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# RIT

## **From Market Research to Product Design: The Process of Building the WebGuru AI Optimization Tool**

by

### **Zhen Bi**

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Art in Visual Communication Design

School/Department of Design  
College of Art and Design

Rochester Institute of Technology  
Rochester, NY  
April 08, 2024

## Committee Approval

We, the undersigned committee members, certify that we have advised and/or supervised the candidate on the work described in this thesis. We further certify that we have reviewed the thesis and approved it in partial fulfillment of the requirements of the degree of Master of Fine Arts in Visual Communication Design.

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Adam Smith

Visual Communication Design, Associate Professor / Thesis Advisor

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Date

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Mike Strobert

Graduate Director of the Visual Communication Design, Associate Professor / Thesis Advisor

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Date

## **Abstract**

The COVID-19 virus has brought a significant transformation in e-commerce, with a lot of businesses not only selling products in physical stores but also conducting transactions online. However, the cost and expertise required for personalized website design and programming are prohibitive for a lot of small business owners. This has prompted many small business owners to adopt generic templates, failing to characterize their products and get the style they really want.

In 2023, rapid advances in artificial intelligence technologies have resulted in a range of tools capable of generating text and images, catalyzing a transformation in online content creation. In response to this gap, WebGuru was created as an innovative AI platform designed to provide small business owners with powerful website optimization capabilities.

This paper introduces WebGuru, an innovative e-commerce website optimization tool designed for users without a technical or design background. By using artificial intelligence, WebGuru enables image optimization, the integration of text with images, and the generation of personalized website styles through simple text commands. This study delves into the key AI-driven design elements of WebGuru, including image processing algorithms, natural language processing modules, and style generation networks. It explores how these AI techniques can improve usability, attractiveness, personalization, customization, and efficiency for users.

## **Key Words**

**E-commerce, Artificial Intelligence Technologies, Website Optimization**

## Problem and Solution

Because of COVID-19, more and more small business owners are transitioning into the digital marketplace. However, many of them lacked foundational skills in design and programming, which posed a huge obstacle to effectively aligning website design with their product style and engaging customers.

WebGuru is a response to the rapid growth of AI tools designed to improve productivity. By utilizing advanced AI technology, WebGuru provides small business owners with an intuitive platform that simplifies the process of optimizing websites. The solution enables users to produce websites that match their brand image and also increase engagement without knowledge of design or programming.

## Project Summary

The emergence of AI tools has brought about a revolution in efficiency across various industries. By the close of 2022, "Generative AI" had become a widely recognized term, with AI applications like ChatGPT and Midjourney gaining prominence. AI tools, encompassing capabilities such as image generation, chatbots, image processing, and data analytics, are now beginning to provide tailored, precise, and aesthetically enhancing solutions. These innovations have the potential to effectively address the current difficulties of small business owners.

For users without design foundations to produce professional visuals, AI can refine images to enhance their visual appeal. For those struggling with design skills or unsure how to effectively showcase product features, AI can facilitate the seamless integration of text and visuals. Additionally, for those burdened by inefficiencies, AI can offer a variety of high-quality design options, significantly reducing the time and effort required in the design process.

WebGuru is an online AI tool that provides an efficient solution for users to optimize their websites. Users can upload their website, enter text commands, and next WebGuru generates a customized design solution based on these requirements.

First, WebGuru improves image quality through machine learning algorithms. When a user selects an image and enters their requirements, WebGuru uses a convolutional neural network to analyze the image and provide users with customized requirements. This process not only adjusts the quality of the image but also ensures that the output results match other images on the website. Also, to help users clarify their needs, WebGuru provides a specialized glossary of terms based on user's text commands. This enables users to precisely articulate their requirements for optimal editing results. The lasso tool further enables users to select and refine specific parts of an image to meet detailed customization requests.

Secondly, WebGuru specializes in integrating images and text to enhance the presentation of product details. Natural language processing techniques are used to understand and interpret user inputs, facilitating the display of personalized product details based on those inputs. This integration enhances visual appeal and also enhances user interaction by providing a seamless combination of textual information and visual cues.

In addition, WebGuru offers a comprehensive website design solution with global and local modes, differentiated by color and layout positioning. The global modification toolbar is accessed via a button in the upper left corner, allowing users to enter a wide range of design changes. WebGuru's AI system can develop intelligent and innovative design solutions based on the types of products offered on the site. This feature enables users to try out various designs, compare them, and select their favorite options. Once a design is chosen, it can be applied consistently across the whole website with the flexibility to make further modifications.

WebGuru's designs are deeply integrated with AI technology such as convolutional neural networks for image analysis and natural language processing for text integration. Every decision in the development of WebGuru is based on creating a user-customized product and delivering an intuitive user experience. This AI integration not only helps with technical tasks but also enriches the creative process, making WebGuru a powerful tool for transforming e-commerce sites efficiently and effectively.

