
Team 4

PactSafe Evaluation Planning

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Usability Baseline

PactSafe has never gone through a formal usability evaluation. They are a startup with only two software developers and roughly ten employees. They base their development work on customer requests, so much of the user experience work is not top of mind, but rather fulfilling customer requirements by a deadline. They don't have a usability expert in house, so much of their system is feature based rather than thinking through the overall user experience.

Overall Objectives for the Study

This study will gather data about how easy PactSafe's application is to learn for new users, as well as the overall consistency of the application. The goals for this study are:

- Assess if new users understand what actions and terms within the system mean.
 - Identify if navigation within the application is intuitive to new users.
 - Analyze if new users of PactSafe understand what consecutive tasks they need to take to achieve their goals within the system.
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Research Questions

Below are additional questions we will try to answer with this study plan:

- What are the interface labels in the website which confuse the user?
 - What are the tasks where the users get lost?
 - In case of confusion, how easy it is for the user to return to home page?
 - How easy or difficult is it for users to create a contract?
 - How easy or difficult is it for users to send a contract?
 - Does the user easily understand the task flow for updating an existing contract?
 - What areas of navigation are confusing to a new user?
 - Do users understand what to do after finishing a task?
 - What questions do users ask when creating and sending a contract for the first time?
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Types of Data

By the end of this study we will have the below Quantitative data:

- We will see how long users pause at certain parts of the system when going through tasks.
- We will track errors when users either type something wrong or click on the wrong button when trying to complete a task.
- Time taken to complete a task.
- Time taken to resolve an error.
- Number of times the users try to go back to the Home Page.
- Number of hints or help needed to complete a task.

We plan to acquire the below Qualitative data by the end of this study:

- From the think-aloud technique, we will understand the questions that come to a user's mind and what is driving his decision making when performing a task on the website.
- We will observe the body language and emotions of users as they are trying to complete the tasks on the website.
- The participant debriefing would reveal the opinions and feelings of the new users about the overall use of the website.
- Suggestions given by the participants to improve the product.

Location and Setup

A one-on-one setting in a quiet environment would be adequate since the PactSafe web application would be mostly used in an office environment. Our goal would be to replicate a work environment in closest possible manner; and so, plan to conducting the study in a closed room with basic utilities and adequate ventilation. Locations such as a study rooms in the library, a conference room or any other room which is unoccupied and is open for use will be reserved and used for the purpose of this study.

The participant would be provided access to a Windows laptop with Google Chrome internet browser, a high speed internet connection and a recording setup consisting of voice and screen recording through '*BSR Screen Recorder 5*'. The recording setup will be used only under the consent of the participant. The ability to record will provide more insightful data to compare and look back at the use of navigation and other usability aspects of the task flow.

Recruitment Plan

We will recruit 10 participants from the following 3 personas:

1. *HR Manager*, whose professional duties include
 - a. Performance Management and Compliance
 - b. Effective Recruiting and Staffing
 - c. Communicating between company administration and its employees

2. *Website Manager*, whose professional duties include:
 - a. Performance management of the website
 - b. Integrating new features in the website to improve user experience
 - c. Publishing/Managing company 'terms', 'agreements' and 'policies' into the website

3. *Lawyer/Paralegal*, whose professional duties include:
 - a. Discuss and create contracts based on the requirements of the organization
 - b. Send contract to required individuals
 - c. Defend the company in court if there is an incident filled against the organization.

To get representative users who follow these personas, we will make use of social circles (LinkedIn, other students, other schools at IUPUI, coworkers, friends), and request people to participate for a fair incentive. Below is the table showing the details of how we plan on recruiting our participants.

Characteristic	Desired Number of Participants
Participant Type	
HR Manager	2
Lawyer/Paralegal	3
Website Manager	5
Total Number of Participants	10
Number of contracts dealt with in a year	
Infrequently: 1 - 4	2
Moderately often: 5 - 15	6
Very often: 16 and more	2
Age	
21 - 30	8
31 - 40	2
Gender	
Male	5

Female	5
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Methodology

The usability study will be an exploratory analysis over 3 key task paths which form the crux of the PactSafe web application. Based on personas, participants will be recruited based on their professional background and will be requested to participate in the study. Participants are selected based on their background as it stands indicative of the kind of tasks he/she is expected to have knowledge over and perform in the application

This analysis will gather quantitative and qualitative data over success/failure rates as well as data pertaining to certain functional aspects involved in each step of the task.

