KMyMoney 1.0.2

Usability Testing Report

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EXECUTIVE SUMMARY

PRODUCT DESCRIPTION

KMyMoney, provides important finance management features, it is an open source personal finance management software. It uses double entry accounting principles and strives to be easy to use.

AUDIENCE

KMyMoney strives to be the easiest open source personal finance manager to use, so the audiences for this usability test were double novices: domain (personal finance management) and tools (Linux).

- They shouldn't have used extensive or recently any personal finance management tools.
- Should have used Linux before but are primarily users of other operating systems.
- Should have an active bank account, do online banking and attempted to create a budget or track their finances.

PARTICIPANTS

We recruited 3 participants using convenience sampling recruiting friends. All 3 of them were software engineers, aged between 25-30 years, who have used Linux but are primarily Windows users. Two of three were male. Two of three never used any personal finance management tool, while one used MS Money for a week long time ago. All of them did attempt to track and plan their finances.

ISSUES

This usability study focuses on 2 of the features of the product: Transactions and Budget. The main issues tested in the study were:

Terminology: to know if finance terminology and icons used in the software were clear. E.g.: 'Clear', 'Transfers', 'Reconciliation' and 'Ledger'.

Task flows: We tested to see if the task flows were easy for the user to follow or not. We particularly looked at process of creating scheduled transactions, reconciliation, creating and viewing budget.

Navigation: We tested to see if various elements and options in the software were easy to find, e.g.: options under right click. We also tested tabs that were designed as a way to change transaction type.

Other issues uncovered during the test were related to input entry in some of the forms and data saving options.

METHODS

Participants were asked to think aloud as they performed the designed tasks in a lab. Interactions with KMyMoney and participants' activity were recorded in a video. The tasks used to test were:

- Creating and paying a monthly rent payment,
- Editing transaction to change state,
- Checking and confirming transactions and
- Creating and viewing a budget.

KEY FINDINGS – RECOMMENDATIONS

Too many pop-ups with hard to follow instructions, they need to be pruned and the instructions need to be clear and crisp. This will make the experience of using KMyMoney a whole lot better.

In Budget form the data needs to be auto saved without needing user to save a budget created separately. This can greatly help not loosing data if the user misses this intermediate save point.

Data entry across software needs to be holding values without user having to explicitly hit 'Enter' key.

In ledger, the entries should be easy to sort, finance terms should have helpful tool tips.

In Transaction edit form, use of tab to select a type of transaction was confusing. Instead using drop down to select type and then changing the options on the form based on that would help clear confusion of the actual type of entry and prevent editing by mistake.

Lastly directly viewing a budget created could be an option in the right click of a selected budget.

DETAILED REPORT

PRODUCT DESCRIPTION

KMyMoney 1.0.2 is an open source personal finance management software for KDE (a desktop environment mainly for Unix-like systems). It enables users of open source operating systems to keep careful track of their personal finances by providing a broad array of financial features and tools. Key features are:

- It uses double entry accounting principles to ensure accounts are kept in correct order,
- Strives to be easy to use and
- Provides all important features commercial systems provide.

AUDIENCE

KMyMoney strives to be the easiest open source personal finance manager to use, especially for the non-technical user. The audiences for this usability test are novices both in terms of in tool skills (Linux environment) and domain knowledge (personal finance management) while being interested in personal finance. They will satisfy the following requirements:

Novices in tool use means:

- should have used Linux
  - used it in past,
  - could at least browse, and navigate through file structures in Linux.
- are primarily Windows or MAC users

We are looking at domain novices who are interested in using personal finance management software. So, we are looking at user who are interested but have not extensively used any personal finance management software like MS Money, iMint etc. So the user should:

- have an active bank account,
- be familiar with online banking,
- check online statements of their bank accounts, pay bills through online banking and log in to it at least twice a month,
- may have tried but not used personal finance management software for more than a month or recently (in last 2 months),
- attempted to create a budget for their finances or attempted to track income and expenses in any form/system

ISSUES

In this usability study we looked at 2 features of KMyMoney: Transactions and Budget. The main issues tested in the study were related to terminology, task flow and navigation; these are discussed under Issues tested. We found several other issues in the test that we have not actually tested for, these are listed as Other Issues that appeared in the test.

ISSUES TESTED

In Terminology: KMyMoney uses double entry accounting principles and the concept of Reconcile is not common in current online banking scenarios. So we tested if the finance terms (e.g. 'Reconcile', 'Clear' and 'Ledger') in the software were easily understandable or not.

In Task flows: We tested to see if the task flows were easy for the user to follow or not. We particularly looked at process of creating scheduled transactions, reconciliation, creating and viewing budget.

- In Scheduled transaction option to pay for the first time doesn't appear in context after creating a scheduled transaction. It appears on the homepage. We tested to find if this flow matches with user's model of task flow.
- Reconciliation is a not a very familiar finance management principle, so we tested to see if the users understood this and how they did it.
- In budget, we wanted to see how the users would handle adding new categories as they enter a new budget plan with pre-selected categories. Also here the categories are wrongly referred as accounts.

In Navigation: We wanted to see if options hidden under right-click were hard to find for the users. We also wanted to see if users had trouble with:

- use of tab for changing type of transaction,

- Viewing and creating budget are not at the same place, we wanted to see how users find creating budget report;
- Button to save created budget is not laid out in proximity to where the budget data was entered. We wanted to see if this could be found.
- Repeatedly used same icon buttons for different functions: 'Calculator', 'New'

OTHER ISSUES THAT APPEARED IN THE TEST

These are some of the issues uncovered during the test that we haven't actively planned the test for. Some of the issues were identified earlier but we weren't clear enough to exactly pin point them. After seeing the participants interact with the system these issues were understood with lot more clarity (these are marked with an *).

- Data entry in several forms as participants did not hit required "Enter" button. It was observed in:
  - In the budget form
  - In creating a new payee
- Had too many pop-ups with lengthy instructions and typos that were ignored.
- In transaction page new transaction gets created on clicking the last blank space at end of transactions without sufficient feedback (*).
- Efficiency of use of transaction list for reconciliation.
- 'Today's Transactions' on homepage misunderstood to be completed transactions.
- Account view shows Institutions with accounts minimized.
- The selected category name in the budget form was not editable.

