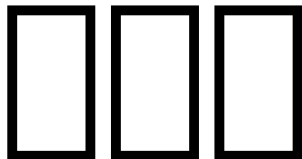


Exponents of Change: How Scale Creates Value in Net Communities

David P. Reed
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Businesses in Networks, and as Networks

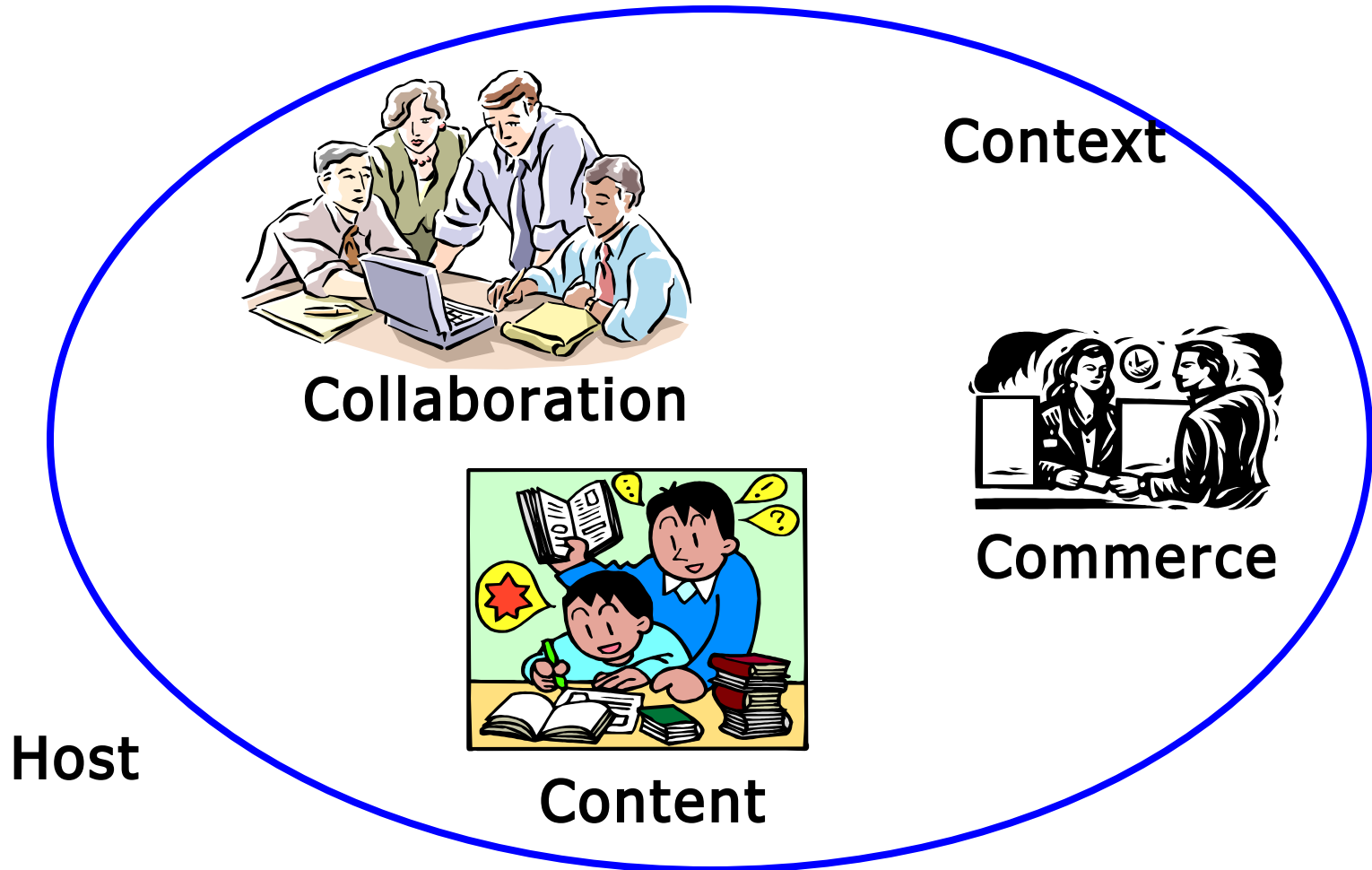
Communities of Value - a new “killer platform”

Economic model of network value creation

Implications for Digital Strategy

Conclusions

What is a Community of Value?



