

E-House

Colour Life: Using Technology to Reinvent Real Estate Management



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Founded in 2002, Colour Life has grown to become one of the world's largest residential property managers, managing over 420 million square meters across more than 3,000 communities in mainland China, Hong Kong, and Singapore.¹ While Colour Life's growth in terms of square meters managed has been impressive, the company's ability to leverage technology in the real estate management sector has drawn the most attention. Its online platform is a "how to" guide on unlocking value through asset-light cost savings and value-added services that appeal to an increasingly sophisticated demographic.

China's Real Estate Boom: Urbanization through Better Residential Housing

Beginning with the privatization of the Chinese real estate market in the 1980s, China has witnessed an unprecedented acceleration of residential real estate construction. Between 2003 and 2014, Chinese builders added 100 billion square meters of floor space, or 74 square meters for every person in China. During this time, China built an average of 5.5 million apartments per year.² Its urbanization level, in turn, grew from 17.9% in

1978 to 56.1% in 2015, and is expected to exceed 60% by 2020.³

Put differently, in a few short decades China transformed from being a country with a predominantly rural population to one defined by its densely populated urban areas. Corresponding to increasing economic opportunities, Chinese cities not only swelled with new inhabitants but were comprised of buyers able to afford larger homes. The average per capita residential building areas in cities and towns increased from 6.7 square meters in 1978 to 32.9 square meters in 2012.⁴

1 "(彩讯) 彩生活CEO唐学斌：社区做生意要线上线下一体化." Colour Life, September 28, 2017, Accessed January 20, 2018, http://gw.colourlife.com/nd.jsp?id=209#_np=112_338.

2 Edward Glaeser, Wei Huang, Yueran Ma, and Andrei Shleifer, "A Real Estate Boom with Chinese Characteristics," *Journal of Economic Perspectives* 31, no. 1 (Winter 2017): 93-116.

3 "Realty Management in China," IBISWorld Industry Report, October 2017, 11.

4 Ibid., 11.

The Real Estate Management Industry: At Your Service

With the rapid construction of dense urban residential housing came the need for real estate management services. Most developers initially had in-house real estate management divisions, but by the early 2000s the market for these services had grown so large that many developers (at least, partially) spun off their management divisions, choosing to grow these businesses as separate entities. Colour Life was one of the first such service providers, having been spun off from Shenzhen-based developer Fantasia Holdings in 2002.

Generally speaking, real estate management companies in China provide three categories of services⁵:

- **Property Management Services:** Comprising 71.5% of industry revenue, these services include many of the basic services needed to operate a large residential community on a day-to-day basis, including security, cleaning, gardening, repair, and maintenance.
- **Engineering Services:** Comprising 24% of industry revenue, these services include equipment installation, maintenance, upgrades, automation services, and energy-saving services.
- **Leasing, Sales, and Advisory Services, also known as value-added services:** Comprising 4.5% of industry revenue, these services include common area rental assistance, marketing and promotions, leasing information system software, rental and sales assistance, construction advice, fee evaluations and operating recommendations for cooperative realty management enterprises.

The nature of this business comes with some inherent challenges:

- **Increasing labor costs:** Labor is the real estate management industry's largest single cost center,

equivalent to approximately 29.8% of overall industry revenue.⁶ As a result, increasing labor costs can significantly impact industry profitability. While there are no published statistics on wage rates in the real estate management industry, recent growth in Chinese per capita GDP along with documented wage rate increases for Chinese manufacturing workers strongly suggest that real estate management companies like Colour Life have experienced significant pressure from increased labor costs in recent years.⁷

- **Low Skilled Labor:** Most employees in the industry are relatively unskilled.⁸ While a low-skill labor force is sufficient to carry out basic property management services such as sanitation, gardening and the like, these workers will most likely not be able to provide the higher levels of customer service and process streamlining that would allow a property manager to capture more value.
- **Customer Service/Managing Relationships with the Residents:** The relationship between property managers and owners is often weak due to property managers' inability to standardize service levels across properties.⁹
- **Management Fee Collection:** Likely driven in part by dissatisfaction with customer service, fee collection for real estate management companies has been problematic, particularly for smaller property managers.¹⁰
- **Scaling Operations:** Given that real estate management companies operate in multiple housing units across multiple cities, it can be difficult to achieve economies of scale because each community requires some minimal level of staff and equipment.

