USER EXPERIENCE PLATFORM: SUSTAINABILITY TRAINING FOR DESIGN PROFESSIONALS

by

Jennifer H. Stinebaker

Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Web Design and User Experience at Lindenwood University

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USER EXPERIENCE PLATFORM: SUSTAINABILITY TRAINING FOR DESIGN PROFESSIONALS

A Thesis Submitted to the Faculty of the Art and Design Department In Partial Fulfillment of the Requirements for the Degree of Master of Arts at Lindenwood University

By

Jennifer H. Stinebaker

Saint Charles, Missouri

©July 2023

ABSTRACT

Title of Thesis: User Experience Platform: Sustainability Training for Design Professionals Jennifer H. Stinebaker, Degree of Master of Arts in Web Design and User Experience, 2023 Thesis Directed by: Dr. Jason Dude Lively, Professor of Interactive Media & Web Design

The primary focus of this project is to better understand the stages of the user experience design process and how implementing those stages can improve functionality and design. Achieving this goal has involved designing a user experience platform that aims to provide training to artists and designers on the importance of ecological sustainability and how they can adapt practices into their work that reduce negative impacts on the environment.

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I would like to thank Professors Erica Blum, Jason Dude Lively, Justin Kussman, Joseph Weber, and James Hutson. Each professor has been very kind to me and instrumental throughout my graduate studies. Additionally, I would like to thank my family, friends, and colleagues for their continued support, patience, and love.

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Introduction

The primary focus of this project is to better understand the stages of the user experience design process and how implementing those stages can improve functionality and design. Achieving this goal involved designing a user experience platform that aims to provide training to graphic designers on the importance of ecological sustainability and how they can adapt practices into their work that reduce negative impacts on the environment. Sustainability is a broad term that is defined as the ability to be maintained at a certain rate or level. This term is typically applied to three primary pillars that include social, economic, and environmental. Ecological is defined as relating to or concerned with the relation of living organisms to one another and their physical surroundings. For the purposes of this project ecological sustainability refers to human impacts on natural resources.

Though there are many learning platforms available on the market there are few that focus on working with small businesses and freelance professionals in fields of art and design to develop business strategies for improving environmental impacts. Therefore, their perspectives were considered throughout the design of the platform. The literature review section of the project describes the options currently available to graphic design professionals. Practical application for this project includes a competitive analysis of three learning platforms, creation of user personas, user experience test plan, flow diagrams, low fidelity wireframes, mood board, prototype, experience test plan implementation, analysis report of test data, and a final project document.

Literature Review

Practices of sustainability can be incorporated into any field, and graphic design is no exception. In the article, "Sustainable Friendly Design: Process and Artifact," authors Ioannou and Meletiou (2011) describe how sustainability is trending in many fields, including urban planning, architecture, interior design, engineering, graphic design, and fashion. The resources used and the designs created have an impact on the surrounding world. The choices of graphic designers may not provide the most significant or effective impact on the environment, but they still contribute to the overall wellbeing of natural resources, and that ultimately affects everyone on the planet. Thorpe (2011) suggests that there is a balance that should be found between abandoning all concerns and having too many rules to follow. Those efforts can accumulate and contribute towards significant impacts overall. Benson and Perullo (2017) state:

Doing good with design may seem to be something for just activists but caring about the environment is not radical and it's not a political issue. It affects us all. . .. And when you realize that you can make a difference with the work you do every day, suddenly the extra work involved becomes less of a burden. (p. 11)

Some opportunities to consider when implementing changes include paper choices and finding ways to reduce usage of inks, solvents, energy, and packaging.

Paper

In relation to the fast-paced development of the digital world, one might think that the need to print and make copies would have decreased in recent years. However, Graham (2012) mentions in her article, "Towards a More Sustainable Graphic Design Philosophy," published in

the *International Journal of Arts in Society*, that in the last twenty years of increasing digital communications, the amount of paper products and materials used for items such as magazines, newsletters, mail advertisements, and many others have continued to grow and are sadly discarded quickly. Authors Benson and Perullo state that at the time their book was published in 2017, a study provided by the Green Press Initiative assessed that an estimated nearly 30 million trees were used annually for printing books solely in the United States. One method Benson and Perullo (2017) present, to assist in reducing the quantity of paper used when publishing a book, is what they describe as "designing backwards." They offer an online calculator via their website <u>www.Re-nourish.org</u> that helps in determining the costs and benefits associated with making a project more sustainable. Among its functions, the calculator provides information for optimizing trim sizes to allow for maximizing the efficiency of each press sheet. By maximizing the layout space utilized by each sheet, the amount of material wasted is lessened. All three authors agree that when possible, depending on the project, it is best to seek ways to avoid printing all together.

Despite best efforts, however, there are some cases in which printing cannot be avoided. In those instances, there are some alternatives with varying levels of sustainable qualities that are available that they have studied and tested. Some of those alternatives, according to Benson and Perullo (2017), include 100% post-consumer recyclable paper, plastic paper, chlorine free paper, and paper made of agricultural fibers. Of the options they have researched, their ideal choice is with a company named Step Forward Paper. Step Forward Paper produces paper that is derived from 60% wheat straw waste and 40% tree fiber. Their paper product is certified by the FSC, better known as the Forest Stewardship Council, which is a global organization which serves many functions, including the verification of standards related to responsible forest management. The reason this option is their top choice is because the concept of using agricultural fiber could ultimately eliminate the need for tree fiber in the future. This company also rates among the lowest in the world of greenhouse gas related emissions produced by a paper manufacturing company.