Example Network Communities of Value

- ♦ www.bluemountainarts.com – sharing cards
- ♦ www.zing.com, www.videofarm.com, www.napster.com - sharing digital photo albums, movies, recordings
- ♦ www.moveon.org - flash political community
- ♦ www.military.com - community of current and former military personnel
- ♦ www.ebay.com - infrastructure for collector/traders

**Make audiences (for sponsors),
metamarkets (for metamediaries),
customer collaborations (mass collaboration)**

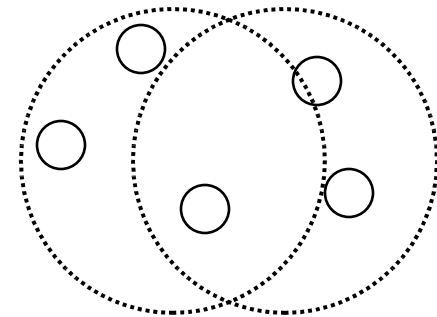
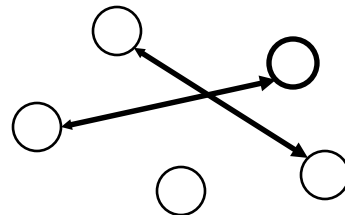
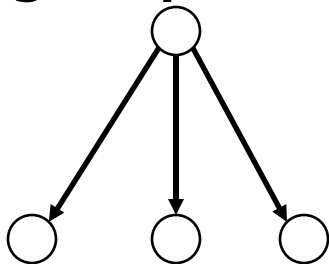
Valuing Optional Transactions

