

LETTER TO ANN WELLS

December 5, 2017

Ann Wells
109 Clarke Court Apt #304
Charlottesville, VA 22903

Dear Ms. Wells,

As you requested, Trendie Consulting has conducted extensive market research and data analysis to assess demand for a new dessert place on the Corner, DesserTrendy. The attached report details the methodology, results, limitations, and conclusions of our team's research.

To determine the market the dessert shop could potentially serve, Trendie Consulting carried out extensive primary and secondary market research. Our primary research involved conducting one-on-one interviews and focus groups, in which we gauged students' preferences and interests in dessert foods. Using this primary exploratory research we were able to construct an online survey which gathered opinions of over 200 University of Virginia students. This survey illuminated many trends and patterns in the UVA population's disposition toward a dessert shop on the Corner, as well as general preferences for menu listings, pricing, and location. Additionally, we conducted secondary research on competitors, as well as on the logistical aspects of setting up a dessert shop on the Corner.

Upon analyzing the primary and secondary research results, we concluded there is significant demand among UVA undergraduate students for a new dessert shop on the Corner. Moving forward with this business venture, it behooves you to use this marketing research to determine what combination of menu items, pricing, and location would maximize success of the dessert shop. Throughout the report, we provide some initial ideas you could use to guide your decisions.

We would like to thank you for the opportunity to collaborate with you on this project. We hope you find our work and methods useful as you move forward with this project. If you have any questions, please reach out to us directly at trendie@virginia.edu.

Sincerely,
Michelle Chen
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DESSERT TRENDY

MARKETING

RESEARCH PROPOSAL
DECEMBER 5, 2017



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EXECUTIVE SUMMARY

Our team at Trendie Consulting was hired earlier this year to **help Ann Wells evaluate the opportunity of opening a new dessert shop on the UVA Corner**. Specifically, Wells was not interested in opening just any dessert shop. She was particularly curious about the potential to open a dessert shop that sold unique desserts popularized by social media, such as edible cookie dough, or black ice cream. In order to understand the feasibility of this idea, we conducted extensive market research, aiming to understand the current student demand for dessert.

In order to establish a key indicator for moving forward with the idea, we collaborated with Wells on our initial Backward Marketing Research Proposal. With this approach, we decided to recommend moving forward with the project if our team's research suggested student demand for the dessert shop was greater than 5 on a scale of 1 to 7 in terms of likelihood to try the new dessert place. This, coupled with enthusiasm from focus group and interview participants, would indicate strong demand.

Our primary sources of research included interviews, focus groups, and a survey developed using Qualtrics. With this three-phased approach, we were able to refine our questions in each source to not only better understand demand, but also to build out the attractiveness of the dessert shop with suggested characteristics. This allowed us to test additional features of the shop with each new respondent group. Overall, we measured demand from over 200 UVA students as our survey had 213 respondents and we conducted five interviews and three focus groups. Our goal was to be as representative of the student population as possible to ensure we were understanding the true market for dessert. A key limitation was of course not representing all 17,000 undergraduate students, but we do believe our sample was comprehensive and relevant.

Based on a series of statistical analyses, we found that students did have strong demand for a dessert shop, with an average likelihood to try at 5.35, above the minimum threshold of 5, with a 95% confidence interval of 5.15 to 5.54. This result indicated to the team that there is strong student demand for a dessert shop with a rotating menu of desserts popularized by social media. **As a result, we recommend Wells move forward with the idea.**

Additional parts of our analysis showed strong interest in making the dessert shop a place for students to hang out and study with comfy couches and a relaxed atmosphere. Additionally, students wanted the dessert shop to be open during late-night hours. With these features added to Wells' initial idea, our team at Trendie Consulting believes DesserTrendy will be UVA's most popular and successful dessert shop next year.

INTRODUCTION

Our client, Ann Wells, approached Trendie Consulting with an idea of opening a new dessert place on the UVA Corner with a rotating menu featuring desserts popularized by social media. The Corner currently has a few select dessert shops including Arches, a frozen yogurt eatery, and cookie shops such as Red Eye Cookies and Insomnia Cookies. With existing, established dessert places on the Corner, our marketing team examined whether there is sufficient consumer demand for another dessert shop. The guiding question we were trying to answer through marketing research was as follows: “Is there consumer demand for a new, trendy dessert place on the Corner among UVA students?” This was the central question, as the response would determine whether or not Wells should open the store. To answer this question, we conducted market research to determine the attractiveness of the proposed offering of trendy rotational desserts for UVA students. Upon completing the research, we concluded that there is indeed demand for Ann Wells’ new dessert shop.

Beyond simply gauging demand for the dessert place, we came up with suggestions for developing an optimal menu offering that would consist of rotating, specialty dessert options and standard, fixed options. We also addressed Ms. Wells’ concerns about specific details regarding location, pricing strategy, operating hours and promotion through the marketing research initiative. Additionally, our primary research analyzed the importance of extra features including student study spaces, beverages, and overall environment of the dessert place. These additional features were tested to see if they would increase the likelihood of UVA students to visit and stay at the dessert place. We drew these insights from primary data which came from opinions relayed in focus groups, interviews, and surveys that are elaborated on later in the report. Understanding how all of these pieces influence a customer’s propensity to visit the

shop and make purchases will help Ms. Wells appropriately design the menu and store in a way that closely resonates with UVA students.

Lastly, our group developed a mock logo, menu and interior design, as well as potential promotional strategies for Ann Wells' dessert shop that take into account results of our research (see **Appendix 1, 2, 6**). We also explored the business side of the dessert shop using extensive secondary data on the required start-up costs (see **Appendix 3-10**). All in all, our research provides a comprehensive set of actionable results necessary to guide Wells' decisions about starting the trendy dessert shop on the Corner.

METHODOLOGY

Procedures Selected

Use of exploratory and descriptive data helped measure student demand

In order to develop a comprehensive overview of the market for desserts on the UVA Corner, our team used both exploratory and descriptive research. We conducted exploratory research through both primary and secondary sources. Our primary sources included five interviews and four focus groups, all with current UVA undergraduate students. We also collected exploratory data from secondary sources such as existing, local dessert shops and dessert industry reports. Specifically, we analyzed secondary sources to get a better sense of local rent, machinery expenses, and the competitive landscape. Finally, our descriptive research came from a survey we developed using the online survey software, Qualtrics. In order to collect a thorough sample of UVA undergraduate students, we sent our survey through various email listservs, including to the University Guide Service, the International Residential College, and to Resident Advisors. All three of these groups represented all four years of students at the University; this

was intentional to ensure that we collected the opinions of all students, including first years. In total, we received 213 survey responses, guaranteeing a robust sample.

All data sources showed strong initial enthusiasm

One of the key, universal findings across all of our data sources was that students were overwhelming positive about the idea of a new dessert shop on the Corner. For example, during the focus groups, students spent a significant amount of time talking about their favorite desserts and dessert experiences, indicating strong preferences toward a new dessert shop. Additionally, at the end of the Qualtrics survey, approximately 15 respondents left positive comments such as, “I’m very excited about this prospect and hope this is real because this would be life altering.” In general, these were highlights of the positive reactions to come out of our team’s research. To gain a better understanding of more specific dessert demand, it was helpful for the team to take a deep-dive look at the insights derived from each type of research individually. To begin, we started our exploratory research by conducting interviews.

Interviews

Interviews gave insight into dissatisfaction with current dessert offerings

Before conducting focus groups and sending out an official survey, our team decided to perform five individual interviews to get a better sense of demand for a new dessert place on the Corner. Participants were all UVA undergraduate students coming from a variety of backgrounds. Each interviewer followed a team-designed interview outline (see **Exhibit 1**) to ensure we could standardize and compare all insights necessary to inform our survey design and overall recommendation. Our interview questions focused largely on understanding students’ opinions about current dessert options on the Corner, as well as their individual dessert preferences. We felt these questions would provide us with two potential insights: Is there a gap between what students are currently offered in terms of dessert on the Corner and what they

want?; What characteristics of a dessert shop would make our dessert shop, DessertTrendy, more attractive to UVA students?

Interviewees suggested characteristics of the dessert shop to add to future research

Based on interviewee responses, we observed several major themes that aligned with the insights we set out to understand. For example, most interviewees touched on not being excited about the current dessert offerings on the Corner. One student even said, “The Corner is missing a place with good desserts for a reasonable price....The key is to do desserts that people don’t necessarily eat everyday.” When we probed students about the idea of offering a rotating selection of desserts popularized by social media, we seemed to get mixed responses. Students who actively used Facebook and enjoyed keeping up with food trends were incredibly enthusiastic. Alternatively, interview respondents who did not consider themselves to keep up with social media expressed much less enthusiasm, as well as confusion. However, regardless of whether or not a dessert was popularized by social media, all interviewee respondents were excited about the prospect of being able to try new, unique desserts. Finally, in regards to other characteristics of a dessert shop, interviewees suggested looking into adding alcoholic beverages to the menu and extending the dessert shop’s hours to accommodate late night snacking. These interviews clearly helped provide direction for the rest of our research, allowing us to add new questions to our focus group guide and Qualtrics survey in response to points brought up by interviewees.

Focus Groups

Focus groups accommodated multiple perspectives on the opening of a dessert shop

We held three focus groups to continue exploring the needs and preferences of students toward a new dessert shop. We expected that focus groups would help us generate more insights as compared to one-on-one interviews: not only because they would involve more participants, but also because the

participants would build on ideas of each other and think about issues they would not have otherwise. Each focus group consisted of homogeneous groups of five participants, with every group coming from a different UVA background: first year students, upper class students and exchange students. This design helped reveal common opinions, as well as specific consideration relevant to distinct groups.

Unique desserts would drive success for the new dessert shop

Similar to the one-on-one interviews, focus groups revealed that students are not too excited about current dessert offering on the Corner and are seeking to have a place with unique desserts. Specifically, first years mentioned that they would more attracted by types of desserts that they cannot get at dining halls. For instance, they would not be interested in cookies as they are always available. Additionally, many students from multicultural and international backgrounds expressed interest in seeing more international desserts. Overall, multiple people said they would visit a dessert place if it had a unique offering, something they “wouldn’t have made at home” such as chocolate fondue, italian tiramisu, korean bingsu, or truffles.

