Capstone Research

UX Professionals' Learning and Usage of UX Methods in Agile Environments in the U.S.

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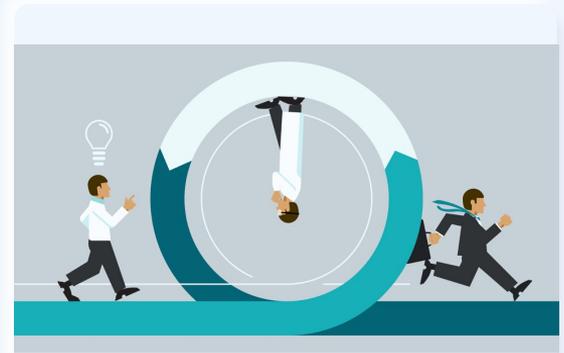
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Introduction

Background and Purpose

Background

All over the world, organizations increasingly look to usability and user experience (UX) in their design and development processes. To meet this need, UX communities are maturing in many countries and emerging in other countries.

It is, however, a common concern that there are still many challenges in the UX professionals' work—even if the topic has been studied for decades, UX professionals are still facing challenges.

Purpose

To investigate how UX professionals in the U.S. apply and learn about UX methods in Agile environments.

Research Questions

RQ 1 — *Where do UX professionals in Agile environments find information on UX methods?*

RQ 2 — *How do UX professionals in Agile environments learn about UX methods?*

RQ 3 — *What do UX professionals in Agile environments consider when choosing UX methods?*

RQ 4 — *Which methods do UX professionals use today and why?*

02

Literature Review

Overview of Relevant Studies

Related Study (Cajander et al., 2022)

Title: UX Professionals' Learning and Usage of UX Methods in Agile

Method: 13 UX professionals from different industries and two European countries were interviewed regarding Agile and UX.

Results: Colleague support is vital for UX professionals to learn about methods. Time pressure leads to the use of familiar methods. Prototyping, user testing, user journeys, and workshops are the most used methods. UX methods are perceived as complex and time-consuming to learn.

Related Study (Inal et al., 2020)

Title: *Positive Developments but Challenges Still Ahead: A Survey Study on UX Professionals' Work Practices*

Method: Reviewed 32 empirical studies on usability and UX work, then surveyed 422 UX professionals in Denmark, Finland, France, Malaysia, and Turkey using a 62-question comprehensive questionnaire to collect data on key issues in UX work practices.

Results: UX professionals have individual knowledge of usability and UX concepts, methods, and tools. On average, they use between one and five HCI theories and one to three different techniques and tools. UX is involved at all stages in organizations and is generally well-known across all levels. However, UX professionals do not typically identify as part of a professional community at the country or community level.

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Methods

Data Collection and Analysis, Participants, and Equipment

Methodology

Data Collection Method

Semi-structured remote interviews to gather data and ensure an understanding of the UX professionals.

Equipment

Zoom was used to conduct the remote interviews.

Data Analysis Method

Research questions were answered by conducting a **thematic analysis**. A thematic analysis is a qualitative descriptive approach for identifying, analyzing, and reporting patterns (themes) within data.

Participants

| Participant	Job Position	Years of UX Experience	Highest Education	State
1	Senior UX Researcher	6	PhD, Technical Communication and Rhetoric	GA
2	UX Design Lead	20	BFA, Performance	NM
3	Principle UX/UI Designer	14	BA, Design and Visual Communication	GA
4	Lead Human Factors Engineer	27	PhD, Information Science	TX
5	UX Researcher	7	MS, Technical Communication Management	CA

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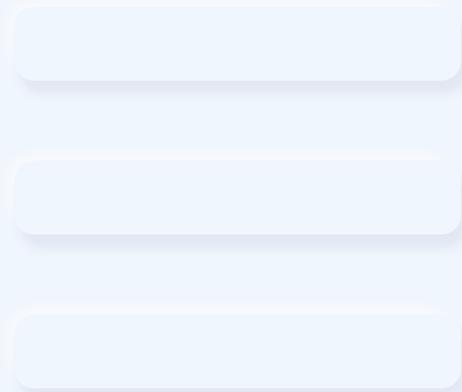
Results

