Data Protection and Privacy in a M2M world

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A M2M world?
“Machine-to-machine (M2M) is the **exchange** of mainly **data** communications generated in a fully or partially **automated** way between machines within a predefined group”
Mobile privacy: Moving from old to new paradigms & regulating for ‘Homo Digitalis’

A smart phone now has computing power superior to the computers needed to send a man to the moon in 1969...
Rethinking privacy in a converged, digitally connected mobile world

Users are broadcasters of data

By default
What are the key privacy challenges?
Mobile Privacy in M2M - Key Challenges

- **ECOSYSTEM – global, fragmented but hyper-connected**
  - information flows: global, multiparty, in real-time
  - inconsistent approaches to privacy

- **REGULATION – patchwork of geographically bound laws**
  - applies unequally according to technology and sector
  - increasingly unable to address global flows of personal data

- **USERS – want: their privacy to be respected**
  - regardless of device, service, platform or where they are located
  - easy ways to understand and manage permissions
What are regulators doing about it?
Growing concerns drive policy and regulation but new rules may erode privacy

- Online and mobile privacy increasingly in the spotlight
  - New rules and Guidelines emerging (APEC, OECD, USA, EU, Japan, Canada, Australia, Hong Kong etc.)

- Latin America
  - Increasing collaboration between Data Protection Authorities
  - New laws influenced by Spain / EU principles

- Peru: New Data protection laws since April 2013
  - Consent to be "free, prior, express, informed & unequivocal"
  - Cross-border transfers of personal data permitted only if recipient entity agrees (in writing) the same obligations as the transferor

→ What is the impact on business and user experience?
What is the GSMA doing about it?
Mobile Privacy Principles

1. Openness, Transparency and Notice
2. Purpose & Use
3. User Choice and Control
4. Data Minimisation and Retention
5. Respect User Rights
6. Security
6. Education
7. Children & Adolescents
8. Accountability and Enforcement

Can be used as the basis for developing codes of conduct and business practices
Privacy Design Guidelines for app development

- Express principles in functional terms
- Provide Best Practice for Apps
- Illustrative examples and use cases
- Foster a ‘privacy by design’ approach
- Include modules on:
  - Location
  - Mobile advertising
  - Children
  - Social networking
But it’s not just about the rules…

Mobile users care!
GSMA Consumer research: Overview

Over 11,500 mobile users in 8 countries in the last 3 years

- Users’ privacy concerns?
- Impact of concerns on mobile use?
- Help shape privacy policies
- Help design better and simpler ways for users to manage their privacy
Mobile users want 3rd parties to seek their permission before using their personal data

Brazil: 83%
Mexico: 79%
Colombia: 77%

Base: All respondents (Brazil – 1,505, Mexico – 1,505, Colombia – 1,511)
Most mobile users want their location information to be respected equally by any company that can access it.

- In Brazil, 55% thought a consistent set of rules should apply to any company with access to their location.
- In Mexico, 62% had the same view.
- In Colombia, 66% agreed.

Base: All Audience A respondents (Brazil – 752, Mexico – 752, Colombia – 755)
Consumer & regulatory concerns around privacy are exacerbated in a M2M world

- More connected devices
- More data
- More parties and data-sharing interfaces
- More profiling and possible discrimination

- What is and what isn’t ‘personal data’ (device id, IP address etc)
- How can aggregated, anonymised data be used in public policy?
- How to ensure data remains anonymised? – Risk of re-identification?
- How to help users understand and manage their permissions?
What role does privacy play in the success of M2M?
M2M removes the human factor from many decision making processes → TRUST is key

- **mHealth**
  - Clinical readings and patient status
  - Source: GSMA

- **mAutomotive**
  - $30 bn
  - Source: Machina Research (2013) - Total MNO Expected M2M Revenues by 2020

- **Smart Cities**
  - $11.4 bn

- **mHealth**
  - $3.1 bn
What does this mean for M2M service providers?
What does this mean for M2M service providers and regulators?

- **Industry:**
  - Make it easy for users
  - Think about privacy from the start
  - Give users choice and control
  - Identify and mitigate risks (e.g. coding, interoperability, security)
  - Show you mean it

  Support ‘Privacy by Design’

- **Regulators – rules that:**
  - Consider desired privacy outcomes for users
  - Based on RISK and potential harm
  - Technology-neutral and non-discriminatory
  - Apply consistently irrespective of device, platform or application

Industry and regulators should work together to support innovative privacy management tools
Thank you

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ANNEX
# Latin America—key considerations

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<th>Area</th>
<th>Future priority</th>
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<td>Technological Neutrality &amp; Interoperability</td>
<td>• Focus on the desired privacy outcomes for users</td>
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<td>• Treat functionally equivalent data and services in equivalent ways (e.g. traffic and location data)</td>
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<td>MNOs often subject to additional more restrictive rules than other sectors</td>
<td>• Move from binary opt-in v opt-out approaches</td>
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<td>• Recognition of privacy in context, ‘just in time approach’</td>
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<td>• Support alternative models to consent and broader big data uses that meet public policy objectives/provides social goods</td>
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<td>• Education and awareness raising</td>
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<td>Notice and Consent</td>
<td>• Create a framework that facilitates the flow of data without unwarranted restriction (draw on the principle of accountability)</td>
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<td>• Support intra-group transfers</td>
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<td>Accountability &amp; Self Regulation</td>
<td>• Support explicit Privacy by Design approach</td>
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<td>• Create incentives for self regulation</td>
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Draft EU Data Protection Regulation: Coding for law - assisting usability & trust?

- Article 13(a) **Standardised information policies** to provide notice:
  - (a) whether personal data are collected beyond the minimum necessary for each specific purpose of the processing;
  - (b) whether personal data are retained beyond the minimum necessary for each specific purpose of the processing;
  - (c) whether personal data are processed for purposes other than the purposes for which they were collected;
  - (d) whether personal data are disseminated to commercial third parties; e) whether personal data are sold or rented out;
  - (f) whether personal data are retained in encrypted form.

The Socioeconomic Impact of the 'Connected Life' Over the Next Five Years

One million
The number of lives mHealth will save in sub-Saharan Africa over the next five years.

One in nine
The number of lives saved in road accidents in developed countries over the next five years due to mobile enabled in-car emergency services.

$400 billion
The amount saved in 2017 from the annual healthcare bill in developed countries as a result of mobile healthcare solutions.

A week back every year
Smart commute interventions in developing world cities will give commuters back a whole week's worth of time every year.

40 million
The number of people in developing countries, equivalent to the population of Kenya, that can be fed each year due to fleet telematics preventing food wastage during transport.

1.2 billion trees
In developed world cities, smart metering will reduce carbon emissions by 22 million tonnes - equivalent to planting more than 1.2 billion trees.

180 million
The number of children in developing countries that will have the opportunity to stay in school between now and 2017 due to mEducation.

Research conducted by PwC for the GSMA