



The City as Creative Platform:
**New Urban Centres of
Creative and Digital Services**



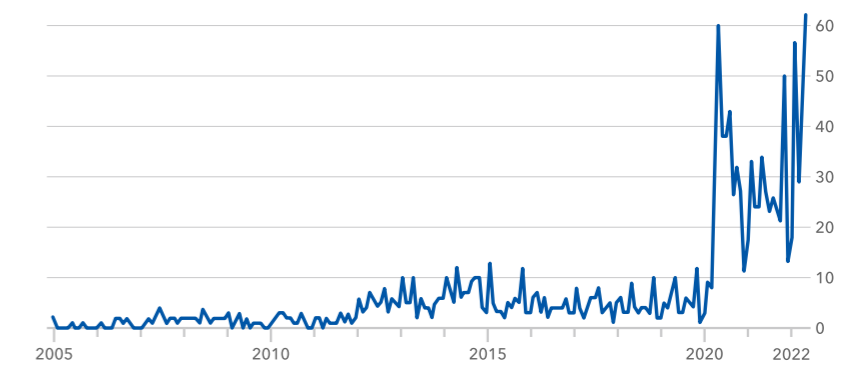
Section 1

In the Hand of the Inevitable?

In a speech in Washington, D.C. in 2019, ex-British prime minister Tony Blair declared that 'globalisation is a force of nature, not a policy; it is a fact.' His words were echoed at a recent global economic Summit by Condoleeza Rice when she said that "Globalization is a fact, not a policy." But, in the tailwinds of the global pandemic the rhetoric of global business leaders had shifted gear into a discussion of deglobalisation with a recent FT survey showing that mentions of nearshoring, onshoring and reshoring on company earnings calls and investor conferences had grown exponentially. ¹

Corporate talk of deglobalisation has hit a new high

Mentions of nearshoring, onshoring and reshoring on company earnings calls and investor conferences* (monthly)



*data from 9,000 companies globally
Source: Sentio

¹ <https://www.ft.com/content/7e528bba-e5b6-41f3-9626-69904618253a>

For many cities, so reliant on the flows of global trade, and largely often responding to the trends in the economic, political and business cycle, this condition threatens to undermine decades of growth, of opening up, and of social and cultural progress.

However, the World Economic Forum has recently argued that international travel and trade are returning to pre-pandemic levels and “the world seems to be ready for re-globalisation. Socioeconomic life is gradually returning to normal” and that “governments worldwide are unveiling new initiatives to attract foreign businesses, capital and talent.”² And they have specifically made the case that cities will have a crucial role in the rebooting the global system of trade and exchange.

Cities play a pivotal role in the global economy, serving as vibrant hubs of commerce, culture, and innovation. Over the years, these urban centres have evolved in conjunction with the global system of trade and exchange, acting as the nodes of the global economy. One striking feature of that trend and that underscores their importance is the global expansion of the creative sector, which is has followed in the footsteps of the financial services sector in reshaping the global economic landscape. This highly globalised dimension of city economies means that whatever the prevailing trend the outcome for cities requires greater examination.

Cities as natural attractors for culture and creativity

The Globalization and World Cities Research Network (GaWC) index of global cities provides a valuable framework for understanding the significance of cities in the global economy. It categorizes cities into different tiers based on their connectivity, economic influence, and global reach. This index highlights the critical role of cities as nodes in the complex network of global economic interactions.

Historically, the financial services sector has been at the forefront of globalization, with cities like New York, London, and Tokyo serving as major financial centres and continuing to maintain their dominance in global cities rankings³, such as those compiled by AT Kearney.

² <https://www.weforum.org/agenda/2023/04/why-global-cities-will-drive-the-new-wave-of-globalisation/>

³ <https://www.kearney.com/industry/public-sector/global-cities/2022#:~:text=The%20top%20four%20cities%20on,in%20the%20years%20to%20come.>

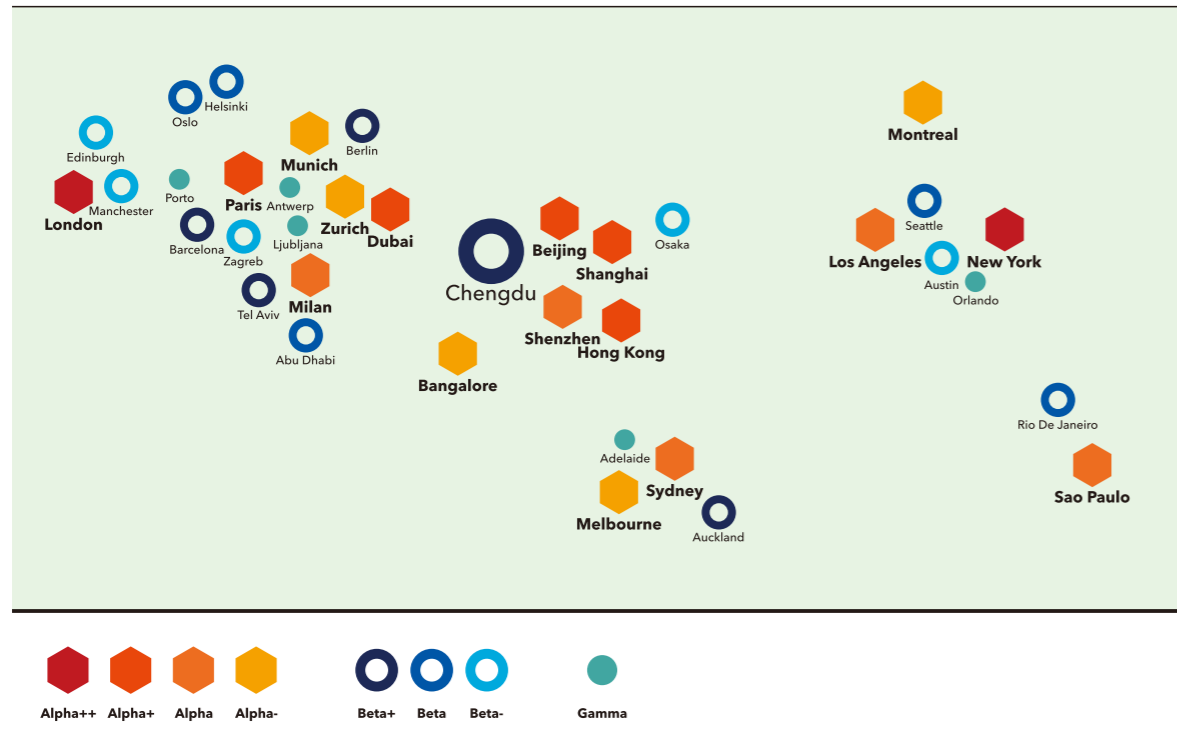
The top 30 cities in the Global Cities Index

