

RESEARCH



TMT EXPANSION DRIVES NEW OFFICE DEMAND DYNAMICS

OCCUPIER INSIGHTS SERIES



KEY FINDINGS

Office space absorbed by the Technology and Media sectors have grown by 5% year on year. By the end of 2015, they represent close to 10% of Shanghai's leasing transactions.

We expect that the Technology, Media and Telecommunications sector (TMT Sector) will expand further, with their workforce increasing by as much as 40%, from 360,000 employees today to 475,000 in 2020. To accommodate this growth, an extra 1.45 million sqm of office space is needed.

New media companies have become a major force in the Grade-A office leasing market. With highly ambitious consolidation plans, many of them are considering relocating to Grade-A and premium Grade-A developments.

Many of the technology and telecommunications companies have turned to new industry clusters including Daning, Jinqiao, Linkong and Wujiaochang to fulfil demand for space.

Rental price sensitivity, proximity to competitors and government incentives drives many of the technology and telecommunications firms located in business parks. At the same time, many of the larger media groups are maintaining a presence in higher rent Grade-A buildings in core locations to compete for talent attraction and retention.

As Shanghai now aims to become a centre of science and technological innovation, we may expect an increasing number of government-backed incubators to generate more office demand in both traditional hi-tech areas and in emerging CBD areas.



INTRODUCTION

Featuring some of the most popular business success stories, the Technology, Media and Telecommunications sector has witnessed rapid growth in recent years, with companies quickly rising from start-ups to household names such as Xiaomi, Alibaba. Through their rapid expansion and ramp up of workforce, TMT has become a significant tenant sector in Shanghai's office market, shifting the demand dynamics. Therefore, it is important to understand the development of this emerging TMT industry and their real estate strategies.

Although the three composing sub-sectors (technology, media and telecommunications) are growing increasingly interconnected, their requirements for office space are very different from one another. For example, media companies are less concerned with rental prices than the other two sectors, while tech companies are more inclined to locate close to industry clusters. Therefore there is a need to analyse the requirements of these sub-sectors individually. Through highlighting the major trends in each sub-sector in this report, we look at how business parks and core office areas are transforming to meet this new demand from the TMT sector.

DEMAND SURGES DRIVEN BY TMT EXPANSION

TMT companies as a group have evolved into significant segments in the office market.

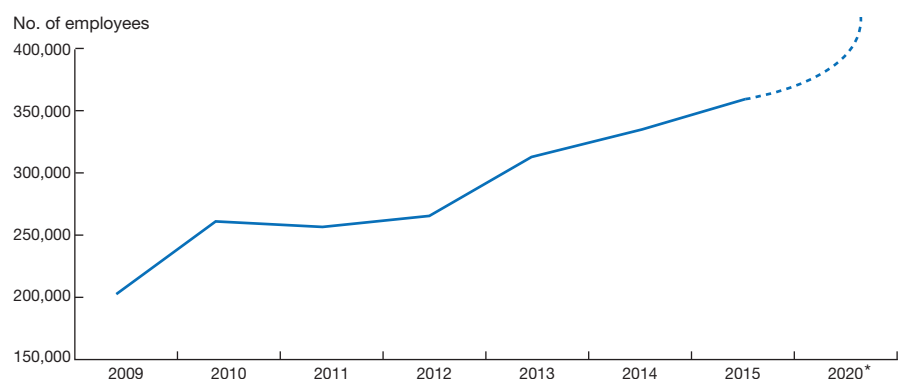
As an emerging industry, the TMT sector has seen steady growth. While domestic IT companies specialising in Internet, mobile games and online entertainment have grown rapidly, many foreign and local media companies have also witnessed expansion. As a result, TMT companies as a group have evolved into significant segments in the office market. In 2015, media and tech companies accounted for 10% of all office leasing transactions in Shanghai. We estimate an expansion by these companies with their workforce increasing by 40%, from 360,000 employees currently to 475,000 in 2020 (see Figure 1). To accommodate this growth, an extra 1.45 million sqm of office space is needed.

