



April 27th, 2015

Ms. Ann Wells
267 Ocean Avenue
Charlottesville, VA, 22903

Dear Ms. Wells,

At your request, Apex consulting has conducted market research on the potential for a business venture which provides a Plus Dollar Exchange service for UVA undergraduates. The following written report contains details on the research problems facing this business venture, our research findings, and our recommendation.

We began our market research by attempting to conduct secondary research on UVa plus dollars as well as existing college currency exchange programs and found that such information was unavailable. We thus turned to primary research by conducting interviews, focus groups and questionnaires which we then used to conduct descriptive research via an online survey. Based on the results of our research, we believe that this plus dollar exchange service has the potential to be a very profitable business venture.

Apex consulting has thoroughly enjoyed conducting marketing research on your behalf. The following report provides an in-depth view of our market research and the rationale behind our recommendation for this business venture. We look forward to further collaborations in the future, and wish you the best of luck moving forward. If you require additional assistance, please feel free to contact us by phone at 1-(434)-723-1APEX.

Sincerely,

Apex Consulting Group

Francisco Gabitan

Nathaniel Ricca

Bill Su

Conrad Tindall

Murali Varadaraj

Executive Summary

Apex Consulting has determined that a Plus Dollar Exchange service is a feasible Charlottesville business model. Substantial demand exists for this service, primarily because a balance exists between students wanting to sell excess Plus Dollars and students requiring additional Plus Dollars. The following report was prepared for Ms. Ann Wells, a recent McIntire graduate interested in opening a business which caters to UVA undergraduates. The content of the report includes insights drawn from our team's marketing research, and justifications for our claims.

Primary research provided a guide map for further analysis of the project

We attempted to conduct secondary research through UVA Dining, to obtain data about existing Plus Dollar breakdowns. Unfortunately this information was restricted for privacy, so we turned to other sources of secondary research such as analogous college currency exchange programs. Our research was unsuccessful, and thus we turned to primary research through focus groups and one-one interviews.

Through our research, we were able to gather data regarding undergraduate students' Plus Dollar use dollars as well as their perspectives on Plus Dollar Exchange, a digital platform that allows exchanges of discounted Plus Dollars. We learned that a significant amount students were immediately willing to adopt the service, and that many more would also be willing if informed about Plus Dollars policies such as rollover restrictions.

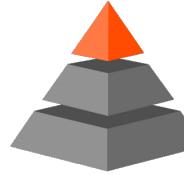
Our marketing research survey was developed and distributed online via Google Forms

After gaining insights through our primary research, we conducted descriptive research. The process culminated in a rough draft of our survey. Afterward, we went through stages of pretesting, specifically receiving feedback from expert Professor Mick, conducting personal interviews, and lastly by doing a field test where our team asked students at dining halls to complete our survey rough draft and offer their feedback. After implementing necessary changes to our survey shown through pretesting, we distributed our survey online.

Research results show that the Plus Dollar Exchange will be a viable business venture

Our research indicates that potential buyers and sellers of Plus Dollars exist in the UVA student body, and most are willing to use the Plus Dollar Exchange. Simultaneously, high supply and demand for Plus Dollars make the Plus Dollar Exchange a viable venture, with \$30,000 revenue per semester. Thus, we recommend the establishment of the Plus Dollar Exchange.

Our team was cognizant of marketing research limitations and bargains with reality



All marketing research techniques have limitations, and thus marketing researchers must continuously balance experimental conditions with real-life applications. Major limitations to our research techniques stem from sampling biases, which may affect supply and demand projection validity. At the same time, administrative barriers and online sampling imperfections may adversely impact result accuracy. Though these limitations are important to consider, they did not significantly detract from the data and our subsequent conclusions.

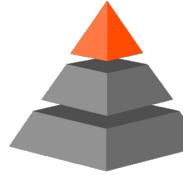


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Plus Dollar Exchange - A Plus to the UVA Dining Experience

Our client is Ms. Ann Wells, a recent McIntire School graduate. Ms. Wells returned to Charlottesville to open a business that caters to University of Virginia undergraduates. She has all necessary funds to pursue her goal, but her resources are not limitless; therefore, her choice is contingent on expected demand of the target population. Ms. Wells reached out to Apex Consulting for help gauging demand, and identifying other important criteria. Our team developed an effective procedure to meet her needs, which was instrumental in our final recommendation.

Prior to construction of this report, we prepared a research plan based on criteria in “Backward Market Research” by Alan Andreasen¹. The piece by Mr. Andreasen highlights the importance of determining data type and collection procedures prior to conducting marketing research. Subsequently, we gathered information from secondary sources, and finally from primary sources like UVA undergraduates. The organized series of steps ensured data collection and analysis was methodical.

