



# CONNECTED LIVING

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IT'S HOW  
WE CONNECT





# M2M IN ACTION

## OPPORTUNITY TODAY IN MOST INDUSTRIES



### Transport

- Fleet location, activity, speed
- Cargo state: moisture, temperature



### Smart Vending

- Inventory Management
- Card payment at Point of Sale



### Security Monitoring

- Home / business security
- Video Surveillance



### Agriculture

- Measure and monitor soil conditions (water quality, air quality)

LAYING THE FOUNDATION OF SMART CITIES



# M2M IN ACTION

## EMERGING INDUSTRIES



### Retail

- Digital signage, kiosks
- Real time, targeted content based on location, time of day



### Automotive

- A new services opportunity: safety, navigation, media
- User –based Insurance



### Utilities

- Real time meter reading for usage based pricing, load control



I FIND IT HARD  
TO GET TO THE  
PHONE IN TIME

### Healthcare

- Patient monitoring
- Duress solutions

# M2M IN ACTION TRUE OR FALSE?

**Rubbish Bin**



**TRUE**



# M2M-ENABLED TRUE OR FALSE?

**Toothbrush**



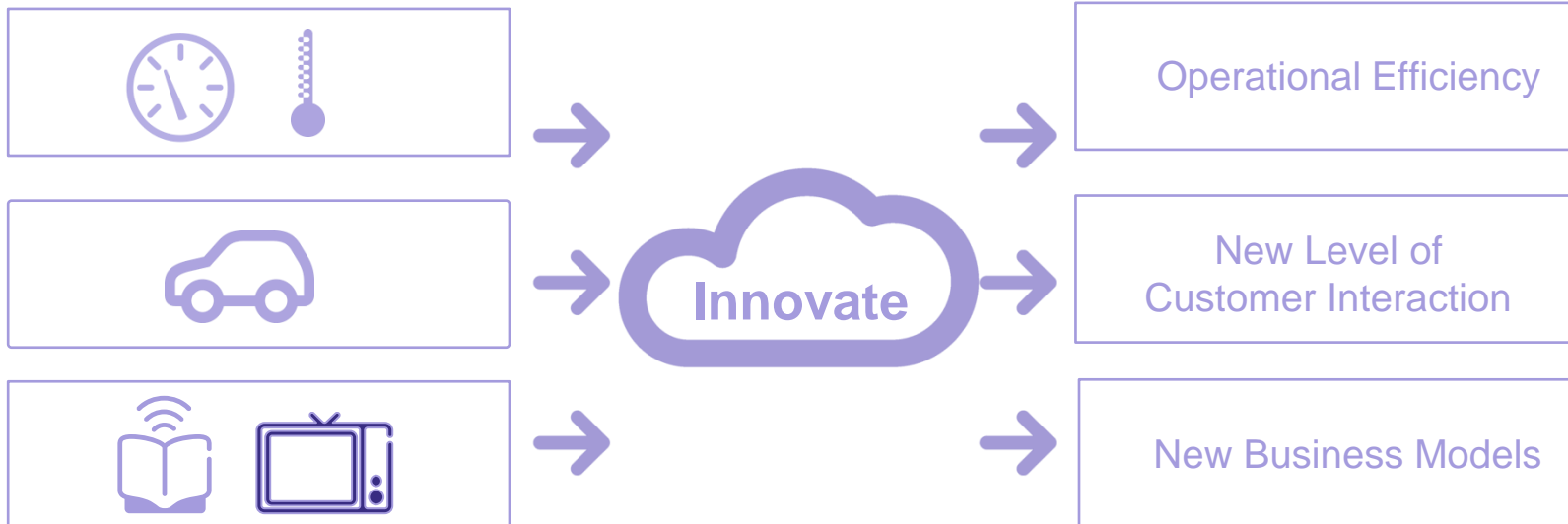
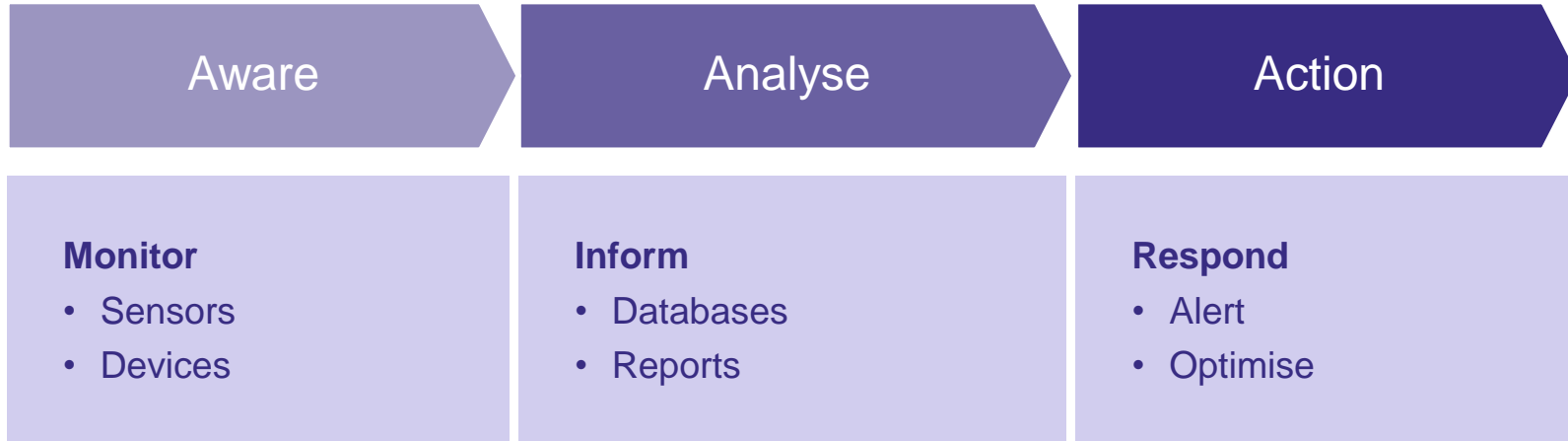
**TRUE**



