, while Android increased 40% from the year before (BuildFire, 2017). Although it cost more time and effort to build for both platforms, it is recommended that they launch their app on both platforms at the same time.

7. What resources do they need to start and grow their online business and where will they get them from? What would you recommend they do to structure the deal?

If the students were able to find a technical co-founder the monetary resources required to start the business would be very small. The yearly fees to pay for the website, security certificate, hosted data storage, and app store fees could easily be self-funded, and would come to around $200 a year. Of course, if the business grew, these yearly costs would grow too.

If the students were to outsource the development of their Minimal Viable Product (MVP) for Android and iOS, it would cost around $13,000. However, it is estimated that each new modification to the app would cost around $3,000 dollars.
Funding these costs would be more difficult. The students could initially cover this out of pocket but would be reliant on successful funding thereafter. Venture funding may not look favorably on the fact that there was no technical talent on the founding team.

8. **Based on the data and information in the case, would you do anything differently to test the idea? What specific recommendations would you make to Smith and Jones? What data would you like to collect to see if there was a market opportunity for their app?**

   Yes! It should be noted that students will come up with a variety of answers to this question.

   Smith and Jones developed wire-frame diagrams (or mock-ups) for their app and tested their ideas with students at their school in the Seattle area. According to Smith, "The students absolutely loved the business idea. They came back with nothing but positive things to say. We tested our idea on 50 students and 100% of them loved their experience." The students gave immediate face-to-face feedback directly to Smith and Jones based on their actual experience.

   Smith and Jones got immediate face-to-face feedback, which was great. However, more data would have enhanced their venture. They could have had the students fill out a questionnaire afterward and ask questions like would you do this again? Why or why not? What was valuable? Would you be willing to pay for this experience? If so, how much? How can we make this experience better? More open-ended questions would have enhanced their company in the long-run.

   Smith and Jones also needed more information about the monetization of their app? There was no mention of them going out and talking with restaurants and bars to
determine what, if any, fees they would be willing to pay for this service? As is, it is a build it and they will come service.

To overcome this weakness, it is recommended that Smith and Jones go out and interview at least 50 to 100 restaurants and bars to determine the feasibility of this venture and how much, if any, restaurants/bars would be willing to pay for each potential customer.

Other additional data that would help them are the specific number of bars and restaurants in the Seattle area. Additionally, market research data on their target market would be beneficial so they could determine the actual size of their market and figure a marketing plan to target them.

Finally, it is recommended that WildAround investigate the possibility of forming a partnership with OpenTable. Open Table is a company that specializes in making reservations for people at restaurants. WildAround could form a partnership where for every reservation that is made from their app through OpenTable they would receive a certain amount of revenue.

**EPILOGUE & RESEARCH METHOD USED**

This case is based on actual events that have occurred. The names of the people involved have all been changed. The case is based on the interactions of the students, professors, instructors, advisory board, and entrepreneurs from the community.

During the final semester in school, the students came in second place in a regional entrepreneurship competition. They then presented their pitch deck to an audience of 50 potential investors. At the event, someone from the city's economic development
office saw them and offered them free space and an entrepreneur in residence for the summer.

Towards the end of the summer they received an investment infusion of $50,000. They are continuing to work on their venture. One of the founders went back home and took a full-time job but is still working on the venture part-time. The other founder stayed in the Seattle area and is continuing to work on the business full-time.

REFERENCES


Figure 1: Example Business Model Canvas