HEMS

CEATEC2012コンファレンス　パネル講演2
番号　SP-13　シンポジウム「家電の未来」 IEEE GCCE 2012主催
日付　10月5日(金曜日)　時間　10:00～12:30
会場　国際会議場2階 コンベンションホールA

Web and Smart House

Oct. 5th 2012

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Keio University/
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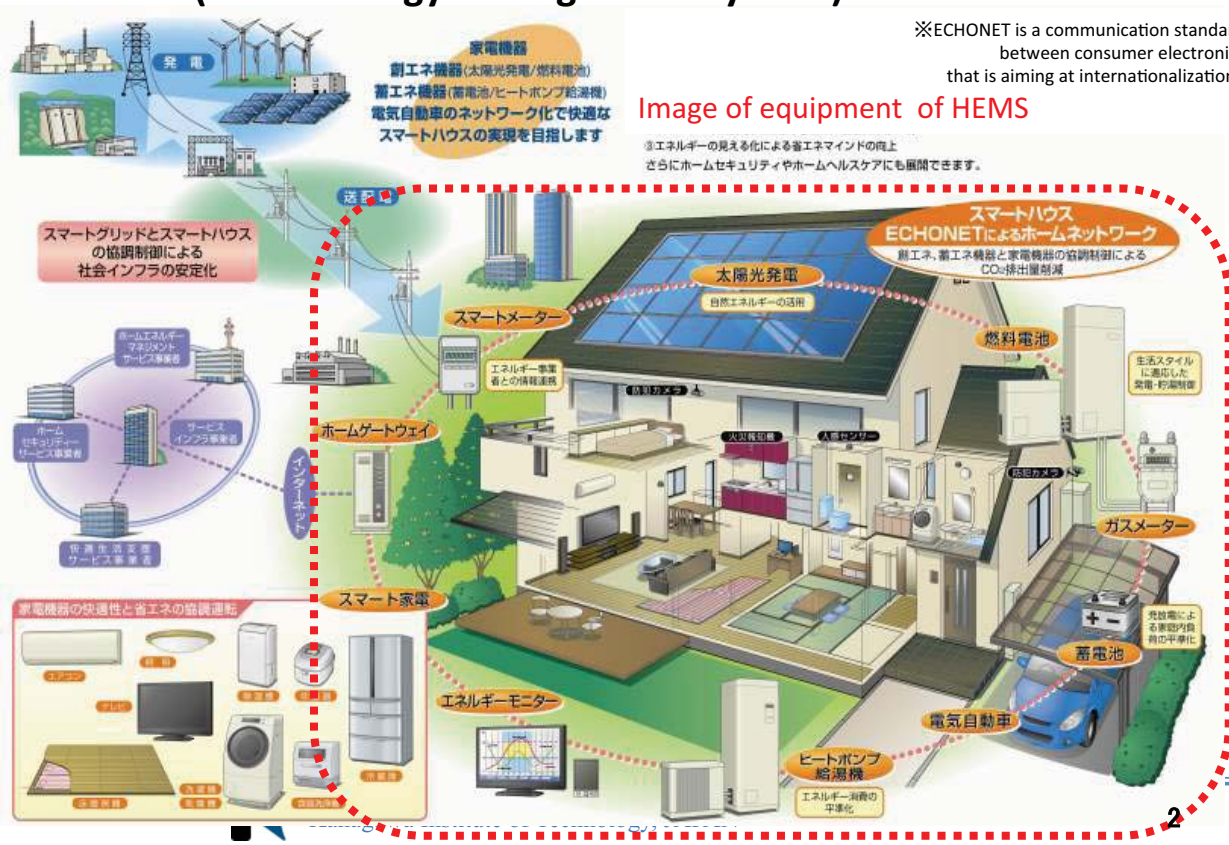
Smart House Research Center

HEMS

HEMS (Home Energy Management System) ⇒ Smart House

※ECHONET is a communication standard between consumer electronics that is aiming at internationalization .

Image of equipment of HEMS



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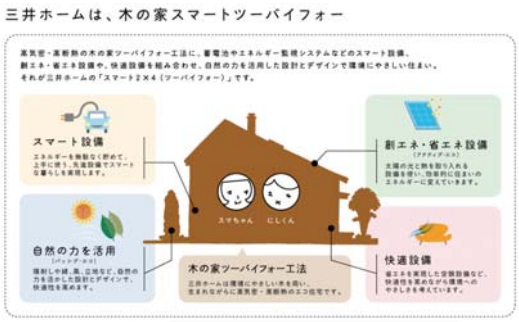
Saving energy

Saving energy + Making energy + Storing energy

Smart House

HEMS is becoming “real business”, it’s “On going service”!