We will use a between-subjects design

In this method, participants are requested to perform one/two tasks based on their background. The study method will test the application over 10 different participants who will act as representative users of the product. One study session is expected to take 25-35 minutes based on the number of task paths he/she is expected to execute.

The session will start with the facilitator of the study taking 5 minutes to explain the context of the application and review some basic background information of the participant. Beyond this, the user will use the laptop provided to go through a think-aloud exercise over each task they are asked to execute. At the end of completion, the user would participate in a debriefing interview for 10 minutes regarding the tasks which he executed. The time required for the participant to execute each task would be 10 minutes.

The pre-test arrangement will have the participant review and sign non-disclosures and recording permissions.

Introduction to the session (2 minutes)

Discuss:

- Participant's experience with usability studies and focus groups.
- Importance of their involvement in the study
- Moderator's role
- Device and recording systems used

- The protocol for the rest of the session
- Thinking aloud

Background interview (3 minutes)

Discuss the participant's experience in creating and managing contracts, based their profession.

Tasks (10 – 20 minutes)

Depending on the background he/she will be asked to perform the following tasks:

Task 1 – Create & publish a contract (10 minutes)

If the participant has a background in law:

- Participant will start at the homepage and is requested to create a sample contract.

Task 2 – Send an existing contract (10 minutes)

If the participant has a background in HR or is a website manager

- Participant will start from the homepage and is requested to send an existing sample contract to a sample Email-ID

Task 3 – Create a new version of the contract (10 minutes)

If the participant has a background in HR or law:

- Participant will start from the homepage and is requested to revise an existing contract and create a new version of it.

Post-test debriefing (10 minutes)

The debriefing interview will cover questions correspond to the number of tasks a user was expected to perform. The interview will ask broad questions regarding the problems faced by the participant, their preference in each task flow, and other qualitative data/

Measures

In order to answer our below research questions:

- What are the interface labels in the website which confuse the user?
- What are the tasks where the users get lost?
- In case of confusion, how easy it is for the user to return to home page?

- How easy or difficult is it for users to create a contract?
- How easy or difficult is it for users to send a contract?
- Does the user easily understand the task flow for updating an existing contract?
- What areas of navigation are confusing to a new user?
- Do users understand what to do after finishing a task?
- What questions do users ask when creating and sending a contract for the first time?

We will collect performance and preference data during our usability test sessions.

Performance:

- Time taken to complete each task.
- Time taken to resolve an error.
- Number of hints or help taken to complete each task.
- We will see how long users pause at certain parts of the system when going through tasks.
- We will track errors when users either type something wrong or click on the wrong button when trying to complete a task.
- Number of times the users try to go back to the Home Page.

Preference:

- Overall ease of use.
- Overall ease of learning.
- How well the system terms and labelling matched with user expectations.

Project Schedule

Planning Meeting/Kickoff

The team had a planning meeting on Wednesday, 11/2 at 6:30PM. The team agreed on the participants and tasks we would like to study. The team is creating a test plan around the main usability issues uncovered from previous research.

Test plan, Session Script, and Materials

After the Test Plan is created we plan to do a self review, a peer-to-peer review and a review by Professor. The object of the review is to identify potential flaws in the participant recruitment,

tasks and activities. It is risky to change any materials of the study once the study begins as it impacts will impact the expected data.

Test Environment

One-on-one setting in a quiet environment. Since the website would be mostly used in an office environment, our goal is to replicate the user environment in closest possible manner. Hence, we plan to conduct the study in a closed room with a participant given a Windows Laptop , Google Chrome browser and a high speed internet connection. The recording setup will be available, but we will record only with consent from the participant. The software BSR Screen Recorder 5 will be available on the Windows Laptop for recording the screen movement/user interactions. This will provide us with extra data to look back to, for navigation and task flow usability.

Moderator

One team member will be playing the role of the moderator. His task would be to give users the background idea of the what PactSafe website does, and where it is used for. He would talk to the participants about their background of using websites and accordingly provide them with relevant information about using the same. While the 2 members of the team would take notes during the Think-aloud process, his task would be define tasks for the participants and decide during the study, when to tweak the questions a bit to suit the participant. He will also facilitate when to use Think-aloud for data collection, and when to stop it,(in case when we want to collect data for the amount of time spent on a task.) without disturbing the flow of the participant.

