ZigZag
EXECUTIVE SUMMARY

Roman Cutler, Richmond VA,  Mechanical Engineering/VCU
Viva Chapman, Richmond VA,  Fashion  Merchandising/VCUarts

PROJECT DESCRIPTION

*We save customers time and make companies money.* More specifically, we leverage GPS technology and a map algorithm to find consumers the quickest route in and out of any store. This includes knowing what is in stock and organizing your shopping list based upon an item's vicinity- giving each user a specific store route for a faster and more efficient experience. While simultaneously benefiting companies' understanding of their customer through data points, which can aid them in store layouts, merchandising, and customer retention.

VALUE PROPOSITION / SOLUTION

Our *app, more specifically our program*, help(s) *individuals with little time to waste*

Who want to *Save Time and reduce the issue of finding products in stores*

By *Streamlining their shopping experience through an in-store GPS application,*

Unlike *H-E-B and Walmart Apps.*
CONTEXT AND BACKGROUND

We chose to address the inconvenience of shopping and how it disrupts individuals efficiency. Oftentimes individuals struggle to seek products they might not have purchased before, are in a different geographical location, or are in a store they do not commonly enter. Nonetheless, grocery stores are often changing their floor layouts, but we can make GPS’s benefit consumerism. We’ve considered the following: **How might we make in-store customer experiences more beneficial for the customers time and convenience while benefiting a company’s profits?**

Our app will benefit the consumer and the companies. On the consumer-front the app is centered around limiting the need to have contact with sales associates (benefit during COVID-19), it will allow consumers to be more efficient (if you list all of your items you will not have to go down the same aisle more than once), and will save them time. On the company’s front, our app will generate meaningful data (that we will sell) that aid the company’s understanding of their customers. Our data points include- the most used routes, which can allow stores to layout their merchandise properly to generate high revenue and potentially increase competition when brands desire shelving/store placements. It will also help company’s see how many items customers are listing, versus how many items they actually end up purchasing or not purchasing.
PROTOTYPE / MVP

We are currently working on the User Experience (UX) of the app, which was completed on 2/26/2021. The UX is focused on the Apple Play store according to our target market, and will be compatible for android. The expected date for user testing is 3/10/2021. Our programming will be done with Swift and Xcode, and will consist of API and data implemented by what3words. Of course, we may expand our usage of specific platforms as our research progresses.

As we continue to work on our UX design, we plan to allow customer testing through our researched target market. Allowing them to use our most basic version of ZigZag in local stores, alike to Ellwood Thompson's in Richmond, VA.

MARKETS & SCALABILITY

What's the market for your solution? Who's the target purchaser? Who's the target consumer/user? How big is the market size?

Our target purchaser to solve our problem, will be with existing department/grocery/hardware stores- a B2B transaction (revenue not yet decided, but definitely data points). More specifically, the target purchaser could be companies alike to Lowes, Home Depot, Target, Walmart, H-E-B, Kroger. Based upon our recent market research, our target consumer ranges from their early 20's into their 50's. These individuals
often have busy schedules and are ill equipped with time. They could also be gig workers, such as Instacart employees, who are trying to make the most money in a given hour. Alongside, individuals trying to limit their contact with in-store representatives, and those traveling to new locations or entering new stores in any geographical area. The market size is extensive, the grocery store market accumulated 656.0 billion dollars in 2020 alone. (statista, 2021) And, with a wide range of target customers in a variety of industries our growth opportunities are extensive.

If you've considered scaling of the solution and/or production, please describe this here.

In regard to scaling, we will sell the application B2B with the hopes a/the company/(s) will integrate our services into their pre-existing apps. We intend for our program to start in the U.S. and then expand into other countries dependent upon the current companies store-front locations. Also, our app will be dependent on other countries' perception of the GPS device, legal/business international status, and other preventative laws/logistics.

