

Forecasting Paper

Name

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Forecasting is basically a process of making the predictions of future that are based on the past as well as present data, trends and analysis. Prediction is also similar but considered as a more general term. Both forecasting and prediction refer to the formal statistical methods that employ the cross-sectional, time series along with the longitudinal data (Daim, Rueda, Martin, & Gerdri, 2006). Forecasting is basically a less judgmental method. The usage can be different among the areas of application. Technology forecasting helps in predicting the future characteristics of technological machines. The application of different forecasting methods as they relate to the future of mobile technology can help glean insights as to the future of the industry.

Body:

It is important to discuss the disruptions that arise in mobile innovation technology. How will the customer, consumers and employee behaviors be changed? Similarly what will be the business opportunities? What steps can be taken by the companies to take advantage of these disruptions? A keen understanding of evolutionary curve is required to take a keen understanding of enabling technologies. A broader framework is used in order to analyzing the innovation in mobile technology quantitatively and qualitatively.

Mobile innovation forecasts are presented with the goal to provide an early warnings to the business leaders about the disruptions along with the actionable intelligence. We introduce the four-part framework in order to assess and analyze the mobile innovation. These four parts are given below.

- Enable the technology
- Capabilities of introducing new technologies
- Use Cases
- Introduction of new business models

The statistics show that the numbers of mobile phone users are expected to grow up to 4.77 billion by the end of 2017 (Chitkara, 2015). We hope that analyzing, forecasting, and examining mobile innovations on these lines will be able to shed light on interdependencies that are cloaked by unorganized streams of innovation. The Martino definition of forecasting has been used to identify the and reflect upon the evolving practice of the technology forecasting that includes both materials along with the rate of diffusion of technology as the critical element of forecasting.

The first category is the “enabling technologies” that focus mainly on the mobile technologies index. Therefore, a new technological improvement is fundamental for mobile innovations that help in forecasting the use cases along with the business models. The enabling technologies have led towards the rapid improvement of the capabilities of mobile devices that dramatically change the personal work lives and also the way in which billions of people interact with each other.

Second category is the “New Capabilities” which are not currently significant innovations but can become important within the coming a few years. We need to consider innovations that become important within the next five years and will become focus of the future. New capabilities include technologies through which the people interact with each other. We can suggest different examples that are based on the previous research in this regard. Near

field communication (NFC), 3D computing, High Definition Audio, Voice recognition future generations, artificial intelligence, video compression, olfactory sensing and gesture sensing are considered to be the New Capabilities that are important in determining and forecasting the future of mobile technology (Chitkara, 2015). The historical understanding of mobile technology adoption by different companies are considered to be the minimum threshold level of 20 % penetration of the mobile devices within five years' time span. Mobile capabilities index is shown in the figure below.



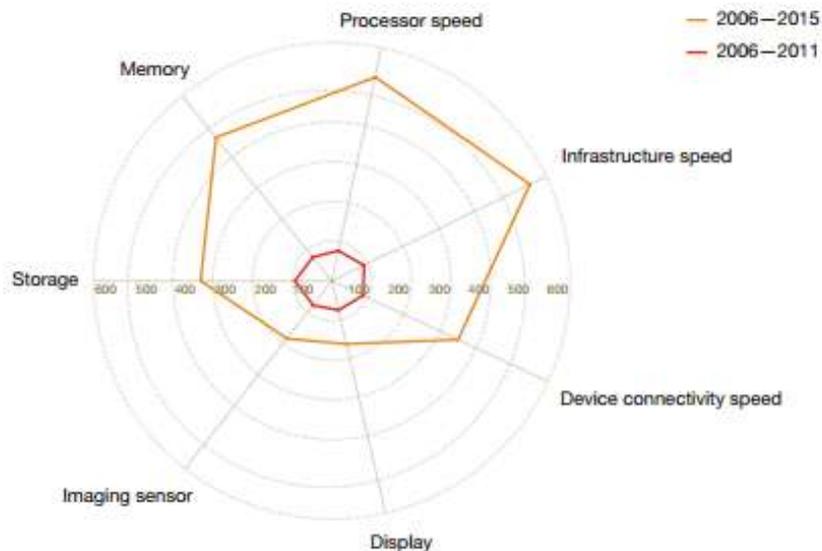
Figure 1: Mobile Technologies Capabilities Index, Source: (Chitkara, 2015).

In order to track the changes in different technologies help in making the modest about the cases that are already under development. Apple Application store is considered to be the use case for interaction with its users. Fourth category is the New Business models that will bring disruption in the mobile business. For example, we can consider the interference of cloud computing in the mobile technologies.

Mobile computing, industry practice and analysts reviewed the metrics that drive the mobile capabilities are expected to drive the services and devices in future. We chose 7 different components of the mobile technologies that contribute effectively in forecasting the future which include mobile technologies, speed of device connectivity, processor speed, infrastructure speed, image and display, storage and memory. Therefore, it is also expected that mobile computing will also grow to a great extent in future (Chen, & Kotz, 2000).

Using the extrapolation process of estimating along the original observation range, we also concluded that the five technologies may continue to serve as the building block for mobile technology which includes infrastructure speed, storage, speed of device connectivity, processor speed and memory. Each of these five technologies will continue to grow along with price performance curve that make a starting point for predictive index. The display along with the multi touch capability is considered to be most disruptive qualities in smartphones. It is expected that the touch sensitivity will improve over the period of next five years (Daim, Rueda, Martin, & Gerdri, 2006). The physical display of the devices will also become tougher, less expensive and thinner. Power efficiency and resolution are also expected to improve with the passage of time. The mobile technology index is shown in the table below.

Figure 2: PwC Mobile Technologies Index—Relative progress of components



Note: Infrastructure speed, Device connectivity speed, Storage, Memory and Processor speed are core technologies. Each accounts for 16% of the Index. Imaging sensor and Display each account for 10% of the Index. See "Creating the Mobile Technologies Index" on page 8 for more information.

Source: IHS iSuppli Databases

Figure 2: Mobile technologies Index, Source: (Chitkara, 2015).

The smartphone will not only disrupt the digital cameras but will also be considered as the integral part of the next generation. This technology is also expected to become the integral part of the next generation of social network. Some of the other technologies associated with the mobile technologies are associated with the forecasting decisions. These technologies include Bluetooth and Wi-Fi that have achieved wide adoption. We also aimed to include Operating system in the forecasting list. However, we observed that OS does not trend towards the evolutionary curve of predictable evolutionary trends. It however, trends towards the disruptive ways. Martino (1993) mentioned that the advent of more powerful computer software and hardware enabled the processing of data on a larger scale and eased the forecasting methods of data analysis.

Conclusion:

Mobile technologies are considered to be one of the most growing industries. The mobile phones have grabbed great attention of people during the past decade. The industry still has a lot of potential for growth. Our forecasting results show that mobile technology still has the potential to grow along 7 dimensions of the technological aspects. It has still the potential for investment.

PapersLead Sample

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