User feedback played a crucial role in refining the interface. I interviewed 6 users and showed them a prototype of the tool during the high-fidelity design phase with several iterations and tweaks. Based on the feedback, I optimized the font size, text command modes, number of tools, and controls to enhance the visual experience and simplify operations. For example, in response to user feedback that the text command mode was complex and difficult to learn and use quickly, I simplified the command structure, provided more intuitive verbal prompts, and added a dynamic guidance system to the interface to help users use the text commands effectively. In addition, I adjusted the default font size to accommodate prolonged reading and improve comfort for users. Through feedback on the control methods, I redesigned the toolbar layout and simplified the tool-switching process. This change improved the smooth operation of WebGuru. These adjustments not only optimized user experience but also improved overall user satisfaction. Through continuous user testing and feedback loops, WebGuru's design was gradually refined to better meet the needs of its target user groups.

## Conclusions

WebGuru is the latest example of the effective use of AI to personalize website design for small business owners. By combining efficiency, personalization, and actionability, WebGuru meets the pressing need for an intuitive and effective website optimization tool in the booming field of e-commerce.

Looking ahead, this thesis proposes to further investigate how emerging AI technologies, such as advanced natural language processing and predictive analytics be integrated into WebGuru. Exploring these technologies may lead to deeper customization options that can enhance user satisfaction and efficiency. These advancements may enable WebGuru to adapt to user behavior and preferences in realtime dynamically, adjusting the site's aesthetics.

WebGuru not only demonstrates the practical application of AI in enhancing e-commerce platforms but also lays the foundation for future innovations in digital commerce. This thesis emphasizes that AI-powered tools have the potential to revolutionize how small businesses participate in the digital marketplace, potentially influencing future design trends and how design integrates with business strategy. By facilitating more personalized and engaging experiences, WebGuru may play a key role in shaping the future of e-commerce, making digital transformation feasible for businesses of all sizes.

# Expanded Thesis Defense Presentation

## Background Research

02

### Ecommerce statistics in 2022.

The COVID-19 virus has brought about a significant transformation in e-commerce, with numerous businesses not only selling products in physical stores but they also conducting transactions online. Since 2021, global e-commerce has witnessed an incredible explosive growth.



#### Ecommerce market

In 2021, the global retail e-commerce sales were approximately \$5.2 trillion. In 2022, it increased by 9.6% to reach \$5.54 trillion.

#### E-commerce sales

E-commerce sales account for 20.8% of global retail sales in 2022.

#### E-commerce websites

With more e-commerce websites being created every day, it's estimated there are 12 million to 24 million e-commerce websites in world.

#### Online purchases

In 2022, nearly 93.5% of global internet users have purchased products online.

Data from Statista, Forbes Advisor

### How do business owners make their own website?

Creating a fully functional online shopping website requires knowledge in both technical and design aspects. The time, price, and investment costs can also vary depending on the specific project and requirements.

Based on my research, there are 5 common methods for creating an online shopping website that are frequently used by users.

Data from Tech.co

#### Online website builder

##### Pros

- Fast and Easy
- Beginner-friendly

##### Low Cost

##### Cons

- Limited Customization
- Template Dependency
- Limited Control

#### Hire a freelancer for design and develop

##### Pros

- Personalized Customization
- High-Quality Design

##### Cons

- Time Investment
- Dependency on the Designer
- High Cost

#### Self-learning website development

##### Pros

- Personal Freedom
- Cost-effective
- Long-term Benefits

##### Cons

- Time-consuming
- Lack of Experience
- Possibility of Errors

#### Hire a professional company

##### Pros

- Professional Expertise
- Customization
- Time Efficiency

##### Cons

- High Cost
- Dependency
- Communication & Collaboration

#### Content Management Systems (CMS)

##### Pros

- Quick Setup
- User-Friendly

##### Scalability

##### Cons

- Limited Customization Options
- Learning Cost
- Possibly Need Technical Support

### Online Website Builder.

By the end of 2022, there are an estimated 12 to 24 million e-commerce websites in the world, more than 50% of these websites are created through web builder.

Shopify, Wix, Squarespace, and Square Online are the top four e-commerce website builders in terms of usage. While each platform has its pros and cons, they all share a common drawback: limited user operability, making it difficult to customize and create highly personalized business websites.



#### Shopify



##### Pros

- Helpful and predictive website building experience
- Massive app selection for unlimited customizability
- Diverse multi-channel integration options

##### Cons

- Limited customization options
- Few built-in features
- Apps cost extra

#### Wix



##### Pros

- Useful SEO best practice prompts
- Friendly onboarding experience
- Advanced business functionality

##### Cons

- Can't change site design after publishing
- Slower server response time than some competitors

#### Squarespace



##### Pros

- Incredible value for the money
- Extensive marketing features to reach new customers

##### Cons

- Poor site speed performance
- Few e-commerce templates

#### Square Online



##### Pros

- Allows users to sell for free
- Great integrations with POS system
- Ideal for small stores and restaurants

##### Cons

- High transaction fees
- Restrictive design options
- Confusing layout with unfamiliar technology

## Interview.

In order to gain a deeper understanding of how small business owners manage their websites, I interviewed three target users. Exploring how they built their e-commerce websites and their related experiences and feelings.



