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Introduction

The story of the month covers China leads the world in the adoption of virtual reality. China to launch first e-commerce satellite in 2017; Shenzhen aims to become south China’s higher education center; China to sign more academic mutual recognition agreements; China is launching big plans to target the domestic health industry for the next decades; research and development spending growth by Chinese companies leads the global market; China introduced measures to address in the internet finance sector; State Council issues development plan for elderly education; China to launch Long March-5 carrier rocket in November.

Contents

Story of the Month .................................................................................................................................................. 2
1. China to launch first e-commerce satellite in 2017 ............................................................................................ 3
2. Shenzhen aims to become south China’s higher education center ................................................................. 3
3. China to sign more academic mutual recognition agreements ............................................................................ 4
4. Health sector, the next big industry ..................................................................................................................... 4
5. Pushing innovation, Chinese firms lead world in R&D spending growth ......................................................... 5
6. Measures to help prevent risks in internet finance ........................................................................................... 5
7. State Council issues development plan for elderly education ............................................................................ 6
8. China to launch Long March-5 carrier rocket in November .............................................................................. 7

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Story of the Month

Insanely virtual

China leads the world in the adoption of virtual reality

(The Economist, 15-10-2016)

At the heart of an emerging technology cluster in London’s Shoreditch lies the Stage, a big mixed-use building complex that is being developed by Vanke, a Chinese real-estate company, among a few others. A potential Chinese buyer of one of the flats in its 37-storey residential tower recently had a look around. She went from room to room, observing the furnishings and fittings. She marvelled at the city views from the balcony and peeped inside the refrigerator. There was no need for a flight to London. She toured the property using virtual reality (VR) goggles at Vanke’s global marketing centre in Shanghai.

The use of VR kit is quickly becoming widespread in China’s property industry. Few real-estate firms in other countries are as advanced. China is fast emerging as the world’s most important VR market, thanks to rapid adoption by property firms and by companies in other industries. The prompt take-up is not because Chinese firms make the best VR headsets, which they do not. In fact, the pioneers in cutting-edge hardware are America’s Oculus, which is owned by Facebook, Japan’s Sony, South Korea’s Samsung and Taiwan’s HTC. It is in California, not Chengdu or Chongqing, that the best software for VR games and movies is being developed.

But professional use of VR by Chinese companies (rather than by consumers) means that the place where the fledgling industry may make its very first fortune is the Middle Kingdom. Goldman Sachs, an investment bank, forecasts that the global VR market could well expand from next to nothing now to be worth as much as $60 billion by 2025. Hardware would account for half of the market and software the rest. Goldman also predicts that mainland China will already account for a third of global VR headset sales this year (see chart).

In the West the interest in VR has mainly focused on consumer applications like gaming. By contrast, in China business applications are an immediate and profitable avenue for growth. Property developers like Vanke are using VR to peddle expensive properties that are overseas or not yet built, and architects are using it in design. Education is another promising field. NetDragon, a Chinese software firm that attracted attention when it acquired Britain’s Promethean World, an online education outfit, for some $100m last year, is testing how VR software and hardware can be used in mainland schools (one idea is that headsets could tell when children are tilting their heads, indicating boredom, meaning a change of subject or teaching method is required).

Companies specialising in VR are spending a great deal of time examining the growth in China’s market. In addition to the quick adoption by Chinese businesses, this is for two other reasons to do with the consumer side, reckons Huang Zhuang, founder of China’s Nao Chuan Yue, a startup VR outfit. First, mainlanders are enthusiastic early adopters of whizzy technologies, even if the early versions are somewhat imperfect. Second, China leads the world in the use of the mobile internet. Mr Huang is convinced that the majority of users in future will access VR via their web-connected smartphones, not via goggles attached to personal computers or self-contained devices.

In other countries, including America, it is difficult for people to try out VR technology, notes Ryan Wang of Outpost Capital, a Californian venture-capital firm with investments in the sector. They have to fork out $1,000 or more to experience high-end VR. That means there is as yet no clear, affordable path for American consumers to adopt the technology, says Mr Wang.

