

**Internet of Things (IoT):** 

Is it a New Business Opportunity or a hype?

Presented by Nauman Jaffar CEO, MarkiTech



## **Imagine**

If these technologies were not commercialized















# Technology continues to evolve every day

Almost everything is going mobile and being connected to internet....





#### **ENTER MARKITECH**

Your guide from innovation to commercialization

We are technology and marketing consultants, trainers and implementers with focus on helping commercialize technology products in the mobility, IoT and digital marketing space for business clients

We augment in-house, traditional consultants, consulting giants and marketing agencies by offering outsource model, focusing on significantly faster turnaround, years of development experience and laser focus on technologies like mobility, IoT, digital marketing trends to improve revenue and reduce costs for our clients



# What do these things have in common??













# **Tesla Billion \$\$ Recall Saved**

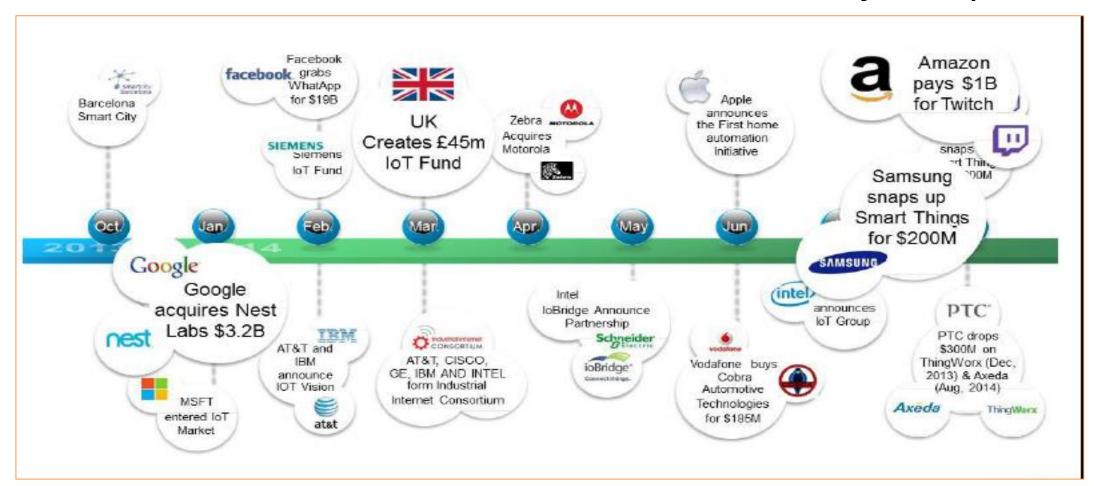


- Hitting road debris is inevitable, NHTSA documents say
- By raising the car's ride height through a software upgrade last fall, Tesla reduced the likelihood and danger of such a strike, the agency concluded
- NHTSA closes Tesla fire inquiry March 2014



## Is "Internet of things" a reality or a hype?

• From 33Mill search results to 733Mill results in just 2 years....