**Nikki Wu**

### Handmade Products Shop Owner

"As a designer, I am capable of independently designing my website. Due to my lack of programming skills, it is **hard to communicate with programmers**. Ultimately leading me to settle for a reasonably suitable online website template."



**Allen Lee**

### Clothing Retail Shop Owner

"I hired a team to help me create the website. The entire process, from design and production to going live, **took a long time to complete.**"



**Tony Mark**

### Trendy Brand Store Owner

"Since I am neither skilled in design nor coding, my only option is to find a template online to build my website. However, I am unsure of **how to customize the template** to make my website look more appealing."

## Persona.

This project is dedicated to meet the needs of small business owners who have an urgent need to **build a website** but **lack professional design skills** and **cannot invest lots of time and money**.

In response to these characteristics, I deeply analyzed and drew a persona of my target user.



**Zoe Lee**

29 years old

Single

Rochester, New York

Small Business Owner

Zoe Lee has a store specializing in **designer jewelry**. To promote her products more effectively, she decides to create a website. Because she lack of design and programming skills and want to save time and money, Zoe chooses to **use an online website builder to build her website**.

However, she finds the website's performance unsatisfactory, few people shopping through the website. This leads her to consider **whether she should hire a designer to improve the website**.

### Needs

- Expand sales channels through online presence
- Save time and money by finding cost-effective solutions
- Enhance brand awareness and customer satisfaction

### Pain Points

- Lacks skills and experience to create and design a professional website on her own
- The chosen online website template doesn't provide satisfactory results and fails to meet business requirements



## Pain Points

04

Efficiency

Aesthetics

Design Capability

Based on background research and user research, I analyze the current problems encountered by users.

According to identify potential pain points of users and find future design opportunities.

**Lack of Professional Support**

Users don't know whether they should hire professionals for assistance, including photographers and content writers, etc.

**Lack of Design Capability**

Users don't know what content to use on their site and what style that better suits the theme of the site.

**Lack of Efficiency**

Users take long time to learn how to modify their website independently.

## Field Research of Artificial Intelligence

05

Image Generation

Chatbots

Image Processing

Data Analysis

And More

As AI technology advances rapidly, a multitude of generative AI programs have emerged. AI serves as an innovative means of content creation, capable of summarizing meeting content in real-time, crafting visually stunning websites, engaging in conversations with users, and even creating artistic pieces based on user demands.

AI provides a powerful tool that can help users **deliver more personalized, precise and efficient design.**

### Image Generation



Disco Diffusion, Dall-E 2, Midjourney, Stable Diffusion, Adobe Firefly

### Chatbots



ChatGPT, The new Bing, Notion AI

### Image Processing



Relight, Bigjpg, Hama, Toolkit, Pixian

### Data Analysis



Google Analytics, Fathom, GoSquared, Market Splash

## Ideate

06

How can AI help target users to optimize their websites?

**Lack of Professional Support**

Assist users in enhancing product imagines to studio-quality levels

Users can input their image optimization requirements or choose from keywords provided by WebGuru to enhance their image quality.

Furthermore, users have the flexibility to select specific areas within the image to adjust details.

**Lack of Design Capability**

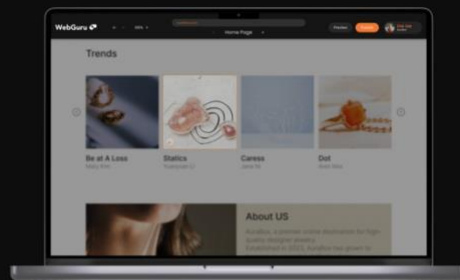
Combine text and images in a design-sensitive format

WebGuru can integrate images and text to provide personalized and creative designs, thereby achieving a superior user experience and enhanced visual appeal of the pages.

**Lack of Efficiency**

Provide a complete brand new web design solution

WebGuru provides comprehensive web page design optimization solutions based on user requirements and product type. Users select their preferred style, and with a single click, this design can be applied across all interfaces on their website.



Select a product picture

I want the background

Text the requirement

I want the background to be **white**

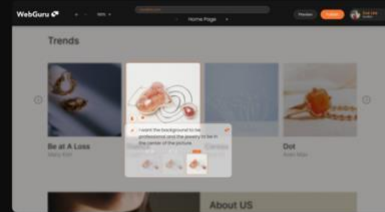
Personalized suggestions by WebGuru

I want the background to be **white** and the jewelry to be in the center of the picture.

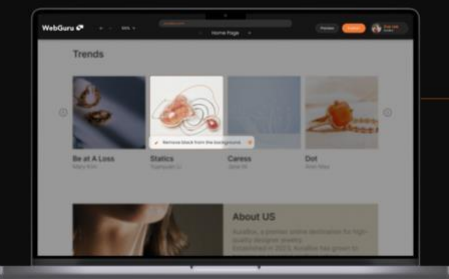
Change key word

### Imagine Modification

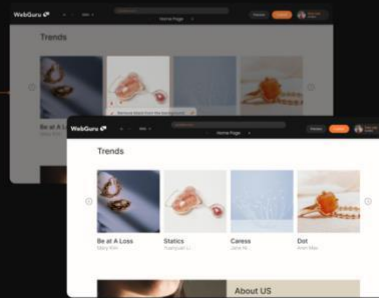
When users input modification requirements, WebGuru provides personalized suggestions based on the characteristics of the image, which users can choose to follow. Additionally, users can select from a range of modification words WebGuru offered. Once a modification word is selected by the user, WebGuru automatically provides a series of related words, thus assisting users who are uncertain about how to express their requirements to better achieve their goal.



