

## **How Location Information tailored Advertisement Needs**

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### **Abstract**

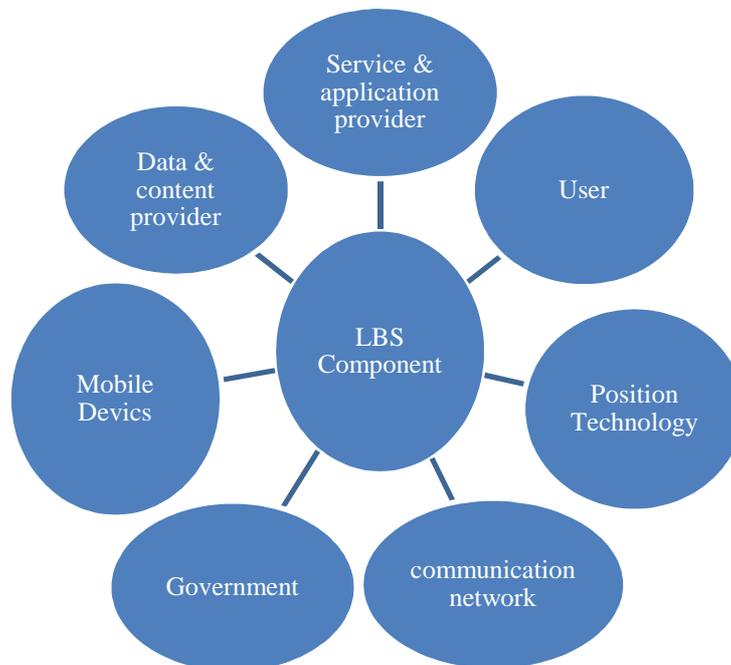
"The ability to identify the geographic position of a mobile device with a high degree of accuracy is increasingly becoming central to the mobile user experience." Location-based services (LBS) are being used for applications ranging from finding friends and family to tracking packages for enterprises to mobile advertising. Location based services is an information service and has a number of uses in social networking today as an entertainment service, which is accessible with mobile devices through the mobile network and which uses information on the geographical position of the mobile device. This has become more and more important with the expansion of the Smartphone and tablet markets as well. The LBS application solutions support both legacy devices and smart phones and are easily deployed. With these innovative solutions companies receive revenue-producing application opportunities suitable for different market and customer needs. Number and engagement of users reflects value of Location-Based Services and is one of the biggest assets of the LBS provider. It creates marketing possibilities and opportunities, if properly utilized bring value to customers and return on investment. The aim of the paper is to disclose the current scenario of LBS in India and focusing on the different initiative taken in this regards. It also discusses the key drivers for location based services & value chain model that sufficiently address and enhance the customer experience.

**Keywords-** LBS, innovation, drivers, value chain, M-commerce

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## Introduction

A location-based service (LBS) is a software application for a IP-capable mobile device that requires knowledge about where the mobile device is located. The release of Apple's 3G iPhone and Google's LBS-enabled Android operating system, however, has allowed developers to introduce millions of consumers to LBS. Location Based Services (LBS)- Services that integrate a mobile device's location or position with other information so as to provide added value to a user-(Prof. Jochen Schiller). However, the regulatory bodies will also come in play considering the recent example of UBER at Delhi. The Govt. of India is considering these activities not mere as technological but in business of transport, which will further complicate the process. Most of Location Based Services require several components. I have proposed the model of "5+2" components of LBS – five technological and 2 human related:



Location Based Services components



Service and Application Provider' and 'Data and Content Provider' might be the same actor in the LBS architecture. For example in the LBS application 3D World Gaze, Nokia is provider of both the data and the application. The majority of Smartphone LBS applications developed by use of geographic data of one of mapping services e.g. Google Maps, Yahoo Maps, Bing Maps and Open Street Maps.

### **Review of literature-**

In an article in The Business standard it is named as Uberisation of services. Let us examine the Uber taxi services. You are standing on roadside and ask for the Cab. Now standing at your place you can see the location of car you have requisitioned, the time it will take or distance it has travelled and how much is balance to travel, the type of car, its condition and even reviews about that car/driver. It can also be called as process which is disturbing the normal business processes and people executing these businesses.

The markets and markets a global consulting and research firm in US has projected the LBS business to grow from \$8.12 billion in 2014 to \$39.87 in 2019 with CAGR of 37.5% during the period of 2015-19. Although there are several possible m-commerce applications [Varshney and Vetter 2002], only a few of these applications have been offered by providers thus far. These include preliminary versions of mobile financial services, mobile advertising, and location-aware services. Advanced versions of these applications will require location information of users, devices, servers, products, and services. These applications also have widely different location precision, response time, and scalability requirements. Also, more work is necessary to evaluate location overhead under different mobility patterns, transaction rates, and network size. There has been very little work in this area, but we would like to briefly overview the related work in location-based services. An interesting implementation of location-based

discovery of services includes mapping current location of a user to an area in Cellular Packet Digital Data (CDPD) and then searching services in the area [Rastimor at el. 2001]. Another service discovery, based on mapping of bookmarks to Universal Resource Locator (URL) of services in the current location of user, is presented in Sastry et al. [2001]. A secure location service using context and location awareness is presented in Bisdikian et al. [2001].