Specifically, high-quality tasteful desserts and rotating menu would be appealing

Taste is a crucial characteristic of an appealing dessert. Focus groups participants did not only directly say that taste was extremely important when they considered a purchase, but also kept mentioning great taste when telling stories about best dessert-related experiences and places. Additionally, many participants said they would prefer quality over quantity of options, as they perceive that by focusing on a few options a dessert shop would be able to make them more tasteful. At the same time, they said they appreciate having an opportunity to try new desserts from time to time. Therefore, we believe that a rotating menu of

a limited number of high-quality desserts would be successful, as it would meet the demand for both taste and novelty.

Location should be convenient but away from bars - closer to Starbucks is best

Location was a key consideration for those who live far from the Corner (first-year and exchange students), but not for upperclassmen who live within a two minute walk. Many participants agreed that the Starbucks area is the best spot, as further down the Corner seemed too far and they “could not justify traveling far for a dessert.” Moreover, some people brought up that this area does not have bars and therefore has a more laid-back atmosphere, which they would prefer for a dessert shop, as opposed to a going-out environment.

Desired atmosphere accommodates both students who want to study and hang out with friends

Some students expressed interest in going to a new dessert shop to hang out with friends, while others would like to use it to study. To accommodate both groups, we recommend having two floors: a more animated, louder first floor with desserts and couches and a quieter second floor with study area. An overwhelming amount of students said they would not study at the dessert shop as they would be distracted by noise or tempted by the smell of desserts. Having a second floor would avoid this problem and is a feature students would support as a few mentioned the appeal of the top floor study space at the Corner Starbucks.

Social media would serve as a great promotional channel for Ann Wells’ dessert shop

Social media can act as a strong influencer for enticing people to buy foods they would not normally know about or try. To support this, in each focus group, at least two people had a relevant experience to

share when they purchased or tried a food after seeing it on social media. Facebook, Instagram and Snapchat were mentioned as sources of the most influential posts. Moreover, many said they often try new desserts because they get a friend recommendation, and such action could be easily facilitated by social media. Additionally, we discovered it would be especially important to use social media when promoting the dessert shop to incoming students, as some first-year and exchange students were disappointed with the lack of current dessert shop promotion and shared they only discovered a few dessert places by chance.

Survey

Survey probes at UVA student demand for a new dessert place on the Corner

The survey (see **Exhibit 2**) sought to drive more reliable, statistically-proved conclusions about the questions set forward in this market research. As such, the survey was broken up into six different sections, each seeking to uncover student preferences toward desserts and the new dessert shop on the Corner:

1. Demand (Questions 3,4,7)
2. Social media usage (Question 8, 9)
3. Menu offering (Questions 1, 2,6)
4. Pricing (Question 10, 11)
5. Use of space (Question 5,6)
6. Location (Question 12)
7. Demographics (Question 13-17)

In the first section, the survey focused on how often students found themselves going to a dessert place on the UVA Corner and how satisfied they were with these current dessert offerings. We juxtaposed these two questions with another question that gauged the appeal of a new dessert place on the Corner with a

rotating menu of desserts popularized by social media. We included these questions to establish if there was a potential opportunity in the dessert market at UVA that Wells could capitalize on.

The second section sought to analyze student's social media usage behavior. This was a relevant question to ask because some desserts sold at Ann Well's shop would be popularized by social media. Our intention was to discover if students involved with social media would be likely to purchase something they saw on a social media platform they use. We hoped that if the UVA demographic was likely to make these social-media primed purchases, then they would be more likely to purchase these desserts popularized by social media as well.

The third through sixth section analyzed consumer preferences for various features that could make the dessert shop ultimately more attractive to potential customers. These questions are especially pertinent once sufficient demand for the shop is established. Given existing competition on the Corner, it is crucial to make smart decisions on pricing, menu offerings, and use of space. The pricing of the specialty desserts cannot greatly exceed what students are willing to pay. Likewise, the shop must offer desserts that still appeal to student's preferences for good-tasting and aesthetic desserts, which will be elaborated on in the results section. Lastly, the new dessert shop has a chance to stand out from competitors by offering more seating and tables that encourage studying and extended stay. In stark contrast to this design, existing places on the Corner lack comfortable seating and tables for people to hang out and study; this encourages "grab-and-go" behavior. For instance, the late-night cookie place, Insomnia Cookies, only has one table with two-three chairs in the entire store.

Finally, the last section of the survey asked for basic demographic information (ie. class year and gender) to further understand our sample respondents.

Data Collection Form

Pretesting uncovered ambiguities and clarifications that were corrected in the final survey

Pretesting our survey gave us the opportunity to receive feedback on the survey before we sent it out to our target demographic. We first distributed the survey to six people who were similar to the population we planned to send the survey to. Afterwards, we talked through the survey with these individuals and took note of ambiguous or problematic wording. For instance, individuals stated we should define “dessert place” because it could be interpreted as essentially any location that sells desserts. Whereas, we are solely interested in actual dessert shops such as Arches, Insomnia Cookies, etc. Thus, we will define “dessert place” as a store that is similar to the aforementioned desserts shops in the final survey. Next, individuals also suggested that we give respondents the opportunity to ‘check all that apply’ for questions with a list of items to choose from. In addition, to gauge respondents’ interest toward gluten-free and vegan options, individuals suggested that instead of a binary ‘yes’ and ‘no’ response type, we ask for a scaled response (1-5). Lastly, we also received feedback on the length of our survey. In general, individuals commented that our survey was somewhat lengthy and recommended that we shorten it to include only relevant questions.

Sampling Plan

Convenience sampling yielded 213 responses with gender and year imbalances after data cleaning

The population of interest are UVA students who go to the Corner for desserts. Convenience sampling yields inherent biases, so to hedge against this bias, we sent the survey to Facebook groups such as “Class of 2018” and “Class of 2019” that contained a large number of individuals of each respective class year. Furthermore, we were notified it would be difficult to get a significant amount of first-year participation. To overcome this, we asked UVA Resident Advisors to distribute the survey to their first year residents.

Lastly, we sent the survey to several club listservs. We leveraged these various distribution channels in order to obtain a representative sample of the UVA population. The downside to this is that we are unable to track how many students actually received the survey and therefore we could not accurately determine the response rate. After utilizing this non-probabilistic and convenience sampling method, we received 213 responses consisting of an adequate amount of each academic class and gender. Next, we proceeded with data preprocessing and analysis.

Data Collection and Handling

Data cleaning and preprocessing allowed for a streamlined analysis in R

We performed the data preprocessing using Excel, and later utilized R for data analysis purposes. We first eliminated incomplete survey responses and instances in which duration spent on the survey was less than 100 seconds. This ensured we were only analyzing results in which responses were complete and reflective of true consumer preferences. We also removed graduate student responses because Ann Wells is solely interested in undergraduate students' dessert preferences. Lastly, we eliminated columns that were not pertinent to our marketing research objectives such as the student IP addresses, longitude, and latitude. Completing these steps enabled us to improve the robustness of our data and focus on relevant attributes within the final data set before we went ahead and analyzed the data. Following data cleaning, we also transformed the likert scales (Strongly Disagree to Strongly Agree), satisfaction scales (Extremely Dissatisfied to Extremely Satisfied), and importance scales (Extremely Important to Not At All Important) into numerical values in order to perform additional data analysis on these results.

RESULTS

Sample Achieved

Imbalances in sample representation still allow for a robust analysis

The narrowed sample consisted of 173 students, who were separated into segments based on gender and college class. There was 30.64% male and 68.79% female representation. Although there is an imbalance of females to males, we believe the 53 males who participated constitute adequate male representation for this survey. Furthermore, the survey yielded a greater proportion of first year respondents (46.24%) compared to second year students (11.56%), third year students (18.50%), and fourth year students (23.70%). However, we believe this class year imbalance is justifiable because first and second years present the largest opportunity for the dessert shop since these students still have 3-4 years left at UVA. In contrast, since third and fourth years will relocate elsewhere in 1-2 years upon graduating, they will not have access to the new dessert place.

Results for the Specific Research Problems

Descriptive statistics reveal that social media usage is similar across genders

As we are interested in introducing desserts popularized by social media, we decided to analyze UVA student's social media usage behaviors as our first step in the analysis process. Participants on average use two types of social media, with Facebook and Instagram being the top-two-used social media platforms across the board. Using a two-sample t-test, we analyzed whether the average number of social media platforms used differed across genders. The testing hypotheses are as follows:

$$H_0: \mu(\text{female}) = \mu(\text{male})$$

$$H_a: \mu(\text{female}) \neq \mu(\text{male})$$

A p-value of $0.6758 > 0.05$ led us to fail to reject the null hypothesis that the average number of social media platforms used was the same across genders. Thus, social media usage behavior on average across genders is relatively the same.

Average number of social media platforms used influences purchasing behavior

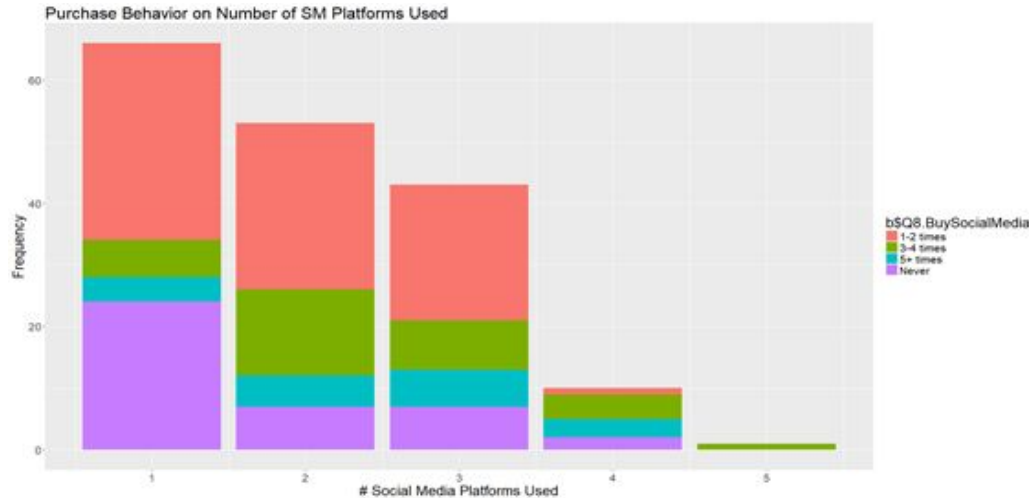
We then tried to determine if there was an association between the number of social media platforms used and purchase frequency from social media. We decided to use a chi-square to determine if there is an association between these two variables. However, not all of the cells have an expected value greater than five and some cells contain values of zero, which undermine the basic assumptions of the Chi-Square test. Instead, we turned to the Fisher's Exact Test, which is compatible with smaller samples, using the following hypotheses:

Ho: Treatments (Number of social media platforms used) do not affect the outcome (Purchases made in the past year due to seeing a post from social media); both variables are independent

Ha: Treatments do affect the outcome; variables are dependent.

