Consumer-Oriented Social Media as Market Opportunity

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http://www.rogerclarke.com/II/ COSMO-1211 {.html, .ppt}

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Consumer-Oriented Social Media as Market Opportunity
Agenda

- **Social Media**
  - Features
  - Business Model
- **Privacy Concerns**
- **COSM Opportunities**
  - Features
  - Business Models
  - Exemplars

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Social Media
A Business-Oriented Classification

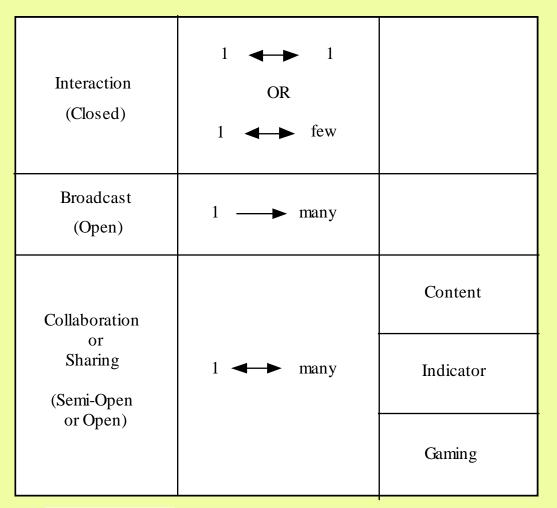|		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

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Kaplan & Haenlein (2010)

A <u>Participant-Oriented</u> Classification of Social Media

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A Participant-Oriented Classification of Social Media

Interaction (Closed)	1 ←→ 1 OR 1 ←→ few	
Broadcast (Open)	1 —→ many	
Collaboration or Sharing (Semi-Open or Open)	1 ←→ many	Content Indicator Gaming

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A Participant-Oriented Classification of Social Media

Interaction (Closed)	1 ↔ 1 OR 1 ↔ few		Email / Chat-IM / Skype
Broadcast (Open)	1 → many		Web-Pages 'Walled-garden' 'wall-postings' YouTube Wikis
Collaboration or Sharing (Semi-Open or Open)	1 ↔ many	Content	
		Indicator	Dis/Approval 'Like', '+1'
		Gaming	Second Life

Currently-Available Social Media Genres

1-with-1/Few INTERACTION Tools
- networked text **email** (asynchronous)
- networked text **chat / IM** (synchronous)
- **SMS / texting** from mobile phones
- **email-attachments**, any format (asynch)
- **voice**:
  - over Internet (VoIP, **Skype**) (synch)
  - tele-conferencing (VoIP, Skype) (synch)
  - videophone (Skype Video) (synch)
  - video-conferencing (Skype Video) (synch)

1-to-Many BROADCAST Tools
- bulletin boards systems (**BBS**)
- Usenet / net**news**
- **email lists**
- **web-pages**
- **indexes** (Lycos, Altavista, Google, Bing)
- **blogs** (WordPress, Blogspot)
- **micro-blogs** (Twitter, Tumblr)
- **glogs** – wearable wireless webcams, cyborg-logs, retro-nymed as 'graphical blogs'

- **'content communities'**, e.g. for images (deviantArt, Flickr and Picasa), for videos (**YouTube**), for slide-sets (Slideshare)
- **closed /** **'walled-garden' 'wall-postings'** within SNS (Plaxo, MySpace, LinkedIn, Xing, Reddit, Facebook, Google+)

1-with-Many SHARING Tools
- **Content Collaboration**
  - **wikis** (Wikipedia)
  - **social news sites** (Slashdot, Newsvine)
  - **online office apps** (Zoho, Google Docs, MS Live)
- **Indicator-Sharing**
  - **'social bookmarking'** (Delicious)
  - **dis/approvals** (Digg's dig & bury, Reddit's up & down, StumbleUpon's thumbs-up & thumbs-down, Facebook's **Like** button, Google+'s **+1** button)
- **Multi-Player Networked Gaming**
  - text-based **MUDDs**
  - **social gaming** sites (Friendster)
  - Massively Multiplayer Online Games (**MMOGs**), esp. Role-Playing Games (MMORPGs), e.g. World of Warcraft
  - **online virtual worlds** (Second Life)

