

A Study on the Hidden Labour of Design: Cognitive Effort, Creative Integrity, and Client Expectations among Website Designers in Bangalore

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Abstract

The website design industry has become an important component of the digital marketing ecosystem, requiring professionals to combine technical expertise, creativity and effective client communication. While the visible outcomes of website design are easily recognized, the hidden cognitive, emotional and creative efforts involved in the design process often remain unnoticed. The present study examines the hidden labour experienced by website designers in Bengaluru, with particular focus on cognitive effort, creative integrity, client expectations and professional well-being.

The study adopts a descriptive and analytical research design using a quantitative approach. Primary data were collected through a structured questionnaire administered to 20 respondents, including website designers, freelance designers, UI/UX professionals, Web developers and digital marketing practitioners. Secondary data were collected from journals, books, industry reports and previous research studies. The collected data were analyzed using percentage analysis, descriptive analysis and tabular presentation.

The findings reveal that website designers experience significant cognitive effort, continuous mental concentration, emotional pressure and creative demands throughout the design process. Client expectations frequent revisions and AI-generated design references were identified as major factors influencing creative integrity and professional productivity. The study also highlights the existence of hidden labour in the form of emotional management, communication and hidden labour were found to affect job satisfaction and professional well-being.

The study concludes that website design work extends beyond technical and visual activities and involves substantial hidden labour that deserves greater recognition within the digital marketing industry improved client communication, realistic project expectations, professional recognition and support for designer well-being can contribute to healthier and more productive creative work environments.

Keywords: Hidden Labour, Website Designers, Cognitive Effort, Creative Integrity, Client Expectations, Digital Marketing, Professional Well-being, Bengaluru.

Introduction

In present research, examines the hidden labour within the Digital Marketing sector. Website Designers

perform not only visible technical and creative tasks but also engage in several invisible forms of labour such as cognitive thinking, ideation, creative designing, understanding client expectations, maintaining design originality and applying UI/UX principles. Designers are also required to manage emotional pressure, frequent revisions, unrealistic deadlines and continuous creative demands, while ensuring that the final output aligns with current market trends and client objectives. Although website and landing page design are often viewed as creative visual activities, the mental effort and emotional involvement behind the design process remain largely unrecognized. This study therefore focuses on understanding the cognitive effort, creative integrity and client expectations experienced by website designers in the contemporary digital business environment.

Research Background

The researcher's professional experience in working with clients on website and landing page projects provided practical insight into the challenges faced by designers in the digital marketing industry. During the design process, professionals such as freelance website designers, web developers, and small scale digital marketing agencies frequently encounter difficulties related to unclear client requirements, repeated design modifications, communication gaps, time pressure, and maintaining creativity under competitive conditions. The increasing use of AI-generated design references by clients has further added complexity to the design process, creating additional expectations for designers to reproduce or modify machine generated outputs. These industry experiences highlighted the need to study the hidden cognitive and emotional labour involved in website design work and motivated the researcher to explore this issue within the context of Bengaluru's growing digital eco system.

Formulation of research problem

The website design industry has become an important part of the digital marketing eco system, particularly in fast-growing business environments such as Bengaluru. Although website designers play a significant role in creating user-friendly and business-oriented digital platforms, their work often involves hidden cognitive, emotional and creative labour that remains unrecognized. Designers are expected to understand client expectations, manage multiple revisions, maintain originality, follow UI/UX standards, and deliver quality outputs within limited timelines. In many cases, clients focus primarily on the final design outcome without understanding the creative effort and mental workload involved in the design process. Existing studies have mainly concentrated on technical and visual aspects of website design, while limited research has examined the relationship between cognitive effort, creative integrity and client expectations. Therefore, the present study seeks to analyze the hidden labor experienced by website designers and understand how these factors influence their professional and creative experiences.

Research questions

1. How does cognitive effort influence the design process among designers in Bengaluru?
2. What is the impact of client expectations on designers' creative integrity and design decisions?
3. What factors contribute to hidden labour in the design profession?
4. Is there any relationship between cognitive workload and creative performance among designers?
5. How does hidden labour affect designers' job satisfaction and professional well-being

Objectives of the research

1. To examine the cognitive effort involved in the design process among designers in Bengaluru.
2. To analyze the influence of client expectations on designers' creative integrity and decisionmaking.
3. To identify the factors contributing to hidden labour in the design profession.
4. To evaluate the relationship between cognitive workload and creative performance among designers.
5. To examine the impact of hidden labour on designers' job satisfaction and professional wellbeing.

Significance of the research

This research is significant because it highlights the invisible cognitive and emotional labour involved in website design work, which is often overlooked in the digital marketing industry. The study contributes to understanding the practical challenges faced by website designers, freelancers and digital marketing professionals while managing client expectations and maintaining creative quality. It also provides insights into how repeated revisions; time pressure and AI-driven design trends affect designers' creative satisfaction and mental workload. The findings of the study may help digital agencies, clients and creative professionals develop better communication practices, realistic project expectations and healthier work environments within the website design industry.

