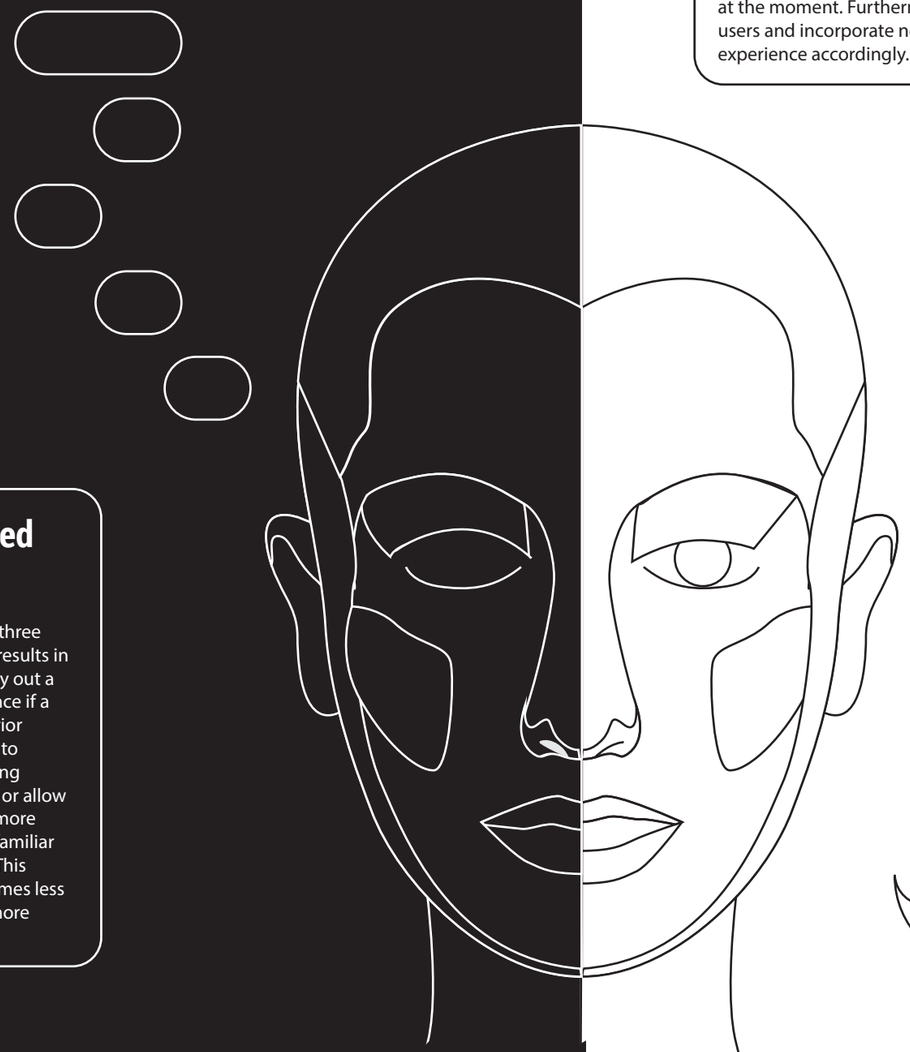
WHY

Incremental vs. Radical innovation

For radical innovation [2] the designer is certainly the authority in UX, because they envision an unfamiliar change for the users. Ford's statement "If I had asked people what they wanted, they would have said faster horses" certainly rings true in this case, because automobiles were a great leap into unfamiliar territory for users.
However, in the case of commonly used technology, the users are familiar with the idea and they have no trouble envisioning the possibilities. Users have the ability to (either consciously or subconsciously) imagine an extremely tailored UX that meets their needs better than a designer can, because a designer needs to generalize the needs of a larger group. In radical innovation it is desirable to let the designer generalize the user group, but this generalization meets a dead end when the technology becomes commonplace and adjustments are minor. Therefore, in incremental innovation we prefer a more flexible approach by empowering users to alter their own experience.

People know what they want

User experience Designers are very aware of what kind of experience people want, but this only rings true for the majority of users in their target group. Target users are envisioned through personas and user studies. However, these again address the majority, while the target audience is usually more diverse and divided. Furthermore, not every user is the same, and small differences in preferences can exist between people who fit the exact same profile. Designing an adaptive user experience allows your system to tailor itself to the personal needs of each user.