Social Media
A Working Definition

And hence Scope Specification

An application or service
that is perceived by its users
to support them in relation to:

- Interaction with other people
- Broadcast to other people
- Sharing with other people

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Social Media's Business Model

- 'There must be a way to monetise this somehow'

- 'You will find something interesting here'
  is a self-fulfilling prophecy, because people can be enticed to contribute 'something interesting'

- Contributors, and the people who come after them,
  can be enticed to click on targeted advertisements

- Targeting is based on:
  - profile-data that users supply about themselves
  - content that they have donated
  - their online behaviour while using the service
  - their online behaviour more generally

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  - Exemplars

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Privacy Risks in Social Media

- **Third-Party Risk Exposure**
  - Openness that was Unanticipated
  - Openness through Breach of Original Terms
  - The Service-Provider's 'Strategic Partners'
  - 'Syndication', to any player
  - Government Agency Demand Powers
- **Second-Party Risk Exposure** (Service-Provider)
  - Content relating to Oneself
  - Content relating to Others
  - Social Networks including Oneself and Others

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A Catalogue of Social Media Privacy Concerns

1   Privacy-Abusive **Data Collection**

2   Privacy-Abusive **Service-Provider Rights**

3   Privacy-Abusive **Functionality and User Interfaces**

4   Privacy-Abusive **Data Exploitation**

Source: Reviews of Media Reports 2005-11

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A Catalogue of Social Media Privacy Concerns

1 Privacy-Abusive Data Collection

Demands for User Data

- identity data
- profile data
- contacts data, including users' address-books:
  - their contact-points (some sensitive)
  - comments about them (ditto)
  - by implication, their social networks

Collection of User Data

- about users' online behaviour when transacting with and via the particular service, over time
- about users' online behaviour, even when not transacting with or via the particular service
- from third parties, without notice to the user and/or without user consent
- about users' locations over time

2 Privacy-Abusive Service-Provider Rights

Terms of Service Features

- substantial self-declared, non-negotiable rights for the service-provider, including:
  - to exploit users' data for their own purposes
  - to disclose users' data to other organisations
  - to retain users' data permanently, even if the person terminates their account
  - to change Terms of Service:
    - unilaterally
    - without advance notice to users; and/or
    - without any notice to users

Exercise of Self-Declared Service-Provider Rights

- in ways harmful to users' interests
- in order to renege on previous undertakings

Avoidance of Consumer Protection and Privacy Laws

- location of storage and processing in data havens
- location of contract-jurisdiction distant from users
- ignoring of regulatory and oversight agencies
- acceptance of nuisance-value fines and nominal undertakings

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Concerns

3 Privacy-Abusive Functionality and User Interfaces

Privacy-Related Settings

- non-conservative default settings
- inadequate granularity
- complex and unhelpful user interfaces
- changes to the effects of settings, without advance notice, without any notice and/or without consent

'Real Names' Policies

- denial of multiple identities
- denial of anonymity
- denial of pseudonymity
- enforced publication of 'real name', associated profile data

Functionality and User Interface

- inadequate documentation and reliance on interpolation
- frequent changes; and/or without advance notice to users, without any notice to users and/or without user consent

User Access to Their Data

- lack of clarity about whether, and how, data can be accessed
- lack of, even denial of, the right of subject access

User Deletion of Their Data

- lack of clarity about whether, and how, data can be deleted

4 Privacy-Abusive Data Exploitation

Exposure of User Data to Third Parties

- wide exposure, in violation of previous Terms, of:
  - users' profile-data (e.g. address, mobile-phone)
  - users' postings
  - users' advertising and purchasing behaviour
  - users' explicit social networks
  - users' inferred social networks, e.g. from messaging-traffic
- changes to the scope of exposure:
  - without advance notice to users
  - without any notice to users; and/or
  - without user consent
- access by government agencies without demonstrated legal authority

Exposure of Data about Other People

- upload of users' address-books, including:
  - their contact-points
  - comments about them
  - by implication, their social networks
- exploitation of non-users' interactions with users
- disclosure of non-users' social networks