PROCEDURES

RECRUITMENT

We recruited 3 participants using convenience sampling recruiting friends by phone. Since we did the usability test during the Thanksgiving break, we all made sure that they would not cancel only few minutes before the test.

PARTICIPANT PROFILES

- All are software engineers
- All use computer very often, > 40 hrs per week
- All are 25-30 years old
- All are primarily Windows users, but have used Linux
- One female, two males
- The participants are all very interested in planning their finances
- 2 participants never used any personal finance management tool; 1 used Microsoft Money only for a week, long time ago

TASKS

We designed 4 tasks for our study. Two of the tasks actually consist of two sub-tasks. Detailed tasks with scenario and supporting material can be seen in the appendix. Following are the goals of tasks:

1. (i) Can the user create a scheduled transaction, (ii) enter it and verify to see if it is entered in the system?
2. Can users understand terminology (Clear) and edit the transactions accordingly?
3. (i) Can users understand Reconcile and Non-reconcile and (ii) be able to change status accordingly?
4. (i) Can the user create budget for a particular year and (ii) view the budget plan in a desired format (pie chart)?

RECRUITING SCRIPT, PRE-TEST QUESTIONNAIRE

We recruited our friends asking them questions (see appendix) over phone. After we made sure they fit the audience profile when they came into the study a Pre-test questionnaire was administered that re-confirmed the participants fit for profile. The reposes given here are described as the participant profiles.

THINK ALOUD AND TASKS

We used think aloud protocol for this usability testing. At first, we explained what Think-Aloud protocol is and the purpose of using it. We also gave an example of think aloud protocol using setting the time on a watch. In order to make sure that participants understood and would be comfortable doing it, we gave participants practice using think aloud protocol to load staples into a stapler. All participants did it with sufficient dialog so we did not explain again or repeat.

POST TEST DEBRIEF

After the tasks we had a very short follow up interview. Here we asked the participants to explain any of their actions they did during the test that we needed more explanation. The typical format of these questions were: "We noticed you did x, can you please explain why you did that?" We end this part with any other non-leading questions that would help us gain insight into the task behaviors better.

POST TEST QUESTIONNAIRE

At the very end the participants filled in this questionnaire where they expressed their perception of how easy they found each of the tasks and overall ease of use of KMyMoney. This data helped us re-affirm our qualitative understanding of the data.

DATA ANALYSIS

Immediately after the test following steps were done to capture the data and insights we had:

- We discussed and filled in the observed task flows
- Then we completed noting any other data (observed and verbal) that was incomplete in our note taking filling in all the relevant task context
- For each participant and for each task we quickly made a list of issues observed and connected them to the observed data
- Data points with discrepancies and gaps were noted to cross check with video.

In a later data analysis sessions where we compiled all the data, we did the following:

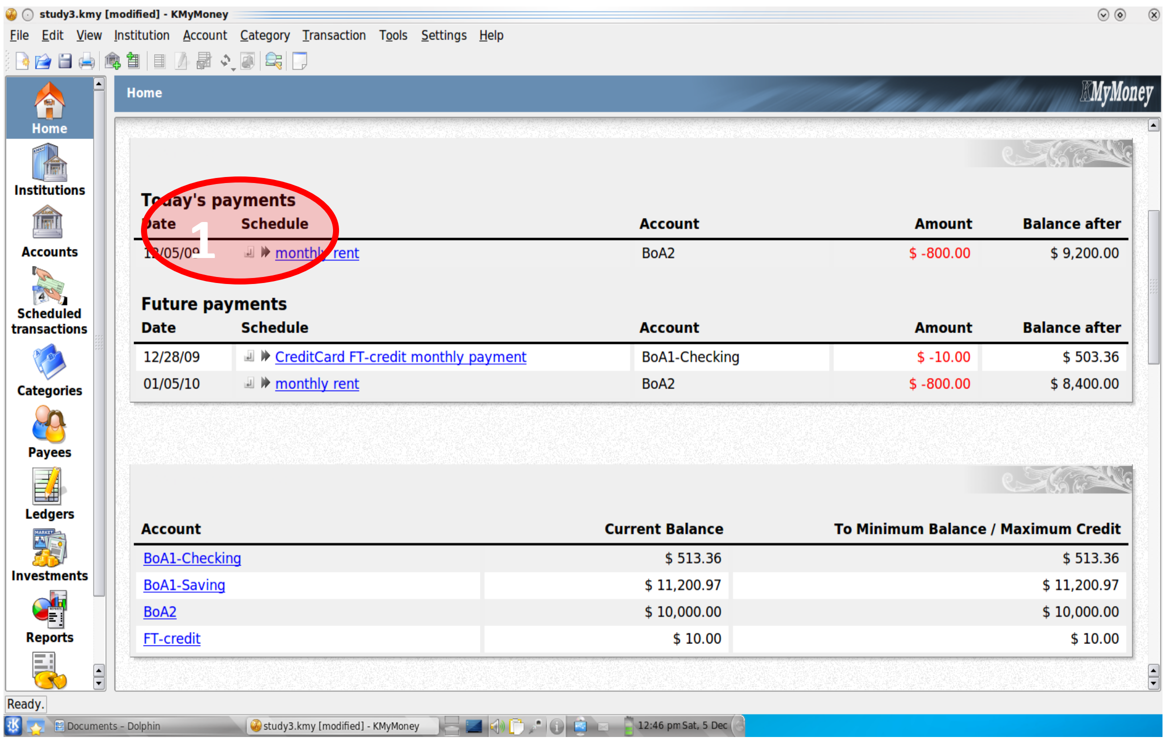
- We went over each task and compiled list of issues with data points that support it for any of the participants. You can see this table in the appendix as detailed issues list. Recommendations were given based on these.
- Quantitative metrics in the post questionnaire helped to re-affirm our qualitative understanding of what happened in the study.
- The task rating for each participant's each task success was discussed to come to a consensus. This helped us discuss and come out with the most striking issues that prevent the user to finish the task.