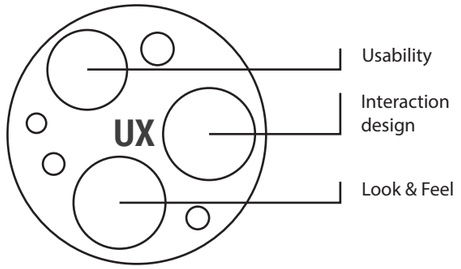
Intended interaction vs. Intended result

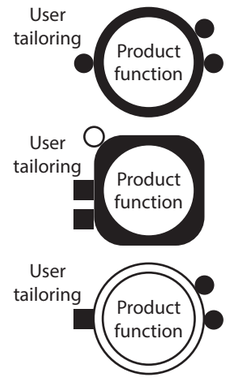
Looking at Montaño's Integrated behaviour model [1], three components influence whether behavioural intention results in behaviour. Firstly, knowledge or "skill" is needed to carry out a behaviour. Secondly, environmental constraints influence if a behaviour is difficult or even impossible. Thirdly, behavior should be salient to the user. Therefore, if a user is able to customize their user experience to leverage their existing knowledge or skills, reduce environmental constraints, or allow the experience to be salients, desired user behavior is more likely to occur. An example of this is a user choosing a familiar interaction style or order to interact with the product. This means if the designer's intended user interaction becomes less fixed, the intended result of the interaction becomes more realistic to achieve.

HOW

Expanding UX possibilities

Users should be able to achieve the same result in multiple different ways. By designing the user experience such that multiple experiences result in the same end result, users can choose which experience they prefer. To achieve this it is important to incorporate multiple interaction styles and user journeys in your concept. It is important that these journeys are modular so users easily switch between elements of these different processes. Eventually, the user will develop a habit of interacting with the system in a certain way and the system should adapt to this over time.
Don't get the wrong idea, we are not saying that every UX has to have a lot of choices and options. We envision it more as having multiple ways to achieve the same goal, customizing the interface or different ways of interacting with the system. However choice overload [3] should always be accounted for by making sure a default option is available and overall reducing the number of choices without compromising flexibility. No over-customization but more than what is being incorporated at the moment. Furthermore, designers should listen to their users and incorporate new desired features in their user experience accordingly.





Making informed decisions

It is essential that designers make very informed decisions about such user input. Active contribution from the user is more essential in some cases, but in other cases the system can learn from the user and adapt itself. The controls of a microwave oven require less input and growth than a smart home agent. Sometimes the user only needs to check boxes or drag menus around, but other times the system needs to adapt to everyday behaviour. Such a system could learn to adapt to audio controls only being active at a certain time of day, or to prioritize certain commands.

Modular Design

A way of designing a customizable user experience is creating a modular product. A current design that encompasses these ideas is the Nintendo Switch, a modular gaming console that allows the users to play in either handheld, tabletop, or docked mode. Due to this modular design it allows users to adjust their experience to meet their needs and preferences in different situations (ex. at home vs. traveling, alone vs. other people using the television). Furthermore, the controllers fit into extensions that can create different controller types. Although the core functionality is the same, the user chooses how, when and where to interact with the system. This is an effective way of empowering the user to tailor their own experience by altering the usability or interaction methods of the device.

Empowering users to tailor their own experiences

Why designers should allow users to alter UI to improve UX

References
[1] Montaño, D. and Kasprzyk, D. (2008), Chapter 6 Theory of Reasoned Action, Theory of Planned Behavior, and the Integrated Behavioral Model , In Health Behavior: Theory, Research, and Practice, 5th Edition, Karen Glanz (Editor), Barbara K. Rimer (Editor), K. Viswanath (Editor).

[2] Norman, D. A., & Verganti, R. (2014). Incremental and radical innovation: Design research vs. technology and meaning change. Design Issues, 30(1), 78-96 https://doi.org/10.1162/DESI_a_00250

[3] Iyengar, S. S., & Lepper, M. (2000). When Choice is Demotivating: Can One Desire Too Much of a Good Thing? Journal of Personality and Social Psychology, 79, 995-1006.

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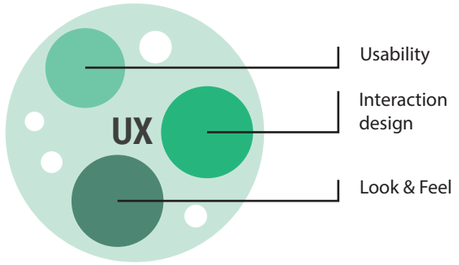

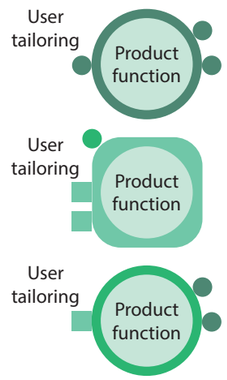

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