Trial different solutions



Selecting a specific area for modification



Finish modifying the image

### Part Modification

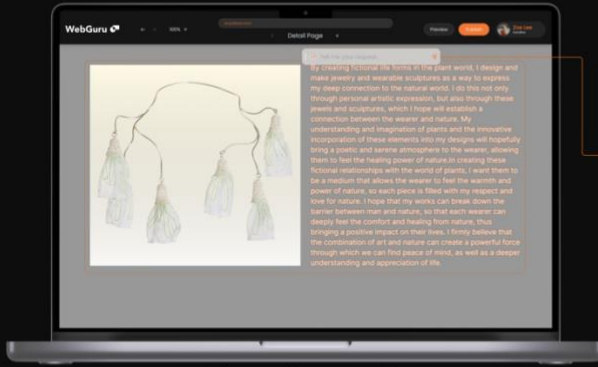
After imagine modifications, if users are still not satisfied with the image, they can choose part modifications.

By simply switching to the lasso tool and selecting the area they want to modify, WebGuru can effectively perform part modifications to satisfy users' personalized detail requirements.

# AI can combine text and images in a design-sensitive format.

08

Local selection → Change tool → Select all the parts → Request → Outcome



## Combination of Text and Images

Users can freely switch different AI tools, select the text and images they want to integrate, and propose specific requirements.

Based on user's needs, WebGuru will blend text and images, providing users with a design-conscious and personalized layout solution.



Marquee tool to select several parts



# AI can provide a complete brand new web design solution.

08

Global selection → Request → Trial different solutions → Apply

## Style Adjustment

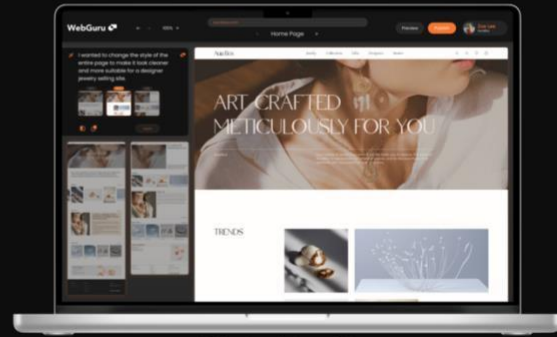
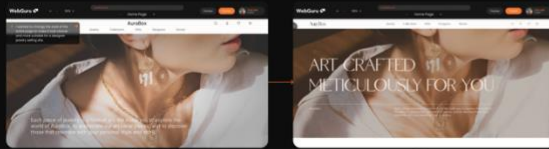
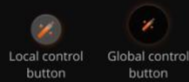
WebGuru integrates user requirements with the types of products sold on the website to provide comprehensive web page design optimization solutions.

Users can click and trial various design solutions via an intuitive interface, choose their favorite design after comparison, and apply it. Then, WebGuru integrates this design solution across all pages of the entire website.

## Global and Local

WebGuru takes into account the possible global and local modifications that users may undertake.

To enhance the intuitiveness of the user interface and reduce confusion during operation, I differentiate the control buttons for these two types of modifications through differences in color and layout position.



- Branding
- Logo
- Colors
- Typography
- Buttons
- Icon
- Components
- Materials

I adopted the **Glassmorphism** style in this design, using its semi-transparent characteristic to effectively emphasize the **hierarchical relationship**.

Also, as a design style adds depth and shadow, without noticeable color changes. It not only giving the UI a sense of layering but also **strengthening the user's identification** between the system itself and the modified page.



### Colors

Orange #F57934	White #FFFFFF	Black #4D4D4D	

### Typography

Typeface	Hierarchy		
<b>A</b>	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789	Heading 1 Body 1 Button 1 Button 2 Button 3	Regular 24 Regular 22 Regular 18 Light 14 Light 12

### Buttons

<b>Basic Status</b>	<b>Magic Button</b>
Default	Default
Pressed	Pressed
	Generate
	Finished