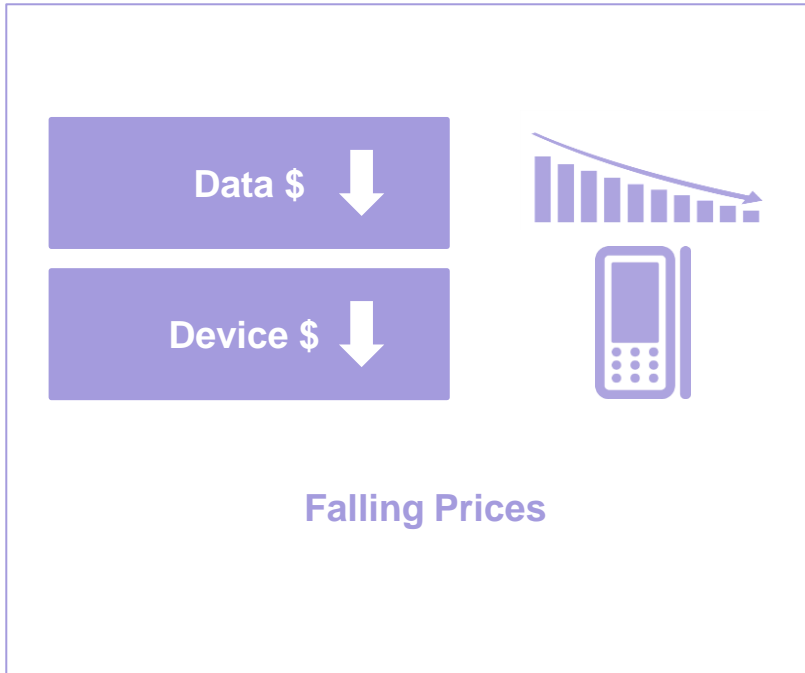


# M2M

## IT'S MORE THAN JUST CONNECTING THINGS



# M2M TRENDS ARE EXPLOSIVE ...WHY NOW

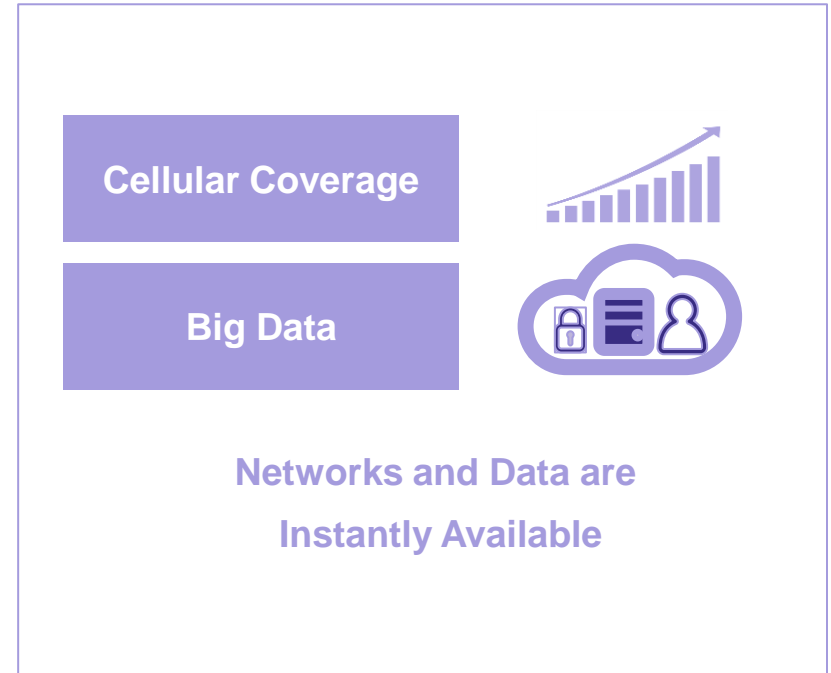


The diagram consists of two stacked purple boxes on the left. The top box contains the text "Data \$" followed by a white downward-pointing arrow. The bottom box contains the text "Device \$" followed by a white downward-pointing arrow. To the right of these boxes is a bar chart with ten bars of decreasing height from left to right, topped with a downward-sloping arrow. Below the bar chart is a white icon of a mobile phone. At the bottom center of the diagram is the text "Falling Prices".

Data \$ ↓

Device \$ ↓

Falling Prices



The diagram consists of two stacked purple boxes on the left. The top box contains the text "Cellular Coverage". The bottom box contains the text "Big Data". To the right of these boxes is a bar chart with ten bars of increasing height from left to right, topped with an upward-sloping arrow. Below the bar chart is a white icon of a cloud containing a padlock, a server rack, and a person silhouette. At the bottom center of the diagram is the text "Networks and Data are Instantly Available".