City	2022 rank	2021 rank	2020 rank	2019 rank	2018 rank	2017 rank	Δ '21-'22
New York	1	1	1	1	1	1	0
London	2	2	2	2	2	2	0
Paris	3	3	3	3	3	3	0
Tokyo	4	4	4	4	4	4	0
Beijing	5	6	5	9	9	9	+1 ↑
Los Angeles	6	5	7	7	6	8	-1 ↓
Chicago	7	8	8	8	8	7	+1 ↑
Melbourne	8	12	18	16	17	15	+4 ↑
Singapore	9	9	9	6	7	6	0
Hong Kong	10	7	6	5	5	5	-3 ↓
Brussels	11	16	14	12	10	11	+5 ↑
Washington,D.C.	12	14	10	10	11	10	+2 ↑
Seoul	13	17	17	13	12	12	+4 ↑
Berlin	14	13	15	14	16	14	-1 ↓
San Francisco	15	11	13	22	20	23	-4 ↓
Shanghai	16	10	12	19	19	19	-6 ↓
Sydney	17	15	11	11	15	17	-2 ↓
Toronto	18	20	19	17	18	16	+2 ↑
Madrid	19	19	16	15	13	13	0
Boston	20	21	21	21	24	21	+1 ↑
Moscow	21	18	20	18	14	18	-3 ↓
Dubai	22	23	27	27	28	28	+1 ↑
Amsterdam	23	22	23	20	22	22	-1 ↓
Frankfurt	24	24	28	28	29	29	0
Buenos Aires	25	32	25	24	25	26	+7 ↑
Barcelona	26	28	26	23	23	24	+2 ↑
Munich	27	26	24	32	32	36	-1 ↓
Istanbul	28	27	34	26	26	25	-1 ↓
Montreal	29	29	29	29	27	27	0
Vienna	30	25	22	25	21	20	-5 ↓

Source: Kearney 2022 Global Cities Report

These cities have been engines of global finance, facilitating capital flows, investment, and trade on a massive scale. The GaWC also identifies groupings of smaller, but no less significant "beta" cities which often punch above their economic weight and grow larger than their domestic markets in the globalized economy. This phenomenon is facilitated by several key factors, including the vast scale of worldwide markets and the nature of technology, which allows businesses to expand and cater to global demand.

THE GaWC INVENTORY OF WORLD CITIES



It is important to explore the nature of the changing economic dynamic. As the global economy resets into a new mode following the global pandemic, to what extent will the creative sector of cities play a significant role in that process of rebooting trade and facilitating growth and which cities are the key players in that story?



02

What are the features of a digital/creative city hub?

Creative Nodes of the global economy

The creative sector encompasses a wide range of industries, including media, entertainment, advertising, design, and technology. With the digital revolution and changing patterns of media consumption, the creative sector has gained prominence as a driver of economic growth and innovation. Cities like Los Angeles, New York, and London have become global hubs for the entertainment and media industries, fostering the creation of content that resonates with audiences worldwide.

The importance of creative services in the next wave of globalization is underscored by the changing nature of media consumption. With the rise of streaming platforms, social media, and digital content, the demand for creative content and expertise has grown exponentially. Consumers worldwide are increasingly interconnected through digital channels, creating opportunities for creative industries to reach global audiences.

Cities are at the forefront of this transformation, serving as hotbeds of creativity and innovation. They provide the infrastructure, talent, and cultural diversity necessary to drive the creative economy. As creative services continue to expand globally, cities are vying for a position on the global stage, seeking to attract creative talent, companies, and investments.

Cities are natural attractors for culture: they draw in ideas, audiences and artists in pursuit of opportunity and like-minded creative expression, and as such, they are crucibles of culture and creative economy. In this respect they are supported by their key characteristic of "large numbers of people living in close proximity and in relative density, in centres characterized by social diversity and under conditions of the dynamic social change accompanying urban growth".³ As argued in a British Council paper on the soft power of cities, "it is this concentration, or congregation of human activity, energy and ingenuity that brings a space to life and gives it a distinctly urban character. [...] Cities are social melting pots, centres of economic innovation, political engagement and cultural interchange."⁴



Key Features of Creative and Digital Hubs [Introducing the Case Studies]

BOX 1

- 1 Access to Global Markets:** In the digital age, geographical boundaries are no longer significant barriers to entry for businesses. Smaller cities can access worldwide markets with relative ease, thanks to the internet and digital platforms. They can tap into consumer bases spanning continents, enabling them to reach a global audience from their local base of operations.

[From our cohort of cities, Manchester has established itself as a vibrant hub for the creative industries. Its MediaCityUK complex, for instance, hosts international media companies and fosters collaboration in the fields of broadcasting, digital content, and creative technology. The city's global connections have attracted creative talent and international investments, contributing to its cultural vibrancy.]
- 2 Scale of Worldwide Markets:** The sheer size and diversity of global markets offer tremendous growth opportunities. Smaller cities can identify niche markets or unique selling propositions that resonate with international consumers. By specializing in specific products or services, they can differentiate themselves and attract customers globally, even if their domestic market is limited.

[From our cohort of cities Barcelona is renowned for its smart city initiatives. It actively collaborates with global partners to develop innovative solutions in urban planning, sustainability, and technology. These efforts have not only enhanced the city's reputation as a centre for innovation but also fostered economic links with other smart cities worldwide.]
- 3 Technology and Innovation:** Technology plays a pivotal role in levelling the playing field for smaller cities. Digital tools, e-commerce platforms, and cloud-based services empower businesses of all sizes to operate efficiently and scale rapidly. This allows start-ups and entrepreneurs in smaller cities to compete on a global scale, offering innovative solutions that can disrupt established industries.

[From our cohort of cities, smaller cities such as Tel-Aviv, Berlin, Austin and Bangalore all rank in the top 20 of the 2023 Global Startup Ecosystem Index, alongside the likes of London, Paris, San Francisco and Shanghai.]

- 4 Global Supply Chains:** Smaller cities can become integral parts of global supply chains. By specializing in certain aspects of production or logistics, they can offer cost-effective solutions to global businesses. As supply chains become more interconnected, smaller cities can find their niche as key players in the global economy.

*[From our cohort of cities **Bangalore** is often referred to as the "Silicon Valley of India" due to its specialization in information technology and software services. It serves as a significant node in the global IT supply chain, providing software development, IT consulting, and outsourcing services to businesses worldwide.]*

- 5 Talent Attraction:** Smaller cities can attract talent from around the world. A dynamic, diverse workforce is essential for innovation and growth. Smaller cities can position themselves as attractive destinations for both local and international talent, fostering a culture of entrepreneurship and innovation.

*[In our cohort, Cities such as **Barcelona, Manchester** have strong established reputations as homes for international talent ranking alongside alpha cities such as London and Paris in the Everis Talent Index of European Cities. ⁴]*

- 6 Global Networking:** Participation in global networks, trade associations, and hosting global conferences, allows smaller cities to establish connections and partnerships with other international cities and commercial players. These networks can open doors to global markets, investments, and collaborations that and build long-term economic partnerships which enhance economic growth.

