Design principles investigation

Flexibility-usability
tradeoff

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What is Flexibility - Usability Design

"The adaptive capacity of a system, process, or product to accommodate various changes or modifications, ensuring it meets diverse requirements or user preferences." [3]

Jack of all trades, master of none. [1]

Example

01

PC or PS5?

Usability Design Made for known Tasks [1]











Personal Computer

"The primary value of a personal computer is that is addresses uncertainty about how it can and will be used: word processing, tax preparation, ermail." [1]

PS5

"People purchase video game players to play games, but they purchase personal computers to satisfy variety of needs, many of which are unknown at the time of purchase." [1]





Example

The Swiss Army Knife

Flexible Design

Made for Contingencies [2]

"Simply put, a usability-flexibility tradeoff means that the more flexible and multifunctional our technology gets, the less useful and usable it will be for accomplishing a particular task. In other words, more flexibility often entails less usability, and vice versa." [2]



Conclusion

Sources

[1] W. Lidwell, K. Holden, and J. Butler, Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. Beverly, Mass: Rockport, 2010. Page 102

[2] C. Cocchiarella, "Usability-flexibility tradeoffs: Jack of all trades, master of none," MINDFUL TECHNICS, https://mindfultechnics.com/usability-flexibility-tradeoffs/ (accessed Apr. 21, 2025).

[3] "Architecture," StudySmarter UK,

https://www.studysmarter.co.uk/explanations/architecture/landscape-design/design-flexibility/#:~:text=Design%20fle xibility%20refers%20to%20the,diverse%20requirements%20or%20user%20preferences. (accessed Apr. 21, 2025).