5 Revenue statistics are from "Realty Management in China," IBISWorld Industry Report, October 2017, 10. Segment descriptions based on both IBISWorld Report and "2016 Annual Report," Colour Life Services Group, Ltd., Accessed January 20, 2018, <http://file.irasia.com/listco/hk/colourlife/annual/2016/ar2016.pdf>, 21.

6 "Realty Management in China," IBISWorld Industry Report, October 2017, 5.

7 "Labor Costs – Just One Cost to Assess," U.S. Department of Commerce, Accessed January 20, 2018, <https://acetoool.commerce.gov/labor-costs>.

8 "Realty Management in China," IBISWorld Industry Report, October 2017, 5.

9 Ibid., 5.

10 Ibid., 5.

The Colour Life Difference No. 1: Increasing the Efficiency of Service Provision

Recognizing the potential of technology to solve many of these challenges, Colour Life has been a leader in introducing technology to the Chinese property management industry, and most notably through its Caizhiyun (彩之云) platform. Caizhiyun is an 'Online-to-Offline' (O2O) platform that connects residents of a community with both their property management company and third-party service providers. (Exhibit 1)

The online portion of the ecosystem enables the more efficient provision of traditional property management

services via the Caizhiyun mobile app, simultaneously lowering costs and increasing customer satisfaction. Some of the platform's apps that specifically address these opportunities include the following:

- **E-Repair:** provides an electronic system for residents to place and track the status of repair requests. According to Colour Life, better tracking allows the company to convert fixed labor costs into variable costs.
- **E-Energy:** provides meter reading and resource-saving solutions to households.
- **E-Leasing:** facilitates leasing services for the housing bank and leasing services, and that generated RMB 19.7 million in revenue in 2016.

Exhibit 1: Colour Life's 'Online to Offline' business model

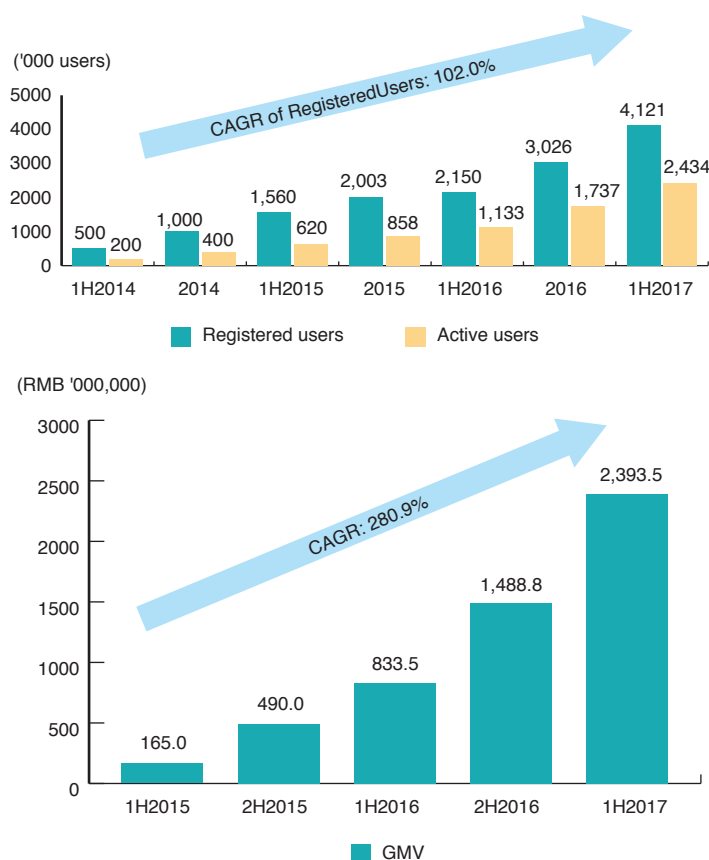


Source: Colour Life FY2016 results presentation

- **E-Parking:** improves parking lot efficiency and thereby increases profits from parking fees, and that generated RMB 6.9 million in revenue in 2016.¹¹

