

Know your competencies and control points



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A small number of market leaders in the ICT space sit at the top of the ecosystem chain and pocket most of the profits. Despite helping the ecosystem flourish, the majority receive pitiful low returns. Operators that hope to boost their profits and influence the playing field of collaboration and competition must identify their competencies and control points, or they will continue to spend trillions on building networks and fail to reap meaningful rewards.

By Li Changwei



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Value doesn't equal profit

China's Ministry of Industry and Information Technology Research Institute reported that ICT contributed 22.6 trillion yuan to China's 2016 GDP of 74 trillion yuan. Of that 22.6 trillion, 5.2 trillion yuan derived from ICT infrastructure such as networks, data platforms, and Internet service platforms, and the remainder came from industries supported by ICT infrastructure.

In 2016, operators generated just 1.2 trillion yuan (US\$182 billion) in revenue from networks, far short of what they put in. For the first time, Internet companies outperformed operators, generating 1.24 trillion yuan. Operators' revenue grew by 5 to 6 percent, but for the 54 listed Internet companies, it shot up by 41 percent. China Mobile led the operator field with profits of 15 percent, which lagged far behind Tencent's whopping 42 percent.

However, operators are the real value contributors to basic network and Internet platform benchmarks as well as relative platform and industry growth. Without



Thanks to strengths in connectivity and carrier-grade security, reliability, localization, and E2E services, the horizontal industries in which telcos shine are smart homes, security in smart cities, and IoV.



4G, neither mobile Internet services nor applications would exist. Without broadband, information-based, intelligent industry wouldn't be able to develop. But operators still miss out on high returns.

Globally, the 18 ICT companies listed on the Fortune 500 saw their 2016 revenues rise by 5.1 percent to hit US\$1.2124 trillion, but their profits only edged up by a weak 1.8 percent to reach US\$80.4 billion. Overall profit in the telecom industry fell from 7.41 percent to 6.45 percent in 2016, and it sits waiting to slide further down to 5.64 percent in 2017.

So, value does not equal profit. But, why?

Core competency for survival, control point for profits

Air is a good example of something with indisputable value that can't really be monetized, except in certain healthcare scenarios and isolated cases of severe pollution.

Air is a core competency in that without any added value, it cannot generate high returns. Oxygen and clean air, on the other hand, have unique, added value. They are value control points, because they can deliver returns.

The biggest change in the ICT industry in the past 10 years has been the emergence and popularization of smartphones. In the smartphone arena, Apple has done phenomenally well for 10 consecutive years, capturing 90 percent of industry profits every single year. And in Q2 2017, its profit share increased to 92 percent. With its hardware (A9/A10 chips) and software (iOS), Apple has become the top dog in customer experience and value thanks to its innovative experience model that blends "technology, humanities, and liberal arts." In 2016, Samsung still grew its profits by 48 percent, despite losing US\$5 billion following the Note 7 battery debacle. The key reason was that in the hardware sector, its exclusive chips are a strategic industry control point.

Between 2007 and 2017, Apple and Samsung took home more than 95 percent of profits in the device market. Lacking control points, other manufacturers have been struggling to survive. This shows how strategic industry control points can be established by developing exclusive control of customer-side value. Core competencies are the basis for competing in the ecosystem, but control points decide where business value and high profits lie.

A new model: Core

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It's difficult for telcos to form a profit model from connectivity alone...telcos must monetize platforms and applications.

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competencies + control points

The voice era integrated core competencies and control points

Pre-2007, voice and SMS were core operator services. They were basic bearer services that unified competencies and control points. As long as they held network coverage and capacity advantages, operators controlled the market. Terminals and upstream and downstream SMS services were subject to network capacity, so when it came to ecosystem cooperation, the power lay in operators' hands. This was a golden age of high profits for operators.

The Internet era made terminals a control point where the basic competition model became data traffic + smart terminals

With the iPhone's debut in 2007, the focus of user value and experience began to shift from voice to web. Mobile phones had become information service centers, and smart devices were replacing the Internet as the best way to satisfy customer experience and value demands, causing the focus of competition to shift to smart devices. Apple thus dominated the market.

AT&T, the first operator to cooperate with Apple, was able to quickly reverse its fortunes in the market and

become the world's top 3G operator by leveraging Apple's smart terminals to drive user migration and increase market share. In the US, AT&T and Verizon, which were positioned at the high-end of the market, cooperated with Apple, while mid-market and low-end operators worked with Samsung and HTC, respectively. Operators needed to offer data plans bundled with specific devices, or they would be unable to either grow users or increase data traffic.