Networks create collections of options

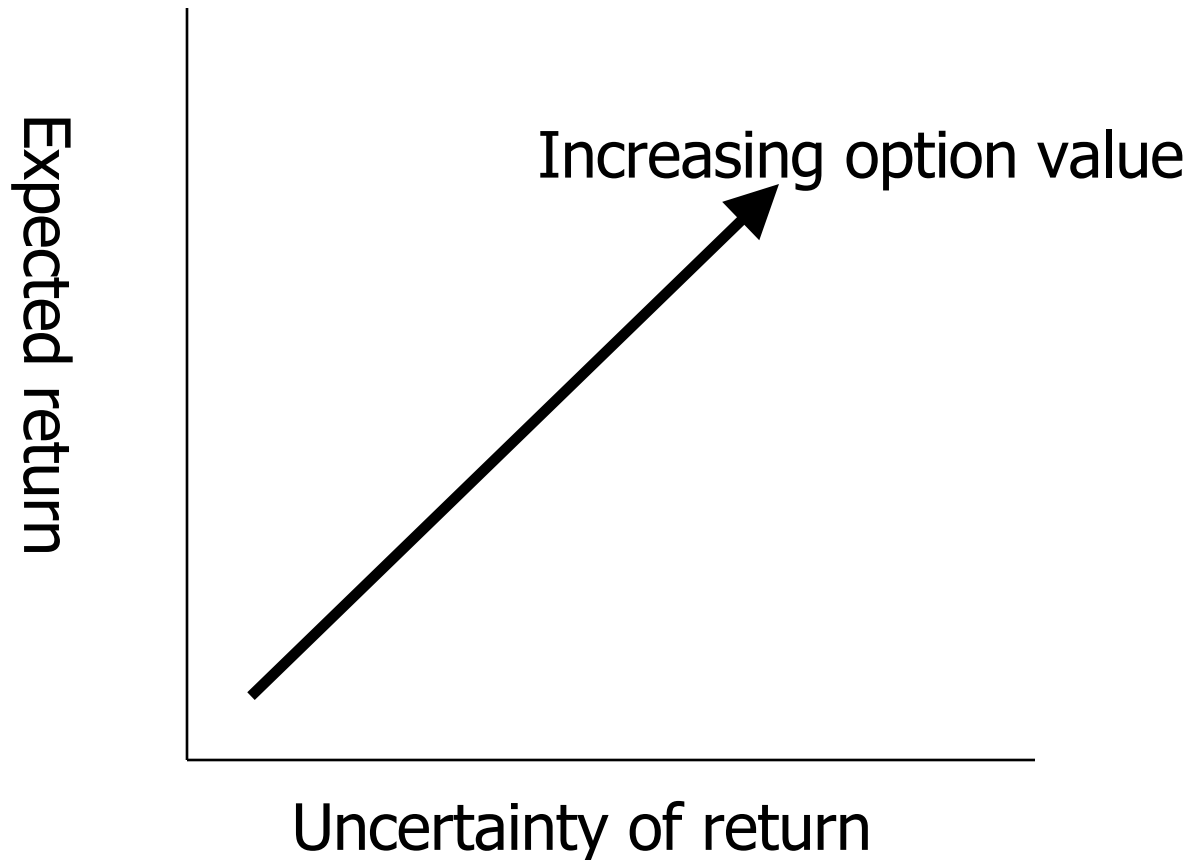
to Receive – distribution

to Transact – exchange with peers

to Affiliate – establish and maintain groups



Valuing Optional Transactions and Affiliation



Sarnoff's Law example: online auctions

Www.OnSale.com: first online auction house

Fixed number of products, variable number of consumers

Total option value $\sim N$

N potential customers

www.OnSale.com

goods

Metcalfe's Law example: online auctions

Online classifieds: classifieds.yahoo.com

Supply and demand scale with net size

Total option

value $\sim N^2$

N potential sellers

N potential buyers



classifieds.yahoo.com

Reed's Law example: online auctions

The screenshot shows the eBay homepage in a Netscape browser window. The browser title is "eBay - Your Personal Trading Community - Netscape". The address bar shows "http://www.ebay.com/". The page features the eBay logo, a navigation menu with links like HOME, LISTINGS, BUYERS, SELLERS, SEARCH, HELP, NEWS/CHAT, and SITE MAP. A search bar is present with a "Search tips" button. The main content area is divided into several sections: "categories" with links to various product categories and their item counts; "fun facts" highlighting the number of items sold; "fun sTuff" with a link to a February issue; and "featurEd" with a list of featured items. At the bottom, there are logos for Netscape Now!, AOL All New 4.0, and Priority Mail, along with copyright information and a link to the User Agreement.

File Edit View Go Communicator Help

HOME LISTINGS BUYERS SELLERS SEARCH HELP NEWS/CHAT SITE MAP

ebay
your personal trading community™

Search tips

categories

- [Antiques](#) (44072)
- [Books, Movies, Music](#) (157806)
- [Coins & Stamps](#) (55337)
- [Collectibles](#) (480453)
- [Computers](#) (53383)
- [Dolls, Figures](#) (32616)
- [Jewelry, Gemstones](#) (50427)
- [Photo & Electronics](#) (23620)
- [Pottery & Glass](#) (94322)
- [Sports Memorabilia](#) (179689)
- [Toys & Beanies®](#) (178128)
- [Miscellaneous](#) (94756)
- [all categories...](#)

fun facts
Explore the finer things in life!

- Over 1,600 [paintings](#) on eBay!
- Over 800 [sculptures](#) on eBay!
- Over 200 [drawings](#) on eBay!

fun sTuff
Read about your eBay community. Check out the new [February issue!](#)
[other happenings...](#)