Ms. Wells’ venture must be chosen based on considerations including demand, feasibility, and timeframe. Our team distinguished between decision problems and research problems based on Professor David Mick’s criteria at the McIntire School of Commerce². The main decision problem Ms. Wells faces is what type of business she should establish. Her business must fulfill an undergraduate need, and thus the selection process should be stringent. To solve this decision problem, we evaluated analogous research problems. The main research problems include:

¹ Andreasen, Alan, “Backward Market Research,” *Harvard Business Review*, May-June 1985, 176-182.

² Mick, David, “Commerce 3330, Defining the Marketing Research Problem, NM Chapter 2,” PowerPoint Presentation, January 14, 2015, accessed April 2015.



- What are UVA undergraduates' Plus Dollar usage behaviors?
- Are UVA students willing to adopt the Plus Dollar Exchange?
- Is there a viable supply and demand for a Plus Dollar Exchange?
- Is the Plus Dollar Exchange profitable for Ann Wells in the future?

The abovementioned research problems were selected because of their applicability to considerations such as demand, feasibility, timeframe, and the greater managerial decision problem.

The following sections explain how Apex Consulting progressed through its marketing research, and the report culminates with our team's recommendation to Ms. Wells.

Methodology

Selected procedures

Our research incorporated both exploratory and descriptive methods, and their corresponding data. The research was geared to discover insights about Plus Dollar use, when students spend the most Plus Dollars, etc. Ultimately, we wanted to determine whether undergraduates are interested in using a platform that allows them to buy and sell Plus Dollars at a discount. Our exploratory research relied on both secondary and primary research applications.

Secondary data on Plus Dollars and other college currency exchanges were unavailable

Initially, our team tried accessing secondary information from UVA Dining, specifically Plus Dollar demographic break downs, usage frequency, and the number of students with remaining Plus Dollars versus those without. Unfortunately, this information was confidential, and our request was rejected. To compensate for this, we looked for additional secondary sources such as other universities that implement currency exchange programs. Unfortunately, we were unsuccessful at finding analogous university examples. Due to secondary data unavailability, we turned to primary research through focus groups and individual interviews.

Our team conducted interviews and focus groups to obtain primary data

Each team member conducted a focus group and several individual interviews. The latter method was chosen to provide an in-depth understanding of how UVA students use Plus Dollars, and their enthusiasm or reservations about discounted exchanges. Since Apex consultants live in various locations, we decided to conduct several interviews to capitalize on undergraduate feedback diversity. The diverse participant pool helped us tackle regional bias, since some of us lived in underclassmen areas while others lived in upperclassmen areas. To facilitate the interview process we developed a Moderator's Guide, seen in *Exhibit 1*, which minimizes differences in interview format and increases comparability.

Interviews and focus groups provided key insights about UVA undergraduates

Apex Consulting considers individual interviews and focus groups to be useful exploratory research techniques, since they garner insights from the Plus Dollar Exchange target population. Moreover, interviews helped us better understand initial perceptions of the Plus Dollar Exchange, and changes to the program necessary for sufficient demand. For example, we learned that students feel forced to spend their Plus Dollars at the end of the year on unnecessary items, because they know that their Plus Dollars do not rollover annually. Interestingly, students who did not feel forced to spend remaining Plus Dollars were largely unaware that rollovers only occur between semesters. Subsequently, these unaware participants stated that they would have felt forced to spend the excess funds, instead of having it “waste away”. Through these interviews, we gained a sense that Plus Dollar Exchange would be a rational alternative to panicked spending.

Conversely, we learned that some undergraduates are uninterested in Plus Dollar Exchange. Some reasoned that transactions which save minimal amounts of money (i.e. 20 cents) “aren’t worth my time”. Additionally students also indicated that they felt they had a reasonable amount of Plus Dollars, and were comfortable spending USD near the end of the year if necessary. Essentially, the cost of spending USD versus Plus Dollars was negligible to the aforementioned participants.

Our team devised three specific hypotheses based on primary research data gathered

Based on our exploratory findings, Apex Consulting formed several research hypotheses. Our first hypothesis was based on students becoming busier over the semester, and specifically

that students spend most of their Plus Dollars later in the semester due to increased need for convenient and quick food options that accept Plus Dollars (examples include the Dumplings cart and West Range Café). Our second hypothesis was that most UVA students are willing to adopt a Plus Dollar Exchange, though a minority exists that is uninterested. Our third and final hypothesis was that charging a 10% commission fee for online transactions make the venture financially feasible, since sufficient demand exists. If these three hypotheses are confirmed, we can safely assume that Ms. Wells' venture will be profitable.

Our survey was developed and administered online through Google Forms

Our survey was developed and administrated through Google Forms, an analytics service provided by Google. The choice of an online platform was based on the following reasons:

- Speed of question completion
- Ease of data-collection and recording
- Ability to import, compile, clean, and analyze results digitally
- Quickly create graphs, exhibits, etc. directly from data
- Reach more potential participants through digital channels

Even with these advantages, we recognize that online surveys have limitations. Examples include potential answer dishonesty, question misunderstanding, and lack of attention, all of which are analyzed in-depth later on. After considering these limitations, we believe the data is accurate and representative of how UVA undergraduates perceive the Plus Dollar Exchange.

