

Exponential technological change

Session 1



WANG XINGQUAN
SHANGHAI ACADEMY OF SOCIAL SCIENCES

- Technology which grows exponentially occurs periodically in the history of mankind.
 - automation technology qualified as exponential does not differ significantly in nature but the pace is no longer the same.
-

Major technology changes cause

Side supply:

- dramatic reduction of production cost,
- adjustment of industrial structure,

Side demand:

- unprecedented experience in consumption and participation,

Side government:

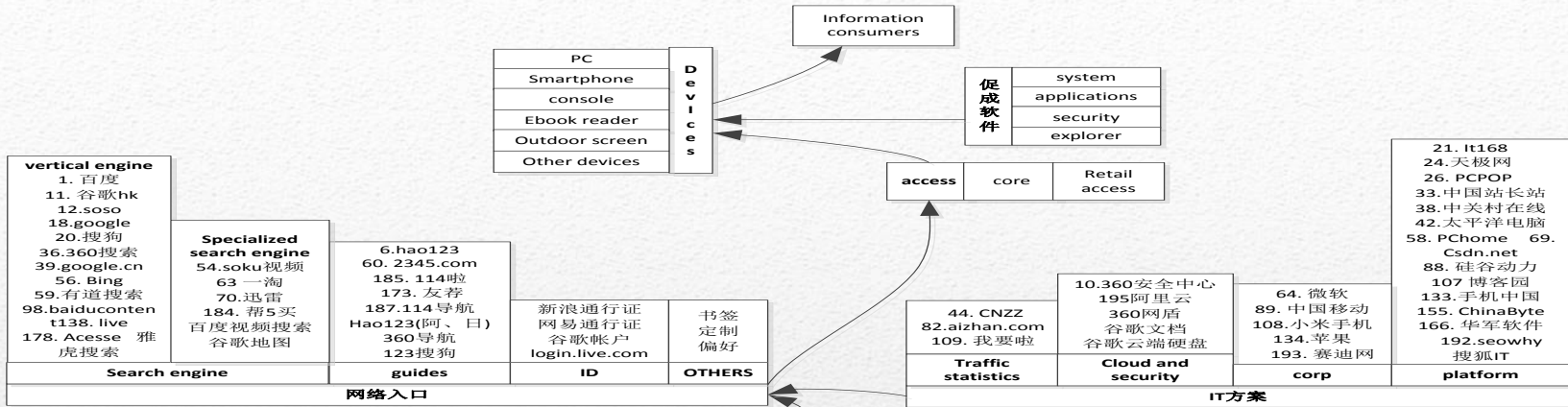
- new sectors of employment and growth
 - disputable technological unemployment
 - optimized governance
-



they are similar:

- Technological: breakthrough,
 - Economic: massive industrial application,
 - Social: double edged sword for social issues,
 - Geographical and international: adopted worldwide and maturity,
 - Platform of new technological breakthrough
-

- Case I
 - Internet emerged as the predominant platform of automation of task and automation of coordination. It generates tremendous economic benefits in sectors such as electronic products, software service, internet access service, e-commerce, cultural industries, social networking, and marks a major impact on economic growth model transformation, consumer welfare, social organization and cultural participation.
-

