

# MORGAN CREEK

## CAPITAL MANAGEMENT

ALTERNATIVE THINKING ABOUT INVESTMENTS

### *New China Perspectives*



Welcome to the latest issue of Morgan Creek's **New China Perspectives**. This issue is comprised of research from Morgan Creek's China-based investment team together with curated articles of interest. In addition to timely political and economic news covering greater China, Morgan Creek's China team seeks to provide in-depth perspectives on investing in the technology, consumer and healthcare sectors in the region. Our research leverages the "on the ground" insights of our team together with

Morgan Creek's decades-long experience in covering the region. To learn more about our team and investment offerings, please email [chinateam@morgancreekcip.com](mailto:chinateam@morgancreekcip.com).

Best Regards,

Handwritten signature of Mark W. Yusko in black ink.

Mark W. Yusko  
CEO & CIO

### **NOTES FROM THE BUND<sup>1</sup>**

This is the third installment in our series on a discussion of cycles. In prior newsletters, we introduced the idea of a universal cycle for human organizations (political, economic and otherwise). We have described a general framework and fleshed out the cycle from the political dimension, with China's historical dynasties as a case study. We continue our exploration in this newsletter turning to the economic dimension, tracing the rise, fall, and rise again, of successive telecommunication empires to illustrate.

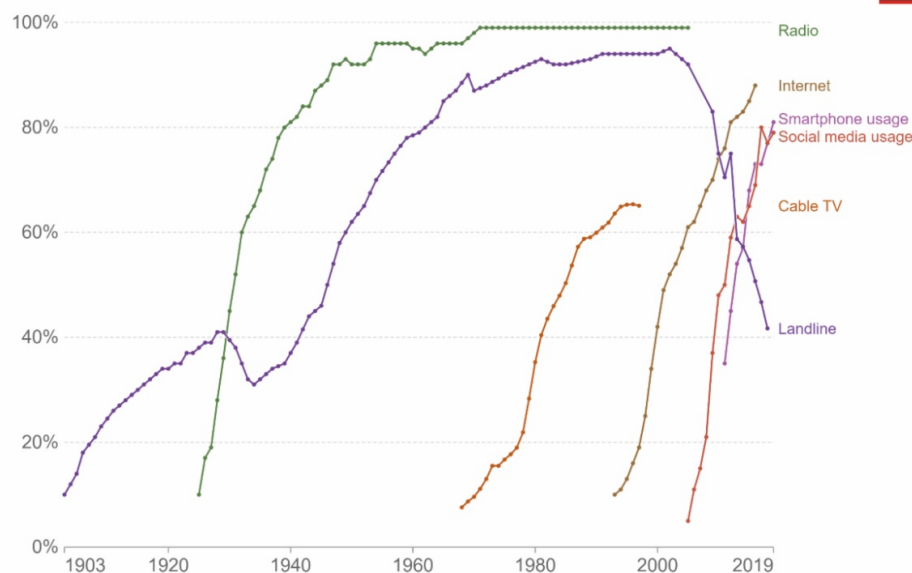
Throughout the ages, information has been among the most valuable of commodities known to man. Fortunes have been created or destroyed on contract speculations; wars won or lost on military reconnaissance capabilities; and revolutions sparked or suppressed on news dissemination.

Therefore, the global telecommunications industry makes for a fascinating case study. Compared to most other industries, the high political and economic stakes mean significantly more resources allotted or adapted for technological innovation in this winner take most (if not all) sector.<sup>2</sup> The telecoms industry is disrupted frequently, translating to more data points (more cycles within a shorter timeframe) for purposes of our analysis.

The chart below illustrates some of the important technology revolutions in the modern communications sector. We will utilize the same "two cycles and a catalyst" framework discussed in prior newsletters to analyze the trends.

[Telecoms' Major Technologies Adoption Curve](#) (not exhaustive)

## Share of US households using specific technologies, 1903 to 2019



Source: Comin and Hobijn (2004) and others

OurWorldinData.org/technology-adoption/ • CC BY

Some observations:

*Catalyst: The availability of affordable enabling infrastructure.*<sup>3</sup>

- This refers to the degree of access of cost-effective infrastructure required to enable the scaling of new platform technologies
- Examples include the telegraph cables, telephone lines, and the fiber optic cables that needed to be in place before the telegraph, telephone and internet could proliferate.

*Macro cycle: Characterized by constant tension between centralization and decentralization*

- The macro cycle comprises the series of individual technology platforms (i.e. telephone, radio, TV, PC, mobile, etc.)
- We observe a cycle of one technology platform being disrupted (and replaced<sup>4</sup>) by the other; with all the technology platforms following the same birth and decay sub cycle: the tendency is to begin life hailed as a “decentralized”, democratic medium working for the benefit of the masses. As it gains critical mass, it’s captured by commercial interest and “centralized”. It then essentially operates as a quasi-monopoly until the next technology platform disruption.
- As an example, in 1983, 90% of traditional US media<sup>5</sup> was owned by 50 companies; by 1996, the number of US media corporations had declined to 6 companies<sup>6</sup>
- The cycle continues: traditional media companies today, in turn, are currently fending off disruption from social media platforms

*Micro cycle: Marked by cycles of birth and decay*

- The micro cycle is concerned with understanding the rise and fall of an individual technology platform

### Birth

- The rise of a new medium is easy to understand. As described above, the market for the new technology is very fragmented at the outset with forceful competition among all players. The central goal at this stage is to increase market share. This is typically done through aggressive pricing (sometimes subsidies) to acquire customers.
- There is also a bandwagon effect at play – as more users connect to the network, it becomes more valuable. This results in an aggregate effect where the rise of technology platforms can become exponential.