The “offline” portion of the Caizhiyun ecosystem consists of management offices (known as “Colour Spaces”) located onsite at residential properties, customer service representatives who visit properties, and a centralized customer service center that residents can reach through a toll free number. As of June 30, 2017, the Caizhiyun app had more than 412 million registered

Exhibit 2: Caizhiyun App Users and Gross Merchandise Volume



Source: Colour Life 2017 Interim Results Presentation

users (approximately 59.1% of whom were active users) and had generated a Gross Merchandise Volume (GMV) of almost RMB 2.4 billion (~USD 380 million) in the first half of 2017.¹² (Exhibit 2)

In addition to the very visible Caizhiyun platform, Colour Life has also come up with more subtle ways to leverage technology to lower costs and better standardize its level of service. The company saves on labor costs by replacing on-site security guards with surveillance cameras and intrusion detection devices both of which can be monitored from their central headquarters.¹³ The company has also centralized equipment maintenance management to save on costs. In turn, Colour Life headquarters staff now determine when specific maintenance work is to be conducted at various properties. They supervise work quality and assess the equipment condition by reviewing pictures sent to them electronically and following up with on-site management and community members.¹⁴ (Exhibit 3)

Overall, these innovations have helped Colour Life become more efficient. The company's headcount (excluding employees for communities serviced on a commission basis) decreased from 7,727 at the end of 2016 to 6,662 by the end of the first half of 2017 despite growing the gross floor area (GFA) under management by about 7% over the same period.¹⁵

The Colour Life Difference No. 2: Adding Value by Expanding into Adjacent Businesses

In addition to leveraging technology to become more efficient, Colour Life has also used its technology platform to grow entirely new lines of business that are adjacent to property management. Authors Alan

¹¹ “FY 2016 Annual Results Presentation,” Colour Life Services Group Co. Ltd., March 2017, Accessed January 20, 2018, <http://file.irasia.com/listco/hk/colourlife/cpresent/pre170319.pdf>.

¹² Colour Life, 2017 Interim results presentation.

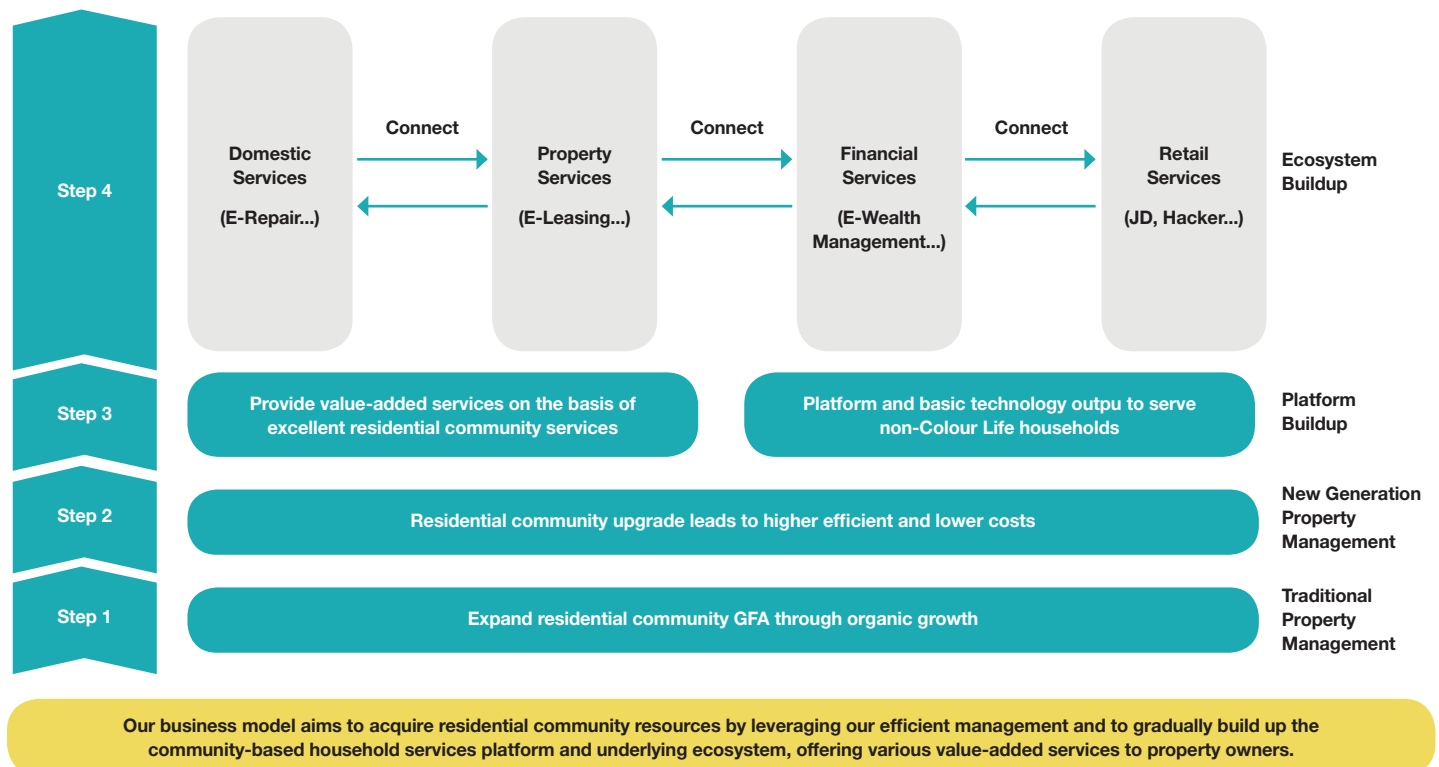
¹³ 2014 Prospectus, 159.

