

INFO5992 Introduction to IT Innovations

Week 3

Tutorial 3: Dominant Design in the Smartphone Market

In our lecture this week, we discussed the concept of **Dominant Design** in IT. In this tutorial, we will reinforce our learning through a group discussion on the dominant design with smartphones operating systems (OS). We will then explore a related topic on Virtual/Augmented Reality (VR/AR) strategy with smartphones.

Form a group of five or six students and read the selected articles below and then search for other relevant information before joining group discussions. Summary of the discussion will be available after the tutorial.

R. Mitz, “Google’s Plan to Use Android Phones to Dominate Virtual Reality”, 2016

<https://www.technologyreview.com/s/601508/googles-plan-to-use-android-phones-to-dominate-virtual-reality/>

J. Tanz, “Apple bets the future of augmented reality will be on your phone”, 2017

<https://www.wired.com/story/arkit-augmented-reality/>

Kurt Wagner, “Facebook’s Oculus boss thinks standalone headsets are the key to getting a billion people into VR”, 2018

<https://www.recode.net/2018/1/12/16876668/oculus-hugo-barra-facebook-virtual-reality-qa-ces-china-headset>

Discuss the following points:

1. Android OS architecture is appearing to be the dominant design in the smartphone OS market. What are the main reasons that led to this?
2. In the short article, Android’s strategy for the VR is following similar principles to what made Android the dominant design for the smartphone OS. Do you think this strategy will become the dominant design in the VR space? You may think about this in the context of concepts learned in the class including ‘architecture’, ‘standards’, ‘network effect’ and ‘self-reinforcing cycle’.
3. Apple recently launched their AR strategy – as with other Apple products, it is a closed system, e.g., a part of the Apple ecosystem. Apple has a massive user base, and the AR technology is strong. Do you think they can become the dominant design of ‘Reality’ technology for smartphones? It’s interesting to note that Apple is not getting into VR and instead focusing on AR. AR with smartphones is been around for a long time.
4. Do you need to be a smartphone OS to dominate in VR? Facebook is a massive social platform and they have many of the services that smartphone OS has e.g. Apps, network effect, and architecture. With Oculus GO becoming ‘standalone’ device, and therefore a mobile device, could they become the dominant design?
5. [Optional / Homework] Read the following article:

E. Spense, "Windows 10's Smartphone Failure Is Microsoft's Greatest Opportunity", Feb 2017, <https://www.forbes.com/sites/ewanspence/2017/02/19/microsoft-windows-10-smartphone-failure/#6aa4f58520ab> [Optional]

In the short article on Windows 10, the author suggests "*Windows 10's Smartphone Failure Is Microsoft's Greatest Opportunity*". Do you agree with this comment? Can you answer in terms of the dominant design concepts, in regards to Android and iOS platforms?

Related reading article: You are encouraged to read the papers below to familiarise with the peer review technology.

G. Cecere et al., "Innovation and competition in the smartphone industry: Is there a dominant design?", *Telecommunications Policy*, 39(3-4): 162-175, 2015.
<http://www.sciencedirect.com/science/article/pii/S0308596114001189>