### **Objective of the study-**

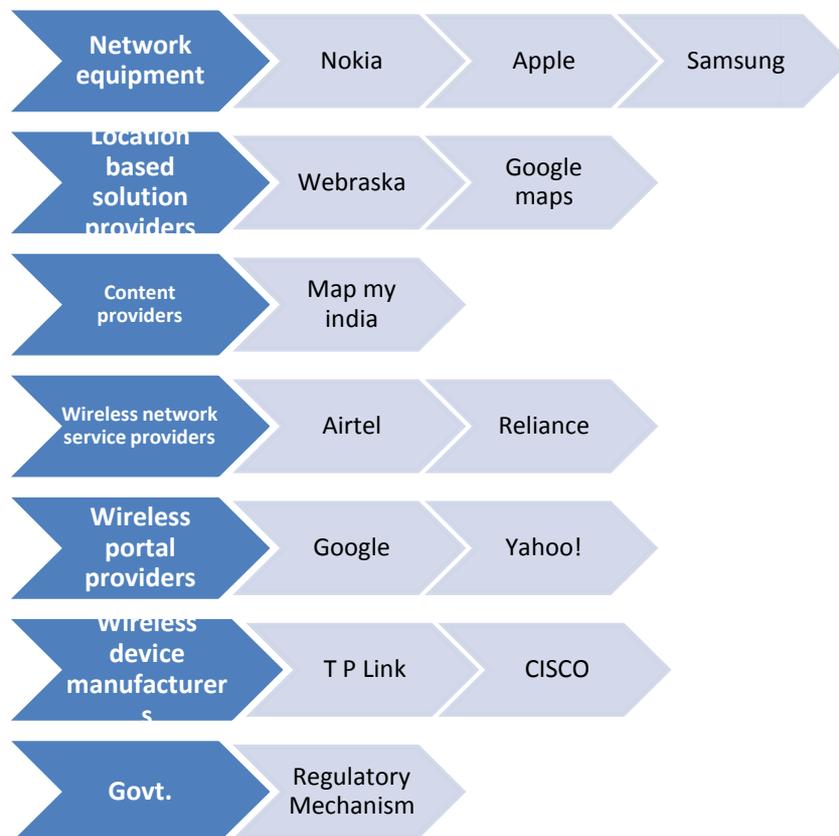
- To analyse the major drivers for Location Based services.
- To identify value chain for LBS.
- To trace the future trends & opportunities of LBS in India.

### **MAJOR DEMAND DRIVERS FOR LBS**

A key driver of LBS will be a degree of fit between the system's technical feasibility and the overall marketing strategy guiding its usage. Several technologies and platforms (including PDAs and mobile phones) need to be connected and integrated with the wireless network infrastructure, ranging from different types of servers to back-end databases. LBS providers will need to focus on blending software, hardware, and wireless connectivity into a plan for serving LBS content. Designing low-cost, reliable, and high-quality systems from a complex puzzle of disparate software, hardware, and connectivity components presents a challenge.



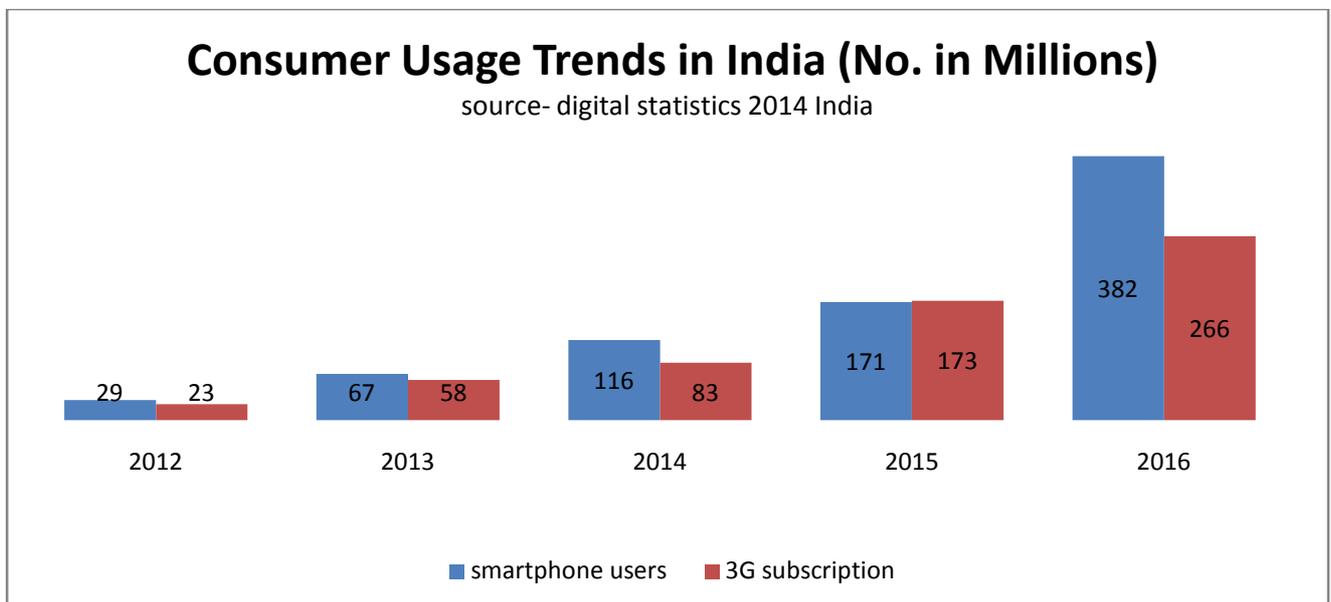
While the idea of using information about customer location to deliver focused services is extremely appealing, the area is fraught with risks and caveats. First, there has been much hype generated about LBS, and some of its benefits are either exaggerated or infeasible. Second, limitations in technologies and aggregation capabilities mean LBS is not about to become widespread for the next year or more. Third, LBS can potentially intrude on customer privacy. Finally, there has not been a sustained effort in developing sustainable business models that sufficiently address and enhance the customer experience.