When exploring potential paper suppliers for their book, Benson and Perullo (2017) tried to find those that were FSC certified, Rainforest Alliance Certified, Ancient Forest Friendly, had attained Green-e certifications and those that implemented carbon neutral programs. Due to negotiations and existing contracts with their publishing company, they were not able to use the Step Forward Paper option. Instead, the material option provided by their publisher consisted of Rolland Opaque 30% PCW (post-consumer waste) which was used for the cover, and 10% PCW text sheets for interior pages. Although this was not an exciting choice to them, Benson and Perullo (2017) were happy in that the company was FSC and EcoLogo certified, the company uses biogas energy for manufacturing, and the location of the paper supplier was in close proximation of their printing company, the Sheridan Group located in Chelsea, Michigan, which maintains both the FSC and Rainforest Alliance certifications, satisfying two of their "must haves." Location was an important factor to them because it reduced the negative environmental effects that are typically associated with shipping longer distances.

Inks and Solvents

There are some important design choices to keep in mind that can assist in reducing not only the amount of ink used for printing but also the costs associated with purchasing ink as well. For example, using white backgrounds on websites, emails, and documents decreases the amount of ink needed when printing pages, while black backgrounds substantially increase the amount of ink used. Many inks and solvents contain elements called VOCs, which are referred to as Volatile Organic Compounds (Benson & Perullo, 2017). When these compounds are emitted and mix with vehicle exhaust, they can form something called photochemical smog, which is a brown haze that occurs when the mixture reacts to sunlight. Cases of this are often found in large cities, and the pollution it produces is a contributing factor of climate change (Benson & Perullo, 2017). Some inks and solvents contain heavy medals, like lead, cadmium, and barium that are toxic and make their way into natural resources, which is especially concerning when they reach water sources. Color changes, press cleanings, and poor ink management can all lead to wasted ink (Benson & Perullo, 2017). It is important to put some thought into the items that require printing and perhaps organize by color groups so that color changes and press cleanings are required less often.

As graphic designers, it is important to make selections that provide the highest quality of standards to clients and consumers. The goal is to find more sustainable options that can compete at the same level as materials that are not necessarily sustainable to create impressive results in artwork and designs. Though some graphic designers may desire to use more sustainable alternatives, not all the options available produce the best results. Some of the available options include recyclable ink, vegetable ink, soy ink, and low volatile organic compound solvents. One of the main components the authors kept in mind when determining ink to use for printing their book were ones that did not contain petroleum. The option Benson and Perullo (2017) ended up using were premium vegetable inks provided by their printing company, the Sheridan Group in Chelsea, Michigan. Additional options discovered through research included water-based inks, ultraviolet inks, and algae inks.

Energy

Using less paper may seem like a great thing in terms of saving trees but something not everyone considers when steering away from typical paper options and towards digital media is the amount of additional energy that is required. Computers, printers, scanners, phones, tablets, and most electronic devices in general use a lot of energy to keep them powered. Benson and Perullo (2017) argue that the increased amounts of energy being used contributes to more toxins being emitted into the air. They also describe how studies provided by Greenpeace state that server farms and networks rank in 6th place throughout the world in terms of energy usage and that the internet adds 830 tons of carbon dioxide into the atmosphere annually (Benson & Perullo, 2017). In correlation with this analysis, they emphasize the importance of selecting providers that are powered by renewable energy. The most common choices available include solar, solar-traditional hybrid, and wind power. Recently, government incentives have also encouraged sustainable energy by offering reimbursements to individuals; this may be an option worth exploring for businesses too.

Packaging

"One sub discipline of graphic design alone, packaging design, generates a huge amount of discarded materials, comprising an estimated 50% of the waste stream" (Graham, 2012, p. 171). Graham (2012) also suggests that this percentage does not include other paper products such as direct mail advertisements. Author Steven Heller (2012) remarks that there are issues that exist beyond the types of paper used for labels or the type of ink used in printing and concludes that real change can be made by reducing packaging and changing the way people consume. Authors Benson and Perullo (2017) raise concerns about contaminates like adhesives and coatings; they argue that the toxins lead to health problems and produce large amounts of garbage that stack up in landfills, releasing methane and toxic greenhouse gas.

According to Benson and Perullo (2017) the cost of packaging products such as cosmetics can account for as much as 30% of the total retail sales price. Reducing the quantity of packaging used is a common thread between authors. Other criteria to consider besides a decrease in package sizes involve materials with lower weights that are recyclable, easy to disassemble, and designs that incorporate lock-tab systems to eliminate using adhesives. There are a growing number of options that are becoming more readily available in terms of eco-friendly packaging that are being produced. Heller (2012) describes innovations developed by art students that include biodegradable materials containing seeds that can be planted rather than discarded. He also mentions packaging that becomes part of a product's design that he suggests are similar tactics used by companies like Puma, Apple, and Amazon (Heller, 2012).

Types of Graphic Design

There are differences that exist between ecological graphic design, also known as green graphic design, sustainable graphic design, and environmental graphic design. Distinguishing between these terms provides a better understanding of how each is used to influence consumers. eco or green graphic design might be considered a more simplistic discipline in that its sole focus is reducing the impacts that design has on the environment. Nicholson (2005) suggests that green design is merely a subset of sustainable design and that although it is important, it does not encompass the full scope of addressing the issues that exist. He adds that sustainable graphic design is more of a methodology or approach that factors in many processes that occur throughout production. This can include but is not limited to materials, resources, transportation, manufacturing, distribution, energy, and waste disposal. It seeks to fully understand the issues involved and provides steps towards developing solutions. Environmental graphic design, although it may sound similar, is an entirely different discipline all together. According to the author Harry Mark (2019), it provides a layered experience that incorporates identity, imagery, and touch receptors. Environmental Design is often used in in signage that provides a more peripheral experience. It is helpful in navigation, for example in airports, where the people passing through may not all speak the same language, images provide guidance on where to go.

