



# Internet Trends 2004

Mary Meeker  
October 2004

# ***The Internet in China***

**Mary Meeker – October 2004**

Full report online at [http://www.morganstanley.com/institutional/techresearch/2004\\_China\\_Report.html](http://www.morganstanley.com/institutional/techresearch/2004_China_Report.html)

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# Internet as Change Agent for China

- **Most populous country** — 1.3B people (21% of world)
  - 1850 — 33% of global GDP
  - 1991 — < 2% of global GDP
  - 2003 — 4% of global GDP (or 13% using PPP)
- **Top priority for China's leaders is long-term, sustainable economic growth with relatively high levels of employment**
- **Technology is the designated vehicle for driving growth and Internet is at core of technology innovation**
  - Internet connectivity may help Chinese companies more effectively utilize labor and resource base locally and globally
- **Many disruptive forces / challenges / risks in China**

# Technology Adoption

## Illustrated for Global Market / Innovators... Not All Made in America

- **China Internet** – 87MM+ users; #2 in world, likely #1 within 5 years
- **S. Korea** – Broadband penetration of 70%+ is higher than any other country
- **Shanda Networking** – 236MM registered gamer accounts (non-unique) in China
- **Ringtones** – \$3B+ annual market
- **Picture phones** – 1 of 6 mobile phones sold globally in 2003
- **Apple** – 70%+ market share of online paid-music market
- **Yahoo!** – 1B+ streaming sessions in 12 months, mostly music videos
- **Google News** – 7MM global visitors/month, 5K sources, zero human intervention
- **eBay** – facilitated CQ2 trades of \$8B, up 42% Y/Y with 45%, and rising, outside US
- **VoIP** – Japan leads with 4MM+ subscribers via Softbank / Yahoo! BB

# ***Internet & China***

## ***11 Points***

# Number of Connected Users Is Significant / Growing Rapidly

<b>TMT Category</b>	<b>China Global Ranking</b>	<b>China 2002 Units (MM)</b>	<b>China 2002 Growth</b>
<b>Mobile Phones</b>	<b>1</b>	<b>207</b>	<b>43%</b>
<b>Cable TV Subscriptions</b>	<b>1</b>	<b>100</b>	<b>10</b>
<b>Telephone Lines</b>	<b>1</b>	<b>214</b>	<b>20</b>
<b>Internet Users</b>	<b>2</b>	<b>59</b>	<b>75</b>
<b>Installed PCs</b>	<b>4</b>	<b>29</b>	<b>21</b>

Source: Morgan Stanley Global Market Sizing of TMT Products and Services, 9/03; <http://www.morganstanley.com/techresearch>.

