

MIT CFP

# **Identity and Privacy: Social TV case study**

Security and Privacy Working Group

*CFP Plenary Meeting*

*October 29, 2009*

## The larger agenda

- Larger agenda
- Series of case studies (2-3)
- Architecture/vision paper

## What is “social TV” (generally)

- Return to social nature of TV
  - Gathering around TV
  - Coffee break discussion
  - TV-program focused mailing lists
- What this means in 2009
  - TV delivery has evolved
  - Social communications has evolved
  - Are there additional features that can/should be included?



## What characteristics are important?

- Convergence of similar supporting capabilities
- Composition: more than the sum or intersection of the parts
- Ability to define privacy constraints
- Probably need to say something about privacy in contexts

# Simple example: setup

- Comcast customers
  - Household: name/address (not where bill sent, but that's important too)
  - Determines content available
  - Parental controls
  - Subject matter: TV content
- Social network
  - Name, location, birthday?
  - Friends
  - Groups
  - Subject matter: shared content - text, photos, video
- Social TV
  - People with shared TV interests
  - Location isn't part of identity, but may matter in delivery
  - New capabilities
  - Subject matter: something about shared content

## Simple example: scenario

- Small group of people who share an interest in TV content (and perhaps some other features)
- Content delivery systems for reasonably simultaneous experience
- “Social networking” features for sharing and exchanging



## Simple scenario: story

- One member sees an announcement of a program
- Wants to experience it with friends
- Negotiate a “meeting” time
- The experience
  - Some where audio not viable
  - Some where resource-demanding delivery not possible
  - Experience allows for
    - Viewing
    - Interaction
    - tagging video snippets with group attributes
    - Support “replay” or “delayed play”

## Issues: privacy

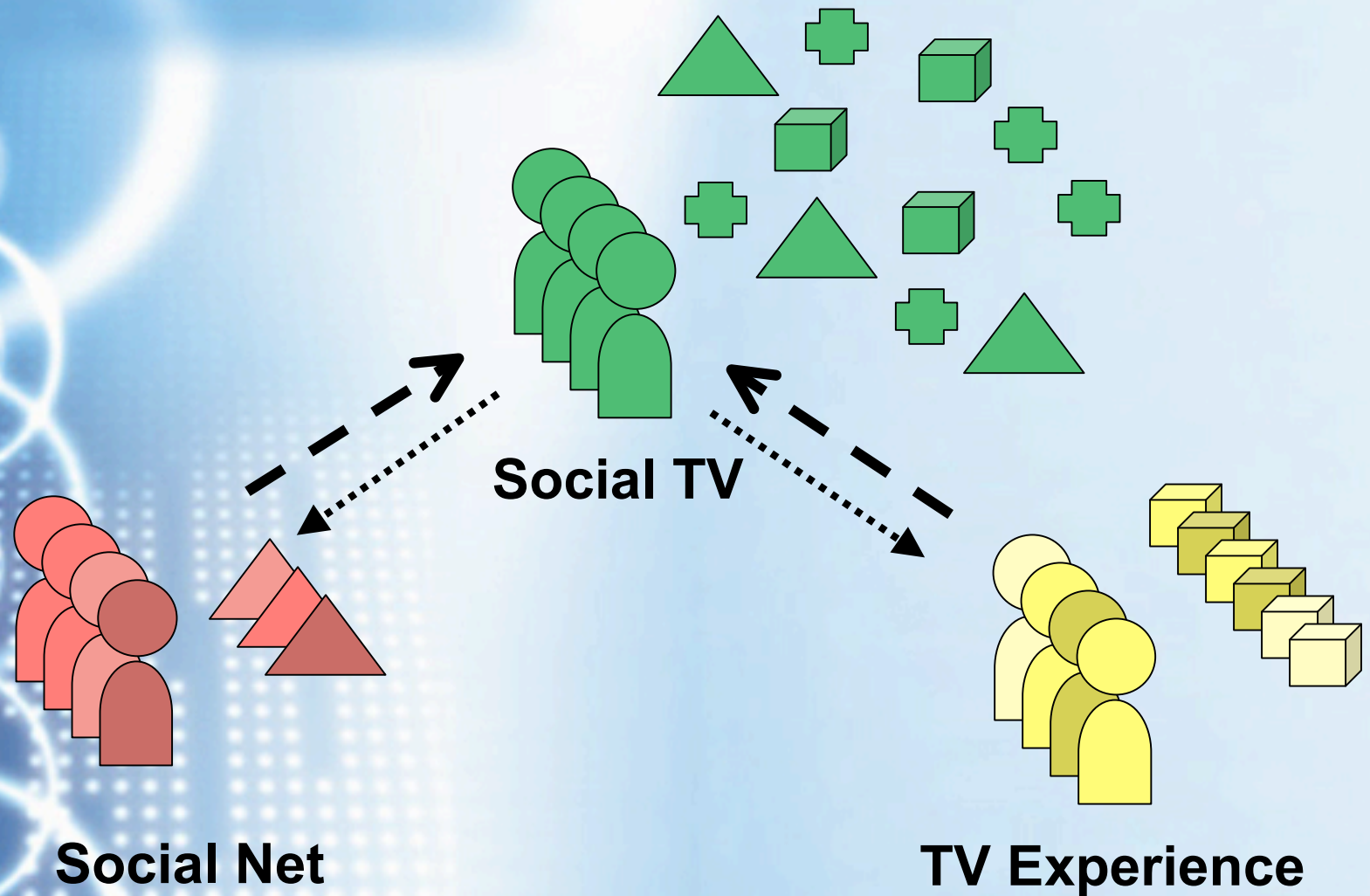
- Each supporting “app” provides approach to privacy.
  - Facebook has very long list of privacy controls
  - TV provider has privacy policy for information including identity information (name, address, credit card number, etc.) and services (which channels or packages, which pay-per-view, etc.)
- Typically, privacy model in overlay app is independent, but supporting apps have promised their policies.



## Issues: Identity

- Convergence: do we need to know whether a member of the group uses Facebook vs. Myspace? Longevity suggests mapping from these to a consolidated model. Same for TV provision
- Social TV identity may be composite of supporting ids + other features. New app space  $\Rightarrow$  new identity

# What does it look like?



# Conclusions: What are the features

- Focus on “information”: need policies and context for sharing, exposure, etc.
- Privacy policy (expressed in terms of identities) definition
  - Policy language
  - Convergence
  - Composition
  - Extension/abstraction
- Identity definition
  - Ontology
  - Convergence
  - Composition
  - Extension
- Contexts
- What functionality required and trusted



# Where is “communication paradigm” going?

- Web
- Search engines
- Sharing and exchanging information
- Not only about ephemeral communication only
- Question of whether can make it more symmetric

*Argues for information based, announce/request and event driven communications paradigm*

## Looking forward

- Complete Social TV case study in next month or two
- Next case study:
  - Something in network management space
  - Your ideas here...
- Beyond that
  - At most one more case study, if needed
  - Overarching white paper, architectural challenges, vision, roadmap of research required

## Questions, participation

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