Data collection forms: survey

Our group conducted interviews and focus groups after Professor Mick's feedback

After gaining insights from exploratory research, we created a survey rough draft for descriptive research purposes. As seen in Exhibit 2, we provided our rough draft to Professor David Mick for review. Professor Mick is a marketing research expert and project supervisor, whose comments greatly increased survey quality. We incorporated Professor Mick's feedback, and created a new survey draft. The new draft was subsequently used in personal interviews, as well as small focus groups. It is important to note that our survey was conducted at UVA, for a service that impacts UVA undergraduates; therefore both convenience and quota sampling was used. Finally, our team conducted a field test by asking undergraduates at dining halls to take our survey and offer criticism.

All pretests and revisions were necessary for survey accuracy, and increased survey response applicability to research problems. Wording and formatting changes culminated in the new survey seen in *Exhibit 3*, which was easy to take and understandable by most UVA undergraduates. Changes that were made include switching a question chart seen in *Exhibit 2* to a ratio-scaled question, replacing the phrase “at a discount” with an example of a discount seen in *Exhibit 3*, and removing price anchors, all of which made responses less more representative.

Sampling plan

The target population was defined as all UVA undergraduate students

Apex Consulting defined the target population as all UVA undergraduate students, since most actively possess and spend Plus Dollars. Thus, our marketing research focused on individuals most likely to use the Plus Dollar Exchange. Students lacking meal plans and hence Plus Dollars were not excluded, because of their potential to purchase discounted Plus Dollars in the future. Non-undergraduates were excluded under the assumption that they do not use Plus Dollars, and inclusion would likely result in inaccurate demand evaluation.

The target population was restricted only to UVA undergraduates

The population was only deliberately bounded to undergraduate students. Undergraduates are the potential users of Plus Dollar Exchange, and thus data should be restricted to them. Since an online survey shared with UVA undergraduates was used, only students with link access could submit survey responses. As a result, undergraduates were the vast majority of total respondents. Therefore, our consulting team was not substantially concerned with data representativeness.

Non-probability sampling was achieved by convenience sampling

Our sampling plan followed a non-probability sampling plan, since we were unable to truly randomly survey the target population. Our team defined the sampling unit as an individual UVA undergraduate student. Each team member distributed the online survey by sending a link

through social media and listservs to undergraduates in similar organizations, clubs, and social circles. A consequence of these distribution channels is our method being non-probability sampling; it is likely that group members have more in common with participants than if they were truly randomly sampled. When the survey was closed we obtained 321 responses, which indicates that the sample likely has high power for statistical significance.

Data collection

Apex Consulting believes that online surveys promote large sample size and participant diversity, which avoids biased results to certain undergraduate groups. We were able to achieve a sample size of 321 students, specifically 42.4% first-years, 41.4% second-years, 10% third-years and 5% fourth-years. To avoid non-response bias, our team made previously mentioned survey modifications based on Professor Mick's feedback and insights from interviews and focus groups; by making questions clearer, participants had a higher likelihood of questionnaire completion. Additionally, our team conveyed the purpose of our study in the survey through a short blurb seen in *Exhibit 4*.

Results

The following section outlines the results our group obtained through surveying. We discuss each of the previously mentioned hypotheses separately, and determine if each is supported by our data. Furthermore, Apex Consulting has come to the conclusion that Plus Dollar Exchange is a viable venture for Ms. Wells.



Achieved sample

The demographic distribution of our participants matches initial expectations

The demographic distribution of our participants was primarily first- and second-years, which confirms one of our hypotheses. Additionally, it is not possible to project a response rate for our online survey since participants independently decided whether to do so. Our data includes a sample size of 321 individuals, with 213 female (66.4%) and 105 male (32.7%) respondents. Most respondents were first- or second-years as illustrated in *Figure 1*. When the sample is divided by academic year, there are 136 first years (42.4%), 133 second-years (41.4%), 32 third- years (10%), and 16 fourth-years (5%). Furthermore, 61.7% of participants were white, 23.1% were Asian/Pacific Islander, and the remainder were of other backgrounds. Living locations were divided more broadly, however 31.5% lived in off-ground apartments.

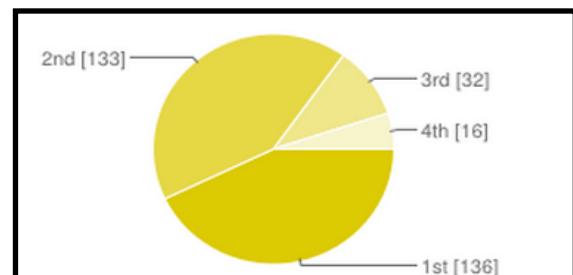


Figure 1. Breakdown of research sample by academic year shows most participants were first-years.