Because the p value = $0.00265 < 0.05$, we rejected the null hypothesis. As a result, the number of social media platforms used does influence purchasing behavior most likely due to the increased priming (ie. videos, ads, posts) from multiple platforms. This is also demonstrated by the stacked bar chart in **Figure 1**: the number of responses pertaining to never having purchased an item after seeing it by social media decreases as the number of social media platforms used increases.

Figure 1

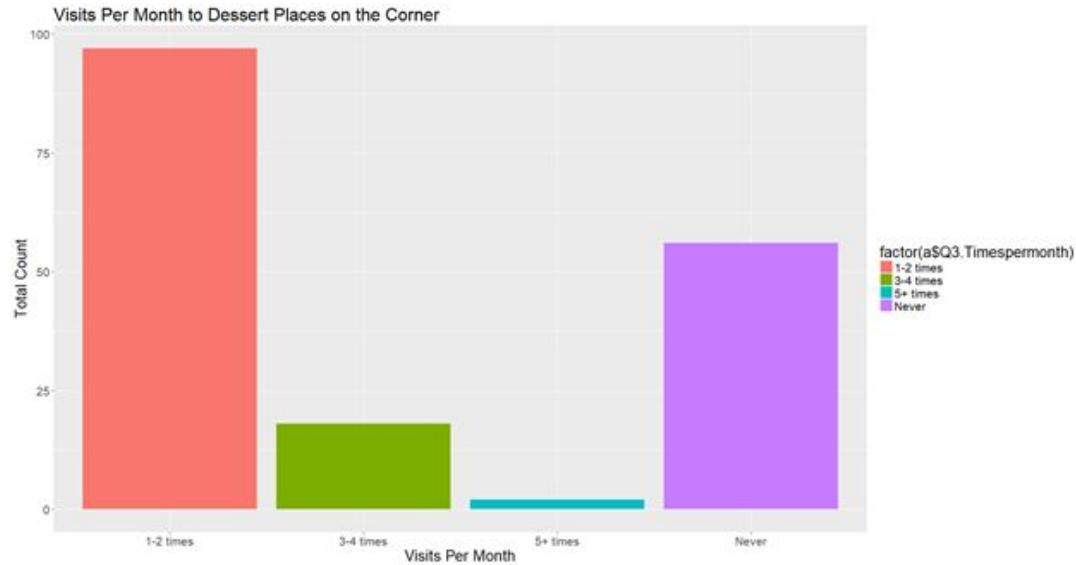


Student dissatisfaction with existing dessert options provides opportunity for a new dessert place

After analyzing social media behavior, the next question we sought to answer was if there was sufficient demand for a new dessert place on the UVA Corner. To answer this question, our team analyzed the general student demand for desserts, satisfaction with current dessert offerings on the Corner, and appeal of a new dessert shop that sells desserts popularized by social media, which were three questions asked in the questionnaire.

1. *How many times per month do you find yourself going to a dessert place on the UVA Corner?*
2. *How satisfied are you with the current dessert offerings on the UVA Corner?*
3. *Imagine that a new dessert shop had a rotating menu featuring desserts popularized by social media. How likely would you be to try one of these desserts?*

Figure 2



For the first question, over 67% of survey respondents answered that they go to a dessert place on the Corner 1-2 times, 3-4 times, or 5+ times (cumulative), as displayed in **Figure 2**. This indicates that UVA students do in fact go to the Corner for desserts.

For the second question, the options ranged from Extremely Dissatisfied to Extremely Satisfied. After assigning numerical values to these nominal categories from 1 to 5, with Extremely Dissatisfied equaling 1, we determined a mean threshold; if the mean is below 3.5 then there are opportunities for opening a new dessert place on the Corner. Responses to this question yielded a mean of 3.06 with a 95% confidence interval between 2.92 and 3.21, which implies that students are somewhat dissatisfied to neither satisfied nor dissatisfied with current dessert offerings. Combining this satisfaction rating with the frequency of visits per month to existing dessert places on the Corner, we can extrapolate that there is a demand for desserts on the Corner, but students are relatively dissatisfied with existing offerings.

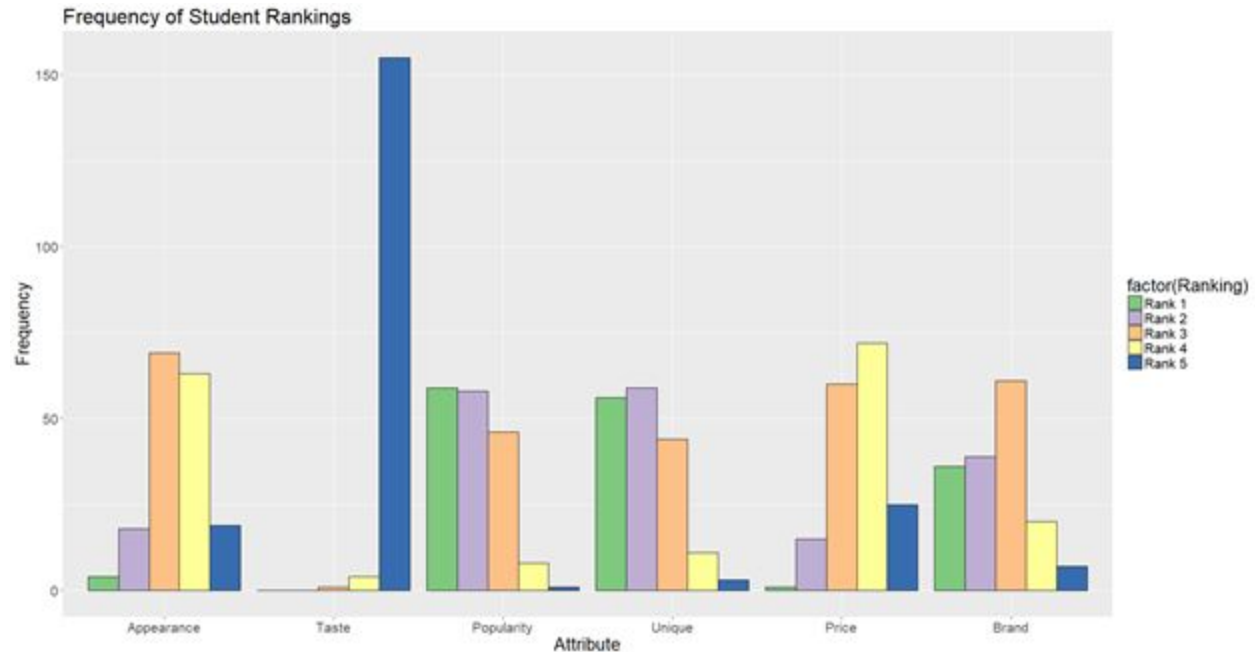
Question 3 examines student's likelihood to try desserts popularized by social media. The response scale for this question ranged from 'Not at all likely' to 'Extremely likely', which we then converted to

numerical values from 1 to 7, respectively. We established 5 as the minimum threshold of appeal for this new type of dessert shop. Descriptive statistics yielded a mean of 5.35, with a 95% confidence interval of 5.15 to 5.54. This result demonstrates that there is great student interest in dessert shop with desserts popularized by social media. Given this result, we recommend moving forward with this project, as these results indicate that a significant demand for a new dessert place on the Corner exists. Opening a new dessert place with a rotating menu featuring desserts popularized by social media could be exactly what UVA dessert lovers are looking for. After establishing that a significant demand for a new place on the Corner exists, we moved to determine the pricing, product mix, and use of space for this dessert shop that would resonate best with UVA students based on survey data.

UVA students consider taste, presentation, pricing in dessert purchase decisions

Before diving into menu design, we analyzed which attributes (appearance, taste, brand, etc.) were most important in a UVA student's decision to purchase a dessert. Respondents were asked to rank attributes from 1-5, with 5 being the most influential factor. From the visualization below, 'Taste' seems to be the most important aspect in a student's decision to purchase a dessert, with 155 respondents ranking it a 5. Next up are price and appearance. This means that students will be more inclined to purchase a specialty dessert from the new shop if it meets students' taste, presentation, and price criteria. **(Figure 3)** We will further analyze student's price elasticity in a later section.