His role would also include to debrief with participants to understand the surprises and issues coming up while performing the tasks of creating new contracts, publishing them and other tasks listed in the Task section. We plan to practice some sessions before execution of the study to decide who would be a fit candidate in the team to perform this role. However, in case of more than one suitable candidates, we would shift the roles with each participant session.

Consolidating, Reviewing and Analyzing the data

Being a team of four members, we would have to carefully consolidate all the findings without skipping out any data. This task would be taken up by as a group activity in the team where we would collect notes and recordings of all members and put them in tabular format for review and analysis. This task has to be done carefully so as not to miss any piece of information while consolidating and hence a review will be conducted post consolidation. The recordings and notes will further be analyzed to retrieve useful information.

Project Timeline

<u>What</u>	<u>When</u>
Fix the objectives of study <ul style="list-style-type: none"> • Reach common consensus on target Research Questions 	October 26
Planning Meeting	October 27
Finish Test Plan	November 4
Review Test Plan <ul style="list-style-type: none"> • Fix any possible issues • Finalize Test Plan 	November 7
Recruit Participants	November 16
Conduct practice session for the study <ul style="list-style-type: none"> • Identify potential loopholes • Fix the issues • Identify potential member for Moderator role 	November 17
10 Usability Study session of 25-35 minutes each	November 18-November 25
Consolidate data , Review and Analyze	November 30
Finish Final Report	December 5
Present Findings	December 12

Test Environment

The test environment will be similar to the work environment which the participant is acquainted with. Similarities will include a closed room to help with focus and privacy with adequate ventilation, furniture and other basic utilities. Places such as a study rooms in the library, conference rooms or any other room which is unoccupied and open for use will be reserved and used for the purpose of this study. The study will be one-on-one with no other individual in the room to preclude the possibility of the participant from getting distracted.

The participant would have access to Windows laptop with Google Chrome internet browser, a high speed internet connection and a recording setup consisting of voice and screen recording through '*BSR Screen Recorder 5*'. The recording setup will be used only under the consent of the participant.

Deliverables

The deliverables would include the following list of items

- The target research questions , and major usability problems (minimum 3) that the study aims to address.
- The summary of participant characteristics and justification of the criteria for selection of participants.
- The schedule for the study , test plan and brief summary of methodology adopted to conduct the same.
- The final copies of session script, used for conducting the sessions. These contain the checklist of sessions conducted for each participant.
- Practice session script and checklist, which includes the changes made if any after the practice session.
- 10 usability sessions of 25-35 minutes each with participants.
- Debriefing (notes and summary) with each participant.
- Recordings (if consented to) of the usability sessions.
- A consolidated final report of the study of PactSafe website.
- A presentation to the PactSafe/Professor about the findings from the study.

Tasks

Participants start from the homepage of the application and are requested to complete one/two tasks based on their background. The three tasks would be creating/publishing, sending and revising a contract. Based on the participant's knowledge, he/she will be able to define issues with the system more acutely than from any other kind of setup. Through the think-aloud exercise, qualitative data will be gathered from each task.

Based on the tasks the users of the product are expected to perform, participants of each category will execute the following tasks:

Lawyer.

1. Create a contract
2. Send a contract

HR Manager.

1. Make a new version of a contract

2. Send a contract

Website Manager:

1. Send a contract

By having multiple participants work on each task, we will be able to discern patterns of cognition and usage to help us better understand the user's perception of the various design elements.

Test Protocol

Preparing for the Sessions

To prepare for our sessions, we will:

- Give all group members the project timeline so they know when to recruit users.
- Give all group members the script, personas, and tasks so they can conduct the study.
- Go over the script with the group and make any modifications.
- Make sure each group member has the site bookmarked and has the login credentials for the participants to log in to the system.

Before each session, we will:

- Make sure laptop has enough battery to last the session.
- Make sure laptop has Internet connection.
- Make sure the correct page of PactSafe is pulled up on the laptop.

After each session, we will:

- Clear the browser history and cache.
- Close the browser.
- Conduct an interview to ask the user about their experiences.
- Take special note anything else that is worth remembering from this particular session.

