

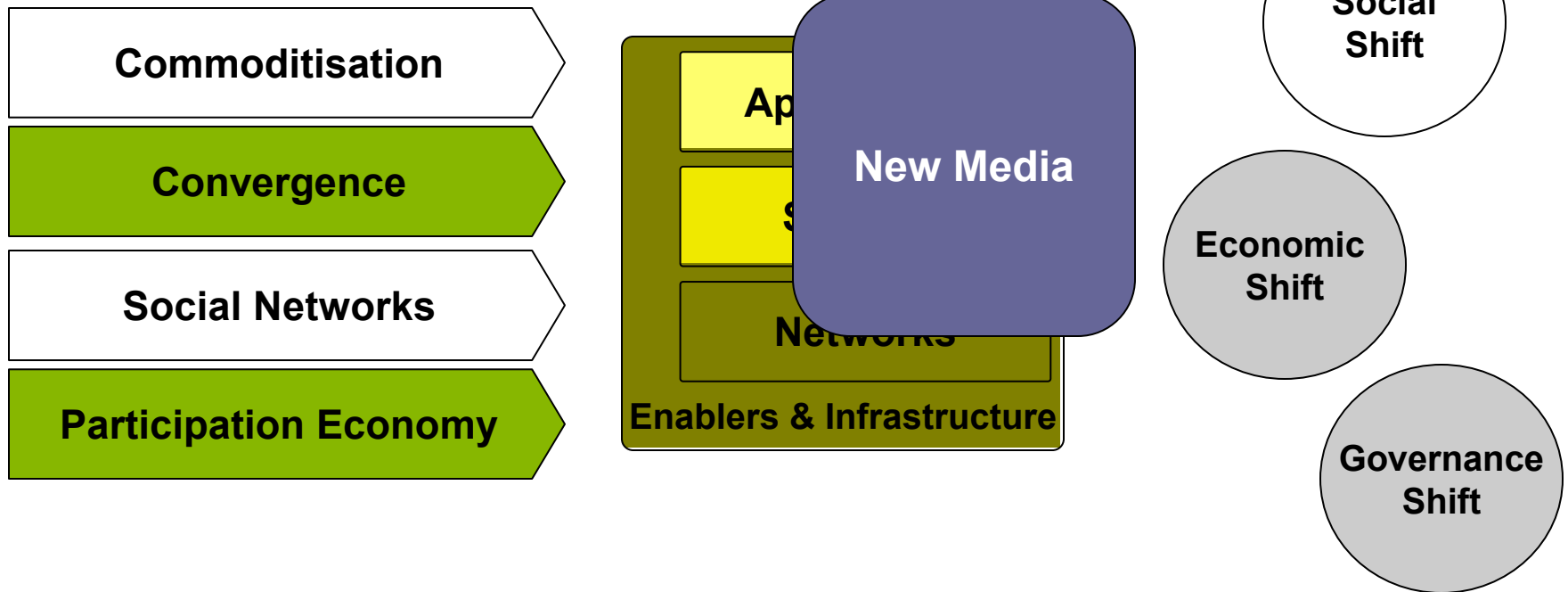
Technology Trends in the New Media

**Presented at Public Relation 2.0 Conference
Presented by Dr Tan Geok Leng, CTO, IDA**

1 Aug 2007

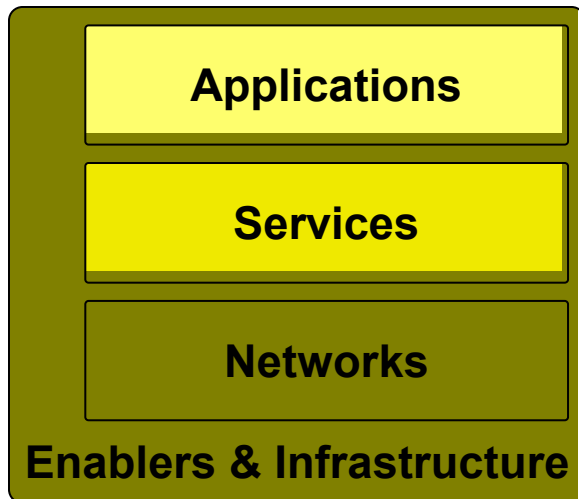
Outline

Emerging trends are reshaping the ICT and media environment with broader impact



Emerging Trends

Commoditisation

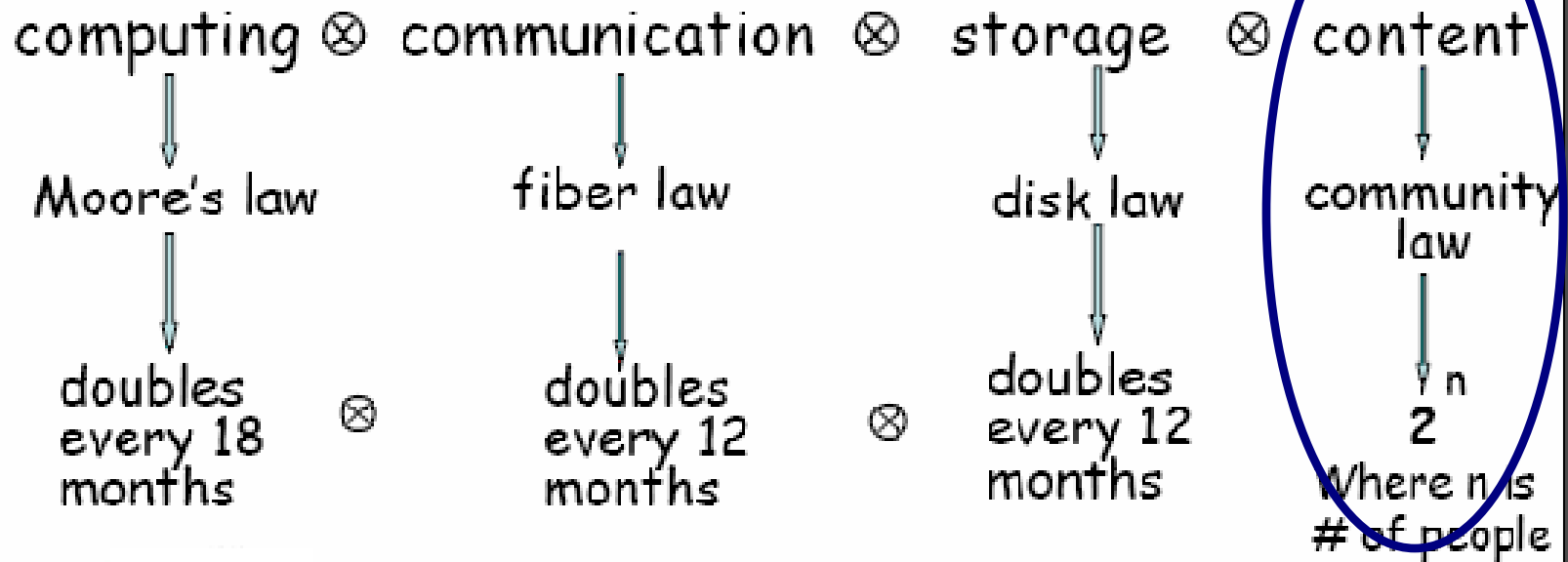


- More CPU Power, More Storage, Lower Cost
- Network Bandwidth are becoming abundant
- Content increasing exponentially
- Talents being commoditized

