CHINA

High-tech center rises in Guizhou's mountains

By **LEI XIAOXUN, YANG JUN** and **WANG XIAOYU** in Guiyang

A rags-to-riches story is always riveting, and when the main character is a province with 36 million people from 18 ethnic groups, the tale is all the more inspirational.

Guizhou province, once a byword for a landlocked location and backward development, has transformed into Western China's big data hub.

Few foresaw this development. Less than a decade ago, more than one in four Guizhou residents was classified as impoverished. The factors that constrained economic development for decades — mountainous terrain that obstructed interregional connectivity, distance from trade ports and a lack of local talent — seemed insurmountable.

The province's blend with big data has been a surprise. In recent years, high-technology projects and companies have tended to cluster in the southern and eastern coastal provinces that boast mature industry chains for high-level manufacturing, making them places college graduates and experienced professionals prefer to settle down.

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> **Ma Ningyu,** head of Guizhou's Big Data Development Administration Bureau

To quench the thirst for new development opportunities, Guizhou has taken local conditions into account and discovered the value hidden in its "weaknesses".

Though situated in the southwestern hinterland, the province is far from major seismic belts at home and in adjacent regions. Few tremors of a magnitude greater than 3.1 have been reported in the province, thus lowering the earthquake risk to large data centers.

The rolling mountains and deep valleys, a typical headache for the construction of transportation networks, endow the province with a temperate climate that drives down the huge cooling costs shouldered by data companies. Guizhou's average annual temperature is 15 C.

Compared with other data storage hot spots prized for their cool climates, such as the Inner Mongolia autonomous region in the northwest, Guizhou enjoys good air quality that eliminates the need for air purifiers in giant server rooms.

Meanwhile, thanks to bountiful energy resources and accelerated construction of internet infrastructure, the province can cater to the demands of power-hungry data companies at a relatively low price.

Guizhou's industrial and economic development still lags behind the traditional economic powerhouses, but the province is leading the race in terms of using and parsing data to innovate and improve livelihoods.

From hailing trucks and selling agricultural produce, to predicting floods and offering government services, big data is being introduced to a growing number of sectors in Guizhou.

"The growth rate for the province's digital economy has been ranked first nationwide for five consecutive years," said Ma Ningyu, head of Guizhou's Big Data Development Administration Bureau.

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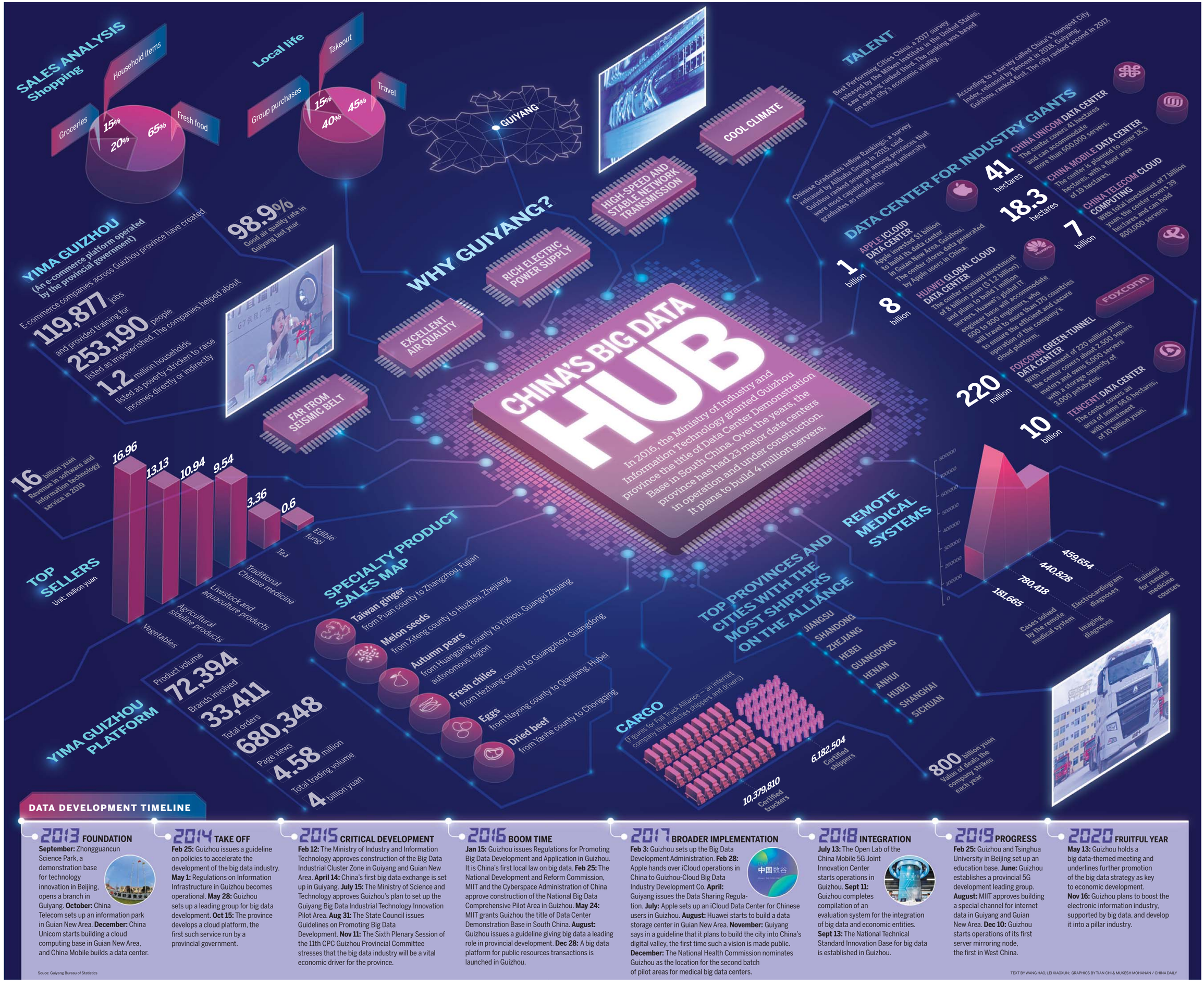

