

TO DO

- 1) Formulae for Success Metrics
- 2) Market research for Khatabook
- 3) Play store reviews (before Case study and after reason)
- 4) Add points which mentor tells us to add
- 5) Good UI
- 6) Add headings?
- 7) Check consistency shopkeeper / vendor / user; UX changes/ features
- 8) Better way to frame User personas (Covid excuse)
- 9) Re-arrange wireframes
- 10) Add URLs for PPTs, animation & sounds

Doubts for the Mentor:

MAJOR Doubts:

- 1) What can we do about Market Research, how can we find it, where can we find it?
- 2) ***Are we expected to conduct surveys and then fill in user personas or can we create user personas by imagining different types of user?
- 3) Should our launch strategy have a timeline in it or should it just be a list of sequential actions to be executed?
- 4) Should we include URLs for PDF of Round 1 and for animation and sound?
- 5) For success metrics, can the success metric be about how we measure UI changes and not about Khatabook's success metrics?
- 6) Should we add heading for major sections?

Overview & Subjective opinions:

Q7) Are the reasons for choosing UX strong enough?

Q8) Are the UI/UX changes proposed for Khatabook app clear and justified?

Q9) Are the wireframes professional enough to be included?

Q10) Is the 'mascot' point clear and justified?

Q11) Any suggestions on the writing style and language?



PMx Round 2 Draft

Team: Nameless

Members: Pranav Chatur and Smeet Dedhia

In the first round, we proposed 3 strategies to increase the number of daily transacting users of Khatabook. They were 'Improving app UX', 'Building better emotional connection' and 'Establishing Khatabook as a brand'. No doubt that all these strategies are important as they cover technical, personal and social aspects of increasing users of Khatabook, but definitely some of them are more controllable, measurable and impactful than others. With the help of this draft, we plan to dive deep into one of these above strategies.

(After prioritization,) The strategy chosen (prioritized?) for this draft is improving app UX. Our aim is to design a full-proof workflow targeting the why, how and what to improve in the app UI. Since all solutions are inter-related at a deeper level, improving the App UX would also build better emotional connection with users and boost the Khatabook brand.

The reason for choosing this solution is because improvements in app UI are often neglected as no direct consequences are seen by focusing on improving the app UX (*91% of unsatisfied customers who don't complain simply leave hence the issue never gets highlighted*). The question shouldn't be why to improve the app UI, it should be why not to improve it. Moreover, it is something that can be changed substantially with minimal effort and something that has a tremendous impact to effort ratio (*Research conducted by Forrester suggests that for every dollar invested in app UI, you get 100 back*) and every aspect of the solution is controllable for the developer, making it an ideal solution to analyze further.

To further support as to why we are choosing to improve Khatabook UX, after researching on Google Play store and Apple App store, looking at majority of the reviews are.... (Product Folk website..)

There are many examples of organizations which, only because of having a good UX, have profited and established themselves as a strong competitor in their respective fields. One such example (case study?) is 'Dropbox'.

Dropbox is a file hosting service which competes with tech giants like Google (Google drive) & Microsoft (OneDrive). In 2017, Dropbox underwent a major rebrand and introduced many features like a new muted color palette and whimsical hand drawn illustrations, making Dropbox's mobile app UI stand out from the crowd for all the right reasons. The numbers speak for themselves here. In 2016, Dropbox's paying customers were 8.8 million but after this revamp it soared to 11 million (whopping 125% increase). This demonstrates the power of enhancing UX of an app.

Hence after analyzing this, no matter how it is looked at, one thing is pretty clear that Khatabook's app UX should be improved so it can reach limits it has never reached before. Now that we have discussed the *why* of the problem, let us get into the gory details of how and what of the plan.

To understand how we can improve UI/UX of Khatabook, we first need to understand what qualifies as a good UI and what are the factors that a good UI should cater to.

A good UI has following factors to account for:

- 1) **Learnability**- A good UI should be easy to get into with a steep learning curve.
- 2) **Efficiency**- It should increase productivity of the user and save user's time.
- 3) **Memorability**- It should be easy to recall and remember for long periods of time.
- 4) **Satisfaction**- User should feel satisfied after using the app and feel like using the app more.

A great UI should also reflect the personality of the brand in order to stand out from the competition and provide a delightful experience to the users.

Now that we know what qualifies as a good UI, let's get into what changes we propose to improve Khatabook's UX a notch above what it is currently.

