

# **EXPLORE IOT EXHIBITION**

## **Proposal of travelling exhibition**



**NATIONAL SCIENCE AND TECHNOLOGY MUSEUM**

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# EXPLORE IOT EXHIBITION

## 1.Introduction

Nation Science and Technology Museum to hold a special exhibition “Exploring IoT Exhibition”. The purpose of this exhibition is to introduce the new age of technology and knowledge in the ICT industry to the public, showing Taiwan’s development and strength in this field, enabling the public to understand, experience and feel the influence of the ICT industry on life and communities through the new era of IoT cloud applications. This exhibition is divided into 6 areas, covering content from the invention of the computer and the global village constructed by the internet, to the omnipresent network environment facilitated by mobile devices. As technology continues to develop and innovate, humans have managed to create communication between man and things, and among things themselves, leading to the emergence of the world of IoT, where everything is connected to the internet to exchange information, communicate, and use smart management systems to the extent that smart cities now exist.

--Exhibition duration: 10 Nov. 2017 –21 Oct. 2018

--Location: No.2 & 3 Special Exhibition Hall of the National Science and Technology Museum

--Organizer: National Science and Technology Museum

## 2.Exhibition Content

Area A: Now is the Future

Area B: 0 and 1 Overturn the World

Area C: Virtual Neighbors

Area D: Transboundary "Language"

Area E: Smart City

Area F: Infinite Potential of IoT?!

## 3.Exhibition Features

### A.Online to Onsite

The final purpose of IoT is to predict decision making depending on the data collected by the sensing elements after data analysis. National Science and Technology Museum has specially created a tour with integrated virtual reality, designed a dedicated App and arranged a method of collecting and transmitting data on the public’s visit to this exhibition through the above system to understand visiting behaviors through an analysis of the statistics of the database which will then be on display in the form of an infographic. The whole exhibition is IoT, fully implemented into a world where people, things, and people and things communicate and connect with each other.

## **B.Smart Vending Machine**

After the experience, please calculate the total of I-coins (knowledge points) and I-points (empirical value) through your mobile device and then exchange them for commodities in the vending machine. Commodities are different according to the amount of points you have accumulated. Please experience the exchange of commodities with virtual coins.

## **4.Exhibition Area**

### **Area A: Now is the Future**

The Fourth Industrial Revolution is leading humanity towards the world of IoT. Now is the future and you need to be prepared to welcome in the smart era. Visitors need to select display mode to first explore IoT. The APP or RFID bracelet is available to download to view the exhibition on mobile devices. On-site interactive units and sensing nodes are placed on the site so visitors can understand what IoT is, accumulate I-coins and empirical value I-points, and really get a sense that IoT is the future of the world in the ICT industry.

### **Area B: 0 and 1 Overturn the World**

The 1990s is the era of computers, during which we experienced many unprecedented revolutions, coupled with the development of multimedia, vivid colors augmented to the unromantic world, especially in terms of the tremendous development in PC. ENIAC, invented in 1946, takes up a whole room, but nowadays, entire ENIAC circuits can be installed on a phone card using integrated circuit technology. The development of computing technologies, the history of computer development, the development of the microprocessor and the PC, and their applications in a variety of fields are introduced in this area.

### **Area C: Virtual Neighbors**

They connect brain power and are able to circulate information, enabling knowledge to exert power with great leverage. In the era of the information superhighway, computer networks open the door that leads to global information and we believe that “connecting to the internet connects you to the future” is not just a slogan. With radio waves and the rapid development of technology applications, broadcasting and telecommunication industries such as radio and TV can transmit information to the masses instantaneously, shortening the distance between one side of the world and the other. The development and application of transmission media, network information exchange, electronic communication, mobile devices, etc. will be introduced in this area.

### **Area D: Transboundary "Language"**

Bill Gates mentioned the interconnection of things in his book *The Road Ahead* published in 1995. In 1998, the Massachusetts Institute of Technology proposed the concept of the IoT which, at the time, was called EPC system. In 1999, the Auto-ID Company put forward the idea of IoT based on RFID. “IoT” has become the next key area of the development of ICT and has marked a new realm

in the development of methods of communication. The development of IoT, cloud computing, big data analysis, core technology and their applications in various fields, including safety and privacy issues, are introduced in this area.

### **Area E: Smart City**

The smart city is an important step in the fulfilment of IoT applications. Before 2010, IoT applications were initiated by government agencies of each country and were mostly used in fields relating to environment sensing. It is predicted that by 2020, the smart city will be an important aspect of IoT applications as various technologies start to mature. Innovative applications such as the smart government, smart transportation, smart healthcare, smart commerce and smart life will be introduced under this umbrella concept.

### **Area F: Infinite Potential of IoT?!**

If the whole world is an IoT, all information and motions of all connected items can be stored and computed through the cloud. Various solutions can be offered for occurring events more powerfully through big data analysis, and future conditions can be also predicted. The unknown power of X power is emerging... Who will you trust and who should you trust?

## **5. Actual Exhibition**



Area B: 0 and 1 Overturn the World



Area D: Transboundary "Language"



Area E  
Interactive experience: Virtual Shopping with Joy



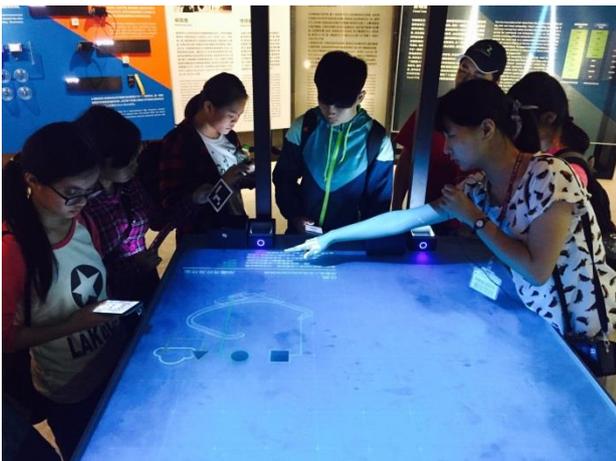
Area E  
Interactive experience: Experience a Smart Car



Area C  
Interactive unit: Maker Network Cable



Area E  
Interactive experience: Cycling Health Test



Area D  
Interactive unit:  
Acquaintance with the Framework of IoT's



Crowd at exhibition

## **6.About travelling information**

A.Exhibition Area: About 660-760 m<sup>2</sup>

B.Date available: According to the needs of both sides

C. Approachs to cooperation:According to the needs of both sides