



# Asia's Information Technology Leap

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Asia's information technology (IT) sector is at the forefront of several long-term, secular trends driving growth in the region. Rising spending among Asian consumers is fueling entirely new business ecosystems, from e-commerce to online gaming. China is currently the world's largest e-commerce market, with revenues expected to surpass US\$1 trillion in 2020.<sup>1</sup> We also see a need for increased labor productivity in Asia due to rising wages, creating a long runway for growth for software and automation solutions. Enterprise software sales in Asia are expected to grow to US\$26 billion by 2026.<sup>2</sup> Finally, innovation and services are playing increasingly important roles in developing markets.

Examining the broad architecture of IT today, companies tend to fall into two broad categories—software and hardware. Among software makers in Asia, we see entirely new paradigms emerging. The software side has historically included IT companies in India, as well as assorted software producers and providers across Asia. We now see the growth of enterprise software among business of all sizes. Smaller mom-and-pop businesses that traditionally used paper based payroll and accounting systems are moving to mobile-friendly, cloud-based systems. And larger business are starting to do more with their data, engaging in sophisticated data analytics for marketing and improving daily operations. Turning to hardware, we see an industry that has built a solid platform and is starting to advance in terms of its capability set. In Asia, the main manufacturers of semiconductors and microchips have historically been centered in South Korea and Taiwan. However, we also see traction for hardware within mainland China. Together, we believe software and hardware provide two compelling strands of the IT sector with attractive long-term growth potential for the Matthews Pacific Tiger strategy.

Software and hardware companies are supporting new forms of consumption in Asia, such as the growing popularity of online games. Is online gaming part of the IT sector? Should investors consider online gaming as part of the communication services or the consumer discretionary sectors? In one sense, gaming can logically be viewed as part of the IT sector because IT provides the backbone for the gaming ecosystem. In another sense, the surge of popularity of online games in Asia includes the way that many multiplayer games might function as a form of social media, with chat functions built into the platforms. Social media more traditionally falls in the communication services vertical. Online gaming also bleeds into the discretionary share of the consumer's income. Online games illustrate the ways in which technology is being woven into everyday life.

The Matthews Pacific Tiger strategy has historically been underweight the IT sector relative to its benchmark, the MSCI All Country Asia ex-Japan Index. The IT hardware sector in particular has been prone to short-term cycles in the past, often driven by global factors. Cyclical in the sector remains, but encouragingly, we have also seen an evolution of the types of companies now available in the sector. With new companies joining the mix, we have increased our weight to the IT sector over the past year and we continue to look for opportunities in the sector from the bottom up. Within the sector, we are interested in companies that compete on intellectual property, companies with strong competitive moats and companies that capture the growth of consumer spending within the broader ecosystems supported by IT, including communication services. As always, we are interested in companies that can generate sustainable growth across a full market cycle.

## Software shines

Demand for cloud services is growing and we see a new crop of software providers that are starting to address enterprise needs, particularly within mainland China. These companies have been relatively small in the past but with the growing digital nature of economies across Asia, there is a real need to improve efficiency. Adoption of software is accelerating as companies look to enhance their labor productivity. Furthermore, some businesses on mainland China prefer to engage with local software providers who can customize solutions to the needs of individual enterprises. The software industry is starting to mushroom and we see quite a bit of capital flowing to innovative businesses.

When we look at the software sector in the West, U.S. companies adopted Microsoft, Oracle and SAP software products a long time ago. These products began as desktop versions of software, but are now slowly migrating into the cloud. In Asia, however, use of traditional desktop software has developed slowly. As a result, many companies in Asia have the opportunity of leapfrog straight to cloud-based software—similar to how many countries in Asia skipped the stage of

generating hardwired telephone lines and went straight to mobile phones. To understand the growth trajectory of the industry, we believe we must focus on trends on the ground in Asia. Investors cannot understand pricing mechanisms in Asia by looking at the Western experience.

The move toward cloud-based software systems is a plus for Asian software developers. In the absence of legacy PC-based software systems, it is faster and easier for businesses to adopt new cloud-based enterprise software solutions. New users and software subscribers can simply start fresh from the cloud. Enterprise software development in Asia can move quickly because it is unencumbered by the past.

### **Hardware remains crucial**

The hardware side of the sector is at a slightly different stage of evolution. Asian companies seek to move up the curve by offering valued-added solutions and becoming more competitive on a global scale. Historically the hardware companies in Asia have been part of the global supply chain. Now hardware companies in Asia are starting to generate more intellectual property, given these companies' own investments in research and development. Some companies in Asia are competing with the best run hardware companies globally, including companies in Silicon Valley. We believe a small, select group of Asian hardware companies has the potential to become global leaders, particularly companies in North Asia. Western businesses have dominated the semiconductor space for a long time, but some Asian hardware manufacturers may be ready to pick up the baton. In our view, certain aspects of Asia's semiconductor industry are not well understood by the market. Growing pricing power for some hardware manufacturers may provide increased sustainability in their growth trajectories.

### **Fundamental research is key**

Asia's IT sector is broad and diverse. Deep knowledge of local markets and in-depth research are crucial, in our view. Valuations for innovative businesses in Asia's IT sector require a multi-prong approach, as traditional P/E ratios may provide only part of the story. In terms of conducting software research for the Matthews Pacific Tiger Strategy, we often begin our analysis with a company's research and development efficiency. The ability to develop intellectual property builds competitive moats for software companies and drives long-term success. The quality of human talent and ability to control operational costs are also important. The hardware side is more capital intensive. When researching a hardware maker, we need to understand a company's capital expenditures and cost of capital. Moving up the spectrum in terms of value-added products can take time and investment. Nevertheless, the best hardware makers are investing in intellectual property as well and building competitive moats of their own.

As part of our research efforts, we also seek to understand and mitigate risks of investing in the sector. On the software side, competition can be fierce. Understanding how intellectual property may create user loyalty is important. Disruption of a software company's business model can also potentially come from many sources, so it is important to understand the full ecosystem a software company operates in. On the hardware side, the semiconductor industry can be highly cyclical. However, there are businesses that may have more persistent trends driven by secular factors, such as the search for greater productivity and efficiency.

Increased usage and adoption of IT solutions is essential for most businesses in Asia, even traditional blue-chip industries. Some of the largest insurance companies in Asia, for example, have been heavy spenders on data analytics and software. IT companies are using data analytics to upgrade efficiency of their operations. Likewise, we see other traditional businesses around the region as in banking and health care using IT to boost efficiency. Technology isn't a silo. Greater IT integration is now table stakes for any company or business to be successful in Asia these days. Importantly, younger generations continue to seek newer ways of buying products and services, while improving their quality of life. We believe changing demographics open the door for innovative IT companies in Asia to continue to grow and expand.

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<sup>1</sup>Source: Statistica.com. Forecast adjusted for expected impact of COVID 19 as of June 2020.

<sup>2</sup>Source: Allied Market Research.

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