

# **Disadvantages And Benefits Of Mobile Processing**

Dr Gulab Singh Chauhan  
Department Of Computer Science And  
Engineering  
Associate Professor  
Vaageswari College Of  
Engineering, Karimnagar, Telangana, India  
mailid: gulsinchu@gmail.com

## **ABSTRACT**

**Mobile computing is human-computer interaction by which a computer is**

**expected to be transported during normal usage. Mobile computing involves mobile communication, mobile hardware, and mobile software. Communication issues include ad hoc and infrastructure networks as well as communication properties, protocols, data formats and concrete technologies. Hardware includes mobile devices or device components. Mobile software deals with the characteristics and requirements of mobile applications. Advancements in technology have enabled portable computers to be equipped with wireless interfaces, allowing mobile networked communication. This combination of mobility and networked communications will give rise to a range of new applications and services. However, the challenges involved in establishing this goal prove to be non-trivial. This article identifies and briefly discusses some of the issues of mobile computing.**

## **INTRODUCTION**

The term "Mobile computing" is used to describe the use of computing devices, which usually interact in some fashion with a central information system--while away from the normal, fixed workplace. Mobile computing technology enables the mobile worker to create, access, process, store and communicate information without being constrained to a single location. By extending the reach of an organization's fixed

information system, mobile computing enables interaction with organizational personnel that were previously disconnected.

Mobile computing is the discipline for creating an information management platform, which is free from spatial and temporal constraints. The freedom from these constraints allows its users to access and process desired information from

anywhere in the space. The state of the user, static or mobile, does not affect the information management capability of the mobile platform being constrained to a single location.

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In mobile computing platform information between processing units flows through wireless channels. The processing units (client in client/server paradigm) are free from temporal

and spatial constraints. That is, a processing unit (client) is free to move about in the space while being connected to the server. This temporal and spatial freedom provides a powerful facility allowing users to reach the data site (site where the desired data is stored) and the processing site (the geographical location where a processing must be performed) from anywhere. This capability allows organizations to set their offices

at any location. The discipline of mobile computing has its origin in Personal Communications Services (PCS)

## **DISADVANTAGES IN MOBILE COMPUTING**

### **SECURITY ISSUES**

**DISCRETION :** Preventing unauthorized users from gaining access to critical information of any particular user.

**RELIABILITY:** Ensures unauthorized

modification, destruction or creation of information cannot take place.

**ACCESIBILITY:** Ensuring authorized users getting the access they require.

**VALIDITY:** Ensuring that only authorized users have access to services.

**LIABILITY:** Ensuring that the users are held responsible for there security related

activities by arranging the user and his/her activities are linked if and when necessary.

**POWER CONSUMPTION:** When a power

outlet or portable generator is not available, mobile computers must rely entirely on battery power. Combined with the compact size of many mobile devices, this often means unusually expensive batteries must be used to obtain the necessary battery life.

- TRANSMISSION INTERFERENCES:** Weather, terrain, and the range from the nearest signal point can all interfere with signal reception. Reception in tunnels, some buildings, and rural areas is often poor.
  
- POTENTIAL HEALTH HAZARDS:** People who use mobile devices while driving are often distracted from driving and are thus assumed more likely to be involved in traffic

accidents.(While this may seem obvious, there is considerable discussion about whether banning mobile device use while driving reduces accidents or not Cell phones may interfere with sensitive medical devices. Questions concerning mobile phone radiation and health have been raised.

- **HUMAN INTERFACE WITH DEVICE:** Screens and keyboards tend to be small, which may make them hard to use. Alternate input methods such as speech or handwriting recognition require training.

## BENEFITS OF MOBILE COMPUTING

**1- INCREASE IN PRODUCTIVITY-** Mobile devices

can be used out in the field of various companies, therefore reducing the time and cost for clients and themselves.

**2- ENTERTAINMENT-** Mobile devices can be used for entertainment purposes, for personal and even for presentations to people and clients.

**3- PORTABILITY-** this would be one of the main advantages of mobile computing, you are not restricted to one location in order for you to get jobs done or even access email on the go

**4. CLOUD COMPUTING-** This service is available for saving documents on a online server and being able to access them anytime and anywhere when you have a connection to the

internet and can access these files on several mobile devices or even PCs at home.

**5. LOCATIONAL FLEXIBILITY**-Now, you are no longer to stay plugged in to a particular location for working on computer. Mobile computing lets you to ultimate flexibility to move and perform the activities at same time. When you are traveling, at that time you can connect with your dearest one. It is a revolutionary method to stay connect with your friends and relatives.

**6. SAVES TIME**-When you want to go anywhere and need to do office work, so then you can do your office work while transit. It is more flexible technology when you are missing to

someone, and connect with your family at anywhere and anytime using portable computing devices like Internet phones and share the fun with them.

**7. EASE TO RESEARCH-**Mobile computing and its flexibility allows to the students and professionals to make able in depth search about any topic or subject even when they are on the way.

## **CONCLUSIONS**

Wireless communication brings challenging new problems. Mobility makes information dynamic. Portability entails limited resources available on board to handle the variable

mobile computing environment. The challenge for mobile computer designers is to incorporate wireless communication, mobility, and portability to adapt the system designs that have worked well for traditional computing.

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