

# Machine to Machine

BCS Northamptonshire Branch

Date: 9<sup>th</sup> December 2014

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**Welcome**

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# **Branch Chair**

BCS Northamptonshire Branch

**Barney Duffy**

The background of the slide features several thick, flowing, wavy lines in shades of green and yellow, creating a dynamic and modern aesthetic. These lines sweep across the lower half of the slide, adding a sense of movement and energy to the design.

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# AGM Agenda

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- **What is Machine to Machine**
- **Machine to Machine Connectivity, and Time lines**
- **Pro's and Con's**
- **Typical Services for M2M**
- **Mobility is the new requirement for M2M**

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# What is Machine to Machine

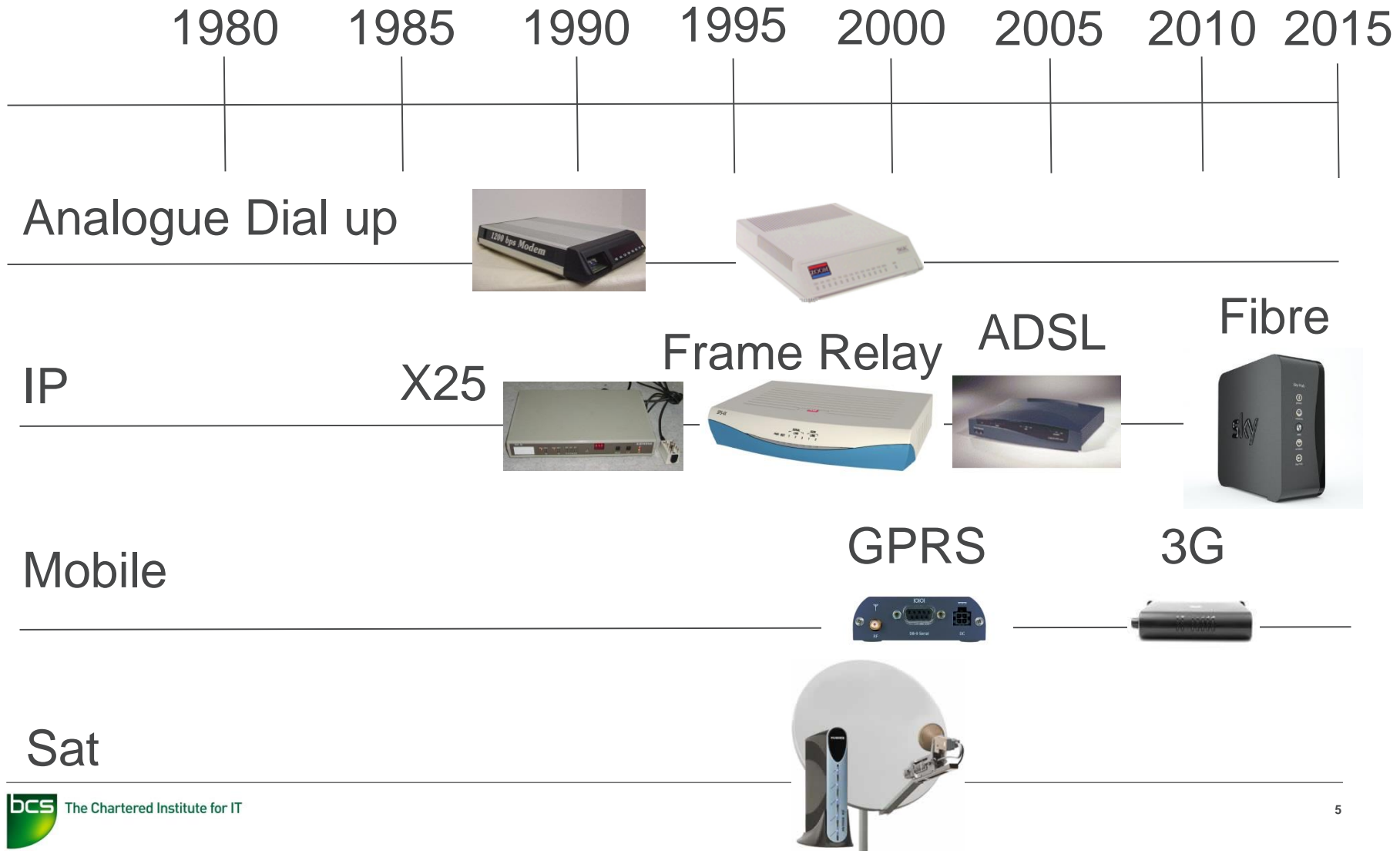
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- **Machine to Machine (M2M)** refers to technologies that allow both wireless and wired systems to communicate with other devices of the same type. M2M is a broad term as it does not pinpoint specific wireless or wired networking, **Information and Communications Technology**.
- **M2M** is considered an integral part of the **Internet of Things (IoT)** and brings several benefits to industry and business in general as it has a wide range of applications such as industrial automation, logistics, Smart Grid, Smart Cities, health, defence etc. mostly for monitoring but also for control purposes.
- This presentation is part one of a two presentation set, the second presentation will be on the Internet of things (2015)

Source Wikipedia 7/12/14

# M2M Connectivity, & Time lines



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# Pro's and Con's

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- **Analogue**

- Pro's Ubiquitous Requires analogue line or PoT extension of Pabx
- Con's Expensive if it requires analogue line
- Con's Anyone can dial in security is a problem
- Con's Fixed location

- **IP**

- Pro's- Easy to connect
- Con's- Internet requires Public IP address, security is a problem
- Cons- Private network expensive
- Con's Fixed location

- **Mobile**

- Pro's Cost effective
- Pro's Mobile and Fixed
- Con's Requires roaming Sim to guarantee connectivity

- **Satellite**

- Pro's Fixed and Mobile
- Con's Very Very Expensive

# Typical Services for M2M

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- Location Based Services
- Asset tracking
- Sensor Management
- Smart Metering
- Smart Vending Machines
- Auto Tellers
- Credit Card Transactions
- Wi-Fi on Train/Bus
- IP Connectivity for Emergency Services (Tetra)
- In Car Services
- Traffic Flow on Motorways and Main Roads
- E-Health
- Smart Control Systems (Heating, Air Conditioning, etc.)
- Security (Video)

# Mobility is the New Requirement for M2M

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- Low installation Costs
- Higher Security
- Easy to deploy
- Can be built in to products
- Mobile Network are Getting Faster; GPRS, 3G, 4G
- Mobile
- Low Power



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# Questions

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