COLUMBIA THREADNEEDLE INVESTMENTS

Your success. Our priority.

DISRUPTIVE TECHNOLOGIES CHALLENGE TRADITIONAL INFRASTRUCTURE APPROACH

Heiko Schupp
Global Head of Infrastructure Investments

- The world is changing – and innovation acts as a catalyst for growth and success. Traditional infrastructure investments are being challenged by the pace of innovation
- Technology and disruption will likely create opportunities across all core infrastructure asset types
- To ensure steady, long-term returns, infrastructure investing must be structured in such a way as to be highly flexible to seek and respond to fast-moving opportunities

Technology trends and disruptive innovation are influencing the infrastructure asset class. The future of infrastructure investment requires a dynamic, flexible, open-ended approach that takes into account the innovation in the sector and understands the potential positive impact on returns from emerging technologies and future trends.

DISRUPTION IS EVERYWHERE

The world is changing – and innovation acts as a catalyst for growth and success. Businesses that fail to innovate are more likely to lose market share and suffer reduced productivity and efficiency, profit or even business failure. Kodak's rise and fall is one of the most famous examples, but there are many more, including the demise of Blockbuster as online streaming services such as Netflix replaced incumbents in the home entertainment sector.

There are four main types of innovation. Incremental innovation makes constant small improvements to products or services; architectural innovation changes the way in which components are put together; radical innovation harnesses new technology and business models simultaneously; and disruptive innovation applies new technology or processes to a company's current market.

Innovation on its own might change processes (ie, a factory production line), but does not necessarily destroy an industry's long-term future. True disruptive innovation, however, can destroy or irrevocably alter entire sectors.

Traditional infrastructure investments are also being challenged by the pace of innovation. As Baby Boomers give way to Generation X and they in turn are followed by Millennials, technology is changing how we work, commute and live our lives. This includes everything from the cars we drive and the public transport we use, to how construction projects are completed, how our homes are powered or how our online shopping is delivered.

WHY IS ALL THIS IMPORTANT FOR INFRASTRUCTURE INVESTORS?

Since many infrastructure assets have a lifespan of 50 or more years, any investment decisions made today will have lasting repercussions and so it is essential that investors take a long-term view. However, to ensure steady, long-term returns in today's fast-changing environment, infrastructure investing must be structured in such a way as to be highly flexible in order to seek and respond to fast-moving opportunities – and to have access to the capital required to do so. This is no longer an environment for traditional infrastructure investment vehicles, which lock investors into rigid structures with constrained investment periods that cannot take advantage of fluid investment trends without adding debt and therefore increasing the asset's risk profile.

CAPTURING VALUE IN A FAST-CHANGING LANDSCAPE?

Technology and disruption will likely create opportunities across all core infrastructure asset types including utility, transportation, social infrastructure, renewable energy and telecommunications. Although where change will be felt most keenly is difficult to predict, as it will be influenced by factors such as regulation and government funding.

Taking electric vehicles (EV) as an example, major global automobile players are expected to launch more than 20 different EV models in the next 24-36 months, boosting total global EV sales from 164,000 in 2014 to 1,695,000 units by 2019. Increasing EV charging rates, however, are expected to put pressure on local utility networks and circuits, so more resources are needed to handle these increasingly large energy consumption rates. As more EVs are connected to the grid, significant spikes in demand will likely impact stability, efficiency, and operating costs of the grid. Owners of these grids must therefore invest significant and substantial amounts into their infrastructure to replace and upgrade their transmission networks else they will not be able to accommodate these changes.

Another example is global transportation, where the mass adoption of 3D printing has the potential to significantly impact freight, logistics, container shipping and more. The ability to build increasingly large and more complex components and achieve higher speeds and much lower costs than traditional methods could transform how many major ports operate in future.

Containerisation, for example, has been one of the most important logistics inventions in the 20th century and a major driving force behind post-war globalisation. Containers have helped reduce transportation time and costs and as a result, has developed into a global scale, highly automated and standardised industry that has shaped the infrastructure behind many major European ports and shipping hubs. However, as costs fall and the efficiency of 3D printing technology rises, the direction, velocity, and volume of global commodity flow is changing. For example, a growing shift away from finished goods to raw material transportation, semi-processed raw materials and 3D printing cartridges is expected. As printing technology improves and becomes more mainstream, ports that cannot adapt to the diversification in types of freight increase their risk of becoming redundant.

A FUTURE-PROOFED INFRASTRUCTURE INVESTMENT SOLUTION

With the right know-how, investors can keep abreast of these technological disruptors and use them to their advantage in selecting assets for their infrastructure portfolios. So where should they look and how should they approach the asset class?

Investment in European infrastructure is currently falling far short of what is needed. The European Commission estimates that Europe needs €2 trillion of investment in infrastructure by 2020 and that €600 billion needs to be spent annually to keep Europe competitive. However, European governments have relatively limited resources, given their restricted ability to raise debts or taxes, creating an opening for institutional investors to provide infrastructure capital. Europe is also home to the some of the highest-quality infrastructure assets globally, ahead of the game in terms of technological innovation and operating in some of the most stable and attractive investment markets in the world.

This presents an attractive opportunity for investors to generate stable, inflation-protected yields over the long-term from a portfolio of high-quality “best-of-class” infrastructure assets, but also take the potential upside of disruptions.

A number of characteristics define a successful infrastructure portfolio. Firstly, considering the long-term nature of both infrastructure assets and pension fund objectives, an open-ended investment vehicle is key. Managers can target low volatility and steady returns more effectively and act swiftly when opportunities are identified, making truly active portfolio management possible. For the underlying investor, a dynamic, flexible structure should allow investments to outperform liabilities whilst keeping up with a constantly changing environment.

Secondly, investors must be able to build a portfolio of infrastructure assets that can withstand a variety of influences, such as economic cycle volatility and/or disruptions. By using dynamic portfolio construction techniques, managers can deliver robust diversification that will withstand varying macroeconomic conditions. Within this structure they can also exercise a variety of operational levers to enhance value and improve yield.

Sustainability must also be part of any successful investment approach. In infrastructure, sustainability and attractive long-term returns go hand in hand, therefore incorporating environmental, social and governance criteria into investment analysis and decision making is essential. It specifically addresses the significant regulatory and political risks. If a project/asset is ecologically and/or socially sustainable there is less risk of negative intervention by politicians or regulatory bodies in the long term.

Finally, fund managers need to understand innovation and have the expertise and capabilities to determine which technologies will turn into trends that dominate asset types. Applying this knowledge to their asset allocation, they can capitalise on the potential positive returns that can be gained from technology disruptors. For example, going back to the shifting trends in the global transportation industry, an open-ended structure and therefore the ability to constantly support assets with investments is crucial to allow the flexibility, dynamism and ongoing investment that is needed to continually capture value over a long-term horizon.

The world is changing and investors can take advantage of these opportunities. The right approach to infrastructure allows institutional investors and fund managers to capitalise on fast-moving trends that will influence infrastructure assets in the decades ahead and provides the flexibility to build portfolios that deliver both the long-term yield and capital growth they require.

To find out more visit
COLUMBIATHREADNEEDLE.COM

COLUMBIA THREADNEEDLE INVESTMENTS

Issued 10.18 | Valid to 01.19 | J28412 | 2283773