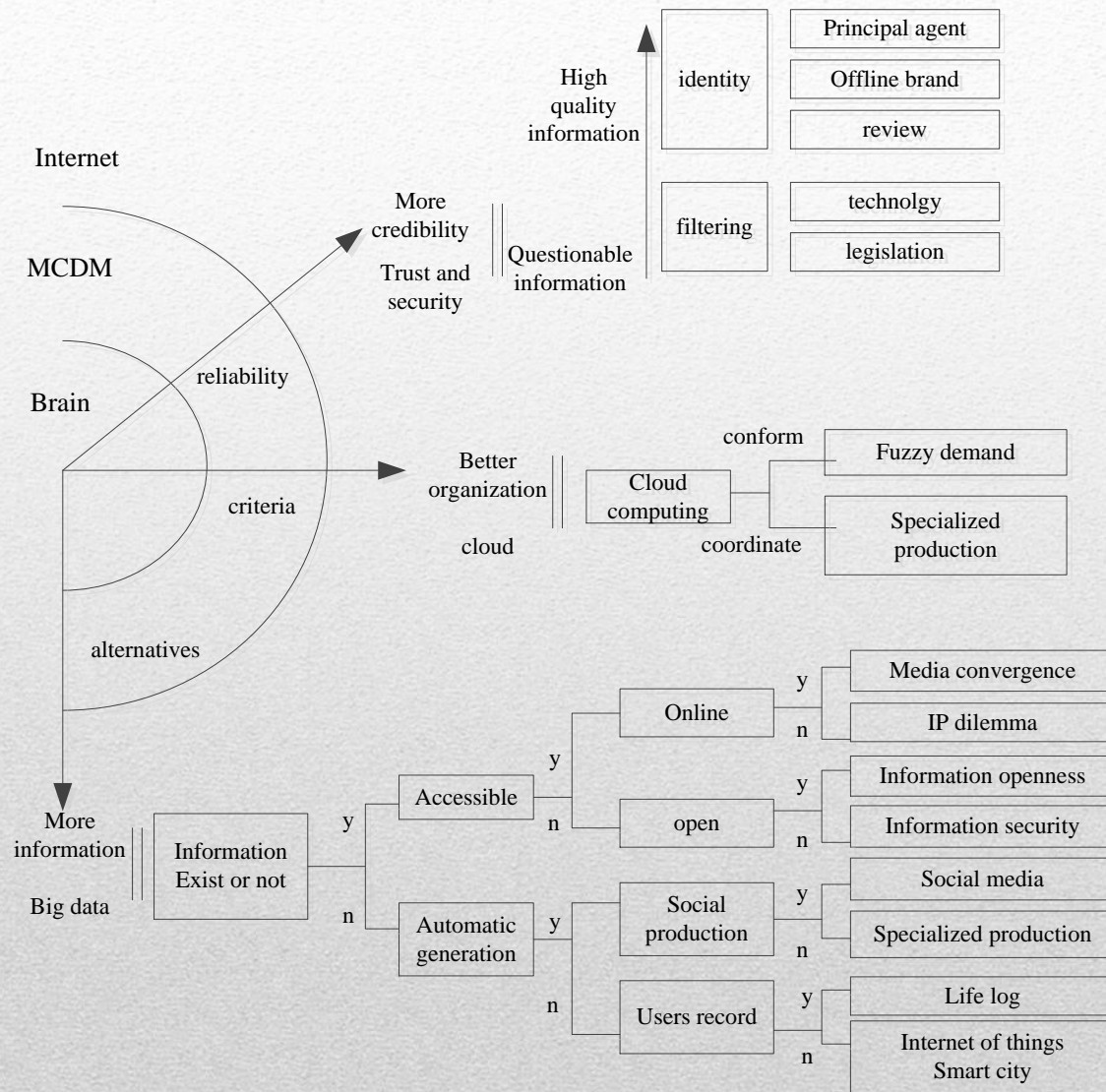


网络入口 IT方案

E-commerce B2B 23 阿里巴巴 48. 金泉网 179. 慧聪网 189. 中国供应商 194. 四川商情 C2C 3. 淘宝网 52. 赶集网(京) 90. qq网购 104. 拍拍网 106. 美团网 120. AliExpress 148. 百姓网 183. Ebay B2C 8. 天猫 22. 京东 57. 亚马逊 79. 易迅 93. 当当 101. 唯品会 105. 1号店 123. 凡客 132. Amazon 191. 1号商城 199. 天翼手机 Tourism and travelling 91. Qunar.com 94. 携程 119. 12306 employment 85. 51job.com 96. 智联招聘 Real estate 143. 焦点房地产网 Online banking 70. 建设银行 86. 工行 116. 招行 161. 农行 181. 中行		support 15 支付宝 125. tenpay.com advertising 102 阿里妈妈 130 广告买卖网 188. 亿起发 review 65. 大众点评		Integrated portal Internet portal 4. 新浪 5. 网易 9 搜狐 67.yahoo.com Mass media portal 14 凤凰网 25财经网 30. 人民网 (时政、国际、图片、财经、健康、法治) 32. 新华网 66. 光明网(生活科技 图片 文化) 71. 中央电视台 100. China Radio International 112. 中国广播网 137. 东方网 145. China Daily 147. 凯迪网络160. 环球网 186. ELLE中文网 E-governance protal 16. 中国网 53. 中国新闻网 72. 中工网 84. 华声在线 110. 中国青年网 122. 上海热线 127. 红网 197. 合肥热线		Culture andentertainment video 13 优酷 17. Ku6 37. 土豆网 40. 我乐网 45爱奇艺 78. Ppstream 99. 乐视网 141. 迅雷看看 157. 六间房 169. 爆米花网 190 Mtime时光网 百度视频 腾讯视频 新浪视频 网易视频 hao123影视 360影视 凤凰网视频 image 174. Nipic.com 百度图片 微相册 搜狗图片 百科视图 中国青年网图片		Fashion and life Women fashion 29. 爱美网 31. 55bbs.com 47 女人志 61. 爱丽 74. 闺蜜网 92. 太平洋女性网 103. yoka.com 113. 瑞丽女性网 131. 伊秀女性网 152. 哈秀时尚网 170. 美丽说 175. 品尚 177. 蘑菇街 198. 尚趣网 qq秀 凤凰网时尚 parenting 34 贝瓦网 77. 宝宝树 149. 太平洋亲子 153. 育儿网 156. 摇篮网 180. 妈妈网 automobile 50. 爱卡汽车网 51. 易车网 62. 汽车之家 76. 汽车点评网 83. 太平洋汽车网 115. 汽车时代网 135. 车讯网 140. 中国汽车消费网 163. 车网 网易汽车 中国汽车		interests military 142. 米尔军情网 168. 军事前沿 军事网 搜狐军事 sports 虎扑体育 新浪体育 网易体育 搜狐体育 凤凰网体育 technology 新浪科技 网易科技 凤凰网科技 中国科技 investment 28. 