Commoditisation in ICT Industry

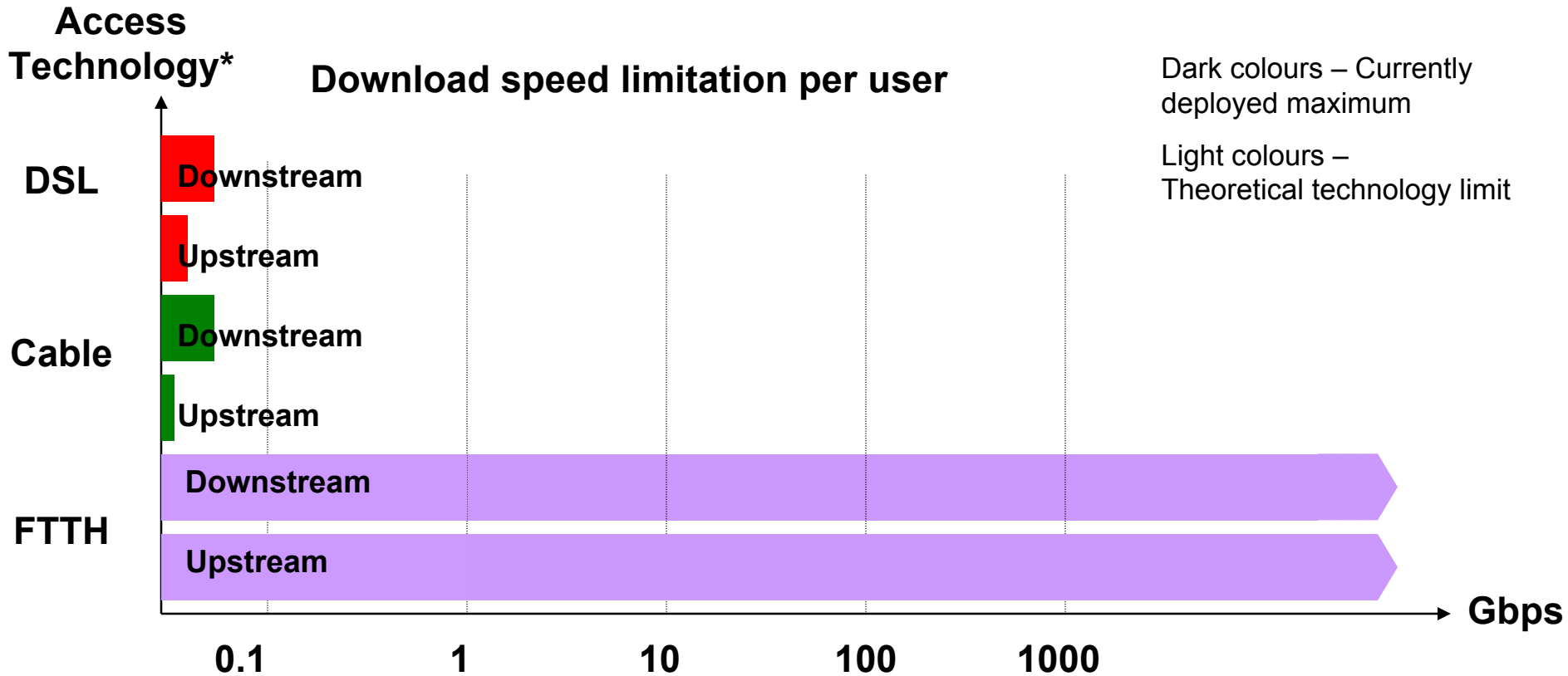
Fundamental dynamics--
(Pace of change of digital infrastructures)

Digital power =



Source: Dr John Seely Brown, Infocomm Technology Roadmap, Mar 2005

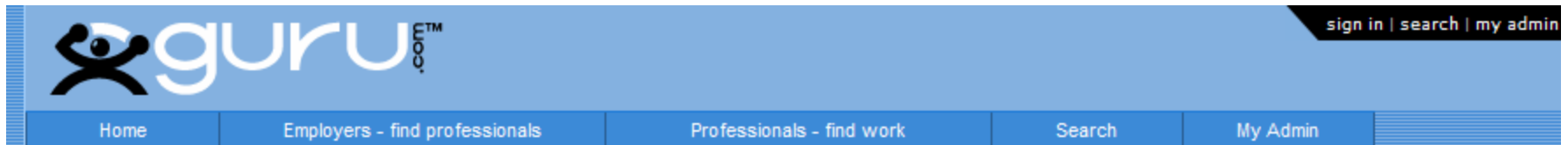
Bandwidth is also becoming commoditised



Content = 2^N

The image shows a collage of three web interfaces. At the top is the Blogger homepage, featuring the Blogger logo and a sign-in prompt: "Sign in to use Blogger with your Google Account". Below this are input fields for "Username:" and "Password: (?)". To the left is a YouTube interface with the "You Tube" logo and the tagline "Broadcast Yourself". Below the logo is a "Director Videos" section with a video thumbnail titled "BIG IDEAS FOR SMA..." from "sundancechannel". At the bottom left is a "Featured Video" section with a YouTube logo and a video thumbnail. The largest interface is the Flickr homepage, showing the "flickr" logo and navigation links: "Home", "The Tour", "Sign Up", and "Explore". A search bar contains the text "Search everyone's photos". The main content area is titled "Explore" and features a large, vibrant image of a tree with red and orange leaves in a field. To the right of the image is a text block: "Flickr labs have been hard at work creating a way to show you some of the most awesome photos on Flickr. We like to call it [interestingness](#). Explore the gorgeousity by choosing a point in time...". Below this is a "Select a month" section with a "Choose" dropdown menu. A small thumbnail grid of photos is visible to the right. At the bottom of the Flickr interface, it says "Other places to explore include:".

Talent is being commoditized



Guru.com: The world's largest online marketplace for freelance talent.

EMPLOYERS:
Connect with top professionals to complete your projects.

- ▶ Our free service quickly connects you with over 629,000 professionals!
- ▶ Two ways to get started:

[Post Your Project](#) Define project, get quotes

[Search for Pros](#) Search by skills/profiles

Watch a tour: [How Guru.com Works](#)

[Success Stories](#) : [About Our Service](#)

Existing users: [Sign in](#)

PROFESSIONALS:
To start finding work, [Post Your Profile](#)

Find professionals and projects in the following Creative, IT, Business Consulting and Office/Admin categories:

.. And not just for professional jobs

“Classifieds” for small jobs

Amazon Mechanical Turk - Welcome - Mozilla Firefox

http://www.mturk.com/mturk/welcome

amazonmechanical turk Artificial Intelligence

What is Mechanical Turk? Sign In or Register | FAQ

Welcome HITs Qualifications

Introduction | Dashboard | Status | Your Account Create Your Own HITs

Search for HITs containing [] that pay at least \$ 0.00 for which you are qualified [] GO

Complete simple tasks that people do better than computers. And, get paid for it. [Learn more.](#)

Choose from thousands of tasks, control when you work, and decide how much you earn.

Do you want to quickly and easily create your own HITs on Amazon Mechanical Turk? [Create HITs now.](#)

If you are a software developer and would like to learn more about using Amazon Mechanical Turk APIs, [click here.](#)

STEP 1 Find Find HITs to work on

What is a HIT?
HIT stands for Human Intelligence Task. These are tasks that people are willing to pay you to complete. For example a HIT might ask: "Is there a pizza parlour in this photograph?" Typically these tasks are

STEP 2 Finish Work & submit your HIT

How do I work on a HIT?
Once you have chosen a HIT to complete, click the "Accept HIT" button to have it assigned to you.
Follow the instructions on how to complete the HIT and when you are done, click the

