Discussion

- **What are the key messages/points? (Do you agree, or disagree?)**

- **What are the trends that you found? (Are they relevant to M2M?)**

- **What is the motivation behind this work? What are the user benefits?**

- **What the fundamental challenges? What technology/service innovation must be done?**

Imagine (Intel):
http://youtu.be/UDoB4Acozp0

Group 1

Key Learning

- **Key points**
  - **Computation can enrich our lives**
    - Different types of processors for different applications & devices, including cloud computing
- **Trends**
  - **Remote control: thin client and powerful cloud**
  - **Processors will be more capable with lower power consumption**
- **Benefits**
  - **Remove medical care**
    - 1/3 fatal rate for infectious disease in developing countries
  - **Smarter, safer transportation**
    - 155 millions cars connected to internet by 2013
  - **Personalized advertisement on digital signage**
    - 10-12 million digital signage by 2015
  - **Greener planet**
    - 50% power is consumed by factories
    - Embedded intelligence can make power generation and distribution better.
- **Challenges**
  - **Wireless bandwidth**
  - **Power consuming**
  - **Security**

System of Systems (IBM): http://youtu.be/h2br2_twHfw

Group 2

Key Learning

- **Key points**
  - Our planet is a natural system of systems
  - The system is complex; interaction of system to system may be unpredictable
  - People matter; M2M is a productive intervention in the complex system

- **Trends**
  - Link systems and exchange information
  - Use sensors as eyes, make more intelligent decision
  - Computer can analyze the data for human to make intelligent decision/action

- **Benefits**
  - Make life better
  - Make technology more humanistic

- **Challenges**
  - Standards to link systems together
  - Communication: protocol
  - Data mining and Decisions
  - Balance between human and machines
  - Power issue

The Social Web of Things (Ercisson):
http://youtu.be/i5AuzQXBsG4

Group 3

Key Learning

- **Key points**
  - Machines in a house can be interconnected, aware of context, and form a "society" to serve human.
  - Agents can prepare things for us, human will make the final decision
- **Trends**
  - People are lazy
  - More and more people live along
- **Benefits**
  - A highly efficient life in house
    - They are tired after busy work
    - They don't want to spend much time on housework
  - People are lonely and want companions
- **Challenges**
  - Context analysis
  - Inter-system communication
  - Setting a standard list of functionalities for each type of machine
  - Security

Machine to Machine Smart Services (Vodafone):
http://youtu.be/ujk1cprLpD8

Group 4

Key Learning

- **Key points**
  - M2M smart services with user's habits makes user more convenience everywhere.
- **Trends**
  - Phone as an important center of services
  - Make the service connected everywhere through smart phone
- **Benefits**
  - Convenience, saving, or lazy (科技始終來自人性)
  - M2M analyze the schedule and make proper planning (time and even route)
  - Personalized service
- **Challenges**
  - Compatibility for unified Interfaces of each machine