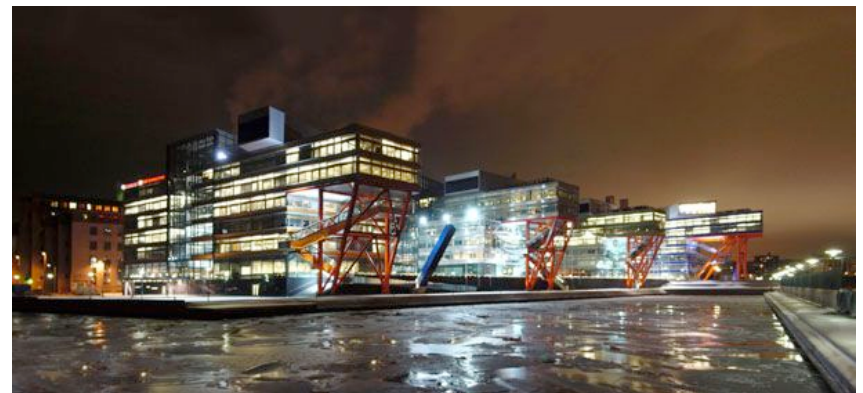


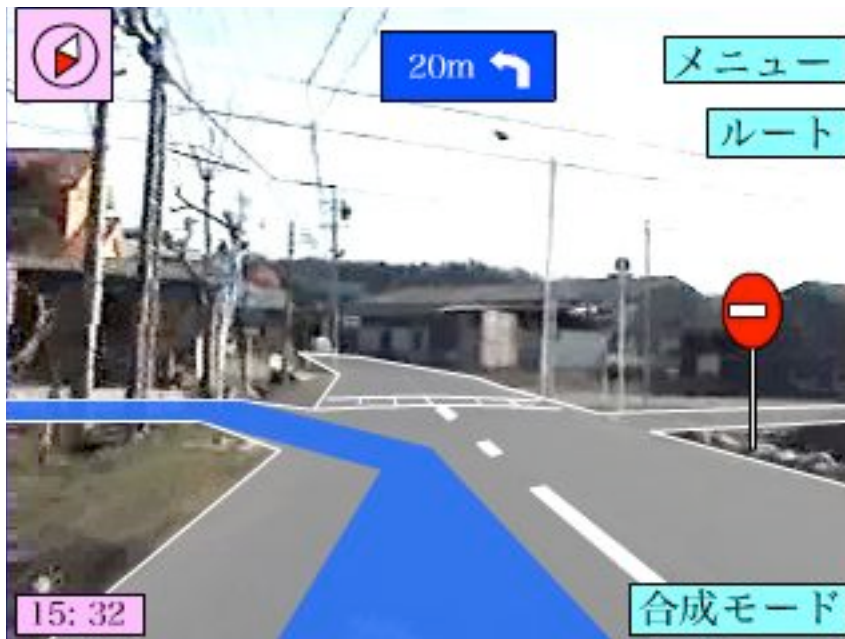
Helsinki Institute for Information Technolog

- Joint research institute of the University of Helsinki and the Helsinki University of Technology
- Alliances: Finnish ICT and media companies, research institutions, international partners
- Presently ~120 researchers
- Network society research program
 - Digital Content Communities group
 - Ubiquitous Interaction group



Typical ubicom/AR application proposals

- Information, navigation, healthcare, security, productivity



Waseda University Okuda Lab



Tokyo University Digital Library

Consumer appropriation of technology



VIRTUAL CONSUMERISM?

Consumers paying real money for virtual property



Thursday

Kil'Jaeden (PVP)

[Change Realm](#)

Monday
Level 4 Warlock
Elwynn Forest

Thursday
Level 30 Hunter
Darnassus

Saturday
Level 5 Rogue
Teldrassil

Gaknar
Level 2 Rogue
Dun Morogh

[Create New Character](#)

Ultima Online Atlantic UO Felucca *CASTLE* near Britain

Item number: 8258587

Bidder or seller of this item? [Sign in](#) for your status

[Email to a friend](#)

Bidding has ended for this item

If you are a winner, [Sign In](#) for your status.

[Sign In](#)

Buyer or seller of this item? Sign in for your status.

Additional options:

- [List an item](#) like this one.