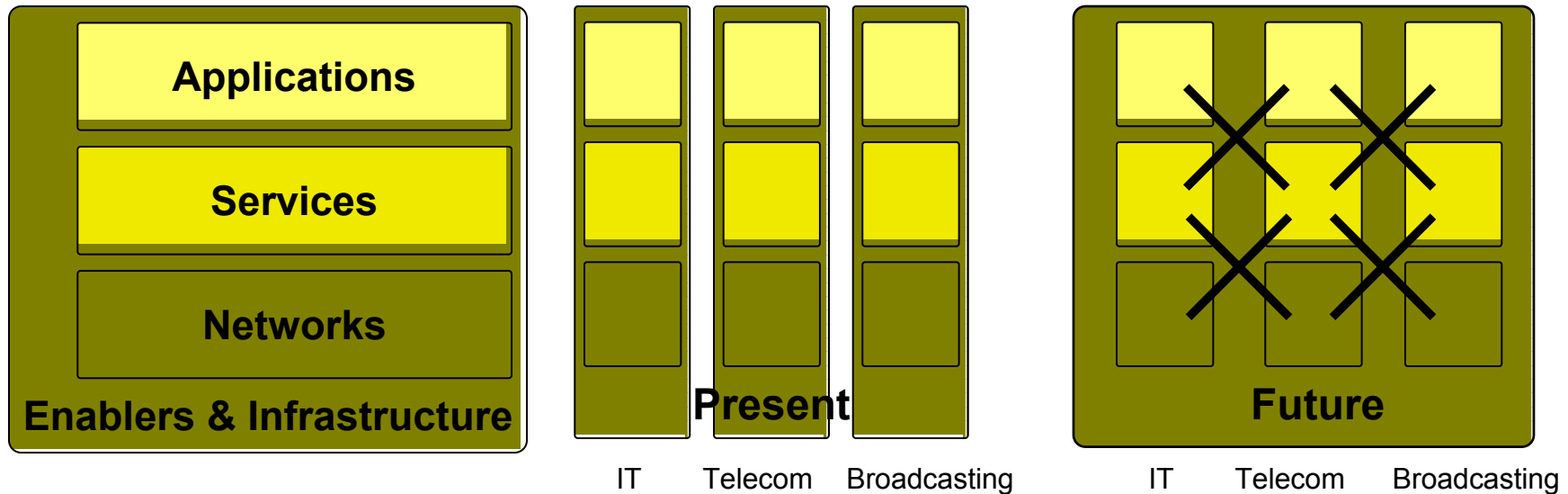
STEP 3 Earn Get paid for your work

How do I get paid?
You are paid when your answer is approved by the person that listed the HIT.
The money you earn is deposited into your Amazon.com account, where you can turn it into cash at any time by transferring it to

Show all details Hide all details		1 2 3 4 5 > Next >> L	
Expiration Date:	Apr 30, 2007 (1 week 6 days)	Reward:	\$0.10
Time Allotted:	2 hours	HITs Available:	2807
View a HIT in this category			
Expiration Date:	Apr 30, 2007 (1 week 6 days)	Reward:	\$0.05
Time Allotted:	2 hours	HITs Available:	2043
View a HIT in this category			
of the Treasury - Term Contract Awards			
Expiration Date:	Apr 21, 2007 (4 days 16 hours)	Reward:	\$0.04
Time Allotted:	60 minutes	HITs Available:	1290
View a HIT in this category			
Description: Extract Data from Contract Documents			
Keywords: beginner , detail , contract , vendor			
Qualifications Required: Contract Data Extraction (beginner) - Granted immediately when requested is greater than 50			
View a HIT in this category			
Description: Describe the Contents of a Web Site			
Requester:	Dimensional Analytics	HIT Expiration Date:	Apr 26, 2007 (1 week 2 days)
		Reward:	\$0.07
		Time Allotted:	60 minutes
		HITs Available:	901
View a HIT in this category			

Emerging Trends

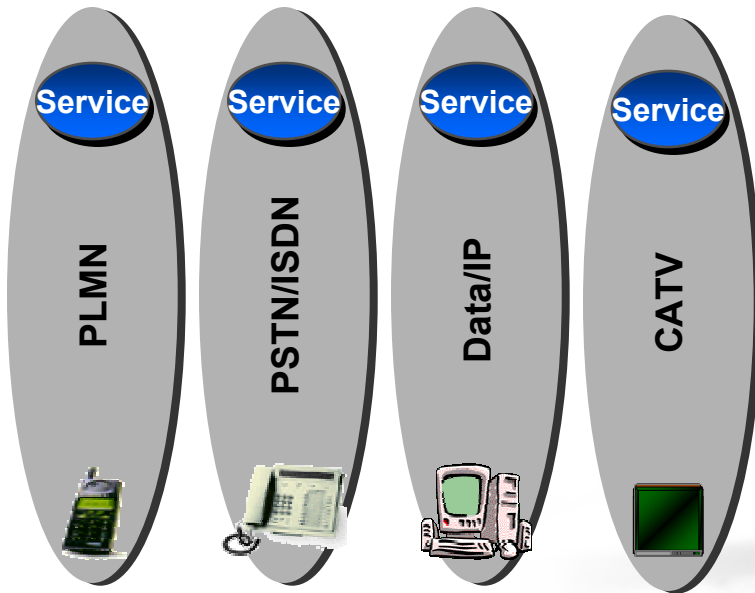
Convergence



Convergence of Networks – eg BT's 21CN
Convergence of Devices – eg Nokia N95
Convergence of Services – eg SingTel MIO

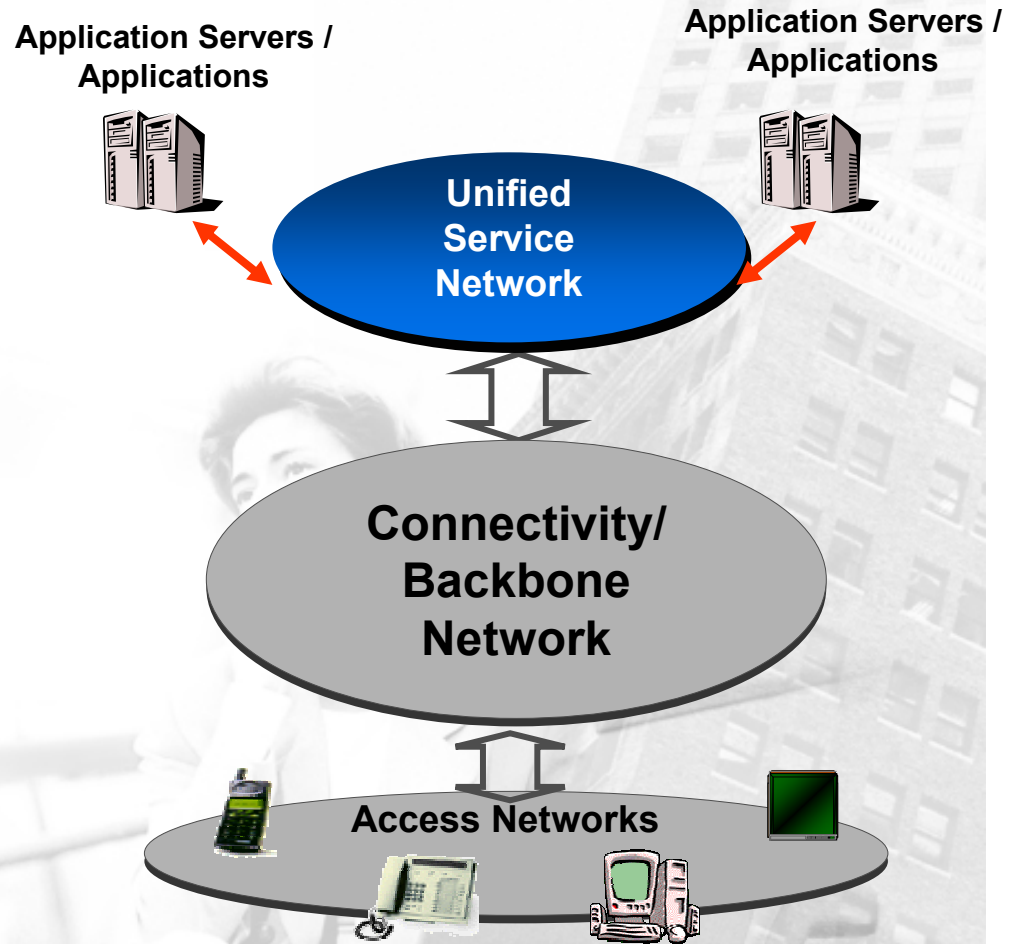
Complexity increases significantly
for convergence across operators

Today's Telco Networks



Each network with own access, transport, switching and service architecture

Tomorrow's Telco Networks



Network with unified service network architecture

Convergence in the Telecommunication Industry

BT forecasts it will switch off PSTN by 2010

British Telecom issued a bold call to arms to the rest of the telecommunications industry yesterday, urging carriers, particularly incumbents to embrace technological change and invest in an IP future. The company also made the astonishing forecast that it will switch off its PSTN by the year 2010.