Mitsui Home Group

Misawa Homes

Daiwa House

Sekisui Chemical

Panasonic

Toshiba

Sharp

Hitachi

An example ：Sekisui Heim

- Trade name:「Smart Heim Navi」

- Total contacts 13,000 (April 2011~August 2012)
  - new construction 11,000, existing construction 2,000

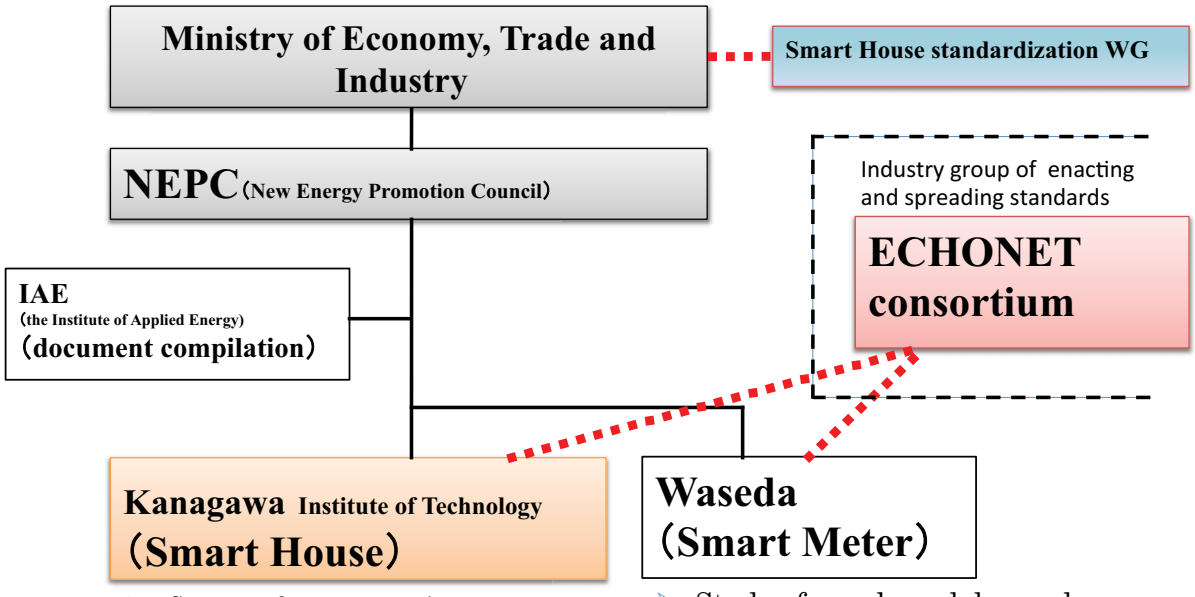
- HEMS construction costs
  - new construction about 120,000 JPY
    existing construction about 150,000 JPY

HEMS is becoming “real business”, it’s “On going service”!

So we need practical steps for spread expansion of future business field.

Activities at Kanagawa Institute of Technology

Activities at Kanagawa Institute of Technology



- Construct the support environment to certificate and test
- Prepare equipment development kit
- Prepare operational guidelines

- Study of supply and demand

① development of ECHONET Lite interconnection environment

- **We provide Plug Festa platform to check and confirm interconnectability**
  - Provide opportunities for manufacturers to test their equipment's interconnectability
- **We provide opportunities and environment to test equipment from manufacturers**
  - Provide opportunities and environment to perform operation test and logging in a standard configuration of ECHONET
- **We provide places for each company or collection center to put the existing sale products and equipment**
  - Provide temporary support if there is a demand
- **We provide support self-certification test for the ECHONET certification**
  - Support of self-certification following certification order

②HEMS development kit development support

- We maintain the software performing the standard for new entrant operators
  - Provide sample source as a role model in the specification
  - Prepare an emulator
- Oversea support
  - Manuals and documents in English

