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Section 3.2. Understanding Mobile 2.0

Ans.

Mobile 2.0 refers to, simply, the new age generation of mobile internet services which are seamlessly interfaced with pre-existing internet services such as social media, content sharing sites and have provided Open access to billions of users, with frictionless distribution and monetization.

This term was coined in 2006 when Internet usage by users on personal computers and mobile phones were very different and silo-ed.

Mobile 2.0 has completely revolutionised the access of relevant information along with mobile broadband access ubiquitous.
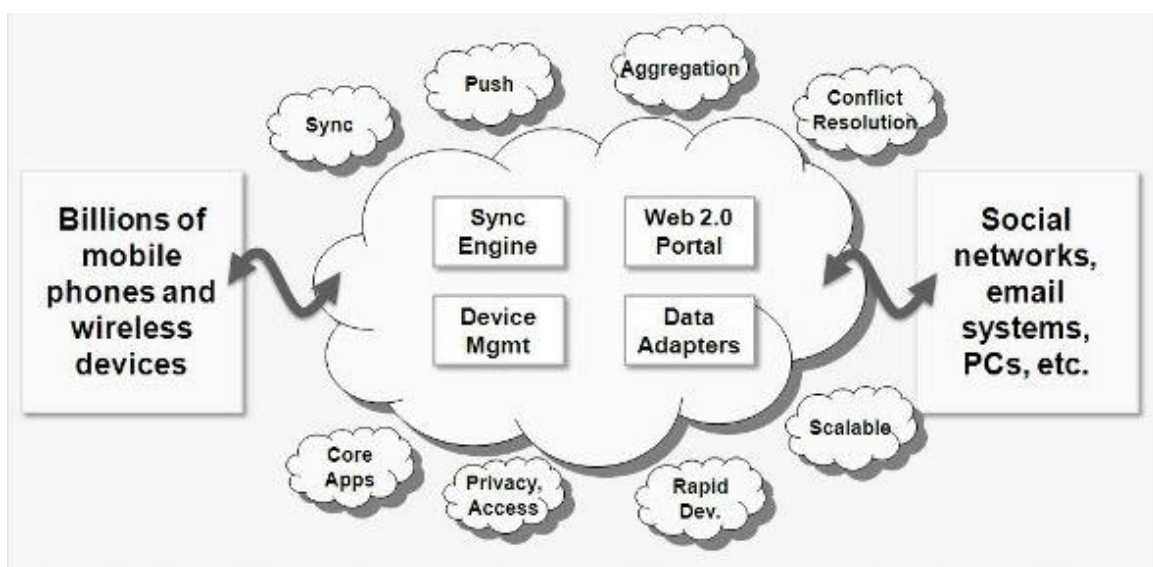

Figure 1. Mobile 2.0 is not "creating". It is "integrating"

There are some essential components of Mobile 2.0:-

1) **Transparency and Openness:** Includes open standards, open-source development and open access.

2) **Communicating context by good UX**: The context of accessing the network and associated web services needs to be a positive user experience.

3) **Affordability and More user choice.**: The new age internet should be democratic.

4) **Intelligent 'aware' applications and devices**: For eg. Location 'aware' applications.

5) **Rise of new business opportunities:** Video, text and music content creation among others.

Q 3.3) Necessary Elements For Designing A Perfect Mobile App User Interface

Ans)

1. **Keep it Simple (KIS):** First-time users shouldn't need instruction manuals to understand and use the app. It should be simple and intuitive!
2. **Consistency:** All the mobile app pages should have a consistent design and theme. Users don't appreciate jarring pop-ups and shining distractions!
3. **Know your users**: The more accurate your user stories during your Software Design and Development Life Cycle. The better your product!
4. **Allow for efficient feedback channels**: Frequent users love giving feedback and participating in the process of making your product better. Let them help you!
5. **Give more control to experienced users:** Shortcuts should be provided for day-to-day functions. This is a challenging task when trying to make design simple. A balance needs to be maintained.
6. **Visual Hierarchy**: Prioritize information based on what your user needs. Primary information should be shown and highlighted first, secondary later and tertiary last. User-centred design is the most important element.
7. **Attention to detail**.

3.4) What are the factors that are to be considered to choose colours.

Ans)

The research showed that it takes only 90 seconds for people to make a subconscious judgment about a product and between 62% and 90% of that assessment is based on colour alone. So, the appropriately chosen colours can be useful on the way of improved conversion for your product as well as advance usability of the product.

A well-thought-out out colour palette can elevate a design from "good" to "great" while a mediocre or bad colour palette can detract from a user's overall experience and even interfere with their ability to use a site or app.

There are a lot of factors that are considered when selecting a colour for a user interface:-

- **Contrast is very useful**: Colour contrast is a key part of any visual composition. It brings the individuality for each UI element and makes all of them noticeable. User interfaces containing only shades from the same colour family have fewer chances to draw users' attention.
- **Consider the psychology of colours**: Each colour has its influence on our mind and the knowledge of the possible reactions can help designers to transfer the right message and call users to make the expected action. For eg., Yellow is the colour of sunlight, joy and warmth.
- **Colour harmony:** Harmony is what UI design strives to. To make users feel pleased and comfortable, designers try to bring the balance into user interface design. Harmonic colours contribute to a nice first impression from the website or an application. There are a lot of basic colour schemes such as monochromatic, analogous, complementary, etc.
- '**Clone' ideas from nature.**
- **Leverage the colour wheel.**
- **Colour engages and increases participation**: Ads in colour are read up to 42% more often than the same ads in black and white.

3.5) Analyse, the role of typical Human interaction speed in HMI.

Ans)

- Humans interact and subconsciously recognise cues within a blink of a second.
- It is this characteristic of recognising, "Genuineness" and other important features that are called, "**thin-slicing**" by leading cognitive psychologists. (First coined by Malcolm Gladwell in his book, "Blink")
- It is the reason why digitally generated faces, despite using state of the art GANs don't seem completely "natural".
- For designing any User-centred interface, the finer details must be taken care off.
- This is especially true as research showed that it takes only 90 seconds for people to make a subconscious judgment about a product.
- An entire product user experience can fall flat on its face if the Human Interaction speed is not considered and prioritized.

3.6) Designing for visually impaired, justify.

Ans)

- The internet has the power to improve the lives of people with disabilities.
- Sadly, many websites and applications don't consider the disabled during the design process and this cuts off people from information and assistance that they might benefit from.
- Designing for people with disabilities doesn't have to be hard work – there are some simple steps to take that make websites and apps accessible to nearly everyone:-
1. Software translators can't translate graphical content. That means it's important to have some text to explain each of your graphics and that's true for those graphics which are nothing but text too.
2. Make sure you label your graphics with alt text (the software uses this text to describe a graphic and its function to the reader).
3. Try to use descriptive titles for page headers – it takes much longer for a blind person to "scan" a page than it does for a sighted person.
- It's estimated that 19% of the world's population suffers from some form of disability in their lives. That's 1 in 5 of your potential user base.
- Catering for people with disabilities isn't just a nice thing to do, it's the right thing to do and it enables you to increase your customer base proportionately in return.

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