Justification of the research

The justification for this research arises from the increasing demand for websites and landing pages in today's competitive digital business environment. Despite the rapid growth of the website design industry, very limited research has focused on the hidden labor and psychological effort involved in creative digital work. Website designers are required to balance technical skills, creative thinking, client communication and emotional patience simultaneously. In addition, the growing influence of AI-generated design concepts has created new challenges for designers in maintaining originality and meeting client expectations. Therefore, there is a strong need to academically examine these issues and understand the real experiences of designers working in the industry.

Need for the research

The need for the present research emerges from the lack of sufficient studies examining the hidden cognitive and emotional dimensions of website design work. Existing literature mainly focuses on design aesthetics, usability and technical performance, while limited attention has been given to the mental effort, creative pressure and revision-related stress experienced by designers. As the digital marketing industry continues to expand, website designers are increasingly expected to deliver innovative and high conversion designs within shorter timelines and changing client demands. Understanding these hidden challenges is important for improving professional practices, supporting designer well-being and creating more effective collaboration between clients and creative professionals.

Scope of the research

The scope of the present study is limited to website designers, freelance designers, web developers and small-scale digital marketing agencies operating in Bengaluru. The research focuses on analyzing the hidden labor involved in website and landing page design, including cognitive effort, creative integrity, emotional pressure, client expectations, revision management and the influence of AI-generated design trends. The study also examines how these factors affect the professional experiences and creative

satisfaction of designers within the digital marketing industry. However, the research does not focus on large corporate IT companies or purely technical software development processes unrelated to creative website design.

Scheme of chapterization and order of presentation

Chapter One - Introduction

This chapter introduces the background and significance of the study. It explains the concept of hidden labour in website design and discusses the growing cognitive and emotional demands faced by the website designers in the digital marketing industry. The chapter includes the research background, formulation of the research problem, research questions, objectives of the study, significance, justification, need and scope of the research. It also highlights the relevance of studying cognitive effort, creative integrity and client expectations within the Bengaluru digital business environment.

Chapter Two - Review of literature

Zihan Deng et al. (2023) Examined the experimental study on Web Interface Design optimization based on user cognitive load. This study mainly uses the experiment methods. They are eye tracking and user behavioral analysis. The duration of the study (operations) for subject 1 is 66.26% and subject 2 is 72.42%. In logical settings from the DIL website all subjects are able to complete the registration task.

Ferlin Firdau Turnip et al. (2022) Examined to build a web landing page that is used to promote SME's product or service business. The application is developed using a waterfall model with UML-based system modelling. The programming language is PHP with the codeigniter 3.1 framework and uses the MVC Concept.

Results of their study are a website dashboard and landing page display that can be used to promote business. The system starts with registration process, user login, add product/service, testimonials and portfolios. Then register and pay on the form. Through referral code confirmation, calculate the commission from the marketer. Help entrepreneurs to make simple landing pages easier. This will not only increase the income of entrepreneurs but also customers who register as marketers.

Dr. P. Manivannam and Mr. P. Purushothaman (2026) in their study examined the perceptions, practices and impacts of digital marketing through semi-structured interviews or surveys conducted with various professionals in Bengaluru. They understood that digital marketing significantly boost student enrollments. Study concludes by recommending increased investment in staff training, strategic budget allocation and the adoption of data-driven approaches to optimize digital marketing efforts. There is no data analysis. Bengaluru institutions face resource constraints that affect their ability to implement sophisticated strategies. Cultural and regional factors play a pivotal role in shaping the adoption and effectiveness of digital marketing strategies in the Bengaluru area. However, Bengaluru's status as a hub for technology and innovation created both opportunities and challenges. Highlights both global trends and logical nuances, continuously to theoretical framework like TAM and DOI while offering practical recommendations for institutions.

Willemien Visser (2026) Examined using SIP and SIT approach, from a cognitive viewpoint, designing is most appropriately characterized as a construction of representations. Design is a process of constructing and transforming representations rather than a simple problem solving. The study explored designers' mental activities, design strategies, external visual representations and collaborative design practices. It also highlighted the lack of sufficient research on the quality of design, which is relevant to understanding

the hidden cognitive labour and creative challenges faced by designers. Two methods to design-1) SIP Approach 2) SIT Approach SIT research states that designers “Dominate resource” is situational context whereas SIP research does not deny that these resources may evolve under the influence of designers. Design involves problem solving for a designer with extensive and long experience in several application domains. It is relevant to understanding the hidden labour, creative effort and mental processes involved in website designing.

Nahle Saleh Diab Thwairan(2024) Examined how the visual elements in website design such a layout, colours, fonts and visual sequence influence user experience and interaction. It focused on how visual appeal and interface organization affect user perception, attention, engagement and conversion on digital platforms. The research also highlighted the importance of visual compatibility and practical usability in enhancing website effectiveness. It is important to design according to a visual hierarchy that guides user attention and improves website functionality. Also, a responsive and user-friendly design increases customer satisfaction, retention and conversion rates. Visual design play a major role in shaping user behavior, engagement and interaction on websites. Aesthetic appeal, usability, typography, layout and navigation together improve the overall user experience.