Since most students with meal plans and thus Plus Dollars are first- and second-years, we believe our sample is representative enough of the target population. Of all participants, 290 had meal plans, while 33 did not; those who did not provided useful information about how willing they were to adopt the service. Additionally, since people without meal plans were unable to respond question 5, only 293 responses were collected and analyzed for that question.



Specific research problem results

UVA students spend most of their Plus Dollars at beginnings and ends of semesters

The first step of our analysis was to determine overall Plus Dollar availability and usage for the last semester, to test our hypothesis that students tend to spend most of their Plus Dollars at the end of the semester. There are 16,000

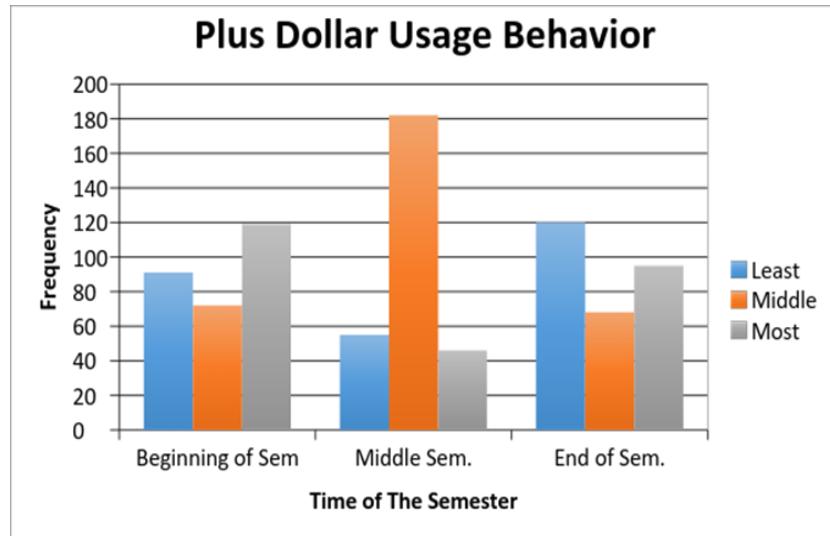


Figure 2. Plus Dollar usage behavior through the semester shows students' spending variability

students at UVA, with an approximately equal distribution of 4,000 students per academic year. From our own experiences, we projected a meal plan coverage rate of 100% for first-years (since they are required to have a meal plan), 50% for second-years, 30% for third-years, and 30% for fourth-years. By multiplying projected coverage rates with the total student population, we estimated that 8400 students have meal plans.

The total amount of Plus Dollars available from 293 respondents carrying Plus Dollars is \$85,700, which was calculated by summing question 1 responses of our survey as seen in *Exhibit 4*. Our sample size of 293 students is approximately 3.5% of the projected meal-plan carrying population (8400), so we estimated total Plus Dollars of the entire meal-plan holding population as \$2,448,571. Total excess Plus Dollars last semester for our sample was \$17,027, calculated by summing question 2 survey responses. Extrapolating the total excess Plus Dollars of the sample



to the student body yields a surplus of \$486,486. Furthermore, illustrated in *Figure 2*, our study finds that students spend most of their Plus Dollars at the beginnings and ends of semesters. We conducted a chi-square cross tabulation analysis, and returned a chi-square value of 133.775, $p < .05$. The statistic indicates that people's Plus Dollar usage varies depending on the time in the semester, and that most Plus Dollars are spent during beginning and end of a semester.

The aforementioned result does not support one of our hypotheses, since we only predicted that students spend most Plus Dollars at the end of semester. From our data analysis, it is clear that two types of Plus Dollar spending behaviors exist among UVA students. Students who spend most of Plus Dollars at the beginning of the semester will likely run out near the end, making them Plus Dollar Exchange buyers. Students who spend most of Plus Dollars at the end of the semester will likely have some remaining, making them Plus Dollar Exchange sellers. Though our data did not support our hypothesis, it indicates that the Plus Dollar Exchange has the potential to succeed.



UVA students are interested and willing to participate in the Plus Dollar Exchange

The second step of our analysis attempts to determine whether UVA students are willing to adopt the Plus Dollar Exchange. The willingness to adopt graph for students is presented in *Figure 3*, and it shows that most students are willing to do so. The chi-square test we conducted returned a value of 46.53, $p < .05$, meaning that people are more likely to respond 3 or 4 than 1 or 2. Therefore we conclude that students are willing to adopt the Plus Dollar Exchange. Overall, 85.3% of participants express interest in selling Plus Dollars, while 56.4% of participants express interest in purchasing Plus Dollars. Essentially, our hypothesis that people will be willing to use Plus Dollar Exchange after its introduction is supported.

