

The Emerging Interactions of Humans and Computers

Sajal Oberoi, Sahil Sharma, Rahul Thakur, Pradip Das

Department of Computer Science and Engineering

Chitkara University, Baddi-174103 Himachal Pradesh, India

Abstract

With globalization and the world modernizing at a rapid rate, and the dependency on computer science and technology has been incremented rapidly. The following research is related with the psychology of humans and their interactions with computers which have been developing at a steady pace in appearance as well as processing and other technical features. As the world is modernizing, there exists certain challenges faced related to scope and applicability of existing technologies along with the system of information they provide in the field of human and computer interaction. Also literature survey has also been conducted in order to gain information about existing knowledge limitations and opportunities for future research. This research results in development of new concepts regarding technologies. It mostly emphasizes on and acts as a platform for providing advanced programming environment for bridging of development and new human interactive designs. Achieving in science means balance between user and technology. Now the field of Human technology is totally change, now they focus on user interface. Success in computer means easiness in technology with which human can interact.

Keywords

Interaction, Future Technology, Emerging technology, Human Psychology, Human computer interaction

1 Introduction

The ACM (Association for computing machinery) define human technology interaction as a discipline concerned with the design evaluation.. Where research shows design of Human technology interface responsible for this.

HCI (Human computer interaction) is a study in which we are study, how human interact with computer (technology). As according to its name HCI divides into three parts. HCI has been developing since then in the field of computer science. In aeronautical there should be a precision in distance, direction and other mechanical factors.

1.1 User

In HCI the user plays an important role. By word user we refer to a single (individual) user or a group of user. In which we discuss how they feel when they interact with technology. A way of user sensory system. A different user has different way of interaction with technology.

1.2 Computer

When we discuss about computers we directly discuss about technology. In HCI we study how make technology simple to use . In early time technology is so difficult to use but with passage of time they are easy to use.

1.3 Interaction

This means difference between user and technology. HCI ensures user and technology both are interact with each other.

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- . Determine how user use technologies
- . Developing tools to make system suitable
- . First preference to user
- . Achieve effective and safe interaction.

The development in Human technology interface has not been in a quality of interaction it has also experienced different sections in history. The method by which user interact with technology has travel from a long way.

The physical and mental nature of the human being should be taken in control the working and design of HCI. The simpler the design , the simpler the design , the simpler the technology to use.

3 Methodology

3.1 Human Computer Interaction(HCI)

Human computer interaction researches the design and use of computer technology, focused on the interactions between users and computers. As a field of research, Human technology interaction is situated at the intersection of computer science and technology.

Parameters and Explication-

Human Computer Interaction rephrased the world with technology that was easy, efficient, less time varying and can be used easily by the population, then back in late 90's. It is a study which focuses on designing that has a number of functions i.e.

- Functionality i.e. how the functions of a system result in the problems and get the desired result.
- Usability of a system is the extent and value of efficiency of a given system for a set of given users.
- The functionality and usability are inter dependent on each other and follow in one hand and another.

Along with these parameters commands, interfaces are also a developing features of computer science. New databases, algorithms and concepts of virtual reality have been developing since then in the field of computer science. In aeronautical there should be a precision in distance, direction and other mechanical factors.

3.2 Existing HCI technologies

With the time running there have been a lot of new inventions along with upgrading of the basic software and other quantities In terms of quality as well as the quantity. Now days new techniques are practiced in every possible field of science. Example now a day several plants have been setup in order to use renewable resources instead of depleting non renewable resources and this is because the action of the emerging human computer interactive technologies. Earlier technologies used keywords and switches which were the tools but now as the world revolutionized the era of sensors have dominated. Most common e.g. of sensors are fingerprint.

Now a days GPS (Global positioning system) technology are the dominant features which give us geographical information about any area and also help us to remote sensing. With the help of satellites there is a revolution in a telecommunication sector. In smartphones there is a remote sensors(biometric) which is also a good example of technology which helps human.

The advancement of virtual technology in last decade it is impossible to determine which technology is virtual and which concept is real. In HCI the user has three levels: Physical, Cognitive, and affective.

The physical aspects with the mechanism of Human and technology interaction. How the human and technology interact with each other.

The cognitive is deals with, how the user understands the technology. In this we check the behavior of user with technology.