Speaking at the *21 Century World Broadband Forum* in London, keynote speaker BT Wholesale CEO Paul Reynolds (pictured right) said global operators were now faced with an urgent choice to either adapt their technology and business models to support fully converged, IP based services, or stand still and risk being *"relegated to commodity players."*

BT, which is embarking on its most radical network infrastructure transformation to date in a 10 billion pound investment, will implement a multi-service IP Based network dubbed 21CN. Reynolds said the move away from *"being a narrowband to a broadband company will be transformative to the industry businesses and consumers."*

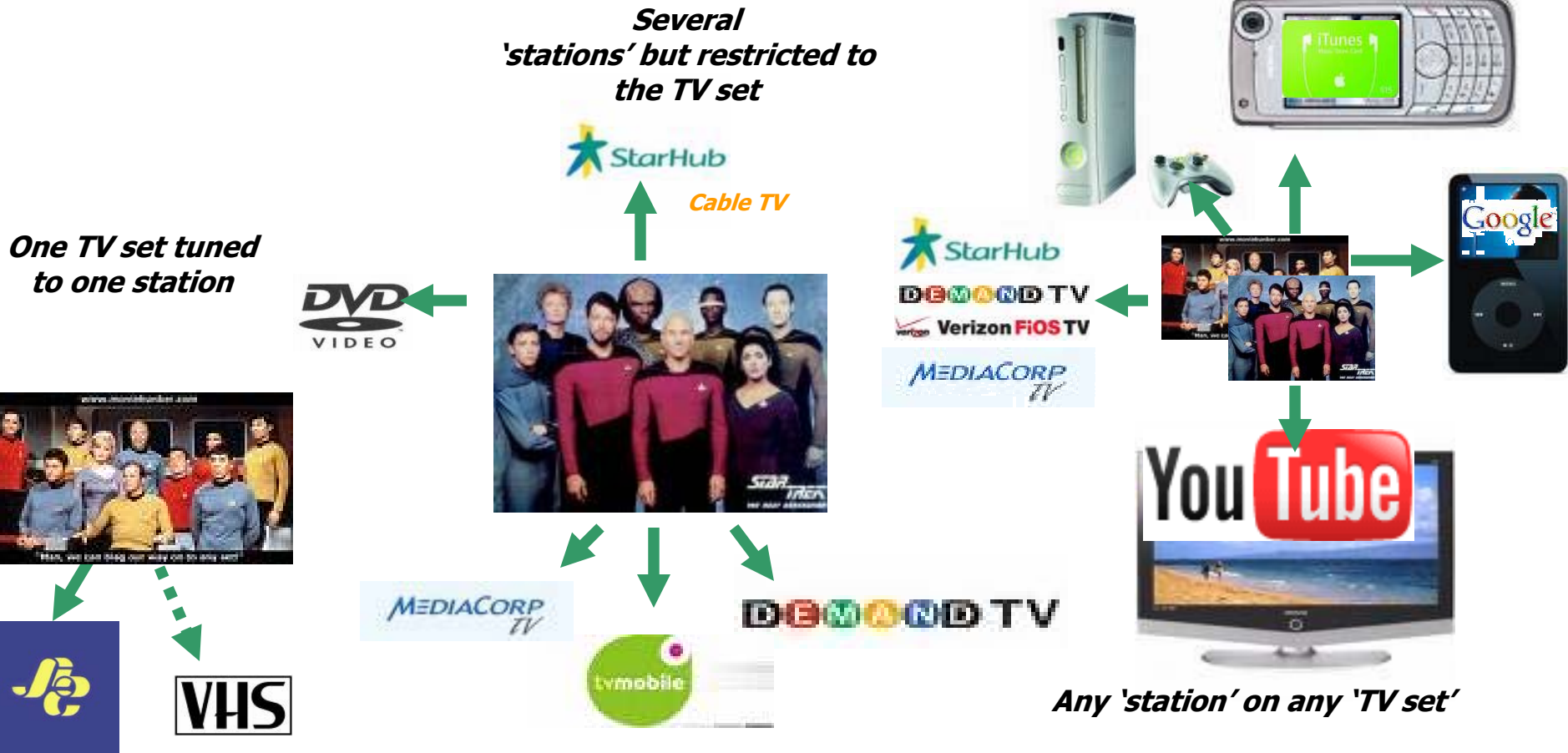


Source: Commsday Global (<http://www.virtela.net/docs/CDG.pdf>)

How we connect is changing...



How we view content is changing...



Where the content comes from is changing...

Channels of creativity are controlled



Channels of creativity are free

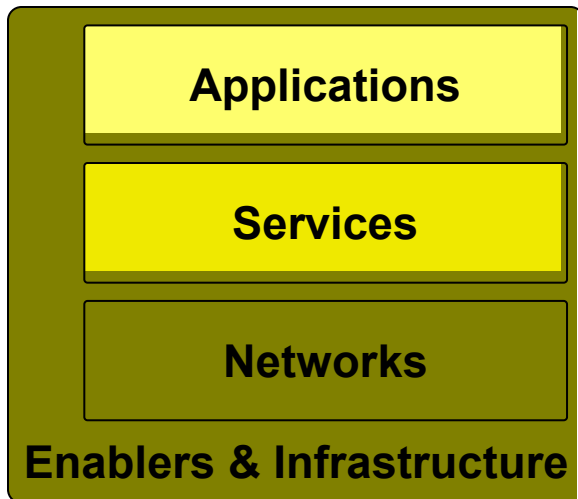
Past

Present

Future

Emerging Trends

Social Networks



- Friends based: Facebook, MySpace, CyWorld, Friendster
- Professionally inclined: LinkedIn, Ryze
- Beyond World Wide Web: Second Life, World of Warcraft (MMORPG)
- Linking People with same interest
- And not just people. Linking Infrastructure as well, eg, FON

Linking like-minded people

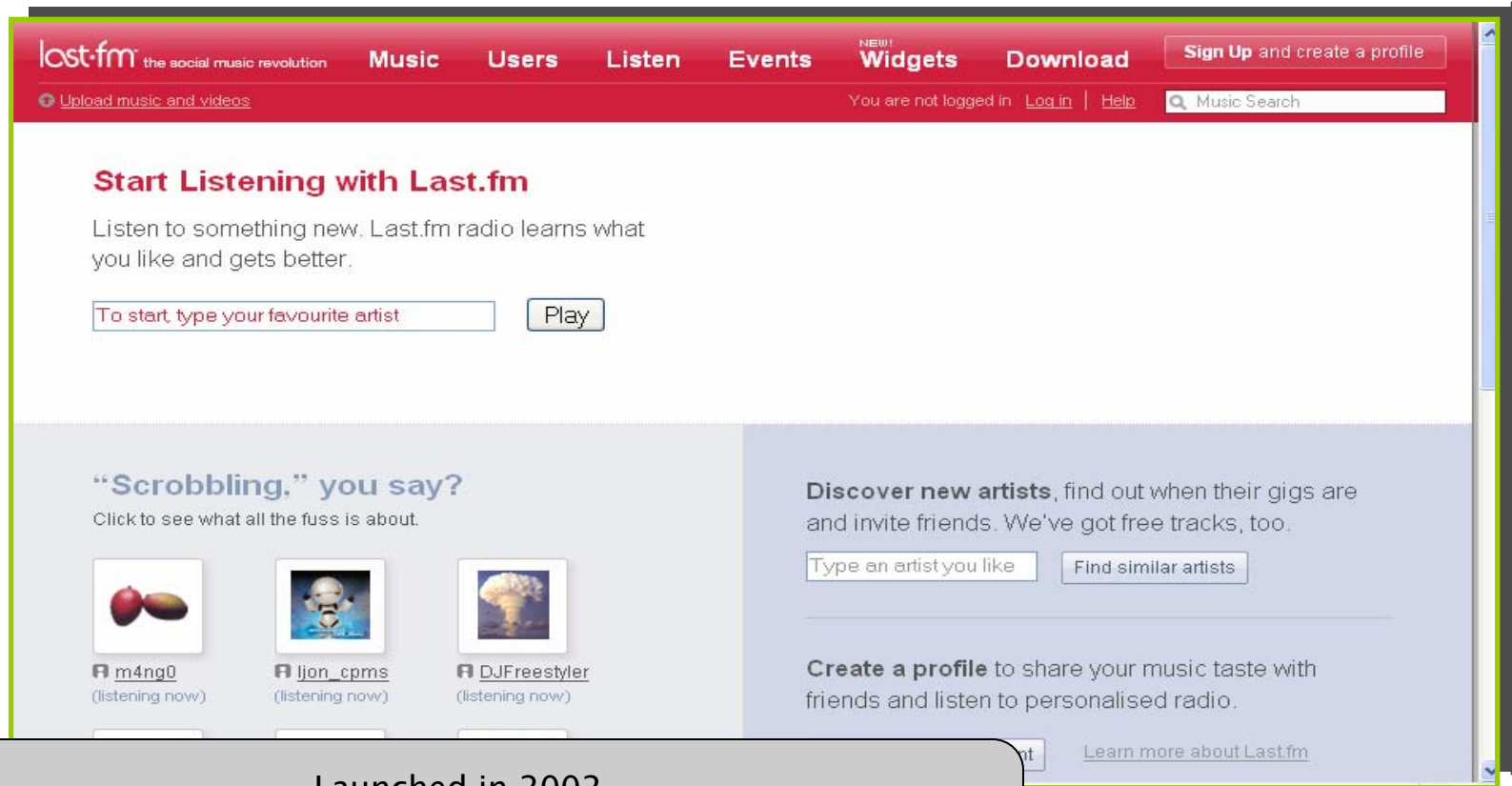
The image displays four overlapping screenshots of social networking websites:

- LinkedIn:** Shows a user profile page with navigation tabs (Home, People, Jobs & Hiring, Services, Answers, My Profile, My Contacts), a search bar, and a 'Network updates' section listing recent connection additions.
- Ning:** Features a header with the slogan 'Create Your Own Social Network for Anything' and a grid of various user-created social networks, such as 'Dallas Mavericks', 'WE'RE AN AMERICAN BAND', 'ZipKarma', and 'OpenCoffee Club'.
- Ryze:** A business networking site with a 'Ryze Home' button and a 'New to Ryze?' section. It includes a list of benefits like 'Get a FREE networking-oriented homepage' and 'Make quality business contacts'.
- eLGG:** An open-source social networking platform with a search bar, a 'Download eLGG' button, and sections for 'Plugins', 'Documentation', 'Communities', and 'Features'.

A grey callout box on the right side of the collage contains the text: "Users can share contacts on a public social network".

Source: <http://www.orkut.com/>, <http://www.linkedin.com/>
<http://www.ryze.com/>, <http://www.ning.com>

New Listening Experience



Launched in 2002.
Over 20 million active subscribers from all
over the world

Source: <http://last.fm>

Linking Family members and Relatives

The screenshot displays the Geni website interface. At the top left is the Geni logo with the tagline "everyone's related" and a "beta" label. To the right, it says "Welcome Patrick Tan" with links for "Logout", "Settings", and "Invite". Below this are navigation tabs for "My Tree", "My Profile", and "My Photos". A search bar labeled "Search My Family" is on the right. Underneath, there are options to "View as Tree", "List", "Index", "Calendar", and "Discussion". The main content area is titled "Patrick Tan's tree 6 people". It shows a family tree with five members: Ban Teck Lim (deceased), San San Tan (deceased), Ah Kow Tan, Swee Lian Lim, and Ai Lian Lim. Patrick Tan is at the bottom. Each member has a profile card with a placeholder photo, name, status, and options to "edit info" and "view tree". There are also "enter email" input fields for Ah Kow Tan, Swee Lian Lim, and Ai Lian Lim. The tree structure shows Ban Teck Lim and San San Tan as parents of Swee Lian Lim and Ai Lian Lim. Ah Kow Tan is connected to Swee Lian Lim. Patrick Tan is connected to Ah Kow Tan. A vertical scrollbar and navigation arrows are visible on the left side of the tree area.

Launched in Jan 2007.
Valuated at US\$100 million by Charles River Ventures

Source: <http://www.geni.com>

From the 'frivolous'...



Source: <http://www.twitter.com/>

Launched in Mar 2006.
An interesting social experiment that became
unexpectedly popular

Platform to allow users
to send updates to their
peers via SMS or IM

Values:

It's... Fun!

Beyond the World Wide Web

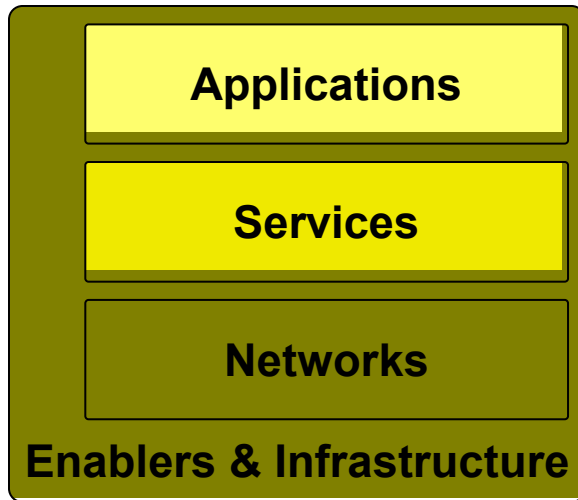


Emerging Trends

- Virtual Worlds are
- going beyond the PC
 - converging with Social Networks

Emerging Trends

The Participation Economy



- Consumers are also Producers -- Prosumers
- Motivated by various reasons: Money, Fame or just for good Karma
- New Business Models evolved

Even infrastructure is shared within social networks



LOGIN

email
Password

Register
Forgot your password?

FON Community

What's new **NEW**
Security **NEW**
Blogs
Boards
News
FON and Friends
Downloads
Our Investor Partners



What's FON | FON Maps | Shop | Jobs |

Language

FON IS THE LARGEST WIFI COMMUNITY IN THE WORLD

AT HOME YOU'RE WIFI KING
BUT AWAY YOU BECOME WIFI BEGGAR
SHARE SOME WIFI AT HOME
GET FREE FON WIFI AROUND THE WORLD

JOIN FON GET LA FONERA FOR 39.95\$€* - 5€/3\$ SHIPPING COST SALE TAX INCLUDED AND ENJOY WIFI EVERYWHERE FOR FREE

* Some exceptions apply

FIND FONSPOTS IN YOUR CITY!



LA FONERA

- Easy to install 54 Mbps wireless router
- Get free WiFi access wherever you find FON
- Decide how much bandwidth you share
- Share safely and keep your own private connection
- Enjoy our community features and meet other FONeros

[FIND OUT MORE](#)

[Retailer? click here](#)



Google Platform + User created Content

Housing Map Singapore

Powered by SingaporePropertiesOnline.com and Google Maps
(this site is in no way affiliated with SingaporePropertiesOnline or Google Maps)

Room Type 4

Address Blk 623

Price S\$330K

Description
 MUST SELL Very nice location,
 less than ...

[More info](#)

FOR SALE Bukit Batok

Rm	Price	Description	Date
4	S\$	More than 100 buyers, able to pay up to ...	2/7
4	S\$350K	more than 100 buyers on hand, \$0 commiss...	2/5
5	S\$390K	Buyer want a 5 room flat, no agents pl...	1/23
4	S\$390k	Buyer want a 4 room flat, no agents pl...	1/23
4	S\$	looking for high floor corner flat. 100%...	1/22
3	S\$165k	Mid Floor/ Near Shop/ Price Neg	1/19
3	S\$180k	Near MRT/ High Floor/ Windy/ Unblock/Sho...	1/18
3	S\$vt	Low floor... well kept, simple move in....	1/16
3	S\$170k	Mid Floor/ Near Shop/ Price Neg	1/16
4	S\$390k	able to pay up to \$60,000 above valuat...	1/13
5	S\$360	Looking for Flats near BB MRT. Interest...	1/8
4	S\$350	High Floor / 100% move-in / 5 min walk t...	1/8
4	S\$240k	No Agents pls! Looking for flats in Clem...	1/8
3	S\$185K	High Floor/ Price Neg	12/21
3	S\$165K	Mid Floor/ Price Neg	12/21
4	S\$235K	High Floor/ Price Neg	12/21
4	S\$205K	High Floor/ Price Neg	12/21
4	S\$200K	Low Floor/ Price Neg	12/21
3	S\$175K	High Floor/ Price Neg	12/21
4	S\$165K	Mid Floor/ Price Neg	12/21
4	S\$200K	Low floor/ Price Neg	12/20
3	S\$168K	Mid Floor/ Price Neg	12/19
3	S\$170	Simple. Indian eligibile. Near school, ma...	12/13

2rm
 3rm
 4rm
 5rm
 6rm
 no info

Note: The center-most marker with the darkest shadow despic insufficient information for display at Housing Map

To the serious – peer to peer financing



Joe Davis, Volunteer Firefighter, needs a small loan.