# Relative Web Site Usage Momentum Is Strong

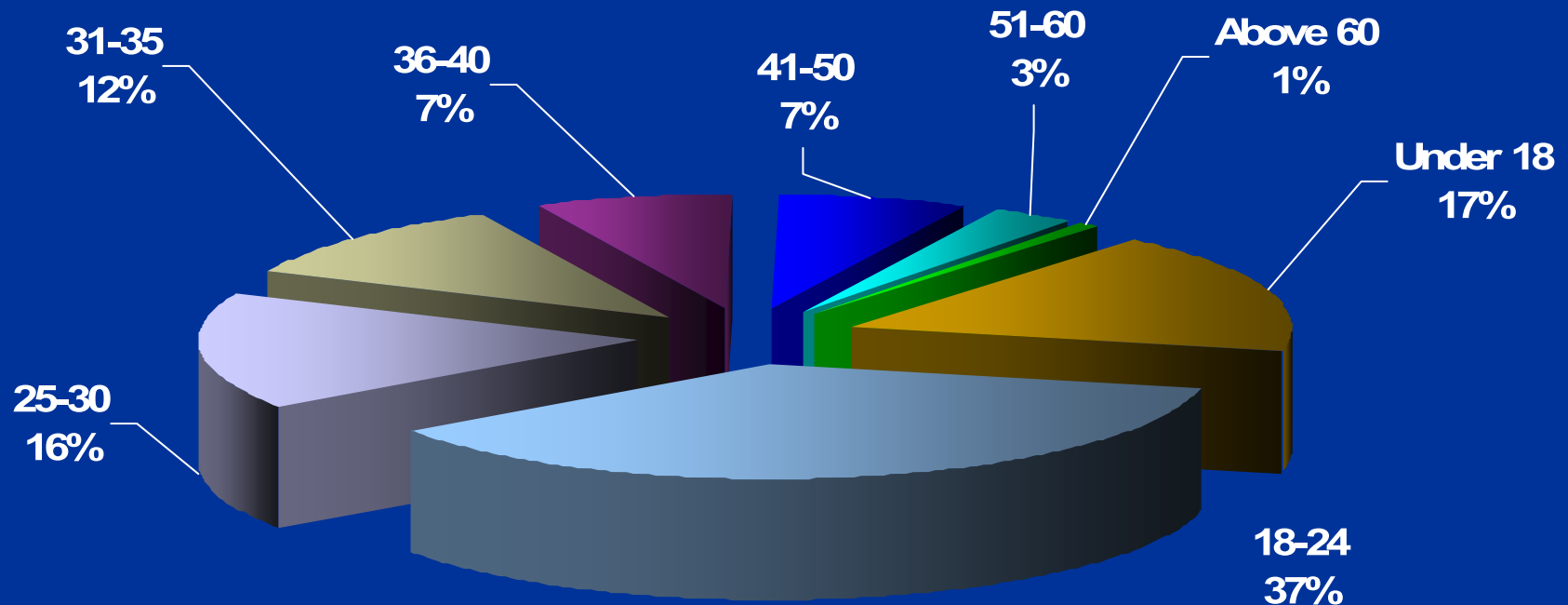
## ~Half of Alexa's Top 25 Trafficked Global Sites are in China

Rank	Site Name	Country	Rank	Site Name	Country
1	Yahoo!	USA	14	Newsgroup.com.hk	HK
2	MSN	USA	15	eBay	USA
3	Sina	China	16	Tom Online	China
4	Google	USA	17	Offeroptimizer.com	USA
5	Sohu.com	China	18	Naver	Korea
6	NetEase	China	19	Taobao	China
7	Baidu.com	China	20	Nate	Korea
8	3721 / Yahoo!	China	21	Allyes.com	China
9	Yahoo! Japan	Japan	22	Chinaren (Sohu)	China
10	Passport.net (Microsoft)	USA	23	EachNet (eBay)	China
11	Microsoft	USA	24	Amazon.com	USA
12	Tencent	China	25	21CN.com	China
13	Daum.net	Korea			

Source: [www.alexa.com](http://www.alexa.com), 10/1/04. Note that Alexa's traffic rankings are based on usage patterns of opt-in users of Alexa's downloadable toolbar. Alexa's results may be skewed owing to inclusion of Alexa toolbar with ISPs in China.

## Next-Generation Very Active on Internet...

**70% of Internet Users in China are Below Age 30 (vs. ~30% in US)**



Source: CNNIC, 13th Statistical Survey Report on the Internet Development in China (Internet User Demographics (1/04). Pew Internet & American Life Project, "The Ever-Shifting Internet Population" (4/03).



## Online Media Development in Early Growth Stages

- Historical governors on media (from TV to print to entertainment) have created an especially fertile environment for emerging online media
- Internet (with / without mobile phones) able to deliver info that simply could not be sent / received / interacted with before
- In market that had been cut off from news flow for years, ability to receive information *and* ability to express oneself should not be underestimated

