

## **Disruption by incremental and sustaining innovations**

The popular story is that major innovations are responsible for disrupting large firms from dominance, right? But did you know that small and incremental innovations play an equally important (if not bigger) role in disrupting large firms. Today's WWDC by Apple and the dominant dialogue around it on the web just points to the major role of small innovations in disrupting incumbents. Many industry observers are saying that today's WWDC is a critical point in Apple's history. Some are saying that Google is winning the innovation war. Some have already put Apple in the category of also ran of yesteryears.

This dialogue reminds me of what I found in my research in industry after industry: small and sustaining innovations can disrupt incumbents and often do. Recently, we witnessed Google's emergence as a dominant player in smart phone ecosystem. It was only a few years back that Apple led the smart phone market with a dominant share. It had claimed the top spot due to its major innovation of iPhone. Since then, Google has been chipping away at Apple's position with a large number of incremental innovations. It is through incremental innovations that Google claimed the top spot. Although the innovation war in mobile phones is far from over, these hundreds of incremental innovations and their impact point to an important and often underemphasized fact: disruption often takes place through incremental innovations.

Apple has responded to decreasing gap between its technology and rival technologies with major innovations in new categories. iPad allowed it to become dominant in the tablets category where again incremental innovations by rivals is chipping away its share. People are expecting an iTv or some sort of iWatch to be the next big innovation by Apple. However, in the long run, Apple has to win in

the cadence of incremental innovation to remain a key player.

While studying the U.S. CT scanner industry from its inception till early 2000s, I saw the same pattern there. CT scanner was a radically different technology from X-rays technology. EMI (the music label) came up with the first CT scanner. When EMI launched the first CT scanner, some imitators arrived on the scene quickly. Due to rapid innovation in CT scanners, another firm Technicare took the top spot from EMI. While EMI and Technicare were fighting for the top spot, X-ray majors such as GE and Picker entered the CT scanner market. The innovation in the industry after that was of sustaining kind – speed of scanner and resolution of the picture were the key innovation objectives. As cadence of incremental innovations increased over the next few years, EMI and Technicare could not keep pace with GE and Picker and both left the industry. EMI and Technicare were not disrupted by major innovations but by small incremental innovations.

In short, disruption by incremental innovations takes place all the time - we just fail to register it.