Key Findings

RQ 1: Where do UX professionals in Agile environments find information on UX methods?
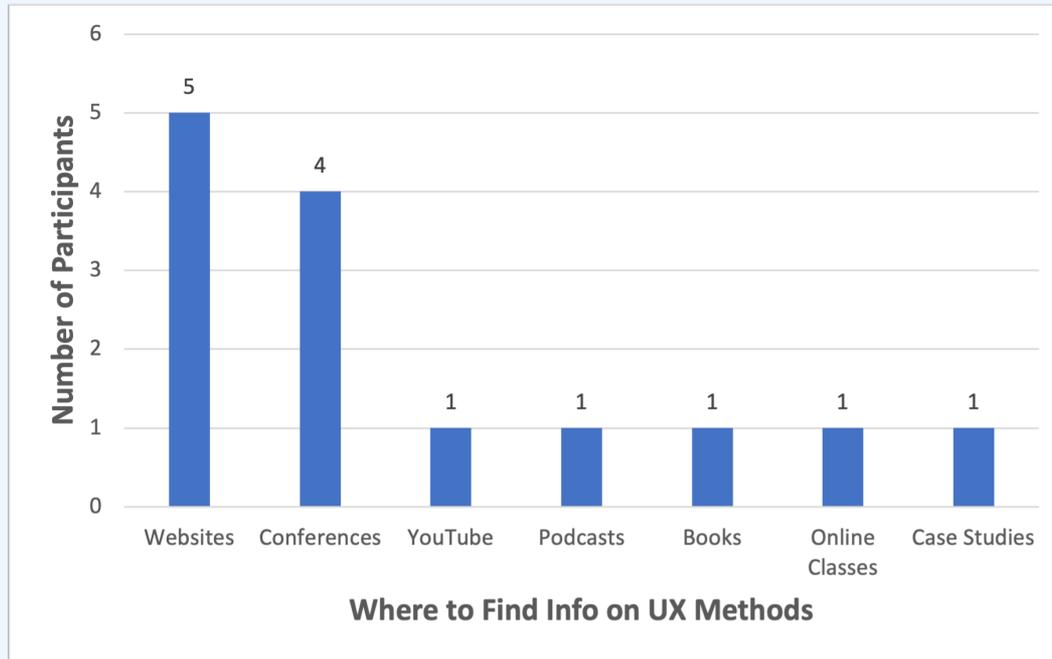
RQ 2: How do UX professionals in Agile environments learn about UX methods?
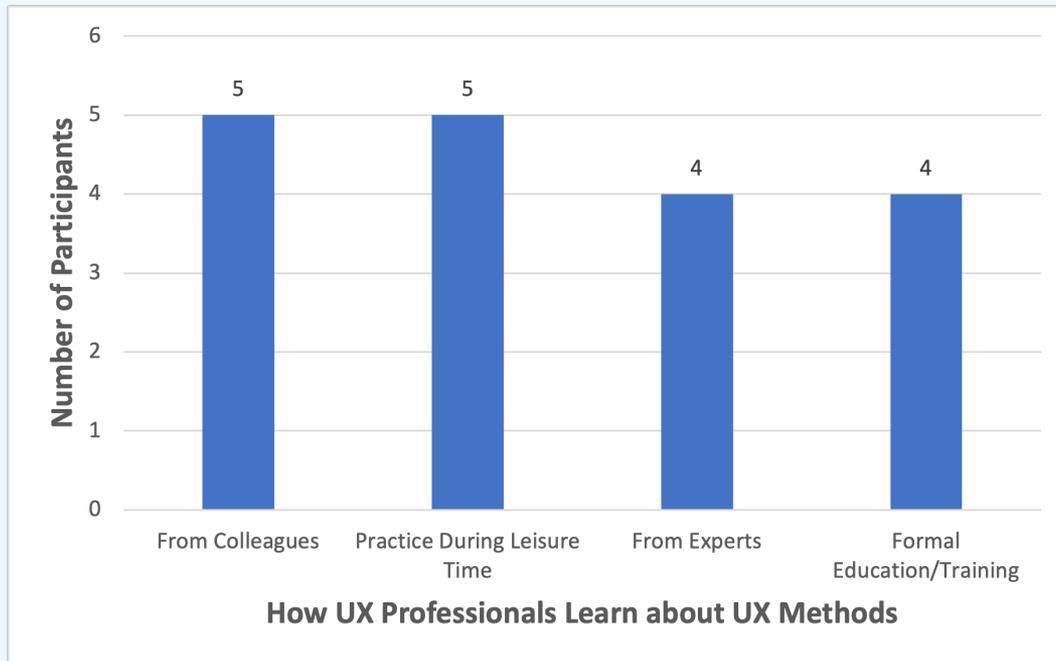
RQ 3: What do UX professionals in Agile environments consider when choosing UX methods?

Top Considerations:

1. *Customer-Centered*

2. *User-Centered*

3. *Cost Expectancy*

4. *Time Constraint*

5. *Performance Expectancy*

RQ 4: Which methods do UX professionals use today? Why or why not?

Method	Frequency	Pros	Cons
Interviews	4	Effective	Time-consuming
Prototypes	3	Allows for early detection of design flaws	Costly
Focus Groups	2	Easy to gather qualitative data	Susceptible to group-think
A/B Testing	2	Provides hard proof, but can be time-consuming	Time-consuming
User Surveys	2	Useful input can be collected	Most users rush or provide poor feedback
Usability Tests	2	Reliable	Time-consuming
Card Sorting	1	Easy	Inconsistent results
Google Analytics	1	Tracking specific metrics help determine user behavior from the moment they hit the page to the time of conversion	Lacks subjective feedback from users and time-consuming to analyze

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Discussion

Implications, Limitations, and New Opportunities for Investigation

Implications

The importance of considering project stage when choosing a UX method

The need for effective communication and flexibility

The importance of ongoing learning and professional development opportunities for UX professionals

Limitations

- *Limited sample size*

- *Lack of funding*

- *16-week time constraint*

- *Self-reported data from participants*

Opportunities for Future Research

- *Expand sample size*

- *Investigate how the use of emerging technologies can impact the choice and effectiveness of UX methods*

- *Explore the impact of different training and professional development programs on UX professionals' knowledge and usage of UX methods*

- *Explore how different team structures and dynamics affect UX methodology choices*

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Conclusion

Summary

Summary

UX methods have been studied through the years. However, more was needed to understand UX professionals' lifelong learning processes related to UX methods in Agile environments in the U.S.

RQ 1: *UX professionals use website and attend conferences when trying to find info on UX methods*

RQ 2: *UX professionals learn how to use UX methods by learning from colleagues and practicing on side projects during leisure time. They also learn from experts or from formal education and workplace training.*

RQ 3: *When choosing UX methods in Agile environments, there were 5 top considerations: Customer-centered, user-centered, cost expectancy, time constraint, and performance expectancy*

RQ 4: *Almost all the participants use interviews and prototypes. Both are effective but are either costly or time-consuming.*

THANKS!

Do you have any questions or comments?

References

Cajander, Å., Larusdottir, M., & Geiser, J. L. (2022). UX professionals' learning and usage of UX methods in Agile. *Information and Software Technology*, *151*, 107005. https://doi.org/10.1016/j.infsof.2022.107005

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