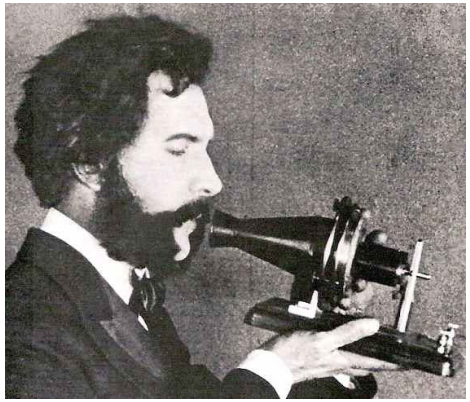
Smart Grids Usage Scenario

José Luís Malaquias

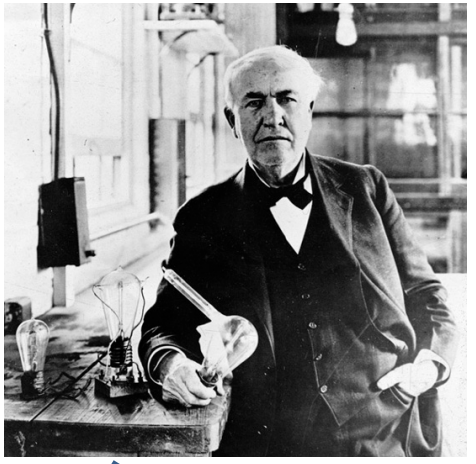
ISA-Intelligent Sensing Anywhere

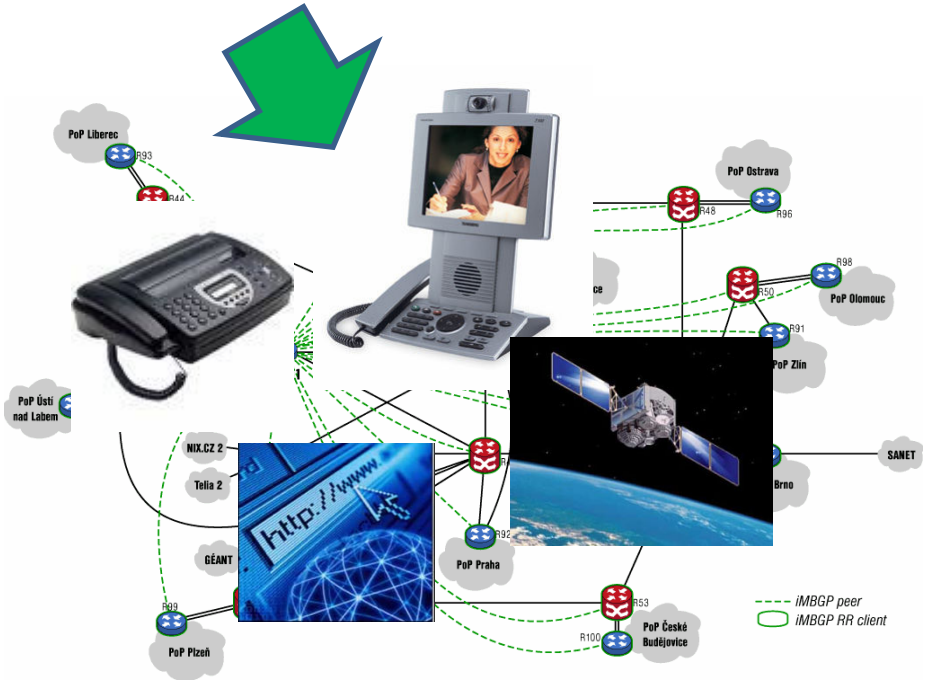
Let’s do some time travel



Alexander Bell

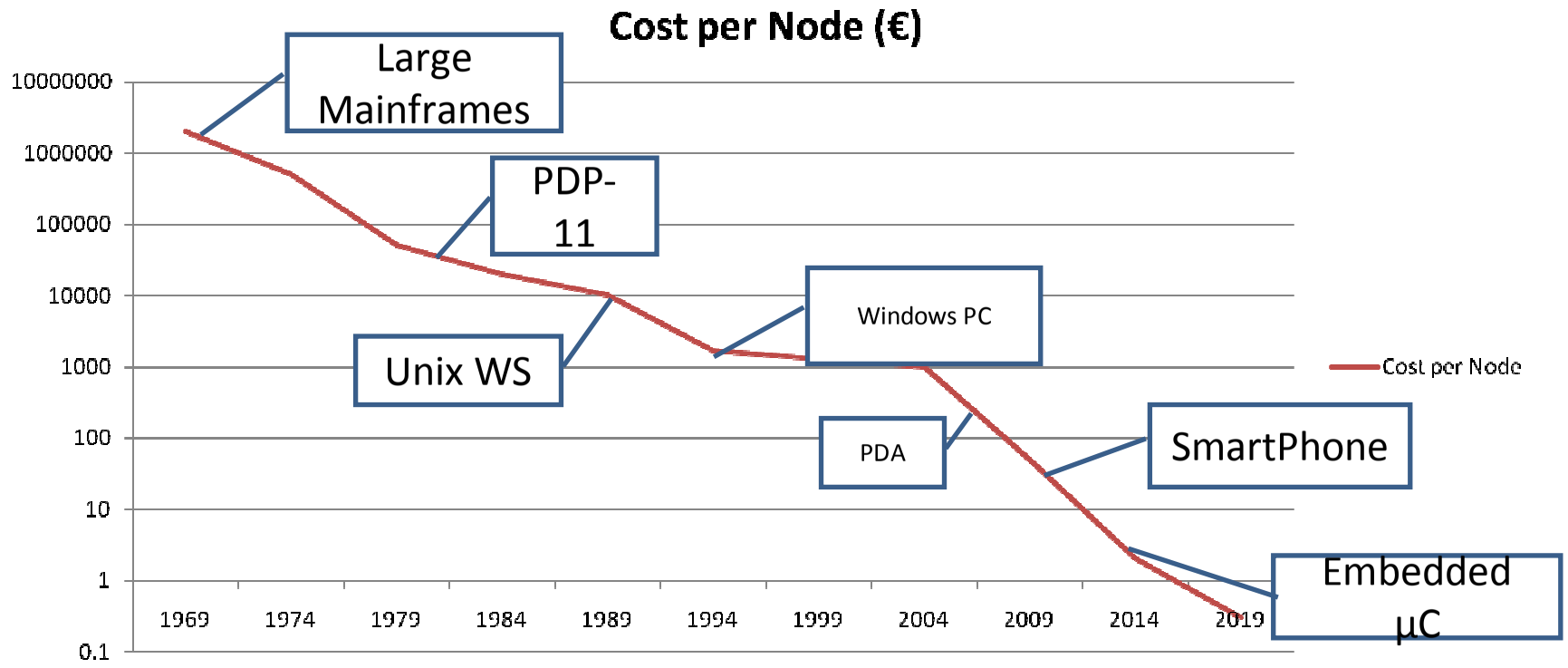
Thomas Edison





Intelligent Sensing Anywhere

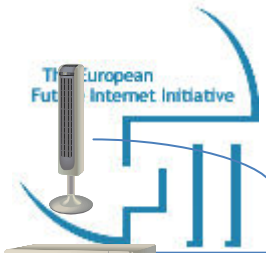
Falling price of Internet Nodes

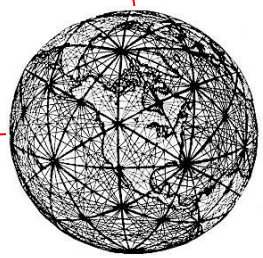


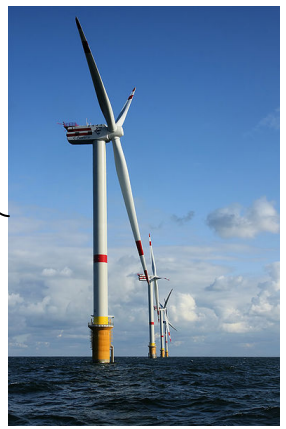
It's time for us to leverage the low-cost of Internet nodes to put communication capabilities into every appliance