Abidullah Khan et al.(30-JAN-2025) Examined four key roles AI plays in supporting divergent thinking in the design process: aiding research, kick starting creativity, generating design alternatives and facilitating prototype exploration. The analysis focused on identifying key theme and categories about-

- 1)Participants current practice in divergent thinking
- 2)Their current use of AI to support divergent thinking
- 3)Their values and desires for AI Tools

Their study is limited to only two countries-North America and Asia and the designers are novice designers. They did not include industrial experts in their study.

UI/UX designers perceived the role of AI Tools in the divergent thinking phase of the design process. Designer valued AI Tools that offer greater control over the ideation process, streamline collaboration and feedback loops, automate repetitive tasks to liberate creativity and go beyond textual prompting.

Joana Teodorescu and Viorel Vasile (2015) Examined the psychological impact of tips and tricks when creating Landing pages. Two essential elements that can influence a visitor: The design and the copywriting of a landing page. Key elements of the landing page are Headline, Sub headline, Body copy, trust indicators, form or Call to Action Button. Two objectives are considered to create and design a Landing page: about techniques, tools and steps and about consumer psychology. The anatomy of the landing page includes a promising headline which responds to visitors' big questions, targeted keywords, visual elements, responses to little questions in copy that a visitor would ask in his mind and a powerful call to action button.

Goran Bidjovski (2013) Examined the study of text on the web pages, an overall direction of the choice of fonts and their characteristics when designing webpages, as well as the same advice and opinions on the same topic are presented. The interpretation of the text on webpages of the users are analyzed. The problem with incompatibility with different Operating systems and web browsers in visualizing the fonts are considered. There is no correct solution in deciding the exact font style. To provide the correct solution, we need to collect a huge range of data with various parameters which causes web page download time to be slower. They have concluded that there is no universal solution in interpretation of the text with pre-determined typographical parameters.

Maha Mohammed Khalil Mohammed Elboksomaty (2018) research discussed the creative thinking for a graphic designer and its types-critical thinking, innovative thinking and creative thinking skills which encompass originality, flexibility, fluency and ability to think outside the box. Introduce the theory Guilford for creative thinking. To resolve a problem, sensing the problem, Identification of the problem, Analysis, Collection of relevant data, proposing solutions. Graphic designers that follow a strategy of creative thinking prefer the strategy of brain storming over the strategy of solving problems. The graphic designer has to be aware of all the strategies of creative thinking and use at least one of them when designing.

Renee Garrett et al.(July 2016) Study reviewed and consolidated research effective design and to define a short list of elements frequently used in research such as navigation, graphical representation, organization, content utility, purpose, simplicity and readability. Seven of the website design elements met their threshold requirement for review. Navigation (62.86%) was the most frequently discussed element, 60% highlighted the importance of graphics, 42.86% emphasized good organization, content utility was 37.114%, purpose 31.43%, simplicity 31.43% and readability 31.43%. This study is based on the first 100 research publications on google scholar search results.

Research Gap

Despite the growing body of literature on website design, landing page designing and UI/UX interaction, several research gaps still exist in the current literature. The researcher reviewed ten research papers related to website design and landing page designing and identified that previous studies mainly focused on individual aspects such as visual elements, typography, navigation, UI/UX interaction and AI supported creative designing. However, limited attention has been given to user cognitive behavior in relation to landing page effectiveness. Furthermore, very few studies have been conducted in the Bengaluru region. There is also a lack of quantitative analysis and limited research focusing on client expectations, user satisfaction and businessoriented website outcomes. Existing studies have largely concentrated on technical and visual aspects rather than analyzing the practical effectiveness of landing pages in meeting both user needs and business objectives.

In practical website development, clients often possess their own visual ideas and expect the final output to align with their imagination, branding and business goals. Designers, on the other hand, consider client satisfaction as an important factor during the designing process. However, previous research has not adequately explored the gap between client expectations and actual design implementation. In addition, limited studies have examined the combined influence of user cognitive behavior, client expectations and landing page performance within a single research framework. Therefore, the present study aims to bridge these gaps by integrating user cognitive approach, client expectations and quantitative analysis within the Bengaluru digital business environment to develop effective, user friendly and high conversion landing pages and websites.

Chapter Three - Profile of Industry

The Digital Marketing industry has experienced rapid growth in India due to increasing internet penetration, online business expansion and digital transformation among startups and small businesses. Bengaluru, popularly known as the Silicon valley of India, has emerged as one of the major centers for web development , UI/UX design, Branding and Digital services. The increasing demand for online

visibility and digital branding has created significant opportunities for website designers and digital marketing professionals.

Nature of website design Industry

The work of website designers involves multiple responsibilities, including website planning, UI/UX design, branding consistency, content structuring, responsive design, client communication, revision, feedback management and technical implementation. Website design is not limited to visual creativity alone; it also includes problemsolving, understanding user psychology, managing client expectations, and continuously adapting designs according to changing market trends. Designers are required to balance both technical and creative responsibilities while ensuring user friendly and business outcomes.

Industry structure.

The website design industry consists of various professionals such as Freelance website designers, small scale digital marketing agencies, startup creative teams, Corporate web developers, and independent branding consultants. Most of the work in this industry is project-based, deadline oriented, requiring professionals to handle multiple responsibilities simultaneously. Many designers work independently or with limited man power often balancing creative tasks, client communication, technical support, and business sustainability. Earnings in this sector are frequently based on freelance projects, contracts, or Gig-based opportunities.