# Wireless Messaging Services Ramping Quickly, Although Transitions Occurring...

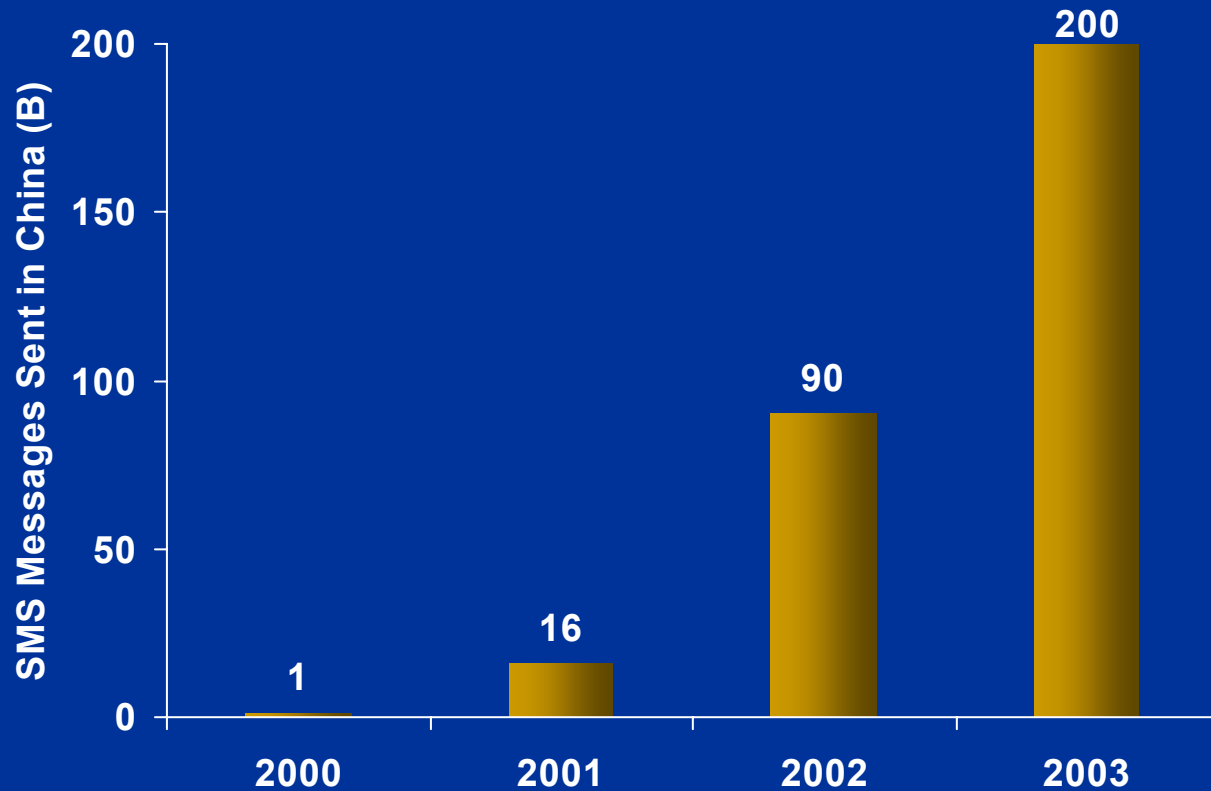
## China Leads in Ratio of Mobile Phones to Internet Users

Country	Mobile Phones (MM)	Internet Users (MM)	Mobile Phone to Internet User Ratio	Installed PCs (MM)
China	207	59	3.5 : 1	29
US	141	162	0.9 : 1	198
Japan	79	53	1.5 : 1	49
Germany	60	34	1.8 : 1	36
UK	49	32	1.5 : 1	24
Italy	49	20	2.5 : 1	12
South Korea	32	26	1.2 : 1	13

Source: Morgan Stanley Research – Global Market Sizing of TMT Products and Services – 9/03; 2002 year-end data.

...Wireless Messaging Services Ramping Quickly,  
Although Transitions Occurring...