Consumer Perceptions

Sherin (2011) suggests that companies are aware that consumers are making choices based on their own belief systems and are starting to consider the values of the companies they choose to purchase from. Because of this, businesses may overdramatize or make implications that they support environmental causes more than they practice in their businesses to merely increase profitability. She explains that color choices made by marketing is one of the most powerful ways to communicate a message and that consumers should be cautious of greenwashing, a marketing ploy that deceives the public into thinking their products are environmentally friendly. Authors Olafur Jonsson and Esa Sigurjonsdottir (2006) describe nature as a service and discuss how elements of nature have been used in art and design throughout history.

Marilyn Delong and Barbara Martinson (2012), the authors of the book, *Color and Design*, share a similar opinion with authors Kevin Budelmann and Yang Kim (2019), the authors of *Brand Identity Essentials: 100 principles for building brands*, in the premise that, green is often used in representing sustainability. Natural looking typographies and pictures of nature deepen the visualization of environment and evoke a level of eco-friendliness that influences consumer views and effects their decision making. Trust can be lost in green initiatives when savvy buyers recognize deceitful tactics used in advertisements, which in turn can cause a negative impact on the advancement of sustainability. In some cases, measures have been taken to hold companies accountable for misleading the public.

Methodology

In support of the thesis, research was completed for the literature review portion of the project using a qualitative methodology for gathering and analyzing data. This approach included researching commonly used materials, processes, and design techniques currently established in the field to provide graphic designers with alternative, more ecologically sustainable solutions. Many of the topics described were extracted from information researched in the *Design to Renourish* book written by Benson and Perullo (2017). The next step of research involved providing clarification to readers for a better understanding of the different types of graphic design, which included ecological or green graphic design, sustainable graphic design, and environmental graphic design. Following those descriptions was an explanation of how companies influence consumers using concepts that imply to consumers that they are environmentally conscious.

To complete the practical milestones identified for this project a mixed approach of both qualitative and quantitative methods was used for research and analysis. This included conducting a competitive analysis on three Learning Platforms to compare strengths, weaknesses, opportunities, and threats. Following the competitive analysis focus was placed on defining user roles for assigning permissions to each type of user and towards creating user personas. Next steps included the development of a user experience test plan and flow diagrams to demonstrate decision paths based on user selections. Hand-drawn low fidelity wireframes were sketched, and a mood board was created to brainstorm style ideas of key elements. Additionally, this project included the design of a prototype, implementation of the user experience test plan, and an analysis of test data.

Analysis

Sources cited throughout this paper were investigated to determine how graphic design impacts the environment and the available approaches for incorporating sustainability into daily practices based on past challenges and achievements. Through the examination of materials, recommendations were provided by the authors on types of paper, ways to reduce paper usage, inks, solvents, energy, and packaging. Positive environmental impacts can be made in process workflows all throughout the supply chain by finding innovative ways to update antiquated strategies. Many of the authors express concern that the field of graphic design is advancing slowly in terms of sustainability. Their advice includes brainstorming new ideas and experimenting with evolving technologies to discover the best results. The purpose and intention of the information gathered is to encourage graphic designers to adapt more sustainable practices into their work by outlining successes and failures of others to speed up progression in the field.

Conclusion

The primary focus of this project was to better understand the stages of the user experience design process and how implementing those stages can improve functionality and design. With this focus in mind, I believe that the goals outlined at the onset of this project will be completed successfully and on time. Achieving this goal involved designing a user experience platform aimed towards training graphic designers on the importance of ecological sustainability and how they can adapt practices into their work that reduce negative impacts on the environment. The literature review section focused on researching ecologically sustainable practices available to graphic designers. Practical applications included researching competitors, developing user personas, outlining a user experience test plan, diagramming potential workflows, drawing low fidelity wireframes, designing a mood board, designing a prototype, implementing the user experience test plan, analyzing test data, and formatting all information into a final word document. Information gathered throughout the implementation of the user experience test plan were used to make improvements to the final project prototype.

| Figure 1: | Thesis / | Directed | Project | Timeline |
|-----------|----------|----------|---------|----------|
|-----------|----------|----------|---------|----------|

| Thesis / Directed Project I Timeline | | | |
|--------------------------------------|---|--|--|
| Date | Title | Description | |
| 3/29/23 | Committee Meeting - Project Overview | Confirm committee members, discuss project overview, and deliverables. | |
| 4/9/23 | Milestone 1 | Complete Competitive Analysis. | |
| 4/12/23 | Milestone 2 & Committee Meeting - Midterm | Complete User Personas and discuss project progress with committee members. | |
| 4/16/23 | Milestone 3 | Submit written prospectus. | |
| 4/19/23 | Milestone 4 | Complete flow diagrams. | |
| 4/23/23 | Milestone 5 | Complete low fidelity wireframes and submit revised prospectus based on writing specialist feedback. | |
| 4/26/23 | Committee Meeting - Oral Prospectus | Meet with board to review project prospectus. | |
| 4/30/23 | Milestone 6 | Complete project mood board and submit revised prospectus based on committee feedback. | |
| 5/5/23 | Milestone 7 | Complete user experience test plan, submit final revised prospectus, and final project deliverables. | |
| | | | |

Thesis / Directed Project II Timeline

| Date | Title | Description | |
|----------|---------------------------|---|--|
| (111/02) | M ² la da se 1 | | |
| 6/11/23 | Milestone 1 | Design Adobe XD Prototype. | |
| 6/25/23 | Milestone 2 | Implement User Experience Test Plan. | |
| 7/2/23 | Milestone 3 | Gather and summarize data from user testing results. | |
| | | | |
| 7/9/23 | Milestone 4 | Final Word Document including link of prototype and screen shots. | |

Final Deliverable(s)

The final deliverable for Thesis / Directed Project II, agreed upon by the committee chair and committee members, will be a Microsoft Word document that includes both the written aspects of the project, design elements, and a link to the Adobe XD prototype.