### Decay

- Due to the bandwagon effect, the telecoms sector tends to be winner take most (if not all). This is typically occurring in the latter stages of the cycle via acquisition of competitors. At this stage, the goal of the remaining firms is generating profits for shareholders.
- The tendency of incumbents at this point is to try to suppress a new wave of technology. Incumbents have a challenging time embracing disruptive technologies (even if they themselves invented it) because this means the cannibalization of their existing business where they have already established dominance (and have high margins). The history of business has illustrated this

phenomenon across many sectors: Kodak invented digital cameras; General Motors mass produced the first electric cars; Xerox assembled the first modern desktop computer.

At a certain point, the stage is set for the rise of a rival willing to invest in the new technology platform that the incumbent was not.

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## ***CHINA NEWS SPOTLIGHT***

**Putin Tells Xi He'll Discuss China's Blueprint for Ukraine:** Vladimir Putin said Russia is ready to discuss China's initiative for ending the conflict in Ukraine, welcoming Chinese President Xi Jinping for a three-day visit that underlines Beijing's support for Moscow. "We've carefully studied your proposals to resolve the acute crisis in Ukraine," Putin told Xi in televised comments at the start of their one-on-one talks in the Kremlin Monday. [Read More.](#)

**China Cuts US Treasury Holdings to Lowest Level Since Global Financial Crisis:** China continued to cut its holdings of US Treasuries at the beginning of the year amid rising long-term interest rates, which slashed its returns on its overseas investments after the US Federal Reserve accelerated its lending cost increases last year. [Read More.](#)

**Evergrande Is Said to Get Creditor Support for Restructuring** The world's most indebted developer has reached an agreement with a group of major creditors for a plan to restructure its offshore debt, just ahead of a key winding-up petition hearing Monday, people familiar with the matter said. [Read More.](#)

**Baidu (BIDU) Robotaxis Offering Fully-driverless Rides Continue to Take Over China:** Apollo Go, tech company Baidu's robotaxi service, has received a permit to offer fully-driverless rides in Beijing, expanding its autonomous ride-hailing service to three major cities in China. Following the awarded permit, Baidu is now the first company in the entire world to offer fully-driverless rides to the over 21 million residents in China's capital city. [Read More.](#)

**Huawei has Replaced More Than 13,000 Parts, Redesigned 4,000 Circuit Boards to Overcome US Tech Sanctions, Founder Says:** Huawei Technologies Co has replaced more than 13,000 components in its range of products with local substitutes and redesigned over 4,000 circuit boards in the past three years, founder Ren Zhengfei said, offering a glimpse of its efforts to overcome years of US sanctions. [Read More.](#)

**BioNTech and OncoC4 Announce Strategic Collaboration to Co-Develop and Commercialize Novel Checkpoint Antibody in Multiple Solid Tumor Indications:** BioNTech SE (Nasdaq: BNTX, "BioNTech") and OncoC4, Inc. ("OncoC4"), a clinical-stage biopharmaceutical company dedicated to the discovery and development of novel biologicals for cancer treatment, today announced that they have entered into an exclusive worldwide license and collaboration agreement to develop and commercialize OncoC4's next-generation anti-CTLA-4 monoclonal antibody candidate, ONC-392, as monotherapy or combination therapy in various cancer indications. [Read More.](#)

**China's NMPA Clears Shengdi's Adebrelimab for Extensive SCLC:** China's NMPA approved Shanghai Shengdi Pharmaceutical Co. Ltd.'s adebrelimab (SHR-1316) for first-line treatment of extensive-stage small-cell lung cancer (ES-SCLC) in combination with chemotherapy. The approval in mainland China makes adebrelimab the third domestic PD-L1 monoclonal antibody to make it to the domestic market. Shanghai Shengdi is a subsidiary of Jiangsu Hengrui Medicine Co. Ltd. [Read More.](#)

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<sup>1</sup>The Bund is a historic waterfront area in central Shanghai, where Morgan Creek's office is located. From the 1860s to the 1930s, it was the rich and powerful center of the foreign establishment in Shanghai, operating as a legally protected treaty port. The picture above is part of the historical waterfront. Traditional western telecommunications companies have drastically cut R&D expenses significantly in the past decade. However, during that time, Huawei made up for the investment deficit in the sector by pouring massive resources into researching next generation technologies (equivalent to multiples of the aggregation of all its western peers combined). This ultimately led to Huawei's global 5G position today.

<sup>3</sup>Some would argue a more appropriate catalyst is a paradigm shift in fundamental technology which enables the successive waves of telecommunication mediums. Examples would include the discovery of electricity and electromagnetism which led to the telegraph (and its latter extension, the telephone); or the transistor which led to semiconductors enabling PCs and mobile phones. That said, communication devices have limited inherent value to the consumer; it is the network that connects the devices that brings majority value (i.e. think of the value to a consumer of an unconnected PC prior to the internet vs. one with modern internet access). As such, we believe the availability of underlying infrastructure that allows for the proliferation of these devices is a more defining catalyst.

<sup>4</sup>One technology may not completely displace the other. For example, the radio, tv and internet all exist concurrently. However, it is undeniable that traditional media usage is steadily eroding, especially among the younger consumers. A [report from Ofcom](#), a British regulator, stated that 16 to 24-year-olds spend 53 minutes watching TV daily, a two-thirds decrease in the past 10 years.

<sup>5</sup>Radio, TV, newspapers, magazines, etc.

<sup>6</sup>Media consolidation in the US, Tacoma Community College.

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