



## An Enhanced Strategy for Mobile Learning System on Diverse Environment

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**Abstract-** With the enlargement of on-going technology and smartphone, smart living is successively replacing people's life. It can make learning extensively available to people everywhere at any moment. The rapid extension of mobile platforms has authorized an enchanting world of new learning solutions with recent proposal in mobile learning (m-learning). Persistent direction and scheme to address typical obstacle like the delivery of cross-platform content that works continuously on any device are still inadequate and explore contemporary technical approaches for cross-platform mobile learning, exclusively behold for ways of expanding, designing and maintaining mobile approaches which run with no reconstruction on all major mobile phone platforms.

**Keywords-** Mobile learning, PDA, smartphone, mobile OS, cross-platform

### I. INTRODUCTION

Growth of mobile phone technology, tablets and number of users is enlarging day by day. These devices are not only just used for making calls, other purpose and now a days it's also using in various domain like education, etc. Diverse environment mobile learning systems are an prepossess to native application development, with probable for enhanced benefit rework and diminished development costs. The current mobile device users market is dominated by two operating systems (Android 70.2%, iOS 27.1%), and the global smartphone sales for upcoming year is estimated to be close to billion units. Mobile devices popularization and mobile community participation are increased every day. The increasing scenario of technologies in network, social network areas, such as Twitter, Facebook, become an online community formed by group of people and multiple interactive like chat, messaging, content sharing, group discussions [1].

Whenever learner wants to share important information with others, they need not send individual electronic-mails or individual messages as happened in past. Through this online community and virtual learning community the information can be shared very easy way and traditional pattern of answers searching also become effortless process.

#### 1.1 Platform based usage

The operating systems on which they run are mainly considered in smartphones and tablets. The following chart will describe global smartphone sales. The following figure 2 shows the detailed description of user's % in recent six years.

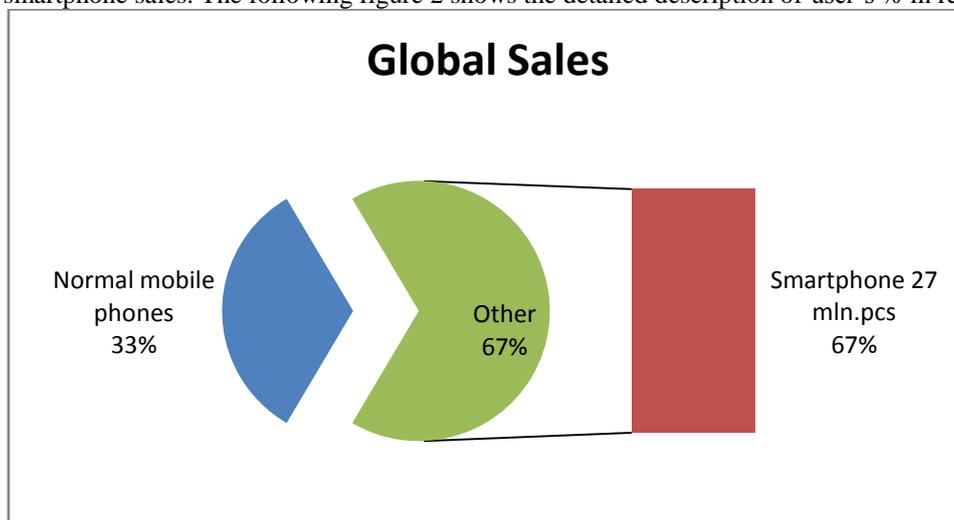


Fig 1. Growth in smartphone global sales

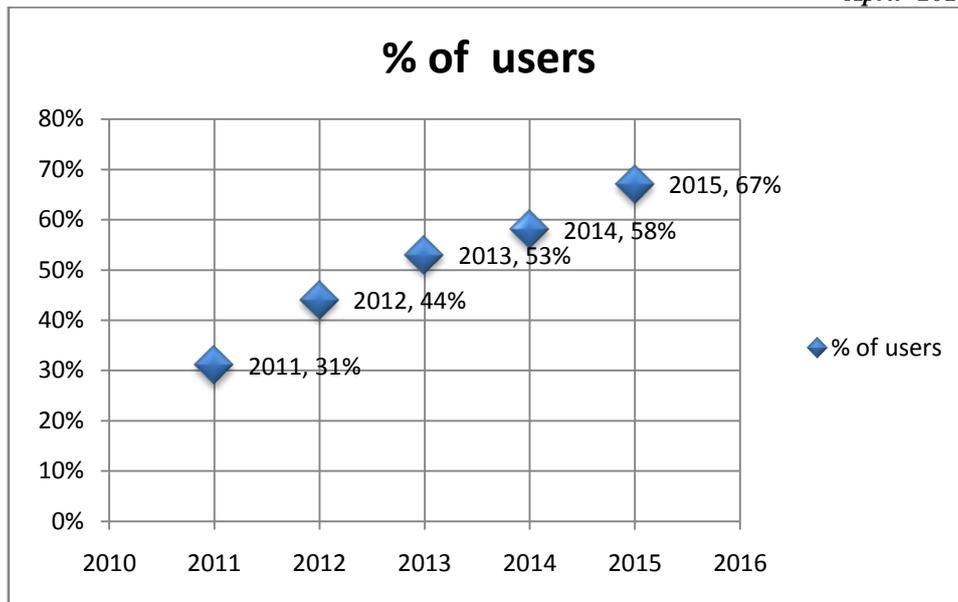


Fig 2. % of users in recent six years

## II. QUALITY CRITERIA

The project quality is most important criteria in analyzing the software product in terms that allows many interpretations. From the view of software quality characteristics mobile learning project is describing and many standards and characteristics are defined. The following are the some of the quality criteria's considered in mobile learning. They are:

Resource searching: - Representation of open pages desires the tree height or path.