### Icons

### Components

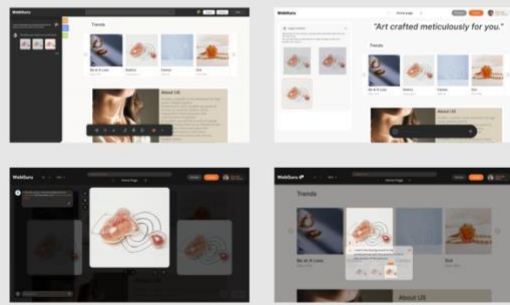
### Materials

#### Glassmorphism

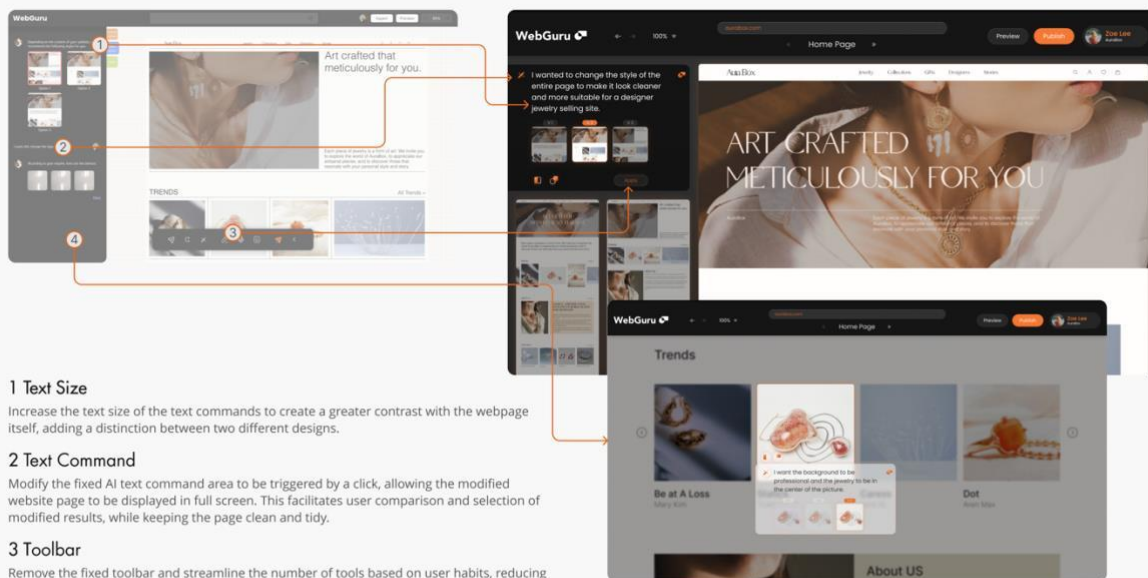
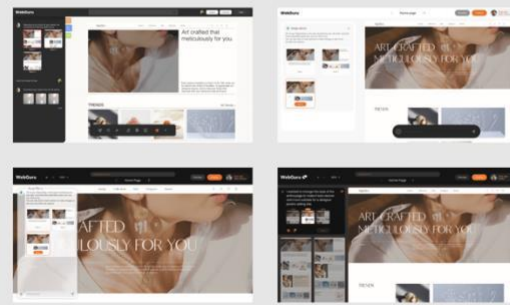
What do users think of this tool? 🗨️

I interviewed 6 users and showed them a demo of this tool. Based on their feedback, I made several changes to the program.

### Optimize the picture



### Change the style



#### 1 Text Size

Increase the text size of the text commands to create a greater contrast with the webpage itself, adding a distinction between two different designs.

#### 2 Text Command

Modify the fixed AI text command area to be triggered by a click, allowing the modified website page to be displayed in full screen. This facilitates user comparison and selection of modified results, while keeping the page clean and tidy.

#### 3 Toolbar

Remove the fixed toolbar and streamline the number of tools based on user habits, reducing the complexity of user interactions.