featurEd

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- [Laser Pointers~ Five Heads ~ Half Mile Range~](#)
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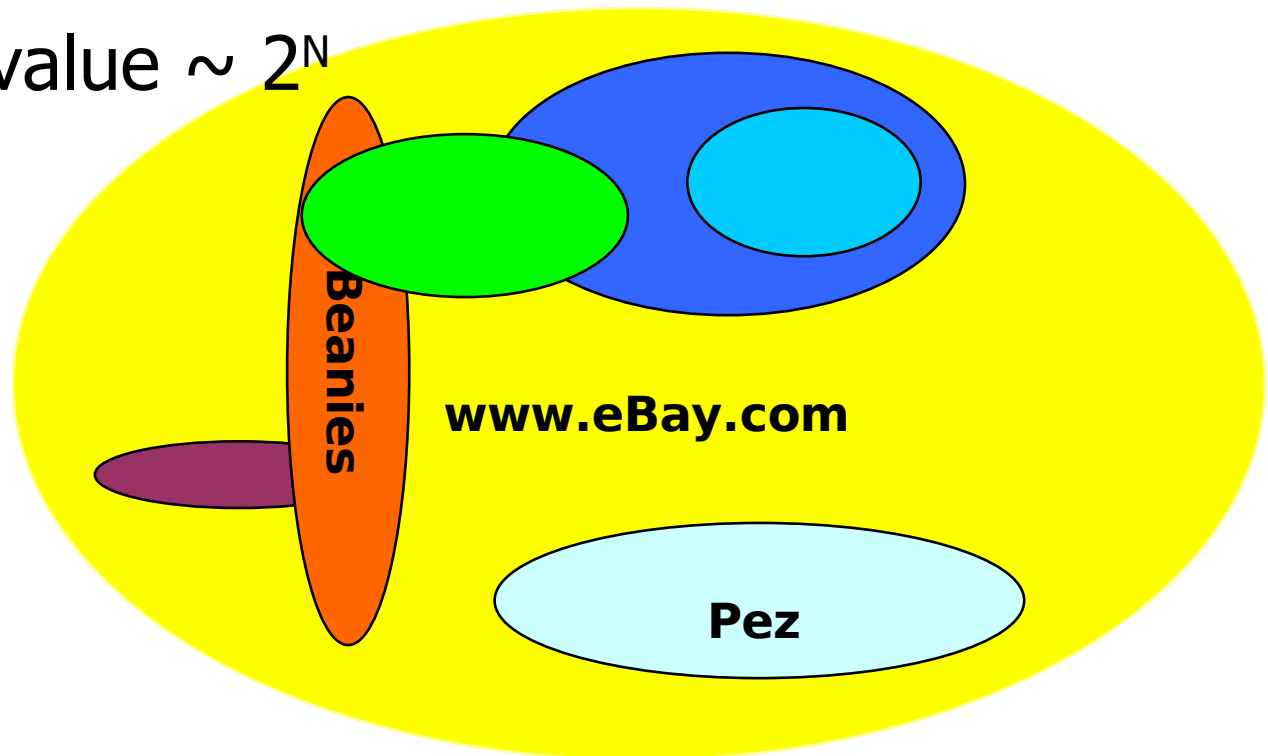
Document: Done