Processing time: - In mobile-learning processing time must not be greater while comparing local machine and it waits for the page to be downloaded. While developing the project it must consider the minimum bandwidth available for users.

Input data process: - Whenever the user interaction will be taken it must interact with the project which will be in same component. The following fig. 1 diagram will explain the general diagram of mobile learning.



Fig. 1 General Diagram of Mobile Learning

## III. RELATED WORK

Mobile learning is the technology used to obtain or provide education oriented content on personal pocket devices such as PDAs, smartphone and tablets. Type of Conventional education of learning also terms as instructor led training or face-to-face learning. The following characteristics are included in this type of learning. They are, the instructor and learner will be assembled at fixed places and also interpersonal communication takes place. Comparing with the traditional E-Learning equipment such as PC's, laptop and easiest and cheapest way is mobile devices [2]. Mobile learning that support many ways of mobile technologies that include the following. It will enable the mobile learning experiences [3].

- Teaching and learning support
- Situated
- Etiquette
- Abstract
- Collaboration

#### IV. USED MOBILE TECHNOLOGIES IN M-LEARNING

To gain continual information access mobile technologies are attractive way. It can easily distribute the groups and providing them with access of learning. The following are some of technologies that support mobile learning:

- Personal Digital Assistant
- Handheld audio and multimedia guides
- Tablet computer
- Camera phones
- Mobile phone

Technical support:

- GPRS services
- Wi-Fi connection

#### V. PROPOSED SYSTEM

The following fig. 2 diagram will explain the workflow of mobile learning system and its environment. It will work under the condition of identifying the learner and group of learners. Based on authentication it will authenticate the learners to use the materials though request processing. It will deliver the information to all operating system in the form of the cross platform technique.

