

Il viaggio di Telco e Utilities verso le Smart Grid

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M2M Forum 2014 - 20th May 2014



Agenda

- Energy & Utilities: M2M adoption, drivers & barriers
- Paving the way for the Smart City: what's next?
- Sustainability
- Traffic & Transport
- Safety & Security
- Catching the growth





M2M adoption, drivers & barriers

Energia e Utilities: trend globali



Conformità regolatoria



Impatto ambientale,
sostenibilità e & CSR



Fidelizzazione del Cliente

Gestione delle informazioni,
produttività e collaborazione
della forza lavoro

Getione degli asset,
manutenzione e sicurezza



Ottimizzazione dei
processi di business



La promessa del M2M per le Smart Grid



Migliorare l'efficienza operativa

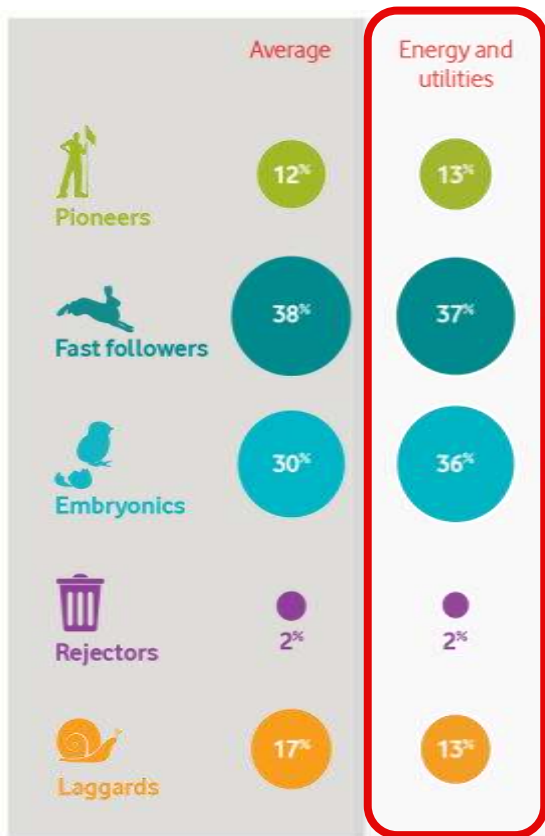
Aumentare la soddisfazione dei Clienti

Garantire maggiore sicurezza

Creare nuove opportunità di business



M2M adoption: Energy & Utilities among the pioneers



Energy and utilities companies reported the biggest ROI from M2M of any industry that we surveyed:

100% said they saw **some return**,

of which **56%** said they saw **“significant” return**.



Drivers of adoption

What's prompting your interest in M2M?	Energy and utilities	All industries
Opportunity to save costs through automation	49%	45%
Need for faster decision-making	45%	35%
Demand from end users for faster information	36%	31%
Regulatory pressures	19%	12%
Opportunity to generate new revenue	25%	31%



Barriers to investment

What percentage of organisations:

...are currently developing or implementing an M2M strategy?



85%

...think M2M is very relevant to their business now?



30%

...think M2M will be very relevant to their business in three years?



32%

Energy and utilities

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Cost

an understandable area of scrutiny, in an industry where pricing is critical

2

Management resistance

cited by 25% (versus 18% across all industries)





Paving the way for the Smart City

The smart city is here

“ The industrial revolution saw huge changes in the way people socialised, worked and organised their family life and communities. I see this opportunity through smarter cities as being the next revolution.

Dave Smith

Chief executive, Sunderland City Council

“ ICT puts the “smart” in “smart cities”. It challenges legacy industries to rethink how to reduce congestion and increase energy efficiency in the urban environment, enabling new businesses and empowering people.