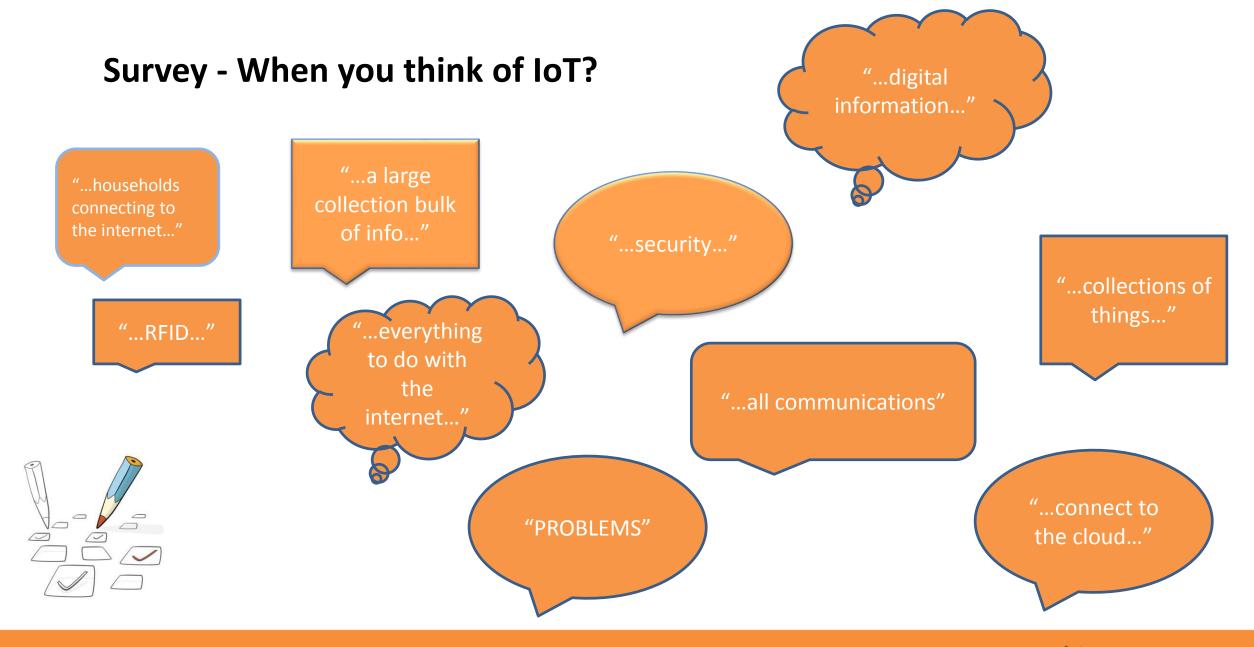


# Agenda for today



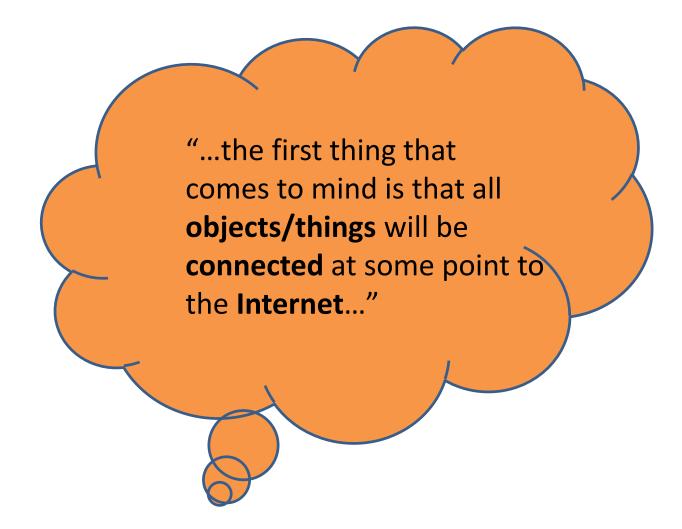
- Defining IoT
- Current Deployments & Opportunities
- Key Challenges for Adoption
- Case Study Canadian Market
- Closing Thoughts

Questions





#### Common Theme.....





## Industry defines the Internet of Things as...vs. M2M

"...A network of networks of uniquely identifiable end points (or things) that communicate **without human** interaction - be it "locally" or globally to provide, analyze and act on information



...while M2M is narrower, more local and has more industrial context"