COVID-19: Our solution will also be successful past COVID-19, already we have seen the spike in gig-economies, who can utilize this application. And, while companies recently created store-pickups the average consumer has still been shopping in-stores themselves. ZigZag is a tool that will aid consumers and companies now and in the future. During COVID-19, it will limit the need for contact between front-line employees and consumers who cannot find merchandise- while saving additional time. Post COVID19, it will still benefit consumers' accessibility to find products allowing them to be more efficient on a daily-basis.

CUSTOMER ACQUISITION
How will you reach your target purchaser?

We will reach our target purchaser through B2B marketing channels, with the knowledge that there are three primary stages ZigZag will have to go through before a transaction. The stages are: Awareness, Consideration, and Decision.

What channels would you use?

ZigZag will utilize digital advertising, predominantly CRM onboarding and targeting and potentially third party data collection to connect with our target purchaser. Sourcing customers on social media and networking platforms will also be beneficial to our company. Whether that be through connecting with individuals on LinkedIn, Facebook, or Instagram; we can reach our B2B prospects and our potential end-user. Nonetheless, we can make direct contact with businesses, and have already started to in order to learn more about their target audiences and catering our app/experience to their needs (H-E-B).

Will you need to target multiple audiences? If so, how do you reach them?

We will be marketing on two fronts: B2B and B2C. We have identified a handful of target markets that could utilize our services and companies as well as throughout various sectors. Thus we will have many different marketing channels directed towards their needs, of course this will require extensive market and continuous research. As of now we will utilize Word of Mouth, email marketing, SEO strategies, direct contact to end-user/purchaser, social media, and other experiential techniques.

Our Marketing Strategy:

Already our team has started networking and making connections via Word of Mouth and through networking platforms such as LinkedIn. Within our two weeks working on the da Vinci Sprint we successfully reached more than 6 mentors who have/are connected/connecting us to programmers, UX designers, and grocery store/department
store experts, with others giving us the ability to send out mass market research surveys. Our research will be expansive and well rounded - as we have utilized the VAL survey to further segment our plethora of target customers. Undoubtedly, we are in the research and segmentation phase of our marketing strategy. With the goal to target and position ourselves prior to da Vinci’s Pre-X Program in April of 2021.

COMPETITION

Our competition in our target market starts with individuals who will not utilize our services, and expands to pre-existing but less efficient and effective store maps/layouts.

The competitors with store maps/layouts include The Home Depot, Lowe’s, Target, Walmart, Kroger, Publix, Wegmans, and H-E-B. These companies have an instore app that displays the user’s shopping list and what aisle each product is located. The difference with our app and theirs, is that we are taking the companies data on stock and product location and then streamlining it to show the customers their streamlined list, shortest route, and if items are in stock. ZigZag will also give the companies data points (like statistics on routes and customer listings versus purchased items) which they can use to improve store layouts, merchandising, and customer retention.

TEAM REFLECTION

What worked well for us as a team?

- We have a diverse team that has complementary skills and perspectives, while also being able to easily and effectively communicate with each other. Giving us the
spark to immediately start working together on creating this product with passion and excitement.

What did not work well for us as a team?
- Because we are a diverse team, it made it hard for us to match up our schedules and also have time to work on this sprint during this short time span. There was an unequal division of work between the two parties.

What would I/we do differently next time?
- As a team we would start conducting more B2B company and industry research early on alongside the customer research. We would also contact mentors sooner and start a more consistent meeting schedule with mentors and team members.

INTELLECTUAL PROPERTY

In regard to intellectual property, there are many things we will patent to secure our designs, program/app, and other crucial aspects. The patents we will need are: Design Patents and Utility Patents.

**Design Patents:** Necessary for company logo, name, and other design aspects to our production.

**Utility Patents:** Will be crucial once we have determined the programming for the apps development, the collection of data points, etc.

Currently team ZigZag is in the process of meeting with numerous patent lawyers to properly set up our success, and to ensure there are no pre-existing patents that would
dampen our ability to successfully achieve our goals or that could result in legal restriction/action.