*[from our cohort of cities, **Chengdu** has embraced international art and cultural exchanges through initiatives like the Fortune global Forum "Chengdu Biennale", Tianfu Symposium 31st Summer Universiade, World Cities Culture Forum Tianfu Symposium, City Ideas Global Conference, and collaborations with multiple global cultural institutions such as the Hong Kong Palace Museum, the V&A and many others. These efforts have not only enriched the city's cultural scene but also established it as a cultural bridge between China and the world, attracting tourism and fostering artistic creativity]*

- 7 Agility:** Smaller cities often have the advantage of agility and adaptability. They can respond quickly to market changes, emerging trends, and consumer demands. This nimbleness can be a competitive advantage when competing on a global scale.

*[From our cohort of cities **Tel-Aviv** demonstrates significant agility, it has built a thriving start-up ecosystem, often referred to as "Silicon Wadi." The city's innovation-driven culture has attracted investors and entrepreneurs from around the globe, resulting in economic links and technological breakthroughs in sectors such as cybersecurity and artificial intelligence.]*

03



Section 3

Trends in Digital Technology -Creative Opportunities for Cities

Creativity and Digital Technology is Powering Growth

For many years now, the cities that have been recognised for their fast-growing creative industries and flourishing culture have also been those with corresponding strengths in the digital economy, with high levels of technological innovation and connectivity. It is at the intersection of arts, culture and technology that much of the innovation, creative experimentation and economic growth is taking place.

For established creative industries, such as music and film, much of the growth in the last twenty years has come from the disruption and adoption of digital production tools and distribution platforms, transforming the way in which creative content is produced, distributed and experienced. The digital distributors of creative content, such as Amazon, Tencent and Apple, are themselves becoming major commissioners, investing considerable amounts in new works from smaller creative agencies, producers and studios. Across the world, and particularly in Asia, the growth in digital content is most clearly seen in video games. China has risen to become the second largest market in the world for video games⁵, second only to the US, and the biggest in terms of estimated gamers. Growth is projected to continue at just under 10% per annum and is most pronounced in mobile gaming, in which China is the world leader.

As well as transforming existing industries, it is also leading to entirely new forms of creative content. In particular, the coming together of high-speed connectivity, increased processing power and advanced creative production tools has enabled huge interest and investment in immersive entertainment - that is, a range of technologies and production methods that create computer-generated content and environments that users can interact with, giving them the sensation of being in a virtual world. The range of experiences known as immersive media range from virtual reality (VR) through to various forms of augmented reality (AR) depending on the level and type of immersion. Taken together, the global market for immersive content is expected to be worth \$144bn by 2032, with an annual growth rate of more than 20%⁶.

⁵ <https://www.statista.com/outlook/dmo/digital-media/video-games/china>.

⁶ <https://www.marketresearchfuture.com/reports/immersive-technology-market-12127>



Digital Infrastructure and the roll-out of 5G

The rapid growth of the creative economies in many cities is underpinned by the telecommunications infrastructure - broadband cable and now increasingly 5G. This is particularly the case with those cities that have invested heavily over the last decade, and which have sought from the outset to integrate digital telecommunications as part of urban planning and development. In many cases, it has been the nations and cities of Asia that have led the way on digital infrastructure, with the expansion of cities and new neighbourhoods incorporating telecommunications provision. According to the OECD, South Korea, for instance, has the highest percentage of fibre optic broadband connections in the world⁷ at more than 80%, compared to 17% in the US and an OECD average of 30%.

It is with the advent of 5G that Chinese cities in particular are expected to excel and become dominant digital economy hubs over the forthcoming decade. Recent years have seen extensive investment in 5G infrastructure and the announcement of ambitious rollout plans. As a result, according to the European Commission⁸, the number of 5G base stations and subscribers in China is significantly higher than Europe or North America, and coverage is expected to further significantly increase over the next five years⁹.

⁷ Source: OECD, <https://www.oecd.org/digital/broadband/broadband-statistics/>

⁸ <https://5gobservatory.eu/observatory-overview/international-5g-scoreboard/>

⁹ <https://www.statista.com/statistics/1119453/china-5g-base-station-number/>

Table: International Comparison of 5G roll-out
(figures taken from European 5G Observatory)

	China	Japan	USA	EU
Approx number of 5G base stations	1,850,000	50,000	100,000	256,000
5G base stations per 100,000 people	132	40	30	57
Number of 5G subscribers	357 million	14 million	79 million	31 million
5G subscribers as proportion of population	25%	11%	21%	7%

Up until now, the principal benefit of 5G has been faster and more reliable mobile internet connections for users. But the transformative potential of 5G lies more in enabling the connectivity of a vast range of devices, making it the basis for such technologies as the Internet of Things, wearable devices and cloud computing. It is here, also, that new creative possibilities will open up within urban landscapes. In Seoul, for instance, the launch of the 5G network running on the subway system has been accompanied by funding from the South Korea government to test out new AR experiences and creative entertainment on the network.

For producers of audio-visual content, the roll-out of the 5G network in cities offer a range of creative and commercial opportunities - ranging from new arts and entertainment products to remote learning applications. Mobile users will be enjoying internet connections some ten times faster than existing, 4G enabled devices, and the richness of the content and speed of interactivity will make for a qualitatively different experience. People will be able to interact in virtual environments with far less delay than has previously been the case, and without the lagging problems that can often mar the experience.

The New Cultural Infrastructure

The cultural infrastructure of cities is being adapted and reimagined in response to these technological advances and the expectations of modern consumers and visitors. For centuries, cities have provided museums, public libraries, theatres and concert halls for citizens. Alongside these has been the emergence of new creative centres that provide space and resources for the production and exhibition of digital art projects and installations. Such centres usually cover a range of functions and cannot be easily classified by traditional art forms. Rather, they encompass immersive experiences, performing arts, film and mixed media, visual arts and audio.

These digital arts centres tend to be equipped with a suite of technologies and facilities. A by no means exhaustive list of these includes: high-definition LED screens, live streaming, motion tracking and performance capture, spherical mapping, holographic projections, interactive environments and surround sound. In many cases, the latest institutions, such as the East Kowloon Cultural Centre in Hong Kong, serve as both venues and sites for creative production. As well as attracting audiences and visitors, they are also advanced creative production facilities, often linked to universities and undertake R&D activities, deliver education programmes and bring together artists and technologists to develop new creative projects.

At the same time, more established cultural venues are being digitally enhanced in order to provide new experiences and improve the accessibility for citizens. This is the case even for those more traditional museums, focused on arts, crafts and heritage, which do not usually have a contemporary focus. In Seoul, for instance, the Metropolitan Government is overseeing the Smart Museum Initiative, a major programme of investment intended to digitally transform its leading museums and historic monuments. The kinds of new experiences that such museums are offering include virtual reality experiences based around collections, GPS-based augmented reality games that allow visitors to explore historic sites in new ways, and dedicated spaces in which visitors can experience 3D performances and surround sound.