## Things connected ...







**Transportation**: Engines, Roads, Drones

Manufacturing: Controllers, Assemblers, Actuators

Building / Homes: Thermostats, Appliances, Lights, Controls,

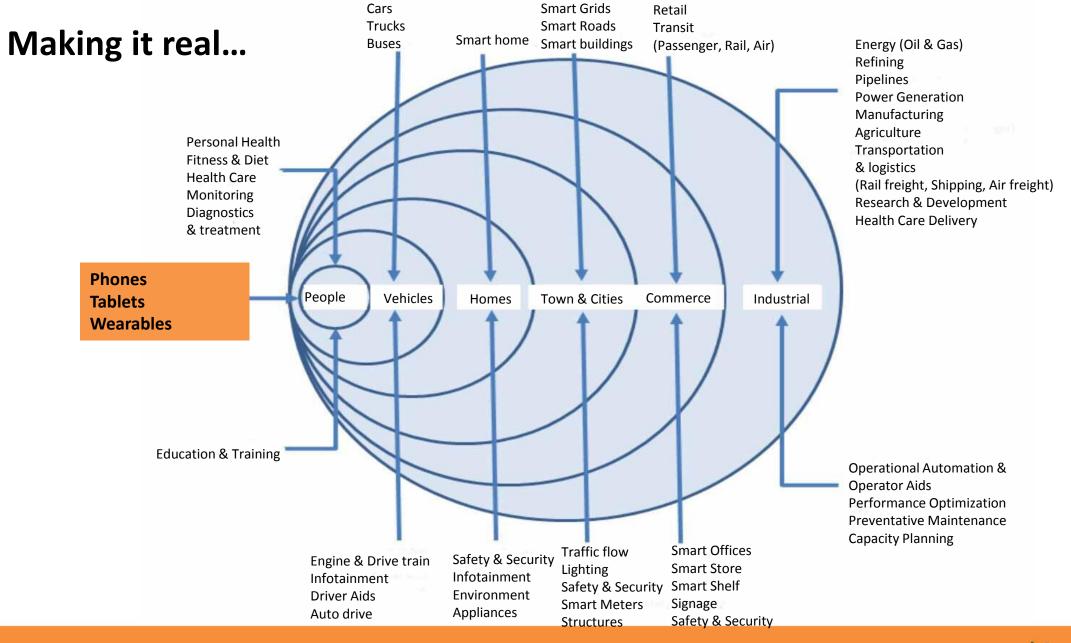
Healthcare: Monitors, MRIs, Medicine

Energy & Utilities: Drills, Pipelines, Smart Meters

**Distribution**: Inventory, Containers, Pallets

Retail: Vending Machines, Kiosks, Digital Signs

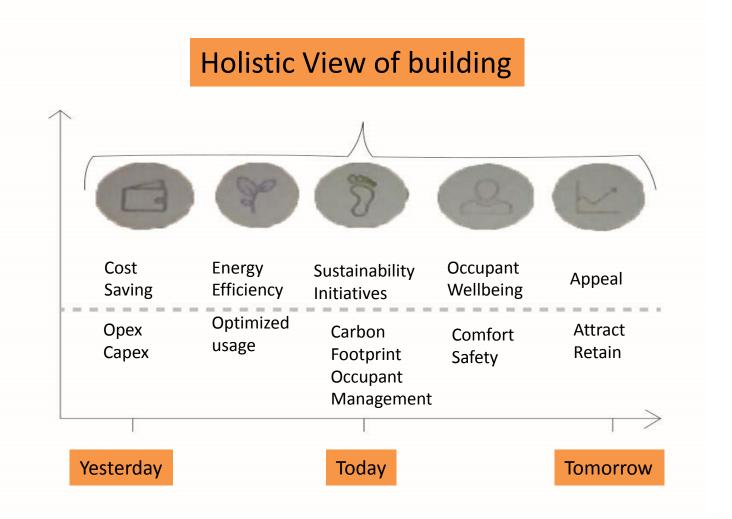






# IoT use – changes with time

Modern Building System Scope





## Why should Business Decision Makers Care about IoT?

#### **New Revenues**

- Enhance Existing
- Product or offer
- New services to
- Your clients



#### **Greater Productivity**

- Optimized equipment
- Uptime, energy saving risk reduction



#### **Cost Savings**

- More data and
- business
- Intelligence
- Enhanced
- Customer support
- And site visits



#### Real Time Monitoring

- Remote Control
- And continuous
- Real-time
- Monitoring for
- Quick response





## **Summary - Key Benefits of IoT for a decision maker**

- Increase productivity
- Improve customer service/data due to tracking of behaviors
- Improve customer product or time-to-market
- Faster decision making
- Generate new revenue streams
- Cost savings
- "Be a leader in your industry"

