

jobbing, тобто розширення посадових обов'язків компанії та заохочення співробітників до виконання роботи, що виходить за рамки змісту посадової інструкції, що і є майбутньою тенденцією. У найближчі десять років буде запущено повною мірою концепцію управління ефективністю, що має більш широке й ефективне значення, ніж атестація. Інакше кажучи, управління ефективністю більше враховує відповідність між людиною та організацією, а не просто відповідність між людиною та посадою, «м'які» аспекти, такі як індивідуальні здібності та відносини. Поведінкові індикатори, фокус не тільки на оцінці, але й на плануванні та зворотному зв'язку. Трансформація китайської моделі управління людськими ресурсами завершила перехід від транзакційного до стратегічного управління людськими ресурсами, перетворилася на виконання окремої функції кожного модуля, зосередження уваги на загальній функції та інтеграції її в організаційну стратегію організації.

### Література:

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### AI'S ROLE IN CHINESE CITIES' CLUSTERIZATION IN THE GLOBAL GEOECONOMIC SPACE

**Key words:** AI, a city cluster, urban processes, economic development.

There have recently appeared a number of indices that aim to estimate the importance of Artificial Intelligence (AI) in cities as the latter is becoming increasingly important for them due to many different reasons.

One of them, is the Intelligent Cities Index China, which provides a ranking of Chinese cities according to their activity in the emerging field of Artificial Intelligence [6]. It is becoming a useful tool for decision-makers and stakeholders who want to utilize AI's advantages in their activities in the economic, social, environmental, and educational sectors of the national economy [1].

AI can automate and optimize various urban processes, from traffic management to waste collection, leading to more efficient use of resources and reducing operational costs.

AI can analyze data, that cities generate from sensors, cameras, and other IoT devices, in real-time to inform decision-making, helping city administrators to respond quickly to issues and plan for the future more effectively. AI can enhance public services like transportation (through smart traffic control, predictive maintenance of infrastructure), healthcare (predictive analytics for public health, personalized medicine), and public safety (crime prediction and prevention), monitor and reduce air pollution, optimize energy use, and manage water resources more effectively [2]. Utilizing different applications, AI can lead to a better quality of life for residents by reducing traffic congestion, improving air quality, ensuring faster and more efficient public services, and enhancing safety and security [5, 7].

The Index is based on 10 indicators and presents the sum of four individual rankings, comprising:

- enterprise activity,
- research proficiency,
- infrastructure readiness,
- government engagement

The Intelligent Cities Index China divides cities into six clusters. These clusters have distinct profiles and correspond to the major economic regions of China and reflect the historical development of the country [4].

The Intelligent Capital comprises Beijing as the capital of the People's Republic of China and the world's third most populous city. The city has a rich cultural heritage and has seven UNESCO World Heritage Sites including the Forbidden City, the Temple of Heaven and parts of the Great Wall.

Beijing's Zhongguancun area (also known as China's Silicon Valley) is close to two of China's most prestigious Universities, Peking and Tsinghua, as well as the Chinese Academy of Sciences. The city has 91 Universities in total and is expanding opportunities in cooperation with international universities and high-tech firms.

Major industries in the city are services, high-tech, manufacturing, construction, agriculture, mining. Such companies as Baidu; ByteDance which operates TikTok being one of the world's most valuable unicorns with

over 800 million daily active users; Cambricon (builds processor computer chips for cloud servers); Didi (provides app-based transportation services) and others.

**The East Coast Challengers:** The three coastal cities of Shanghai, Nanjing and Hangzhou build a strong intelligent cities cluster with strengths in all aspects of the Index. Shanghai and Hangzhou feature in the Top 6 of all four individual rankings. While Nanjing has particular strengths in the research sector, Shanghai is strong in the AI enterprise space with a growing AI start-up sector.

**The Giants of the South Coast:** The two Guangdong province cities, Shenzhen, Guangzhou, are located in the ‘Greater Bay Area’ of the Chinese South-East. They are known as hotbeds of innovation and growth. Not surprisingly they have strong AI enterprise sectors, as well as government engagement and enabling infrastructure. They are lacking significant research capacity however.

As a high-tech centre Shenzhen is home to some of the most influential tech companies, most notably the online conglomerate Tencent, as well as globally renown drone manufacturer DJI, both of which are leaders in the AI space. For many years the region was associated with imitation – shanzhai – products but is referred to increasingly as China’s Silicon Valley. Major industries of the city are hi-tech, finance, logistics and cultural industry [6]. Thus, such famous startups and tech firms originated in Shenzhen:

- Huawei, the world’s largest telecom equipment maker, is headquartered in Shenzhen. The company launched a powerful AI processor in 2019 and invests heavily in AI research.

- Tencent Holdings Limited is a Chinese multinational investment holding conglomerate. The company’s dedication has as one of its slogans, “Make AI everywhere,” and focuses on research and applications of AI, particularly in cloud services.

- DJI is the world’s leader in commercial and civilian drone industry, accounting for over 70 percent of the drone market. DJI has partnered with Microsoft to increase the AI capabilities of its drones.

- Ping An Insurance is the world’s largest and most valuable insurer, worth AU\$320 billion. Ping An claims its A.I. can read 54 distinct “micro-expressions” to determine whether loan applicants are lying.

**The Rising Centre:** Wuhan, a city in China’s central regions, stands out as a symbol of the area’s ambitions. It ranks in the top six in three out of four categories, showing particular prowess in AI research and infrastructure. Wuhan is actively drawing in AI startups and has already persuaded top AI companies to establish their secondary headquarters there.

**The Industrial Northeast:** Harbin and Shenyang, two cities in Northeastern China, are recognized for their long-standing industrial

heritage. Both have developed significant capabilities in AI research. Harbin boasts a premier university-level AI research department, while Shenyang has made substantial investments in its innovation ecosystem.

The Developing West: In the Western regions of China, Xi'An and Chengdu have emerged in the top ten of the Intelligent Cities Index. Both cities excel in AI research, with Xi'An hosting three distinguished universities engaged in AI research. These cities have fostered an environment conducive to AI research, enhancing industry activities. They have also eased residency restrictions to attract and retain AI talent. In summary, China is treating AI development with the same level of importance as a lunar mission. Since 2015, AI has been a top priority for the nation, and its current involvement in this field extends from earlier science and technology strategies. Additionally, the division of cities into clusters helps both distinguish challenges that the areas face and support them in their development.

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## **ДРАЙВЕРИ ІННОВАЦІЙНОГО ПРОВАЙДИНГУ ШТУЧНОГО ІНТЕЛЕКТУ В КИТАЇ ТА СВІТІ**

**Ключові слова:** штучний інтелект, інноваційні технології, драйвери, провайдинг.

На думку вітчизняних науковців, саме штучний інтелект сьогодні є каталізатором багатьох економічних і технологічних процесів в Україні та світі, тож від забезпеченості інноваційними розробками, зокрема на основі штучного інтелекту, багато чого залежить в післявоєнному відновленні економіки нашої країни. Саме тому на фундаментальне місце у відновленні економічних процесів виходить вивчення досвіду країн – світових лідерів щодо інноваційних технологій та штучного інтелекту та визначення драйверів їх впливу та впровадження в пріоритетних областях національної економіки. У цьому контексті ми проаналізували сучасні можливості Китаю та інших країн.