**Project Title:** Smart Farmer – IoT Enabled **Project Design Phase-I** - **Solution Fit**

Smart Farming Application

**1. CUSľOMER SEGMENľ(S)**

Who is youí customeí?

i.e. woíking paíents of 0-5 y.o. kids

**6. CUSľOMER CONSľRAINľS**

**CC**

**AS**

**CS**

**5. AVAILABLE SOLUľIONS**

Which solutions aíe available to the customeís when they face the píoblem

What constíaints píevent youí customeís fíom taking action oí limit theií choices

of solutions? i.e. spending poweí, budget, no cash, netwoík connection, available devices.

oí need to get the job done? What have they tíied in the past? What píos & cons do these solutions have? i.e. pen and papeí

ľhe iííigation píocess is automated using Ioľ. Meteoíological data and field paíameteís weíe collected and píocessed to automate the iííigation píocess. Disadvantages aíe efficiency only oveí shoít distances, and difficult data stoíage.

Using a laíge numbeí of sensoís is difficult. An unlimited oí continuous inteínet connection is íequiíed foí success.

ľhe customeí foí this píoduct is a faímeí who gíows cíops. Ouí goal is to help them, monitoí field paíameteís íemotely. ľhis píoduct saves agíicultuíe fíom extinction.

**Explore AS, differentiate**

**Define CS, fit into CC**

**Team ID: PNT2022TMID17177**

ľhe puípose of this píoduct is to use sensoís to acquiíe vaíious field paíameteís and píocess them using a centíal píocessing system. ľhe cloud is used to stoíe and tíansmit data using Ioľ. ľhe Weatheí API is used to help faímeís make

decisions. decisions applications.

Faímeís

thíough

can make mobile

**2. JOBS-ľO-BE-DONE / PROBLEMS J&P**

Which jobs-to-be-done (oí píoblems) do you addíess foí youí customeís? ľheíe could be moíe than one; exploíe diffeíent sides.

**9. PROBLEM ROOľ CAUSE**

What is the íeal íeason that this píoblem exists? What is the back stoíy behind the need to do this job?

**RC**

**7. BEHAVIOUR**

What does youí customeí do to addíess the píoblem and

**BE**

get the job done?

i.e. diíectly íelated: ﬁnd the íight solaí panel installeí, calculate usage and beneﬁts; indiíectly associated: customeís spend fíee time on volunteeíing woík (i.e. Gíeenpeace)

Use a píopeí díainage system to oveícome the effects of excess wateí fíom heavy íain. Use of hybíid plants that aíe íesistant to pests.

Fíequent changes and unpíedictable weatheí and climate made it difficult foí faímeís to engage in agíicultuíe. ľhese factoís play an impoítant íole in deciding whetheí to wateí youí plants. Fields aíe difficult to monitoí when the faímeí is not at the field, leading to cíop damage.

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

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



**I**

**d e n ti f**

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|  | **3. ľRIGGERS ľR**  What triggers customers to act? i.e., seeing their neighbor installing solar  panels, reading about a more efﬁcient solution in the news. | | **10. YOUR SOLUľION SL**  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.  Ouí píoduct collects data fíom vaíious types of sensoís and sends the values to ouí main seíveí. It also collects weatheí data fíom the Weatheí API. ľhe final decision to iííigate the cíop is made by the faímeí using a mobile application. | 1. **CHANNELS of BEHAVIOUR CH**    1. **ONLINE**   What kind of actions do customeís take online? Extíact online channels fíom 7   * 1. **OÏÏLINE**   What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and  use them for customer development.  ONLINE: Píoviding online assistance to the faímeí, in píoviding knowledge íegaíding the pH and moistuíe level of the soil. Online assistance to be píovided to the useí in using the píoduct  OFFLINE: Awaíeness camps to be oíganized to teach the impoítance and advantages of the automation and Ioľ in the development of agíicultuíe. |  |
| Faímeís stíuggle to píovide adequate iííigation. Inadequate wateí supply íeduces yields and affects faímeís' píofit levels. Faímeís have a haíd time píedicting the weatheí. |  |
| **4. EMOľIONS: BEÏORE / AÏľER EM**  How do customeís feel when they face a píoblem oí a job and afteíwaíds?  i.e. lost, insecure > conﬁdent, in control - use it in your communication strategy & design.  BEFORE: Lack of knowledge in weatheí foíecasting →Random decisions →low yield.  AFľER: Data fíom íeliable souíce →  coííect decision →high yield | |