

# IEEE-SA's IoT

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# Agenda

Overview of IoT and IEEE activities to-date

IEEE's Uniqueness

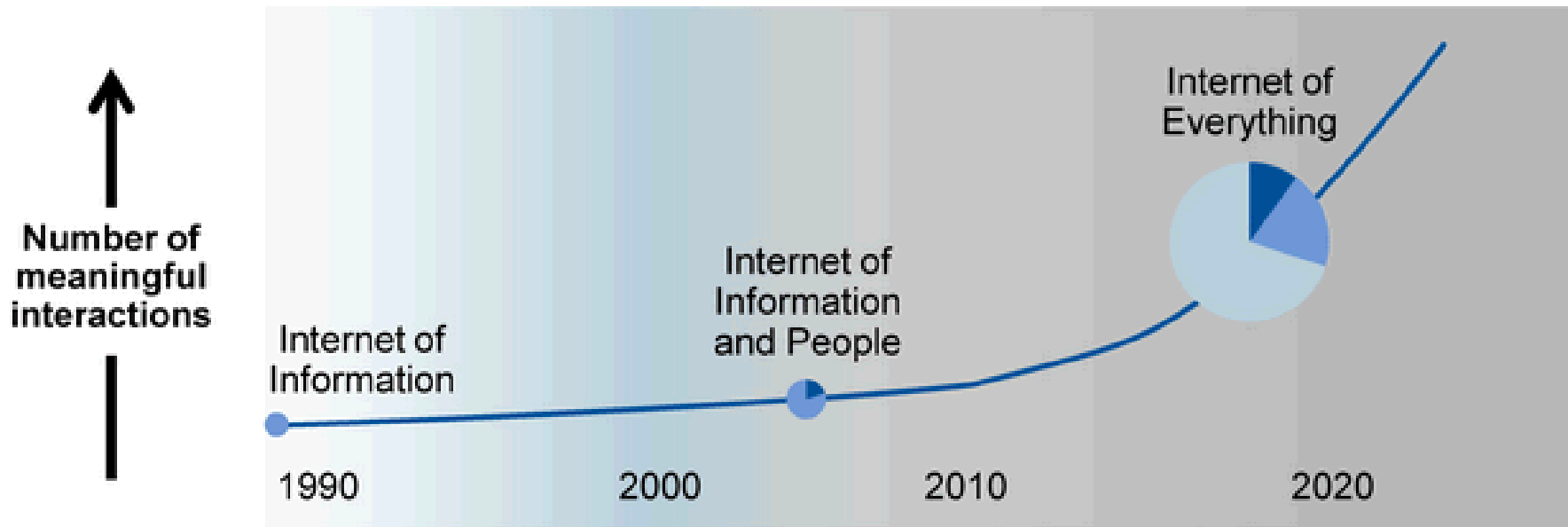
Focus Areas and Call to action

# IoT concept

- ▶ Enable things to be **connected anytime, anyplace, with anything and anyone ideally** using any path/network and any service.



**Connected! All the time! Everywhere!**



Key milestones	> 50% of Internet connections are things	Things create more traffic than information and people
Number of permanently Internet-connected devices	> 15 billion	> 30 billion
Number of intermittently Internet-connected devices	> 50 billion	> 200 billion
Volume of traffic from things	Minority	Majority