Bengaluru as the research context

Bengaluru provides a suitable environment for studying website designers, due to its rapidly growing digital ecosystem, startup culture, and increasing dependence on online branding and business visibility. The city has a strong presence of entrepreneurs, educators, coaches, startups, freelancers, and content creators, who require websites and landing pages, to promote their products or services online. This has increased the demand for digital branding and intensified competition within the digital service market. Website design work is largely remote in nature, allowing professionals to communicate with clients and manage projects online from requirement gathering to final delivery. However, increasing market competition has also resulted in higher client expectations and greater pressure on designers to deliver creative and effective solutions within limited timelines.

Hidden labour in the Industry

Website designers engage in several forms of invisible labour that are often overlooked within the industry. These include continuous thinking and ideation, creative decision making, understanding unclear client requirements, managing repeated revisions, handling unrealistic deadlines and maintaining originality despite rapidly changing design trends. Designers also experience emotional pressure and mental exhaustion due to constant creative demands and the need to maintain professional relationships with clients. Therefore, website design work involves not only technical and creative skills but also significant cognitive and emotional effort.

Creative integrity and Client expectations

Website and landing page designers develop digital designs based on the client's products, services, content, images, videos, and branding requirements. Every design element must be carefully structured,

visually aligned, optimized for user engagement and developed according to UI/UX principles and search engine standards. Despite these efforts, clients often request multiple changes even after the final design has been delivered, leading to repeated revisions that may reduce the designer's creative satisfaction. In many cases Clients prioritize the final outcome over the creative effort involved in the design process, creating pressure on designers to meet expectations within short timelines.

The increasing use of AI-generated design tools has introduced additional challenges within the industry. Clients frequently use AI tools to generate design concepts and expect designers to recreate and modify those outputs exactly. However, AI-generated designs are often difficult to edit because they are created using manually layered design structures. Although designers can redesign similar concepts using professional tools, clients may still expect exact replication of AI-generated visuals. As a result, designers must spend additional time explaining the technical limitations, quality concerns, and practical challenges involved in modifying the AI-generated designs.

Role of small agencies and freelancers

Small Digital Marketing agencies and freelance website designers often manage multiple responsibilities simultaneously, including design creation, ideation, technical problem solving, client communication, debugging, and project management. Since many of these professionals work independently or with limited resources, they must continuously upgrade their skills to remain competitive in the rapidly evolving creative industry. In addition to maintaining creativity and innovation freelancers and small agencies are also required to sustain long term client relationships and ensure business growth.

RSDigitalcreator is a Digital Marketing consulting and online coaching platform that supports entrepreneurs, small business owners, and students interested in graphic design and digital marketing. The organization provides digital marketing services, website design support, branding solutions, and online training programs.

About RSDigitalcreator



Through direct interaction with clients and project-based design work, the platform has observed the increasing cognitive, emotional, and creative demands placed on website designers in the digital marketing industry. These practical experiences contributed valuable insights toward understanding the hidden labour involved in website design and digital creative work.

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Chapter Four - A conceptual/theoretical framework

The present study focuses on the hidden labour, experience by website designers in Bengaluru, particularly in relation to cognitive effort, creative integrity, hidden labour and client expectations. Website design work not only involves technical execution and visual creativity but also significant mental processing, emotional management and continuous interaction with clients. Designers are often required to balance creativity, business goals, user experience and market expectations under limited timelines.

To understand these hidden dimensions of website design work, the present study is supported by the following theoretical frameworks:

1. Cognitive Load Theory
2. Emotional Labour Theory
3. Creative Labour Theory
4. Job Demand-Resource (JD-R) Model

These theories collectively explain the relationship between cognitive effort, hidden labor, creative performance, client expectations and professional well-being among website designers.

1. Cognitive Load Theory

Cognitive Load Theory was developed by John Sweller(1988). The theory explains how mental effort and information processing influence human performance during complex tasks.

Website Designers are required to:

- Understand client requirements
- Apply UI/UX principles
- Organize visual hierarchy
- Solve technical problems
- Create original designs
- Handle revisions and feedback

These activities increase cognitive workload and require continuous mental concentration. Excessive cognitive load may lead to fatigue, stress, reduced creativity and lower work efficiency.

Relevance to the study

This theory helps explain:

- Mental effort involved in website designing
- Cognitive pressure during revisions
- Relationship between workload and creativity
- Impact of complex design tasks on professional performance

2. Emotional Labour Theory

Emotional Labour Theory was introduced by Arlie Hochschild(1983). The theory explains how professionals regulate emotions and maintain professional behavior during workplace interactions.

Website designers frequently experience:

- Client pressure
- Communication stress
- Unrealistic expectations
- Emotional exhaustion
- Revision-related frustration

Despite these challenges, designers must maintain professionalism and positive communication with clients throughout the project lifecycle.

Relevance to the study

This theory helps analyze:

- Emotional management among designers
- Stress created by client interactions
- Emotional exhaustion caused by repeated revisions
- Impact of emotional labor on job satisfaction

3. Creative Labour Theory

Creative labour theory explains the nature of work within creative industries where professionals combine innovation, originality, technical skills and emotional involvement.