FINDINGS – RECOMMENDATIONS

See Appendix to the entire list of issues found. Data supporting issues is coded as P1, P2 and P3 depending on the participant that data came from. High priority issues are marked in bold.

TASK 1

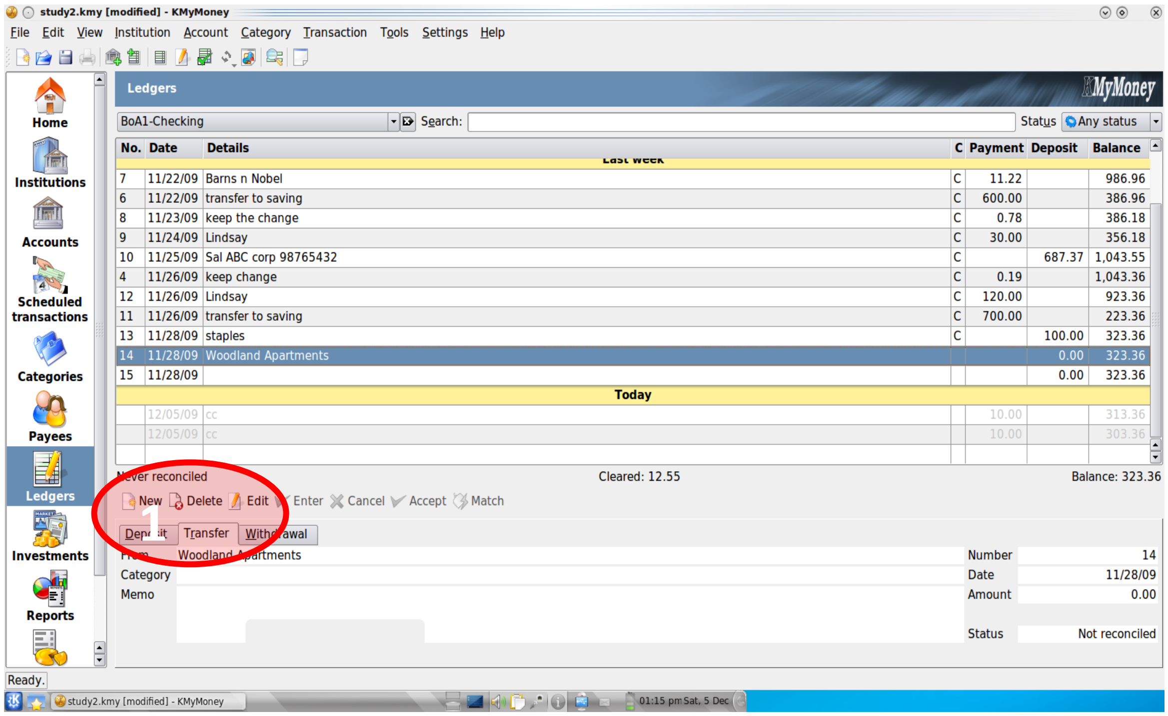
I. Create a reminder to pay your rent monthly
II. Enter details of this month's rent that you have paid today in the system
III. Verify that it has been entered in the system



Issues	Data	Recommendations
There is no direct way to enter a Scheduled Transaction after creating one	P1:Users had to go to the ledger to create entry manually, P1: Failed to understand the Transaction(short cut) on the Home page	In scheduled transactions, 'enter a payment now' could be part of end of the process. Explicitly let users know the reminder to enter transaction would be on home page.
Today's Transaction on the Home page was thought to be Transaction that has already been entered today(see 1)	P1: Mentioned in think aloud P3: Clicked on it but not knowing P3: Enters Transaction without realizing. P3: In debrief mentioned that that home page showed transactions already entered today	Change label 'Today's Transactions' to something like ' Transactions pending today'

TASK 2

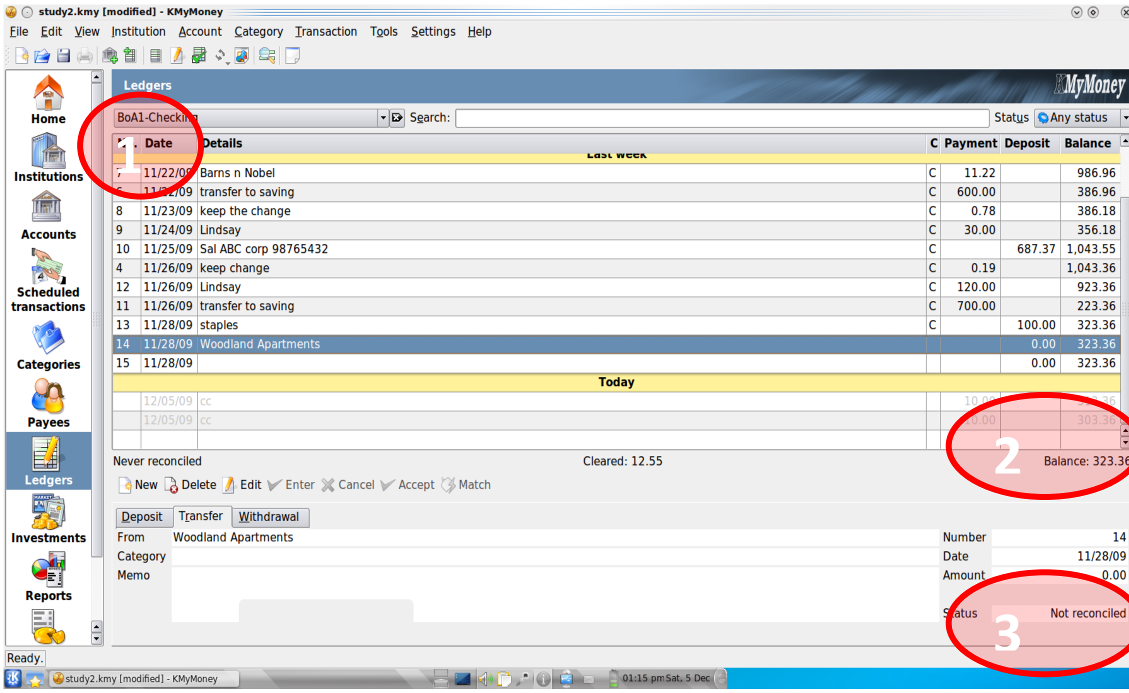
Change the cheque entry details appropriately.