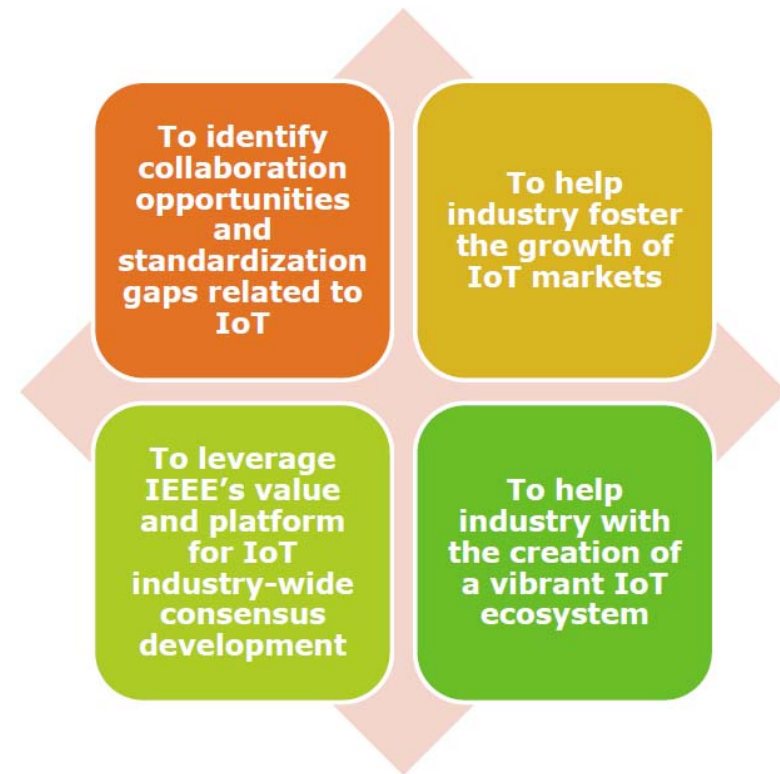
Source: Gartner, Sept 2011

# IEEE Activities To-Date

- ▶ IEEE-SA has been looking at IoT since Q4 2011
- ▶ In Q4 2012, an IoT Strategy Group was formed under the IEEE CAG (Corporate Advisory Group)
  - to establish industry collaboration
  - to deliver IoT solutions to the marketplace
  - to leverage IEEE strengths
- ▶ IEEE has held a number of industry activities on IoT around the world
  - Workshops
  - Roundtables
  - Panels
  - Website
- ▶ Sponsors have been contacted to inform and request participation
  - March 7<sup>th</sup> 2013 requesting feedback on IEEE-SA standards that have IoT relevance
  - May 15<sup>th</sup> 2013 announcing the focus groups and requesting member participation
    - Information forwarded to 802.3, 802.11 and perhaps others

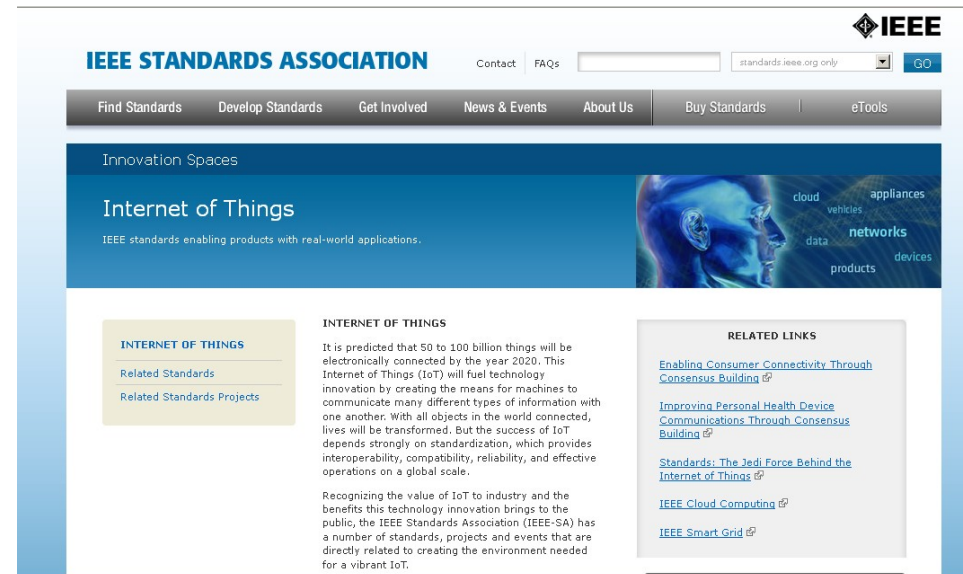
# Example IEEE-SA Industry Activities

- ▶ Panel at South by Southwest 2013
  - Digital Telepathy- Where everything connects
- ▶ Leading a series of workshops worldwide that will identify gaps and requirements to assist in developing industry IoT strategies and programs
  - June 2012: joint workshop with CCSA
    - Beijing, China ½ day workshop on afternoon of 5 June
  - November 2012: full-day workshop Milan, Italy
  - April 2013: full-day workshop Shenzhen, China
  - Fall 2013: multi-day event West Coast USA
- ▶ Roundtable in Seoul May 2013 collocated with IEEE-SA BoG



# SA IoT on the web

- ▶ Creation of SA IoT website
  - <http://standards.ieee.org/innovate/iot/>
  - Includes lists of IoT-related standards and projects (over 135)
  - Links to related areas
  - Links to relevant articles
  - Links to past and present workshops
- ▶ Hub of SA IoT information as work expands