A Catalogue of Social Media Privacy Concerns

2 Privacy-Abusive Service-Provider Rights

Terms of Service Features

- substantial self-declared, non-negotiable rights
  for the service-provider, including:
    - to exploit users' data for their own purposes
    - to disclose users' data to other organisations
    - to retain users' data permanently, even if the person terminates their account
    - to change Terms of Service:
        - unilaterally
        - without advance notice to users; and/or

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A Catalogue of Social Media Privacy Concerns

3   Privacy-Abusive Functionality

Privacy-Related Settings

- Non-conservative default settings
- Inadequate granularity
- Complex and unhelpful user interfaces
- Changes to the effects of settings, without advance notice, without any notice and/or without consent

  i.e. Untrustworthiness

A Catalogue of Social Media Privacy Concerns

3   Privacy-Abusive Functionality

'Real Names' Policies

- Denial of multiple identities

- Denial of anonymity

- Denial of pseudonymity

- Enforced publication of 'real name',
  and associated profile data

i.e. Threatening to Persons-at-Risk

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A Catalogue of Social Media Privacy Concerns

4   Privacy-Abusive Data Exploitation

Exposure of Data about Other People

- Upload of users' address-books, including:
  - their contact-points
  - comments about them
  - by implication, their social networks
- Exploitation of non-users' interactions with users
- Disclosure of non-users' social networks
  i.e. Extends to 'Innocent Victims'

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Location – from Added-Extra to Intrinsic

- Physical Address / **Geo-Location**
  - knowledge of the cell that a mobile-phone is in, is intrinsic to the service's operation
  - more precise geo-location is increasingly feasible
  - location is becoming readily available to the device
  - location is being acquired by service-providers

- Location-based services can be valuable to users

- A primary use is in consumer marketing

- For most current-round SMS, location is an extra

- **For the coming round, Geo-Location is intrinsic**

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The Primary Geolocation Technologies

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

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Consumer-Oriented Social Media Opportunities
COSMO

- Architecture
- Openness
- Functionality
- Privacy-Sensitivity

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COSMO
Alternative Architectures

- **Client-Server**
  Centralised storage and control by the service-provider

- ... with Replication
  Multiple copies, but centralised control

- ... with Distribution
  Scattered storage, but centralised control

- **Semi-Peer-to-Peer (P2P)**
  Content and control scattered across many devices
  e.g. http://jappix.org/why

- **Full P2P**
  All content and control on participants' own devices
  e.g. http://tent.io/

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COSMO
Openness

- **Interoperability**
  - Content Openness
  (not a 'walled garden' /
  'island')

  - Message Openness
  (to/from any email, chat/IM)

- **Portability**
  - Content Export-Import
  (profile, postings, messages)

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COSMO Functionality

- **Interaction**
  Messaging, Tagging, Profile, Groups, Tag-Based Notifications

- **Broadcast**
  Content-Posting, Blogging, Micro-Blogging, Tagging, Commenting

- **Sharing**
  Content-Search, Re-Posting, Tagging, Commenting

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COSMO Functionality

- See Content in any format

- Comment on Content

- Draw Content to the attention of others

- Post Content in any format

- Manage the Accessibility of your own Content

- Exchange messages with individuals, and Groups

- Create and maintain Groups / Social Networks

- Manage your own Membership of them

- Manage your own Profile and Personas

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COSMO
Privacy-Sensitivity

Advice from 2000-05
Apply Consumer-Friendly Principles

- **Information**

- **Choice**

- **Consent**
  - 'opt-in' the norm
  - 'opt-out' requires stringent justification

- **Fair Conditions**

- **Recourse**

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Privacy

- The interest that individuals have in sustaining a 'personal space', free from interference by other people and organisations

- Multiple Dimensions
  - Privacy of Personal Data / Data Protection
  - Privacy of Personal Communications
  - Privacy of Personal Behaviour
  - Privacy of the Person