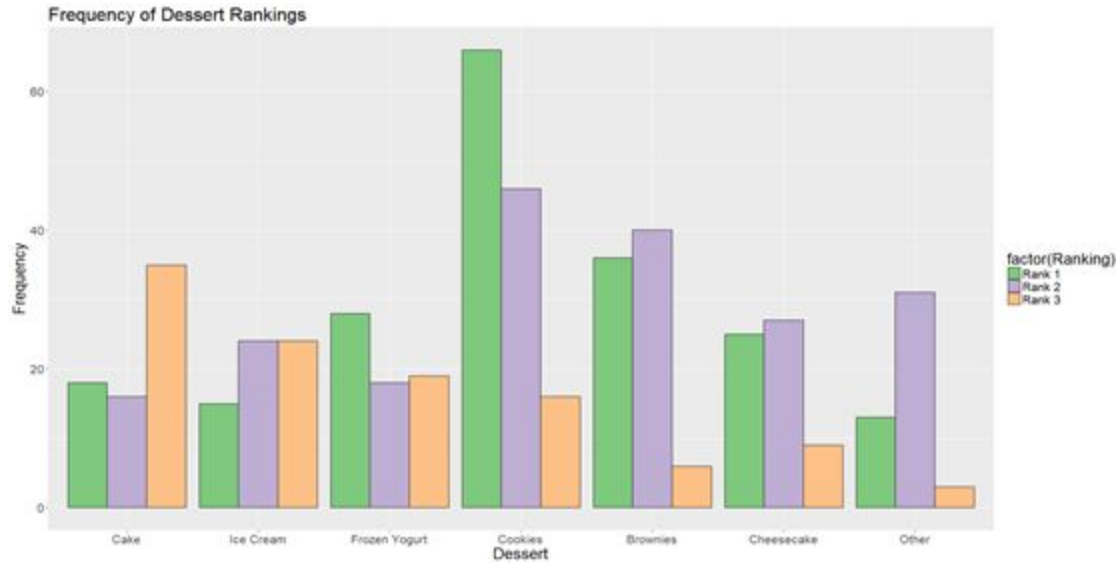
Figure 3



Cookies, brownies, and frozen yogurt are the top preferred desserts among UVA students

In determining the menu for the dessert place, we first visualized the dessert preference ranking data from Question 1 in **Figure 4**. In Question 1, respondents were asked to pick from a list of 7 choices their top three preferred desserts and rank them from 1-3 (with 1 being the most preferred). From the ggplot visualization below, we can tell that for ‘Top 1’ dessert rankings, cookies have the greatest number picks, followed by brownies and frozen yogurt. Meanwhile, for ‘Top 2’ dessert, we have cookies and brownies, again, and other desserts. For ‘Top 3’ dessert, we found cake, ice cream, and frozen yogurt to be most popular. Because cookies are in two of the rank categories, it seems to be the most popular dessert amongst UVA students. In line with this realization, the Corner currently boasts two late-night cookie places: Red Eye and Insomnia. Luckily, the rotating menu, which will include cookies, and other amenities will enable the new dessert place to reap competitive advantages in the dessert and cookie shop spaces.

Figure 4



Vegan and gluten free options do not boost the attractiveness of the dessert shop among students

During focus groups, some students suggested adding vegan and gluten-free options to the menu. The questionnaire included a question about how students perceived these offerings. Contrary to what was said in focus groups, on average, survey participants disagreed with the statement that the option(s) would increase the attractiveness of the dessert place to them (Vegan: 2.63, Gluten-free: 2.71, which both fall between disagree and neither agree nor disagree). Given that 1) the vegan and gluten-free populations at UVA are rather small and 2) that it may be hard to achieve returns by providing these costly options, it may be best to hold off on including gluten-free and vegan options for now.

Serving alcoholic beverages does not increase the attractiveness of the dessert shop among students

Wells also asked us to determine the feasibility of adding alcoholic beverages (ie. Wine, beer, etc.) to the menu. The survey question we designed asked to what extent does selling alcohol at the new place

increase the attractiveness of the dessert place for them (**Exhibit 2**). The mean response was a 3.133 and median, 3, which both correspond to “neither agree nor disagree”. This is not surprising because people usually go to a dessert shop for desserts, not alcohol. Students are also more likely to go to a nearby bar or restaurant to purchase alcoholic beverages instead of a dessert shop. We ran additional summary statistics to see if the preference for serving alcohol differed between genders. Males exhibited a slightly higher mean (3.226) compared to females (3.092), but overall there was little difference in terms of the attractiveness of serving alcohol at the new dessert place. Secondary analysis indicates that an alcohol license costs around \$2,000, which the dessert place may not be able to recoup if the demand for alcohol at the dessert place is low. The dessert shop would also bear logistical risks such as accidentally serving alcohol to an underage student since our dessert shop is open to students who may not be 21 years old. Given these reasons, we recommend the dessert shop not serve alcohol due to its marginal impact on the attractiveness of the dessert shop and high risk of implementation.

Price speciality desserts between \$5-6 dollars

Using our knowledge of existing dessert places and pricing of similar products, our group hypothesized that on average a UVA student would be willing to pay \$5 for a dessert. The survey collected the average and maximum price respondents would be willing to pay for a specialty dessert, defined as a “unique dessert that you would not be able to find easily anywhere else.” The questionnaire revealed that UVA students prefer to pay a price between \$2 and \$16, with an average of \$5.81 (95% confidence interval: (\$5.47, \$6.14)) for a specialty dessert. We wanted to check if students were willing to pay more than \$5 dollars for the specialty desserts that the new dessert would offer. To do so, we conducted a one-sided t-test with the following hypothesis:

$$H_0: \mu \leq 5$$

$$H_a: \mu > 5$$

The one sided t-test yielded a p-value $= 2.06 \times 10^{-6} < 0.05$. As a result, we can reject the null hypothesis that the average amount students are willing to pay for a specialty dessert is less than or equal to \$5. This implies that UVA students are willing to pay more than \$5 for a specialty dessert.

The average and maximum amount UVA students are willing to pay does not differ across genders

Further, we wanted to examine whether the average willingness to pay across genders differed, as this could help Wells market to a target demographic in the future. To do so, we conducted a two sample t-test with the following hypotheses:

$$H_0: \mu(\text{Female WTP}) = \mu(\text{Male WTP})$$

$$H_a: \mu(\text{Female WTP}) \neq \mu(\text{Male WTP})$$

The two sample t-test yielded a p-value of $0.5738 > 0.05$. This means that we fail to reject the null hypothesis: the average dollar amount that female students are willing to pay for a specialty dessert is comparable to the amount that male students are willing to pay.

In examining potential gender-pricing discrepancies regarding the maximum price a female versus a male student is willing to pay, we conducted another two sample t-test. The two sample t-test had used the following hypotheses:

$$H_0: \mu(\text{Max Female WTP}) = \mu(\text{Max Male WTP})$$

$$H_a: \mu(\text{Max Female WTP}) \neq \mu(\text{Max Male WTP})$$

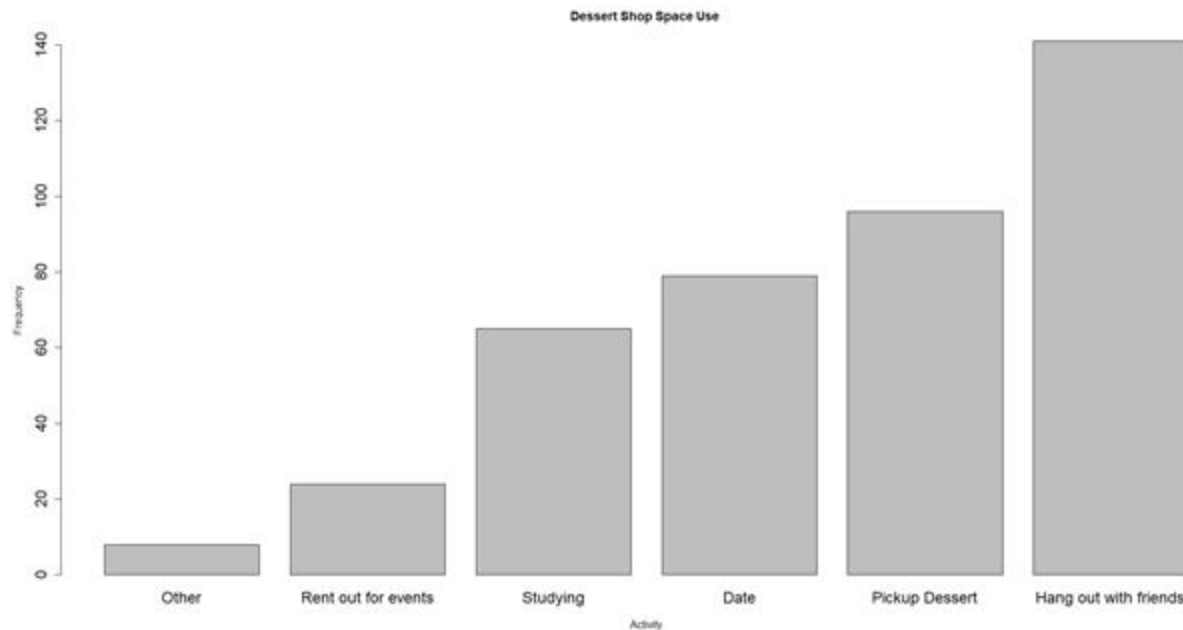
Since the p-value was $0.05181 > 0.05$, we fail to reject the null hypothesis that average maximum willingness to pay across genders is the same. However, we were very close to rejecting the null hypothesis at this 0.05 significance level. If we had performed the testing using a 0.1 significance level, we would be able to reject the null hypothesis. Seeing as the test was on the edge between failing to reject

and rejecting, we performed additional summary statistics. These summary statistics revealed that the maximum amount a UVA male student is willing to pay for a specialty dessert exceeds the the maximum amount (\$) UVA female student will pay (Male: 10.40 (9.28 , 11.51) > Female: 9.16 (8.59 , 9.73)). This implies that female UVA students are more price sensitive than male UVA students, from a maximum price standpoint. However, seeing as the average WTP (excluding maximum WTP) across genders is similar, we recommend setting the price per dessert to \$5-6 dollars. This price point not only matches customer sentiment, but also aligns with the prices of competitors (see **Exhibit 3**).

Design the new dessert shop to encourage group interaction and extended stay

Designing the dessert shop in a way that promotes hanging out (ie. has couches, study nooks, etc.) and is open late hours would make the dessert place more attractive to UVA students. This insight was revealed from analyzing responses to Question 6, which asked respondents if certain features would increase the attractiveness of the dessert shop. We converted the likert scale to numeric values (Strongly agree = 5) so that we could obtain averages and confidence intervals for the customer preferences. With a mean score of 4.69 (Confidence interval: (4.25 , 4.48)), students were largely in agreement that making the dessert shop a “hangout space” would make the shop more appealing. In addition, students overall agreed that having late hours for the dessert shop was preferable mean = 4.64 (4.54,4.74). Additional data from Question 5 also confirmed that students hoped to use this space to hang out with other friends (41 out of 173 respondents). The next two popular activities that students hoped to partake in at the shop include going to the dessert place for a date and studying (**Figure 5**).

Figure 5



These activities are common in the fact that they cater to group interaction. Thus, it may be sensible to include seating for parties of two for couples on dates and ample tables and chairs for studying and hangout purposes.