China, on the other hand, already has a full infrastructure in place for consumers to try it out. The very best VR equipment, such as HTC’s snazzy Vive goggles, can be found at theme parks, shopping malls and experience centres right across the mainland. There are over 100,000 internet cafés offering VR sessions for just a few dollars. Dozens of local manufacturers are making cheap VR adaptors for smartphones. Purists look down on them, yet they could prove useful “gateway drugs” into what VR could eventually become, says Anjney Midha of KPCB Edge, a technology investment firm in Silicon Valley.

So great is China’s potential that HTC is treating the market as its first priority. The firm has forged alliances with Suning and Gome, two Chinese electronics retailers, to distribute its products. It plans to set up over 10,000
sophisticated “experience centres” for VR across the country. It has made deals with thousands of karaoke bars and gaming cafés. Alibaba, a big e-commerce firm, plans soon to launch a service that will allow the purchase of physical goods using VR equipment. VR movies are soon coming from Tencent, a gaming and messaging giant. “There is faster adoption and a wider embrace of VR here than in any market in the world,” declares Alvin Graylin, a VR executive at HTC.

It is possible that VR executives are making overly optimistic projections, as if wearing their own headsets, but the moneymen are certainly listening. A consortium of several dozen venture-capital firms that are investing in the sector, organised by HTC, held its first meeting on September 20th. Fittingly, although the group included several Silicon Valley firms, the get-together took place in Beijing.


News

1. China to launch first e-commerce satellite in 2017

Global Times, 31-10-2016

China plans to launch its first e-commerce satellite in 2017, with the primary purpose of using satellite data in agriculture.

The plan was announced on 31st Oct during an international aviation and aerospace forum in Zhuhai, Guangdong Province, by the China Academy of Launch Vehicle Technology, China Aerospace Museum and Juhuasuan, an arm of e-commerce giant Alibaba.

"In an era of space economy, the potential of a commercial space industry is immeasurable," Han Qingping, president of the Chinarocket Co., Ltd, said at the forum.

In 2015, the value of the global space industry amounted to 330 billion US dollars, 76 percent of which resulted from commercial activities.

Chinese authorities are making efforts, including legislation, to support and regulate the development of a commercial space industry.

"China is speeding up the making of space law, with the aim of having completed drafting the law by the end of this year," Hu Chaobin, an official from the State Administration of Science, Technology and Industry for National Defense, said during the forum.

(http://www.globaltimes.cn/content/1014999.shtml)

2. Shenzhen aims to become south China’s higher education center

China Daily, 04-10-2016

Shenzhen in South China's Guangdong Province intends to reinvent itself as a center of higher education within the next 10 years.

According to a document by Shenzhen government, the number of colleges and universities will be increased to 20 by 2025, and students to 250,000 of whom 200,000 will be full-time.

The city's regular and vocational higher education systems will be expanded, in the hope that some of these institutions will be included in the national top 50 list, the document said.

Shenzhen will focus on practical subjects such as medicine, science and engineering.
Shenzhen is home to many high-tech and Internet companies, and has attracted millions of young graduates to work and settle in the city. It has one of the youngest demographics among all Chinese cities.

3. **China to sign more academic mutual recognition agreements**

(China Daily, 21-10-2016)

China plans to sign more agreements on the mutual recognition of academic degrees with other countries, according to an educational official.

"We hope that by 2020, such mutual recognition agreements could cover most countries of the world, particularly the developed ones," said Xu Tao, director of the Ministry of Education’s department of international cooperation and exchanges.

Xu made the remarks at the 17th China Annual Conference for International Education, which kicked off in Beijing on 20th Oct.

The conference was organized by the China Education Association for International Exchange with support from the Education Ministry. Each year, the conference works to promote study in a foreign country. This year, Ireland was selected.

Xu said such mutual recognition agreements represented other countries’ acceptance and recognition of the quality of China's higher education, and could accelerate bilateral cooperation between countries beyond the education field.

Since entering into its first mutual recognition agreement with Sri Lanka in 1988, China has inked similar deals with 46 countries across the world, including Russia, Britain and France.