### China Leads in SMS Messaging

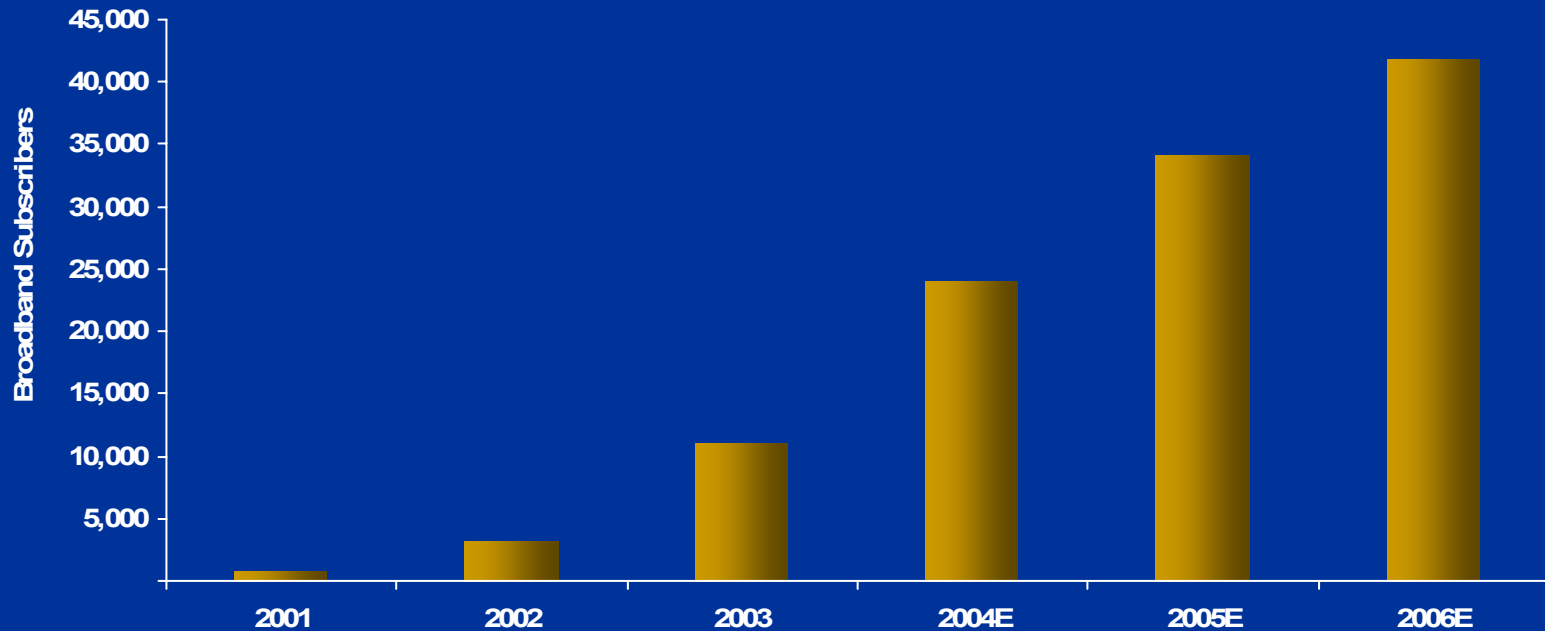


Source: Morgan Stanley Research.

## Broadband Acceptance Is Growing Rapidly...

### 24MM Chinese Broadband Subscribers (up 118% Y/Y) for 2004E

(Subscribers in Thousands)



- 15MM estimated online gamers in China are key users of broadband

Source: CNNIC, Lina Choi. E = Morgan Stanley Research Estimates. The ratio of broadband subscribers to users was 63% at YE2003.

## eCommerce in Very Early Stages and Governors Exist...

### **China lags in eCommerce:**

- 1) Poor credit / payment systems
- 2) Inefficient logistic / distribution / transportation systems
- 3) Low levels of trust
- 4) Low PC installed base
- 5) Low levels of disposable income

## Challenges for Multinational Companies Create Opportunities for Chinese Companies

- Chinese market is complex, especially for non-China companies
- Foreign investment is restricted and structuring and legal issues can be daunting
- Internet is highly regulated
- Entry into WTO is helping, but still long way to go...
- Muscle flexing by local companies can have significant impact – China Mobile and China Unicom in WVAS...

## 3<sup>rd</sup> Generation Internet Entrepreneurs Are Impressive, though Broad-based Experience/Leadership Still Not Abundant

- Chinese Internet leaders have proven to be fast followers relative to their global peers
- When will we see China's Bill Gates, Michael Dell or Larry Ellison?