¹⁴ 2014 Prospectus, 148.

¹⁵ Colour Life 2017 Interim Report, 29; 14.

Exhibit 3: How Colour Life Is Leveraging Technology to Capture More Value

	ISSUE	COMPANY STRATEGY
CHALLENGES (Reduce Costs)	Increasing Labor Costs	<ul style="list-style-type: none"> • Greater efficiency through E-Repair • Electronic entry/monitoring devices replacing security guards • Centralizing Maintenance Scheduling at HQ
	Low Skilled Labor	<ul style="list-style-type: none"> • Greater efficiency through E-Repair
	Management Fee Collection	<ul style="list-style-type: none"> • Colour Wealth Life Value-Added Plan
	Customer Service/Relationship	<ul style="list-style-type: none"> • Dispatch customer service managers from HQ to visit residents
	Scaling Operations	<ul style="list-style-type: none"> • Electronic entry/monitoring devices replacing security guards • Centralizing Maintenance Scheduling at HQ
OPPORTUNITIES (Capture More Value)	Resident Need for Financial Services (Banking, investment, insurance)	<ul style="list-style-type: none"> • Colour Wealth Life Value-Added Plan
	Property Developer Need to Drive Sales	<ul style="list-style-type: none"> • Colour Life Property
	Resident desire for convenient e-commerce/local commerce option	<ul style="list-style-type: none"> • E-commerce on Caizhiyun platform
	Other property managers' need for better technology	<ul style="list-style-type: none"> • Consulting Services/Cooperation Agreements



Source: Case information, Colour Life FY2016 results presentation

Lewis and Dan McKone cite Colour Life's example in their book, *Edge Strategy*, which they define as seizing opportunities that exist "on the edge of [a company's] core business, through the sale of ancillary goods and services that actually make existing customers' interaction with the business more complete."¹⁶

Most visibly, Colour Life has used its Caizhiyun platform to connect residents to many of the services they need in their day-to-day life in the following areas:

- **E-Commerce:** Colour Life works with both local vendors and larger retailers, such as JD.com, to promote the products and services their residents need through the Caizhiyun app.¹⁷
- **Colour Wealth Life Value-Added Plan:** Links payment of property management fees to residents' investment demands. By depositing money with the app, residents can get an interest rate that is slightly higher than bank deposit rates while also enjoying a reduction or exemption from management fees.¹⁸
- **Colour Life Property:** Under this service, Colour Life sells properties on behalf of developers. In exchange for making sales, Colour Life gets management rights over those properties and property buyers get "meal coupons," rebates that can be used for e-commerce purchases on the Caizhiyun platform.¹⁹

The demand for these services is clear. In the first half of 2017, Colour Life's value added services generated RMB 110.8 million (~USD \$17.6 million), a 55.1% year-on-year growth rate. This impressive growth has pushed Colour Life's value-added segment past Engineering Services as the company's second-largest source of revenue, after property management services.

