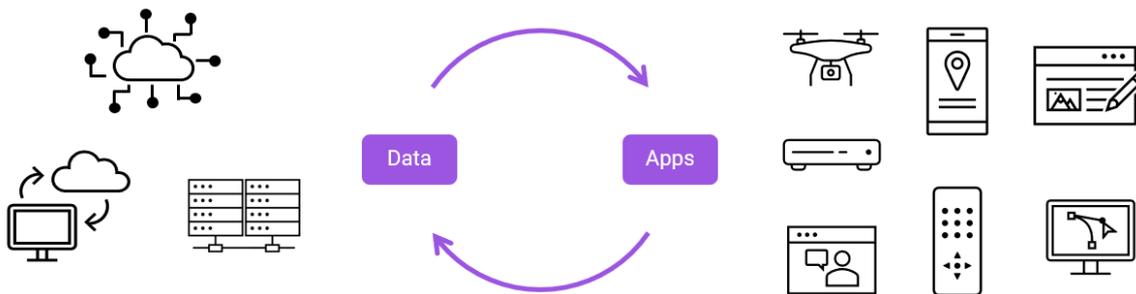


Communications towers: the future is bright

In recent years, the emergence and acceleration of the digital revolution has fundamentally altered the way we live, work, and play. Mobile phone users, of whom there are now over 5 billion worldwide¹, have created a perpetual data loop, meaning that every interaction to and from our phones creates a trail of digital breadcrumbs which are transmitted to, and stored in, data centres. This wealth of data has led to an explosion in the creation of applications and services which, over time and with increased connection speeds, have become more useful and relevant to our everyday needs. The more refined they are, the more accurate they are and the more we use them. Round and round we go.



A significant driver of the rapid growth in data is mobile phone usage and the pace at which mobile internet connectivity has developed. In the late 2010s, 4G emerged as the dominant global mobile technology, surpassing 3G, with more than four billion connections. In the next few years 5G is likely to overtake 4G and is expected to account for one fifth of global connections by 2025². Coupled with the anticipated growth in digital interactions per user, forecast to reach 5,000 per day³, we are going to see an immense amount of data flooding the airwaves. User demand for ever quicker connectivity, and the subsequent speed at which technology has developed, have been key to driving the pace of development. It took 41 years to reach one billion debit card users, 19 years for online banking to reach 1 billion users, 3G took 12 years and 5G is projected to hit the same figure in just over three years⁴.

With an ever-increasing amount of data being produced and transmitted, the demand for data centres, where this information is stored, continues to rise. But between the smartphone and the data centre lies a key piece of infrastructure. Vital to the data supply chain are telecom towers, without which the entire digital world would collapse. The owners' business models are very straightforward. They simply erect a steel tower, bolt it to a concrete plinth, and rent space on the tower to network and communications companies to fix multiple microwave transmitters and receivers. The key requirement is for the user to remain in blissful ignorance of the technology operating behind the scenes which ensures they can remain connected as they travel, without interruption. The connection between towers and devices operates by ensuring that the signal to and from the device is passed from one tower to the next, often at high speed. To add to the complexity, the transmitters and receivers must be capable of providing the same high quality of service to thousands of users, regardless of the speed at which the devices move into and out of range of each tower. Fast and seamless connectivity is all that matters to the user, so a network of towers with excess capacity is required to ensure interruptions are kept to a minimum.

The towers themselves are a simple lattice framework which rarely need to be adapted to accommodate updated equipment as their tenants' upgrade and improve their service. It is time-consuming and expensive for the service provider to build the infrastructure themselves and so instead, they rely on developers to build and maintain vast estates of towers, on which they simply rent space. Each slot on each tower is therefore highly sought after. Once the development capital has been invested, each tower has the capacity to host multiple tenants. They enjoy long rental contracts of five to ten years, high tenant retention rates of 80%-99%, and many leases contain contractual inflation-linked escalators.

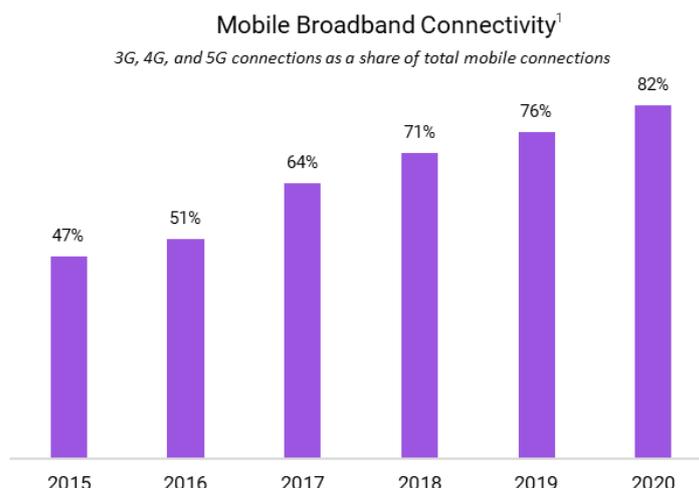
¹ <https://datareportal.com/global-digital-overview>

² GSMA: The Mobile Economy, 2020

³ Knight Frank

⁴ Statista, data as of 2020

With a predicted \$1.1 trillion of investment coming from mobile phone operators by 2025⁵, and 80% of towers set to be upgraded to 5G networks, the future for mobile tower owners is robust and well defended.



Even if the number of new operators coming to market were to stall in the future, the need to update technology and offer increased capacity to customers means that mobile tower owners should continue to see rising demand. As more devices come online worldwide, and the perpetual data loop continues to expand with the adoption of new and more sophisticated technologies, the need to expand transmission capacity to limit congestion on busy networks is likely to support rental income and will result in demand from existing tenants for years to come.

We can look to the US as an example of a relatively mature, but successful, market in which there is less new building activity, but continued support from an increase in demand, generated by existing and prospective tenants and the contractual price escalators mentioned previously.

It is evident that the outlook for mobile tower owners is bright, with solid growth prospects ahead; annual rent increases and increasing demand mean that the opportunity to lock-in steady returns through investment in the owners of mobile towers can be significant.

Dividend yields are also well defended, supported by long-term, contracted rental payments from high quality tenants. Among the largest listed mobile tower owners, dividend growth has been consistent and sustained for years. American Tower, a Fortune 500 REIT which owns 187,000 telecom towers all over the world, currently yields 2% and has grown its dividend every year over the past decade. Likewise, Crown Castle International, a REIT with a network of 40,000 mobile towers in the US, has increased its dividend every year for the past eight years and currently yields 2.8% per share.

There is no end in sight for the growth of data, and so the ability to forecast stable returns by investing in communication towers is relatively predictable. 5G will be integral to the roll out of future digital technology, enabling large scale and stable data coverage that will ensure industry and cities can function seamlessly. From digital entertainment and 'e-health' to smart cars and smart parking, the potential application for digital technologies appears unlimited.

A focus on mobile communication towers will form an integral pillar of the VT Gravis Digital Infrastructure Income Fund, with exposure to best-in-class REITs that are specialists in the sub-sector and at the forefront of development. As a result, we believe investors will benefit from the steady and sustainable future growth we expect to see from these companies in the coming years.

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⁵ GSMA Intelligence: '2025 capex outlook (2020 update): the \$1 trillion investment'