Issues	Data	Recommendations
Creates a new Transaction entry without clear feedback to the users. (see 1)	**P1,2:Users tried to repeatedly created a new entry**	**Could use a status bar at the bottom stating the current state or action.**
Pop-ups(too many), lengthy, had typos	**P1:During editing transaction** **P2:During Budget entry form Typo: ‘Fill et’** **P2:Read and said, “I don’t know what that means”**	**Use pop ups only if it is must,** **Use shorter clear messages,** **Correct typos in pop up instructions.**

TASK 3

Confirm/correct the entries for your checking account BoA1 based on your bank statement.

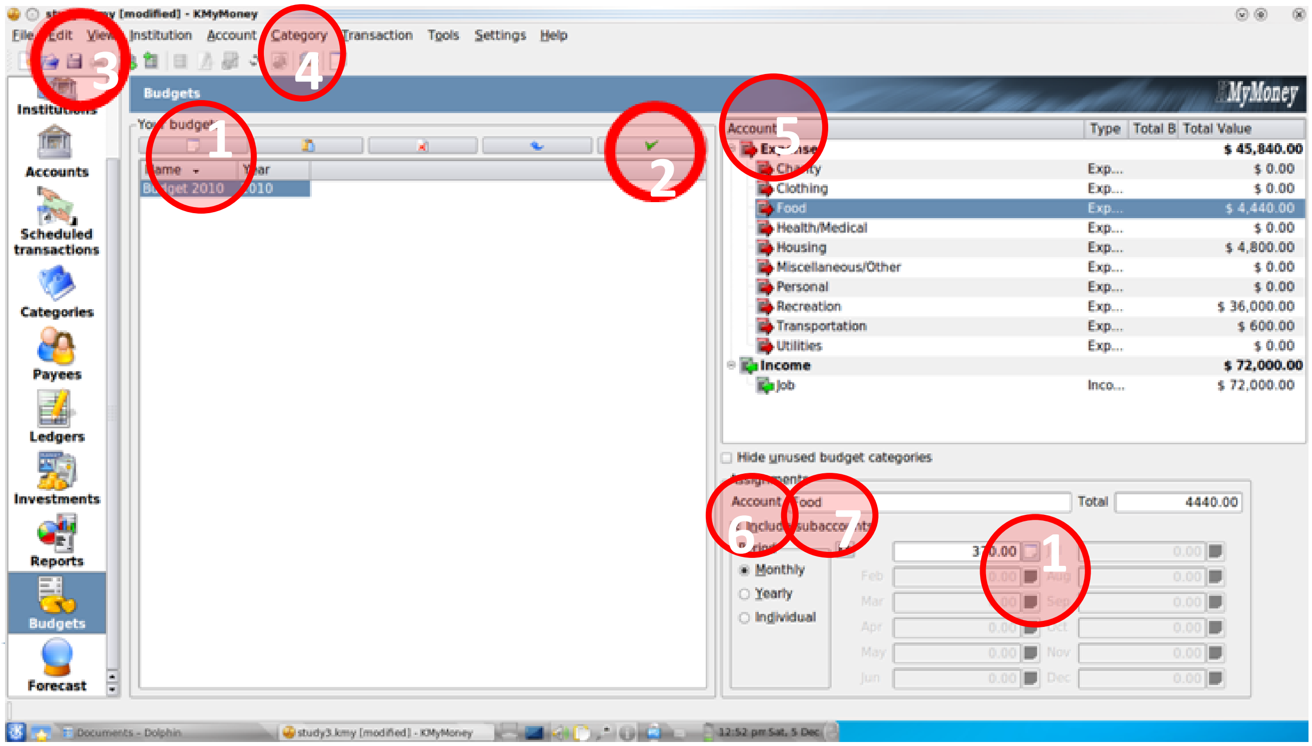


Issues	Data	Recommendations
Not clear on term 'Clear', 'Ledger', 'Reconcile' (see 3)	P1:In debrief said she changed status to Clear but did not know what it means P1:"Ledger, is not familiar to me" P1,P2:Corrected wrong entry but did not change status to Reconcile though checked the status options	Include contextual help
Not easy to find and see a wrong entry (see how selected entry and its details in the lower pane are shown)	P1: Created a new entry instead of correcting the wrong entry P2:Couldn't sort by date, took a long time to cross check the entry(see 1) P2:Didn't notice the detail for the selected transaction at the bottom	More feedback, minimalist form design to distract. May be list should be below and editing entry on the top.
Checking balance for a particular period of time is difficult (see 2)	P1:Wasn't intuitive, looked at the end balance value instead of the specific balance for the dates P2: Found the divide between the transactions for every week confusing. P2: Found the jumbled order of the transactions confusing P3:Couldn't sort data	Make data sort-able by date, payee etc.

Task 4

I. Enter the budget plan for next (2010) year.

II. View this budget you just entered for year 2010 as a pie chart



Issues	Data	Recommendations
Could not enter values if 'ENTER' was not hit	**P1: Had this issue while changing the budget name** **P2: Always confused about how to enter the value. Some of the times, the data got enter when he hit ENTER, but he was not aware that was because he hit ENTER)** **P3: Could not enter any value at all. Was typing values and hitting tab to go to next, while the previous value disappeared. Never hits ENTER**	**Hold the value without having the user to hit 'ENTER'**
Labels are confusing, category was called account multiple times (see 5, 6)	P1: "I want to change 'account-job' to my company name '(creates confusion in understanding categories account)" P2: Mentions pointing to the category Job labeled 'Account'(see 6)	Correct accounts to category
Category not directly editable but has affordance of edited ability by being a text box	P1,2: Tried to Edit Job from the label that shows the category selected in budget creation (see 7)	Grey out the text field to show it is not editable. Allow editing categories from there if possible, as users want to do it.