## Sustainability of Internet-related Revenue and Profits Still Unproven, but Market Opportunity Is Large...

- Wireless messaging has been a blessing for the Internet pure-plays



# ...Sustainability of Internet-related Revenue and Profits Still Unproven, but Market Opportunity Is Large...

## China Internet Portal Revenue Breakdown

(US\$ in Millions)	<b>CQ2:04</b>	<b>% of Revenue</b>			<b>Operating</b>
<b>Company</b>	<b>Revenue</b>	<b>Messaging</b>	<b>Gaming/Other</b>	<b>Advertising</b>	<b>Margin <sup>(1)</sup></b>
Sina	\$49	67%	2%	32%	40%
Shanda	35	--	95	5	40
Tencent	33	95	--	5	43
Tom Online	31	93	1	6	35
Sohu	27	42	9	49	36
NetEase	25	7	78	16	49
<b>Total</b>	<b>\$200</b>	<b>53%</b>	<b>28%</b>	<b>19%</b>	<b>40%</b>

2 out of 3 top global mobile phone operators, based on CQ2 subscribers, were in China -- #1: China Mobile (159MM); #3: China Unicom (104MM)

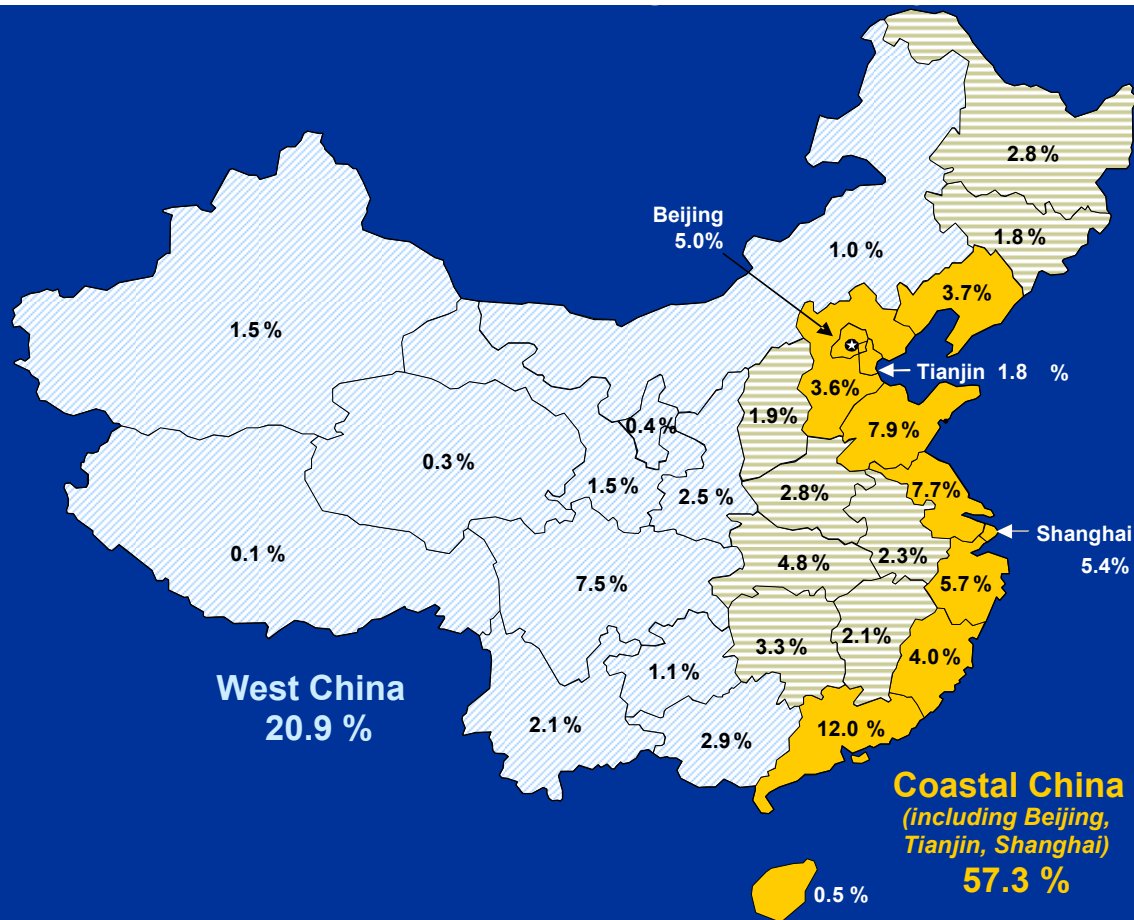
Source: Company Reports; totals may not add to 100% owing to rounding errors. (1) Excludes stock-compensation and amortization expense.