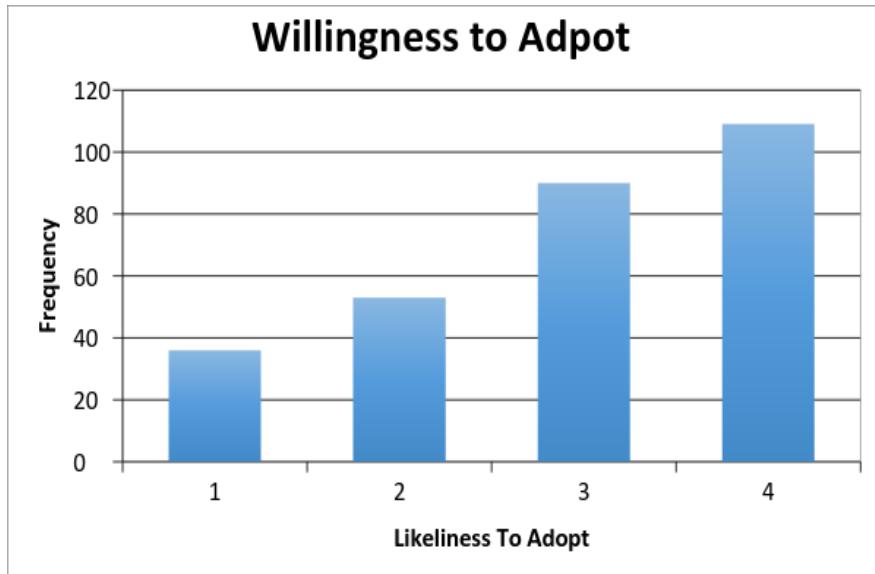


Figure 3. Respondents are very likely to adopt the service

Plus Dollar Exchange will generate more than \$30,000 in revenue per semester

After collecting descriptive information about participants' willingness to adopt, we projected supply and demand for Plus Dollars each semester. Additionally, we determine whether the Plus Dollar Exchange service is profitable for Ann Wells.



To determine total Plus Dollars supply, we first replaced the “All Unused Plus Dollars” response data from question 5a in our survey with the differences between participants’ overall Plus Dollar availability and Plus Dollar spending last semester. We also replaced all negative values returned from this calculation with a 0, and assumed participants lack excess Plus Dollars last semester. We determined supply by repeating these steps for the rest of the respondents, yielding a total supply of \$15,833.31, and a projected overall Plus Dollar supply of \$452,380.

To determine the total demand for Plus Dollars, we summed the question 6a responses. During our analysis we removed 9 data points from the dataset with responses of “all” or “depends,” since it is impractical to project how many Plus Dollars these respondents are willing to purchase. Analysis returned a sum of \$9907.87 Plus Dollars, which reflects a total demand of \$508,096.

To project the price of Plus Dollars, we averaged responses from question 5b of the survey, which is 71.31 cents after removing 3 responses with values over 1. The standard deviation is 18.29, with a range of 10 cents to 100 cents. The frequency distribution of price can be seen in *Figure 4*.

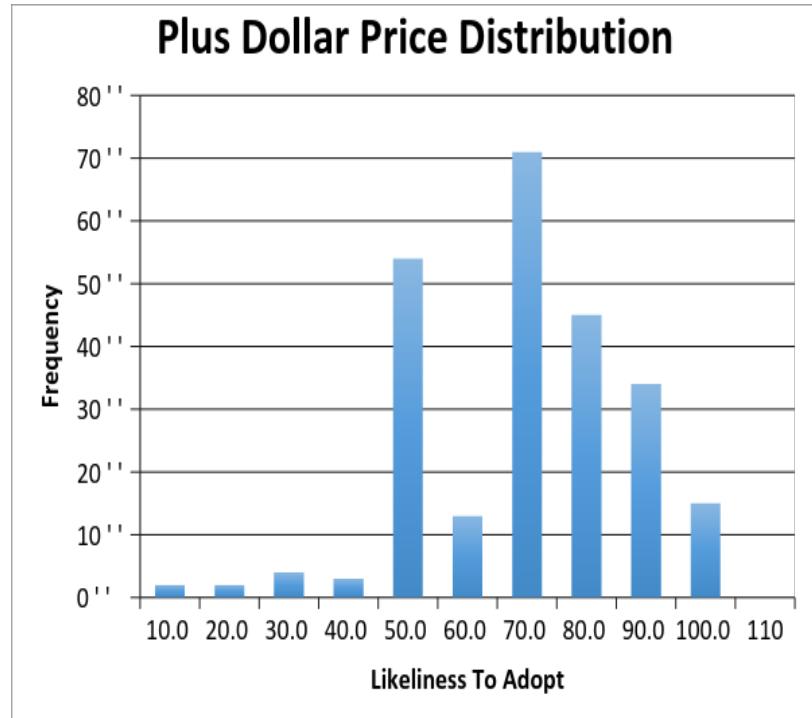


Figure 4. Plus Dollar likeliness to adopt is highest at 70.0.