The affective aspects is more recent issue and in this there is not only a interaction, but in this affect the user in a way that makes user continue to use the machine by changing there attitude and emotions towards the technology.

3.3 Cognition and Artificial Intelligence

Robotics cognition and technology development has also reach up to the par and is still emerging. In American thriller t.v. series West World there is glance on future artificial intelligence. Also Will Smith's movie I. Robot it gives us information regarding the cognition and artificial intelligence. This development in robotic sector is to reduce human effort and easy the work load, increase the efficiency and reduce energy usage and reduce time dependency. This enhancement in robot technology has become widespread and many countries are still developing this star technology. It could be very useful in space navigation like N.A.S.A ,security purposes of national defenses system. This technology could be very useful in the working field for developing countries.

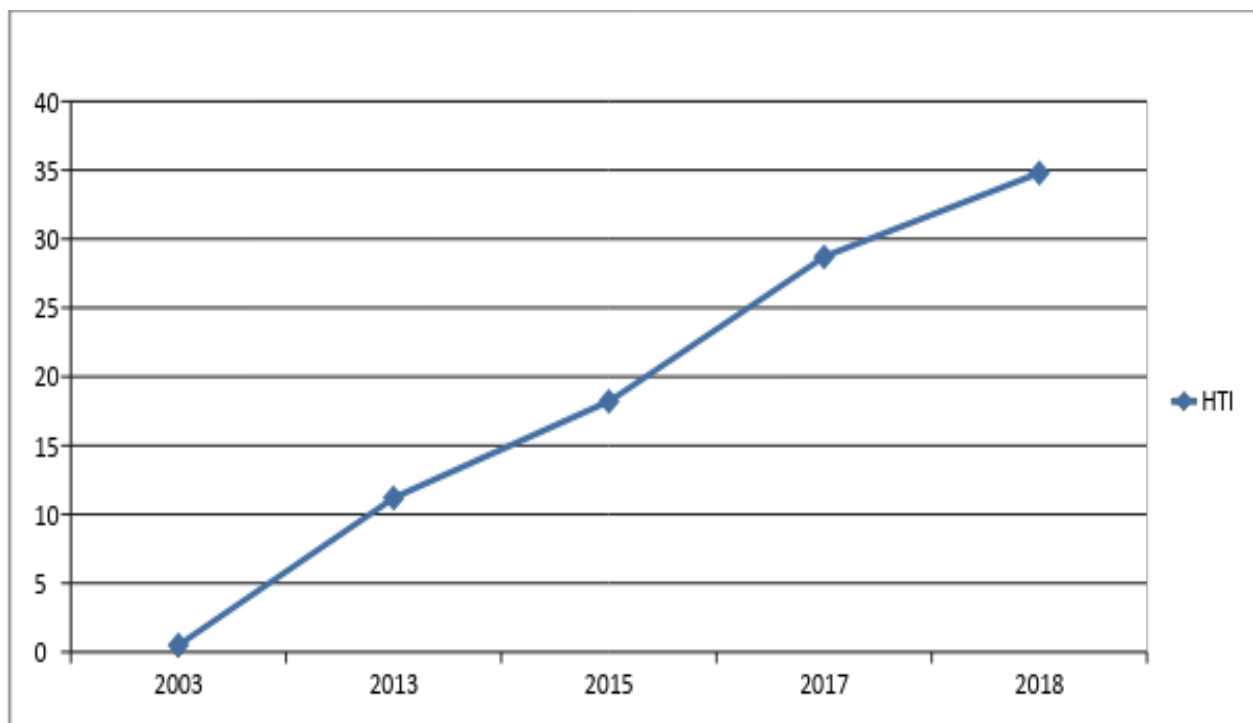
3.5 Demerits in Increased Rate of Human Computer Interaction