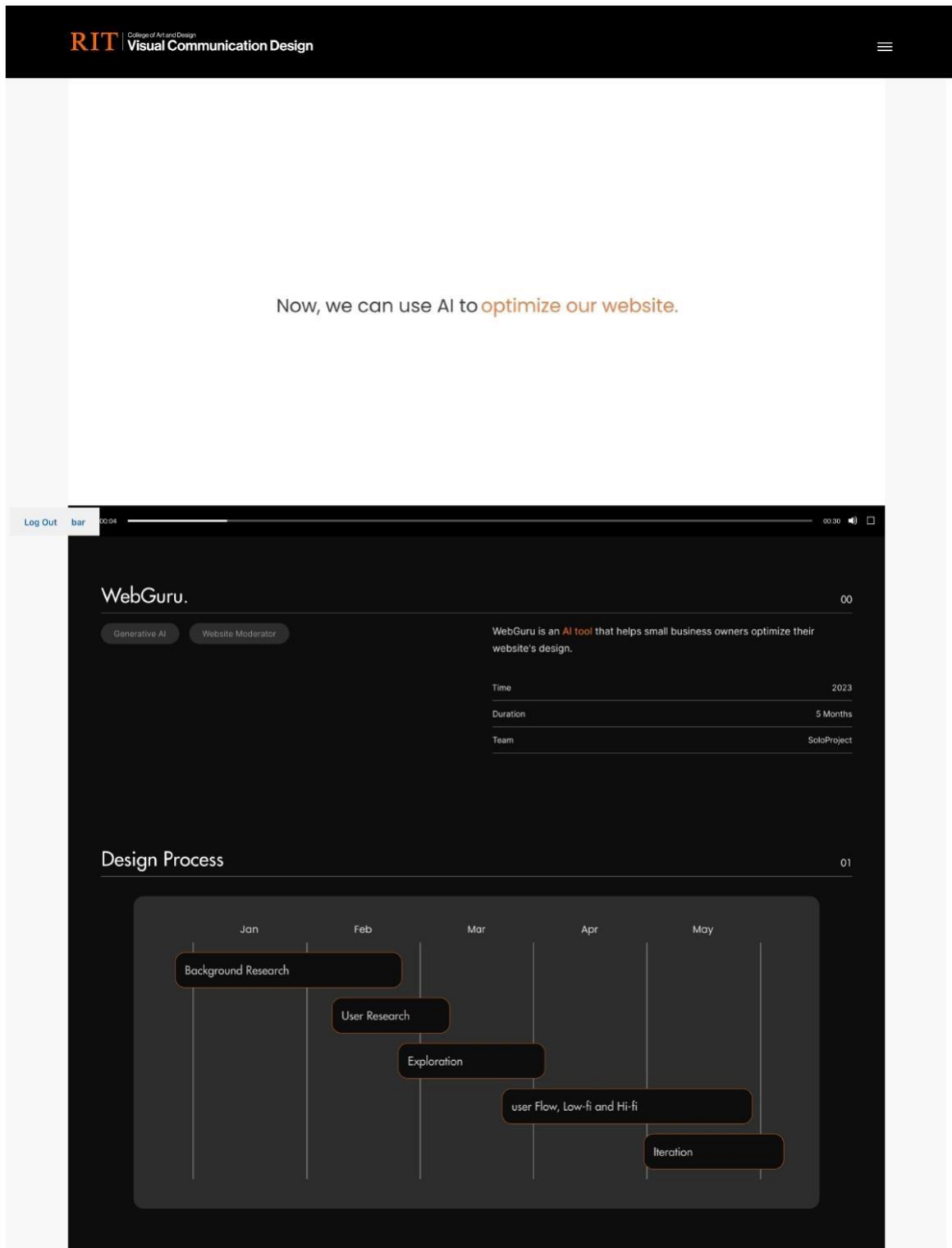
#### 4 Global and Local Control

Differentiate global control and local control through color, helping users distinguish between partial modifications and overall modifications. Minimize user confusion during operations.

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# Semplice Screenshot



- UX Design
- UI Design
- Web Design
- Concept Design

Designer	Zhen Bi
Time	2023
Advisor	Adam Smith, Joel Rosen, Mike Strobert

## What is WebGuru?

- Generative AI
- Website Moderator
- Designer
- Data Analyst

WebGuru is an **AI Platform** that helps business owners optimize their website's performance and design. With powerful analytical capabilities and professional advice, users can easily transform their website without any coding or design experience, resulting in a high-quality and user-friendly website.

## Background Research

### Ecommerce statistics in 2022.

The COVID-19 virus has brought about a significant transformation in e-commerce, with numerous businesses not only selling products in physical stores but they also **conducting transactions online**. Since 2021, global e-commerce has witnessed an incredible explosive growth.



#### E-commerce market

In 2021, the global retail e-commerce sales were approximately \$5.2 trillion. In 2022, it increased by 9.6% to reach \$5.54 trillion.

Data from: Statista, Forbes Advisor

#### E-commerce sales

E-commerce sales account for 20.8% of global retail sales in 2022.

#### E-commerce websites

With more e-commerce websites being created every day, it's estimated there are 12 million to 24 million e-commerce websites in world.

#### Online purchases

In 2022, nearly 93.5% of global internet users have purchased products online.

### How do business owners make their own website?

Creating a fully functional online shopping website requires knowledge in both **technical and design aspects**. The time, price, and investment costs can also vary depending on the specific project and requirements.

Based on my research, there are **5** common methods for creating an online shopping website that are frequently used by users.

Data from: tech.co

#### Hire a freelancer for design and develop

Pros	Cons
Personalized Service	Time-consuming

#### Self-learning website development

Pros	Cons
Personalized	Time-consuming



<p><b>Personalized Customization</b></p> <ul style="list-style-type: none"> <li>High-Quality Design</li> </ul>	<p><b>Time Investment</b></p> <ul style="list-style-type: none"> <li>Dependency on the Designer</li> <li>High Cost</li> </ul>	<p><b>Personal Freedom</b></p> <ul style="list-style-type: none"> <li>Cost-effective</li> <li>Long-term Benefits</li> </ul>	<p><b>Time-consuming</b></p> <ul style="list-style-type: none"> <li>Lack of Experience</li> <li>Possibility of Errors</li> </ul>
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<p><b>Hire a professional company</b></p>	
<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Professional Expertise</li> <li>Customization</li> <li>Time Efficiency</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>High Cost</li> <li>Dependency</li> <li>Communication &amp; Collaboration</li> </ul>

<p><b>Content Management Systems (CMS)</b></p>	
<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Quick Setup</li> <li>User-Friendly</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>Scalability</li> <li>Limited Customization Options</li> <li>Learning Cost</li> <li>Possibly Need Technical Support</li> </ul>

Online Website Builder.