Reed's Law example: online auctions

Www.eBay.com: online auction market site

Any subset can form an auction

Total option value $\sim 2^N$

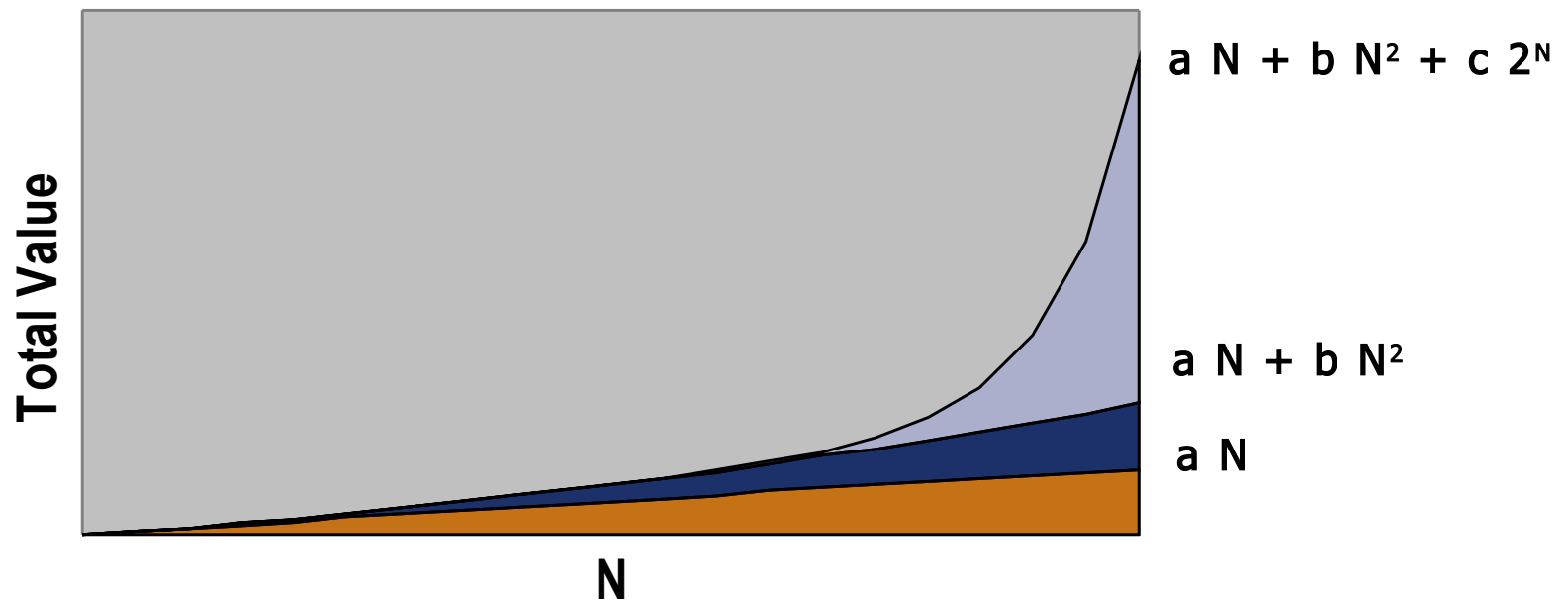


Network Scaling Laws

	Sarnoff Broadcast	Metcalfe Network	Reed Community
Value	N	N^2	2^N
Examples	Wire service, OnSale	Email, Classifieds	AOL Chat, eBay
Connecting 2 Networks	N+M	$N^2 + M^2 + 2NM$	$2^N \times 2^M$
Economics	Stable oligopoly of lowest cost suppliers	Increasing returns to host of most users	Increasing returns to best hosts