The changes can be broadly divided into 3 categories:

- A) Enhancement of existing app UI/UX
- B) Visualization of Benefits
- C) Tools to increase user engagement.

Let us dive deep into and tackle each one of them one by one.

A) Enhancement to existing app UI/UX:

Under this section, we aim to provide modifications for existing elements as well as creation of new elements targeted to increase efficiency of the app. The proposed changes have been inspired from Google's Material Design, which suggests UI/UX guidelines after meticulous research. Following are the changes we propose:

1) Inserting scroll bars for quick navigation:

It is really frustrating when users want to find something in the list but are unable to do so quickly. By introducing a scroll bar (as seen in the wireframe) navigation will become really easy in case of large number of customers.

2) Modifying Search bar:

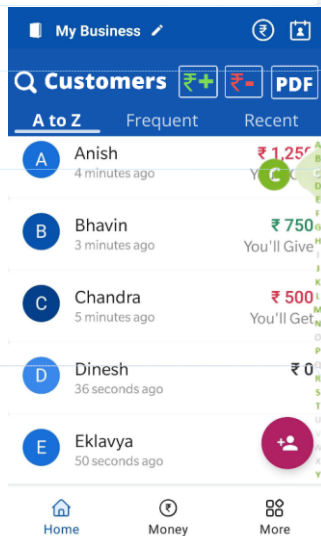
Khatabook uses a persistent search bar, which should be replaced by an expandable search bar, as searching is not the main focus of the app. An expandable search bar exists within a search button in the tool bar when it is dormant and only becomes visible when the user is searching, after which it again recedes back into the icon.

3) Making Tabs for quick sorting:

An alphabetical customers' list may not be of much use to a shopkeeper. We propose that different tabs (like A-Z, frequent & recent) should be created to better sort the customers and reduce the time taken by shopkeepers to feed one transaction.

4) Priority Placement of buttons: (Prioritized Button Placement?)

Buttons which are used frequently should be more accessible than the ones used rarely. Frequently used buttons to be placed directly on the top app bar (as shown in the wireframe) to ensure faster transaction entry by users.

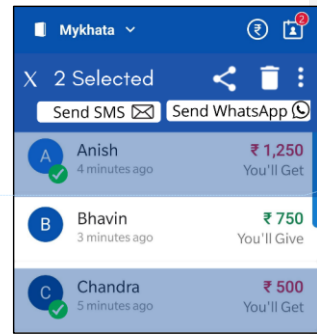


5) Modifying Top bar into Contextual Action bar:

Contextual action bars provide actions for selected items. A top app bar can transform into a contextual action bar, remaining active until an action is taken or it is dismissed. This makes it convenient to select frequently used actions (as shown in the wireframe) without going inside the customer card.

6) Modifying bottom navigation bar into disappearing bar:

Currently Khatabook's bottom bar is static i.e., it doesn't disappear while scrolling down. This reduces the overall visibility of the user. We propose that on scrolling downwards the navigation bar should seem to go below the user's screen and hide itself from user and it should appear again after scrolling upwards.

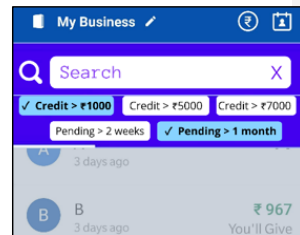


7) Adding a text field for Customer Description:

One of the most critical reasons as to why vendors prefer using books is because books give them flexibility of writing extra info regarding the customer. Therefore, having a text field which allows vendors to type short notes in the customer card remains to be an essential requirement to be integrated within the app UI.

8) Adding Filter chips:

Filter chips represent filters for a collection. Using filter chips, vendors can categorize customers into smaller groups (as shown in the wireframe). Using filters and filter chips is a great way of organizing huge amount of information into bits & pieces.



B) Visualization of Benefits:

Under this section, our aim is to constantly remind the users about the resources they are saving by using the app. It is always better to educate users about benefits than advertise the benefits to them. This will act as an incentive for users to keep using Khatabook, as the user will consciously know the benefits of using Khatabook as opposed to having a rough idea on how Khatabook helps them. In short, this solution is designed to increase user commitment by improving user empathy of the app.