After more than a decade of effort to transform Shanghai into an international financial, trade and shipping centre, Shanghai approved a draft plan in May 2015 for building the city into a centre of innovation, science and technology with global influence by 2020. We are seeing comparable trends in other global financial hubs such as London and New York. Two such examples are Worldpay, a digital payments firm, who have acquired space in The Walbrook Building in London – a short walk from the Bank of England, and

near where Bloomberg is building a new HQ; in Manhattan of New York City, where the traditional FIRE (finance, insurance and real estate services) sector remains stable, the TMT sector has taken an increasingly bigger proportion of the workforce and office demand.

As these sectors will become one of the main drivers of Shanghai's future development, this will generate a new wave of office demand from the IT related industries. While the traditional IT hubs of Zhangjiang and Caohejing still attract the majority of technology companies, new alternative areas are emerging. Some technology companies began to consider emerging business parks where a large amount of office space is available. For example, Alibaba purchased No 2 Building in Pudong Financial Square in 2012 and more recently, Ctrip purchased office space in Sky SOHO in Linkong Economic Park in 2014. Meanwhile, many media companies are increasingly attracted to Grade-A office buildings. For example, UK-based media firm Aegis Media consolidated into 18,000 sqm in Corporate Avenue Phase 2 Building 5.

FIGURE 1
The number of employees of TMT sectors



Source: Knight Frank Research Shanghai Statistics Bureau

Note: *Knight Frank Research estimates

TECHNOLOGY COMPANIES ASKING MORE FROM THE TECH HUBS

Technology companies have attracted an increasing number of knowledge workers, and as a result have been seeking business parks that not only offer larger floor plates and stand-alone buildings, but can also fulfil the residential and leisure needs for the employees.

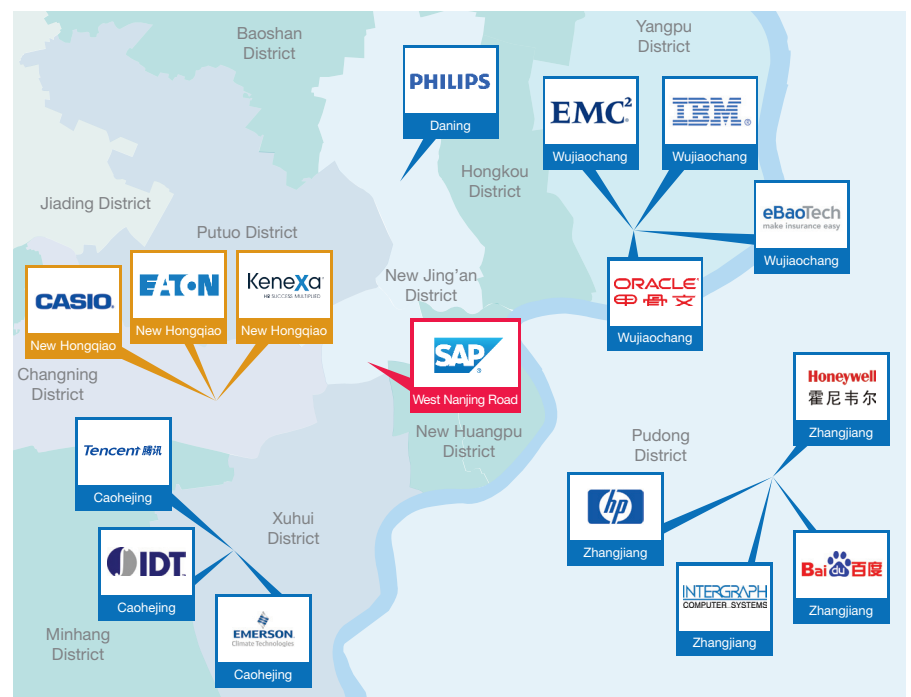
Thanks to rapid advances in technology, companies in the field have adjusted their office requirements accordingly. In the past two years, technology companies have attracted an increasing number of knowledge workers, and as a result have been seeking business parks that not only offer larger office plates and stand-alone buildings, but can also fulfil the residential and leisure needs for the employees. Although traditional tech hubs like Zhangjiang and Caohejing have already transformed themselves from pure industrial zones to office parks that meet the new demand, their land supply is relatively limited. As a result, some technology companies have turned to new industrial clusters such as Daning, Jinqiao, Linkong and Wujiaochang to fulfil their surging demand for space. For example, Philips plans to relocate its China headquarters and its largest R&D centre in China, both located in Caohejing for the past eight years, to Daning Central Square Phase III in New Jing'an District.