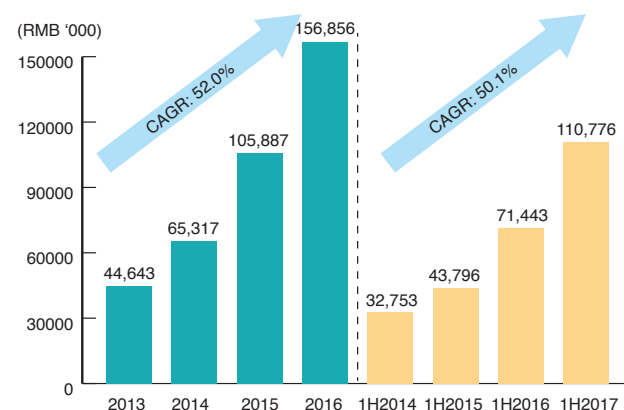
¹⁶ Alan Lewis and Dan McKone, *Edge Strategy: A New Mindset for Profitable Growth* (Boston, Harvard Business School Publishing, 2016), viii.

¹⁷ Colour Life, 2016 Annual Report, 31.

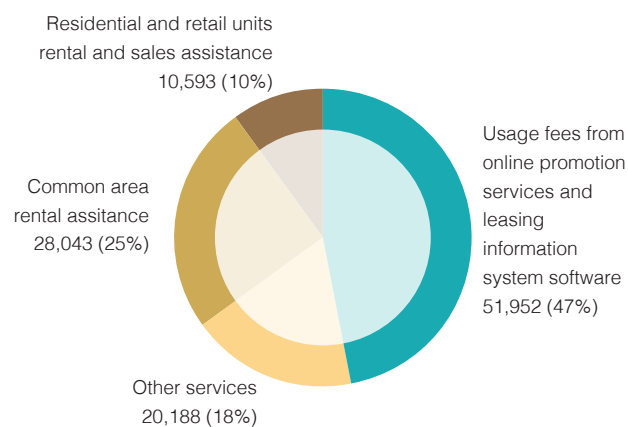
¹⁸ "FY 2016 Annual Results Presentation," Colour Life Services Group Co. Ltd., March 2017, Accessed January 20, 2018, <http://file.irasia.com/listco/hk/colourlife/cpresent/pre170319.pdf>.

¹⁹ Colour Life Services Group Co., Limited, "Colour Life announced its 2017 interim results Momentum of high growth continued as revenue rose by 29.8% and Net profit increased by 35.6% year on year Gross profit and gross profit margin further increased Platform service area expanded rapidly Platforms further developed for community-based ecosystem of businesses," August 25, 2017, <http://www.irasia.com/listco/hk/colourlife/interim/2017/interpess.pdf>.

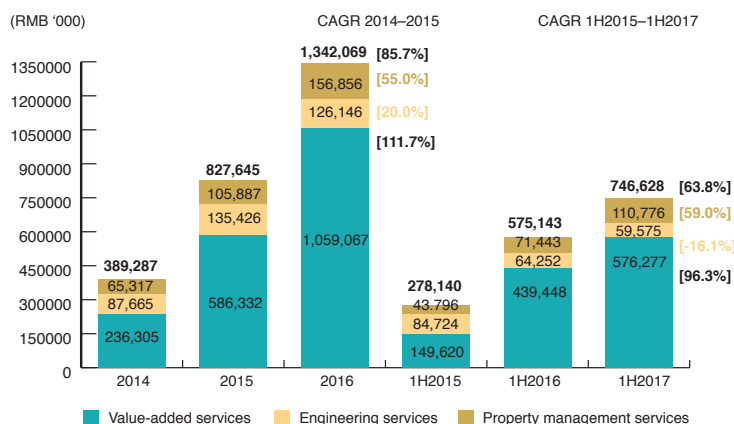
Exhibit 4: Growth of value-added services and revenue by business segment