The last step of our analysis was to determine the overall viability of this business venture. Based on the supply and demand data, we projected a supply coverage rate of 89.03%, indicating a shortage of Plus Dollars. However, we recognize this coverage rate discounts participants who responded they would purchase all available Plus Dollars, or only a certain amount depending on needs. If these participants are incorporated into the calculation, the coverage rate will be substantially higher. With our current coverage rate, we project approximately \$452,380 Plus Dollars will be traded through Plus Dollar Exchange per semester. An exchange ceiling exists, since the amount of Plus Dollars that are exchangeable is only as high as projected demand. With an average price of \$.7131 for Plus Dollars, the projected revenue for this venture given a 10% commission fee is \$32,259. These results support our hypothesis that the venture is a viable business venture for Ann Wells, assuming that \$32,250 covers administration and website construction fees.

Limitations

All marketing research techniques involve ‘bargains with reality,’ which are compromises between experimental settings and real-world applicability. Apex Consulting conducted its marketing research survey online, which offers benefits such as minimal expenses and data entry time, as well as wide access to the target population. However, online surveys suffer from distracted participants, higher attrition rates, and added factors that may taint data. Our consulting team was cognizant of these limitations during analysis, and integrated them into our recommendation. The following sections outline and explain the major research limitations.

Survey responses may not accurately reflect respondent spending behaviors

Apex Consulting recognizes that a respondent's statement about his or her behavior may not be congruent with his or her actual behavior. An analogous example is the Netflix debacle in early 2011, where survey responses supported a one dollar increase in subscription fee, but implementation lost the firm thousands of subscribers and a significant share price decrease³. Keeping this example in mind, we caution Ms. Wells that Plus Dollar Exchange should be pilot tested prior to full investment, to reduce the likelihood of negative outcomes.

Plus Dollar Exchange works best if students can trade without administrative barriers

Plus Dollar Exchange is a service which relies on the assumption that Plus Dollars are freely traded among undergraduates. However, since Plus Dollars are proprietary virtual currency, they may have clauses such as being non-refundable or non-transferrable. With such clauses in effect, direct trade and transfer is road-blocked. Consequently, Plus Dollar exchanges may require real-life meetings between buyer and seller, where sellers purchase items for the buyer. Essentially inconveniences caused by administrative barriers may reduce students' willingness to adopt.

Survey distribution channels may increase participant homogeneity

The survey was distributed through digital channels, particularly UVA listservs and social media sites, which access participants with similar interests and social ties. UVA listservs

³ Kuadey, Kwame, "5 Business Lessons from the Netflix Pricing Debacle," *Forbes*, December 28, 2011, accessed April 2015.

do not send information to all students, but rather those who self-selected to be part of them.

Students who self-select to certain listservs likely are similar to one another, which increases participant homogeneity.

Social media site distribution is also biased because it reaches individuals with direct ties to the consulting team. Consequently, generalizability of results may be reduced since respondents are more socially similar compared to the larger student population.

Demand might be over-projected due to internal sample biases

When we projected UVA general population Plus Dollar demand, we assumed our sample accurately represents the greater student body. We expect a meal plan coverage rate of 52.5%, however our results indicate a Plus Dollar coverage rate of 93.9%, which is significantly higher. The difference indicates our results do not rely on a perfect representation of the UVA population. Therefore, actual demand for Plus Dollar Exchange is lower than projected demand. However, we believe that demand can be increased through introducing additional exchange venues. For example, if the Plus Dollar Exchange permits students to sell Plus Dollars to on-grounds contracted independent organizations, these organizations can subsequently use the Plus Dollars to purchase food like Domino's Pizza.

Some survey questions assumed participants grasp economic concepts like liquidity

All surveys are subject to interpretation, and our instrument was no exception. One example is question 5b, which asks "How much would you be willing to sell each unused Plus

Dollar for (in cents).” The parenthetical (in cents) was included to emphasize that the value of a Plus Dollar is lower than the value of one USD, since the former has lower liquidity. However, many respondents answered the question with numbers and ranges of numbers greater than one USD, indicating a lack of liquidity awareness. One way we could have addressed this concern is by digitally restricting responses between 0 and 100 cents. Additionally, the liquidity concern exists in question 6a, which asks how many Plus Dollars students would be willing to buy at a discount. Interestingly, this question lacked the parenthetical “in cents” of question 5b, and the responses spanned “75 cents” to “as many as I want.” As a consequence of our liquidity-knowledge assumption, the data set was difficult and time-consuming to clean. However, since these questions were intended to gauge students’ inclination to purchase or sell Plus Dollars, these differences are not as problematic.

Conclusion

Based on the results of our marketing research, we recommend that Ms. Wells to pursue the Plus Dollar Exchange starting fall 2015. After conducting exploratory research, we found primary data that suggests a substantial amount of UVA undergraduates are willing to adopt the digital platform. Additionally, we learned through interviews and focus groups that educating students unaware of Plus Dollar restrictions and economic liquidity is important, especially to those hesitant in adopting the platform. These processes increase the success potential of the venture.