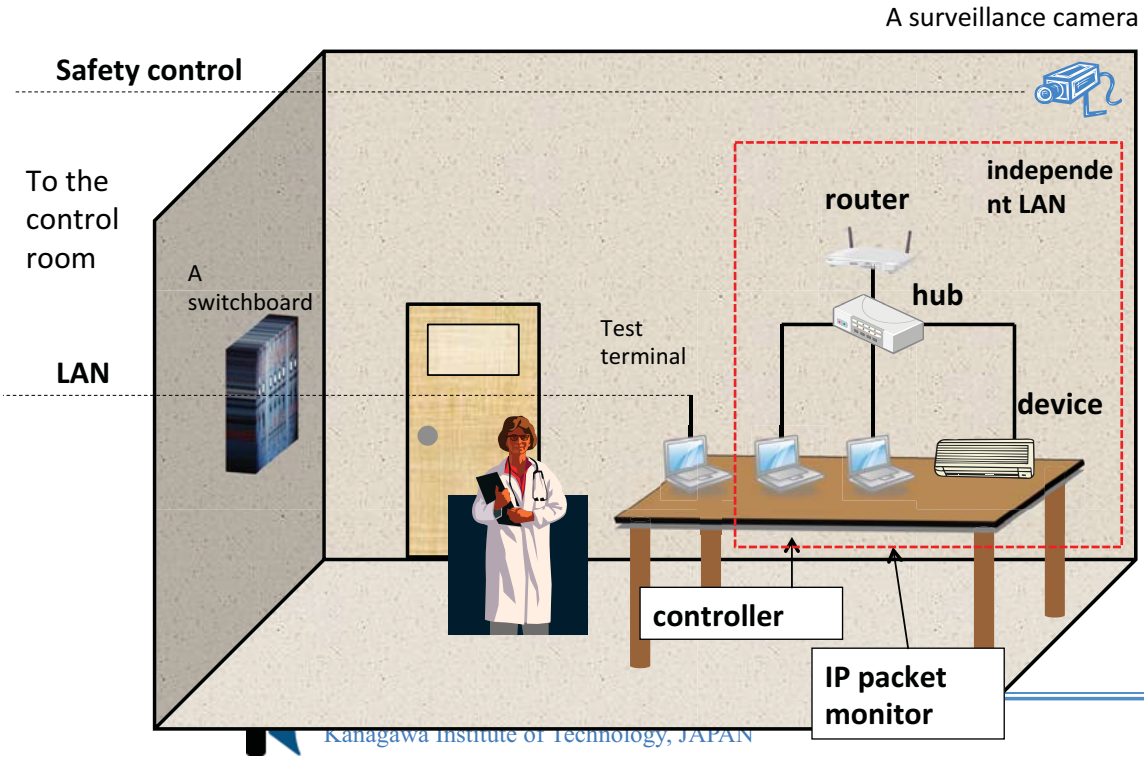
Functions provided by the Certification Center

①**For the companies providing service**: HEMS equipment, a place for actual examination, opportunities of information dissemination

②**For the companies developing equipment**: permanent Plug Festa location, software development kit, introduction of technical consultants or certification bodies

Image of the center

Basic configuration of the test room

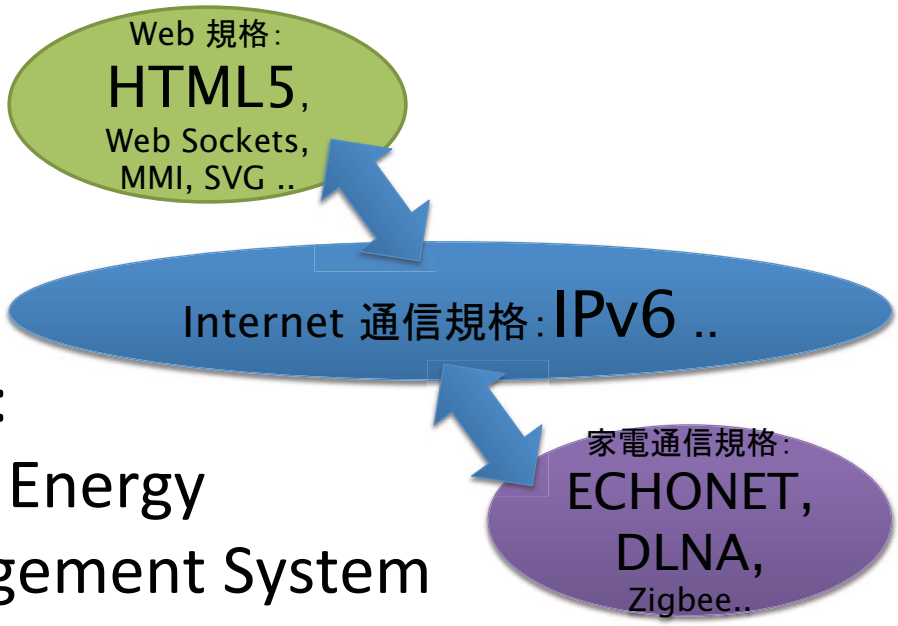


schedule	contents
April	Start of the project
May	Test rooms and facility-related orders
June	Beginning of web PR, Public appeal for developing development kit and development facilities
July	Order of development kit and test facilities
August	Start interviews for housing manufacturers and builders
September	ECHONET symposium (today)
October	Start α test of test rooms and facilities
November	start β test of test rooms and facilities publicly.
	Center opening 11/21
December	Open development kit to the public
January	Summary report
February	Final delivery
March	Start the operation