Intelligent Sensing Anywhere

Grid







Sub\-
Metering

Corporate
Sub-Metering

V2G

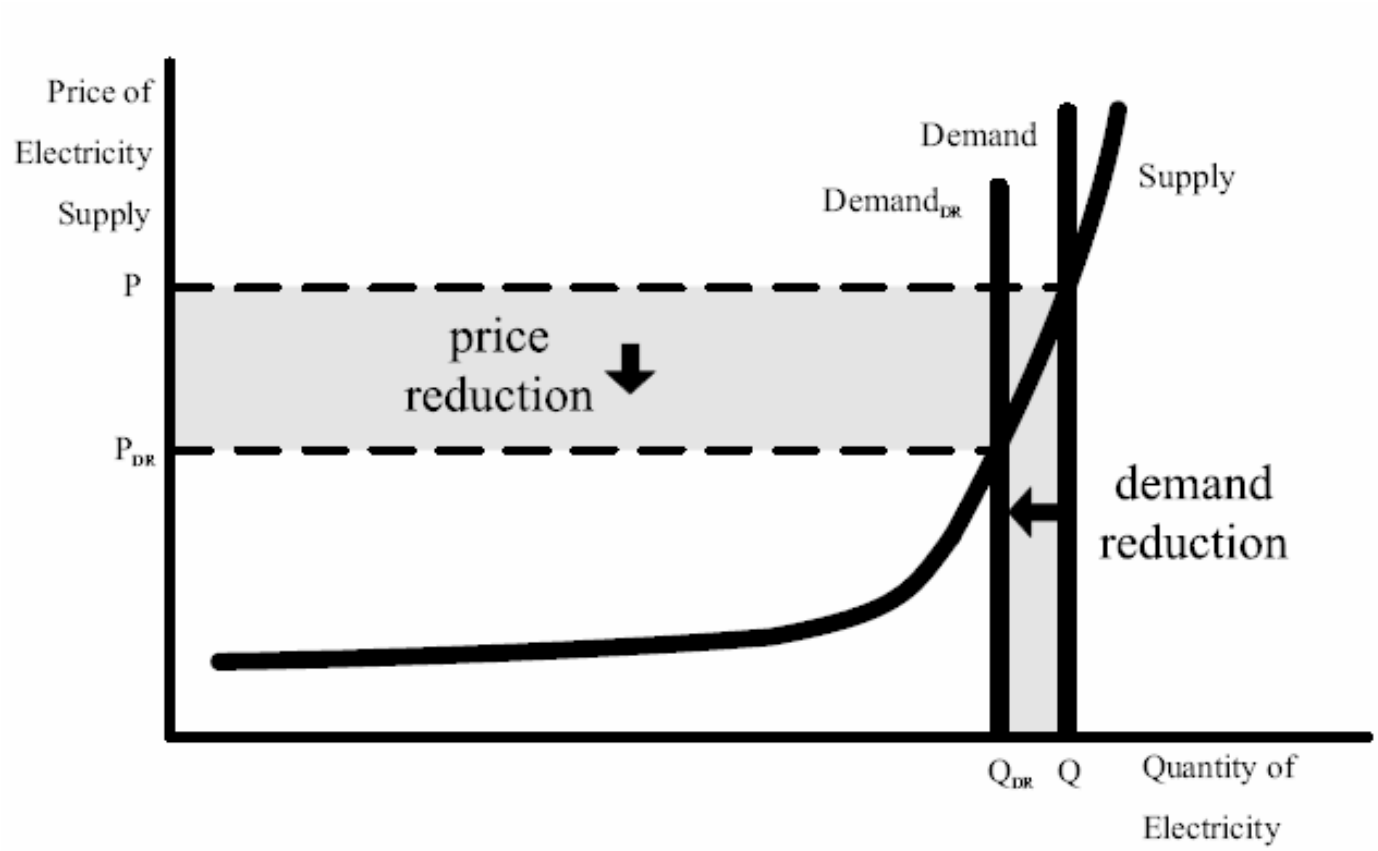
Automatic
Demand
Response

Generation

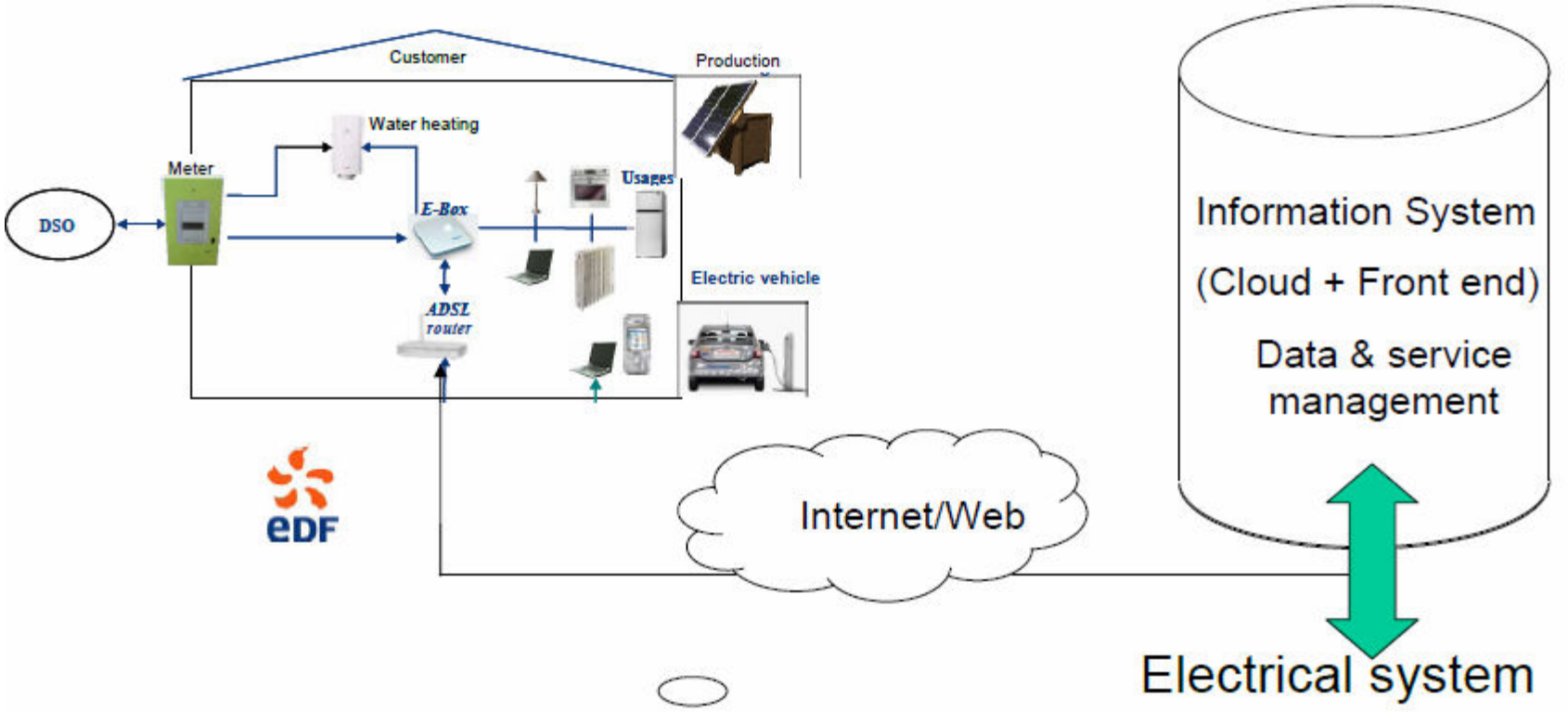
ISA

Intelligent Sensing Anywhere

Business case



Smart Meter vs. Smart Grid



Credit: Jean-Luc Dormoy's presentation at 1st Usage Scenario Meeting

Interaction with other USc

Automated Demand Response

Vehicles will be coordinated to avoid sudden peaks in demand and to provide several types of energy storage as an energy buffer capable of smoothing demand peaks by giving energy back to the grid, for the Utility, for the customer and for the environment.