So he posts a listing for a loan with the amount he needs and a rate he can afford.

Loan period: 3 years

Amount requested: \$3,000

Maximum interest rate: 7%

Create Listing


Lisa Barron has a little bit of money to lend.

Lisa, along with other lenders like her, bid on Joe's listing with an amount they're willing to lend at a rate they think is fair.

Bids		
\$2,000.00	5.25%	✓
\$1,000.00	5.50%	✓
\$1,500.00	5.65%	✗

Loan: \$3,000.00 @ 5.50%

When the listing ends, the bids with the lowest rates are combined into a single 3-year loan for Joe.



Each month, Joe's payment is deducted from his bank account and deposited into his lenders' accounts until the loan is repaid.

Join Prosper now to get started >>>

What is this?

- Micro-financing
- + Syndicated lending
- + Securitization
- + Debt market
- + Credit rating
- + Social Networking

Social Lending: the big idea

Zopa is a marketplace for Social Lending. People lend and borrow money with each other, sidestepping the banks.



Using the New Media to gain Influence

New “Traditional” Media

THE STRAITS TIMES
stomp ONLINE · MOBILE · PRINT

email, sms or mms
7555

HOME SINGAPORE SEEN TALKBACK DIY VIDEO CLUB STOMP MEDIA CLUB STOMPCAST STAR BLOG LOVE-IN FOODIES CLUB ASK ST

JOBS UNLIMITED STOMP eBay EPL STOMPING GROUND ENGLISH AS IT IS BROKEN DIGITAL CLUB MMSING TALENT CONTEST THE COURT ROOM AB

Going for a song.
IKEA
© Inter IKEA Systems BV 2007

STOMP'S TOP 5
These are 'Must-See'
Singapore SEEN

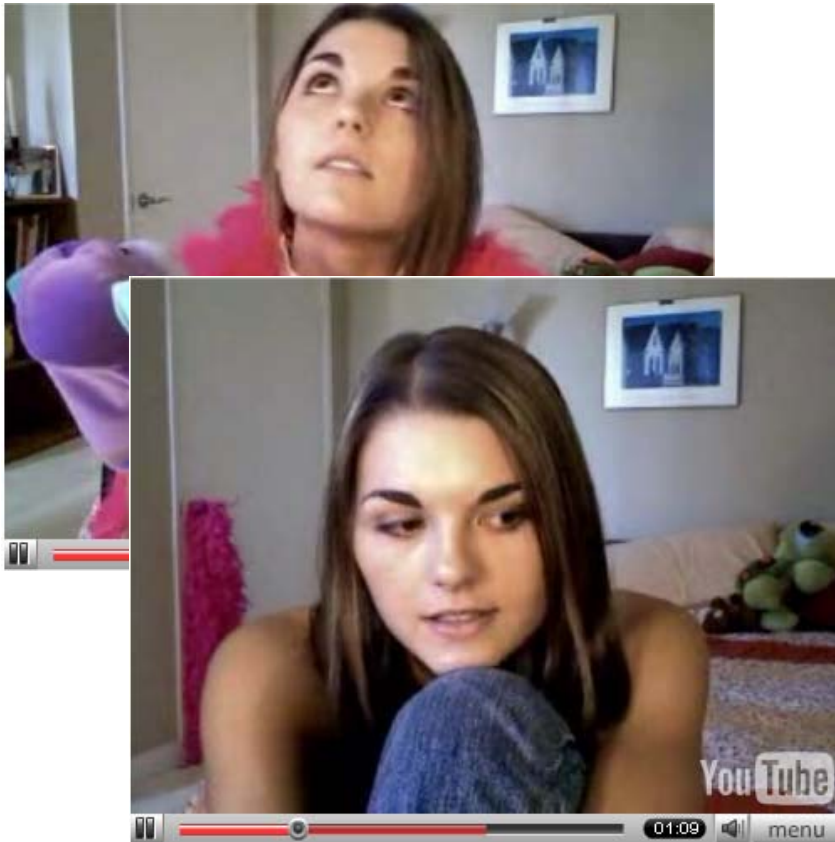
Laptop user sponges free electricity in Fajar Road void deck

@ MARINA BAY SANDS
Watch it LIVE
4pm, 9th Aug '07
straitstimes.com

THE STRAITS TIMES
National Day Spectacular

Source: <http://www.stomp.com.sg>

Worldwide Fame for a Lonely Girl



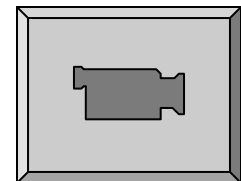
- Video blog of a fictional character, Lonelygirl15
- From her first video, posted June 16, she's doled out new chapters in two-minute chunks, each with an alluring title such as "Boy Problems," "Dad 'Talks' to Daniel," and "What Did Daniel and Dad Talk About?"
- Almost 2 million views, her "channel" is the fourth most popular on YouTube
- Exposed in Sep 2006.
- Still widely popular ever since. Running at Episode 245 now.

Some viewers noted that everything in her room seemed to come from Target. (One viewer annotated each item with its Product-Order number)

Successful PR using Social Media

The screenshot shows a YouTube video player with the title "15 short Ads = Apple Mac Guy -VS- PC Guy". The video features two men standing side-by-side against a white background. The man on the left is wearing a brown suit and tie, while the man on the right is wearing a blue t-shirt and dark pants, looking at a device. The video player includes a progress bar showing 00:04 / 07:40. Below the player, the video has 529,597 views, 2604 comments, and is favorited 5815 times. The right sidebar contains metadata: Added: October 15, 2006; From: DOCKERSFAN; Category: Entertainment; Tags: Apple, PC, Ads, Counsellor; URL: http://www.youtube.com/watch?v=Z7ReS_ur4k; Embed: <object width="425" height="350"><param name="...". A "Subscribe" button is also visible. The "Related" section lists other videos: "South Park Mac vs. PC" (01:50, 1685799 views), "Mac Vs Bloated PC" (00:29, 437352 views), and "PC vs Mac" (03:27, 437352 views).

Views: 529,597



From Google Ads to PayPerPost



The screenshot shows the PayPerPost website. At the top left is the logo, which consists of a blue pushpin on a stack of green money and the text "payperpost" in blue and green. Below the logo are navigation buttons for "advertisers", "bloggers", "publishers", "faqs", "company", and "blog". The main content area has a blue header "BLOGGERS OVERVIEW" followed by a paragraph: "Get Paid for Blogging. You've been writing about Web sites, products, services and companies you love for years and you have yet to benefit from all the sales and traffic you have helped generate. That's about to change. With PayPerPost advertisers are willing to pay you for your opinion on various topics. Search through a list of opportunities, make a blog posting, get your content approved, and get paid. It's that simple." Below this are two columns of content. The left column has a blue box with "will be paid: \$0.00" and "sent to charity: \$0.00", and a "MySpace URL" field with "NA" and "email address: andrew.demoblog@...". The right column features a "WILLIAMSHATNER DVD CLUB" advertisement with a photo of William Shatner. Below these are sections for "Featured Opportunities" and "Popular Opportunities".

Source: <http://www.payperpost.com/>



Exploiting Wisdom of the Crowd



Subvert and Profit

Home

Advertiser

Social user

Finance

Log in

Subvert and Profit

We are the crowdsourcing black market. We pay social media website users for their votes, and sell them to advertisers who want to boost their exposure on these sites.