Figure 2: Competitive Analysis - Workday



https://www.workday.com

| Strengths | Weaknesses | Opportunities | Threats |
|-------------------------|------------------------|---------------------------|--|
| Company is well | Complex | Working with small | There are many competitors offering |
| known and used by | implementations that | businesses and | similar products. Top competitors for |
| many organizations. | require expert | freelance professionals. | enterprise eLearning include Docebo |
| | support. | | and Cornerstone Learning. |
| | | | |
| Services include a wide | Website requires | Smaller focus, | Companies that provide smoother |
| variety of products. | users to provide | dedicated specifically to | onboarding without the need for expert |
| | personal information | training on | support. |
| | before fully accessing | sustainability. | |
| | the site. | | |
| User Friendly | Only available to | Free trial version, cost | |
| | medium and large | transparency, discount | |
| | corporations. | for multiple users. | |
| Multiple site versions | Creating an account | Simplified navigation. | |
| available for other | is by invitation only. | | |
| countries / languages. | | | |

Figure 3: Competitive Analysis – Learning Lab



https://www.thelearning-lab.com

| Strengths | Weaknesses | Opportunities | Threats |
|-------------------------|-----------------------|---------------------------|---|
| Large user base of | Limited functionality | Providing potential | There are many competitors in the |
| 185,000+ users. | compared to larger | clients with more | eLearning space some of which include |
| | more established | information related to | companies such as Degreed and Udemy. |
| | companies like | services. | |
| | LinkedIn Learning | | |
| | and Workday. | | |
| Simple and easy to use | Less dynamic | More interactive | Companies that provide better |
| navigation. | features and | features that include | functionality in working videos, links, |
| | assessments. | users in the decision- | and customer service response times. |
| | | making process based | |
| | | on preferences. | |
| Users can try for free | Pages are long and | Price transparency, | Larger, better-known companies such |
| without using a credit | require a lot of | letting potential clients | as LinkedIn Learning or Workday. |
| card. | scrolling. | know exactly what to | |
| | | expect. | |
| E-Learnings tailored to | Services page does | Quick response times | |
| company branding. | not provide detail, | for client questions. | |
| | instead there is a | | |
| | contact us button. | | |

Figure 4: Competitive Analysis – Ecovadis



https://ecovadis.com

| Strengths | Weaknesses | Opportunities | Threats |
|-------------------------|---------------------|------------------------|--|
| Training focused | Error message when | Ensuring that | Direct competitor of RecoThink in the |
| specifically on helping | clicking on login | functionality is up to | sustainability training market for |
| companies improve | button. | date and working | professionals. |
| sustainability. | | properly. | |
| | | | |
| Sustainability specific | Some videos not | Setting standards for | As the topic of sustainability continues |
| assessments. | playing for user | sustainability. | to grow traction additional competitors |
| | testimonials. | | may crowd the market. |
| Potential clients can | Ratings and | Streamlining | |
| review pricing. | assessments are not | assessments and | |
| | streamlined. | scorecards. | |
| Modern graphics that | Low response times | Faster response times | |
| move when clicked. | for scoring and | for answering customer | |
| | customer service. | questions. | |

Figure 5: User Personas – Instructional Designer and Trainer

Jamie Young, 27

Title: Instructional Designer and Trainer

Company: Recothink

Education: Master of Professional Studies Degree in Renewable Energy and Sustainability Systems

Primary Device: Dell Laptop

Work Environment: Remote

Major Responsibilities

- · Create courses on ecological sustainability.
- Create Assessments.
- Submit course materials for review.
- Review end user assessments.
- Submit tickets for updates to already posted courses.

Photo by Christina @ wocintechchat.com on Unsplash



Contact

- 123 Main Street
 State College, PA16801
- 814-888-9999
- Jamie.young@recothink.com
- 🛞 www.recothink.com



Figure 6: User Personas – Graphic Designer

Noah Ebert, 34

Title: Graphic Designer Company: Freelance Education: Associate of Arts Degree in Graphic Design Primary Device: Apple iPad Work Environment: Remote

Major Responsibilities

- Create and Register a New Account.
- Search catalog for available certifications.
- Choose which courses to complete for selected certification.
- Complete Courses.
- Take Assessments.

Photo by Marcos Paulo Prado on Unsplash



Contact



- 636-777-5555
- Noah.ebert@gmail.com
- (B) www.noahebert.com

Figure 7: User Personas – Technological Support Specialist

Maya Kowalski , 43

Title: LXP Technological Support Specialist

Company: Recothink

Education: Bachelor of Science Degree in Information Management

Primary Device: HP Desktop

Work Environment: Remote

Major Responsibilities

- Respond to tickets from end users related to technical issues with assessments.
- Respond to tickets from instructional designers / trainers on technical issues with courses.
- Review and post courses submitted by instructional designers.
- Add new courses to catalog of available courses.
- Update available courses per request of instructional designer / trainer.

