## **Analysis of Smart Pills**

- (1) As a pill which will be eaten to observe body's healthcare, the potential target customers of the smart pill should be majority of elders and middle-aged. These kinds of people need to check and observe their body everytime. So the smart pill can provide their healthcare and warn them if their body got some problem. Also, nowadays healthy problems become more and more popular in youngers' topics, it is easy to see that there are still many youngers prefer to buy and use it.
  - On the other hand, hospitals can be the largest consumer of this pill, this pill can help doctor check patients body to diagnose disease quickly and conveniently.
- (2) In the first pill, according to introduction, sensors are added in it, data will be transmitted to user's mobile phone through Bluetooth, healthcare data will be showed into the mobile immediately.
  - In the second pill, the camera takes photos first, and then send these photos data to a second device (which is wearable), the second device will transmit data to user's tablet through wireless.
- (3) This pill can make live better. Because it is tiny and harmless. Instead of big body check device, this pill can go into the inside body conveniently. Also, if this pill can be sold with a low price and easy to use, people can check the body whenever they want and no need to go to hospital. That will be a good example for IoT application in healthcare.
- (4) The for the limitation, firstly is the battery power, the biggest problem is how to supply power stably, can the power be supply by wireless? If yes, how to guarantee the stability? If not, how to supply power by power line? That is a question needed

to be discussed. Secondly is safety about human body, they need to guarantee those components must not damage humans body.

- (5) a) It can have huge number of users in hospital or individual users
  - b) The data rate is low and efficient.
  - c) Delay for daily body check is ok, but for emergency situation like heart disease, user need to know heart information in time, the delay should be very low and refreshing should be frequency.
  - d) It is an autonomous device.
  - e) Battery life should be discussed, we don't know it now.
  - f) It may be very expensive because it is IoT combines healthcare.
  - g) Mobility is very good.
  - h) The healthcare information cannot be get too easy and the pill system cannot be destroy too easy, also it don't need to be very strict, because this will waste too many time in security which will cause delay.
- (6) It is useful but need to design well in security. If the system was broken, it is very dangerous for emergency patients.
- (7) Of course, healthcare is one of the biggest topic in people's life, many people are willing to pay for it for their healthcare.

## **Analysis of Smart Mother**

- (1) Base on the introduction in its official website, seems it is a daliy-managing device, it can connect with any daily use such as toothbrush or coffeemaker, and it can manage nearly everything of daily life including alert, GPS locating and sport tracking. So its potential customers are home users.
- (2) As a multiple-usage-managing device, smart mother provides many kinds of functions about daily life, such like using GPS locating (for getting children's location), using sensors to provide many kinds of tracking (coffee making, water drinking, sleeping etc..), like a mother, smart mother can help users know nearly anything they want in daily life.
- (3) Smart mother can help customer know anything about their daily life, so it is benefit in improving life quality.
- (4) The biggest limitation is stability of the devices connect all daily tools, and to guarantee this, do they need to provide a set of daily tools such like special toothbrush, or special coffeemaker? If devices can only connect to specified daily tools, that is not convenient for customers.
- (5) a) It can have huge users and huge devices
  - b) Data rate can be very low because it doesn't need to transform too many information.
  - c) Delay can be a little bit slow because it doesn't have some emergency situation to deal with.
  - d) It is an autonomous device, user only need to set rules.
  - e) Battery problem need to be discussed, we don't know it now.
  - f) It can be very cheap but need to be discussed if they need specified daily tools.

- g) Mobility is great.
- h) The security needed is not so strictly. It is only daily life, but in GPS locating function they need to consider about security problem.
- (6) That is a great device to improve our daily-life quality but only can improving. It is not necessary for our daily life.
- (7) Sure, it will have a good marketing performance in middle-income and high-income customers, but for low-income customers, it may not have such a good marketing performance as well.