

# Multi-touch technology

Technology



This paper will first introduce the orally of Multi-Touch Interfaces and give a brief explanation of the history of this technology: second, it will refer to the importance of the Apple phone which arguably changed the game through its illnesses to implement Multi-Touch technology providing to consumers cheaper and user-friendly technology; third, it will talk about the internal design of products with Multi-Touch technology, mainly the phone, and focus on how this forced other companies to follow suit which slowly integrated Multi-Touch into more and more devices; finally, it will explain how Multi-Touch technology has revolutionized the technology market and will make other technologies, such as the mouse and keyboard, obsolete. The development of Multi-Touch technology started as a slow progression of research and Innovation. This technology was first created by Minims Meta at university of Toronto In 1982.

Minims designed the first Multicolumn display depended on finger pressure (Change 1). However, its availability and high price restricted its widespread use (Change 1). One year later, Myron Krueger created a vision-based multi-touch system which allowed people to interact using a great many gestures, including: " the pinch gesture to scale and translate objects" (Buxton 4). In 1992, a Multi-Touch pad was integrated into a keyboard by Bill Buxton (Buxton 5). Seven years later, Portfolio Wall was created by Alias: " This was a digital cork-board n which images could be presented as a group or individually" (Buxton 7). Buxton further wrote: " It allowed Images to be sorted, annotated, and presented in sequence" (7).

Multi-Touch technology transitioned out of the laboratory and into the hands of consumers with the 2007 release of the Phone. Steve Jobs and his design

team spent more than SIX months to successfully Integrate multi-touch technology into a mobile phone (Occasions 264). Due to Apple's vision and innovation, Multi-Touch technology has become very widespread and successful. More and more consumers become familiarized with Multi-Touch technology each day. Due to cheaper production costs and the widespread success of the phone, Multi-Touch technology has become an innovative and user-friendly technology: " By the end of 2010, Apple sold ninety million phones, and it reaped more than half of the total profits generated in the global cellophane market" (Occasions 266).

Due to the mass production and reduced failure rates of phone, the price of Multi-Touch technology has fallen dramatically (Nichols 12). People Like to use phones because of the capability of Multi-Touch screens to create Interfaces that are easier to use (Nichols 12). For example: " when viewing a video on the Phone, most of the controls disappear to make room for the display and only the buttons needed to work with the file remain" (Nichols 12). Multitude screens, designed using a popular technique with technology. The capacitive approach consists of manufactures: " coating the screen with a thin, transparent metallic layer" (Nichols 13). A wire (or piece of ivy) is connected to a touch point (Barrett 16).

When touched: " additional body capacitance was added to a resistor-capacitor network" (Barrett 16) . By checking whether the vaccinate changed or not, the touch can be detected (Barrett 16). As an improvement to capacitive approach, a technique called Fourier Transform Infrared Spectroscopy (FITS) is used (Nag 2). This technology can not only detect touch but also detects gestures created by the motions of the fingers (Nag <https://assignbuster.com/multi-touch-technology-essay-samples/>

2). Nag explained this technique in his paper saying that: " This technique can produce strong contrast blobs and allow for varying blob pressure, which is essential for the blob tracking system's ability to detect finger gestures like single tapping and double tapping on the touch surface" (2).