As Shanghai aims to become a centre of science and technological innovation, the city continues to incubate startup firms and provides support through initiatives like the recently released "22 Opinions" policy document. Under this policy environment, we expect that the number of incubators continue to grow. Incubators provide low-cost office space and mentorship for early-stage startups. Most incubators focus on technology companies as there is a need for larger, short-term, flexible office space for the new firms. In 2014, the Xuhui District government and Tencent

Holdings jointly funded a business incubator in Caohejing Hi-Tech Park, providing one-stop services to mobile Internet, digital entertainment, O2O, and wearable technology start-ups. Tencent provided users and network while the district government offered offline resources such as free office space. The incubator has generated more than RMB5 billion in total revenue by mid-2015. Given success stories like this we can expect an increasing number of government-backed incubators generate more office demand in both traditional hi-tech areas and in emerging areas.

Some technology companies have turned to new industrial clusters such as Daning, Jinqiao, Linkong and Wujiaochang to fulfil their surging demand for space.

MAP 1
Shanghai Technology Distribution Map



■ Est. rent: > RMB10/day/sqm
■ Est. rent: RMB6-9/day/sqm
■ Est. rent: RMB4-5/day/sqm
 Source: Knight Frank Research

MEDIA COMPANIES SEARCHING FOR HIGHER QUALITY WORKSPACE

New media companies, with their ambitious expansion plans, have grown to be one of the major tenant groups of the Grade-A office leasing market.

The number of media companies in Shanghai has grown by 25% since 2000 and they continue to seek upgraded and innovative workplace solutions to compete for attracting and retaining talent as well as promoting collaboration.

New media companies, with their ambitious expansion plans, have grown to be one of the major tenant groups of the Grade-A office leasing market, many occupying premium Grade-A offices. As stated earlier, after being acquired by Dentsu in 2014, the newly formed firm Aegis relocated its office from Huaihai International Plaza to Corporate Avenue Building 5. The world's leading advertising and brand communications giant Publicis Group moved to Henderson 688 of Jing'an District with an office space of 11,259 sqm. At the same time, the subsidiaries of Publicis Group including Saatchi&Saatchi, Leo Burnett, ZenithOptimedia, Starcom MedraVest Group, VivaKi and Razorfish also moved to Henderson 688 in 2015.