Dominant Value Proposition Shifts

Optional Transaction Value

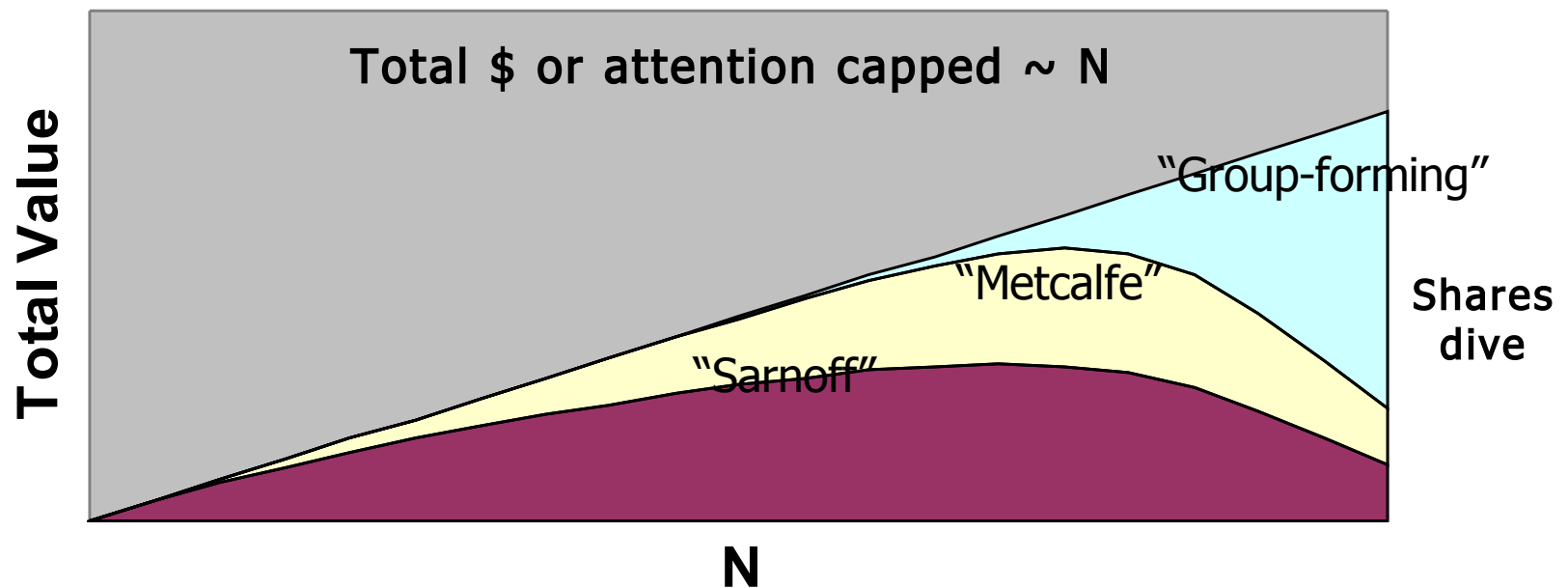


$$\text{Total Value} = a N + b N^2 + c 2^N$$

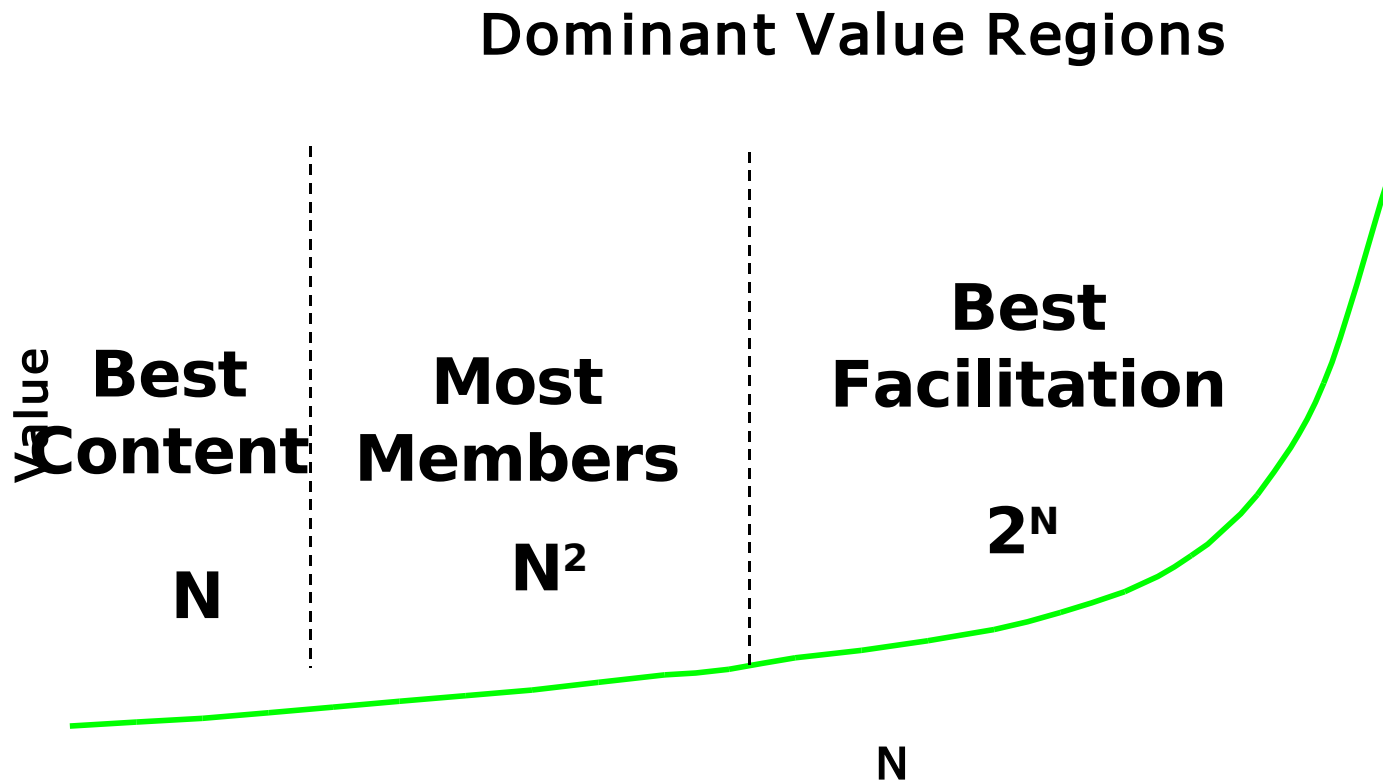
Typically, $a \gg b \gg c$

Saturation squeezes the slower-scaling sources of value

Saturation of Value



Suit your game to the conditions



Bootstrapping a CoV strategy

Evolutionary (phased) approach:

- Phase 1. **Content** acquisitions while N is small
- Phase 2. **Transactions** as N grows
- Phase 3. **Facilitate groups** as N gets larger

Preemptive (first mover) approach:

- Build a **scalable community platform**
- Buy scale: your survival depends on it.**

Remember: spoils go to most efficient value creator

Mechanisms for value capture

Subscription / Membership fees

Advertising / Sponsorship

Transactions (direct & intracommunity)

Referral fees – metamediary role

Information sales or use

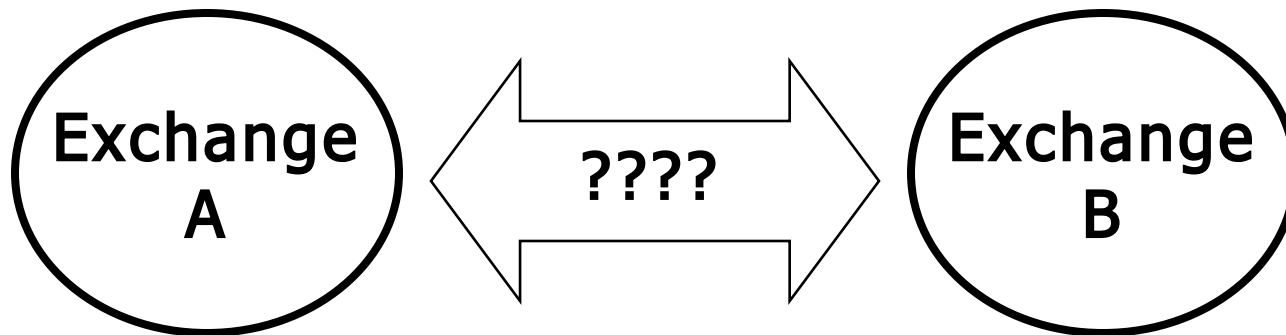
Buyers cartel

Collaborative product innovation

Other ?

Leveraging network partnerships

Closed vs. Open networks?



Network Scaling Laws

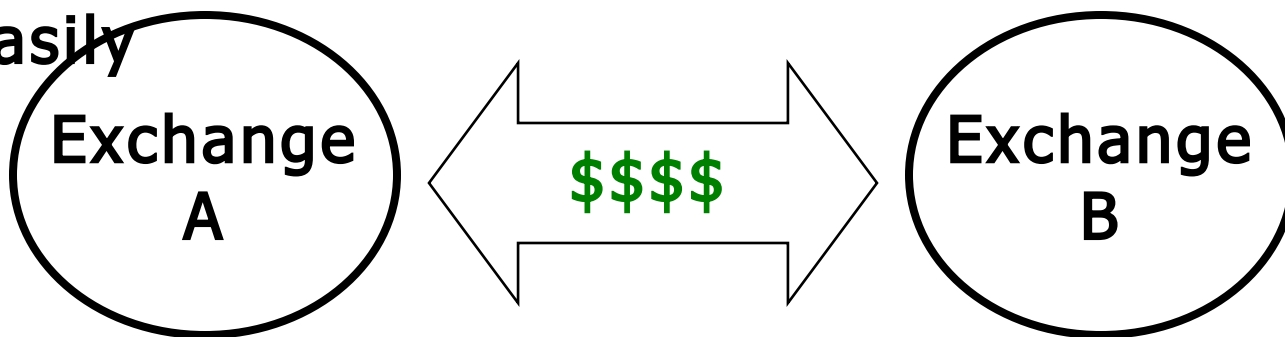
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Leveraging network partnerships

Closed vs. Open networks?

“Metcalfe partnership” or “Reed partnership” create value by allowing transactions or groups to form in a wider scope

Construct communities that interconnect easily



In conclusion...

**As the 'net scales, communities are the next
"killer platform"**

**Scale shifts value from content to
transactions and finally, group-forming**

**Gateway partnerships among communities
of value may be the most efficient ways to
create value**