The City as Creative Platform

The combination of creativity and digital technologies provides a new opportunity for cities to project themselves, both to citizens and the wider world. But alongside it comes a threat. The rapid increase in the uptake of devices, improvements in displays, greater connectivity and the proliferation of media channels has also meant that audiences have been not only digitalized but also displaced and diminished. This is a process that was accelerated as a result of the COVID-19 pandemic and accompanying public health restrictions, which hugely reduced the cultural output and participation of many cities. Many citizens got into the habit of not only working online at home, but also spending their leisure time streaming content and ordering delivered food, rather than going out to socialise and take part in the cultural life of the city they live in.

As cities have emerged from the lockdown, it is vital that digital technologies are used not to escape city life, but rather to make the most of it. The application of VR/AR technologies and the development of immersive content are actually most impactful not when consumed at home alone, but rather as shared experiences which can help to reimagine existing buildings, or else as provide a means of animating public spaces and exploring the urban realm.

From this perspective, the cityscape itself can be thought of as a platform - a space in which artists, film makers, creative producers, games designers and authors can use digital tools in order to project artworks, multimedia installations and participative dramas and games. In recent years, cities such as Hong Kong have demonstrated what is possible with the projection of large-scale artworks onto the surface of iconic buildings, while the 'playable city' concept has originated from Bristol in the UK into a network of cities, including Seoul, Tokyo and Melbourne - all of which use digital artworks, interactive installations and video gaming to help bring their cities to life. For cities such as Chengdu, with its strong digital infrastructure, renowned cultural heritage and high levels of 5G mobile connectivity there are excellent opportunities to use the latest technologies to animate the cityscape, showcase the city's creative vitality and encourage civic participation.

Emerging from Lockdowns

While the pandemic initially cast a shadow over globalization, the resurgence of demand for culture and creative services highlighted the enduring human need for cultural expression, connection, and entertainment that transcends national borders. This resurgence underscores the adaptability and resilience of the creative industries in responding to changing global dynamics and emerging opportunities. As the world continues to navigate the post-pandemic landscape, culture and creativity are likely to remain central drivers of global connectivity and engagement.

The COVID-19 pandemic undeniably had a profound impact on the process of globalization. In its wake, there was a notable slowdown, as countries grappled with travel restrictions, disrupted supply chains, and economic uncertainty. City economies suffered as international activity ground to a halt, notably in areas such as tourism, business conferences and international student which showed dramatic decline. In the case of student numbers, in some instances such as London, numbers reducing by more than half.¹⁰ At that moment many questioned the future of globalisation itself. However, a remarkable resurgence of demand for culture and creative services globally emerged as a testament to the enduring power and resilience of globalization.

The pandemic-induced slowdown in globalization was initially characterized by a focus on national interests, the re-evaluation of supply chain vulnerabilities, and a shift towards more localized production and sourcing. International travel and trade faced unprecedented challenges as borders closed, and economies shrank. This led to a temporary contraction in the global economy, particularly affecting sectors like manufacturing and traditional services.

Amid this challenging backdrop, a notable transformation was occurring in the demand for culture and creative services. The pandemic accelerated several trends that were already underway, such as increased digitalization, remote work, and the rapid growth of online entertainment and content consumption. People around the world sought solace, connection, and entertainment through digital platforms, leading to a surge in demand for creative content, streaming services, and cultural experiences that transcended geographic boundaries.

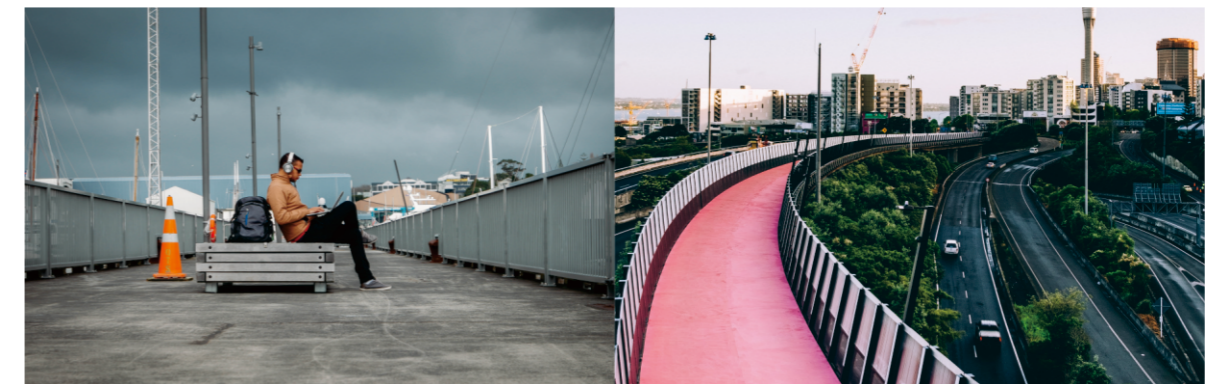
- 1 **Digitalization and Remote Work:** The pandemic forced businesses and individuals to embrace digital technologies for work, communication, and entertainment. This digital shift created new opportunities for creative professionals and content creators to reach global audiences.
- 2 **Content Consumption:** With more people spending time at home, there was an increased appetite for digital content, including streaming movies, TV shows, music, podcasts, and online gaming. This surge in demand created new markets and opportunities for creative industries.
- 3 **Virtual Events and Experiences:** The events industry pivoted to virtual formats, enabling cultural events, conferences, and exhibitions to reach global audiences like never before. This expanded access to cultural experiences irrespective of physical location.
- 4 **E-commerce and Online Marketplaces:** The e-commerce boom during the pandemic provided a global platform for artists, artisans, and creative entrepreneurs to showcase and sell their products and services to a worldwide customer base.
- 5 **Cross-Cultural Influences:** As people worldwide consumed content from different cultures and backgrounds, cross-cultural influences and collaborations became more prevalent, fostering a sense of global interconnectedness.
- 6 **Innovation in Creative Services:** The need for innovative approaches to content creation, marketing, and branding in the digital age created a growing demand for creative services, from graphic design and video production to digital marketing and branding.

The success of a creative and digital hub depends on the collective efforts of government, businesses, educational institutions, and the local community to create a nurturing environment for creativity and innovation. Cities serve as the backdrop and catalyst for a variety of cultural activities, business initiatives and ecosystem-building for creativity & innovation. Whether it's established creative capital London or growing cultural hub Chengdu, cities are playing an important role in perusing such success.