Website designers operate in highly competitive environments where they are expected to:

- Produce visually attractive designs
- Maintain originality
- Meet business objectives
- Deliver user-friendly experiences

However, client demands, frequent modifications and commercial expectations may reduce creative freedom and creative satisfaction.

Relevance to the study

This theory helps to understand:

- Creative integrity among website designers
- Commercial influence on creativity
- Hidden labour in creative industries
- Relationship between client expectations and originality

4. Job Demand-Resource (JD-R) Model

The Job Demand-Resource Model explains how workplace demands and available resources influence

employee well-being and job performance.

Job Demands

- Tight deadlines
- Continuous revisions
- Client expectations
- Multi-tasking
- Technical problem-solving
- Creative pressure

Job Resources

- Technical expertise
- Creative autonomy
- Professional experience
- Client cooperation
- Organizational support

According to the model, excessive job demands combined with insufficient resources may result in stress, burnout and reduced professional satisfaction.

Relevance to the study

This model helps to understand:

- Relationship between workload and professional well-being
- Burnout among website designers
- Impact of hidden labor on job satisfaction
- Balance between work pressure and creative performance.

Conceptual Framework of the study**Independent variables**

- Cognitive effort
- Client expectations
- Revision pressure
- Emotional labour
- AI-generated design expectations

Mediating Variables

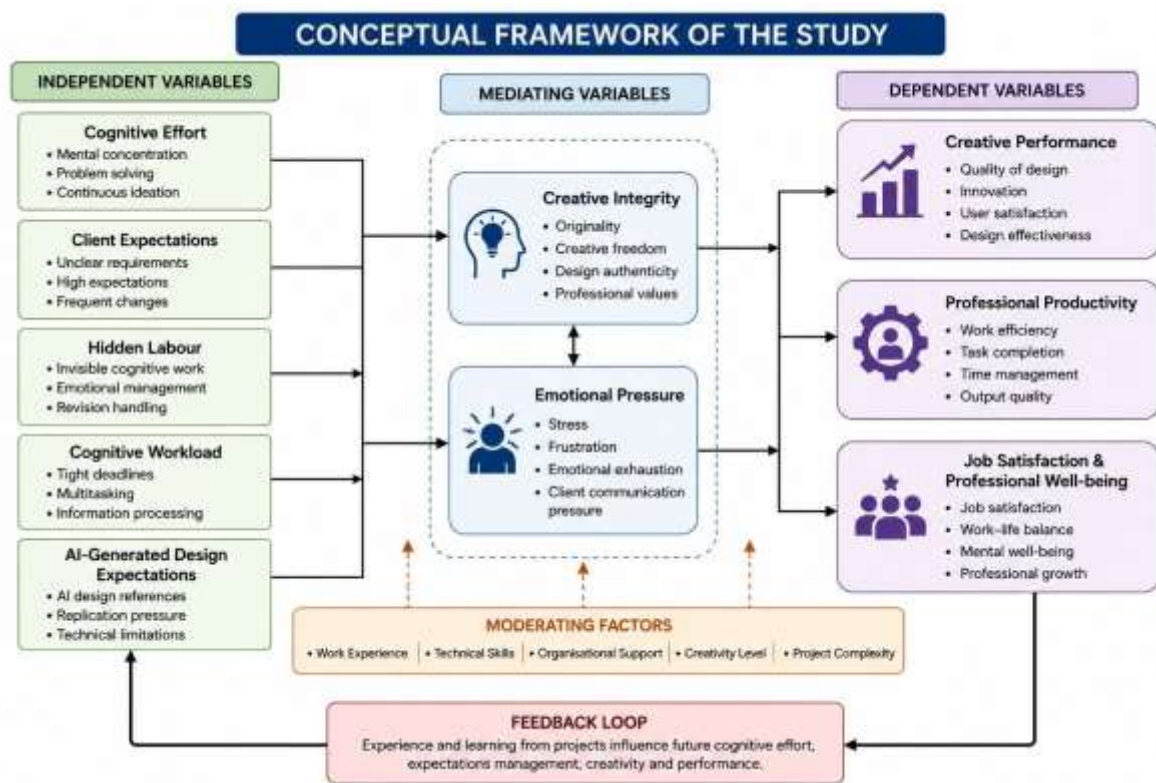
- Creative integrity
- Emotional stress
- Cognitive workload

Dependent Variables

- Creative performance
- Professional productivity
- Job satisfaction
- Professional well-being

Relevance of Theoretical Framework

The integration of these theories provides a comprehensive understanding of the hidden labour experienced by website designers in Bengaluru. The framework explains how cognitive effort, emotional management, client expectations and creative demands influence designers, creativity, productivity, job satisfaction and professional well-being within the digital marketing industry.



The conceptual framework of the present study explains the relationship between cognitive effort, hidden labour, client expectations and professional outcomes among website designers in Bengaluru. The framework is designed to understand how invisible cognitive and emotional activities influence the creativity, productivity and well-being of designers working in the digital marketing industry.

The framework consists of three major components: Independent variables, Mediating variables and Dependent variables.