By the end of 2022, there are an estimated 12 to 24 million e-commerce websites in the world, more than 50% of these websites are created through web builder.

Shopify, Wix, Squarespace, and Square Online are the top four e-commerce website builders in terms of usage. While each platform has its pros and cons, they all share a common drawback: **limited user operability, making it difficult to customize and create highly personalized business websites.**



<p><b>Shopify</b></p> <p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Helpful and predictive website building experience</li> <li>Massive app selection for unlimited customizability</li> <li>Diverse multi-channel integration options</li> </ul> <p><b>Cons</b></p> <ul style="list-style-type: none"> <li>Limited customization options</li> <li>Few built-in features</li> <li>Apps cost extra</li> </ul>	<p><b>Wix</b></p> <p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Useful SEO best practice prompts</li> <li>Friendly onboarding experience</li> <li>Advanced business functionality</li> </ul> <p><b>Cons</b></p> <ul style="list-style-type: none"> <li>Can't change site design after publishing</li> <li>Slower server response time than some competitors</li> </ul>
<p><b>Squarespace</b></p> <p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Incredible value for the money</li> <li>Extensive marketing features to reach new customers</li> </ul> <p><b>Cons</b></p> <ul style="list-style-type: none"> <li>Poor site speed performance</li> <li>Few e-commerce templates</li> </ul>	<p><b>Square Online</b></p> <p><b>Pros</b></p> <ul style="list-style-type: none"> <li>Allows users to sell for free</li> <li>Great integrations with POS system</li> <li>Ideal for small stores and restaurants</li> </ul> <p><b>Cons</b></p> <ul style="list-style-type: none"> <li>High transaction fees</li> <li>Restrictive designs options</li> <li>Confusing layout with unfamiliar technology</li> </ul>

User Research

Interview.

In order to gain a deeper understanding of how small business owners manage their websites, I interviewed three target users. Exploring how they built their e-commerce websites and their related experiences and feelings.


**Handmade Products Shop Owner**



**Nikki Wu**


"As a designer, I am capable of independently designing my website. Due to my lack of programming skills, it is **hard to communicate with programmers**. Ultimately leading me to settle for a reasonably suitable online website template."

**Clothing Retail Shop Owner**




"I hired a team to help me create the website. The..."

**Trendy Brand Store Owner**



"Since I am neither skilled in design nor coding, my..."

entire process, from design and production to going live, took a long time to complete.”




**Allen Lee**

only option is to find a template online to build my website. However, I am unsure of how to customize the template to make my website look more appealing.”



**Tony Mark**

Persona. 

This project is dedicated to meet the needs of small business owners who have an urgent need to build a website but lack professional design skills and cannot invest lots of time and money.

In response to these characteristics, I deeply analyzed and drew a persona of my target user.



**Zoe Lee**

- 29 years old
- Single
- Rochester, New York
- Small Business Owner

Zoe Lee has a store specializing in designer jewelry. To promote her products more effectively, she decides to create an website. Because she lack of design and programming skills and want to save time and money, Zoe chooses to use an online website builder to build her website.

However, she finds the website's performance unsatisfactory, few people shopping through the website. This leads her to consider whether she should hire a designer to improve the website.

**Needs**

- Expand sales channels through online presence
- Save time and money by finding cost-effective solutions
- Enhance brand awareness and customer satisfaction

**Pain Points**

- Lacks skills and experience to create and design a professional website on her own
- The chosen online website template doesn't provide satisfactory results and fails to meet business requirements

**Pain Points**

- Efficiency
- Aesthetics
- Design Capability

Based on background research and user research, I analyze the current problems encountered by users.

According to identify potential pain points of users and find future design opportunities.



Users don't know whether they should hire professionals for assistance, including photographers and content writers, etc.

Users don't know what content to use on their site and what style that better suits the theme of the site.

Users take long time to learn how to modify their website independently.



**Field Research of Artificial Intelligence**

- Image Generation
- Chatbots
- Image Processing
- Data Analysis
- And More

As AI technology advances rapidly, a multitude of generative AI programs have emerged. AI serves as an innovative means of content creation, capable of summarizing meeting content in real-time, crafting visually stunning websites, engaging in conversations with

users, and even creating artistic pieces based on user demands.

AI provides a powerful tool that can help users deliver more personalized, precise and efficient design.

### Image Generation



Disco Diffusion, Dall-E 2, Midjourney, Stable Diffusion, Adobe Firefly

### Chatbots



ChatGPT, The new Bing, Notion AI

### Image Processing



Relight, Biggip, Hama, Toolkit, Pixian

### Data Analysis



Google Analytics, Fathom, GoSquared, Market Splash

## Ideate

06

How can AI help target users to optimize their websites?

### Lack of Professional Support

Assist users in enhancing product images to studio-quality levels

Users can input their image optimization requirements or choose from keywords provided by WebGuru to enhance their image quality.

Furthermore, users have the flexibility to select specific areas within the image to adjust details.