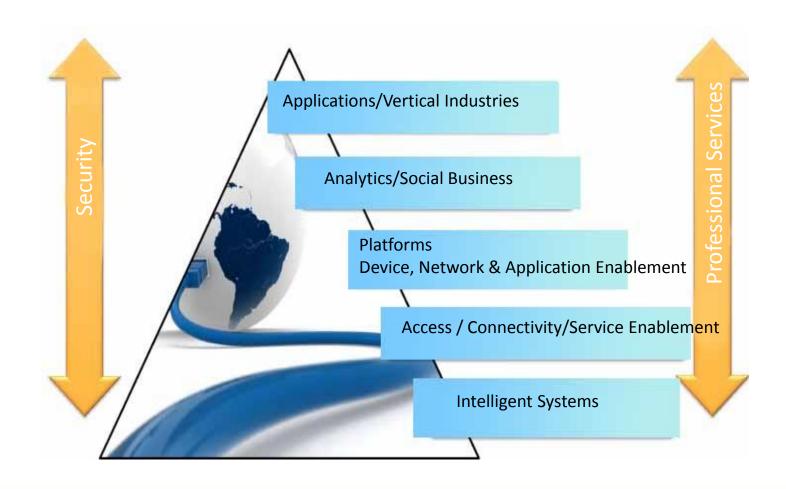


# **Key Implementation Challenges to IoT Adoption**



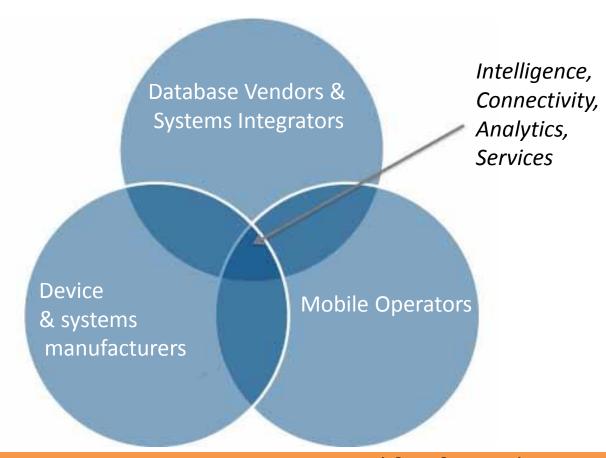


# Many players....IoT Ecosystem Open for All Vendors





## Frenemies & Coopetition Characterize the IoT Market



Hitachi + Axeda, PTC + ThingWorx, SAP + Ericsson, GE + Cisco, Intel & AT&T, Axeda + Jasper, Operators ++



# Case Study: Canadian Market Perspective





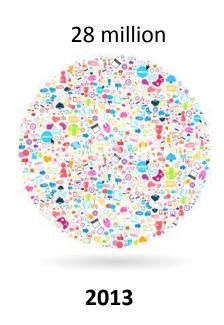
# **Backdrop for IoT: Business and IT Priorities in Canada**





#### **Canadian IoT Forecast: Installed Base**

Autonomous intelligent & embedded systems (units)



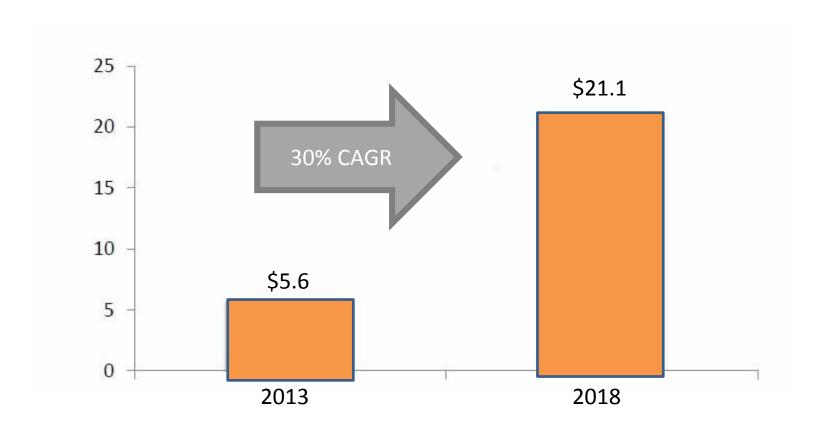


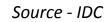


Source - IDC

#### **Canadian IoT Forecast: Revenue**

Cdn \$ Billions







#### **10 Conditions for IoT Growth**



- 1. Business case for IoT is crystal clear
- 2. Need to show existing process improvement before tackling the new (hard) stuff
- 3. High **growth** in new smart and connectable assets
- 4. Implementation needs to be dead simple
- 5. **Learn** from the past e.g., what worked to get smart meters deployed