Subverting Social Media

Other "social media optimization" sites can only advise their clients on ways to design their sites for Digg and StumbleUpon. Subvert and Profit actually gets you the votes, and for cheap!

By crowdsourcing our operation to over 1000 anonymous Internet users, we can provide a cheap, effective form of undercover marketing. Read the [FAQ](#) to see how it all works.

Advertisers

Buy votes on Digg and StumbleUpon.

1. [Sign up](#).
2. Add funds to your account.
3. Buy votes for \$1 each.
4. Get visitors to your site for cheap.
5. Repeat.

Referral programs

We offer two highly lucrative referral programs. You can earn 20% of the earnings of any friends who work for us, and 10% of the cost of all advertisements from all advertisers you refer to us.

Some users make more in referral earnings than they do voting for stories with us!

Social media users

Get paid just for clicking buttons.

1. [Sign up](#) and [refer](#) your friends.
2. Verify your Digg and StumbleUpon.
3. Subscribe to the [blog](#) and stay up.
4. Vote for stories.
5. Make \$0.50 per list of votes.

New Business model that exploits the voice of the users from social media sites for marketing purpose.

Source: <http://subvertandprofit.com/>

Making Sense with your RSS



Hello, our name is FeedBurner.
We help you measure and promote [blog](#), [podcast](#) and [RSS](#) content.

Blogs »
Promote content, build & measure audience, make \$

Podcasts »
Track your subscribable audio & video content

Commercial »
Join Wall Street Journal, USA TODAY, Newsweek, etc.

Blog & Feed Advertising Programs »
See why brands like Microsoft & Verizon choose FeedBurner for blog and RSS advertising.

Start FeedBurning Now. Type your feed or blog URL below. (Why Burn?)

Learn how to burn your [Blogger](#), [TypePad](#), [WordPress](#), [MySpace](#) or [podcast/video](#) feed.

I am a podcaster!
 Next »

Currently feeding **422,717** publishers who've burned **721,074** feeds (as of 21 May 07). [More »](#)

Publisher Buzz [More »](#)

"FeedBurner's [advertising network](#), with its strategically segmented channels for advertising and subscriber base are valuable resources for publishers, audiences and advertisers. In addition, we have been extremely

The FeedBurner Blog [More »](#)

- ♦ [MediaVillage Feeds to Reside in Ye Olde FeedBurner-burg](#) 5/23/2007
- ♦ [Jackson Pollock didn't bother with a "Troubleshootize" tab.](#) 5/17/2007

My Feeds

Analyze | Optimize | Publicize | Monetize | Troubleshootize

FEED STATS

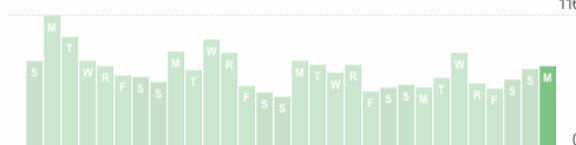
- Dashboard
- Subscribers
- Item Use
- Uncommon Uses
- Ad Performance

SERVICES

- StandardStats
- TotalStats **PRO**

Single Item Use for "FeedFlare, Part II" ↑ Show stats for

116



Monday, February 27, 2006

- ♦ **71 views** in feed readers *and* on the web
- ♦ **1 click** back to the [original item](#) ↑

Web-Based Item Use

People at the following web sites have viewed, clicked or downloaded your content.

REFERRERS	VIEWS	CLICKS
http://vrypan.net/linkblog/index.php?hours=-1	6	0
http://aggrsive.olt.ubc.ca/viewitems.php?fid=...	1	0
http://vrypan.net/linkblog/index.php?hours=168...	1	0
http://www.podcastingnews.com/	1	0
http://www.rssinteractive.com/rss_feeds/feedbu...	1	0

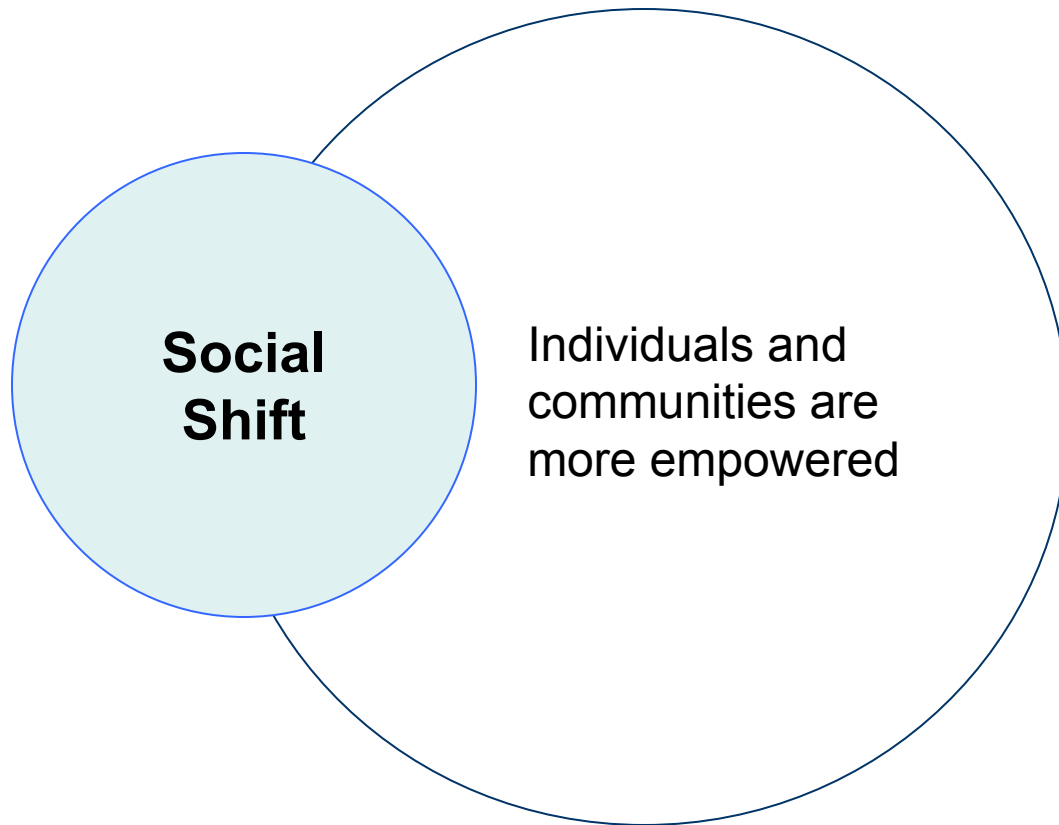
↑ Back to top

WEB-BASED FEED READERS	VIEWS	CLICKS

Source: <http://www.feedburner.com/>

What are the implications from these trends?

Key Implications



Individuals

Traditional sources of authoritative information are being challenged

Multiplicity channels for people to express “voice”