From insights gained through exploratory research, we developed a survey instrument for descriptive research. Data obtained from this survey showed us that substantial buyers and sellers



for Plus Dollars exist in the UVA population. At the same time, most undergraduates are willing to adopt the Plus Dollar Exchange. Specifically, the data showed large amounts of students have excess Plus Dollars while others are willing to buy discounted Plus Dollars. Further data analysis shows the potential for the Plus Dollar Exchange to garner more than \$30,000 of revenue per semester, indicating financial viability and overall business venture attractiveness.

Our team at Apex Consulting ultimately believes that this venture is not only profitable for Ms. Wells but one which serves the greater UVA undergraduate student body. Based on our findings, we are optimistic about the success of Plus Dollar Exchange.



Exhibit 1. Our team created a moderator guide to facilitate dialogue

Introductions

- 1) Welcome and thank participants for their time
- 2) Introduce yourself, and provide project background information

Ground rules:

“Our discussion is organic, so feel free to discuss any and all ideas you may have. Additionally, feel free to ask questions or clarification when necessary. Please keep in mind that there are no right or wrong answers, and we are grateful for all feedback you can provide.”

Processes and schedule:

“Our session should last no more than 20 minutes, and all your responses will be de-identified. If you have any additional concerns about privacy, please ask them now.”

(Respond to all concerns appropriately)

Ask the following questions, and intersperse sections for discussion

- Do you remember how many Plus Dollars you used last fall and spring?
- Would you say that you spent most of your Plus Dollars from August-September, October or November-December? If not, were they spent on a regular basis?
- Were you able to spend all your Plus Dollars?
- How many unused Plus Dollars do you estimate having at the end of the year?
- What did you do with remaining Plus Dollars at the end of the year?
- *How do you feel about potentially selling unused Plus Dollars at a discount (i.e. 80 cents USD per Plus Dollar)?
- *How do you feel about potentially purchasing unused Plus Dollars at a discount?

*Switch the question order between sessions to control for psychological order-effects.

Thank participants for their time, and answer any remaining questions



Exhibit 2: Our first survey draft was reviewed by expert Professor Mick

Do you want to add a sentence or two about the purpose of the survey, as related to UVA undergraduates?

Plus Dollar Exchange Survey

There are no right or wrong answers.

The following survey asks some questions concerning your plus dollar usage throughout the semester. Please respond as openly as possible. The survey is anonymous and confidential, with no right or wrong answers. If you are uncomfortable with any question, please feel free to skip it and move on. You may discontinue this survey at any time. It should take you about 5 minutes to complete the survey and thank you for your time.

1. What kind of meal plan do you have? (circle one)

Unlimited Access All Access 7 All Access 5 Semester 100 Semester 50

2. How many Plus Dollars did you spend last semester? (circle one per column)

August – September	October	November – December
\$0-25	\$0-25	\$0-25
\$26-50	\$26-50	\$26-50
\$51-75	\$51-75	\$51-75
\$76-100	\$76-100	\$76-100
\$100+	\$100+	\$100+

3. If there was an online platform that lets you trade Plus Dollars with other students, would you use it? (check one)

Scale? How likely would you be to use it?

Yes No

(If the previous answer is 'No', please skip to question 6)

*Scale
How willing...*

4. Would you be willing to sell unused plus dollars before they expire this semester? (check one)

If willing,

Yes No

a. If 'Yes', how many plus dollars? _____

**Exhibit 2 Cont.**

Will students know how to answer this?

b. What is the lowest discount at which you would be willing to sell? _____%

Might it be better to say something like, how much would you be willing to accept for each dollar not used as a way to cash these in?

5. Would you be willing to buy unused plus dollars before the end of the semester? (check one)

_____ Yes _____ No

a. If 'Yes', how many plus dollars? _____

6. What is your academic year? (circle one)

1st 2nd 3rd 4th Graduate

Gender Question

7. Where do you live? (circle one) *important?*

New dorms Old dorms Res. College On-Grounds Apt. Off-Grounds Apt.

Other (please specify) _____

8. Does your dorm have a kitchen? (check one)

Yes No

a. If 'Yes', how frequently do you use the kitchen per week?

I'm lost, what's important here and why is it last question?

Are you asking for gender?

reasonable start. Revise, edit, run pilot interviews, and head into data collection.



Exhibit 3: New draft of the questionnaire was created to learn more student insights

Plus Dollar Exchange Survey

The following survey asks some questions concerning your plus dollar usage throughout the semester. Please respond as openly as possible, as there are no right or wrong answers. The survey is anonymous and confidential. If you are uncomfortable with any question, please feel free to skip it and move on. You may discontinue this survey at any time. It should take you about 5 minutes to complete the survey and thank you for your time.