Adding category was not easy	**P1: Had to explore all menus a lot, try to add categories** **P2: Could not find category, said "I don't know how to edit category"**	**Make it available on right click or allow adding categories in context of editing a budget.**
View budget is not where it was expected	**P1: Right clicks on budget to find a view budget created** **P2: Right clicks on budget to find a view budget created**	**Enable creating a report directly on right clicking a selected budget.**
Too many chart options, confused selection of the right type	P1: Selected transaction report instead of budget report to view budget P1: Didn't set the date range correctly P2: Select Transaction instead of budget report	Highlight basic few. Wizard assistance in creating a report to set all metrics correctly.
Icons are not clear (see 1s)	P2: Looking at calculator button "what is this button? This is not clear" P2: "it is same as new budget button"	Design specific buttons
Saving budget is confusing (see 2, 3)	**P2: Lost data; "I'm trying to save and clicks file save button," but did not click the green check mark, even though he hovered over it**	**Auto save the data**

Summary: Findings and Recommendations

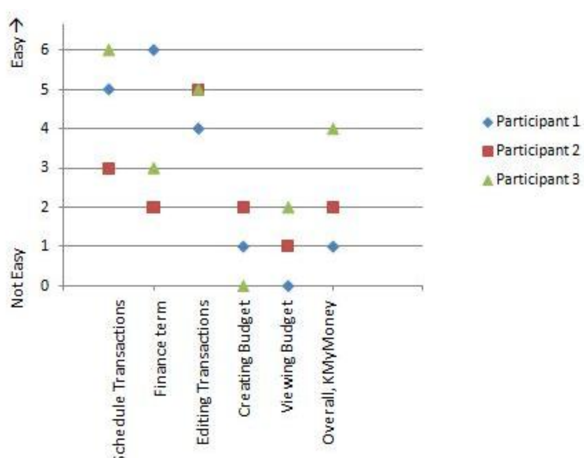


FIGURE 1: QUANTITATIVE FEEDBACK

Based on the usability study we performed on the KMyMoney1.0.2, we had these finding and recommendation.

General: There are too many pop-ups with long texts. Participants had hard time to understand the instructions. Concise and clear instructions would help users understand what they should do next.

Budget: Entering budget data, saving budget plan and viewing budget reports need to be improved. Since users may want to edit category information as the way they want, the system could make it easier. The data needs to be auto-saved without hitting "Enter" key. The way to save budget information could be done automatically also, or the system could notify users if they are trying to click different menu. The configuration of budget report is confusing also, so it could be reorganized.

Transaction: Many novice users do not understand finance terminologies, so the software could provide helpful tool tips and clear icons correctly. Moreover, the transaction information should be sort by date or by details. In addition, creating a new Transaction entry without clear feedback to the users would cause duplicate. Instead of using tab, it could use a status bar and let user know they are editing a new transaction.

EVALUATION OF TEST PROCESS

Here are our reflections on what worked and what didn't and why in this usability testing project. We will go over all the elements of the in Test design, starting from our recruitment strategy to creation of our data entry forms and covering how they affected the Test administration and what we did to handle them.

(Note: please refer to Appendix for the actual artifacts created)

RECRUITMENT SCRIPT

We did convenience sampling of our friends. Since we knew them personally we missed including Age and Profession due to our oversight. These are important demographic information that needs to be added. They would help us understand Finance behaviors (stable income flow or not) and computer skills.

PRE STUDY QUESTIONNAIRE

In the fourth question we asked the user to mention when, which and how long he last used any personal finance if he answered Yes. One of the participant who answered 'Yes' ignored this part. To ensure a response we could have posed the option as:

'[ ] Yes, When?______Which?_______How long?_____' .

TASK 1

Our task is to set a scheduled transaction that doesn't auto enter but reminds the user of periodic payments. We avoided using the words 'Schedule Transaction' and instead used the word 'Reminder' to avoid giving clues to the language of the software. The wording of the task was:

*"You have paid your monthly apartment rent today by cheque, now **please create a reminder** to enter it every month, and enter this month's rent payment and verify to see it is entered in the system."*

This made one of the participants to look particularly for the word 'reminder' and ignore scheduled transaction even when stumbled upon. To avoid this sticky word problem we thought we could reword and test the following task wording:

*"You have paid your monthly apartment rent today by cheque, now please **set KMyMoney to remind you to pay rent monthly**, enter this month's rent payment and verify to see it is entered in the system."*

TASK 2

In the second task one of the participants forgot part of the scenario: that the cheque from staples has already been entered and began to create it first. To avoid this we could bold or repeat it right before the task. During the test we asked the participant to read the task aloud again.

TASK 3

In this task the participants were required to identify a wrong entry in the ledger comparing to the correct entries in the bank statement given. The wrong entry was similar (not exactly though) to another entry making it harder for the participants to identify it easily. This task could have been made easier by making the wrong entry very distinct.

TASK 4

This task had 2 parts. First is creation of a budget and second is viewing it. Failing the first meant the user couldn't do the second part. We have not planned the data to do the second task anyway ahead of time by duplicating another budget. We handled this situation by asking the participants who couldn't create a budget to take a short break for 1 minute. We quickly created the budget from the control room while turning the monitor off in the study room where the participant did the tasks. Then we asked the participants to resume with the rest of the task.

TASK TEMPLATE

Laying out the actual action items of the task scenario again in a separate box at the end in the order that they need to be performed helped. The participants could quickly and clearly focus on the task.

Data Collection Form

The known paths added on the top helped us while analyzing the data to quickly understand the task.

The observed task was filled immediately after individual study that helped to quickly summarize all that happened in the study session.

End of the study we debriefed to identify all the issues making a list of it and clearly marking the observations we took note of during the session. This helped us clearly connect of findings to the data.

The task rating helped to quickly interpret how the participant completed the task. While discussing the rating with the group it helped us to clearly vocalize the issues that were observed to justify a rating. However this definitely needs redesign in few aspects.