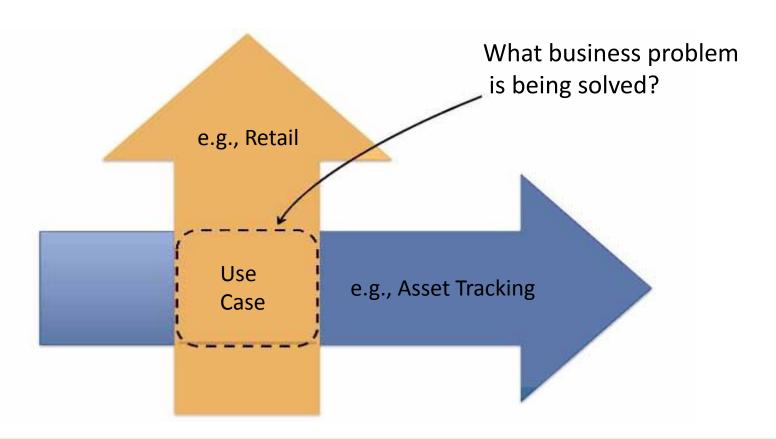
#### **10 Conditions for IoT Growth**



- 6. Joint responsibility between **IT and Business**
- 7. New partnerships form between IT, operational technology (OT) vendors
- 8. Public sector buys into IoT for enhanced service
- 9. **Complexity** is minimized ("templated" solutions, ability to sell to SMBs)
- 10. Security is prioritized



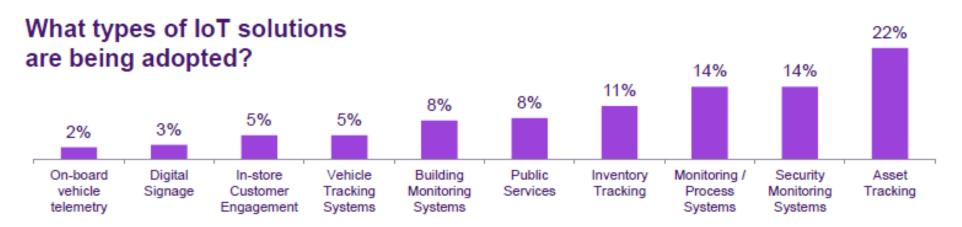
#### **IoT: A Cross Between Vertical and Horizontal Markets**





## **High Potential IoT Markets in Canada**









#### **IoT Under Construction**

1.8 million sq ft acute care facility "New Model of Care"
Design: lean, green, digital

- •Robots for automated transport
- Pneumatic tube delivery
- •Scanned results sent to physician's smartphone
- Bar coded drug delivery
- •Auto BP readings into digital charts

"On track to save 164 km per day of walking time, with a potential savings of \$2,000,000 per year in operating costs." – COO Barb Collins



## **Bringing it all together**

Ecosystem - IoT and the 3rd Platform

#### Cloud

Scalability & flexibility Variable workloads



# **Mobility**

Variety of (and remote) locations
Enhancing field processes

## **Social Business**

**Big Data / Analytics** 

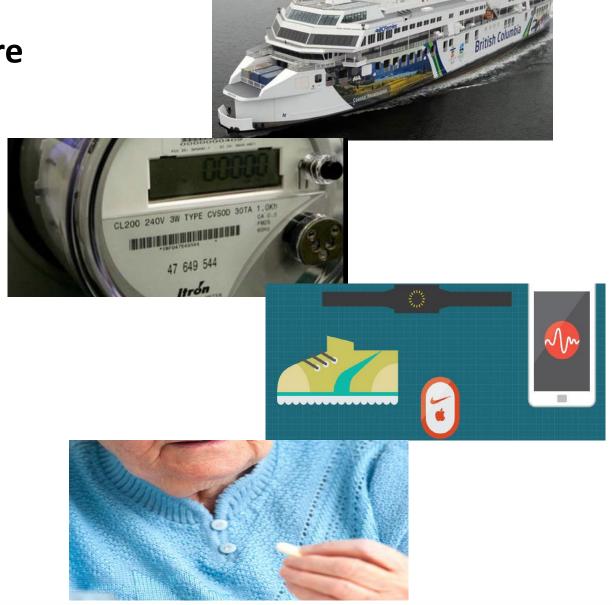
Machines that tweet Automated response



# Closing Thoughts – IoT is every where

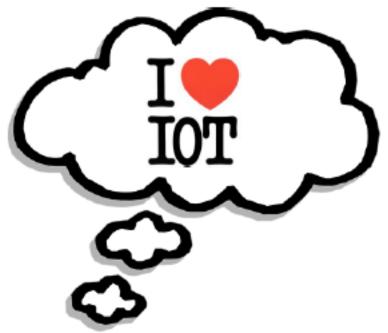
- Ferries
- Transport
- Wearables
- Health....

• Still 99% of the world is unconnected





# **Closing Thoughts**



Opportunity is ripe for many vendors to play and win share

Look to partner outside your current comfort zone

We at MarkiTech, are here to help you with this transition



Please visit our website, <u>www.markitech.ca</u> and review our blogs, infographics and presentations....we are here to help you be more awesome.....