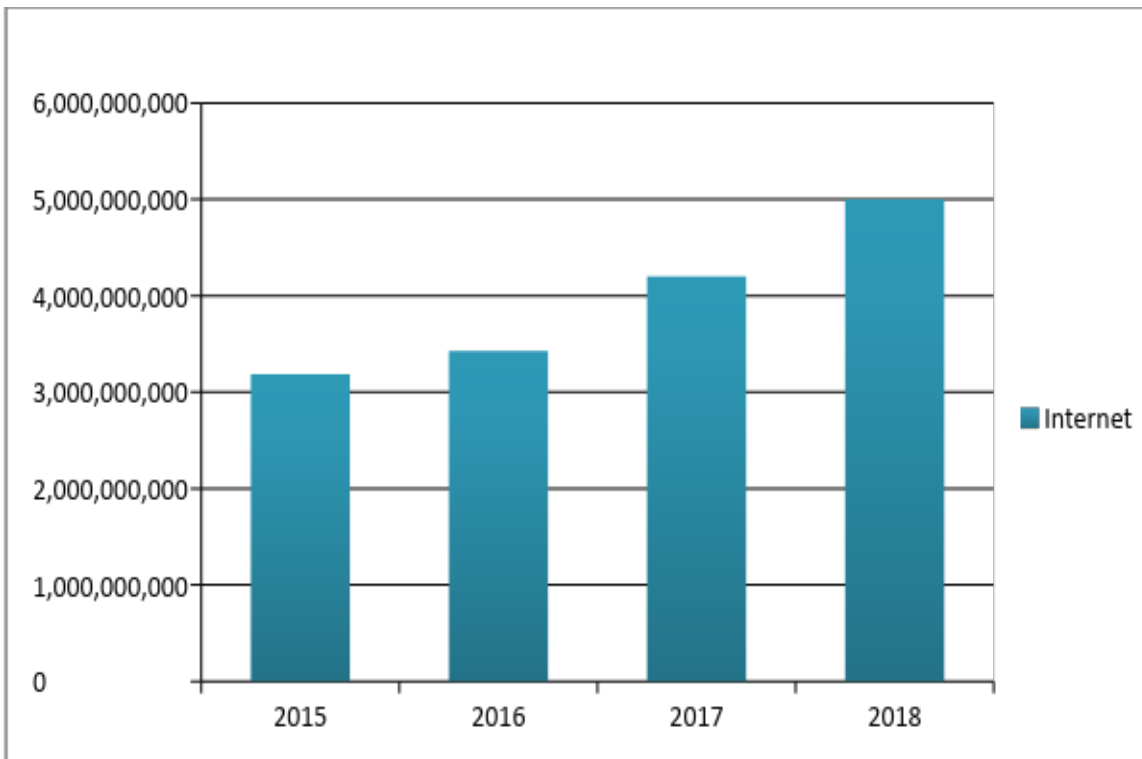
As goes the saying ,”Every book has 2 faces. “Similarly there is a not a face but a full book of disadvantages of emerging Human computer interactions. There is heavy impact on the living society. Nowdays people are fully dependent on the technology and rely on it for every single work. There is depletion in the physical activities of humans and resulting in increased health problems. Growing up children are also influenced with this technology. Also with increase in robotics technology, like in China there is increased probability of unemployment and lack of opputunities. Also with continuously indulging in technology there an huge impact on eyesight as well as according to researches there is depletion in sleep of the person who use most of the time in technology. Also this technology is harmful to the wildlife as well as the nature.

Also the negative sides also include hacking of several hacked interfaces, illegal interfaces created for smuggling of unauthorized goods,trafficking etc. Also people also use this in wring means by creating fake id's on social sites as well as some form alliance to attract people and many somehow and extract money out of them. Several of them also hack into several accounts, some unauthorized databases and get information as a source of well good money. And the list of these demerits goes on and on.

4 Result

Human computer interaction is increases rapidly in fast few decades. Technology has vast use todays life. Study shows that in 2003 very few users are contact with technology. But in 2013 there are more than 10 million peoples who are in contact with technology. The growth of PC's, Laptops are increases suddenly. In 2018 there are approximately 35 million people who are in contact with technology.





The study shows the internet usage is increases rapidly. In 2015 there are 300 million internet users. In December 2017 462 million internet users. In 2018 there are 500 million internet users. Technology is good but for some limits.

5 Conclusion

Today HCI is a vast society, bounded by the concept of usability. Human computer interaction plays a vital role to design a system. Badly designed man machine interaction can create unexpected problems like three-mile island accident. Quality of technology depends, how it used by a human (and how they interact with it). The study of UI provides a multi sided approach to understand, how machine and user interact with each other. Virtual reality is also advance field in Human Technology Interaction for a future. In the last decades the interest in HCI is increases. This paper is mainly focus on interaction between user and technology. To better interaction we need to know about user. In future HCI has a vast change in various technologies. Sound proof gadgets are one of the best examples of future technology.

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