The independent variables include cognitive effort, client expectations, hidden labour, cognitive workload and AI-generated design expectations. Cognitive effort refers to the mental concentration, problem-solving ability and continuous ideation involved in website designing. Client expectations include unclear requirements, frequent modifications and high demands for creativity and business-oriented outputs. Hidden labour refers to the invisible cognitive and emotional work performed by designers, such as emotional management, revision handling and maintaining professional communication. Cognitive workload includes tight deadlines, multitasking and processing large amounts of design-related information. AI-generated design expectations represent the growing pressure on designers to replicate or modify AI-generated concepts according to client demands.

These independent variables influence the mediating variables, namely creative integrity and emotional pressure. Creative integrity refers to originality, creative freedom, authenticity and the professional values maintained by designers during the design process. Emotional pressure includes stress, frustration, emotional exhaustion and communication pressure experienced while managing clients and project revisions.

The mediating variables further influence the dependent variables of the study, namely creative performance, professional productivity and job satisfaction with professional well-being. Creative performance refers to innovation, design quality, user satisfaction and design effectiveness. Professional

well-being includes mental well-being, work life balance, professional growth and overall satisfaction within the profession.

The framework also includes moderating factors such as work experience, technical skills, organizational support, creativity level and project complexity. These factors may strength or weaken the relationship between the independent and dependent variables.

Finally, the framework highlights a feedback loop where designers' experiences, learning and project outcomes influence future creativity, cognitive effort, expectation management and professional performance. Thus, the conceptual framework provides a comprehensive understanding of the hidden labour involved in website design and explains how cognitive, emotional and creative factors collectively shape designers' professional experiences within the Bengaluru digital ecosystem.

Chapter Five - Research Methodology

Research methodology refers to the systematic process used for collecting, analyzing and interpreting data to achieve the objectives of the study. The present research examines the hidden labour experienced by website designers with special reference to cognitive effort, creative integrity and client expectations in Bengaluru.

Research Design

The study adopts a descriptive and analytical research design.

Descriptive Research

Used to describe the hidden labour, cognitive effort, emotional stress and professional experiences of website designers.

Analytical research

Used to analyze relationships between:

- Cognitive effort
- Client expectations
- Creative integrity
- Job satisfaction
- Professional productivity

The study primarily follows a quantitative research approach supported by industry observations.

Nature of data

The study uses both:

Primary data & Secondary data

Primary data

Primary data will be collected directly from:

- Website designers
- Freelance designers
- UI/UX designers
- Web designers
- Small-scale digital marketing agencies

Secondary data

Secondary data will be collected from:

- Research journals
- Books

- Websites
- Industry reports
- Previous studies
- Digital marketing publications

Area of the study

The study is conducted in Bengaluru, Karnataka, due to its rapidly growing digital ecosystem, startup culture and increasing demand for website design and digital marketing services.

Population of the study

The population of the study includes:

- Freelance website designers
- UI/UX designers
- Web developers
- Small-scale digital marketing agencies operating in Bengaluru

Sampling Technique

The study adopts:

Convenience sampling method Respondents are selected based on:

- Accessibility
- Availability
- Relevance to the study

Sampling Size

The proposed sample size for the study is :

20 respondents

The sample includes:

- Freelance designers
- UI/UX professionals
- Web developers
- Digital marketing professionals

Tools for Data Collection

Statistical tools used for Analysis

The data collected from 20 respondents were analyzed using the following tools:

1. Percentage Analysis:

Used to analyze the demographic profile of respondents and their responses to the questionnaire.

2. Descriptive Analysis:

Used to summarize and interpret respondents opinions regarding cognitive effort, creative integrity, client expectations, hidden labour and job satisfaction.

3. Tabular Analysis:

Used to present the collected data in a systematic and understandable format for easy interpretation.

Interpretation:

The study is based on primary data collected from 20 respondents over a period of one month through a structured questionnaire. The analysis indicates that designers experience considerable cognitive effort, client-related pressure and hidden labour in their professional activities. These factors influence their creativity, productivity, job satisfaction and overall well-being.

The primary data will be collected using:

Structured Questionnaire The questionnaire includes:

- Multiple-choice questions
- Likert scale statements
- Opinion-based questions

The questionnaire focuses on:

- Cognitive effort
- Client expectations
- Emotional labour
- Creative integrity
- Revision management
- Job satisfaction

Statistical Tools used for analysis

The collected data will be analyzed using the following statistical tools:

Hypotheses of the study

Null Hypotheses (H_0)

- **$H_0 1$** o There is no significant relationship between cognitive effort and the design process among designers in Bengaluru.
- **$H_0 2$** o Client expectations have no significant influence on designers' creative integrity and decision making.
- **$H_0 3$**
o There is no significant relationship between hidden labour and designers' creative performance.
- **$H_0 4$** o Cognitive workload has no significant impact on designers' productivity and creativity.
- **$H_0 5$** o Hidden labour has no significant effect on designers' job satisfaction and professional well-being.

Period of the study

The study covers the period from May 2026 to June 2026,

Limitations of the study

1. The study is limited to Bengaluru city.
2. The research focuses mainly on website designers and small-scale digital marketing agencies.
3. Responses are based on personal opinions and experiences of respondents.
4. Time and resource limitations may affect wider data collection.