T-tests inform us of contrasting “hang out” behaviors in the dessert shop across genders

Before designing the layout of the dessert shop, it is critical to understand which customers will be staying in the shop and hanging out and who will just pick-up his or her dessert and go. To better understand UVA student behavior, we conducted a two-sample, one sided z test to see if there was a greater proportion of female students who would “hang out” (versus “picking up and going”) in a dessert shop compared to the proportion of males who would “hang out” in the same location. We postulated that a greater proportion of females would hang out at the dessert shop.

H₀: The proportion of female choosing to hang-out at dessert places less than the proportion of males who choose to do so

Ha: The proportion of female choosing to hang-out at dessert places is greater than or equal to the proportion of males who choose to do so

With a p-value of $0.02801 < 0.05$, we reject the null hypothesis. This implies that based off survey data, a greater proportion of female UVA students will hang out at dessert places compared to the proportion of UVA males. Designing the store in a way that appeals to UVA male students will encourage these UVA males to hang out with their friends here, stay longer, and create more business for the dessert shop.

Z-test inform us of similar “grab-and-go” behavior within dessert shops across genders

Now, in analyzing the proportion of female and male students who pick up desserts and go, we conducted another two sample, two-sided z test for proportions.

Ho: The proportion of female choosing to pick up and go at dessert places is the same as the proportion of males who choose to do so

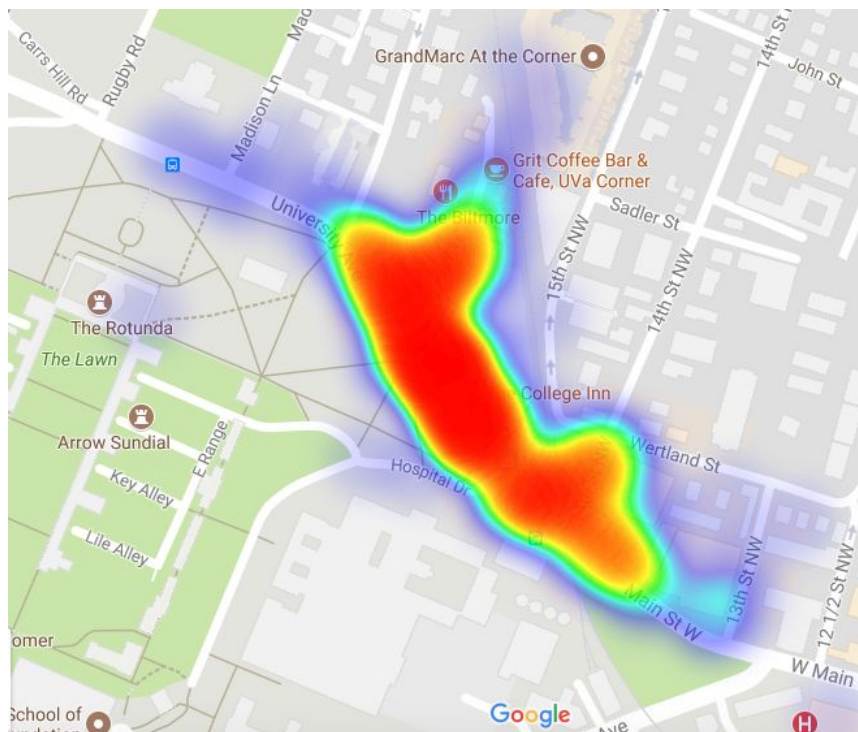
Ha: The proportion of female choosing to pick up and go at dessert places differs from the proportion of males who choose to do so

The two sided, two sample z test for proportions yielded a p-value of $0.1559 > 0.05$, which means that the proportion of females who simply buy a dessert and do not stay in the dessert shop is relatively the same as the proportion of males who do so. While this pick up and go behavior may be because UVA students are busy and do not have time to sit down and eat dessert in the shop, the environment within existing dessert shops also reinforces this behavior. Current dessert shops on the Corner lack sufficient and comfortable seating arrangements, which encourages grab-and-go behavior and increased customer turnover. Given the survey insight and competitor analysis, it may be strategically beneficial to design the new dessert place in a way that encourages long-term stay. The benefits of long-term stay include increased customer purchases of specialty desserts and other fixed options such as coffee and pastries, which were recommended by focus group and interview participants.

Heat map shows an ideal location between Bodos and The Virginian

For Question 12 in the survey, we asked respondents to select on a heat map where they would like to see the dessert shop located on the Corner. In **Figure 6**, we can see that respondents wanted the dessert shop to be located along University Avenue / Main Street, rather than down streets such as Elliewood. The greatest concentration of picks occurs between Bodos and The Virginian, what matches the sentiment we received from focus groups.

Figure 6



LIMITATIONS

Limitations of the Design & Problems Encountered

Sample pool was skewed towards females and first-year students

Instead of a heterogeneous sample from the UVA population, we received responses from a larger proportion of first-year students (vs second-, third- and forth-) and females (vs.males), which could have skewed survey results. This was likely caused by respondent selection error and nonresponse error. Our team was afraid not get enough responses from first-year students, so we put in extra effort encouraging them to fill out the survey, leading to a higher participation from the group. Moreover, since most average males are less interested in eating desserts or visiting dessert shops, many could have chosen not to participate in our study related to the topic. This yielded a proportion of males in the sample higher than in UVA population. Despite skewness of the sample, we believe that results are still very relevant, informative, and pertinent to the research problem because we see our target population being current first, second, and third years, as well as female students. The shop will not be built in time for current fourth years to enjoy it and female students will probably be more interested in trying new desserts, as we found from our primary research.

Number of survey questions was limited, yielding less in-depth results

In order to entice more people to participate in the survey, we made it short and convenient to take, which implied a relatively limited number of questions and superficial research. Undoubtedly, incorporation of more in-depth questions would have provided us with more comprehensive information. However, the simpler version yielded a bigger pool of respondents, making data analysis results more reliable. Moreover, the survey did explore key questions relevant to Well's idea, so we achieved the goal set forward by this research.

Online survey could have resulted in thoughtless responses

We chose to have an online survey instead of an in-person study, as it would allow us to collect more responses quickly. This could have led to participants being less attentive when filling out the survey and, thus, providing less accurate results. We tried to mitigate the problem by excluding responses that took less than 100 seconds to complete from data analysis. Therefore, we believe that we avoided any errors that could have arisen from lack of attention by respondents.

CONCLUSION

Trendie Consulting recommends that Wells open a new dessert shop on the UVA Corner

Based on this marketing research survey data, there is sufficient demand for a new dessert place on the Corner. UVA students' social media usage behavior influences purchasing behavior, which the dessert shop can capitalize on with its rotating menu of dessert items popularized by social media. At the same time, our research clarifies how this dessert shop can tailor its product, pricing, and space usage to the target demographic to increase the attractiveness of the shop in the face of existing competition. For instance, the dessert shop can offer cake and brownie specialty desserts popularized by social media because UVA students tend to favor these desserts over others. However, these desserts must first and foremost taste good, and then appeal in the aesthetics and pricing aspects. In terms of pricing, a price of \$5 per dessert will match both females and male UVA student's willingness to pay. In terms of store usage, a greater proportion of females will naturally hang out at dessert shops compared to males. Thus, we can consider designing the store so that it is more inclusive of male students and encourages them to stay longer. Designing the space to allow for extended stay will also provide a competitive advantage for the new dessert shop since existing dessert places encourage "grab-and-go" behavior. In conclusion, we recommend Wells open the dessert shop using aspects of this market research as a guide. To aid Wells in initial planning, we have included creative concepts and start-up costs for the project in the Appendix.

EXHIBITS

Exhibit 1: Interview and Focus Group Guide

Hi! Thank you for agreeing to participate in this interview. My name is Simone. I am a fourth year/exchange student in McIntire School of Commerce. The purpose of this interview is to gauge the receptiveness of the UVA student body toward the idea of a new dessert place on the Corner. Consequently, we also want to determine what dessert shop features would appeal to UVA students the most regarding aspects such as product mix, pricing, and location. During the interview I will ask you about your preferences, opinions, and typical behaviors regarding desserts and dessert places. Please answer with as much detail as you can. Elaborating on your thoughts with recollections and stories of past experiences would be prove highly beneficial to our marketing research. If you ever feel uncomfortable answering answer, please feel free to refrain from answering. The answers you provide will help me and my team better understand needs and preferences of UVA students and make future decisions about the new dessert shop. The interview will take around 20 minutes. I would like to record a video of our conversation for future reference. I will only share the video with my team members and professor. Is it ok with you? GET CONSENT BEFORE PROCEEDING. Great! Thank you! (If say No, don't record and take notes instead) Do you have any question before we start? ANSWER QUESTIONS BEFORE PROCEEDING. Let's start:

Warm Up

Please start by introducing yourself. Tell me your name, year at UVA and whether you are an exchange or full-time student.

“What is the most amazing experience you have had that involved a dessert?”

Questions (in-depth investigation):

“In what situations do you eat desserts?”

“Can you name some of the dessert places you have visited within in the past year?”

“How did you hear about these dessert places?”

“What certain aspects drew you to these places?”

“What aspect sets each of the dessert places you have visited apart?”

“What do you think about the current dessert offerings on the Corner?”

“How did you hear about these dessert places on the Corner?”

“Are you satisfied with the dessert offerings on the Corner?”

“What certain aspect drew you to these specific dessert places on the Corner?”

“In general, which of the following factors matter to you the most when purchasing a dessert?”

Product Mix

“What type(s) of dessert are you drawn to the most?”

“Why are you drawn to these desserts?”

“What is your main outlet for getting these dessert?”

“Would is your opinion on gluten free, vegan, or low-calorie desserts?”

Aesthetics / Appearance

“How strongly does how a dessert looks factor into your decision to buy it?”

“How often do you purchase desserts solely based on presentation (appearance)?”

“Have you ever seen or heard about trendy desserts (black ice cream, edible cookie dough)”

What is your opinion/ what do you think about these desserts?

Social Media

“Have you ever tried a dessert because you saw a post about it on Social Media?”

“According to the previous answer, which social media platform do you receive this information from?”