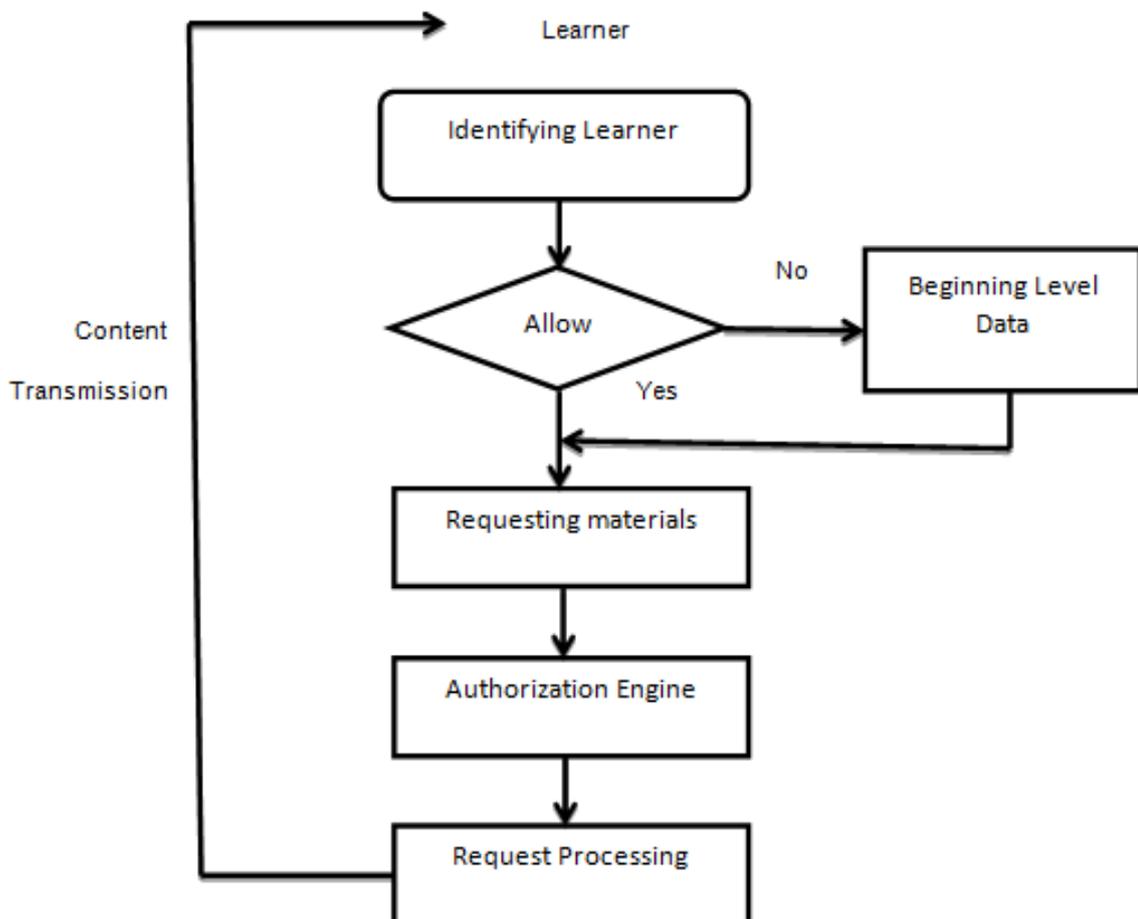
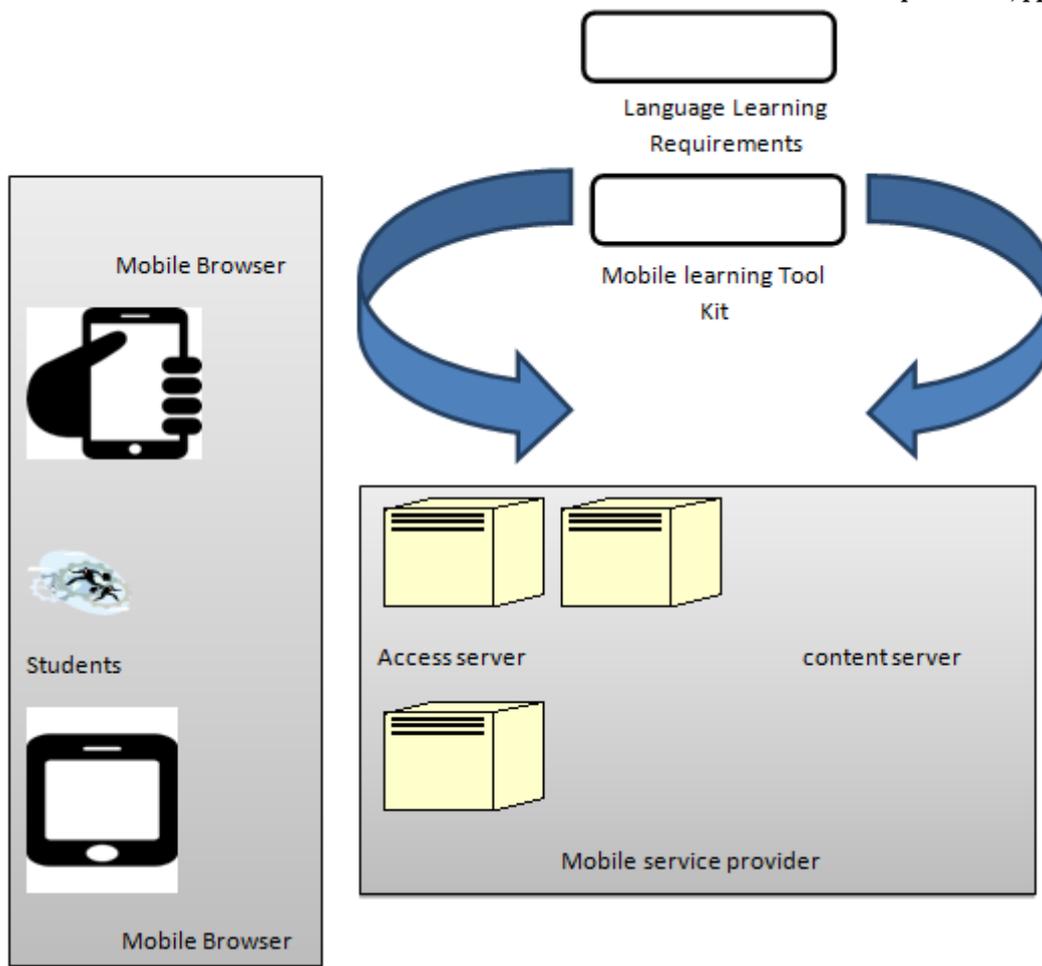


Fig. 2 Workflow diagram of mobile learning

#### ARCHITECTURE OF MOBILE LEARNING

Fig. 3 explain the architecture of mobile learning environment. It will process with language learning requirements and mobile learning toolkit. The information process under the different server like access server, content server and mobile service provider. These all the information are accessed by learners in the form of students or group of learners through the mobile devices and other handheld devices.



## VI. CONCLUSION

The current smart phone and tablet market has made it necessary to develop applications for several platforms. The overall view on the existing research work and projects in the m-learning domain shows that it most probably applies best to processes, where specific knowledge should be retrieved/accessed In a certain moment, where discussions in distributed groups (i.e. brainstorming) appear, where data is collected or utilized “on the field”, and where context-information is strongly related to the learning content. Cross-platform development approaches are one way of increasing asset reuse between platforms and reducing development cost. The flexible approach proposed by our framework takes both instruction and performance support into consideration for the mobile learning task or challenge at hand.

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