These reminders can be in the form of banners and dialogue boxes which will appear during loading screens and after a milestone is reached. It must be noted that the reminders should not feel annoying or forced. Hence the banners and dialogue boxes should appear sparsely throughout the app. The benefits which can be visualized include:

1) The amount of time saved:

Using Khatabook saves a lot of time over using a physical book. Maintaining and recording the transactions in the app is quicker than maintaining a physical book. The app allows users to send reminders of the due payments in the matter of seconds as opposed to manually contacting the customers.



Such benefits can be visualized for the user by dialogues boxes as shown in the adjacent wireframe.

2) The amount of effort saved:

By using the app, users save a lot of efforts and hassle. Most things can be done by the users without anything apart from a smartphone, without leaving their seat. Such benefits can be visualized by dialogue boxes as shown in the adjacent wireframes; and be placed sparsely throughout the app.

Khatabook helped you receive **346 payments!**
Imagine the time it would take to collect them manually

You have used Khatabook for **776 transactions.**
Hence saved **100 pages** of paper!

C) Tools to Increase User Engagement:

This solution mainly deals with increasing user empathy. We propose that certain features should be added to the app which makes using the app more colorful. These features include

1) Mascot:



Humans can easily connect with personification than with something without a face hence users will empathize better with a brand mascot. Keeping this human tendency in mind, we propose that there should be a character associated with Khatabook. This character can act as a mascot for Khatabook which appears throughout the app UX. The mascot's purpose will be to comfort the user during transition screens and keeping them engaged. The adjacent images show how a mascot can appear in Khatabook app's 'Transaction Saved' splash screen.

2) Animations:

Animations express a brand's personality and style. Subtle animation in icons, illustrations, logos and transitions can add polish and playfulness to the user experience. Motion can be used to emphasize key points in a user journey, like recording a transaction. Introduction of animations in the app would make it much more engaging.

3) Sounds:

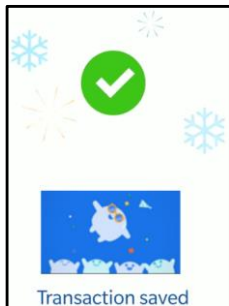
Sound communicates helpful feedback in ways that express a brand's personality and aesthetic. Sound must be Informative, Honest & Reassuring. User empathy is improved when the sounds in the UI work like a well-coordinated orchestra.

More importantly, since users associate major tasks with stress, introduction of 'Hero Sounds' in the app UX after a transaction is completed, will give a sense of satisfaction to the user.

4) User Preferences:

Users like to customize the app to best suit their needs. Allowing customization of the app is another step towards better user empathy. Hence, we propose Khatabook should introduce 'User Preferences' in the settings tab which would include options to customize viewing density (compact/comfortable/default), dark mode; and change certain defaults in the app like which khata is opened by default on start-up. Options to customize the credit and time filters can also be provided.

Now that we understand all of our proposed solutions, it is important that we analyze the effects of implementing these on different user personas. It should be ensured that the categorization of user



personas is such that we can understand behavior of that particular category and understand the impact of our proposed solutions on that particular category.

We can categorize users on the basis of whether they have been using Khatabook app and how comfortable they are with adapting to new technology. Therefore, there will be 4 user personas.

Type	Impact of proposed solution	Way to increase participation
Uses Khatabook and is comfortable adapting to new technology	Increase in number of such users automatically. As app is introducing productivity enhancements.	Having proper response team set up to gather feedback from users.
Uses Khatabook but slow to adapt to new technology	Decreases the number of such users, as they are habituated to old app UI.	Having proper launch strategy put in place so that changes are rolled out gradually.
Doesn't use Khatabook but is comfortable adapting to new technology	Increase in number of such users as app UX is more engaging and empathetic.	Creating awareness among people using advertisements and word of mouth can be used to reach out to this class of people
Neither uses Khatabook nor is comfortable adapting to new technology	Increase in number of such users as UI now is more intuitive and easier to learn.	Setting up sales teams which provide the demonstration of how the app works travelling from shop to shop.

As evident from the table, vendors currently using Khatabook but not comfortable adapting to technology are expected to reduce. According to Business Insider, Khatabook has over 8 million users and according to Gartner survey, only 67% of users in India are comfortable adapting to newer technology to be more effective, therefore Khatabook could potentially lose over 2.6 million users! Therefore, the proposed solution fails to tackle this demographic of users.

The reason for decrease in the number of users from this demographic is because the users habituated to old app UI will be reluctant on changing. Therefore, if the changes are implemented without having a proper launch strategy in place, the solution can backfire.