1. What kind of meal plan do you have? (circle one)

None

Unlimited Access All Access 7 All Access 5 Semester 100 Semester 50

2. How many Plus Dollars did you spend last semester? (circle one per column)

August – September	October	November – December
\$0-25 <u>\$26-50</u>	\$0-25 <u>\$26-50</u>	\$0-25 <u>\$26-50</u>
\$51-75	\$51-75	\$51-75
\$76-100	\$76-100	\$76-100
\$100+	\$100+	\$100+

but this all in one column

3. If there was an online platform that lets you buy or sell Plus Dollars at a discount with other students, how likely would you be to use it? (check one)

~~A Kind of Craving~~

Very Unlikely Unlikely Likely Very Likely

X

4. How willing would you be to SELL unused plus dollars before they expire this semester? (check one)

Unwilling Willing ✓

a. If willing, how many plus dollars?

X — page break

**Exhibit 3 Cont.**

\$ put on
one page

All Unused Plus Dollars: Other (please specify): _____

b. How ~~many~~^{much} are you willing to sell each unused Plus Dollar for?
Example: For every Plus Dollar, I will accept X cents.
100 cents

Talk about
"roll-over" policy
Also has to be
high smart(100)

5. Would you be willing to BUY unused plus dollars from other students at a discount?
 Yes No

a. If 'Yes', how many plus dollars? IDK A

Also talk
about no
refund policy
(can't exchange
plus dollars for
cash)

6. Where do you live? (circle one)

New Dorms Old Dorms Res. College On-Grounds Apt. Off-Grounds Apt.

Other (please specify) _____

7. What is your academic year? (circle one)
1st 2nd 3rd 4th

8. How do you self-identify? (check one)
 Male Female Other

Very likely
Somewhat likely
Somewhat unlikely
Unlikely
Very unlikely

9. What is your race? (check one)

<input type="checkbox"/> White	<input type="checkbox"/> Hispanic or Latino	<input type="checkbox"/> Black or African American
<input type="checkbox"/> Native American or American Indian	<input checked="" type="checkbox"/> Asian / Pacific Islander	
<input type="checkbox"/> Other		

Very likely
Somewhat likely
Somewhat unlikely
Unlikely
Very unlikely



Exhibit 4: Our final survey was conducted through Google Forms

Plus Dollar Exchange Survey

The following survey asks some questions concerning your plus dollar usage throughout the semester. Please respond as openly as possible, as there are no right or wrong answers. The survey is anonymous and confidential. If you are uncomfortable with any question, please feel free to skip it and move on. You may discontinue this survey at any time. It should take you about 5 minutes to complete the survey. Thank you for your time and participation!

1. 1. What kind of meal plan do you have? (If do you not have a meal plan, please skip to Question 6)

Mark only one oval.

- Unlimited Access (\$300 Plus Dollars)
- All Access 7 (\$150 Plus Dollars)
- All Access 5 (\$300 Plus Dollars)
- Semester 100 (\$400 Plus Dollars)
- Semester 50 (\$350 Plus Dollars)

2. 2. How many Plus Dollars did you spend last semester (approximately)?

.....

3. 3. Please rank the time of the semester when you spent most plus dollars. (1 being the most, 3 being the least)

Mark only one oval per row.

1 2 3

Early Semester	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Middle Semester	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Late Semester	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. 4. If you can buy or sell Plus Dollars online at a DISCOUNT (i.e. 1 Plus Dollar = X cents) to other students, how likely would you be to use it?

Mark only one oval.

1 2 3 4

Very Unlikely Likely



**Exhibit 4 Cont.****5. Would you be willing to SELL unused plus dollars* before they expire in the spring semester?**

*Note: Plus Dollars from the Fall will roll towards the Spring semester, but any unused Plus Dollars from Spring will not roll towards Fall of the following year.

Mark only one oval.

- Yes
 No

6. a. If Yes, how many plus dollars?

Mark only one oval.

- All Unused Plus Dollars
 Other:

7. b. How much would you be willing to sell each unused Plus Dollar for? (in cents)**8. 6. Would you be willing to BUY Plus dollars from other students at a DISCOUNT?**

Mark only one oval.

- Yes
 No

9. a. If 'Yes', how many Plus dollars?**10. 7. Where do you live?**

Mark only one oval.

- New Dorms
 Old Dorms
 Residential College
 On-Ground Apartment
 Off-Ground Apartment
 Other:

**Exhibit 4 Cont.****11. 8. What is your academic year?***Mark only one oval.*

- 1st
- 2nd
- 3rd
- 4th

12. 9. How do you self-identify*Mark only one oval.*

- Male
- Female
- Other

13. What if your race?*Mark only one oval.*

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Other
- Prefer Not To Disclose



Works Cited

1. Andreasen, Alan, "Backward Market Research," *Harvard Business Review*, May-June 1985, 176-182.
2. Mick, David, "Commerce 3330, Defining the Marketing Research Problem, NM Chapter 2," PowerPoint Presentation, January 14, 2015, accessed April 2015.
3. Kuadey, Kwame, "5 Business Lessons from the Netflix Pricing Debacle," *Forbes*, December 28, 2011, accessed April 2015.