Cellular Coverage

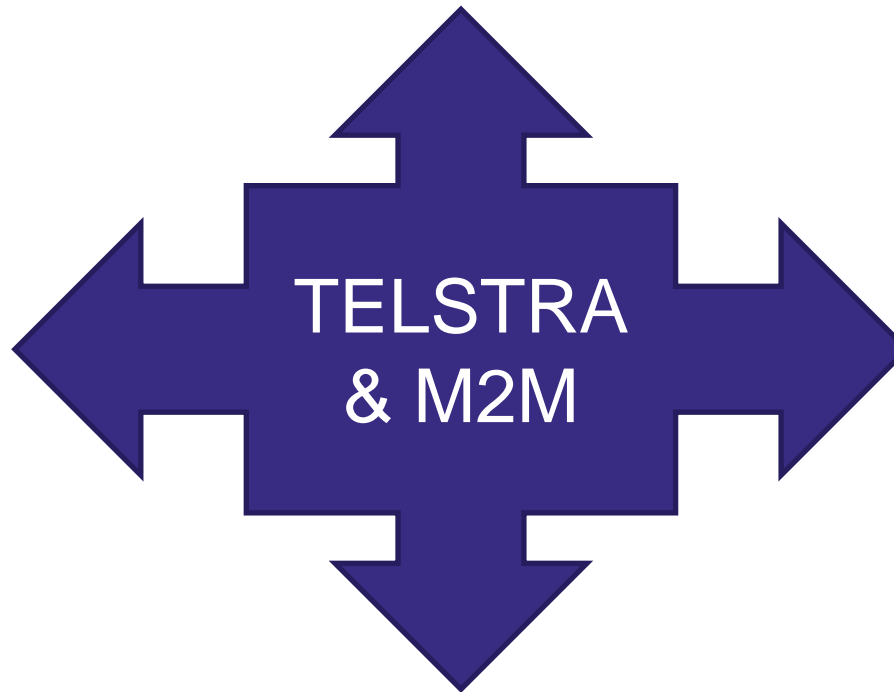
Big Data

Networks and Data are Instantly Available

## Innovation and Opportunity

# M2M IS AN ATTRACTIVE OPPORTUNITY SO WHAT IS TELSTRA'S POSITION ?

Platforms & Ecosystem  
- Jasper Platform



Partners  
- 150+ Resellers

Coverage, Capacity,  
Reliability,  
Performance

Future Roadmap  
- DCHSPA/LTE



# OUR NEXT G<sup>®</sup> NETWORK

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WE CONNECT



## AUSTRALIA'S NUMBER ONE MOBILE NETWORK POWERED BY 3G & 4G



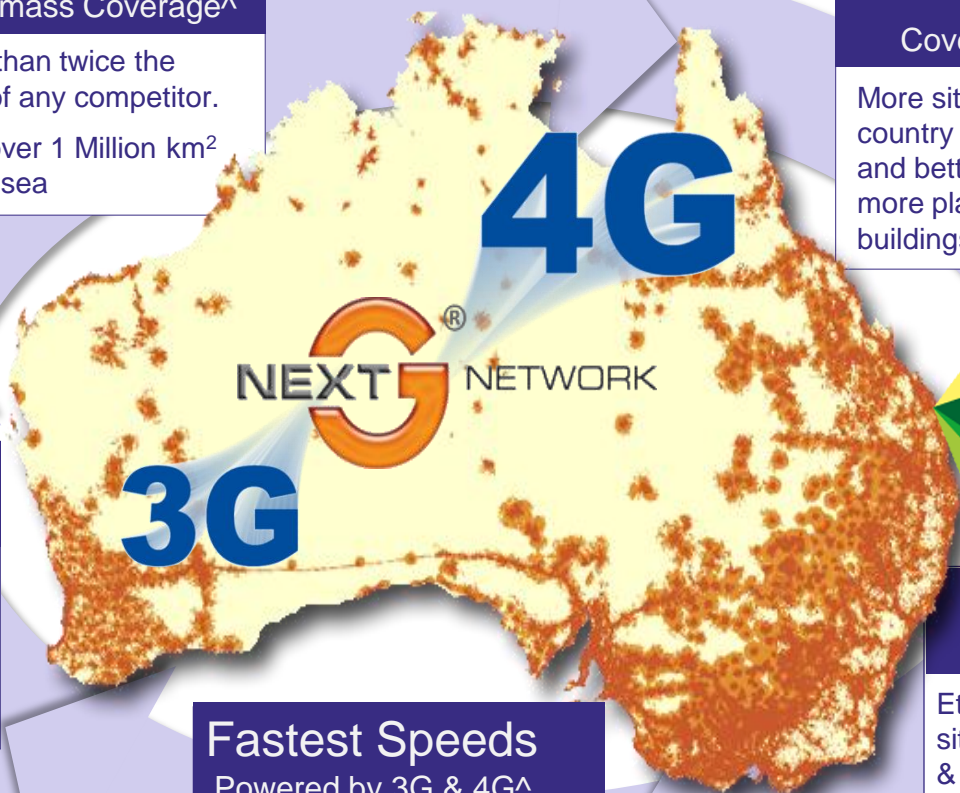
**2.2 Million km<sup>2</sup>**  
Landmass Coverage<sup>^</sup>

More than twice the  
area of any competitor.

Plus over 1 Million km<sup>2</sup>  
out to sea

**7,500**  
Coverage Sites<sup>^</sup>

More sites in both city &  
country = more coverage  
and better reception in  
more places including in-  
buildings.



**HIGH DEFINITION  
VOICE**

**Superior Backhaul  
Multi-Gigabit Capable<sup>^</sup>**

Ethernet fibre the majority of  
sites to minimise bottlenecks  
& max performance.

Best placed to meet current &  
future traffic demand

**Fastest Speeds**

Powered by 3G & 4G<sup>^</sup>

Only Australian network to  
commercially offer enhanced  
3G HSPA+ typically ranging  
between 1.1-20Mbps<sup>^</sup>

First Australian network to  
offer 4G/LTE speeds typically  
ranging between 2 - 40Mbps<sup>^</sup>

**99%**  
Population Coverage<sup>^</sup>

Australia's largest 3G  
mobile network covering  
over 400,000 more  
Australians than nearest  
competitor<sup>^</sup>.