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# IEEE's Uniqueness

- ▶ Value proposition
  - *Marrying* a **technology** and **business** approach
- ▶ IEEE's Technology Strength
  - Over 40 technical societies
    - Societies span infrastructure, sensor and consumer technologies
  - Standards become nexus for bridging and integrating technology
    - Over 90 standards sponsors
- ▶ IEEE's Business Strength
  - Focus is to develop requirements and disseminate across the IEEE-SA
  - IEEE-SA CAG focuses on industry interests in the IEEE-SA
  - Leverage and organically evolve IEEE's standards core competencies
    - May include partnering with other organizations to develop requirements

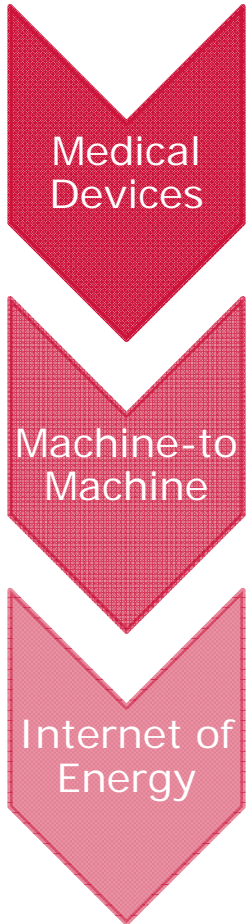
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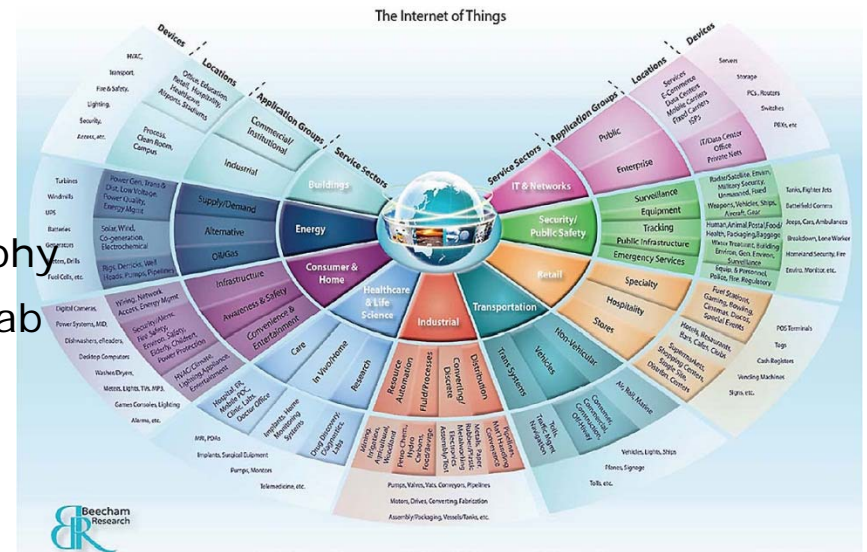
IEEE's Uniqueness

Focus Areas and Call to action

# Focus Areas



- Paradigm shift in approaching standards
  - Look at the “challenge” top-down
- Initial phase to focus on 3 areas
  - Medical, M2M and IoE
  - Focus is answering strategy questions
- 3 Teams of industry experts are being formed
- Leadership
  - Steering Chair: Dennis Brophy
  - M2M Lead: Wael William Diab
  - IoE Lead: Oleg Logvinov
  - Medical Lead: Paul Schluter



# Focus Group Deliverables

- Goal is to answer questions similar to these to understand where we would like to go
  - Name of vertical
  - What exists today in terms of relevant standard
    - Inside IEE
    - Outside IEEE
  - What are the IoT requirements for this vertical
  - What are the gaps in IEEE to implement those requirements?
  - What is the vision (plan, timeline, type of documents) to achieve those requirements?
  - Annex of related material
  - Who participated in this and from what Sponsor (if applicable)
- Contribution driven organization
  - If you are interested, please join and contribute

# Call to Action

- ▶ IEEE-SA CAG IoT Strategy Group is building out the 3 teams of experts for M2M, IoE and Medical
- ▶ Encourage any experts from 802 to join and participate in those teams!
  - Open to all!
  - Including non-IEEE / IEEE-SA members



# IEEE-SA IoT M2M Update and Reflector

- ▶ Reflector has been recently created
- ▶ Web area has been recently created
- ▶ To subscribe
  - Subscribe to IEEE listserv list IOT-M2M
  - <http://grouper.ieee.org/groups/iot/m2m/reflector.html>
- ▶ Will hold first telecon this quarter

# Contacts

- ▶ *Staff Contact*
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**THANK YOU**