

Bridging the Gap Between UX Practices & AI-Enabled Design Tools

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Keywords

User Experience (UX), Human-AI Collaboration, Design-Support Tools, Data-Driven Design

Methodology

- Interviews with 8 UX practitioners
- **Retrospective analysis** of previous design project files
- **Speed dating** with storyboards of use scenarios for state-of-the-art data-driven design support tools
- Thematic analysis & affinity diagramming among 2 researchers



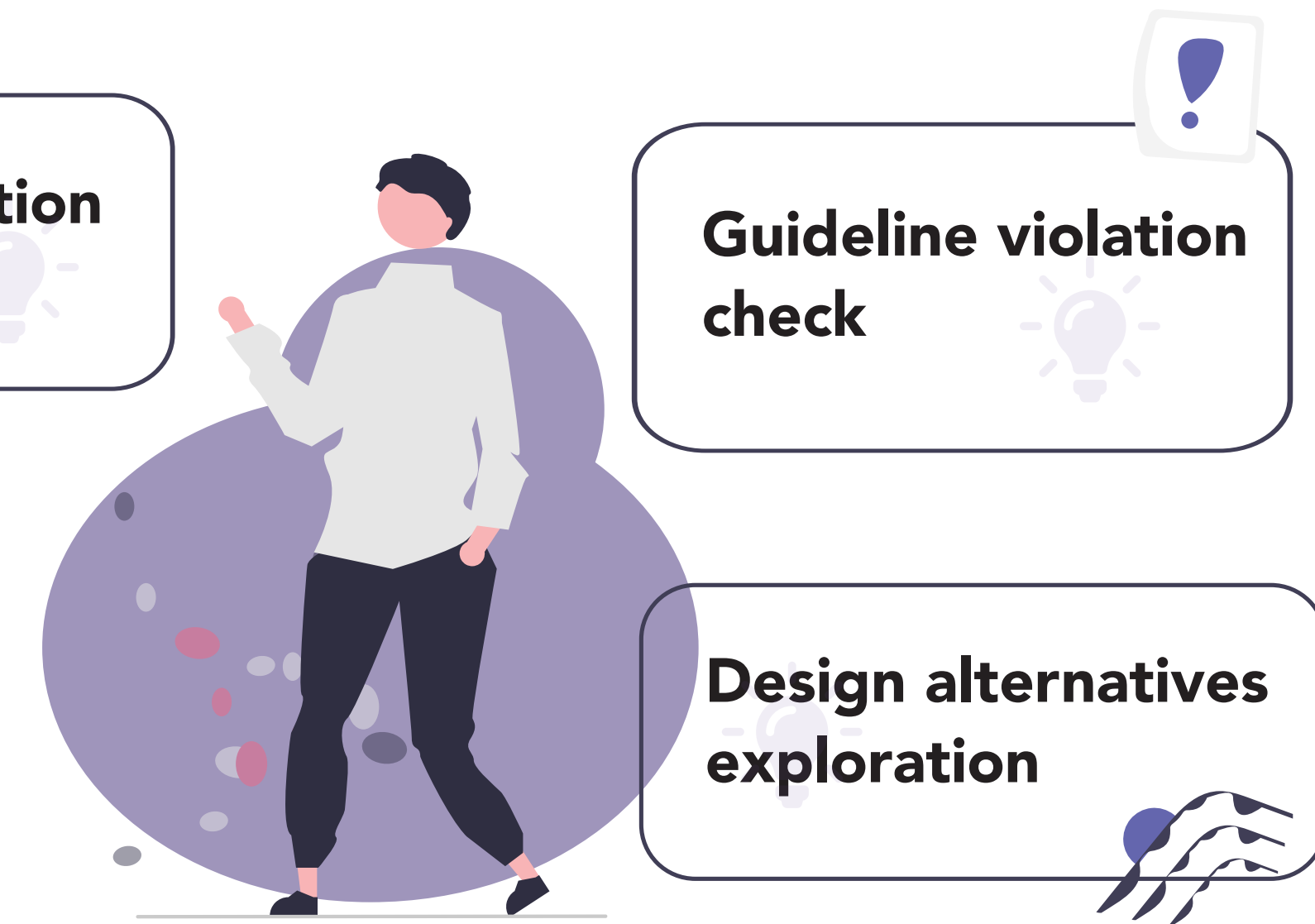
Design opportunities

Design inspiration search

Design system customization

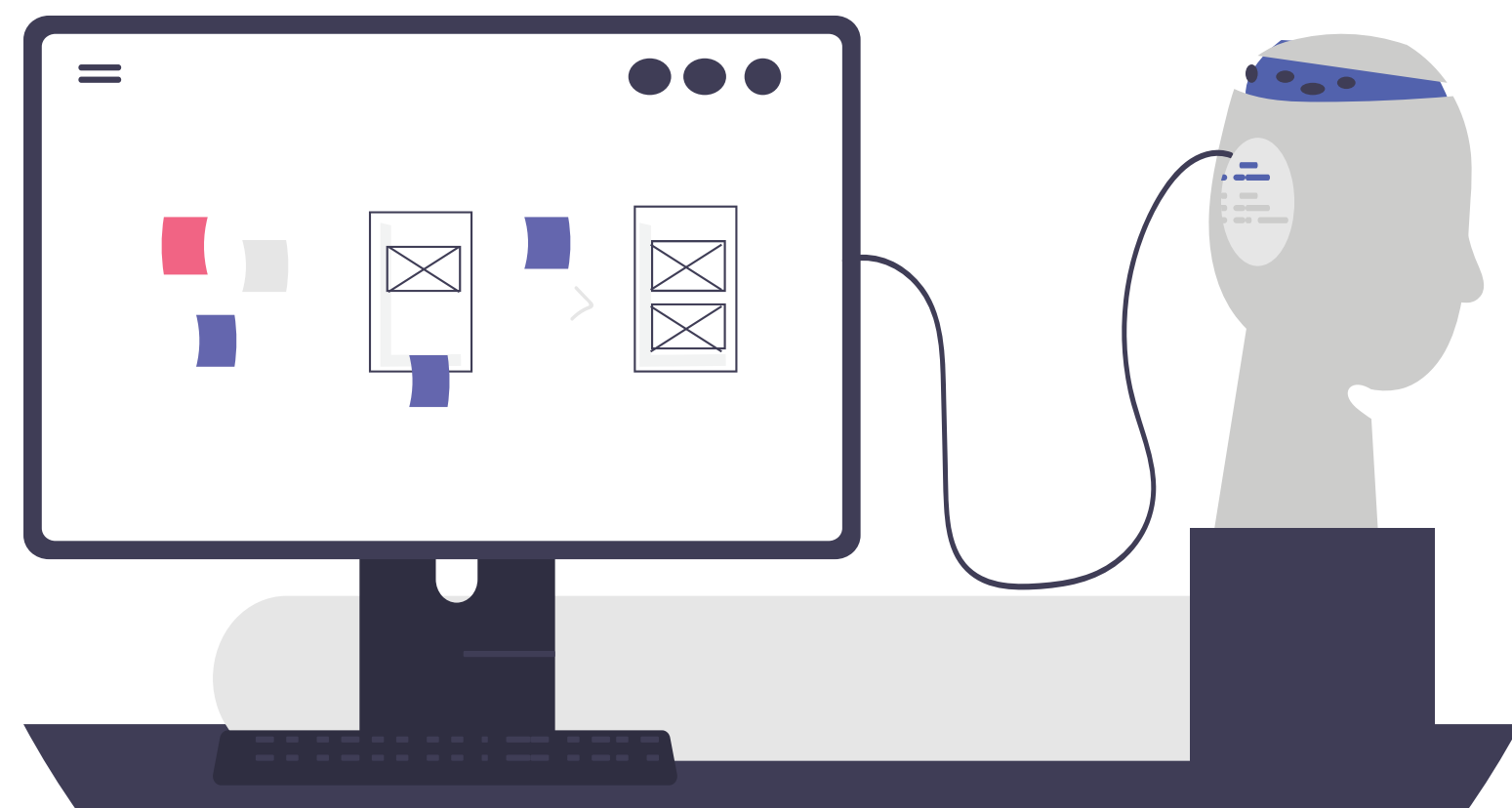
Guideline violation check

Design alternatives exploration



Background

- **UI and UX design** is key in product cycle
- **Data-driven design** with machine learning is emerging with large datasets (e.g. RICO)
- Most are not **human-centered** but tech-centric
- No impact on industry practitioners yet
- Will designers like these tools? How to design them to better support designers' needs?



Gaps Between Existing Tools and Designers' Needs

Designers' Goals

Existing AI-Enabled Tools

Confidence in generative models' results	1	Little explanation for generated results, no quality assurance measures
Control over the generation process	2	No access or involvement in generation process
Context-specific suggestive results, easy adoption	3	Generic results that are hard to be adapted
Help with non-graphic design activities	4	Mostly helpful for design of graphical elements
Ownership over the generated design, easy justification of design decisions to non-designers	5	No rationale for ML model outputs, no support for explanation of design or communication

Storyboards