# Sustainability of Internet-related Revenue and Profits Still Unproven, but Market Opportunity Is Large...

- **What's next blessing?**
  - Messaging extensions?
  - Gaming extensions?
  - Advertising and eCommerce?
  - eCommerce Verticals?
  - Cross-border trade?

# Government's Focused on Ramping Internet, in Part, to Boost Domestic and Global Trade...

## Internet Users Concentrated in Coastal Regions and Major Metropolitan Areas



Source: CNNIC 13<sup>th</sup> Statistical Survey Report on the Internet Development in China, 1/04.

# ...Government's Focused on Ramping Internet, in Part, to Boost Domestic and Global Trade...

## Annualized Opex per Employee

- \$6.5K = China using Hang Seng Index – Labor surplus!
- \$73K = US using S&P500
- \$333K = Microsoft

## GDP per Capita

- \$619 = China
- \$37K = US

## Summary...

- Internet serving important role in helping modernize China and drive efficiencies
- Still, small revenue / profit levels for China Internet companies
- Like US in mid-1990s, we are at the beginning...but, in many respects, for China, impact may be greater
- Lots of opportunity with lots and lots of risk
- Andy Xie notes that... “In the middle of most small towns in Europe or the US stands a church; in China, it is usually a Kentucky Fried Chicken or a McDonald’s or both...”

# China Internet Company Risks

- **General economic and social conditions**
- **Messaging-related revenue** – sustainability / consistency
- **Intramural competition** – differentiation can be difficult
- **High operating margins** – sustainability could prove challenging
- **Emerging business segments** – competition / monetization
- **Online advertising / eCommerce** – nascent
- **Content development** – nascent
- **Online billing/payment and logistics/distribution** – nascent
- **Vertical markets** – potential size / scope; good news often no incumbents
- **Rising competitive focus** – eBay and Yahoo!
- **China telecoms** – evolution of potential Internet efforts
- **Slowing Chinese economy**
- **Valuations**

# China Internet Company Comparables

(US\$ in Millions, Except per Share Data)

Company	Price	Equity Value	2004E Revenue <sup>(1)</sup>	2004E Operating Income <sup>(1)</sup>	% Price Change <sup>(2)</sup>	
					2003	2004YTD
Shanda	\$23.98	\$1,653	\$140	\$44	--	119%
Sina	25.49	1,397	188	70	419	(24)
NetEase	37.94	1,253	108	51	222	3
51job	20.75	1,145	--	--	--	--
Tencent	0.49	850	135	59	--	--
Sohu	16.63	671	108	38	367	(44)
Tom Online	11.29	550	129	42	--	(26)
Ctrip	34.70	524	39	16	--	2
chinadotcom	4.98	521	218	29	185	(38)
KongZhong	6.72	230	--	--	--	(33)
Linktone	8.25	206	50	15	--	(40)
<b>Total</b>		<b>\$7,347</b>				

Source: Based on Conversion Rates as of 9/30/04, 1 US\$ = 0.81 Euro, 1 US\$ = 7.8 Hong Kong Dollars; (1) Based on I/B/E/S Consensus estimates. (2) Based on return over IPO offering price for Shanda, Tom Online, KongZhong, and Linktone.

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(as of March 31, 2004)

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Equal-weight	785	44%	280	44%	36%
Underweight	375	21%	101	16%	27%
Total	1,779		643		

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