

A3 Problem Solving Report

Topic: Selling and Lending Book App

Date: 8/21/2020

Name: Team D

1. Identify a Problem	PLAN
<div><div>a. With today’s rising technology and economic uncertainty, it is estimated that 27% of US population do not read books, up from 19% in 2011.<ul style="list-style-type: none">This creates a problem because many people, mainly students, resort to buying pre-owned textbooks as they are more cost-friendly and are usually only used for a short amount of time.</div><div><div>b. With the current global pandemic status, it is highly unsafe to personally meet with people and exchange items.<ul style="list-style-type: none">This creates a problem for people that are actively searching for books or that could benefit from selling/lending old textbooks that they no longer need, as physically doing this would put any parties involved at risk.</div><div><div>c. As of 2019, Americans spend an average of 0.28 hours (16.8 minutes) a day reading; Americans between 20-34 years old only spend an average of 0.11 hours (6.6 minutes) a day reading.<ul style="list-style-type: none">As the years go by, newer generations are engaging with and reading books less and less. This is a problem because some of the information recorded in books cannot be found online, and some reflect the context and values to do with the time in which they were written. This results in a lot of valuable information and work being lost.</div></div></div></div>	

2. Set the Target	PLAN
<div><div>a. Create a market where people can sell or lend their books to students that need them.<ul style="list-style-type: none">Decrease the proportion of Americans that don’t read books by at least 3%.</div><div><div>b. Create an efficient system where people can share their books and pass them on to others without having to personally meet, if desired.<ul style="list-style-type: none">At least 50% of the transactions are done remotely.</div><div><div>c. Promote reading in the American population.<ul style="list-style-type: none">Increase the average reading time to at least 30 minutes overall, and to 20 minutes for younger generations.</div></div></div></div>	

3. Analyze the Causes	PLAN
<div><div>Why does this problem occur?<ul style="list-style-type: none">Many students face financial struggles which exacerbate the problem.People are more connected to their phones and forget the importance of mental health and “disconnecting” for an hour or two.</div><div><div>Can we explain the cause and effect relationship plausibly?<ul style="list-style-type: none">Annual tuition at four-year public colleges has soared 37% since 2008, and in some states it’s more than 60%, according to the College Board. What’s more, since 1980, tuition and fees at four-year public colleges and universities have risen 19 times faster than median family income, according to the Georgetown University Center on Education and the Workforce.Mental health is a topic that not everyone is aware of and don’t bring the importance it needs to it. While technology can indeed be useful, we need to have awareness that:<ol style="list-style-type: none">It can become addictive.We need a break from it so we can connect with our selves occasionally.</div></div></div>	

4. Propose & Implement Countermeasures	PLAN/DO
<div><div>a. Provide an online platform where users can upload their books as listings so they can lend or sell them to other users, mainly students via remote.<ul style="list-style-type: none">Provide weekly deals on items listed remotely.</div><div><div>b. Provide an efficient system where users can search for specific books, browse available books in general, and request to buy or rent a book.<ul style="list-style-type: none">Offer suggestions based on reading habits, book popularity, etc.</div><div><div>c. Implement a sub-system that lets users record and analyze their average reading data.<ul style="list-style-type: none">Compute average reading time based on book length and time rented. If bought, users can mark them as read when finished.</div><div><div>d. The users should electronically sign an agreement indicating they will return the lent book in x amount of time or lend it forward.<ul style="list-style-type: none">If the user exceeds the amount of time without further communication, they are required to purchase the book.</div><div><div>e. Implement a sub-system that allows users to create a wish list with the books they want to read or borrow.<ul style="list-style-type: none">After an x amount of time, the users will be reminded of their wish list.</div></div></div></div></div></div>	

5. Act/Standardize	ACT
<div><ul style="list-style-type: none">Monitor and keep track of all the book listings available through our service.Evaluate search results to be able to know what books are popular and would need more copies in circulation.Carry out an evaluation of user’s past books to be able to recommend reading lists from comparable categories.Are users able to share the books and pass them to other users?</div>	