Auckland, New Zealand

- City population: 1.44m
- % of national population: 28%
- GDP per head (US dollars): \$47,660 (for 2022)
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta +
- Ranking on BOP500 Cultural Infrastructure index: 11
- Ranked universities on QS ranking: University of Auckland 87th, Auckland University of Technology =486th
- Part of UNESCO Creative Cities Network for Music





Although Auckland is not New Zealand's capital, it is its largest city, accounting for more than a quarter of the country's population. It is a multicultural city, with more than 40% of its people having been born overseas, and has large Asian and Pacific Islander communities. Its coastal location and the attractive surrounding countryside and islands are important parts of the city's appeal, helping it to be New Zealand's most popular city for tourists. The city has a high quality of life, and was even ranked the world's most liveable city in 2021 by the Economist Intelligence Unit. It has some notable cultural attractions, including the Maritime Museum and the Auckland Art Gallery.

Auckland is also the major economic and financial centre for New Zealand, producing around 40% of the country's GDP. Its particular strengths, compared with the rest of the country, include insurance, telecoms and internet services, finance, and information media services. It is the country's largest cargo port.

The creative sector is even more concentrated, with Auckland accounting for just under half (49%) of creative sector employment in New Zealand. In 2019, creative firms made up 5.2% of all Auckland's businesses, 3.2% of its GDP and 3.6% of its employment. Creative firms tend to be small, and the majority of creative employment is found in Waitemata, the area of Auckland that includes the central business district.

The largest sub-sector among creative employment is design: advertising, graphic design and architecture. This sub-sector makes up 43% of the total. The next largest is screen production (TV and film). However, the fastest-growing sub-sector between 2009 and 2019 was software publishing, where employment grew at more than 30% a year, though from a low base.

Auckland plays a prominent role in New Zealand's film industry, being a production centre for work such as the Amazon series *Lord of the Rings: The Rings of Power*. It is also home to several games studios, including Grinding Gear Games, RocketWerkz and Ninja Kiwi.

The city has drawn up a vision document for its creative sector's future: Creative Auckland 2030. Its goal is for Auckland to become a global creative capital by that date. It aims to increase the number of creative industry jobs in the city by 9,000 and focuses on five broadly defined sectors: convergent creative content (film, TV, immersive tech, interactive digital and gaming), the Māori creative economy, creative technology, the Pacific creative economy, and music. For each focus area there are a number of targeted actions, activities, initiatives and programmes, which are reviewed annually.

Tel Aviv-Yafo

- City population: 467,000 (1.4m in wider economic area)
- % of national population: approx. 5%
- GDP per head (US dollars): \$42,600
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta+
- Ranking on BOP500 Cultural Infrastructure index: 92
- Ranked universities on QS ranking: Tel Aviv University = 260th
- Part of UNESCO Creative Cities Network for Media Arts



Tel Aviv-Yafo (Jaffa, the old port) is the economic and tech centre of Israel. It is a city with a relatively young population that prides itself on being an open, liberal city – it is sometimes described as the 'party capital' of the region. The city's economy has particular strengths in banking, finance and insurance, real estate, law and high tech. It is a significant player globally in finance – the Global Financial Centres index ranks Tel Aviv 57th worldwide. It is also a sizeable tourist destination, attracting around 2.5m visitors a year.

The city plays a central role in Israel's internationally-renowned tech sector. It is by far Israel's leading city for start-ups and is the heart of the area sometimes called Silicon Wadi. A combination of factors helped drive this tech growth initially, including civilian adaptation of military technologies, at which Israel excels – military service is compulsory for young Israelis – and the migration of scientists and engineers from the former Soviet Union in the 1990s.

The city now has much 'soft' infrastructure that supports start-ups, such as venture capital funds and entrepreneurship networks, as well as deep connections to the United States. It has attracted many foreign firms to set up R&D facilities there – a 2022 study reported that more than 130 multinationals had innovation hubs in the city. Tel Aviv's current tech strengths are reported to be in AI, big data and analytics, cybersecurity and the life sciences.

Although the city's culture seems to be thriving, Tel Aviv does not seem to pay particular attention to the creative sector. Its 200-page Strategic Plan (from 2017) sets out the city's ambitions for itself up to 2035. It has four 'strategic courses', the first of which, A Metropolitan and National Economic and Cultural Centre and Global City, has only one significant mention of creative businesses: a short section entitled 'Encouraging the establishment of innovation hubs that will house various creative enterprises and artists and foster cross-fertilization, creative spillovers and new ideas'. Otherwise, its mentions of arts and culture are mostly focused on creating or maintaining cultural infrastructure and support for artists and performers, and on culture's role in improving the city's appeal to both residents and tourists.

Nevertheless, Tel Aviv is the media capital of Israel, being home to its three largest newspaper companies and its two major TV networks. (In recent years Israel has developed a growing reputation for TV drama production.) Tel Aviv also has a number of gaming companies, among them Plarium, Overwolf and Playtika.



Bangalore, India

- City population: 8.4m
- % of national population: approx. 0.6%
- GDP per head (US dollars): \$2,600
- Ranking on Loughborough University's GaWC index for advanced producer services: Alpha-
- Ranking on BOP500 Cultural Infrastructure index: 119
- Ranked universities on QS ranking: Indian Institute of Science = 155th

Bangalore is India's third most populous city and the capital of Karnataka state. It is often called the 'Silicon Valley' of India, reflecting its importance to the country's IT industry – the city accounts for 38% of IT exports. Several of India's best known tech firms began in Bangalore, among them Infosys, Wipro Technologies and Flipkart. The city's economy has many other strengths. It is an important centre for aerospace and defence companies, for heavy engineering firms (many of which now incorporate high-tech in their activities) and is a major semiconductor hub. It is also a centre for newly emerging clusters in, for instance, biotechnology.

Bangalore is also sometimes known as the Garden City of India, reflecting its plentiful parks and greenery. It benefits from a mild climate (by Indian standards) owing to its altitude on the Deccan plateau. It has a relatively well-educated population and is comparatively prosperous. Bangalore is home to several public research institutes, among them the Indian Institute of Statistics, the Indian Academy of Sciences and the National Aerospace Laboratories. These factors help to explain why the city has become a major centre for R&D work by multinationals, including Google, Microsoft, IBM and Adobe.

Indian governments, whether national or local, have historically offered little direct support to culture and creative industries, focusing instead on preserving the country's rich cultural heritage. This, though, has not prevented some successful industries emerging. Bangalore's most distinctive role in this respect is as the home of the Kannada film industry, which makes around 200 films a year. However, the increasingly digital dimensions of culture have brought more attention, with the central government driving the Digital India project and interest from both domestic and foreign firms in the size of India's consumer market for digitally-delivered products. Bangalore, as India's leading centre for IT/telecoms firms, will have a major role to play in this future. Among the multinationals with bases there are several from the media, entertainment and publishing sectors, including Zynga, Pearson, Time Inc. and Rockstar Games.