- Some of the tasks were made of 2 sub tasks. So we needed 2 scales for such scenarios.
- Encourage to comment or critical observation giving reason for a rating.
- This scale doesn't scale well for task failures. May be the rating scale could also accommodate a range for task failure scenarios as shown below:

☺ 😐 ☹ 💣 💣 💣 Reason: ___________________

☺: Completed easily

😐: Completed with minor problems

☹: Completed with lot of difficulty

💣: Not completed as done with minor error

💣: Completed almost

💣 Disaster, loss of data, couldn't get started at all.

Post Study Questionnaire

In our post test debrief interview with the participants we felt compelled to ask the participants if the tasks they did in the test were something they would do with the software. We asked this as we felt that the participants couldn't complete the tasks more than we expected. We wanted to ensure that the task did not seem too unnatural and out of context. We could very well include this question in the post study questionnaire as:

If you were to use this software, the tasks you have done today would be:

Typical						Not typical
0	1	2	3	4	5	6

APPENDIX

RECRUITMENT SCRIPT

[To be conducted over the phone]
Hello, my name is Pallavi/Grace. I am currently a graduate student at the University of Washington, and I am looking for participants for a usability study that would help improve a free open source software. If you are interested, I would like to ask you a few questions to see if you match our profile. Do you have a few minutes to answer some questions?

[If "yes", then proceed with questions.]

1. Have you ever used Linux?
☐ Yes (Go to question2)
☐ No (Thank you, our study is focusing on people who have some experience using Linux.)

2. Have you ever used any web browser and navigated through file structures in Linux?
☐ Yes (Go to question 3)
☐ No (Thanks for your time, our study is focusing on people who have some basic experience using any web browser and navigated through file structures in Linux.)

3. Do you use any other operating system?
☐ Yes (Go to question 4)
☐ No (Thank you, our study is focusing on people who are primary users of other operation systems.)

4. Which operating system do you use most often?
☐ Except Linux (Go to question 5)
☐ Linux (Thank you, our study is focusing on people who are primary users of operating systems other than Linux.)

5. Have you ever used any personal finance management software, for example, iMint or MS Money?
☐ Yes (Go to question 6)
☐ No (Go to question 9)

6. Which personal finance management software have you used?
____

7. How long have you used ___(answer to 6)______?
☐ Less than a month (Go to question 8)
☐ More than a month (Thank you, our study is focusing on people who have used finance management tools for less than a month.)

8. When did you use __(answer to 6)___ last time?
☐ 2 months ago (Go to question 9)
☐ Within 2 months (Thank you, our study is focusing on people who have less experience in personal finance management software.)

9. Do you have an active bank account?
☐ Yes (Go to question 10)
☐ No (Thank you, our study is focusing on people who have a bank account.)

10. Do you use online banking services?
☐ Yes (Go to question 11)
☐ No (Thank you, our study is focusing on people who are using online banking.)

11. How often do you log in to your online banking services to do tasks like track online statements of your income, expenditure or pay bills?
☐ Less than twice a month
(Thank you, our study is focusing on people who are checking online banking statements more than twice a month.)
☐ More than twice a month

(Thank you for answering my questions. Based on your responses, I would like to invite you to partake in a study evaluating an open source personal finance management software. Thanks again for your interest in helping)

[Schedule the participant]

PRE STUDY QUESTIONNAIRE

Participant Number: ________________________, Date: ___________

1. What is your age?
☐ 18-24
☐ 25-34
☐ 35-44
☐ 45-54
☐ 55 or older

2. How many hours per week do you use a computer?
☐ Less than 4 hours
☐ 4-9 hours
☐ 10-20 hours
☐ 21-40 hours
☐ More than 40 hours

3. Which operating systems have you used?
☐ Linux
☐ Windows
☐ Mac
☐ Unix

4. Have you ever used any personal financial management software? If yes, when did you start, what is the name, and how long have you used it?
☐ Yes _______________
☐ No

5. Which of the following personal finance management activities did you ever do?
☐ Tracking income and expenses
☐ Create a budget plan
☐ Estimate net value
☐ Compare budget to actual spending

6. Please rank the following factors in order of importance when choosing a personal financial management tool
☐ Online/need to be installed
☐ Compatibility with Operating system
☐ Price
☐ Ease of use

☐ Features

7. Do you think that you might be using any personal financial management tool in the next 12 months?
☐ Yes
☐ No

Participants Tasks

(Note: Each task was presented in a separate sheet of paper)

Last week you made a resolution to get your finances organized and just began to try a free software called "KMyMoney". It's 3:00 in the afternoon of a Saturday. You picked up your mail and sat down to do some of your pending paper work and manage your finances for the week.

You have learnt from the marketing material that KMyMoney:

- Strives to be easy to use,
- Provides all important features commercial systems provide and
- Uses double entry accounting principles to ensure accounts are kept in correct order.

Last week you have set up KMyMoney to suit your requirements. The following is the description of the settings you applied:

- Created your KMyMoney file
- Added accounts with starting balances
- Entered few expenses
- Chose basic categories to track expenses

So, as you come back today you have few tasks lined that you want to do in KMyMoney that are as follows:

Task 1

"You have paid your monthly apartment rent today by cheque, now please create a reminder to enter it every month, and enter this month's rent payment and verify to see it is entered in the system."

Use the following data:

1. Rent = $800
2. Date = Nov, 28th 2009
3. Paid from your checking account BoA2
4. Cheque was written to Woodland Apartments.

Do the following **in order:**

I. Create a reminder to pay your rent monthly II. Enter details of this month's rent that you have paid today in the system III. Verify that it has been entered in the system

TASK 2

"You got your cash back for a new laptop you bought recently from Staples. You have deposited that cheque yesterday and entered those details it into KMyMoney. Earlier today you found from your online bank statement that the cheque you deposited got cleared. Please change the entry appropriately."

Use the following data:

1. Refund amount: $100
2. Account to which you posted the money was : BoA1-Checking

- Change the cheque entry details appropriately.