Similar items from all eBay sellers

Item Name	Price	End Date
Ultima Online UO Atlantic 10 Million Gold	US \$60.00	Mar-17-06 11:19:44 PST
Ultima Online Atlantic 5K Recall Scrolls 5,000 UO	US \$6.99	Feb-28-06 14:15:20 PST
Ultima Online Atlantic 20K Blank Scrolls UO	US \$6.99	Feb-19-06 09:53:06 PST
UO Ultima Online Atlantic 50,000 BOARDS	US \$9.79	Mar-01-06 23:14:20 PST

Winning bid: **US \$510.00**

Ended: Feb-15-06 23:38:50 PST

Start time: Feb-08-06 23:38:50 PST

History: [19 bids](#) (US \$300.00 starting bid)

Winning bidder: [mysticgbi](#) (23 ★)

Item location: Lynn
United States

Ships to: United States

Shipping costs: FREE -- Standard Flat Rate Shipping Service



[Larger Picture](#)

Seller information

[barringtonuo](#) (108 ★)

Feedback Score: 108

Positive Feedback: 100%

Member since Feb-05-00 in United States

[Read feedback comments](#)

[Add to Favorite Sellers](#)



[Ask seller a question](#)

[View seller's other items](#)

Free PayPal Buyer Protection
[See eligibility](#)

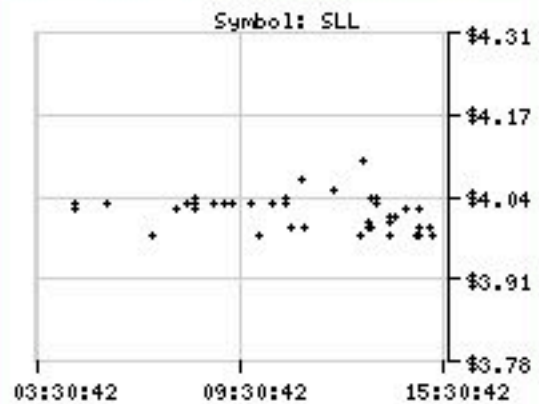
Real-money trade of game propert

- Total volume ~1 Bn USD? (up from zero in 1999)
- Virtual currencies are traded on exchange markets like “real” currencies
- Thousands of Chinese allegedly employed to harvest virtual gold from *Lineage*, *World of Warcraft* etc. to be sold on eBay
- “*EverQuest* has a higher GNP per capita (USD 2,266) than Bulgaria and China” (Castronova 2001)

Item Title	Bids	Price* ▲	Time Left
LOOK ----- Habbo Furni Package - Rares + Norms  	14	\$40.08	2d 23h 12m
UO Ultima Online Europa LUNA House ***INSIDE WALLS***  	5	\$152.50	2d 12h 24m
Eve Online GIST X-TYPE X-LARGE SHIELD BOOSTER  	<i>Buy It Now</i>	\$239.99	5d 01h 12m
Maple Story MapleStory LVL85+ PRIEST BROA OFFICIAL MS 	21	\$560.00	5h 53m

Daily summary:

Last trade:	\$3.98
Change:	-\$0.05
Best selling price:	\$3.98
Best buying price:	\$4.00
Blocks traded:	866
Open:	\$4.03
Yesterday's close:	\$4.03
Daily high:	\$4.29
Daily low:	\$3.98
Today's average:	\$4.0217
Best selling rate:	251 / \$
Best buying rate:	250 / \$



Symbol: SLL

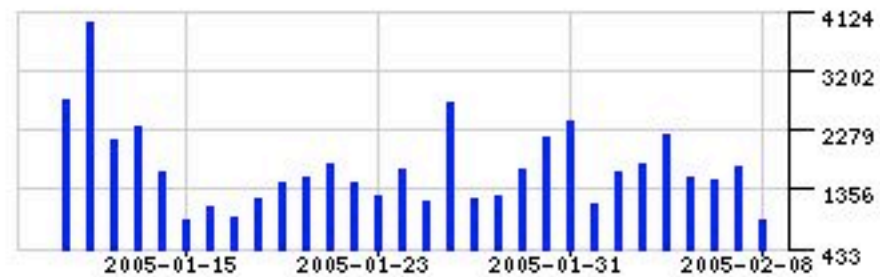


Chart Types

[Closing Price] [OHLC] [Candlestick]



Cyworld, Korea:
USD 250 M (2005)



IRC-Galleria, Finland:
200 000 € / month

mehiläisiä!!!! kaikki jotka tulee kattoo matsii ny saa anka
/te_girl: klik sitä
Kunni o on kjaib



Habbo Hotel, Europe/US
€ 30 M (2005)

Tencent QQ, China



Virtual property with real value

Why? What motivates the consumer to spend real money on “non-existent” things?

- Power, identity, status, membership in a group, ...
- “Symbolic value”

⇒ Sociologists: Same things motivate the physical consumer culture

⇒ Brands, exclusivity, collector’s items, symbols, names, ...

Digital Brand Commodities project proposal

- Using augmented reality technologies to bring the virtual property concept to real-world settings
- “Digital commodities”
- VTT, HIIT, Waseda, (UADH)
- Technology, content, business models, user testing



Digital Brand Commodities project proposal

Three scenarios:

1. Using digital commodities as a placeholder / sales channel for physical commodities (e.g. furniture)
2. Using digital commodities as decoration for physical spaces
3. Using digital commodities as fashion accessories for personal decoration



Lo-fi implementation of a personal decoration concept