Greater freedom through anonymity

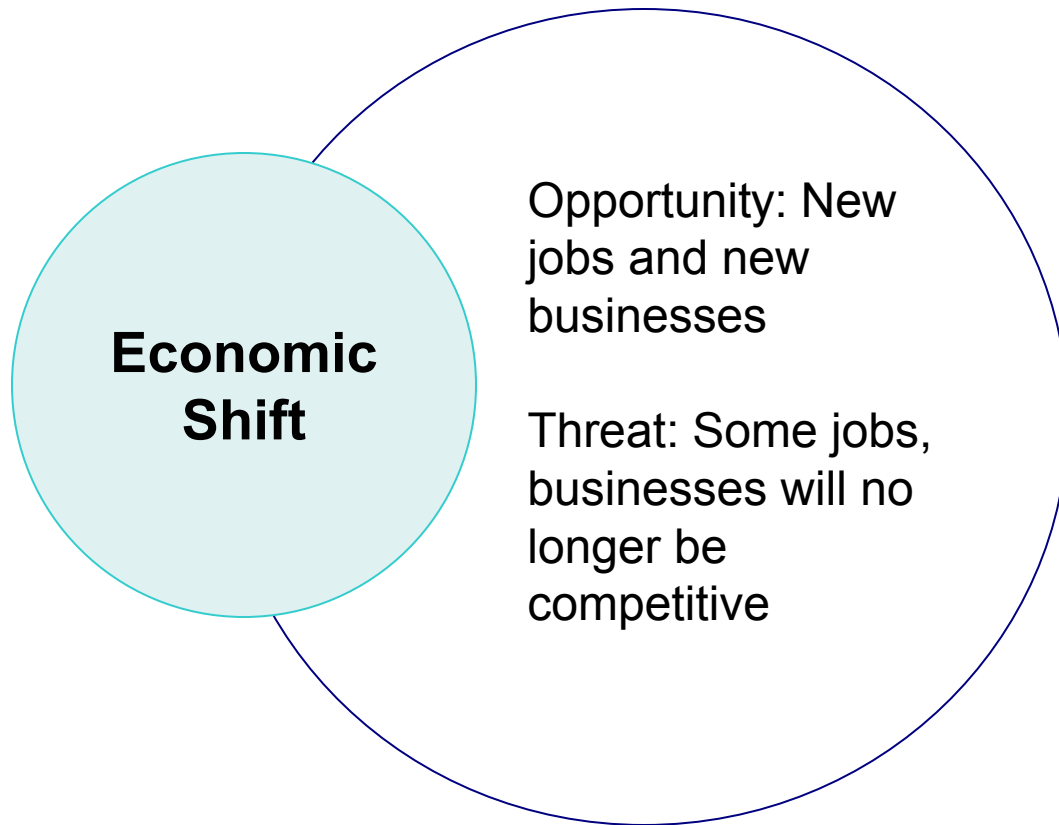
Community

Like-minded people can easily mobilize

New social norms, new social bonds

Privacy. Really?

Key Implications



Micro

The global prosumer competes in a global marketplace

Lowering of transaction costs for most economic activities

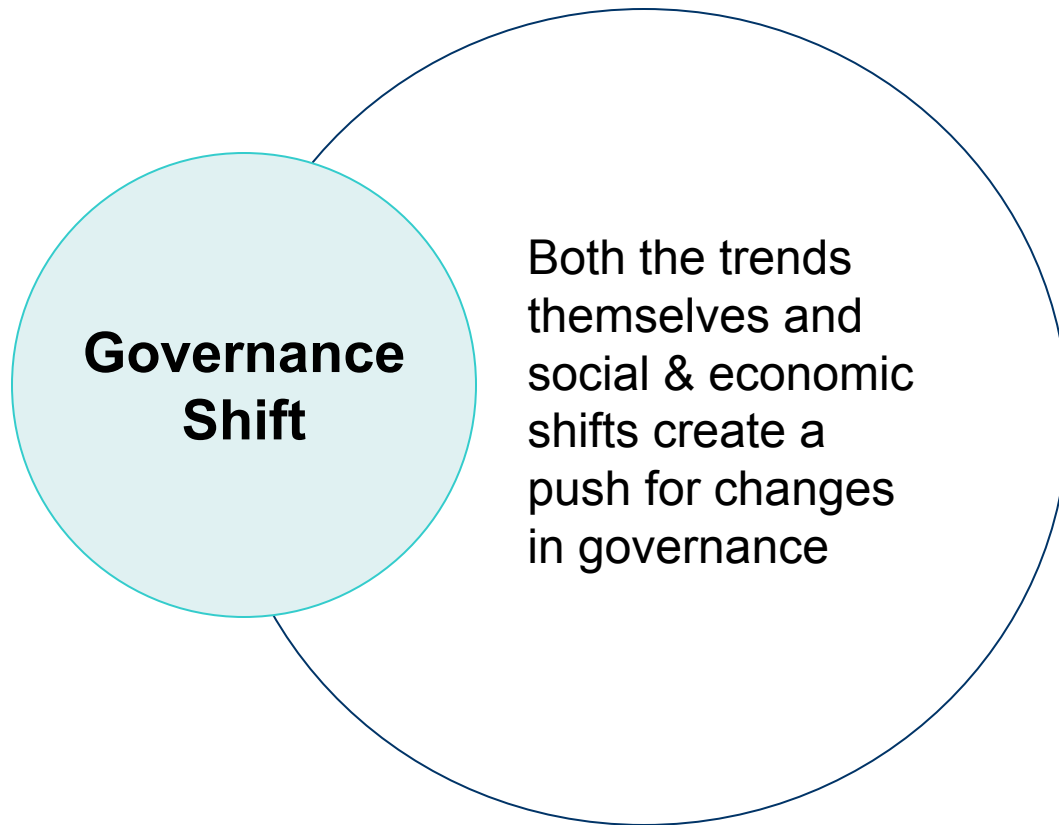
Macro

Trend for global business to shift to people rather than places

The digital infrastructure divide will determine winners and losers

Time-zone is less of an advantage

Key Implications



National

Engaging and servicing a digitally empowered population

Information & media management issues become more complex

Public finance issues: taxation and incentives

International

Competition-Cooperation Paradox: compete to attract investment, but need to cooperate on tax

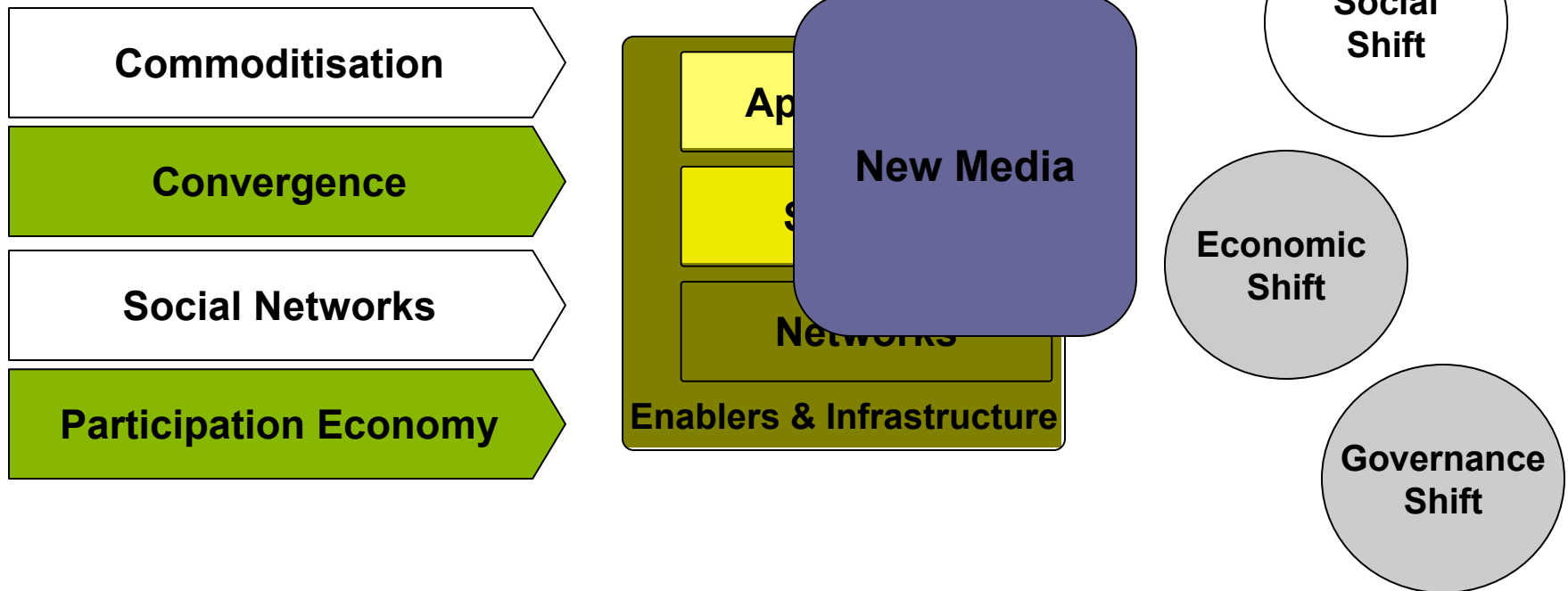
Internet governance issues: Can Singapore remain a “price taker”?

In Conclusion

Emerging trends are

reshaping the **ICT and Media environment**

with **broader impact**



Thank you

Thank you