### Lack of Design Capability

Combine text and images in a design-sensitive format

WebGuru can integrate images and text to provide personalized and creative designs, thereby achieving a superior user experience and enhanced visual appeal of the pages.

### Lack of Efficiency

Provide a complete brand new web design solution

WebGuru provides comprehensive web page design optimization solutions based on user requirements and product type.

Users select their preferred style, and with a single click, this design can be applied across all interfaces on their website.

## How does WebGuru work?

07

Upload Website

01

Propose a Requirement

02

Modify the Website

03

Publish

04

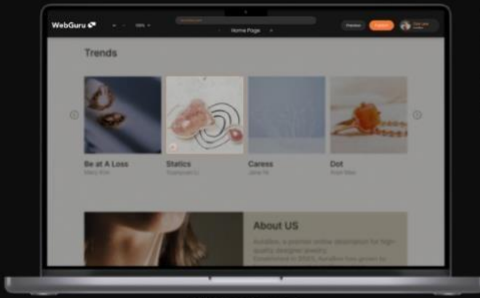
What can WebGuru do?



# AI can enhancing product imagines to studio-quality levels.

08

Local selection — Select a picture — Request — Trial different solutions — Outcome



Select a product picture

I want the background Text the requirement

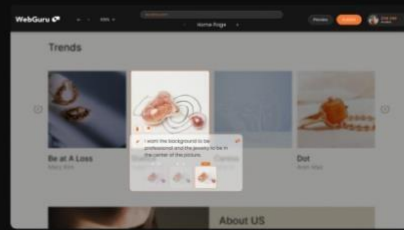
I want the background Personalized suggestions by WebGuru

I want the background to be **whiter** and the jewelry to be in the center of the picture. Change key word

## Imagine Modification

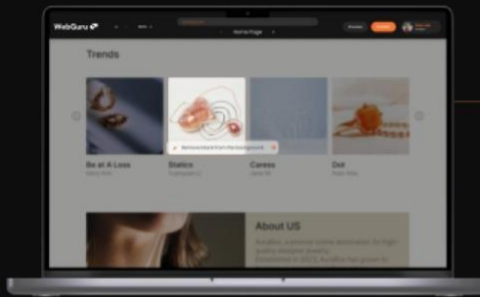
When users input modification requirements, WebGuru provides personalized suggestions based on the characteristics of the image, which users can choose to follow.

Additionally, users can select from a range of modification words WebGuru offered. Once a modification word is selected by the user, WebGuru automatically provides a series of related words, thus assisting users who are uncertain about how to express their requirements to better achieve their goal.

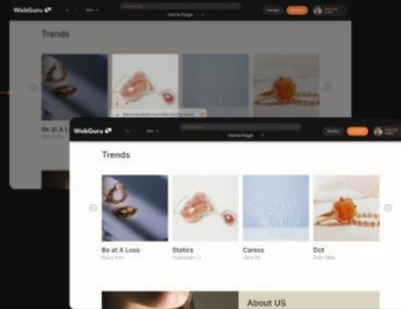


Trial different solutions

Local selection — Select a picture — Change tool — Request — Outcome



Selecting a specific area for modification



Finish modifying the image

## Part Modification

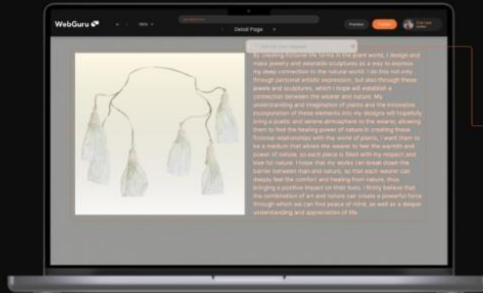
After imagine modifications, if users are still not satisfied with the image, they can choose part modifications.

By simply switching to the lasso tool and selecting the area they want to modify, WebGuru can effectively perform part modifications to satisfy users' personalized detail requirements.

## AI can combine text and images in a design-sensitive format.

08

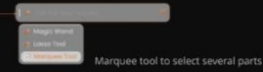
Local selection → Change tool → Select all the parts → Request → Outcome



### Combination of Text and Images

Users can freely switch different AI tools, select the text and images they want to integrate, and propose specific requirements.

Based on user's needs, WebGuru will blend text and images, providing users with a design-conscious and personalized layout solution.



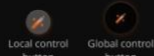
## AI can provide a complete brand new web design solution.

08

Global selection → Request → Trial different solutions → Apply

### Global and Local

WebGuru takes into account the possible global and local modifications that users may undertake. To enhance the intuitiveness of the user interface and reduce confusion during operation, I differentiate the control buttons for these two types of modifications through differences in color and layout position.



### Style Adjustment

WebGuru integrates user requirements with the types of products sold on the website to provide comprehensive web page design optimization solutions.

Users can click and trial various design solutions via an intuitive interface, choose their favorite design after comparison, and apply it. Then, WebGuru integrates this design solution across all pages of the entire website.



Visual  
Communication  
Design  
MFA

Communication  
Interaction  
Motion & 3D  
Design Studies

About the Program