金融界网 68. 东方财富 73. 全景网 87. 和讯网 95. 中国经济网 114. 财联网 121. 证券之星 新浪财经 网易财经 搜狐财经 搜风证券 凤凰网财经 中国财经 entertainment 新浪娱乐 网易娱乐 搜狐娱乐 凤凰娱乐		knowledge encyclopedia and q&a 49. 互动百科 139. Wikipedia 171. 奇虎I 176. 知乎 百度知道 百度百科 新浪爱问 soso问问 360问答 360百科 天涯问答 雅虎answers Dictionary and translation 谷歌翻译 googlecn翻译 有道词典 Personal library 360doc documents 200 道客巴巴 百度文库		social Weak ties 7. 新浪微博 35 豆瓣 43. 天涯社区 126. 豆丁网 151. 网易博客 159. 猫扑网 172. 19楼空间 百度贴吧 腾讯微博 新浪博客 新浪新闻 搜狐博客 搜狐微博 凤凰网博客 凤凰网北京 Social networking 2. QQ 19. 人人网 41. 58同城 46. 朋友网 165. 世纪佳缘 167. 开心网 qq手机 google+ Strong ties 75. 网易邮箱 117. 中国电信 189 qq邮箱 谷歌邮箱 雅虎邮箱 mail163 email163 mail.10086.cn feixin.10086.cn mallive	
---	--	---	--	---	--	---	--	--	--	---	--	---	--	--	--

- Before the internet age, many automation technologies, including artificial intelligence, sensory technology, and etc. had already existed, but their impacts were limited without an omnipresent and a ubiquitous network to coordinate and mutually enhance.
-

- Case 2
 - Big data, cloud computing and cyber security will further push forward the automation of task and coordination on internet platform, by introducing more information, optimized organization, and better reliability.
-



- We cheer their arrival, which is disruptive and exponential in short term (maybe a generation), but relatively repetitive in terms of economic and social consequences in long term.
 - Research on policy and international coordination is available and almost sufficient. Courage and consensus.
-

Thank You!

WANG Xingquan
Shanghai Academy of Social Sciences

wangxingquan@sass.org.cn
