Case Study – Product Hiring

Question Prompt

ZestMoney is a leading consumer lending fin-tech company in India. In order to increase customer retention and acquisition, ZestMoney has recently provided its customers an option to pre-close a loan with zero penalty.

Pre-closure is the process where a customer repays the loan before the loan tenure ends. For example - a customer applied for a loan of Rs. 9000 on 5th Oct'19 and chose a tenure of 6 months at 20% p.a. such that his monthly EMI is Rs. 1650 (Principal - Rs. 1500 and Interest - Rs. 150) with the first EMI due on 5th Nov'19. On 6th Nov'19, the customer can choose to pre-close the loan and ends up paying Rs. 9150 only (Principal amount and interest for the first EMI). In this case, ZestMoney loses on the revenue by losing the interest for 5 months.

As a product manager at ZestMoney, how would you solve this problem? Feel free to redesign the existing feature or introduce a new one. You can make any necessary assumptions, whatsoever.

You can use documentation, scribbling, sketches, flow charts, or any other method for communicating your ideas.

NOTE:

- **The Concept Note should not be more than 2 pages in length**

Concept Note: Solving Loan pre-close problem

Current Scenario: No pre-close loan penalty. Did this to increase customer retention and acquisition. Now, this is leading to a loss in revenue.

Revenue for ZestMoney = (Amount of Loan)*(Time)*(Interest Rate) + Charges

Assumptions: Since the problem statement talks about revenue, I am suggesting the methods to increase revenue which may not necessarily improves profit. I will touch a bit on aspect of profit while comparing different solutions.

Note: Some of the solutions are motivated from my curriculum of CFA level 1 exam and my Economics curriculum. Due to limited space, I will try to give a brief idea of the idea and may contain some jargon.

Proposed Solutions

Why a user pre-closes the loan?

A user pre-closes the loan if he has the money and/or want to save the interest payment. Further questioning why s/he wants to save the interest payment, given the money can be utilised elsewhere. This leads us to the concept of utility. The user is pre-closing because the utility from the saved interest payment(say INR 1000) is more than the utility that can be gained from having the principal for extended period of time. What I propose is to utilise this concept and create solutions, centered to this concept.

I will broadly divide my solution into 2 types: (i) Re-designing the current feature; (ii) New feature without changing the current features

(i) Re-designing the current feature

We will require to redesign the feature by eliminating pre-close for free option and implement one or more of the below solutions:

Solution 1: At the time of applying for the loan, the user is provided 2 options, either to decide a fixed interest rate or a variable interest rate depending upon the number of days (like a Floater, prevalent in Financial Markets). Though the interest is itself based on number of days in many cases, providing this option before hand will persuade users to extend/complete time of loan. We have to design the rates considering individual specific factors (comprising of creditworthiness, past records, etc) and set rates such that the user is better-off by paying the loan at the set-forth time only. For instance, if the interest rate decided for one year loan was 12% per annum (1% per month), we can charge different interest rates (say 1.5% per month for loan pre-closed in less than 6 months, 1.25% per month for 6-9 months and 1.1% in 9-12 months). In case, the user opts for fixed one, we can charge a part of lost revenue.

Solution 2: In Spite of using option 2, we can provide an ‘option’ type of thing. At the time of applying for the loan, we can provide an option feature in which a user may purchase an option (like in Financial Markets) which allow him/her to pre-close the loan without paying anything extra. For example, the option to pay after 6 months for a 10,000 rupees 12 month

period loan (say, 12% pa) can be 400 rupees (just for reference) and 2000 rupees for less than 6 months. This option amount will be returned if not exercised. In case the user doesn't opt for this plan and wants to pre-close, a part of lost revenue can be charged.

Solution 3: Referral & Rebate Feature
This solution will reduce the burden of extra charge on users as well as us and would also lead to an increase in acquisition (through higher referral). Let's say a loan of 10,000 rupees is taken for a period of 12 months at 12% pa. Now, at the end of 6 months the user wants to close the loan and he has referred to the people who have taken the loan from us. We can reduce the extra interest charge the user needs to pay for pre-closure depending on the referee's loan amount, may be zero for lets say the total sum of Rs. 10,000 from all referrals combined. In this way, the user and Zestmoney is mutually benefited leading to even higher acquisition and correspondingly higher conversion and revenues. What a treat!

(ii) New feature without changing current feature
Solution 4: Coming again to the reasoning of why user pre-closes the loan. We have to create a strategy such that the perceived saving or utility from saving is overweight by the benefit we provide. One method could be loan structuring. Consider this example: User takes a loan of Rs 10,000 for 2 months at 10% pa. He wants to pre-close the account at the end of first month thus saving Rs 1000 in interest payments (Total = 2X1000, Paid = 1X1000). Now, we provide him/her an option to reduce the interest rate at 8% pa. Now his savings would be only 600 if he pays earlier. (Total = 2X800 = 1600, Pay after 1 month = 1000). Now, he has more incentive to keep with extended period considering that at a lower cost, he can enjoy the benefit of using 10,000 for 1 more month. It is beneficial for firm too as our revenue increases from Rs 1000 to Rs 1600.
Another method in this class of methods is to provide the user a better interest rates for future credit requirements, which won't be quite extreme scenario considering that the credit rating (quality) of the user has increased as s/he serviced previous loans.
Note: The strength of this referral program lies in the fact that people value Rs 10 saved more than Rs 10 earned. As a result, we can expect better referral rate.

Comparing Solutions
As we have initiated the no penalty scheme, it may backfire on us to introduce penalties in one form or another. So, considering this in mind Solution 4 would be best, followed by 3,2,1 respectively. In terms of profitability, Solution 2 could the best as it directly gives incentives for people to stick with the tenure followed by solution 1,3,4. Surprisingly, solution 3 could be a great source to enhance referrals and could be given considerable thought. So, based on the requirement, we can implement one or more of these solutions. I have not elaborated much on solution comparisons, implementation limitations ans their solutions and would love to discuss them over the interview.

Thanks!