Photo by Amy Hirschi on Unsplash



Contact

- 987 Garden Ave. Webster Groves, MO 63119
- 314-444-2222
- Maya.Kowalski@recothink.com
- www.recothink.com





Figure 8: Flow Diagrams – Administrator Course Review Approval Process



Figure 9: Flow Diagrams – Instructional Designer Course Submission Process



Figure 10: Flow Diagrams – End User Course Selection Process





Account, End User Home Page





Certificate Selection



Figure 13: Mood Board



RECOTHINK: USER EXPERIENCE TEST PLAN

by

Jennifer H. Stinebaker

Scope: This document provides an outline for conducting user experience testing on a prototype designed by Jennifer Stinebaker in Partial Fulfillment of the Requirements for completing the Degree of Master of Arts in Web Design and User Experience from Lindenwood University.

Purpose: The prototype being tested involves a user experience platform called Recothink that aims to provide training to Graphic Designers on the importance of ecological sustainability, and how they can adapt practices into their work that reduce negative impacts on the environment by having them subscribe to the platform and complete certifications.

Goals: Primary goals of testing includes feedback from end users on message clarity, design preferences, ease of navigation, and identifying functionality concerns.

Participants: The target audience for participants will include five working professionals that are comfortable and experienced using computers and attending zoom sessions. Participants recruited will include a combination of friends, family, and co-workers.

Schedule: User experience testing sessions will be scheduled for June 11, 2023 – June 17, 2023.

Facilitator: Jennifer Stinebaker

Format: Each participant will be invited to attend a facilitated 1-on-1 recorded zoom session for the duration of 30-minutes. At the onset of the zoom session the facilitator will establish and verify communication with the participant. Once communication has been established and verified the participant will be asked to confirm consent for recording the session and recording will begin. Next, the participant will be given control of the facilitator's screen. The facilitator will provide verbal instructions on completing a task, one task at a time, for a total of four tasks. Participants will be encouraged to provide open dialog as they complete each task and to notify the facilitator when the task is complete to the best of their ability. Following the completion of the tasks, the facilitator will take control back of the shared screen, answer questions, stop and save the recording, and end the zoom session. Immediately following the session, the facilitator will send an email to the participant with a link to complete the post user experience test session survey.

One Week Prior To Testing: Facilitator will send out zoom session invitations to participants via email and include the consent form, requesting that the signed consent be returned prior to the participant's scheduled session.

One Day Prior To Testing: Facilitator will send a reminder via email to participant restating the scheduled session date, time, and consent requirement.

Pre-Testing Checklist: Facilitator will verify signed participant consent form has been received, prepare prototype for testing, and zoom session script.

Post-Testing Checklist: Facilitator will send the post-test survey via email to the participant.

Zoom Session Invitation Template:

Hello,

You have been invited to attend the virtual **Recothink Prototype - User Experience Test Session**. This session will be 1-on-1 between you and the session facilitator and can be done from any computer. There will be time at the end for questions. <u>Due to the</u> <u>content needed for screen sharing, a computer monitor is needed, cell phones may</u> <u>be used for audio.</u>

<u>A consent form has been included in this invitation. Please sign and return the</u> <u>consent form prior to your scheduled zoom session. User experience testing cannot</u> <u>begin without a signed consent form.</u>

Please plan accordingly to be connected by the scheduled time. Should you be more than 10 minutes late, the session will be rescheduled.

To attend the session, click the link at the bottom of this email approximately 10 minutes early. This should give you time for computer connection and set up to Zoom. To communicate with the facilitator, please have a headset, or telephone available prior to setting up the computer. When using a telephone, there is a telephone number and access code listed in the e-mail below. (Please note telephone connection is not toll free.)

Thank you for your participation in this study. If you have any questions prior to your session, please contact Jennifer Stinebaker via email address JS542@lindenwood.edu.

Thank You,

Jennifer Stinebaker JS542@lindenwood.edu

Pre-testing Email Reminder Template:

Hello,

This is a friendly reminder about your virtual **Recothink Prototype - User Experience Test Session** scheduled for (Day of Week, MM DD, YYYY at hh:mm am/pm). If you have not done so already, please return the signed consent form prior to your scheduled session. Testing cannot begin without a signed consent form.

Thank you for your participation in this study. If you have any questions prior to your session, please contact Jennifer Stinebaker via email address JS542@lindenwood.edu.

Thank You,

Jennifer Stinebaker JS542@lindenwood.edu

Post Session Survey Email Template:

Hello,

Thank you for your participation in the virtual **Recothink Prototype - User Experience Test Session.** Please click the link below to complete the Post Test survey about your experience. Your time and feedback are greatly appreciated.

https://lindenwood.az1.qualtrics.com/jfe/form/SV_6sMeTnWf5nN8sd0

If you have any questions, please contact Jennifer Stinebaker via email address JS542@lindenwood.edu.

Thank You,

Jennifer Stinebaker JS542@lindenwood.edu

Qualtrics Survey

+ Recothink Prototype - Post User Testing Survey

| Instruction Thank you for completing the Recothink Prototype User Testing Session! We look forward to learning more about your experience. Please, keep in mind, that this is not a test. Your honest feedback is greatly valued and appreciated. If you would like additional information regarding your data, your rights as a data subject, or the privacy policy of Lindenwood University, please visit the following |
|--|
| link: http://www.lindenwood.edu/academics/support-resources/information- technology/privacy-policy/ |
| Q0 Before completing the survey, please complete the captcha below. |
| Page Break |
| Question 1: Were you able to successfully complete all of the instructed tasks throughout your zoom session? |
| Yesi: Each task was completed successfully. No, not every task was completed successfully. Please describe the experience and provide any suggestions for improving user experience. |
| Question 2: |
| Was the product easy to navigate? Yes! The product was easy to navigate. No, the product was not easy to navigate. Please describe the experience and provide any suggestions for improving user experience. |
| |
| Question 3: Was the text clear and easy to read on the screen? |

- Yes! The text was clear and easy to read on the screen.
- No, the text was not clear or easy to read. Please describe the experience and provide any suggestions for improving user experience.