Price

“What do you think is a reasonable price for a dessert?”

“What should bring you to pay an extra price for a dessert?”

“Could the fact that you saw the dessert on a social media let you more willing to pay an extra price?”

Location

“Think about one place you love (coffee shop, restaurant, etc.). Where would you wish it could be located on the Corner?” (Indicate an existing place as a reference point)

Why did you pick that new location?

“How much time do you generally spend at these places?”

“What do you generally do at these places?” / “Would you study in these place?”

“Referring to the previous question, Do you like to study in a different place from University or your home?”

Closure

These are all the questions I have for you today. Are there any other ideas or suggestions you have that would make a new dessert shop on the Corner more attractive for you? *Give opportunity to share, listen carefully*

Thank you for sharing your thoughts! I loved hearing about _____ *(if applicable, note specific stories/ideas you liked)*

Are there any questions you have for me now? *Answer questions if they arise*

Thank you again for your time! Have a great rest of your day!

Exhibit 2: Final Survey (Qualtrics)

Default Question Block

Context. Our marketing research group is conducting a survey to analyze University of Virginia student preferences toward desserts. Your feedback and participation will enable us to design a new dessert place on the Corner that is tailored for the UVA community. This survey should take you no more than 5 minutes. Thank you for taking the time to participate in our marketing research!

Q1. Rank your top 3 favorite desserts (1 being the most favorite).

<input type="checkbox"/>	Cake
<input type="checkbox"/>	Ice Cream
<input type="checkbox"/>	Frozen Yogurt
<input type="checkbox"/>	Cookies
<input type="checkbox"/>	Brownies
<input type="checkbox"/>	Cheesecake
<input type="checkbox"/>	Other (please specify) <input type="text"/>

Q2. How important are the following attributes in your decision to purchase a dessert?

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Appearance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Popularity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uniqueness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3. How many times per month do you find yourself going to a dessert place on the UVA Corner?

Never	1-2 times	3-4 times	5+ times
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4. How satisfied are you with current dessert offering on the UVA Corner? (i.e. Arche's, Insomnia, Red Eye, etc...)

Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5. Ann Wells, a UVA alumna, is planning to open a new dessert place on the Corner next semester and wants to know how to best organize and design the space. What would you like to use the dessert space for? (Select all that apply)

☐ Picking up a dessert and leaving

12/4/2017

Qualtrics Survey Software

- ☐ Hanging out with friends
- ☐ Studying
- ☐ Date night
- ☐ Renting it out for events
- ☐ Other (please specify)

Q6. This feature would make the new dessert place more attractive to you.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
International desserts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegan dessert options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gluten-free dessert options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet study space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hang out area (couches, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convenient location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Late open hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delivery service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcoholic beverages (Beer, Wine)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. Imagine that the new dessert shop had a rotating menu featuring desserts popularized by Social Media. How likely would you be to try one of these desserts?

Not at all likely ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Extremely likely

Q8. How many times in the past year did you buy or try something because you saw a post about it on Social Media?

Never ☐ 1-2 times ☐ 3-4 times ☐ 5+ times ☐

Q9. According to the previous answer, which social media platforms do you receive this information from? (Select all that apply)

- ☐ Facebook
- ☐ Instagram
- ☐ Twitter
- ☐ Snapchat
- ☐ Other
- ☐ None

12/4/2017

Qualtrics Survey Software

- ☐ Hanging out with friends
- ☐ Studying
- ☐ Date night
- ☐ Renting it out for events
- ☐ Other (please specify)

Q6. This feature would make the new dessert place more attractive to you.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
International desserts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegan dessert options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gluten-free dessert options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet study space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hang out area (couches, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convenient location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Late open hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delivery service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcoholic beverages (Beer, Wine)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. Imagine that the new dessert shop had a rotating menu featuring desserts popularized by Social Media. How likely would you be to try one of these desserts?

Not at all likely ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Extremely likely

Q8. How many times in the past year did you buy or try something because you saw a post about it on Social Media?

Never ☐ 1-2 times ☐ 3-4 times ☐ 5+ times ☐

Q9. According to the previous answer, which social media platforms do you receive this information from? (Select all that apply)

- ☐ Facebook
- ☐ Instagram
- ☐ Twitter
- ☐ Snapchat
- ☐ Other
- ☐ None

12/4/2017

Qualtrics Survey Software

Q10. What is the average dollar amount you would typically spend on a dessert (ie. From restaurant or dessert place)?

	1	3	5	7	9	11	13	16	18	20	22	24	26	28	30
Drag slider below to reflect your price choice															

Q11. What is the maximum amount (\$) you would be willing to spend on a specialty dessert (ie. A unique dessert that you would not be able to find easily anywhere else)?

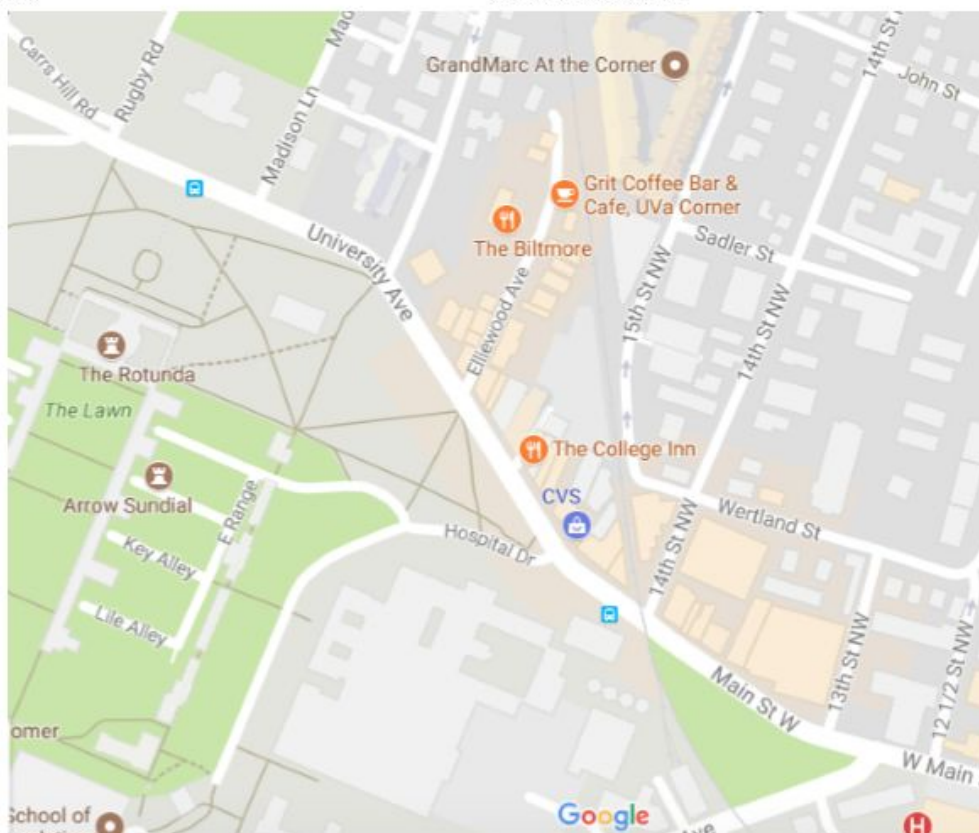
	1	3	5	7	9	11	13	16	18	20	22	24	26	28	30
Drag slider below to reflect your price choice															

Q12. Where would you want the new dessert place on the Corner to be located? Click the map to place a dot in the desired location. Select up to two spots.



12/4/2017

Qualtrics Survey Software



Q13. What year at UVA are you?

- ☐ First year
- ☐ Second year
- ☐ Third year
- ☐ Fourth year
- ☐ Graduate student

Q14. Are you an exchange student?

- ☐ Yes
- ☐ No

Q15. How far do you live from the Corner in terms of walking distance?

- ☐ < 5 minutes
- ☐ 5 - 10 minutes
- ☐ 11 - 15 minutes

12/4/2017 Qualtrics Survey Software

☐ > 15 minutes

Q16. Which gender do you identify with?

☐ Male
 ☐ Female
 ☐ Wish not to disclose

Q17. If you have any further questions or comments, please leave them down below:

Exhibit 3: Competitor Prices in Charlottesville range from \$1.60 to \$11.00

STORE	MIN PRICE	MAX PRICE
INSOMNIA COOKIES	\$ 1.60	\$ 8.25
ARCH'S FROZEN YOGURT	\$ 4.00	\$ 12.00
STARBUCKS	\$ 1.95	\$ 6.45
KILWIN'S	\$ 3.00	\$ 8.00
SPLENDORA'S GELATO CAFE	\$ 4.00	\$ 7.80
IRON PAFFLES & COFFEE	\$ 4.50	\$ 8.99
PARADOX PASTRY	\$ 2.75	\$ 11.00