<sup>^</sup> Enhanced 3G HSPA+ and 4G /LTE speeds  
are available in selected areas. For more  
information on our coverage & speed visit  
telstra.com.

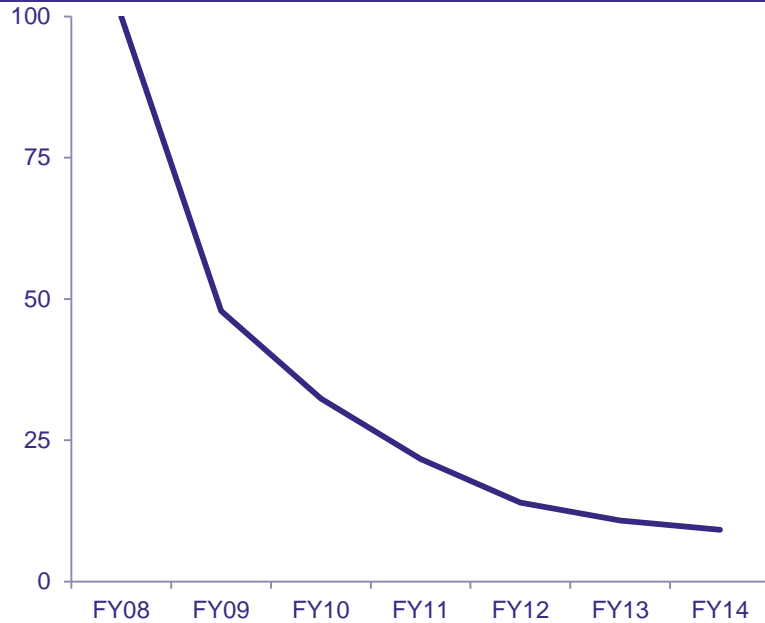
<http://www.telstra.com.au/mobile/networks/>

# EACH GENERATION OF NETWORK HAS DELIVERED COST OF CAPACITY IMPROVEMENTS

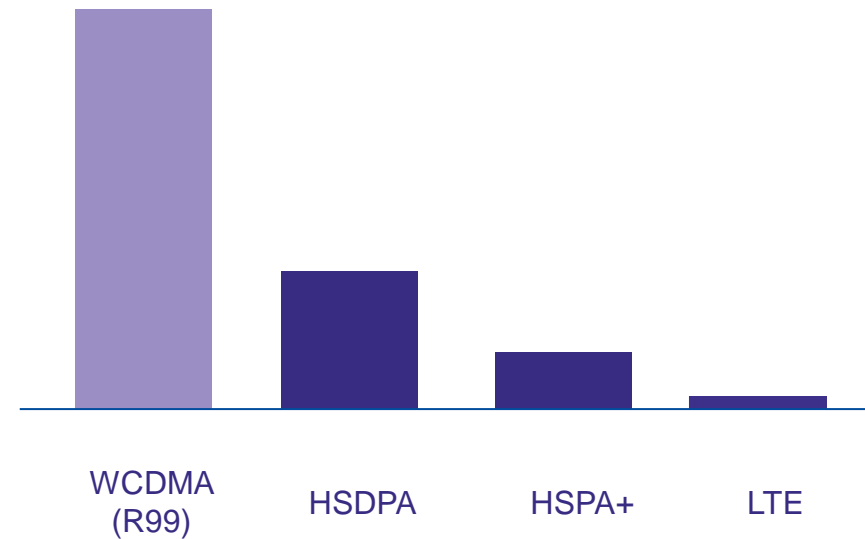
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## Relative Cost: Hybrid HSPA+/LTE



## Relative Technology Cost



**THE INDUSTRY MUST MOVE TO 3G/4G & WEAN ITSELF OFF CHEAP 2G CHIPS OR RISK FALSE ECONOMY**

\* Index based on Telstra derived network unit costs per MB (excluding OSS/BSS)

\* Excludes trends from GPRS & EDGE as not carried on the Next G<sup>®</sup> network