This year alone such agreements have been reached with Poland, Indonesia and the Czech Republic.

(China Daily, 21-10-2016)

4. **Health sector, the next big industry**

(China Daily, 26-10-2016)

China is launching big plans to target the domestic health industry for the next decades, with the potential value of the sector expected to reach 16 trillion yuan ($2.36 trillion), Shanghai Securities Journal reported.

The "Healthy China 2030" blueprint, released on 27th Oct by the Communist Party of China (CPC) Central Committee and the State Council, plans to ensure residents of rural and urban areas enjoy equal access to basic health services in 2020.

It also expects to increase the average life expectancy to 77.3 by 2020 and 79 by 2030.

The guideline focuses not only on medical services for patients visiting doctors, but takes a holistic approach, including education, lifestyle, services and environment.

Liu Yuanli, head of the public health school under the Chinese Academy of Medical Sciences, said "Health is not just about curing illness. Prevention is the key."

According to Liu, everyone in 10 adult Chinese is a diabetic and one out of four suffers high blood pressure.

The guideline proposes to raise people's awareness to help them cope positively with illness.

It encourages companies and individuals to take out commercial health insurance policies.
China is encouraging and promoting the development of diverse medical services and health industry as it tackles the challenge of an aging society.

There are currently five major businesses related to the sector: medical service, medicine and equipment, health care products, health management, and pension industry.

(http://www.chinadaily.com.cn/china/2016-10/26/content_27181681.htm)

5. Pushing innovation, Chinese firms lead world in R&D spending growth

(China Daily, 27-10-2016)

Research and development spending growth by Chinese companies leads the global market as they shift their advantage from competitive costs to innovation to build up technology capabilities to win in the global market, according to research.

The 2016 Global Innovation 1000 Study from Strategy&, which identified the 1,000 public companies around the world that spent the most on R&D during the last fiscal year as of June 30, said that 130 Chinese companies among the top 1,000 spenders on R&D had spent a combined $46.8 billion on R&D, up 18.6 percent from $39.4 billion in last year.

As a result, the R&D spending contributed by Chinese companies is also on the rise, up from 5.8 percent in 2015 to 6.9 percent in 2016.

Huawei, a Chinese leader in telecommunication, although being excluded from the top spenders list due to its nonpublic status, is highlighted as the highest spender on R&D in China with 59.6 billion ($9.48 billion) on R&D in 2015, the ninth largest R&D spender behind Novartis but ahead of Johnson & Johnson among the top 1,000 global innovation enterprises.

"In light of the innovation-driven development strategy at a national level, Chinese companies have been increasing their investment in R&D year by year," said Adam Xu, partner and leader of digital practice with Strategy&.

Many of world's major innovators are transforming mostly driven by changing and rising customer expectations, and the fast pace of improvement in what software can do, including the increasing use of embedded software and sensors in products.

"Companies will recruit fewer mechanical engineers and more data and software engineers to build their capabilities, shifting from physical products to digital offerings including software and services," said Huw Andrews, partner and innovation group leader of PwC China.

Chinese companies have been allocating a great deal of R&D resources on optimizing production processes and the supply chain, which help to reduce costs and increase productivity, which are not directly visible to consumers but benefit companies, said Andrews.

(http://europe.chinadaily.com.cn/business/2016-10/27/content_27194627.htm)

6. Measures to help prevent risks in internet finance

(China Daily, 13-10-2016)

China introduced measures to address risks brought by irregular and illegal activities in the internet finance sector for the healthy development of the industry, according to a circular issued by the State Council on Oct 13.

The circular made a distinction between legal and illegal activities in the sector, and submitted measures targeting specific areas of risk.
According to the circular, P2P (Peer-to-Peer) lending platforms are banned from setting up capital pools, extending loans, and illegal fundraising. Offline marketing is not allowed, either, except for credit information collection and verification, posts of loan tracking, and pledge and mortgage management.

Equity-based crowdfunding platforms should not fabricate targets and carry out self-financing, according to the circular.

