**Project Title: Smart Solution for Railways**

**Project Design Phase-I** - **Solution Fit Template**

**Team ID: PNT2022TMID53640**

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|  | **3. TRIGGERS**  Neighbour who booked their tickets through website and said about paperless verification. Know about new smart systems in railways through news. |  | **TR** | **10. YOUR SOLUTION SL**  Our solution is to design a website where we can book ticket and receive QR Code which can be scanned during boarding. Passengers can also monitor the train status and as well as they are alerted through mobile before their destination arrives. | **8. CHANNELS of BEHAVIOUR CH**  Online : Passenger book on their own.  Offline : Passenger book through service centers or at railways. |  |

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

**AS**

**5. AVAILABLE SOLUTIONS**

Which solutions are available to the customers when they face the problem

What constraints prevent your customers from taking action or limit their choices

of solutions? i.e. spending power, budget, no cash, network connection, available devices.

**CC**

**6. CUSTOMER CONSTRAINTS**

**CS**

**1. CUSTOMER SEGMENT(S)**

Who is your customer?

i.e. working parents of 0-5 y.o. kids

**Explore AS, differentiate**

**Focus on J&P, tap into BE, understand RC**

**Deﬁne CS, ﬁt into CC**

**Focus on J&P, tap into BE, understand RC**

* E-booking is an available solution but doesn’t ensure safety
* Passenger chart is available 3 hours before departure and passenger is alerted
* Pen and paper use has reduced
* Network connectivity issues inside the train
* Getting used to the process especially senior citizens
* Nowadays, the login captcha will be not be perfect
* People of all age groups ranging from small kids to senior citizens as well as super senior citizens

i.e. directly related: ﬁnd the right solar panel installer, calculate usage and beneﬁts; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

**BE**

**7. BEHAVIOUR**

What does your customer do to address the problem and get the job done?

**RC**

**9. PROBLEM ROOT CAUSE**

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.

**J&P**

**2. JOBS-TO-BE-DONE / PROBLEMS**

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

* Paper pen usage contributed to lots of confusions and errors
* The long queues caused collision during peak hours and caused accidents
* TTR was burdened with too much workload
* Population growth, train capacity and expansion of railways led to this problem
* Need for security
* Customers self-learn to use the technology
* They book the tickets and then have to scan the QR code and show it to TTR while boarding
* They track their journey or ask their family members to track incase of emergency they can alert the authorities
* E-ticket booking and proper allocation of seats
* Verification of the customer
* Live tracking of the locomotive

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| --- | --- | --- | --- | --- |
| **Identify strong TR & EM** | **3. TRIGGERS TR**   * Senior citizens waiting in long queues to book tickets, News on more efficient solutions in social media * Drive for Digital India   What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efﬁcient solution in the news. | **10. YOUR SOLUTION SL**  If you are working on an existing business, write down your current solution ﬁrst, ﬁll in he 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.   * Automatic door open for only booking passengers in train * Smart Ticketing Automated Fare Collection * Alert while nearing destination | 1. **CHANNELS of BEHAVIOUR CH**     1. **ONLINE**  * Online: Customers don’t rely on external sources anymore * Offline: People had to rely service centers or have to wait in stations   What kind of actions do customers take online? Extract online channels from #7   * 1. **OFFLINE**   What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development. | **Extract online & ofﬂine CH of BE** |
| **4. EMOTIONS: BEFORE / AFTER EM**  How do customers feel when they face a problem or a job and afterwards?  Before: Less security, Time consuming, confusion  After: Secured feeling, less time spent for booking, paperless tickets  i.e. lost, insecure > conﬁdent, in control - use it in your communication strategy & design. |

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