DATA DEVELOPMENT TIMELINE

2013 FOUNDATION

September: Zhongguancun Science Park, a demonstration base for technology innovation in Beijing, opens a branch in Guiyang. **October:** China Telecom sets up an information park in Guian New Area. **December:** China Unicom starts building a cloud computing base in Guian New Area, and China Mobile builds a data center.

2014 TAKE OFF

Feb 25: Guizhou issues a guideline on policies to accelerate the development of the big data industry. **May 1:** Regulations on Information Infrastructure in Guizhou becomes operational. **May 28:** Guizhou sets up a leading group for big data development. **Oct 15:** The province develops a cloud platform, the first such service run by a provincial government.

2015 CRITICAL DEVELOPMENT

Feb 12: The Ministry of Industry and Information Technology approves construction of the Big Data Industrial Cluster Zone in Guiyang and Guian New Area. **April 14:** China's first big data exchange is set up in Guiyang. **July 15:** The Ministry of Science and Technology approves Guizhou's plan to set up the Guiyang Big Data Industrial Technology Innovation Pilot Area. **Aug 31:** The State Council issues Guidelines on Promoting Big Data Development. **Nov 11:** The Sixth Plenary Session of the 11th CPC Guizhou Provincial Committee stresses that the big data industry will be a vital economic driver for the province.

2016 BOOM TIME

Jan 15: Guizhou issues Regulations for Promoting Big Data Development and Application in Guizhou. It is China's first local law on big data. **Feb 25:** The National Development and Reform Commission, MIIT and the Cyberspace Administration of China approve construction of the National Big Data Comprehensive Pilot Area in Guizhou. **May 24:** MIIT grants Guizhou the title of Data Center Demonstration Base in South China. **August:** Guizhou issues a guideline giving big data a leading role in provincial development. **Dec 28:** A big data platform for public resources transactions is launched in Guizhou.

2017 BROADER IMPLEMENTATION

Feb 3: Guizhou sets up the Big Data Development Administration. **Feb 28:** Apple hands over iCloud operations in China to Guizhou-Cloud Big Data Industry Development Co. **April:** Guiyang issues the Data Sharing Regulation. **July:** Apple sets up an iCloud Data Center for Chinese users in Guizhou. **August:** Huawei starts to build a data storage center in Guian New Area. **November:** Guiyang says in a guideline that it plans to build the city into China's digital valley, the first time such a vision is made public. **December:** The National Health Commission nominates Guizhou as the location for the second batch of pilot areas for medical big data centers.

2018 INTEGRATION

July 13: The Open Lab of the China Mobile 5G Joint Innovation Center starts operations in Guizhou. **Sept 11:** Guizhou completes compilation of an evaluation system for the integration of big data and economic entities. **Sept 13:** The National Technical Standard Innovation Base for big data is established in Guizhou.

2019 PROGRESS

Feb 25: Guizhou and Tsinghua University in Beijing set up an education base. **June:** Guizhou establishes a provincial 5G development leading group. **August:** MIIT approves building a special channel for internet data in Guiyang and Guian New Area. **Dec 10:** Guizhou starts operations of its first server mirroring node, the first in West China.

2020 FRUITFUL YEAR

May 13: Guizhou holds a big data-themed meeting and underlines further promotion of the big data strategy as key to economic development. **Nov 16:** Guizhou plans to boost the electronic information industry, supported by big data, and develop it into a pillar industry.

Soucе: Guiyang Bureau of Statistics

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