1H 2017 value-added services revenue breakdown



Revenue by business segments



Source: Colour life 2017 Interim Results Presentation

(Exhibit 4) Furthermore, the value added services segment has a much higher gross margin (84.5%) than either property management (36.4%) or engineering services (60.8%).²⁰

In addition to finding new ways to add value for residents, Colour Life has also found opportunities to generate revenue by selling its technology and expertise to other companies in the property management industry. For example, the company provides automation and other equipment (e.g. security, intercoms, alarms) installation services to property developers. This service, in turn, creates an avenue for Colour Life to be contracted as a property manager once a development is finished.²¹

Colour Life also provides consulting services to regional property management companies. Under these arrangements, Colour Life provides advice and use of the Caizhiyun platform to these property managers. The company will also provide sales and leasing services under some arrangements. In the first half of 2017, the company generated approximately RMB 24.9 million (~USD \$ 3.9 million) in revenue from consulting services. Given the very low material costs of these services, Colour Life enjoys a gross margin on them of close to 100%.²²

Colour Life as Tech Company: Changing the Nature of Economic Growth

Given the increasing importance of technology to Colour Life's business, the basis of its future economic growth is changing. As the company has put it, Colour Life is moving from "Real Estate + Internet" to "Internet + Real Estate," by which the firm means to suggest a transition from being known as a real estate management

company to a tech company.²³ Such a transition implies the need for very different growth strategies.

Under a traditional property management business model, companies grow by simply increasing their GFA under management, usually by acquiring other property managers outright or by contracting with property owners to provide management services. This creates a zero-sum competitive market, meaning each property managed by a given firm is a property that is not managed by other firms. As such, the potential for growth is constrained by capacity to prevent another firm's expansion.

Tech companies, on the other hand, grow by increasing their user base. No doubt tech companies vigorously compete with each other for users, but the attractiveness of tech products, and particularly platform products, typically depends on a platform's ability to integrate the products and services of its competitors. A classic example of this phenomenon is Apple permitting competitor apps on its iOS platform, such as Spotify (competes with Apple Music), Netflix (competes with movies on Apple's iTunes), and Amazon Kindle (competes with iBooks). Therefore, as a tech company, your competitor can simultaneously be your collaborator.

Two major strategic shifts indicate that Colour Life is indeed beginning to think of itself more as a tech company.

Asset-light Growth Strategy

Colour Life, along with other large Chinese property management firms and real estate developers, has traditionally pursued growth through acquisition. In 2015-2016, Colour Life acquired controlling stakes in 12 property managers. While this helped grow the company's revenue-bearing GFA nearly 137% during that

20 Colour Life FY17 Interim Results Presentation, 10, 17-18.

21 Colour Life 2017 Interim Report, 20.

22 Colour Life 2017 Interim Report, 19.

23 "(博览会之星) 彩生活服务集团: 构建智慧社区生态圈 引领物业行业转型升级, Colour Life, September 28, 2017, Accessed January 20, 2018, http://gw.colourlife.com/nd.jsp?id=210#_np=112_338.

period, it was also very capital-intensive, requiring RMB 680 million (~USD \$108 million) in consideration, and likely drove up the price of future potential acquisition targets.²⁴

By late 2016, Colour Life shifted to a more asset-light ‘minority stake’ strategy, one that focused on growing the user base of the Caizhiyun platform. Specifically, Colour Life entered into ‘cooperation agreements’ with other property managers, acquiring a 5% to 10% equity interest in exchange for bringing that manager’s customers onto Caizhiyun. One of the first of these agreements was with Shanghai Yinwan real estate, under which Colour Life agreed not to take profits from Yinwan’s property management business, but get 50% of profits generated by Yinwan customers’ use of Caizhiyun.²⁵ Largely driven by these cooperation agreements, GFA serviced by the Caizhiyun platform has now more than doubled, from 322.2 square meters

in 2015 to 769.5 square meters in 2016 and has kept growing in 2017.²⁶ (Exhibit 5)