Hence it is a clear that the proposed solutions should be launched in phases, in a gradual manner and effects of the released patches should be monitored carefully. Moreover, time should be spent on tests and simulations before releasing the UI for public use. Following is a detailed outline of the launch strategy we propose:

1) Test with developers

As more time passes by in development, the more expensive it becomes to fix a problem. So, identifying and resolving problems early on matters from both a business perspective and a design and development perspective. Hence, Debugging & testing the UX change with developers are important. This is where QA testing comes in, with comprehensive tools and task runners that attempt to crash the feature and interface.

2) Test with real users in a controlled environment

When the first working prototype is finished, the feature is tested with actual users in interviews. Shopkeepers who use the app regularly can be invited to complete tasks. The UX team can monitor dead ends and issues that pop up and addresses them on spot. This usability test's goal is to ensure that the new feature doesn't affect critical components of the interface like recording transactions.

3) Gradually increase testing users' group

The new additions can be rolled out first to the Khatabook employees who can vote on changes & give feedback. Then the beta-testers of Khatabook app can be given access. This wider rollout would test the app on a variety of smartphones & operating systems. If the feedback is mostly positive, then the changes are ready for the final rollout.

4) Split -Test and Retention Check

When the changes are finally live, every user will have to use the new features. Passive users who were habituated to the old app, might face problems, and finally some of these users may leave the app.

To maximize retention and help this user group, the changes can be split test with 3 small segments of such users to measure their retention. Each segment would get a slightly different view, which would enable us test how to display the new feature to all users later. For the first segment, we add the new feature and provide a tutorial on how to use it. For the second segment, we just add the new feature. For the third segment, we could leave the feature as is. The higher the retention of a segment, the more likely that design will be promoted to all users later on.

5) Customer Support

The customer support must be active and ready to help users who are affected by the feature rollout. Developers must be active to quickly rollout bug fixes. Different methods to draw attention and educate users about the new features must put forward, so that the users will be able to perform their tasks more efficiently.

Once the features have been rolled out, we can monitor how they performs. Various analytics like the time saved in feeding a transaction before and after the rollout can be generated for future rollouts.

Moving forward, **UX KPIs** differ from other KPIs in that they have the difficult task of translating human behaviour, opinions and feelings into numbers hence clear metrics must be created to quantify the success of the rollout. Following are some metrics which can be used to measure success of UX enhancements:

1) Time on Task:

This KPI describes the time (in minutes and seconds) that a user needs to complete a task successfully. Basically, the shorter the processing time, the better the user experience. The time taken for a user to feed a transaction into the app can be measured and analysed. A decrease in time on task after a UX change would indicate its success.

[This KPI is chosen by keeping efficiency of the app in mind.]

Formula here:

2) Search vs navigation

When the app UX is intuitive and simple, users would navigate through the app. On the contrary, if the UX is cluttered, users would use the search function to reach their destination.

[The reason for choosing this KPI is to keep track of effort put by the user of the app.]

Formula here:

3) Retention rate

Retention rate is the percentage of users that continue to use a product over time. With the help of this KPI, we can understand the long term usefulness of the product.

[This KPI is chosen to analyse how often (frequency) the user uses the app.]

Formula here

4) Customer satisfaction

Customer satisfaction measures users' overall fulfilment levels, and it can be tracked in various ways like using NPS (Net Promoter Score, calculated by asking users how likely they are to recommend a brand or a product on a scale from 1-10.), CES (Customer Effort Score, found by asking users to rate their effort levels) and social media monitoring tools like Mentions and Google Alerts are used to see what people are saying about the product on social platforms, blogs, and review sites.

[This KPI indicates the emotional comfort (empathy) given to the user by the app.]

Using the above metrics, we can measure the quality of UX and by aiming to increase the above factors, the app UX can be made more and more efficient.

This concludes all of the research and the efforts we have put to make the draft. In the end, solid mobile app UX design won't land you on the map, but weak UX design will certainly strip you from it. Users expect mobile apps to be intuitive and easy to use. No matter how groundbreaking the intent behind your mobile app, it will never succeed if people do not enjoy using it. Moreover, nothing is more motivating than seeing happy, delighted people using an application exactly the way it is intended.

Thank you for indulging with us.

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SPACE INTENTIONALLY LEFT EMPTY, WILL BE FILLED AS PER WHAT THE MENTOR SAYS
WE LACK FOCUS ON