TASK 3

"In your mail today, you got your bank statement for your checking account BoA1. Using that now, in order to make sure you have done your book keeping right, you want to confirm/correct the entries for your checking account BoA1."

Use the following data:

The Bank statement is as follows:

BoA1 Checking - 12345678	
From: 11/21/09 Through: 11/26/09	
Starting Balance:	$310.81
Ending Balance:	$223.36

Date	Description	Withdrawal	Deposit	Balance
11/26/09	CHECK 1321	-$120.00		$223.36
11/26/09	ONLINE BANKING TRNSFR TO SAVINGS 12345678	-$700.00		$343.36
11/25/09	REG SALARY ABC Corp.98765432		$687.37	$1,043.36
11/24/09	CHECK 1335	-$30.00		$355.99
11/23/09	KEEP THE CHANGE TRANSFER TO ACCT 5678 FOR 11/22	-$0.78		$385.99
11/22/09	PURCHASE 90631029011479844262401 ON 10/29 AT BARNS AND NOBEL SEATTLE WA	-$11.22		$386.77
11/22/09	ONLINE BANKING TRNSFR TO SAVINGS 12345678	-$600.00		$397.99
11/21/09	REG SALARY XYZ Corp.98765662 CHECK 1378		$687.37	$997.99
11/21/09	KEEP THE CHANGE TRANSFER TO ACCT 5678 FOR 10/21	-$0.19		$310.62

- Confirm/correct the entries for your checking account BoA1 based on your bank statement.

TASK 4

"As you are trying to have a full control on your finances, you are excited and created a budget plan you would like to stick with for the coming year 2010. You planned your next year's budget as given below, please enter that budget plan into your system for the next year and view the allocated budget as a pie chart."

Use the following data:

Here is your budget plan for 2010:

1. Monthly income from ABC corp.: $5000
2. Monthly income from XYZ corp.: $1000
3. Apartment rent: $800 per month until June
4. Food: $300 per month
5. Vacation/trips: $3000
6. Auto Insurance twice a year, during January and June: $300 each time

Do the following **in order:**

I. Enter the budget plan for next (2010) year.
II. View this budget you just entered for year 2010 as a pie chart.

POST STUDY QUESTIONNAIRE

Participant Number: ________________________ Date: _________________________

1. Using scheduled transactions to enter your recurring transactions in this software was:

Not easy Very easy

0 1 2 3 4 5 6

2. Understanding the financial terms used in this software was:

Not easy Very easy

0 1 2 3 4 5 6

3. Editing transactions in this software was:

Not easy Very easy

0 1 2 3 4 5 6

4. Creating budget in this software was:

Not easy Very easy

0 1 2 3 4 5 6

5. Viewing the budget created in this software was:

Not easy Very easy

0 1 2 3 4 5 6

6. List up to 3 things you liked about KMyMoney:

___________________________________, ____, ___________________________________

7. List up to 3 things you did not like about KMyMoney;

_______________________________________, _____________________________________, _______________________________________

8. Overall, using KMyMoney was:

Not easy						Very easy
0	1	2	3	4	5	6

ADMIN SCRIPT

1. Welcome and Introduction
    a. Welcome participant to usability study.
    b. Introduce yourself and observer.

    Hello, I'm Pallavi (Grace) and I'll be walking you through today's session. Let me also introduce my colleague. She will be taking some notes.

    You'll notice that I'll be reading from this paper most of the time. We do this to ensure that we give the same information to all the people who are participating in this study.

    We are working on improving ease of use of open source personal finance management software. By taking part in this usability study, you will be helping us to improve this product.

    c. Tour the room, show the control console, cameras, offer water.

    This is a usability lab facility here at University. This room (main room) is for discussion. This room (control room) is for audio and video control as we record the studies. And this room (study room) is the study room, where participants sit and do their task. This camera records the activity done here and the screen interactions are also recorded and fed to the control unit.

    d. Have participant sit at their station. Join them at the table
    e. Explain format of the study, following is the outline:

    *Thank you again for coming. Let me explain a little about what we are going to do here today, so you know what to expect. This is a usability study, the purpose of which is to evaluate the "ease of use" of a product. We have asked you to come here to observe how **you** interact with and use the product. Since we are evaluating a product I want to assure you that we are in no way evaluating or testing **you.** Every action you take or question you ask is **THE RIGHT ONE** and merely highlights a feature of the product that is not clear to a potential customer such as yourself.*

    First, I will give out the consent form for this study, then I will need you to fill out a brief questionnaire. Then I will explain how the study will be conducted using something called a Think-aloud protocol. After the study, I will have some follow-up questions for you and then another brief questionnaire. Then we will be done. Do you have any questions so far?

2. Consent form
    a. Thank for volunteering
    b. Say the data we collect won't be attached to their name
    c. This is also to take your permission to video record their interactions, it will help out note taking.

3. Pre-study Questionnaire
    a. Give participant Pre-study Questionnaire and a pen. Pre-fill out participant number on the questionnaire.
    b. When finished, take questionnaire and pen from participant.

4. Demonstrate Think-Aloud protocol
    a. Explain Think-Aloud protocol
    As I mentioned, this study will be done with something called a think-aloud protocol. It simply means that I will give you a task to do and you will say out loud everything that you are thinking as you go. This helps me to understand your experience as you use the product to do some tasks. Note that this is not the same as offering how the product might be improved. These comments ***are*** *important but we will address them after all the tasks have been completed.*
    Let me give you an example of thinking aloud while trying to accomplish the task of changing the time on my watch…
    b. Give an example of think aloud protocol using setting the time on your watch.
    c. Have participant practice using think aloud protocol to load staples into a stapler.
    d. If first attempt is not sufficient, explain how to improve then repeat c.