Question 4:

Did you like the overall appearance of the product?

- O Yes! I liked to the overall appearance.
- \bigcirc No, I did not like the overall appearance. Please describe the appearance and provide any suggestions for

improving the overall appearance.

Question 5:

If you were an instructional designer / trainer what type of device would you prefer to use for designing and instructing end users?

O Desktop

O Laptop

Tablet

O Phone

Question 6:

If you were an end user what type of device would you prefer to use in completing certification courses?

Laptop

Tablet

O Phone

Question 7: What did you love most about the product? Question 8: If you could change just one thing about the product what would it be?

Question 9: How would you describe the product? Question 10: Who would benefit most by using the product?

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Zoom Session Script:

Hello, this is Jennifer Stinebaker, welcome to the Recothink Prototype - User Experience Test Session. Thank you for your volunteered participation in this study. Before we get started, do you consent to the recording of this zoom session?

Thank you, I will go ahead and start the recording now.

In a couple of minutes, I will share my screen with you. Next, I will provide you with verbal instructions for completing a task. I will paste the instructions into the chat, then give you control of my screen. I encourage you to share your observations with me as you complete the task and to let me know when you feel that you have completed the task to the best of your ability or if functionality fails. Feel free to have open dialog with me and ask questions, but keep in mind that I might not be able to answer them fully because part of testing includes understanding how users might navigate the site without guidance. After the task I will take control back and we will move on to the next task.

We will repeat this process for a total of four tasks, which I anticipate will take less than 30minutes. After the four tasks are complete, I can answer any questions you might have in more detail. Following the session, you will receive an email with a link to a survey related to your experience. Your feedback would be greatly appreciated.

Please, keep in mind, that I am not testing you, I am only testing the prototype, and your honest feedback is appreciated. There are no wrong answers, you will not hurt my feelings, and you are free to speak candidly.

Any questions before we begin the first task?

Task #1: Please spend a few minutes familiarizing yourself with the prototype. The only request is that you not log in or register. As you navigate, share your observations out loud. For example, you might comment on appearance, functionality, or the purpose of the site. Notify the facilitator if functionality fails or if you are ready to move on to the next task.

Task #2: Let's say you are a small business owner, and you would like to know the cost of a subscription. Starting from the home screen, navigate the site, determine the cost of an annual subscription and state that amount out loud. When you have completed the task return to the home screen. Notify the facilitator if functionality fails or if you are ready to move on to the next task.

Task #3: Next, we'll pretend that you're a systems administrator named Maya. Starting from the home screen, log into the learning platform. A username and password will be pre-populated, select the most relevant role, navigate to the instructor course submissions, and approve the first course in the list. As you complete the task share your observations. When you have completed the task return to the main menu, then log out. Notify the facilitator if functionality fails or if you are ready to move on to the next task.

Task #4: Next, we'll pretend that you're a graphic designer named Noah. Starting from the home screen, log into the learning platform. A username and password will be pre-populated, select the most relevant role, navigate to review your certifications. State your score for course 3, module 2. As you complete the task share your observations. When you have completed the task return to the main menu, then log out. Notify the facilitator if functionality fails.

That completes testing, please remove your hand from the mouse for just a moment while I regain control of the screen.

Do you have any questions or comments related to your experience?

That concludes our test session, you will receive the post survey email in just a few minutes. I am going to stop sharing my screen, stop and save the recording, and then end our meeting. If you have any questions after the session has ended, please feel free to email me. Thank you again for participating in this study.

LINDENWOOD

Research Study Consent Form

RECOTHINK: USER EXPERIENCE TEST PLAN

Before reading this consent form, please know:

- Your decision to participate is your choice.
- You will have time to think about the study.
- You will be able to withdraw from this study at any time.
- You are free to ask questions about the study at any time.

After reading this consent form, we hope that you will know:

- Why we are conducting this study.
- What you will be required to do
- What are the possible risks and benefits of the study?
- What alternatives are available, if the study involves treatment or therapy.
- What to do if you have questions or concerns during the study

Basic Information About this study:

This consent form will be used for conducting user experience testing on a prototype designed by Jennifer Stinebaker in Partial Fulfillment of the Requirements for completing the Degree of Master of Arts in Web Design and User Experience from Lindenwood University.

LINDENWOOD

Research Study Consent Form

RECOTHINK: USER EXPERIENCE TEST PLAN

You are asked to participate in a research study being conducted by Jennifer Stinebaker under the guidance of Dr. James Hutson at Lindenwood University. Being in a research study is voluntary, and you are free to stop at any time. Before you choose to participate, you are free to discuss this research study with family, friends, or a physician. Do not feel like you must join this study until all your questions or concerns are answered. If you decide to participate, you will be asked to sign this form.

Why is this research being conducted?

We are doing this study to test a user experience platform called Recothink. Goals of the study include receiving feedback from end users on message clarity, design preferences, ease of navigation, and identifying functionality concerns.

What am I being asked to do?