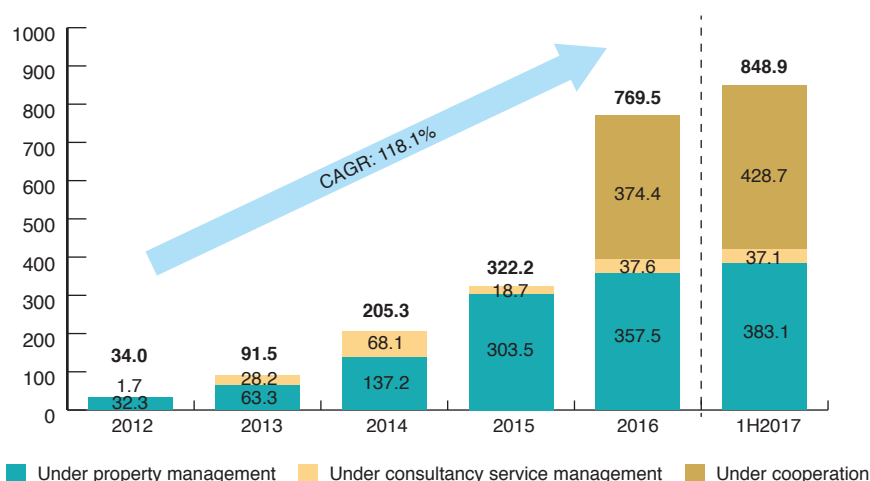
Increasing Caizhiyun Functionality Through Partnerships

From the start, Colour Life actively pursued partnerships with third parties to augment Caizhiyun’s capabilities, which demonstrates its recognition that the value of a platform is defined in large part by the functionalities that can work on top of it. Nonetheless, Colour Life may not be in the best position to provide all of those functionalities. As such, the story of its transition to a new business model is more than simple movement from offline to online services. Indeed, the company prefers the phrase ‘Business-to-Family’ (B2F) to indicate how its platform connects its residents to the services they need. As company chairman Pan Jun has said, “Colour

Life will focus on establishing a community service platform that provides water and soil to B2F enterprises which have ambitions to provide vertical services in communities with professional experience.”²⁷ That is to say, the many value-added services that Colour Life’s platform provides (e.g. E-Repair, E-Wealth, E-Leasing) occur through partnerships with other companies.²⁸

Exhibit 5: Growth of Caizhiyun platform

Total Platform service area as of June 30, 2017 (mm sq.m)



Source: Colour life 2017 Interim Results Presentation

²⁴ China Merchant Securities Report, 10/20/2017 (list of M&A transactions in report)

²⁵ CMB International, “Colour Life (1778): Adopt the Platform Output strategy,” May 25, 2017, 1.

²⁶ Colour Life 2017 Interim Presentation, 8.

²⁷ Colour Life Services Group Co., Limited, “Colour Life Announces Its Interim results for 2016 Achieved Persistent High Growth in Revenue with Strong Cash Flow Structural transformation – value-added services to become key growth driver,” August 11, 2016, <http://file.irasia.com/listco/hk/colourlife/interim/2016/intpress.pdf>.

²⁸ Colour Life 2016 Annual Report, 30.

market share.²⁹ According to the China Index Academy, in 2016 the top 10 Chinese property managers (including Colour Life) accounted for only about 10% of total GFA managed. Nonetheless, consolidation is happening. Both GFA and revenue growth have been largely concentrated among the biggest property managers. In 2016, the top 10 Chinese property managers experienced GFA and revenue growth of 41.30% and 41.58%, respectively, compared to 1.53% and 1.49% for those ranked 31 to 50.³⁰ (Exhibit 6) This indicates there will likely be further consolidation in the Chinese property management industry, with larger, more cost efficient, and more technologically advanced players gobbling up smaller ones.