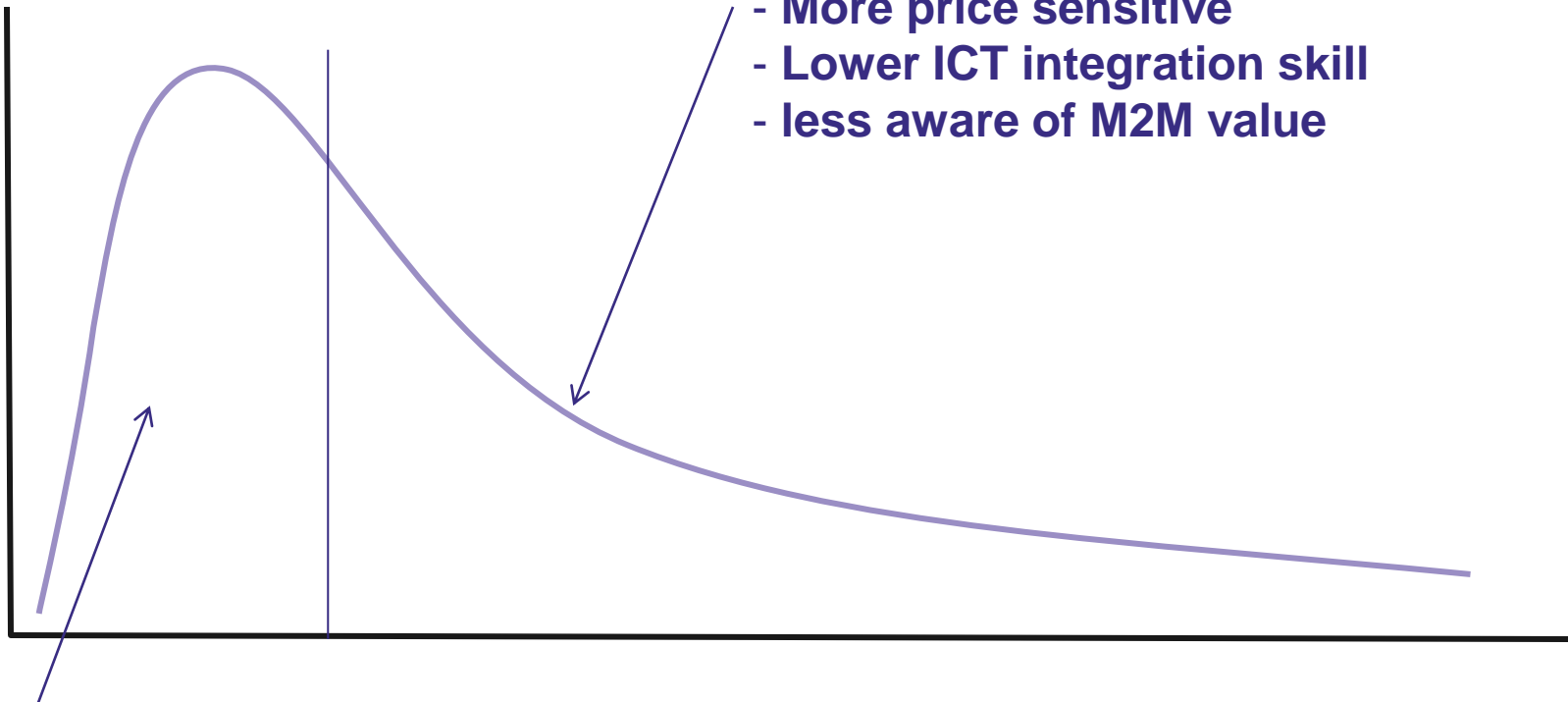
# EXPLOSION IN CONNECTED 'THINGS' MEANS GETTING TO THE LONG TAIL

IT'S HOW  
WE CONNECT



## The long tail:

- Low volumes, many opportunities
- More price sensitive
- Lower ICT integration skill
- less aware of M2M value



## Early Focus:

- Vertically integrated
- Large value, scale, margin
- Sophisticated ICT development environment
- Highly aware of M2M value

# ENABLERS OF THE LONG TAIL

IT'S HOW  
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## Easy to use business models

- Common platforms eg Jasper
- Flexible & Secure activation and configuration (embedded SIMS)

## 'Pre- Packaged' hardware and apps

- Easy to integrate chips and platforms with simple development environments. Look at 'TWINE'



## Low cost devices : Chips & Network Impact

- Low cost & efficient devices for network load and signalling
- 3G & 4G networks for higher loads

## Education & Awareness

- Raise solution profiles
- Introduce into Universities