FAIRPLANE

Analytics of hospital health-care data

Based on ten customer interviews and observations from the Fairplane Guided City Tours team

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SCENARIO

Collecting data, performing analysis, arriving at a decision.

	Entice How does someone initially become aware of this process?	**Enter** What do people experience as they begin the process?	**Engage** In the core moments in the process, what happens?	**Exit** What do people typically experience as the process finishes?	**Extend** What happens after the experience is over?
Steps What does the person (or group) typically experience?	**Define the objective** The objective of this analysis is to predict the future requirement of medical drugs **Collect the relevant data of the patient** According to the objective, the relevant data of the patient should be collected **Ignore the useless informations** Some data may not be important for the analysis which should be ignored. **Figure out only the significant data** Only the important data should be considered and the repeated data should be deleted **Clean the data by deleting duplicate data**	**Enter the data in the excel sheet** Figure out relevant rows and column names to enter the data in excel **Create csv file from the data** From the collected data create comma separated variables **Open the application** Using anaconda navigator Jupiter notebook can be launched **Load csv file in the application** By entering the file location they can import the data into the noteboook	**Process the data** **Visualize the data, to get a clarity** The software creates visualization using matplot library in python **Describe the data and get a prediction** The software describes the data using describe() function.	**Save the analysis and exit the applications** The guide wraps up the tour and everyone heads their separate ways **Prompt for review** After providing the prediction, an email and in-app notification prompt the health care center for areview **Writing & submitting review** The health care center writes a review and gives the tour a star-rating out of 5.	**The app keeps sending notifications health care center** The completed tour appears on the "past experiences" area of a customer's profile with a few details on where the group went **Keeps checking if the prediction goes right** Participation in the tour informs our backend recommendation systems, which the customer may experience via better personalization **Personalized suggestions of further analysis** The customer receives an email 14 days after their tour with personalized recommendations for other tours **Personalized tour suggestions after new travel booking** When a past tour participant books new travel with us, we show them personalized tour recommendations in their arrival city.
Interactions What interactions do they have at each step along the way? **People:** Who do they see or talk to? **Places:** Where are they? **Things:** What digital touchpoints or physical objects would they use?	Open the patient portal, in the software List of objectives section, software Choosing an objective, in the software Uploading the data, in the software Clean the data, in the software	Select create visualization, in the software See the trend created from the loaded data, in the software Understand and get a clarity from the data, in the software	The software starts the analysis which may take some time Throws error if the data is not provided sufficiently, user has to click continue Finally shows the predictions made from the analysis	Make decisions and arrive at a conclusion from the predicted value Medical drugs that has to be imported can be decided "Leave a review" modal window within the profile on the website, or software	The right prediction triggers them to use the analysis again, the software Recommendations from the software or website Customer's email (software like Outlook or website like Gmail)
Goals & motivations At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")	Help me get predictions of medical drugs Help me have more accurate prediction by adding more data Help me get predictions of future ailments of the population Help me see what they have to offer	Help me stay connected for future analysis Help me feel confident that I have uploaded full data.	Help me feel confident about the process Help me feel good about my decision to go with this analysis Help me make the right predictions	Help me leave the software with full satisfaction with right prediction Help me spread the word about the accuracy of the analysis	Help me see what I've analyzed before Help me see what I could analyze next
Positive moments What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?	It's good to see the availability of various types of visualizations It's reassuring to readreviews written by past users	Excitement about the analysis ("Here you go") Current payment flow is simple We've heard from several people that the reminder emails were essential, especially if they booked way in advance	Our medical drug predictions tend to be sogood that it matches with the reality People love the process itself, we have a 98% satisfaction rating	People experience secure integrations and workflows	People like looking back on the expenditure saved after using our analysis
Negative moments What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?	People need to collect the data in a systematic manner which may not be easier every time A normal low key health care centers would not opt for data analysis Predictive analysis cannot deal with data loss	Trepidation about the prediction ("I hope this will be worth it!")	Doctors fear sometimes something unexpected may happen Sometimes people may not follow our predictions blindly because of lack of trust	People are unclear whether the prediction is necessary	
Areas of opportunity How might we make each step better? What ideas do we have? What have others suggested?	If you don't know what to analyze next, we send you recommendations We could check whether the prediction has matched with the reality People could check out what data should be collected for the further analysis Data mining and data normalization can be performed separately Show highlights or common phrases from reviews		How do we provide electronic health records for free if they opt for our analysis	How might we make it clear that review is necessary? How might we equip doctors to check on regression plots How can we import various other tools like tableu, splunk etc How might we provide discount and offers	How might we help people remember how much they have saved from our analysis. How might we extend the personal connection with the health care center