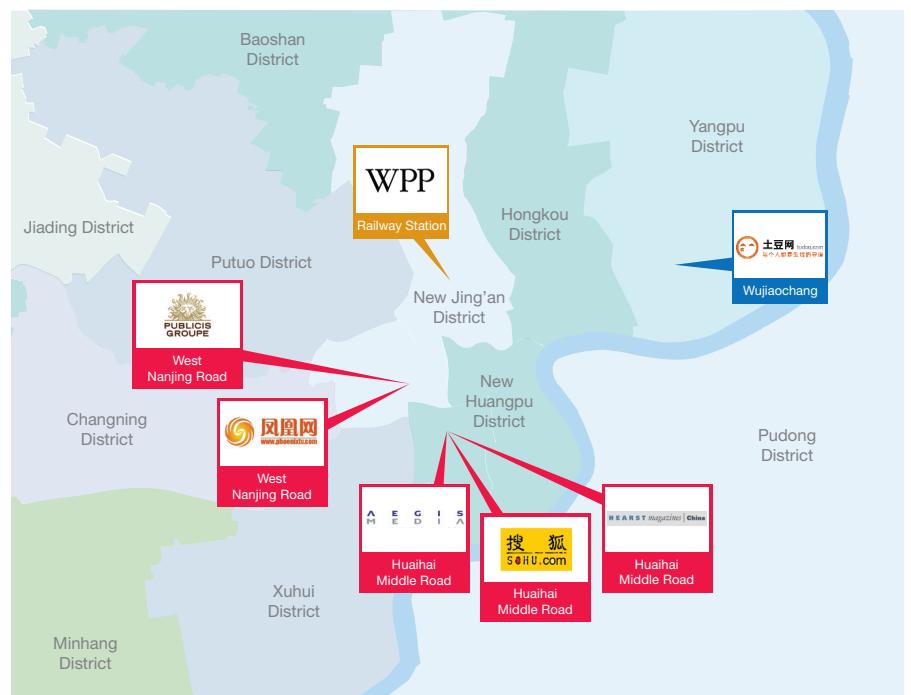
Besides the newly launched Grade-A office buildings in core CBD areas, other new buildings in decentralized CBD

are also in great demand. For example, Tudou.com, a domestic media company, has relocated its office from a business park in Xuhui District to Baoland Plaza, a newly completed Grade-A building in Yangpu District, with an office space of 3,500 sqm.

In one of the largest office leasing consolidations to date, international media group WPP is relocating its 26 subsidiaries (including Blue Hive, GroupM, Hill+Knowlton Strategies, Millward Brown, J. Walter Thompson, Ogilvy & Mather, Sudler & Hennessey and TNS) into WPP Campus, formerly known as Nan Fun BM Tower by the end of 2015. With leasing 20 floors

totalling 41,000 sqm, WPP is hoping to improve project collaboration and gain operational efficiencies through this consolidation. Given the fast development of China's media industry contrasted with limited supply in the core CBD, WPP's relocation may spur greater consolidations within the media industry and decentralisation.

MAP 2
Shanghai Media Company Distribution Map



■ Est. rent: > RMB10/day/sqm
■ Est. rent: RMB6-9/day/sqm
■ Est. rent: RMB4-5/day/sqm

Source: Knight Frank Research

Media companies targeting pre-leasing opportunities in both core CBDs and secondary business districts for expansion or consolidation.



“Though some telecommunication companies are considering move their offices to CBDs and secondary office locations, we see most of them still prefer to stay in traditional industrial zones or business parks including Zhangjiang, Jinqiao and Caohejing.”

REGINA YANG
Director, Head of Research & Consultancy, Shanghai

TELECOMMUNICATIONS INDUSTRY SEIZES NEW OPPORTUNITIES AMIDST DOWNTURN

The development of digital technology is posing significant competitive pressure to traditional telecommunications companies.

In this report we broadly define the telecom sub-sector to include: phone manufacturers, local exchange carriers, wireless communications services and call centres. The telecommunications industry has undergone a rapid transformation of growth and development for the past ten years. The development of digital technology is posing significant competitive pressure to traditional telecommunications companies.

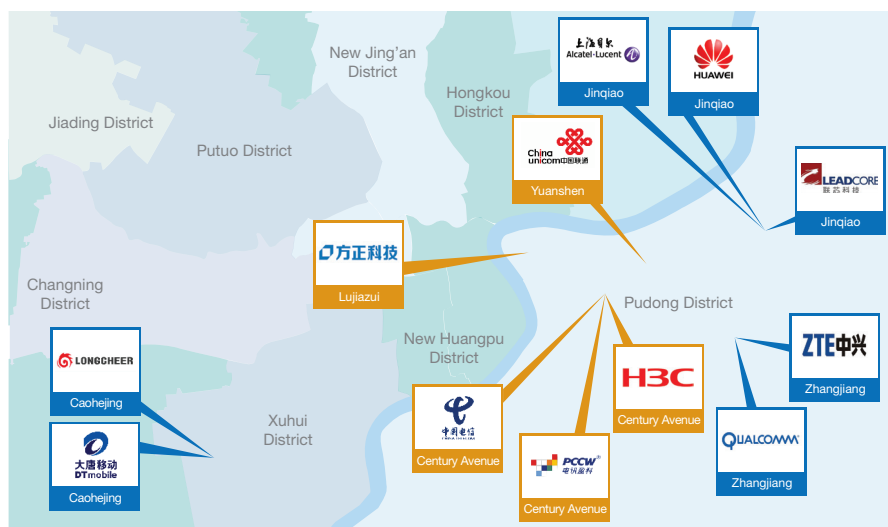
The increasing popularity of smartphones has had a detrimental impact on traditional telecommunication companies such as Nokia and Siemens. Nokia had to sell its dominant mobile business to Microsoft a few years ago as it was too late to catch up to the