Austin, USA

- City population: 975,000 (2022), 2.2 mil Austin metro area(2023)
- % of national population: 7%
- GDP per head (US dollars): \$63,839 (for 2017)
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta-
- Ranking on BOP500 Cultural Infrastructure index: 55
- Ranked universities on QS ranking: University of Texas at Austin =58th



Austin is the capital of Texas USA, one of the fastest-growing cities in the US, attracting a diverse population and a youthful vibe, with a significant number of young professionals and students. It is recognized as a top tech hub "Silicon Hills" in the US with growing tech industry, start-up ecosystem, major multinational corporates, and a skilled workforce. Austin's unofficial motto, "Keep Austin Weird," reflects its commitment to embracing individuality and supporting small unique local businesses. Austin prides itself on being a hub for innovation, creativity and a heaven for tech enthusiasts and artists alike.

Austin's economy is robust and dynamic. A number of Fortune 500 companies have headquarters of regional offices in Austin, including Tesla, Oracle, Apple, Google, Meta (Facebook), IBM, Intel, Amazon and many more. The city is also emerging as a hub for pharmaceutical and biotechnology companies, ranked as #3 emerging life sciences cluster in the US. In addition to attracting large corporates to the city, Austin is also acknowledged for its support of entrepreneurship and small businesses, making it an attractive destination for start-ups and entrepreneurs.

In addition to tech and innovation, Austin is well-known for its vibrant cultural and creative scene, including its music & entertainment, film, gaming, and media production. Thanks to its numerous music festivals, music venues and a thriving community of musicians, the city is often celebrated as the "Live Music Capital of the World". The South by Southwest (SXSW) festival and Austin City Limits Music Festival brought international attention to this hub for music and cultural events. Austin has a strong theatre culture with dozens of itinerants and resident companies producing a variety of work.

Austin 2030 Plan set the goal for climate protection and sustainability. To solidify its status as a national and global innovation hub, city government provided policies and incentives to attract talent, start-ups and established tech companies. Austin designated specific areas as innovation districts as well as preserved historic neighbourhoods to support cultural traditions and local artists. Austin Technology Incubator (ATI) was a well-known start-up accelerator program associated with the University of Texas at Austin. It provided mentorship, resources, and networking opportunities to tech start-ups, helping them grow and succeed.

Montreal, Canada

- City population: 4.3 mil Montreal metro area(2022)
- % of national population: 11%
- GDP per head (US dollars): \$36,217 (for 2022)
- Ranking on Loughborough University's GaWC index for advanced producer services: Alpha-
- Ranking on BOP500 Cultural Infrastructure index: 9
- Ranked universities on QS ranking: McGill University =31th
- Part of UNESCO Creative Cities Network for Design



Montreal is a dynamic and culturally rich city with a unique identity that reflects its history and diversity. Montreal is known for its bilingual and multicultural character, its identity is deeply rooted in its French heritage, its diverse demographic makeup, and its strong economy with a focus on technology, culture, and research make it a vibrant and dynamic place to live and do business. Montreal embraces its status as a vibrant and cosmopolitan metropolis.

Montreal is a major economic hub in Canada, known for its contributions to technology and innovation, arts and culture, and advanced manufacturing. Its advantageous industries include artificial intelligence, aerospace, cultural creative industries, biotechnology and pharmaceuticals. Montreal has become a leading AI research and development centre, with AI-focused companies and academic institutions leading the way in cutting-edge research and applications. Montreal boasts world-class universities, such as McGill University, fostering leading research and innovation in various fields, like life sciences and engineering.

Montreal's vision to become a World Hub of Digital Creativity centers on positioning the city as a global leader in the digital and creative sectors. Montreal leverages its strengths in technology, creativity and culture to drive economic growth, job creation and international recognition. Film production, music, gaming, digital media are shaping a thriving cultural scene. Its bilingualism attracts international talent and foster innovation through collaboration between English and French-speaking communities.

Montreal is an internationally recognised home for festival and events, including the Montreal International Jazz Festival, Just for Laughs comedy festival, MUTEK International Electronic Music and Digital Creativity Festival, attracting global attention and showcasing local talent. Montreal is a popular tourist destination and has received recognition for its tourist attractions, historic sites, and cultural experiences. The 1 km² Quartier des Spectacles is Montreal's cultural heart, encompassing 8 public spaces, 40+ performance hall, over 40 exhibition spaces and several cinemas.

Public and private partnerships have been the commonly approach in supporting innovation, entrepreneurship, digital skills training, and cultural export. Various government-funded programs offer grants, subsidies, and tax incentives to creative and tech companies to stimulate production, innovation, and content creation. Montreal fosters collaboration by creating shared workspace, innovation hubs and cultural districts. Both Quebec and Montreal government launched a number of programs and initiatives to assist creative companies in exporting their digital content and services to global markets, C2, HUB Montreal, This Is Quebec, and Digital Creativity Quebec are just a few programs in promoting Montreal's international reach.

By implementing these policies and initiatives, Montreal aims to create a thriving ecosystem where technology and creativity converge, fostering digital innovation, entrepreneurship, and artistic expression.



Manchester, United Kingdom

- City population: 553,000 (2.73m in Greater Manchester)
- % of national population: approx. 0.8%
- Approx. GDP per head (US dollars): \$35,275 (in 2021)
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta-
- Ranking on BOP500 (Cultural) Infrastructure Availability index: 74th
- Ranked universities on QS ranking: University of Manchester 32nd, Manchester Metropolitan University=590th
- Part of UNESCO Creative Cities Network for Literature

Manchester sees itself as the capital of northern England and has, in recent decades, acquired a reputation as a centre for creative and digital industries. This began with its distinctive music and club scenes, which reached a peak of public recognition in the 1980s, centred around the Hacienda nightclub and bands like New Order and The Smiths. The long post-industrial decline of the city (especially its city centre) began to reverse in the 1990s, which led to significant redevelopment of the city centre. A series of high-profile events, most notably the Commonwealth Games of 2002, and the revival in fortunes of its best known football club, Manchester United, drew further attention to the city, and the creative sector was identified as a key prospect for future growth. Manchester

was already the home of an important TV company, Granada, which made Britain's longest running and most popular soap opera, Coronation Street, among many other programmes. In 2006 it was chosen by the BBC as the location of its second HQ. The site in the Salford Quays, now known as MediaCityUK, has become the focal point of a media cluster in the city. The most recent major cultural development is Aviva Studios, a huge new venue for arts, music and special events, built at a cost of £240m.

Such developments have helped the city centre revive, and boosted local creative businesses and attracted incoming firms. Apart from the BBC, the city has also attracted the likes of Mediacom and Dentsu Aegis. The city-region is the largest creative and digital cluster in the UK outside London and the South East of England. Figures produced in 2021 suggested Greater Manchester had 19,000 digital, creative and tech companies, and that 156,000 people worked in digital or creative roles.