Chapter Six - Data Analysis

Introduction

This chapter presents the analysis and interpretation of data collected from website designers, freelance designers, product designers, UI/UX professionals and other design-related professionals. The study aims to examine the hidden labour involved in the design profession with special reference to cognitive effort, creative integrity, client expectations and professional's well-being.

The analysis is based on the responses collected through a structured questionnaire consisting of demographic variables and twenty statements measured using a five-point Likert scale.

Objectives of the Study

Sino	Objectives
1	To examine the cognitive effort involved in the design process among designers.
2	To analyze the influence of client expectations on designers' creative integrity and decision-making.
3	To identify the factors contributing to hidden labour in the design profession.
4	To evaluate the relationship between cognitive workload and creative performance among designers.
5	To examine the impact of hidden labour on designers' job satisfaction and professional well-being.

Hypothesis of the study

Hypothesis No.	Null Hypothesis(H ₀)
H01	There is no significant relationship between cognitive effort and the design process among designers.
H02	Client expectations have no significant influence on designers' creative integrity and decision-making.
H03	There is no significant relationship between hidden labour and designer's creative performance.
H04	Cognitive workload has no significant impact on designers' productivity and creativity.
H05	Hidden labour has no significant effect on designers' job satisfaction and professional well-being.

Demographic profile of respondents

Table Gender-wise distribution

Gender	Frequency	Percentage
Male	11	55%
Female	9	45%
Total	20	100%

Interpretation

The majority of respondents were male (55%), while female respondents constituted 45%. This indicates representation from both genders and provides diverse viewpoints regarding hidden labour in the design profession.

Table Age-wise distribution

Age Group	Frequency	Percentage
Below 25 years	1	5%
26-35 years	2	10%
36-45 years	10	50%
Above 45 years	7	35%

Total	20	100%
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Interpretation

Half of the respondents belong to the age group of 36-45 years, indicating that most participants possess substantial professional experience and industry exposure.

Table Educational qualification

Qualification	Frequency	Percentage
Diploma	1	5%
Professional certification	2	10%
PG Degree	16	80%
Other	1	5%
Total	20	100%

Interpretation

The majority of respondents (80%) possess postgraduate qualifications, suggesting a highly educated respondent group.

Table Work experience

Experience	Frequency	Percentage
Below 2 years	2	10%
2-5 years	1	5%
6-10 years	3	15%
Above 10 years	14	70%
Total	20	100%

Interpretation

Most respondents (70%) have more than ten years of professional experience. Therefore, the opinions gathered are based on substantial practical exposure to the design profession.

Variable wise analysis

Table Analysis of cognitive effort

Statements	Overall Response
Designing requires continuous mental concentration	Majority agree/Strongly agree
Significant cognitive effort is required while creating design concepts	Majority agree/strongly agree
Managing multiple projects increases mental workload	Majority agree
Creative tasks often lead to mental exhaustion	Majority agree

Interpretation

The findings indicate that website design is a cognitively demanding profession. Designers are required to maintain continuous concentration, manage multiple responsibilities and engage in intensive creative thinking. Mental exhaustion emerges as a common challenge among professionals.

Table Analysis of creative integrity

Statements	Overall Response
Maintaining originality is important	Strongly supported
Client demands limit creative freedom	Supported
Pressure exists to modify creative ideas	Supported
Creative integrity is important in professional practice.	Strongly supported

Interpretation

The respondents strongly value originality and creative integrity. However, client requirements often create pressure to alter creative concepts, leading to compromises in creative freedom.

Analysis of Client expectations

Statements	Overall Response
Clients often have fixed expectations	Supported
Understanding client expectations is essential	Strongly supported
Unrealistic expectations increase work experience	Supported
Frequent revisions affect productivity	Supported

Interpretation

Client expectations significantly influence designers' work processes. Unrealistic expectations and repeated revisions contribute to increased pressure and reduced productivity.

Analysis of hidden labour

Statements	Overall Response
Design work remains unrecognized	Supported
Emotional effort is involved in client communication	Strongly supported
Unpaid additional work occurs during revisions	Supported
Hidden labour affects work-life balance	Supported

Interpretation

The results reveal the existence of hidden labour in design work. Designers perform several invisible tasks such as emotional management, client handling and unpaid revision work that often go unnoticed.

Analysis of job satisfaction and professional well-being

Statements	Overall Response
Designers feel valued for contributions	Moderately supported
Excessive workload affects creativity and productivity	Strongly supported
Hidden labour contributes to stress	Strongly supported
Recognition improves job satisfaction	Very strongly supported

Interpretation

The findings demonstrate that hidden labour and workload contribute significantly to professional stress. Recognition and appreciation are important determinants of job satisfaction and well-being.