smartphone business. The Finnish company however, has remained in the telecommunication sector. In 2013 Nokia closed its biggest flagship store on Nanjing East Road after it had shut down one of its Shanghai offices in the same year. In 2015, telecom equipment company Nokia (Finland) decided to merge with Alcatel-Lucent (France), its smaller rival 4G and LTE mobile network equipment supplier. After the merger, it was rumoured that Nokia and Alcatel-Lucent would likely need to make significant cuts to their combined mobile assets, which will result in job cuts.

However, there are a number of telecom companies, such as those running call centres have performed better than expected. For example, VIP ABC, a training institute, has relocated its call centre from The Headquarters Building in Huangpu District to Baoland Plaza in Yangpu in 2014. VIP ABC has doubled its call centre area to 4,000 sqm, now covering two whole floors in the Baoland Plaza.

In terms of office locations, though some telecommunication companies are considering move their offices to new buildings in CBDs and secondary office locations, we see most of them still prefer to stay in traditional industrial zones or business parks. According to our statistics, Zhangjiang, Jinqiao and Caohejing still holds approximately 70%-80% telecommunication companies in Shanghai.

MAP 3
Shanghai Telecom Company Distribution Map



Est. rent: RMB6-9/day/sqm
Est. rent: RMB4-5/day/sqm
Source: Knight Frank Research

BUDGETS, AFFORDABLE OFFICE SPACES AND LOCATIONS

The rental budget between TMT companies varies widely.

The rental budget between TMT companies varies widely. Media companies are typically located in core CBD and higher rent locations compared to technology and telecommunications firms, e.g. Nanjing West Road and Huaihai Middle Road with an effective rent of RMB7-10 per sqm per day. In contrast, technology and telecommunications companies usually favour business parks due to the lower rents and incentive packages. These companies target a rental budget from RMB4-6.5 per sqm per day.

As traditional media firms require a large floor space to accommodate the consolidation of various business units, they are likely to relocate their offices from traditional office-intensive areas to secondary and emerging business districts.

Large and medium-sized technology firms usually prefer business park clusters where there are specific government incentives, or for some, close proximity or easier access to their manufacturing base. We believe that Zhangjiang, Caohejing and Linkong will remain their preferred areas.

For start-ups and small businesses with limited rental budget and staff numbers,

co-working spaces or incubators are more viable and attractive. Co-working spaces refer to a shared office environment where individuals working independently or collaboratively and charge a per day or per person rental rate. Soho 3Q and People Squared are two such co-working examples in Shanghai and can accommodate over 15,000 staff. Moreover, some co-working spaces not only provide basic work facilities but also offer services in legal affairs, finance and mentorship areas such as Founder Park. These co-working spaces may be found in innovation parks in secondary and emerging business districts such as Zhongshan Park and the Changfeng area. Another office type favoured by technology start-ups is incubators. Incubators usually refer to a facility designed to foster entrepreneurship and help start-up companies to grow through the use of shared resources, management expertise, and intellectual capital. Incubators in Shanghai may be found in low-rise office buildings in business parks like Zhangjiang and Caohejing. These incubators fall into two categories: one is established by the government and established firms, incubating start-ups by offering their own technology resources and basic

office facilities. Another category refers to incubators established by various funds and privates, aiming to create a platform to attract outstanding start-ups. This kind of incubators often charge very little fees, and some even provide supporting services free of charge but obtain equity participation at the early stage. On the whole, the growing number of tech start-ups in Shanghai will create significant demand for shared facilities and collaborative working space and generate more co-working spaces and incubators in the near term.