Other data suggests that the most important sub-sector is 'IT, Software and computer services', which makes up around half of both employment and business numbers. Advertising, architecture and design are also significant sub-sectors. The vast majority of firms are very small, though: 85% employed fewer than five people, and only twenty creative industry firms employed more than 250 people each.

However, Manchester is still a comparatively poor city by British standards and its economic recovery from industrial decline remains incomplete. Outside the city centre and Salford Quays, the creative and digital base is relatively small. The challenge for the future is to encourage such growth in these other parts of the city.



Berlin, Germany

- City population: 3.57m
- % of national population: 4.3%
- Approx. GDP per head (US dollars): \$51,000
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta+
- Ranking on BOP500 (Cultural) Infrastructure Availability index: 6th
- Ranked universities on QS ranking: Free University of Berlin 98th, Humboldt-University of Berlin 120th, Technical University of Berlin =154th
- Part of UNESCO Creative Cities Network for Design

Berlin is another city that has been transformed in recent decades. Since the restoration of Berlin as the capital city of a united Germany, it has become a more typical large city.

In the 1990s, for all its significance, Berlin was a relatively poor place by German standards. Its Cold War past had left many neighbourhoods depopulated and the collapse of industry in the East led to high unemployment. Some of these abandoned spaces became home to a vigorous nightlife, with trendy bars and techno clubs such as Berghain establishing themselves and attracting visitors from across the world. By the early 2000s the cool image the city had established (its Mayor famously described Berlin at the time as 'poor but sexy') started to attract creative and digital entrepreneurs. Combined with the resources coming from government to rebuild the city as the national capital and firms moving there to be close to Germany's new centre of political power, the economy has revived significantly. The city has become a major European start-up hub, behind only London on some rankings.

Berlin is now a major creative centre. It has more than 55,000 creative and media companies employing around 300,000 people. It is home to the (German) HQs of Axel Springer AG, Universal Music Germany, Paramount, Netflix, Sony Deutschland and Zalando, among many others.

Within the overall total for the creative sector, Berlin has some particular strengths. In fashion, it is home to around 4,800 companies of sufficient significance to be able to support its own Fashion Week, held twice a year. The city is regarded as the leading centre in Germany for music with around 1,500 firms employing some 15,000 people. Publishing is another important sub-sector. The city has 160 book publishers and 260 periodical publishers among a wider sub-sector of 3,900 firms and 18,000 staff.

Berlin is also an international centre for video games and esports. It is home to a mix of indie and international studios, with around 270 companies employing more than 3,000 people.

Film and TV is a big creative employer. The wider Berlin-Brandenburg capital region is reported to be home to more than 5,000 film and TV companies, employing around 48,000 people.

Despite this already substantial presence, the city's boosters argue that one legacy of the city's history is that it still has plenty of under-used physical spaces for creative businesses to expand into, making it an appealing location for such firms.

Barcelona, Spain

- City population: 1.66m in 2020 (almost 5m in metro region)
- % of national population: 3.5%
- Approx. GDP per head (US dollars): \$50,600 (in 2018)
- Ranking on Loughborough University's GaWC index for advanced producer services: Beta+
- Ranking on BOP500 (Cultural) Infrastructure Availability index: 47th
- Ranked universities on QS ranking: Autonomous University of Barcelona =149th, University of Barcelona =164th, University Pompeu Fabra =310th, BarcelonaTech (UPC) 354th
- Part of UNESCO Creative Cities Network for Literature



Barcelona too can trace its recent success back to a major event; in its case the hosting of the 1992 Olympic Games, one of the most successful Games of the modern era. The regeneration of several decaying parts of the city helped to kickstart a period of economic growth and made the city hugely appealing to tourists. Barcelona also has a distinctive culture, being the capital of Catalonia and the focal point of Catalan political identity. It also has been home to important 20th century artists, such as the painter Joan Miro and the architect Antoni Gaudi.

Barcelona's forward-looking approach to urban planning has continued in the years since the Olympics. One notable example was the creation of @22, a district for high technology businesses, that has attracted creative software and video games companies among others. Barcelona has also built up a reputation as one of Europe's leading start-up hubs, with particular strengths in mobile tech and e-commerce (according to data from 2018).

Turning to the creative and digital sector, Barcelona has around half of all the creative jobs in Catalonia, somewhat more than its share of general employment. The sector accounted for 147,000 jobs in 2019, 13% of jobs in the city then. The main concentrations of employment were found in the central districts of Eixample and Sarria-Sant Gervasi.

The largest sub-sector was 'software, video games and electronic publishing', which accounted for 50,000 creative jobs in 2019. It was followed by architecture, design, and advertising, each of which employed around 18,000 people.

The list of the sub-sectors in Barcelona with the highest share of Catalan employment is somewhat different. Software, advertising, and publishing in the city each have around two-thirds of their sub-sector's jobs in Catalonia, while 'cinema, videos and music' has 60%.

While still a successful city, Barcelona has faced challenges in recent years. It is an unusually compact and densely populated city, which means residents are often in tension with visitors over noise, congestion, and new factors like the role of Airbnb in the property rental market. The turbulent politics of Catalonia in the last few years have added to this sense of pressure, to which the city is now trying to respond.

04

Section 4

Beyond Commonality

While Creative platforms share a number of economic characteristics, they each have grown to prominence through their own distinct differences and strengths. Here we focus in greater detail on the specific features of Chengdu and its relation to other Chinese city economies.

Special characteristics of Chengdu's Creative Economy

In the case of Chengdu, China's historical cultural city and provincial capital in Sichuan, the city has emerged as a hub for the creative economy with outstanding performances among major cities in mainland China. The city demonstrates its unique specialisms and characteristics which are beyond above-mentioned commonalities.

Here are 5 characteristics of Chengdu's cultural landscape and digital creative industries.

- 1 **Chengdu's Rich Cultural Heritage:** Chengdu boasts a rich cultural heritage with historical tourist attractions dating back thousands of years. Traditional elements like Sichuan Opera, calligraphy, music, and tea culture have played a pivotal role in shaping the city's unique identity known as Tianfu Culture. This cultural legacy fuels a vibrant cultural tourism sector, drawing visitors from around the world.
- 2 **Coexistence of Tradition and Innovation:** Chengdu is a captivating cultural destination where ancient traditions seamlessly coexist with contemporary creativity. The city's ability to integrate traditional culture with modern design and innovation sets it apart, offering an array of attractive products and unique experiences to both residents and tourists.
- 3 **Emerging Tech and Innovation Ecosystem:** Chengdu has made significant strides in fostering an enabling ecosystem for innovation. Positioned as a key hub for technology development, the Tianfu New Area in Chengdu provides favorable policies, funding support, and physical infrastructure to attract high-tech industries, research institutions, startups, and established businesses, driving innovation and economic growth.
- 4 **Livable City and Quality of Life:** Chengdu consistently earns the title of "China's Happiest City" for its exceptional quality of life. As a new Tier 1 city in China, Chengdu's commitment to improving living standards has yielded remarkable results. Residents enjoy access to affordable housing, a strong public school system, quality healthcare, and a safe, clean community. The city's relaxed, leisurely pace of life is a key factor in its reputation as one of the most livable cities in mainland China.
- 5 **Cultural Attractiveness and Artistic Vibrancy:** Chengdu is increasingly drawing young professionals and artists to make it their homebase. The city's vibrant cultural and art scene, including museums, music, and performing arts, offers rich assets and activities. With a growing number of music festivals, engaging cultural events, and thriving nightlife offerings, Chengdu's creative environment attracts and retains talent. Additionally, the renowned Sichuan Conservatory of Music fosters musical talent, contributing to the city's artistic vitality. Chengdu's differences with Shanghai, Beijing, Shenzhen.