Objective-wise analysis and Hypothesis testing

Objective	Null Hypothesis(H ₀)	Major Findings	Interpretation	Result
To examine the cognitive effort involved in the design process among designers	H ₀₁ : There is no significant relationship between cognitive effort and the design process among designers.	Respondents reported continuous concentration, mental and creative exhaustion	Cognitive effort forms an integral part of the design process.	H01 not supported
To analyze the influence of client expectations on designers' creative integrity and decision making	H ₀₂ : Client expectations have no significant influence on designers creative integrity and decision making	Designers reported limitations on creative freedom due to client demands and revisions.	Client expectations influence design decision and creative integrity.	H02 not supported
To identify factors contributing to hidden labour in the design profession	H ₀₃ : There is no significant relationship between hidden labour and designers' creative performance	Emotional effort, unpaid revisions and unrecognized work were frequently reported.	Hidden labour is a major component of design work.	H03 not supported
To evaluate the relationship between cognitive workload and creative performance among designers.	H ₀₄ : Cognitive workload has no significant impact on productivity and creativity.	Excessive workload and multitasking were reported to affect creativity and productivity	Cognitive workload influences professional performance.	H04 not supported

Chapter Seven - Findings, suggestions and conclusions

Table Objectives, Hypothesis and Findings

Objective	Null Hypothesis(H ₀)	Major Findings	Interpretation	Result
To examine the cognitive effort involved in the	H ₀₁ :There is no significant relationship between	Respondents reported continuous concentration,	Cognitive effort forms an integral part of the design process.	H01 not supported

design process among designers.	cognitive effort and the design process among designers.	mental workload and creative exhaustion.		
To analyze the influence of client expectations on designer's creative	H ₀₂ : Client expectations have no significant influence on designers	Designers reported limitations on creative freedom due to	Client expectations influence design decisions and	H ₀₂ Not supported
integrity and decisionmaking.	creative integrity and decisionmaking.	client demands and revisions.	creative integrity.	
To identify the factors contributing to hidden labour in the design profession.	H ₀₃ : There is no significant relationship between hidden labour and designers creative performance.	Emotional effort, unpaid revisions and unrecognized work were frequently reported.	Hidden labour is a major component of design work.	H ₀₃ not supported
To evaluate the relationship between cognitive workload and creative performance among designers.	H ₀₄ : Cognitive workload has no significant impact on productivity and creativity.	Excessive workload and multitasking were reported to affect creativity and productivity.	Cognitive workload influences professional performance.	H ₀₄ not supported
To examine the impact of hidden labour on designers' job satisfaction and professional well-being.	H ₀₅ : Hidden labour has no significant effect on job satisfaction and professional well-being.	Hidden labour contributes to stress, while recognition improves satisfaction.	Hidden labour influences wellbeing and satisfaction.	H ₀₅ not supported.

Major findings of the study

Si.No	Major Findings
1	Designers experience high levels of cognitive effort during the design process.
2	Continuous concentration and mental involvement are essential aspects of design work.
3	Client expectations frequently influence design decisions and creative freedom.
4	Unrealistic client expectations increase professional pressure.
5	Repeated revisions negatively affect productivity.

6	Hidden labour exists in the form of emotional effort, communication management and unpaid revisions.
7	Hidden labour affects work life balance and contributes to professional stress.
8	Excessive workload reduces creativity and productivity.
9	Recognition of designers' contributions improves job satisfaction.
10	Professional well-being is closely linked to workload, recognition and hidden labour experiences.

Suggestions

Basing on the findings of the study, the following suggestions are offered to improve the professional experience and well-being of website designers.

1. Improve Client-Designer Communication

Clients should be encouraged to provide clear project requirements, objectives and expectations at the beginning of a project. Proper communication can reduce misunderstandings, unnecessary revisions and project delays.

2. Establish structured and revision policies

Freelancers and digital marketing agencies should define the number of revisions included in project agreements. This can help reduce unpaid additional work and manage client expectations more effectively.

3. Recognize hidden labour in design work

Organizations and clients should acknowledge the cognitive effort, emotional involvement and creative thinking required in website design. Greater recognition of these contributions can improve designer motivation and job satisfaction.

4. Promote healthy work practices

Website designers should be encouraged to maintain work-life balance through proper workload management, realistic deadlines and adequate breaks to reduce stress and mental exhaustion.

5. Provide professional development opportunities

Continuous training in UI/UX design, emerging technologies, AI-assisted design tools and client management skills can help designers improve efficiency and adapt to changing industry demands.

6. Encourage creative freedom

Clients should allow designers reasonable flexibility to apply their professional expertise and creativity. This can enhance design quality, innovation and overall project outcomes.

7. Develop awareness about AI-generated designs

Clients should be educated about the limitations and practical challenges of modifying AI-generated designs. This can help establish realistic expectations and reduce unnecessary pressure on designers.

8. Support mental well-being

Organizations and freelancer communities should promote awareness of mental health, stress management and emotional well-being among design professionals to create healthier work environments.

9. Strengthen professional recognition

Acknowledging the contributions of designers through appreciation, feedback and fair compensation can improve professional satisfaction and long-term career growth.

10. Encourage further research

Future studies may be conducted with larger sample sizes, different geographical locations and other creative professions to gain a broader understanding of hidden labour within the digital and creative industry.

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Overall Conclusion

The study reveals that website designers perform substantial hidden labour beyond visible design activities. Cognitive effort, emotional involvement, client management and unpaid revisions represent significant yet frequently unrecognized dimensions of professional design work. The findings further indicate that client expectations influence creative to stress and impacts job satisfaction and professional well-being. Recognition of designer's efforts emerges as a crucial factor in enhancing motivation, satisfaction and professional effectiveness.

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