TABLE 1
Space requirements by subsectors

Items	Technology	Media	Telecommunications
Rental budget (RMB/sqm/day)	4.0 - 6.0	7.0 - 10.0	4.0 - 6.5
Preferred office size	2,000 - 5,000 sq m	3,000 - 10,000 sq m	2,000 - 5,000 sq m
Preferred location	Emerging areas or business parks (Wujiaochang, Zhangjiang)	Core CBD areas (Nanjing West Road, Huaihai Middle Road)	Core CBD areas , or emerging areas or business parks (Zhangjiang,Caohejing and Jinqiao)
Preferred property type	Office space in business parks, co-working spaces, incubators	Grade-A / premium Grade-A office building	Office space in business parks

Source: Knight Frank Research



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CONCLUSION

Knight Frank believes the constantly evolving TMT sector will continue to drive the office market demand in Shanghai. As detailed in Knight Frank's Global Cities 2015 report, we are seeing a rise of a new hybrid industry known as Fin-Tech in the premier gateway cities including London, New York and Shanghai. Similar to Shanghai, these are all established financial centres that face increasing demand from TMT clusters. From this perspective, Shanghai TMT sector demand is outpacing other gateway cities in Asia such as Hong Kong and Singapore. From 2007 to 2015, TMT companies increased their leasing take-up in the Shanghai market by 75%, an impressive growth rate compared to the 25.7% growth of the FIRE (finance, insurance and real estate services) sector. By Knight Frank Research estimation, TMT companies will occupy around 15% of Shanghai's total office stock by 2020, turning into an even more influential sector of the market.

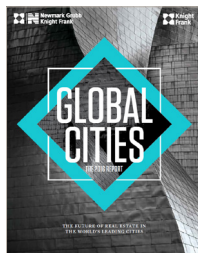
With many Shanghai media companies acquiring premium Grade-A offices, technology companies' expansion and telecom companies finding new opportunities from transformation and re-generation, the TMT sector will continue to drive demand that will shake up the current growth model driven historically by the FIRE sector. As what we have observed in European cities like London and Berlin, with the expansion of the digital economy, TMT companies in Shanghai are taking a larger share in the Grade-A office market, driving rents as well as impacting demand, especially in the core areas and industry clusters.

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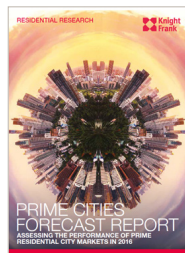
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RESEARCH & CONSULTANCY

David Ji

Director, Head of Research & Consultancy, Greater China
+852 2846 9552
david.ji@hk.knightfrank.com

Regina Yang

Director, Head of Research & Consultancy, Shanghai
+86 21 6032 1728
regina.yang@cn.knightfrank.com

Vincent Li

Assistant Manager, Research & Consultancy, Beijing
+86 10 6113 8017
vincent.li@cn.knightfrank.com

Ocean Ruan

Manager, Research & Valuation, Guangzhou
+86 20 3839 6408
ocean.ruan@cn.knightfrank.com

Pamela Tsui

Senior Manager, Research & Consultancy, Greater China
+852 2846 4843
pamela.tsui@hk.knightfrank.com

Cliff So

Executive Director, Agency & Professional Advisory Services, REPro Knight Frank, Taipei
+886 2 8729 8770
cliff.so@repro.knightfrank.com

SHANGHAI OFFICE LEASING

Peter Zhang

Director, Head of Tenant Representation, Commercial Services
+86 21 6032 1713
peter.zhang@cn.knightfrank.com