検索：HEMS認証支援センター

http://sh-center.org/

家電/機器/車＋Web 規格連携



HEMS:
Home Energy
Management System

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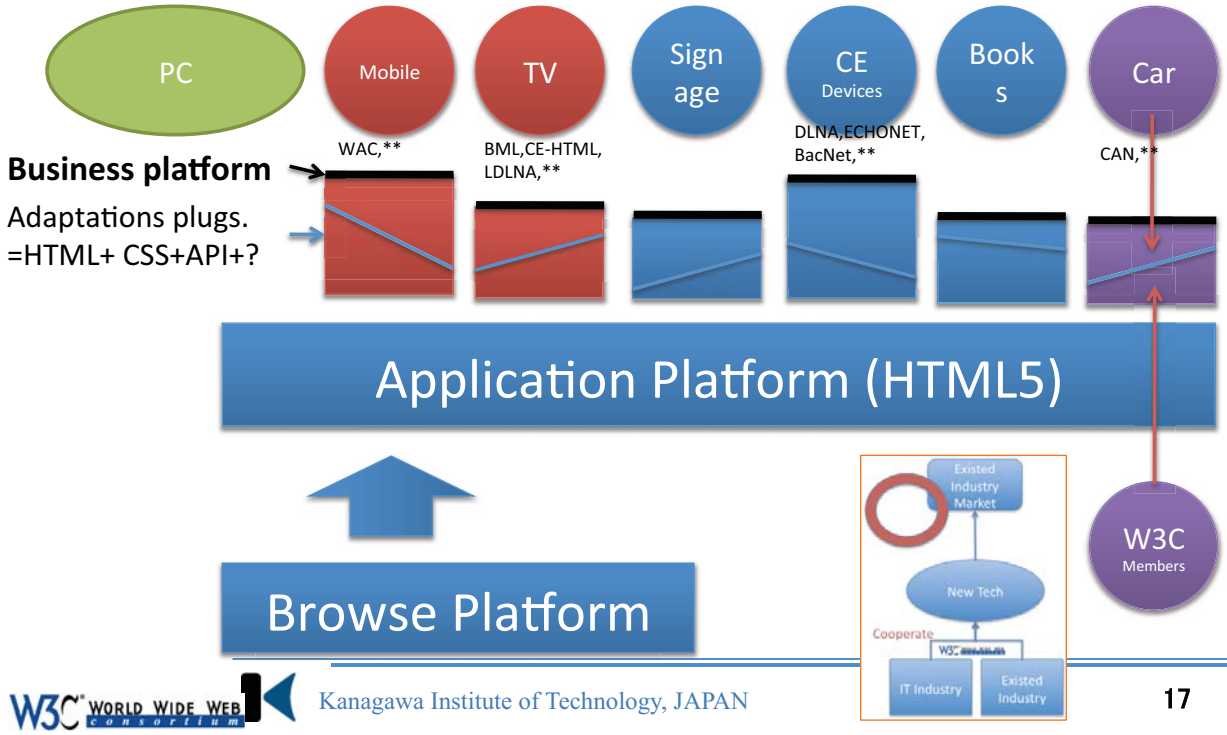
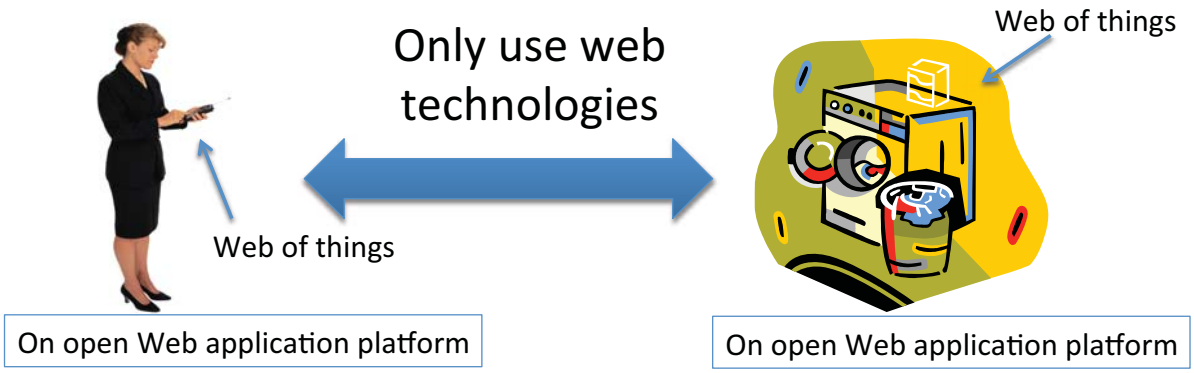
Economy and Technology are changing by Web / HTML5!

Web became to "Business Platform"



to Open Web Application Platform

We have to consider the fact of Open Web Platform based business.