A total of five participants will be recruited for the study. Each participant will be invited to attend a facilitated 1-on-1 recorded zoom session for the duration of 30-minutes. At the onset of the zoom session the facilitator, Jennifer Stinebaker, will establish and verify communication with the participant. Once communication has been established and verified the participant will be asked to confirm consent for recording the session and recording will begin. Next, the participant will be given control of the facilitator's screen. The facilitator will provide verbal instructions on completing a task, one task at a time. Participants will be encouraged to provide open dialog as they complete each task and to notify the facilitator when the task is complete to the best of their ability. Following the completion of the tasks, the facilitator will take control back of the shared screen, answer the participant's questions, stop the recording, save the recording, and end the zoom session. Immediately following the session, the facilitator will send an email to the participant with a link to a post user experience test session survey.

How long will I be in this study?

The duration of the study will include the thirty-minute zoom session and the amount of time it takes to complete the online survey.

Who is supporting this study?

This study is not financially funded.

What are the risks of this study?

Privacy and Confidentiality:

We will be collecting data from you using the internet. We take every reasonable effort to maintain security. It is always possible that information during this research study may be captured and used by others not associated with this study.

What are the benefits of this study?

You will receive no direct benefits for completing this survey. We hope what we learn may benefit other people in the future.

What if I do not choose to participate in this research?

It is always your choice to participate in this study. You may withdraw at any time. You may choose not to answer any questions or perform tasks that make you uncomfortable. If you decide to withdraw, you will not receive any penalty or loss of benefits. If you would like to withdraw from a study, please use the contact information found at the end of this form.

What if new information becomes available about the study?

During the course of this study, we may find information that could be important to you and your decision to participate in this research. We will notify you as soon as possible if such information becomes available.

How will you keep my information private?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, representatives of state or federal agencies.

Your study participation in this study may be observed by a student enrolled in a course taught by Dr. James Hutson. Please let us know if you are willing to be observed by checking one of the boxes below:

---- It is okay if others observe my participation

---- It is not okay if others observe my participation

How can I withdraw from this study?

Notify the research team immediately if you would like to withdraw from this research study.

Who can I contact with questions or concerns?

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board at (636) 949-4155 or <u>irb@lindenwood.edu</u>. You can contact the researcher, Jennifer Stinebaker directly at 314-479-7551 or JS542@lindenwood.edu. You may also contact Dr. James Hutson at JHustson@lindenwood.edu.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

| Participant's Signature | Date |
|---|------|
| Participant's Printed Name | |
| | |
| Signature of Principal Investigator or Designee | Date |
| Investigator or Designee Printed Name | |

RECOTHINK: USER EXPERIENCE TEST PLAN RESULTS

Five participants, consisting of friends and family, were involved in testing the Recothink prototype. Although bias may exist when including friends and family in testing, data gathered from testing was useful in determining message clarity, design preferences, ease of navigation, and identifying functionality concerns. In accordance with the user experience test plan, zoom session invitations were sent to participants one week prior to testing. Invitations also included the consent form with instructions for returning the signed consent form prior to their scheduled session should they choose to participate. One day prior to testing, email reminders were sent to each participant restating the scheduled session date, time, and reminder about returning the signed consent form. All signed consent forms were received prior to each participant's scheduled session. At the onset of each session participants were provided with an introduction from the meeting facilitator and information describing what to expect throughout their test session. Participants were asked to complete a total of four tasks. Following the session each participant was sent the post-test survey.

Summary of Tasks:

Task 1 focused on gathering information related to appearance, functionality, and messaging. Participants were asked to navigate the site and share their observations out loud.

Task 2 focused on the perspective of a small business owner interested in determining the cost of an annual subscription. The goal for this task was to see how quickly information could found on the site. Task 3 focused on the course approval process from the perspective of an administrator named Maya.

Task 4 focused on the perspective of a graphic designer named Noah and the process of reviewing the status of courses completed for certification.

Zoom Session Results:

Test User 1

Likes: Logo, colors, concept, and clean design.

Recommendations: Recothink video, troubleshooting blue squares that appeared when clicking on some links and pictures, and changing second line of header on home page to lowercase 't'.

Facilitator Comments: A functionality issue occurred following task two and the user was not able to complete the remaining two tasks. Steps that were taken to troubleshoot the functionality issue included the facilitator resetting the prototype so that the user could attempt the task again, the facilitator attempting to test the prototype on another screen that was not visible to the user, and the facilitator moving to another computer and reconnecting to zoom. Out of respect for the test user's time the zoom session concluded within the 30-minute scheduled time. Immediately following the test session, the posttest survey was administered, and later it was determined that the link used for testing had not been updated following changes to the prototype.

Test User 2

Likes: Ease of navigation, colors, working links.

Recommendations: Update header on 'About' page, add scroll bar to certification page, add more text on home page focused on how ecological sustainability ties into art and design.

Facilitator Comments: User had difficulty with selecting the appropriate user roles in tasks 3 and 4, therefore, more clarification for which role to select was provided to remaining test users. In the future, it would be more impactful for tasks 3 and 4 to specify in more detail which user role should be selected.

Test User 3

Likes: Navy and orange color combination, logo returns user to home page.

Recommendations: Did not like the green accent color, third circle on the certification page needs updated from 'Course 2' to 'Course 3'.

Facilitator Comments: Participant tried to click on circles in the about page, consider removing circles from that page.

Test User 4

Likes: Easy to understand, easy to navigate, inclusion of how fortune 500 companies are implementing sustainability initiatives, believes that would be persuasive to potential clients.

Recommendations: In news section include news on how recothink is implementing sustainability efforts as a company.

Facilitator Comments: Clicked on circles in 'About' page resulting in blue squares.

Test User 5

Likes: Large text and buttons for logging in and registration, colors grab attention, menu at top and bottom, and that there wasn't a lot of text throughout the pages, personalization when logging into the prototype.