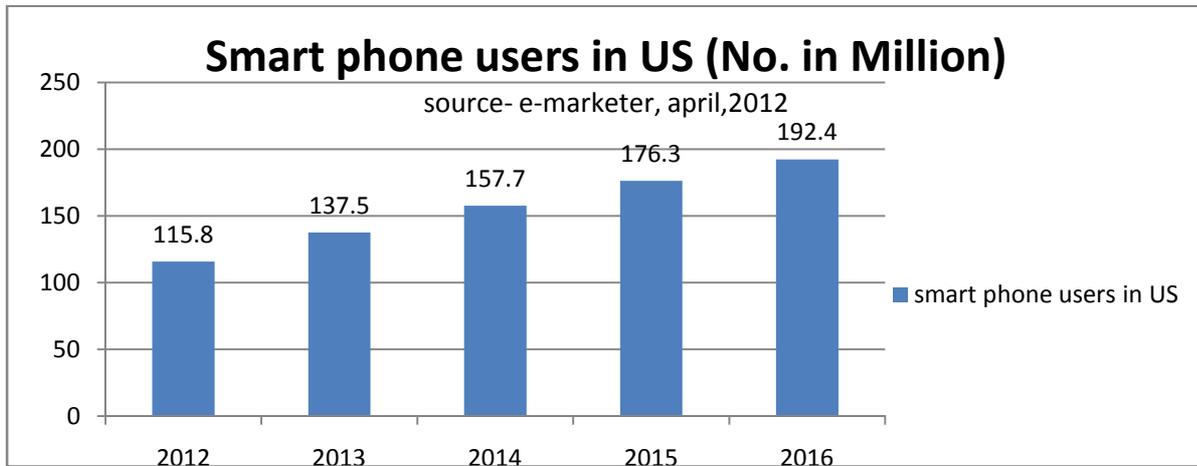
## LBS value Chain

### PRESENT SCENARIO IN INDIA

LBS has a great scope in India and as per estimates the projected revenue from mobile advertising market is to grow to \$40 million which as of now is much lower to the overall advertising spend of more than \$6 billion per annum. Let us analyse the growth scenario in India vis a vis United States of America.



The total mobile phone subscribers as on 30/09/2014 stands at 930.2 millions as per highlights on subscription mobile data, hence the %age of smart phone users is 41.06% compared to total mobile users and merely 30% of total population



The smart phone users in US stands at 74% of the total mobile phone users and 58% of the total population as per e-marketer.

Now if we compare the data highlighted in above two tables,

- It is clear that there is a big gap in total mobile users and smart phone users in India as compared to US(40% as compared to 74%), which calls for suitable strategy by service providers to motivate the mobile users in India and make them switchover to smart phone.
- The total number of smart phone users as per table are already much more in India as compared to US with a huge scope to increase it many fold
- Also when we compare with %age of total population which is about 30% in India as compared to 58% in US, again demonstrates the future potential in India.

## Conclusion

Businesses investing to increase their location-aware audience base are reporting improved conversions. They have ensured that their business is easy to find and have skilfully combined location based marketing with an overall targeted marketing approach that includes social media, push notifications, email newsletters and even



offline marketing. To conclude, in order to ensure continue success and long-term longevity of LBS, consumer trust must be established and maintained. LBS needs to be permission based and marketers must take great strides in protecting the privacy and respect in the preferences of each and every consumer.

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