5. Introduce tasks

    This study consists of you performing several tasks with a personal finance management software. I will give you a packet with one task per page. Please read through the entire page and then attempt the task that is asked ***in the order given****. Do not move onto the next page until you feel you have fully completed the task. When you feel you have completed the task,* ***say "I'm done"*** *and I will instruct you to turn the page. Remember to say aloud anything that you are thinking as you do the task. If you feel stuck or have questions, try to work them through – I will not be available to answer questions. Also remember, there are no right or wrong answers here – our goal is to understand how this product is used by you. Do you have any questions before we begin?*

6. Give Tasks
    a. Give participant the packet of tasks and the box of supplies.

7. Follow-up questions
    a. If there are any actions to get further detail (look for follow-up questions in the Data collection form), ask the participant to explain what he or she was thinking or trying to do at this time. Try: "I noticed you did *x* during task *y,* can you explain in more detail your thought process at that time?"
    b. Write responses on the data collection form next to the question.
8. Post-Study questionnaire
    a. Give participant Post-Study Questionnaire and a pen. Pre-fill out participant number on the questionnaire.
    b. When finished, take questionnaire and pen from participant.
9. Conclusion
    a. Thank participant for coming.
    b. Give participant gratuity.

SAMPLE DATA COLLECTION FORM

Can the user create a scheduled transaction, enter it and verify to see if it is entered in the system?

<table>
<tr><th colspan="2">Observer’s known click stream</th><th>User’s click stream</th></tr>
<tr><td colspan="2">Schedule transactions > new schedule > schedule name > fill out details > right click/ go to home > Enter next transaction/click on the icon > Go to ledger to verify</td><td></td></tr>
<tr><th>Observations/ Verbal comment</th><th>Observations/ Verbal comment</th><th>Follow up Q&A</th></tr>
<tr><td></td><td></td><td></td></tr>
</table>

Task Rating by observer: ☺ 😐 ☹ 💣

Notes:

- Create scheduled transaction
- Enter transaction
- Find entry in the ledger

- ☺: Completed easily
- 😐: Completed with minor problems
- ☹: Completed with lot of difficulty
- 💣: Not completed
- * all the interpretations, + if more info required, “ ” verbal comm

DETAILED LIST OF ISSUES

<table>
<tr><th rowspan="2">ISSUES</th><th colspan="3">DATA: OBSERVED BEHAVIORS AND THINK ALOUD DIALOG</th><th rowspan="2">RECOMMENDATIONS</th></tr>
<tr><th>PARTICIPANT 1</th><th>PARTICIPANT 2</th><th>PARTICIPANT 3</th></tr>
<tr><td>Creates a new Transaction entry without clear feedback to the users</td><td>Users tried to repeatedly created a new entry</td><td>Users tried to repeatedly created a new entry</td><td></td><td>Could use a status bar at the bottom stating the current state or action.</td></tr>
</table>

There is no direct way to enter a Scheduled Transaction after creating one	Users had to go to the ledger to create entry manually, Failed to understand the Transaction(short cut) on the Home page			In scheduled transactions, 'enter a payment now' could be part of end of the process. Explicitly let users know the reminder to enter transaction would be on home page.
Today's Transaction on the Home page was thought to be Transaction that has already been entered today	Mentioned in think aloud		Clicked on it but not knowing He entering the Transaction without thought In debrief mentioned that that home page showed transactions already entered today	Change label 'Today's Transactions' to something like ' Transactions pending today'
Pop-ups(too many), lengthy, had typos	During editing transaction	During Budget entry form Typo: 'Fill et' Reads and says, "I don't know what that means"		Use if only must, use shorter clear message, correct typos.
Not clear on term 'Clear', 'Ledger', 'Reconcile'	In debrief said she changed status to clear but did not know what it means "Ledger, is not familiar to me" Corrected wrong entry but did not change status to Reconcile though checked the status options	Corrected wrong entry but did not change status to Reconcile though checked the status options		Include contextual help
Didn't find account instantly		"I would like to see account s maximized rather than see the institutions "		Set initial view to account maximized.

Not easy to find and see a wrong entry	Created a new entry instead of correcting the wrong entry	Couldn't sort by date, took a long time to cross check the entry; Didn't notice the detail for the selected transaction at the bottom		Data details at the bottom and the list of elements need to more explicitly show affecting each other. More feedback, minimalist form design to distract. May be list should be below and editing entry on the top.
Checking balance for a particular period of time is difficult	Wasn't intuitive Looked at the end balance value instead of the specific balance for the dates	Found the divide between the transactions for every week confusing. Found the jumbled order of the transactions confusing	Couldn't sort data	Make data sort-able by date, payee etc.
Could not enter values if 'ENTER' was not hit	Changing the budget name	Always confused about how to enter the value. Some of the times, the data got enter when he hit enter, but he was not aware that was because he hit ENTER)	Could not enter new payee, "Maybe I need to enter a new payee somewhere else" He didn't hit enter to register the value. Could not enter any value at all. Was typing values and hit tab to go to next, while the previous value disappeared. Never hits ENTER	Hold the value without having the user to hit 'ENTER'
Labels are confusing, category was called account multiple times	"I want to change 'account-job' to my company name '(creates confusion in understanding categories account)"	Mentions pointing to the category Job labeled 'Account'		Correct accounts to category
Category not directly editable but has affordance of edited ability by being a text box	Tried to Edit Job from the label that shows the category selected in budget creation	Tried to Edit Job from the label that shows the category selected in budget creation		Grey out the text field to show it is not editable. Allow editing categories from there if possible, as users want to do it.

Adding category was not easy	had to explore all menus a lot, try to add categories	Could not find category ”how to add category”		Make it available on right click or allow adding categories in context of editing a budget.
View budget is not where it was expected	Right clicks on budget to find a view budget created	Right clicks on budget to find a view budget created		Enable creating a report directly on right clicking a selected budget.
Too many chart options, confused selection of the right type	Selected transaction report instead of budget report to view budget Didn’t set the date range correctly	Select Transaction instead of budget report		Highlight basic few. Wizard assistance in creating a report to set all metrics correctly.
Icons are not clear		Looking at calculator button “what is this button? This is not clear” “it is same as new budget button”		Design specific buttons
Saving budget is confusing		Lost data; “I’m trying to save and clicks file save button,” but did not click the green check mark, even though he hovered over it		Auto save the data
New budget created with default values without asking for user’s input		On pressing new budget, “it create a new budget without asking the name and the year”		Take users input before creating a new entry.