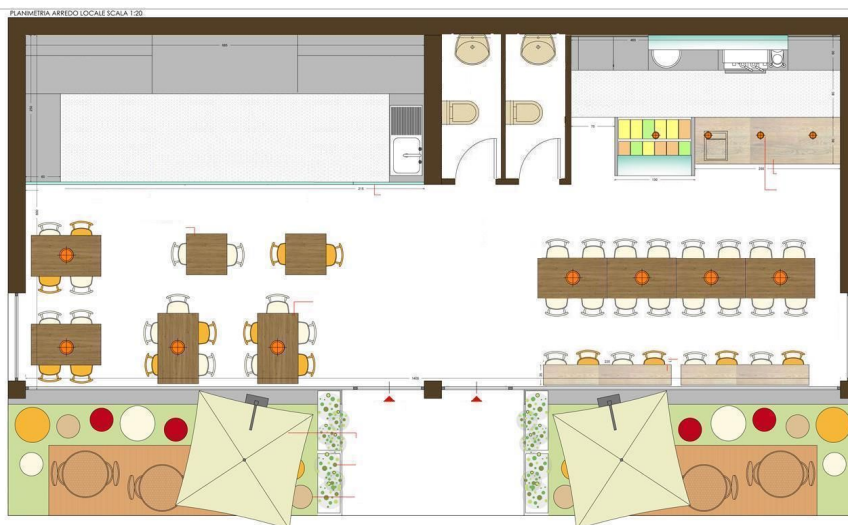
APPENDIX

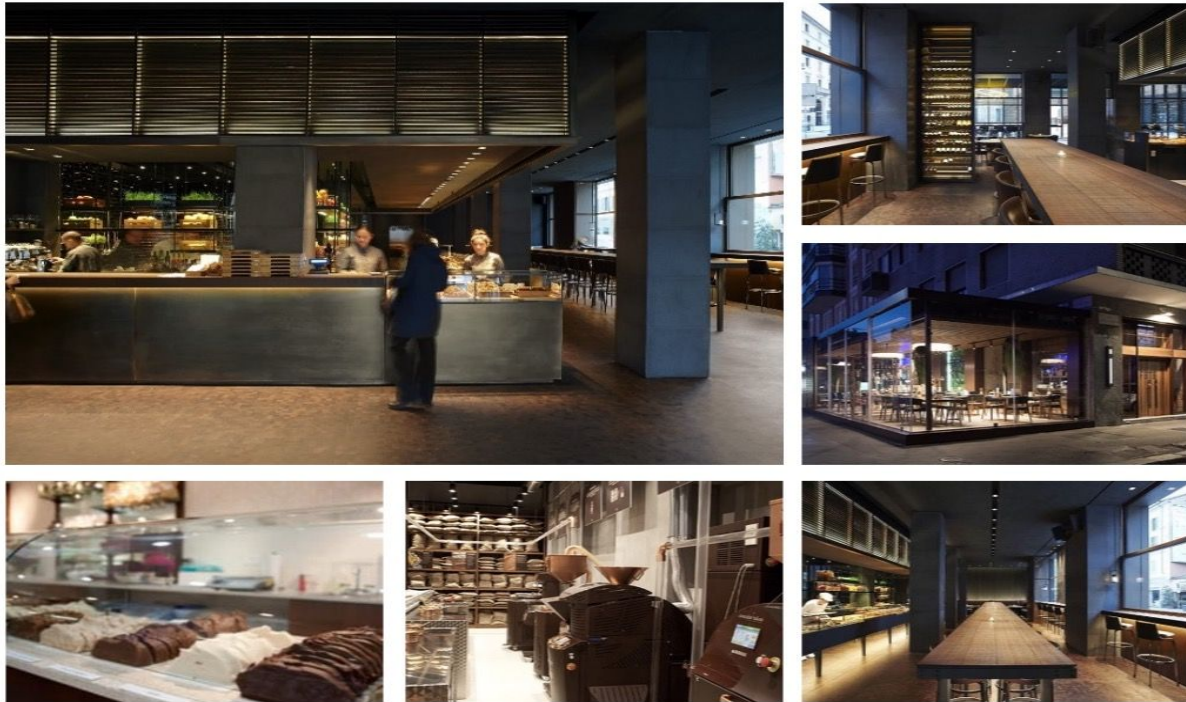
Appendix 1: Dessert Trendy Logo and Menu Idea



Appendix 2: Dessert Trendy Interior Idea

This store setting is inspired by “Princi” and “Cioccolati Italiani” stores. By installing large shop windows, we aim to attract customers who pass next to the store. We could display some of the unique, visually appealing trendy desserts next to these windows to increase people’s curiosity and encourage them to come in and try. Additionally, an important strategy for our dessert shop is to hold clientele inside the store, in order to encourage them to buy more. Therefore, we want to install spacious tables and comfortable chairs to invite people to spend a relaxing moment inside the store. Moreover, existence of an open-plan kitchen shows customers how we prepare our products. From our point of view, this element infuses cleanliness and reassurance to our customers. Finally, the store will be equipped with shelves for in-store made products, available for purchasing.





Appendix 3: Leasing Cost

According to TheBalance.com, estimated monthly rental cost of leasing a storefront is (average price per square foot) x (estimated square footage of the storefront). LoopNet estimates that the average price per square foot for a month in Charlottesville is between \$19 and \$22. Great Harvest Bread & Co. and Linear Retail estimates that the average square footage of a dessert store is between 2,200 and 2,400 square feet. Thus, the leasing cost would be within the range of \$41,800 - \$52,800 per month or \$501,600 - \$633,600 per year.

Appendix 4: Utilities Cost (Commercial Electricity)

According to the website ElectricityLocal.com the average commercial electricity rate in Charlottesville is 7.8¢/kWh. We have estimated potential kWh per year consumption by the trendy dessert business:

3 POSSIBLE SCENARIOS DEPENDING ON THE CONSUME OF ELECTRICITY

HIGH USAGE	MEDIUM USAGE	LOW USAGE
30,000 kWh	25,000 kWh	15,000 kWh
\$2.340,00	\$1.950,00	\$1.179,00

Appendix 5: Taxes

According to Taxjar.com the average tax rate in Virginia is 6% of total sales.

Appendix 6: Advertising Cost

Focus Groups participants underlined importance of advertising in their decision to purchase a dessert. Our team has identified two ways of acquiring new customers:

- Social Media: According to our Data Analysis, customer are much more influenced in buying a product if they see it before in a social media. Using Facebook with a budget of \$1,200 distributed in an entire year, it is possible to reach between 28,000 and 54,000 student with an age of 17-24. Moreover, we could incite customers to post our desserts on their social media, what wouldn't come with any additional cost.
- Flyering: Flyering is a common technique used by many businesses in Charlottesville. Printing 2000 flyers to distribute on Grounds would cost \$ 1,094 (Fedex). Moreover, we would need to hire and pay (minimal wage) "ambassadors" to distribute them. We could also partner with restaurants on the Corner and ask them to distribute the flyers at the end of the meal, as our research indicates that a high proportion on student population likes to eat dessert after a meal (especially dinner). Overall, the cost of advertising through flyering might be around \$2,000 per 2000 flyers.

Finally, we would want to invest in a catchy sign to attract students passing by the store. According to Fitsmall Business.com a storefront sign could cost at most \$1000 for a Logo sign made by metal.

Appendix 7: Licensing Cost

After consulting Charlottesville Official Website we estimated cost of licensing to be \$735. This includes Sign Permit Application, Certificate of Occupancy, and Alcohol and Beverage License. Furthermore, it is important to consider Business License cost, which is 0.002 per receipt if the store receipts are greater than \$50,000.

Appendix 8: Business Insurance Cost

According to Insureon.com, insurance for our business could cost: \$1,281 or \$584 per year, depending on the size of the business (medium and small, respectively). However, this amount is the outcome is based on multiple assumptions. Indeed the price could vary based on several factors, such as the type of policy a business purchases, limit, deductible, industry, location, revenue, and number of employees.

Appendix 9: Store Cost

Our team estimated that \$50,000 is the maximum expense of furniture for the dessert shop.

<i>EQUIPMENT</i>	<i>QUANTITY</i>
CHAIR	46
PORCH CHAIR	8

<i>STOOL</i>	8
<i>POUFFE</i>	20
<i>DOUBLE TABLE</i>	10
<i>TABLE</i>	2
<i>HIGH TABLE</i>	4
<i>PORCH TABLE</i>	2
<i>CASH REGISTER</i>	3
<i>SINK</i>	2
<i>TOILET</i>	2
<i>OTHER ITEMS</i>	NA
<i>MAX EXPENSE</i>	<i>\$50,000.00</i>

Appendix 10: Equipment Cost

In order to produce all kinds of trendy desserts we plan to offer, some specific bakery machineries are required. Below, we provided costs of all the main equipment needed with a possible financing plan.

<i>EQUIPMENT</i>	<i>PRICE</i>	<i>FINANCING/month</i>
<i>OVEN STEAMER</i>	<i>\$11,717.00</i>	<i>\$276.76</i>
<i>COOLER</i>	<i>\$5,296.76</i>	<i>\$132.84</i>
<i>DOUGH SHEETER</i>	<i>\$7,066.00</i>	<i>\$177.22</i>
<i>PLANETARY FLOOR MIXER</i>	<i>\$2,699.00</i>	<i>\$67.48</i>
<i>FRYING MACHINE</i>	<i>\$659.00</i>	<i>\$33.00</i>
<i>REFRIGERATED DISPLAY CASES FOR BAKERY</i>	<i>\$10,347.30</i>	<i>\$258.70</i>
<i>ICE CREAM MACHINE</i>	<i>\$11,087.50</i>	<i>\$258.00</i>
<i>STARTER (YEAST BASE) FERMENTERS</i>	<i>\$3,000.00</i>	<i>\$83.33</i>
<i>CHOCOLATE FOUNTAIN</i>	<i>\$500.00</i>	<i>\$13.89</i>
<i>WAFER MACHINE</i>	<i>\$200.00</i>	<i>\$5.56</i>



<i>SUGAR GRINDER</i>	<i>\$3,000.00</i>	<i>\$83.33</i>
<i>GENERIC KITCHEN EQUIPMENT</i>	<i>\$600.00</i>	<i>NA</i>
<i>TOTAL</i>	<i>\$56,172.56</i>	<i>\$1,390.11</i>

Appendix 11: Main Kitchen Equipment (Images)



Appendix 12: Initial Survey

Gauging Demand

“How likely are you to go to a dessert place on the UVA Corner?”

(not likely) 1.....2.....3.....4.....5 (very likely)

“How often do you go to the Corner for dessert (# times a month)?”
_____ times/month

“Are you satisfied with the current dessert offerings on the Corner?”
(not satisfied) 1.....2.....3.....4.....5 (very satisfied)

“How likely are you to make a purchase at the dessert place?”

(not likely) 1.....2.....3.....4.....5 (very likely)

“How often do you end up buying a dessert because you saw a post about it on Social Media?”

(never) 1.....2.....3.....4.....5 (very often)

“According to the previous answer, which social media platform do you receive this information from?”

☐ Facebook

☐ Instagram

☐ Snapchat

☐ Twitter

☐ Does not apply to me

☐ Others (Please specify) _____

Product Mix

“What type(s) of dessert are you drawn to the most?

(Select top three choices & rank them with 1 being the dessert that most appeals to you)”

☐ cake

☐ ice cream

☐ frozen yogurt

☐ cookies

☐ brownies

☐ cheesecake

☐ pancakes

☐ other (please specify) _____

“What dessert, if any, would you be interested trying? List desserts in the space below or write ‘N/A’.”

