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<center>Sixth Sense Technology:</center>

<center>When the Digital World Meet the Real World</center>
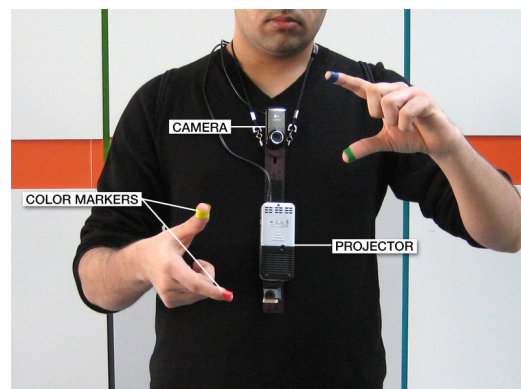
Introduction

Since the last twentieth century there has been a marked development in information technology in partially digital development. In the digital world, such as using computer, we analysis information through input and output devices, which is in the use of few human sense.

Pranav Mistry, a PhD student in the Fluid Interfaces Group at the MIT Media Lab, recently publish his invention called Sixth Sense. Sixth Sense is a wearable gestural interface that augments the physical world around us with digital information and lets us use natural hand gestures to interact with that information (Mistry, 2009). Different with the former technology, it gives your six sense, include the eye, ear, nose, tongue, body, and mind, a totally new experiment, which has a connection of the digital worlds and the real worlds.

Construction

In order to active six human sense, Sixth Sense can feel when you move yours fingers, it can read when you ask it, it can detect the taste of the product, it can remember whatever it watches, it can show your invisible watch, and many more (Das 2009). But how makes it work? There are four parts support it.

1. Camera: A webcam captures an

object in view and tracks the user's hand gestures. It sends the data to the smart phone. (As shown in the picture)

2. Colored Markers: Marking the user's fingers with red, yellow, green, and blue tape helps the webcame recognized gestures.

3. Projector: A tiny LED projector displays data sent from the smart phone on any surface in view - object, wall, or person.

4. Smart Phone: A Web-enabled smart phone in the user's pocket processes the video data, using vision algorithms to identify the object. Other software searches the Web and interprets the hand gestures. (Brittany, 2009)

Thus, Sixth Sense's four parts constructions emerge for the magical device to collect and interpret information. All of them interact with each other in the purpose of attaching the digital to the physical world.

Features

One of the messages of the Sixth Sense is that the digital world take part in the physical world. Once this technology is constructed, it will be used to come true a number of human illusions of future technology.

For instance, do you think holding up your hands in a photo-framing gesture and actually taking a picture, then browsing pictures on a nearby surface, then sending photos by dialing numbers on your hand will be a possibility (Iezzi, 2009)? The answer is definitely *yes* in term of Sixth Sense technology.

You can be like living in the 22nd century

retrieving information wherever you want without taking a heavy boxlike laptop everywhere. The irons which usually appear in your desktop will be surround you in the air, and you can touch it simply using your fingers. Here are more features that presented in Dr. Mistry's demonstration:

* You pick up a book and hold it in front of you. You see, projected onto its cover, reader ratings and reviews.

* When you want to check the time, you draw a circle on your left wrist; the projector displays a clock right on your arm.

* You hold up your boarding pass; the words DELAYED 20 MINUTES or ON TIME are beamed onto it.

* You hold up your left hand, fingers pointing to the right. The system recognizes that you want to make a call, and projects a dialing pad onto your fingers. You tap the virtual keypad with your right hand to dial the call.

* You run into a guy at a party. The system projects his name and Facebook keywords onto his T-shirt, so you can remember who he was and start a conversation. (Pogue, 2009)

If your were to build a new information world, where would you start? According to Husted and Melvin, an obvious place to begin is to look at the world around you (2001). Since human being is the subject, it is no doubt to satisfy human desire is the very first mission. In this case, Sixth Sense can make your world full of possible.

Technology Evaluations

When a new technology comes out, it is vital to evaluate whether it is safe, ethical,

or other social issues. In order to spread a technology in the world, we have to make sure it has positive effect. For such a new invention, Sixth Sense shows reliable quality from following points.

Security: Information security means protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction (Schneider, 2011). Considering of Sixth Sense, we know its network accesses through the smart phone's network which is same as the current network process, such as 4G or WiFi.

Ethics: Since this technology is created by Dr. Mistry, who claimed it is created in MIT Media Lab, we can assume that there is no copy right issue involved in. Although there might be similar concept, Sixth Sense is the first production published. In this case, it can be seen as the first model of this technology.

In addition, Dr. Mistry said it will be a open source. "Rather than waiting for that time to come, I want people to make their own system. Why not?," Mistry says in an article on Rediff Business. In this point, it gives chance for more people experience it.

Legal: MIT Media Lab is authority in the field of information technology, and much of the inventions published by MIT Media Lab. Sixth Sense is also published by MIT Media Lab, so we are confident of its authority.

Social: As Sixth Sense gives more convenience to communicate with others (according to the feature that it will show names when you run into a guy), it makes your social life becomes easier. For other features claimed before, the main point is making life more convenience, and helping people build a healthy social life.

From above four point, Sixth Sense is a highly recommend technology because it not only connects the digital and the real world, but also is a reliable technology to be relied on.

Future Development

Diaz has said, "Sixth Sense technology may change how we look at the world (2009)." Because this technology firstly makes a connection between the digital and the real world, the future of Sixth Sense is really unpredictable. It makes people possibility to live in a digital world, but not just staring at a screen. In the past, people thought such technology may just be available in movie, but from then on, it no longer be a illusion. Our world will change but not just physical world as it was.

As Dr. Mistery opens its source to public, it would be influence people's life a lot. The important point is that for opened source, demands on the production leads to high requirement. So long as people continuously need it, Sixth Sense will be popular in the world.

Conclusion

Technologies from science fiction movies often surprised us and leaves us plenty of questions. You may wonder how people access computer walking their hands in the air (n.a., 2010). However, writers' imaging of that would come true in the future.

Bring the digital world to the real world, Sixth Sense interacts the two worlds corporate efficiently. When the digital world meet the real world, the intersection of them would expand human being living in a wonderful life.

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