Task5 - A dissertation framework based on the DIEP framework and PACT model

Introduction

Background and Significance:

First, the importance of User-Centered Design in interaction design will be explained, as well as the core concept and application value of PACT (People, Activities, Contexts, Technologies) framework. The importance of optimizing user experience design in combination with the PACT model in the design, and demonstrating its effectiveness through the analysis of design projects (such as crowd observation, meditation puzzles, Sweetair).

Target:

It is to explore how to reasonably analyze diverse user scenarios through the PACT framework in the project, and put forward new strategies to improve the design direction and application in the future in combination with the actual project.

Describe

Introduce the core elements of the PACT model:

1.People：

In the People Watching project, user profiling (e.g. gender, age, occupation, and behavior patterns) is carried out.

In the Meditation Puzzle project, the pain points of different user groups (e.g., digital screen time management issues) were investigated.

2. Activities：

In the field observation, analyze the flow of users' activities in the restaurant (e.g., queuing, ordering, dining).

Analyze how efficiently people use their phones and their main activities (e.g., low-value vs. high-value behaviors).

3.Contexts：

In the field observation, the indoor and outdoor layout of the restaurant, the weather and the time of day are all part of the scene in the survey.

The impact of technology dependency on both the user's psychology and life (e.g., anxiety and loneliness).

4.Technologies：

In the project, behavior tracking and feedback technology was introduced to help users solve time management challenges .

In Sweet Air, information and observed user behavior are translated into interactions with new products and technologies.

Interpret

The significance of the PACT framework in the project:

First of all, explain how to analyze user behavior and needs through PACT method in the project. In restaurant observations, how environmental factors influence user behavior (e.g., temperature influences beverage choices), and how technology tools (e.g., the Meditation Puzzle app) support users to change behavior, manage time, and reduce low-value behaviors. Secondly, this paper analyzes the

difficulties of PACT applications in complex scenarios, such as how to balance the contradiction between technical design and user experience optimization, where most of the user needs are very diverse. Finally, some theories and literature support are proposed, and relevant design theories (such as user journey map, pain point analysis, and user portraits) are cited to support PACT analysis, and literature interpretation technology is used to promote and constrain humanized design.

Evaluate

Practical effects of the PACT framework:

The key findings of three case studies were evaluated: the change pattern of user behavior in the Chinese restaurant in Project 1, the experimental effect and user feedback on screen time management in Meditation Puzzle, and the design potential of technology-environment and product interaction in Sweet Air.

Compare the advantages and disadvantages of PACT with other user research methods:

The PACT model is more comprehensive (considering people, activities, contexts, and technologies), but it may face limitations in actual project research (such as insufficient data volume or single user group).

Plan

Future Research & Practice Plans:

  Suggestions for improvement will be made in response to the problems found, and research on the relationship between user behavior and technical needs will be deepened. Conceptualize and develop more diverse, multi-topic PACT use cases (e.g. virtual reality design).

Plans for application in future projects:

For example, the optimization application of restaurant service system, designed for technology-dependent psychotherapy applications, will be extended to a wider range of user scenarios (such as smart cities, smart shared spaces) in the future.

Conclusion

In interaction design, a comprehensive analysis of user behavior and needs is carried out through the research framework of PACT, which can provide theoretical and practical support for the design and optimization of projects, and propose design solutions to solve practical problems or human needs in today's society. Therefore, in the future design, it is necessary to continue to study and apply the PACT model and user-centered project strategy to promote the optimization and development of user experience research.