The late Internet era saw video become a control point where data traffic + video became the new keys to success

In 2015, smart terminals started to become ubiquitous in the device-pipe-cloud ecosystem, and their importance in customer experience and value began to decline. Value shifted to upstream high-value content. Video currently accounts for 70 percent of traffic, and high-value video has started to become a new user and market control point. Without high-value video bundles, vicious competition over data prices would become unavoidable, which would lead to a collapse in the value of the data traffic market.

For example, following the end of five-year market penetration growth in the Saudi market, price competition over data traffic led to a double-digit slide in revenue and profits for operators. In developed markets like the US, Japan, and South

Before 2015 "Traffic + Terminal" strategy

Advantage: 4G networks

- Leader in network coverage and speeds: leading technology/superior experience
- Bundling of strategic control points: Leader in the user market landscape

Control point: Smart terminals

Matching users: AT&T/Verizon-iPhone; Sprint/TME-Samsung/HTC



Canceling terminal subsidies as the control power over terminal users wanes

After 2015 "Traffic + Video" strategy

Advantage: FMC/SDN

- Network convergence: 8:2 traffic topology
- Network cloudification: Cost-efficiency

Control point: High-value video

- AT&T acquired Time Warner and DirecTV
- Verizon acquired CBS/Disney/Comcast through merger talks
- TME's partnerships with Netflix and YouTube/Binge-On



Bundling content packages as the control power over video users increases

Korea, average data per user per month (DOU) had increased by 1 GB per year, leading operators to implement data traffic and video bundle strategies. This generated a positive correlation in growth in user traffic and operating value, leading to positive market growth.

The smart era approaches: Intelligence in platforms and ecosystems will become the new control point

In 2016, AlphaGo beat world champion Lee Sedol at Go, achieving a milestone in the development of AI. In 2017, AlphaGo 2.0 defeated top-ranked Go player Ke Jie and then achieved quick consecutive wins against 60 masters. At Amazon's annual technology conference, Apple WWDC, and Google I/O 2017, the three leading US over-the-top companies all launched AI products. There's no doubt that we've entered the AI-first era, where intelligence has become the new strategic control point on all platforms.

From data traffic + device to

data traffic + video

The US, Japan, and South Korea lead in the development of 4G and 5G. China has overtaken Europe to enter the second tier, while Europe now sits in the third tier. All other countries represent the fourth. As such, market followers such as China are following the strategic development path already set out by the top trio, and are transforming from voice-led markets into data-led ones. In these markets, the strategic control point is shifting from smart terminals to high-value video.

From 2010 to 2015, each of the top four US operators adopted a data traffic + smart terminals approach alongside core competency and control point strategies. In 2015, they shifted to data traffic + video strategies. AT&T's 2015 acquisition of DirecTV for US\$48.5 billion and the launch of unlimited LTE, the Roku set-top box, and DirecTV services is a typical example of this strategy. AT&T was acting in response to T-Mobile's continued data price competition with its Un-carrier service. With this move, AT&T was able

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to consolidate its market position and protect its data traffic prices and profits.

There is a two-to-three-year gap in LTE development between China and the US. In 2015, AT&T was the first to adopt a video strategy and lead the focus of the market toward video strategies. This means that 2017 may mark a transition towards video strategy in the Chinese market.

Operators should move in the direction of video strategies and, through a process of trial and error, they can make breakthroughs in data traffic + video strategies by reforming their organizational structures and adopting flexible mechanisms.

The current key challenges and difficulties around video strategies are questions of how to acquire high-value content and how to succeed on the business side. There are four models for success in terms of high-value content acquisition: the merger model of US operators AT&T and Verizon; the ecosystem model exemplified by Japanese carrier KDDI's Smart Pass; South Korean operator LG U+'s co-production model; and the buying content rights model favored by European providers such as BT and Telefonica. There are also four high-value content acquisition models that OTT companies use: YouTube's UGC model; Netflix's PUGC model; Tencent's ecosystem collaborative model; and the content rights purchasing

model employed LeTV, iQiyi, and others. Different operators in different markets can adopt the most successful high-value content acquisition models from around the world based on their own needs.

When it comes to operating strategies, carriers can learn from Internet companies and leading telcos – they can follow their strategic roadmaps to develop content operations: First, start from content collaboration; for example LG U+ worked with YouTube and local media companies to kick start its video business. Second, build up core competencies in fixed-mobile convergent broadband networks, much like Japanese operator KDDI's Smart Pass strategy, which reinforces its experience infrastructure. Third, build a service and data intelligence platforms that develop platform capabilities like video streaming media, CDN, cloud and data analytics, and precision targeting, similar to Netflix's model. And fourth, open powerful platform capabilities to drive ecosystem development and innovation, like the App Store.

With polyphonic caller ring back tone services, Chinese operators have replicable experience at successful content acquisition and operations. Platforms and ecosystems can be built for both music and video. Essentially, they are the same. If operators can learn from past examples and continue to optimize strategies, they can find the right answers. [www](#)