Session Introduction

'Thank you for helping us with our research! My name is _____. During this session I will request that you complete certain tasks from this script. We want to use this study to learn how people use the PactSafe platform and improve the website if there are any issues.

During this time, I will ask you to complete certain core tasks in the PactSafe web application; and I am going to observe the steps you take to complete the task. Please feel free to use the system like you would normally.

I ask that you describe what you think, out loud, as you go through the application. Please tell me everything going through your mind when using it. We aren't testing you, we are testing the application, and there is definitely no correct or wrong answer to say in this. You are helping us understand what works and what doesn't in this site.

We had nothing to do with the design of the site; we are researching the usability this website independently and we would really appreciate your honesty in your feedback.

This session will last about 30 minutes. Do you have any questions before we go ahead and get started? [Answer the questions]’.

Task Matrix

‘Now that all of your questions are answered, we can get started. For this session today, I’d like you to imagine that there is a ‘terms of services’ contract that needs to be created and ready to be used by next week. You need to get this contract approved by another team member before it is considered a completed contract. This contract is going to be sent from within the PactSafe software.’

Create/Publish, Revise, and Send a Contract

Time: 10 minutes for each task; executed based on the user’s background

Start at <https://app.pactsafe.com/login>

To get started, you will need to login using the following credentials.

Username: ptarnows

PW: Testaccount1!

Once logged in, create and save a new contract in the PactSafe system. How would you get started with this task?

After saving the contract, you realize you made a typo, and you need to update this contract. How do you update this contract? Where do you go in the system? Please walk me through what you are thinking as you do this.

Once the typo in the contract has been updated, send this contract to your coworker for approval. Please send it to the below email. Let me know what you think as you are sending the contract.’

Email: ptarnows@iupui.edu

<u>Issues to Explore</u>	<u>Success Criteria</u>
How easily does the user log into the PactSafe system? (circle one) <ul style="list-style-type: none">• Very easily• One wrong click, but completed without assistance• A few wrong clicks, but completed without assistance• Needed a question or two answered	User logs into the PactSafe system

<ul style="list-style-type: none"> • Needed step by step instructions 	
<p>How easily does the user create the contract? (circle one)</p> <ul style="list-style-type: none"> • Very easily • One wrong click, but completed without assistance • A few wrong clicks, but completed without assistance • Needed a question or two answered • Needed step by step instructions 	<p>User creates a contract and clicks the “Save” or “Publish” button.</p>
<p>How easily does the user update the contract? (circle one)</p> <ul style="list-style-type: none"> • Very easily • One wrong click, but completed without assistance • A few wrong clicks, but completed without assistance • Needed a question or two answered • Needed step by step instructions 	<p>User updates the text of an existing contract and clicks the “Save” or “Publish” button.</p>
<p>How easily does the user send the contract? (circle one)</p> <ul style="list-style-type: none"> • Very easily • One wrong click, but completed without assistance • A few wrong clicks, but completed without assistance • Needed a question or two answered • Needed step by step instructions 	<p>User successfully sends the contract to ptarnows@iupui.edu</p>

Close the Session

Time: 10 minutes

Thank you for your help! Now that you have executed the task, we would appreciate your help with a few more questions:

<u>Questions</u> (Asked based on the task executed)	<u>Notes</u>
What do you think about the process of creating a contract?	

What about the process of updating a contract that already existed?	
How easy was it to send the contract?	
Did you understand what all the terminology meant within the system?	
What are your overall impressions of PactSafe?	
Is there anything else you think we should know about the software that we didn't ask?	

Data Measures

Quantitative Data:

- We will see how long users pause at certain parts of the system when going through tasks.
- We will track errors when users either type something wrong or click on the wrong button when trying to complete a task.
- Time taken to complete a task.
- Time taken to resolve an error.
- Number of times the users try to go back to the Home Page.
- Number of hints or help needed to complete a task.

Qualitative Data:

- From the think-aloud technique, we will understand the questions that come to a user's mind and what is driving his decision making when performing a task on the website.
- We will observe the body language and emotions of users as they are trying to complete the tasks on the website.
- The participant debriefing would reveal the opinions and feelings of the new users about the overall use of the website.
- We will include a feedback survey to collect participant's ratings and rankings of the website.
- Suggestions given by the participants to improve the product.

Preference Measures:

- Overall ease of use.
- Overall ease of learning.

- How well the system terms and labelling matched with user expectations.