Recommendations: On plans page add information that briefly describe what each thing represents, indent modules listed under courses, add average scores for each completed course

Facilitator Comments: Noticed as user navigated the prototype that updating the text color used on the 'Review' buttons of the certification page would improve contrast.

Post-Test Survey Results:

Question 1: - Were you able to successfully complete all of the instructed tasks throughout your zoom session?







Question 3: - Was the text clear and easy to read on the screen?



Question 4: - Did you like the overall appearance of the product?



Question 5: - If you were an instructional designer / trainer what type of device would you prefer to use for designing and instructing end users?



Question 6: - If you were an end user what type of device would you prefer to use in completing certification courses?



Question 7: - What did you love most about the product?

easy to navigate and well thought out.

I loved the color of the website. I also enjoyed how easily readable everything was and how easy it was to navigate.

Easy of use. Very intuitive and easy to navigate.

It was easy to navigate and all the links worked when clicked.

The colors were great

Question 8: - If you could change just one thing about the product what would it be?

remove the lines under words that are not links.

In the news portion just post articles that you can read directly from the website.

It would be better if the graphic on the home page moved on its own.. without clicking on it.

For the people who don't know what the subject is, it would be great to see a Learn More Here button for more education about the topic.

The contact page would include a hyperlink to email.

Question 9: - How would you describe the product?

easy to navigate, precise with wording on what the designer is saying about their thoughts. Colors grab your attention. Easy to login and use the product within and easy to navigate that product.

A website for small business owners to participate in the eco friendly changes that major companies are doing.

A useful tool to help teachers and students navigate projects and assignments.

A service for a specialized industry.

Clean, fun, inviting

Question 10: - Who would benefit most by using the product?

anyone who needs a site that is well thought out, it could be easily changes to any business which is nice.

Small business owners

students and instructors

Business Owners who want to use sustainability in their designs.

People who need eco-certification

Conclusion: Information gathered from zoom sessions and surveys was helpful in making improvements to the prototype. Updates included removing underlines from words that are not hyperlinks, adding a hyperlink to the email on the connect page, changing the header on the about page, changing the text color of buttons on the course approval, and certification pages. Additional changes were made on the certification home page including indenting text listed under each course, correcting the course number on the third circle in the top right side of the page, and adding a scroll bar.

Script/Task Recommendations:

To provide more clarity to testers it would be helpful to update tasks 3 and 4 to specifically state which user roles they should log into. The wording for these two tasks were too vague and caused some confusion.

Survey Recommendations:

To gain a wider range of feedback from surveys it would be helpful to include more short answer questions and fewer multiple-choice questions. Participants tended to respond positively rather than providing descriptions of their experiences. Having additional participants that work in the field of graphic design would also provide helpful feedback for making improvements.

Prototype Recommendations:

If this prototype were to be developed into a learning experience platform there are several key features that would need to be added. Due to time constraints the video on the home screen is a

place holder, it would be very beneficial to post a video created by the company Recothink that explains in more detail the definition of ecological sustainability, why it is important, the services provided and how they as a company have implemented strategies for improving their carbon footprint. The search icon, located in the top right side of the pages listed on the main menu would need to work within the prototype rather than opening a tab for google. More information would be provided that describes each feature included in the subscription on the plans page. The news page would provide information on internal company news and more information would be shown directly on the page rather than linking to outside websites. The user roles page is a place holder and would need to be removed. Lastly, the platform would be expanded to include other professions of art and design. These professions might include game design, web design, and photography to name a few.

Link to Prototype:

https://xd.adobe.com/view/8f1507b0-d33e-4d04-a541-40873488e0a8da46/?fullscreen&hints=off

Figure 14: Design Overview



Figure 15: Prototype Overview



Figure 16: Login



Figure 17: Home Page



Figure 18: About Page







Figure 20: End User Certification Page





Figure 21: Updated End User Certification Page

Figure 22: Updated Administrator Course Approval Page





Figure 23: Updated About Page

Figure 24: Updated Connect Page



RECOTHINK: BRAND BOOK





Our mission is to assist artists and designers in the development and implementation of more sustainable business practices.



world where setting and implementing more sustainable practices is the standard across all industries of business.



We value people and the planet and believe that creativity, profit, and ecological sustainability can all be achieved simultaneously.



Font of page headers should be set to Verdana 90 pt., bold weight, and left aligned.

Font within body of pages should be set to Verdana 32 pt. with regular weight, and left aligned. Character spacing should be set to 0 within paragraphs.



Increase kerning 1.5 X the font size for letters with straight lines that are greater than 12pt. font.

Sustainability, the time is now.

Set your business apart from the competition by taking steps towards a more sustainable future. We offer ecological sustainability certifications to freelance and small business owners in fields of art and design.

Watch Video

Text on buttons should be set to Verdana 32 pt. font with bold weight, center aligned.

COLOR CONTRAST Register Register

For brand consistency adhere to these color combinations.

Blue Background - White Text

Orange Background - Blue Text

White Background - Blue Text

White Background - Green Text

*Do not use white background with orange text or orange background with white text as it will reduce color contrast.

LOGO USE

Consistent and correct use of the logo is essential to maintain a strong brand presence. The following is a guide to incorrect use of the logo.

a. Do not stretch your logo to different proportions.

b. Do not use special effects on the logo such as drop shadows or inner glows.

c. Do not use logo on complex backgrounds such as pictures.

d. Do not use logo with unauthorized colors.



https://www.canva.com/design/DAFnHFboMgI/fv_5uOq7WUroRNLcG-

3Kgg/edit?utm content=DAFnHFboMgI&utm campaign=designshare&utm medium=link2&ut

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