

Project Design Phase-I

Problem – Solution Fit Template

Team ID	PNT2022TMID39501
Project Name	A New Hint to Transportation - Analysis of the NYC Bike Share System
Team Members	Team Leader: THIRUPATHI K Team member : VIGNESH P Team member : AJAY A Team member : MADHAN R

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Template:

<div style="background-color: #f8d7da; padding: 2px; font-size: 0.8em; font-weight: bold;">Define CS, fit into CC</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>1. CUSTOMER SEGMENT(S) CS</p> <p>Who is your customer? i.e. working parents of 9-5 yrs. kids</p> <p>The bikesharing system is used by riders , tourists, commuters, recreational, errand rider and it is used for domestic purposes .</p> </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; font-weight: bold;">6. CUSTOMER CONSTRAINTS</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available services</p> <p>The bike sharing schemes include transport flexibility, reductions to vehicle emissions, health benefits, reduced congestion and fuel consumption, and financial savings for individuals</p> </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; font-weight: bold;">5. AVAILABLE SOLUTIONS</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>Team ID: PNT2022TMID28308</p> <p>Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking</p> <p>Advantage: Bike sharing is also a solid alternative to a car. If you want to visit a park or landmark on a pleasant weekend day, you can hop on a bike and get there in less time than it would take to walk, and with more freedom than you'd get in a car or bus.</p> <p>Disadvantage: 1. Some Bike-Share Frames Are Bulky 2. It's Not Necessarily Available Year-Round 3. Geography & Climate Complicate Matters 4. Safety Can Be an Issue</p> </div>
<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; font-weight: bold;">2. JOBS-TO-BE-DONE / PROBLEMS</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</p> <p>The goal is to increase the following:</p> <ul style="list-style-type: none"> * Bikes * Stations * Membership * Usage fees * Other funding sources </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; font-weight: bold;">9. PROBLEM ROOT CAUSE</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.</p> <p>As in today's world there is necessary to use cabs, auto for travelling purpose. But due to unavailability of cabs/autos people have to wait for long time. If sharing cabs are not available then it will become headache for peoples. So to overcome these issues we are going to implement system which will allow user to book bike on sharing bases. So due to this system user time and money will save.</p> </div>	<div style="background-color: #fff3cd; padding: 2px; font-size: 0.8em; font-weight: bold;">7. BEHAVIOUR</div> <div style="background-color: #fff3cd; padding: 5px; margin-top: 5px;"> <p>What does your customer do to address the problem and get the job done? CC: Directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)</p> <p>Traditional bicycle-sharing is constrained by the capacity of stations, limiting potential improvements for short distance travel. In the past 4 years, a new generation of dockless bicycle-sharing programs (DBSPs) has emerged and experienced a period of rapid expansion, leading to a revival of the humble bike across New York City.</p> </div>
<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; font-weight: bold;">3. TRIGGERS</div> <div style="background-color: #d4edda; padding: 5px; margin-top: 5px;"> <p>What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</p> <p>Bike share engages riders in physical activity, beneficial to health. In addition, it promotes green mobility and contributes to carbon neutrality. This analysis will help in understanding the association between bike share usage and the environment which is essential for system management and urban transportation planning.</p> </div>	<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; font-weight: bold;">10. YOUR SOLUTION</div> <div style="background-color: #d4edda; padding: 5px; margin-top: 5px;"> <p>If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</p> <p>The goal of this analysis is to create an operating report of Citi Bike for the year 2018. We are going to create different types of data visualizations using the various features of IBM Cognos Analytics so that the user can better understand the results of the analysis. It integrates reporting, modeling, analysis, dashboards etc so that the users can understand the available data, and make effective decisions. It includes predictive, descriptive, and exploratory techniques and provides an intuitive and straightforward interface that is easy to understand. Python's analytical functions can also be used for generating descriptive statistics and visualizations can also be created using Python's visualization libraries.</p> </div>	<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; font-weight: bold;">8. CHANNELS OF BEHAVIOUR</div> <div style="background-color: #d4edda; padding: 5px; margin-top: 5px;"> <p>8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7</p> <p>8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</p> <p>Regardless of innovative actions. As the main motive is to satisfy customer. Some sort of actions like registering the membership of customer initially can be done online and updating it when needed can be done online but some default managing functions like allocation of bikes, and facility availability can be done offline.</p> </div>
<div style="background-color: #d4edda; padding: 2px; font-size: 0.8em; font-weight: bold;">4. EMOTIONS: BEFORE / AFTER</div> <div style="background-color: #d4edda; padding: 5px; margin-top: 5px;"> <p>How do customers feel when they face a problem or a job and afterward? i.e. feel, measure > confident, in control - use it in your communication strategy & design.</p> <p>Bike sharing is also a solid alternative to a car. If you want to visit a park or landmark on a pleasant weekend day, you can hop on a bike and get there in less time than it would take to walk, and with more freedom than you'd get in a car or bus.</p> </div>		

Purpose:

- ❖ Solve complex problems in a way that fits the state of your customers
- ❖ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ❖ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ❖ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.