The two platforms are not allowed to engage in finance business such as asset management, creditors’ rights or equity transfers, or high-risk securities market funding, unless they are officially approved.

In addition, no real estate development enterprises, real estate agents, or internet financial institutions without credentials can be engaged in real estate finance business through the two platforms.

The circular also listed measures to address potential risks in online asset management and cross-sector financial business.

Internet enterprises’ financial business and public sales of financial products generated from private offerings are banned without permit. Financial institutions should not conduct asset management business through asset management products nesting on the internet to evade supervision.

Branches under the same business group that obtain various financial business qualifications should not violate connected transaction regulations, the circular said.

As for third-party payment business, non-bank payment institutions are not allowed to seize customers’ prepayments, and the prepayment accounts should be opened at the People’s Bank of China or qualified commercial banks with no interest.

Cross-bank settlement is forbidden for non-bank payment institutions by connecting several banks’ systems, according to the circular.

Moreover, advertisements for internet financial products should be true and accurate, in accordance with related laws and regulations.

Other measures such as conducting strict market access, enhancing capital monitoring, establishing reporting systems, and incentive and punishment mechanisms should also be introduced to enhance the overall regulation of risk areas.

(http://english.gov.cn/policies/latest_releases/2016/10/13/content_281475465623304.htm)

7. State Council issues development plan for elderly education

(Xinhua, 19-10-2016)

On Oct 19, the State Council General Office issued a notice on the development plan for elderly education (2016-2020).

The notice put forward five major tasks, concerning education resources, methods and content, support services, mechanism innovation and sustainable development, to promote elderly education in China.

The document called for expanding resources for elderly education. Development in cities and counties should have priority, while services for the elderly living alone or scattered in rural areas should be strengthened. Developed areas are encouraged to give support to remote or rural areas.

Various schools at every level should promote elderly education. Resources such as libraries and facilities should be opened to local elderly people. Those who want to study can also enroll, said the document.

Efforts should also be made to enrich education patterns and content, and explore new study modes at elderly-care centers and nursing homes.
Support services such as information technology should be enhanced. Resources in culture, sports and technologies should be integrated for elderly education, according to the notice.

Meanwhile, the development mechanism for elderly education should be innovated. Market vitality should be fully stimulated, and private capital is encouraged to participate in elderly education.

A sustainable development of elderly education should also be promoted, the document said. Talent cultivation is needed, research on theories and policies should be enhanced, and global communication and cooperation should be strengthened.

According to the plan's target, senior citizens who participate in education activities in various forms should account for over 20 percent of the whole aging population by 2020. By that time, every city above county level should have at least one university for the elderly; 50 percent of towns and villages should have schools for the elderly; 30 percent of administrative villages and neighborhood committees should have learning centers for the elderly.

By 2020, resource platforms supporting the development of elderly education should be established in every province, region and city; distance education should be available in over 50 percent of China's counties, cities and districts; one to two elderly volunteer teams should be established in every elderly university and volunteer service organizations can be found in schools for the elderly.

Currently, China faces an aging society - the population of over 60 years old reached 222 million by the end of 2015, accounting for 16.1 percent of the whole population. It is estimated that the elderly population will reach 243 million by 2020.

(http://english.gov.cn/policies/latest_releases/2016/10/19/content_281475470093141.htm)

8. China to launch Long March-5 carrier rocket in November

(Global Times, 28-10-2016)

China's largest carrier rocket, the Long March-5, will make its first trip into space in early November this year.

The rocket, which arrived at the Wenchang launch center in south China's Hainan Province in September, was transported to the launch area on the morning of 28th Oct, after finishing final assembly and tests, said the State Administration of Science, Technology and Industry for National Defence (SASTIND).

With the strongest carrying capacity in China, the rocket will receive functional examinations and further tests before launch.

According to the SASTIND, the Long March-5 integrates top space technologies, including non-toxic environmentally-friendly fuel and a highly stable controlling system, representing a landmark in the country's carrier rockets.

(http://www.globaltimes.cn/content/1014535.shtml)