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COSMO
Privacy-Sensitivity

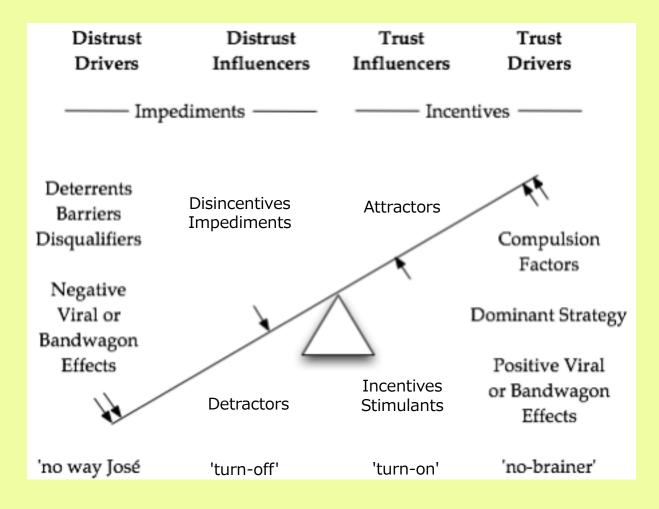## Address the Catalogue of Social Media Privacy Concerns

1 Privacy-Abusive **Data Collection**

2 Privacy-Abusive **Service-Provider Rights**

3 Privacy-Abusive **Functionality and User Interfaces**

4 Privacy-Abusive **Data Exploitation**

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Prioritisation of Privacy-Sensitive Features

COSMO
Business Models

A Business Model
is an Answer
to the Question:

Who Pays?

For What?

To Whom?

And Why?

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Internet-Era Business Models Lessons from Open Source and Content

WHO PAYS? For What? To Whom? And Why?

- **Customers:**
  - **for a Good or Service**
  - **for Complementary Goods or Services**

- Providers

- **Third Parties – esp. Advertisers**

- **'A Fairy Godmother'**

Open Content Business Models
Who Pays? A Fairy Godmother

- **Subsidy / Patronage**

   Funding from 'external' sources

   Deprecated as a gift, <u>unless</u> 'market failure'

- **Cross-Subsidy**

   Funding from 'internal' sources

   Deprecated (but less so), because it's 'distortive'

- **Portfolio Approach**

   Mutual Cross-Funding from 'internal' sources

   How business works – 'cash cows' fund the rest

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Internet-Era Business Models Lessons from Open Source and Content

Who Pays? FOR WHAT? To Whom? And Why?

- **Goods & Services**
- **Value-Added Goods & Services**
- **Complementary Goods & Services**

- Data
- Information
- **Expertise / Knowledge**
- An Idea in Good Standing
- **Timeliness**
- **Quality**

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Lessons from Open Source and Content

Who Pays? For What? To Whom? <u>AND WHY?</u>

The Negative

- **Resource Control**
- **Switching Costs (capture, lock-in)**
- Grief Avoidance

The Positive

- **Perceived Value** ('the genuine article')
- **Cost Advantage** (incl. Time)
- **Quality Advantage** (incl. accuracy, security, timeliness, completeness, complementary services)

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COSMO
Some Business Model Scenarios

- All users pay in cash rather than in data,
  for a service that is entirely COSM

- A corporation provides a gratis base-grade
  COSM, but offers more features in exchange
  for
  control over the data of consenting consumers

- A corporation funds a gratis COSM by selling
  customised / value-added versions and/or
  selling their expertise to support custom-builds

- A wealthy organisation funds COSM

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COSMO
Exemplars

- **Freenet**
  http://en.wikipedia.org/wiki/Freenet
- **Diaspora**
  http://diasporaproject.org/
  https://github.com/diaspora/diaspora/wiki/FAQ-for-Users
- **GNU social**
  http://www.gnu.org/software/social/
- **Buddy Press** (an offshoot of Wordpress)
  http://buddypress.org
- **Duuit**
  http://duuit.com/

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Privacy-Sensitive Social Media Research Opportunities

Social Science

- Distinguish positive and negative Drivers from Influencers
- Measure the Strength of Influencers, under varying scenarios
- Assess trade-offs between positive and negative Influencers, under varying scenarios
- Prioritise possible privacy-sensitive features

Design and Prototyping

- Specify Desirable Features
- Architect:
  - for Client-Server
  - for P2P
- Design and Code Open-Source Components
- Establish a Test-Harness and/or Demo Apps
- Publish Reference Code
- Publish Demo Apps

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