Neelie Kroes

Vice President, European Commission



M2M: the heart of the smart city



Where do the opportunities lie?



of worldwide spending on M2M city projects in 2014 will be on:



Sustainability

Reducing energy usage and the cost of public services



Transportation

Improving traffic flow and public transport



Public safety

Protecting lone workers, public sites and the vulnerable



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Sustainability



Improve sustainability with M2M

You're under pressure to lead the way in sustainability.

M2M technology can help you:

- Cut your energy use
- Track and reduce pollution
- Optimise waste collection



Global energy use increased by 34% between 1993 and 2010



Worldwide energy-related CO₂ emissions will hit 37bn tonnes by 2035



Air quality monitoring

Air pollution can affect healthcare costs, tourism and productivity.

M2M sensors installed around a city can gather data on local humidity, harmful chemicals, pressure, and other factors. You can use the data to:

- **Restrict traffic or industry** in highly polluted areas on a day-by-day basis
- **Make a case for funding** to improve air quality
- **Report accurately on the progress** towards improving air quality



Connected street lighting

Effective street lighting deters crime and improves safety for drivers and pedestrians — but lights are expensive to run and maintain.

M2M sensors installed on lights can:

- **Alert maintenance workers when a fault occurs** — removing the need for expensive routine check ups
- **Detect when there's no traffic or people nearby** — and dim the lights to cut energy use and light pollution



Maintenance visits accounted for over 60% of Aberdeen County Council's lighting costs in 2010 — nearly £3 million



Waste management

Overflowing bins can be a health hazard, but checking manually to see whether they're full can be expensive and time-consuming. M2M devices on city bins can monitor waste volume and automatically notify refuse collectors when they're full.

Using the information, you can:



Schedule fewer collection journeys — saving time and money, and cutting carbon emissions



Reduce the number of refuse trucks you operate

The solution is already proving successful
in [the Netherlands](#).





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Traffic and transport



Improve traffic and transport with M2M

Traffic congestion and limited parking availability are pressing issues for towns and cities.

Our M2M solutions can help you:

- **Optimise** traffic flow and parking
- **Enhance** public transport service levels



Traffic and parking management

Our M2M traffic and parking solutions can improve traffic flow and parking availability. M2M-enabled cameras collect data on traffic volume and use it to:

- **Update digital signs** notifying drivers of busy areas and parking spaces
- **Adapt the timings of traffic signals** to optimise the flow of vehicles
- **Monitor road safety** and alert emergency services to problems

Councils in the [UK](#) and parking companies in [the Netherlands](#) are already benefitting from M2M traffic and parking solutions.

\$244

Congestion costs more than \$244 billion per year in the **world's biggest conurbations**



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Safety and security



How can M2M help?

You have a duty of care to protect your own employees, the vulnerable, public sites and assets.

Our M2M solutions provide simple and cost-effective ways to:

- **Protect** lone workers
- **Protect** the vulnerable in their own homes
- **Monitor** public sites, such as parks





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Catching the growth



Growing up the value chain

Vodafone's M2M end-to-end solution



Vodafone combines technical hardware expertise, managed connectivity and software applications to offer an end-to-end, single point of contact solution for M2M capacity

Hardware/device

- Device and connectivity – bundled offering
- Partnerships with device vendors



Managed M2M connectivity service

- Network
- Global SIM
- Logistics
- Global M2M platform
- SLAs
- Customer support



Applications

- Asset tracking
- Smart metering
- Telematics
- Fleet management
- Remote monitoring



Your M2M partner of choice



**Complete
M2M solutions**



**Most extensive M2M
footprint in the
world**



**Dedicated global
M2M team**



24x7 support



**Extensive partner
networks**



**Industry experience
and expertise**



Analysts recognise Vodafone as the clear leader

Current Analysis

Positioned as a leader in the global M2M services market, April 2013

Machina
Research

1st Place in M2M Communication Service Provider Benchmarking Study 2013

 analysys
mason

Rated as 'Industry Icon' in M2M Communication Service Provider Scorecard 2012





Thanks!