Colour Life is well positioned to take advantage of this emerging consolidation trend. The partnerships that it has formed with other property managers (both through consulting and cooperation agreements) give the company important intelligence on potential

acquisition targets. The continually expanding reach of the Caizhiyun platform raises consumer awareness and consideration of the Colour Life brand, while also creating stronger network effects with a larger user base. Finally, the cost savings that Colour Life is able to achieve through technology make a compelling financial case for further acquisitions.

Nonetheless, the company is sure to face fierce competition from other top property managers, most of whom have also incorporated technology platforms into their strategies. For example, China Overseas Property Management Company, Ltd. has developed e-PMIS, a realty management and information system.³¹ In March 2017, Greentown China Holdings established a ‘technology’ subsidiary with the goal of developing a “highly responsive living services platform.”³² There is also the possibility that one or more of China’s tech giants (e.g. Alibaba, Baidu, Tencent) could marshal their significant financial and R&D resources to enter the industry.

Exhibit 6: 2015-2016 GFA and Revenue growth of property managers by ranking group

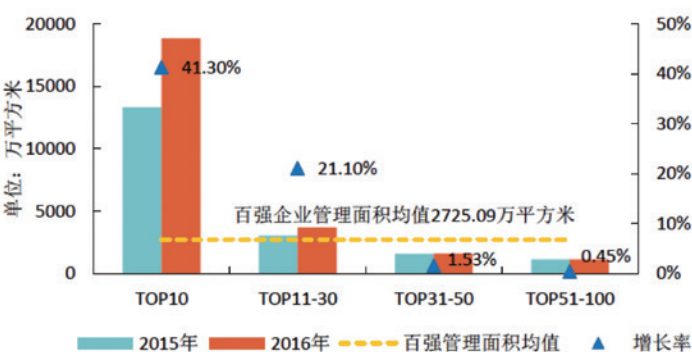


图 3: 2015-2016 年百强企业不同层级管理面积及增长率情况

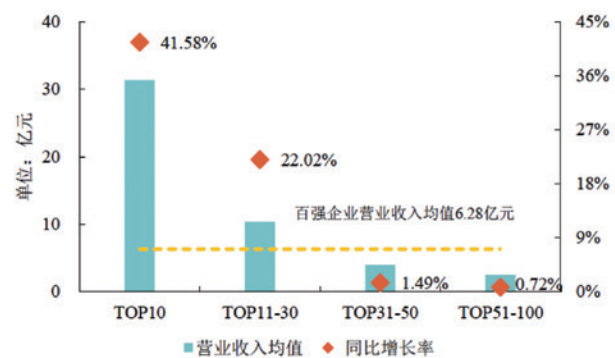


图 9: 2016 年百强企业分层级营业收入均值及增长率

Source: China Index Institute, “2017中国物业服务百强企业研究报告.”

²⁹ Langi Chang, “Estate manager looks for HK target,” South China Morning Post, March 11, 2015.

³⁰ China Index Academy, “2017中国物业服务百强企业研究报告,” 8.

³¹ (IBIS 27)

³² Greentown China Holdings Ltd., 2016 Annual Report, 36.

Of course, Colour Life and the rest of the Chinese property management industry also face the uncertainty of the Chinese real estate market as a whole. Property prices in China's Tier 1 cities have increased so much for so long that many have declared it a bubble. Nonetheless, some industry analysts insist that current property values are still within a reasonable range and that other factors, such as double-income families, higher down payment requirements, mitigate the risk of individuals irresponsibly borrowing to buy homes. The Chinese government is also very invested in ensuring the stability of property markets and has many tools at its disposal to do so.³³

Whatever happens with broader industry and property market trends, it is clear that the nature of the relationship between Chinese residential property owners and their property management companies is changing. Residents should expect that most interaction with their property managers will be over a mobile platform, and one that will offer more and more services. At the same time, the increasing sophistication and widening breadth of available services does two things: It delivers more value to users through efficiency and membership benefit gains, and allows property managers to extract more profit from the resident-manager relationship. ■

³³ Tom Nunlist, "China's Housing Market: The Iron Bubble," CKGSB Knowledge, July 31, 2017, <http://knowledge.ckgsb.edu.cn/2017/07/31/real-estate/china-housing-market-iron-bubble/>.