“Which feature plays the biggest role in your decision to try a new dessert? (Select one)”

☐ novelty (as in you cannot get this dessert anywhere else)

☐ popularity

☐ discount

☐ recommendation from a friend

“How important is presentation (appearance) for desserts in order to make you buy it?”

(not important) 1.....2.....3.....4.....5 (very important)

“How often do you purchase desserts solely based on presentation (appearance)?”

(never) 1.....2.....3.....4.....5 (very often)

“In general, which of the following factors matter to you the most when purchasing a dessert? (Select two)”

☐ Taste ☐ Uniqueness ☐ Brand ☐ New ☐ Appearance

“Have you ever seen or heard about trendy desserts (black ice cream, edible cookie dough) or trendy dessert shops (Nutella Bar)?”

☐ Yes

☐ No

“How excited were you about these desserts and dessert shops?”

(totally indifferent) 1.....2.....3.....4.....5 (very excited)

☐ Haven’t heard about any

“Would you be interested in a dessert shop that offered, gluten free dessert options?”

☐ Yes ☐ No

“Would you be interested in a dessert shop that offered vegan dessert options?”

☐ Yes ☐ No

“Would you be interested in a dessert shop that offered low calorie dessert options?”

☐ Yes ☐ No

Price

“What is the average dollar amount you spend on a dessert?” \$_____

“What is the maximum dollar amount you are willing to pay for a dessert?” \$_____

“What is the maximum dollar amount you have ever spent on a dessert?” \$_____

“Which of the following factors caused you to spend that much on the dessert in the previous question?

Please rank the factors with 1 being the most influential factor.”

☐ Taste

☐ Novelty/ uniqueness

☐ Brand

☐ Appearance

“Would you pay an extra dollar above what you usually spend on desserts (on average) if you saw that desserts being popularized on social media?”

☐ Yes ☐ No

Timing and Location

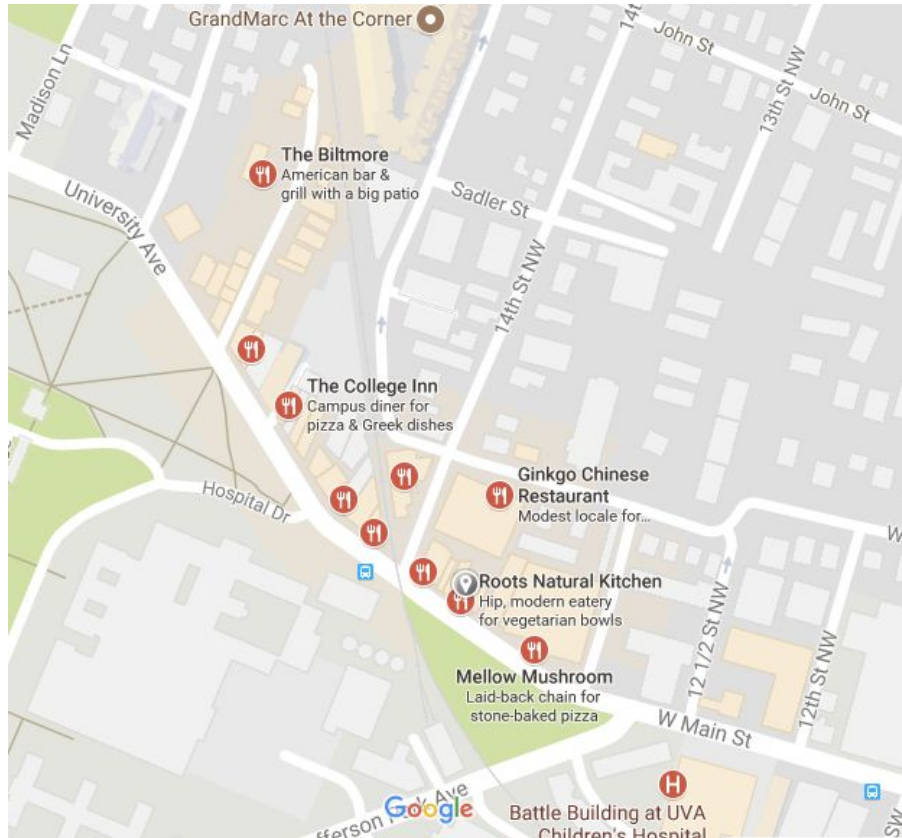
“During which types of occasions do you usually eat dessert?” (select all that apply)

- ☐ date night
- ☐ formal event
- ☐ nice dinner
- ☐ out with friends
- ☐ meeting new people
- ☐ treat yourself after a long day

“Around which meal do you crave a dessert the most?” (select all that applies)

- ☐ Breakfast
- ☐ Brunch
- ☐ Lunch
- ☐ Afternoon Snack
- ☐ Dinner
- ☐ Late Night Snack
- ☐ Other (Please specify) _____

“Think about one place on the Corner you love (coffee shop, restaurant, etc.). Where would you wish it was located so that you could go more often? Draw a dot or a line in the desired location. If your favorite place is already in the perfect spot, please mark the current location.”



[Follow up question from map question] : “If a new dessert place was located where you just identified, how likely would you to go there when you crave a dessert?”
(not likely) 1.....2.....3.....4.....5 (very likely)

[Follow up question from map question] : “If a new dessert place was located where you just identified and had a study area, how likely would you be to study there (you wouldn’t have to buy a dessert to stay)?”
(not likely) 1.....2.....3.....4.....5 (very likely)

Additional Logistics

“Are you interested in having a takeout option for desserts?”
__ Yes __ No

“Are you interested in a delivery service for desserts?”
__ Yes __ No

“Are you interested to know the history behind a Dessert?”

☐ Yes ☐ No ☐ Not significant

“According to previous answer, could you be fascinated by a desserts’ museum?” (where you could watch video-recipes or send the recipes to your email address...)

☐ Yes ☐ No ☐ Not significant

“How much could you be impressed by a open-style kitchen?”

(not impressed) 1.....2.....3.....4.....5 (very impressed)

Demographics

“What year at UVA are you?”

☐ First Year
☐ Second Year
☐ Third Year
☐ Forth Year
☐ Grad Student
☐ Other (please specify)_____

“What gender do you identify with?”

☐ Male
☐ Female
☐ Wish not to specify

“Which type of student do you currently identify as?” (select one)

☐ In-state
☐ Out-of-state
☐ International (all four years)
☐ Exchange

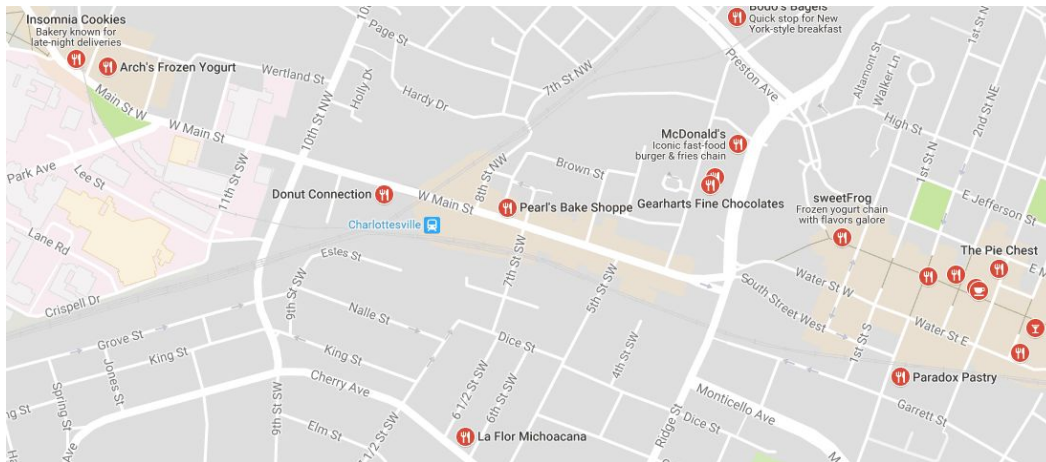
“Where do you live?”

☐ Behind the Corner
☐ On JPA
☐ On Main Street (the Flats, Uncommon, etc...)
☐ On-Grounds Housing (Lambeth, Lawn, Faulkner, IRC, Language House, etc...)
☐ Other (Please specify)_____



Appendix 13: Competitive Analysis (Location)

Most dessert places in Charlottesville are located far from the Corner, providing opportunity for a new dessert shop on the Corner.



Appendix 14: Cross-tabulation Based on Gender and Year

Show that most respondents would be very to extremely likely to try the new dessert shop.

		Imagine that the new dessert shop had a rotating menu featuring desserts popularized by Social Me... -7 represents "Extremely likely"							Total
		1	2	3	4	5	6	7	
What year at UVA are you?	First year	0 0.00%	1 1.23%	3 3.70%	9 11.11%	27 33.33%	21 25.93%	20 24.69%	81 100.00%
	Second year	0 0.00%	1 5.00%	2 10.00%	1 5.00%	4 20.00%	8 40.00%	4 20.00%	20 100.00%
	Third year	0 0.00%	1 3.13%	2 6.25%	4 12.50%	13 40.63%	5 15.63%	7 21.88%	32 100.00%
	Fourth year	0 0.00%	5 11.11%	3 6.67%	4 8.89%	15 33.33%	13 28.89%	5 11.11%	45 100.00%
	Graduate student	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 12.50%	4 50.00%	3 37.50%	8 100.00%
	Total	0 0.00%	8 4.30%	10 5.38%	18 9.68%	60 32.26%	51 27.42%	39 20.97%	186 100.00%
Which gender do you identify with?	Male	0 0.00%	4 6.90%	3 5.17%	7 12.07%	23 39.66%	14 24.14%	7 12.07%	58 100.00%
	Female	0 0.00%	4 3.15%	7 5.51%	10 7.87%	37 29.13%	37 29.13%	32 25.20%	127 100.00%
	Wish not to disclose	0 0.00%	0 0.00%	0 0.00%	1 100.00%	0 0.00%	0 0.00%	0 0.00%	1 100.00%
	Total	0 0.00%	8 4.30%	10 5.38%	18 9.68%	60 32.26%	51 27.42%	39 20.97%	186 100.00%

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