Chengdu is a growing centre of digital and creative services in China. It is one of a cohort of Beta global cities in China who are becoming important centres of digital and creative innovation. It's essential to note that each creative and digital hub may have its own unique strengths and characteristics that make it stand out in specific industries or niches.

Apart from sharing those commonalities with global digital hubs, Chengdu's excellence in their specialism and characteristics enables them to have a much greater global influence, ensuring their comparability with Alpha Chinese cities or Tier 1 cities, namely Beijing Shanghai and Shenzhen.



Table: Benchmarking Chinese Major Culture Creative Cities

	Chengdu	Shanghai	Beijing	Shenzhen
Location	Provincial Capital in West China	Coastal city in East-Central China	National Capital in North China	Special Economic Zone in South China
City Positioning	World Beta+ City, Liveable Garden City, emerging World Culture City	World Alpha+ City, Global Metropolis	World Alpha+ City, Global Digital Economy Benchmark City	World Alpha- City, Tech & Innovation City
Historical and Cultural Identity	Rich cultural heritage, fusion of tradition with modern creativity	Cosmopolitan & int'l outlook, global business & financial hub	China political & cultural capital, strong traditional Chinese culture	Tech & innovation hub, growing tech-led creative scene
CCI - GDP Contribution	10.9%, 2022	13%, 2022	11%, 2021	8%, 2022
Economic Focus	Both cultural creative industries and tech-driven innovation	financial focus, private & foreign investment, 70%+ service sector	Government-related activities Cultural institution, traditional arts	Technology, IT, digital innovation, Export hardware & electronics
CCI Sub-sector Specialization	Design, media film& tv, fashion, music, animation, games, museum, events, advertising Information service	Digital creative industries, film & TV, Art fair, performing art, eSport, design	Traditional arts. design, media, publishing, games entertainment, museum, art fair cultural thinktank	design, software animation & games, tourism, printing, new media, cultural information
Government Key CCI Policy	Chengdu 14 th 5Y Plan for Digital CCI Chengdu Devel't Plan for World Culture City	Shanghai CCI 50 Initiatives, Shanghai 14th 5Y Plan for Global Metropolis	Beijing 14 th 5Y Plan for Culture and Tourism, Beijing CCI 18 Initiatives	Deep integration of Culture & Finance, Action Plan on Digital Creative Cluster(2022-2025)
Collaborative Ecosystem	Emphasizes cross-sectoral collaboration, traditional +modern	Encourages collaborations with global creative players	Strong ties with gov-sponsored cultural institution & research org.	Focus on tech-driven innovation, Giant leaders eg Tencent, Huawei

	Chengdu	Shanghai	Beijing	Shenzhen
Global Integration	Emerging world cultural city, keep Investing in global connectivity	gateway to int'l market, extensive global connectivity	democratic ties, political impact, national cultural soft power	part of global supply chain in tech hardware leader in R&D
Global Urban Competitiveness¹¹	#54 global, 2019	#10 global 2019	#17 global, 2019	#4 global, 2019
2021 Digital CCI Development¹²	#5	#2	#1	#4
Disposal Income per Capita 2022	¥47,948 /y # No.22 in China	¥79,610 /y #No.1 in China	¥77,415 /y #No.2 in China	¥72,718 /y #No.3 in China
Housing Affordability¹³	#22	#1	#2	#3

In summary, while Chengdu, Shanghai, Beijing, and Shenzhen all contribute to China's creative and innovation landscape, they have distinct identities and focus areas. Chengdu stands out for its emphasis on creative content, cultural fusion and sustainability, while the other cities have their unique strengths, be it international connectivity (Shanghai), political influence (Beijing), or tech-driven innovation (Shenzhen). Chengdu's development as a cultural creative and innovation hub is shaped by its regional identity and diverse creative ecosystem, as well as its ambition and a clear goal to specialise as a global creative platform.

¹¹ China Academy of Social Sciences, UN-Habitat: Global Urban Competitiveness Report 2019-2022

¹² Chengdu Cultural Industry Development Promotion Center commissioned a 3rd party to assess the major Chinese cities in their development of digital cultural creative industries. The index consists of 5 indicators - industry baseline, talent pool, tech innovation, product competitiveness, market consumption, and 13 sub-indicators such as number of enterprises, number of clusters/business parks etc. Chengdu ranked No.5.

¹³ National Academy of Development and Strategy, Renming University. China Housing Affordability Research Report 2020. The ranking reflects the city's index of average housing price vs average income ratio. <http://nads.ruc.edu.cn/docs/2021-01/5d5b75cab43e44f995e84dda7a7ba319.pdf>



Chengdu's Potential and Challenges in Becoming a Digital Creative Hub

Chengdu has been emerging as a potential digital creative hub in recent years. This transformation is driven by several factors, including its vibrant culture, innovative spirit, government support, a growing tech-savvy population, and the seamless blend of tradition and modernity. These factors have contributed to its emergence as a dynamic digital and creative hub in China and Asia.

1 Cultural Capability

- Cultural Heritage and Tourism:** Chengdu's rich cultural heritage and its ability to blend tradition with modern creativity provide a unique foundation for the development of a digital creative hub. Its cultural richness, contemporary experiences and the trendy lifestyle make Chengdu a popular destination for both domestic and international travelers, providing opportunities for creative professionals in many creative and digital services.

- Growing Innovation Ecosystem:** Chengdu has demonstrated a growing entrepreneurial spirit, particularly in the tech and start-up sectors. The city's supportive ecosystem for innovation and entrepreneurship can attract and nurture talent, fostering digital creative endeavours. Additionally, the growing convergence of culture and technology contributes to Chengdu's emerging innovation ecosystem, which empowers the city's capacity in generating innovative and globally appealing content and products.
- CCI Dynamic Chain and Cross-sectoral Collaboration:** Chengdu is paying increasing attention to the development of cultural clusters and creative communities which is backed up with a supportive business environment. CCI development model has been shifted from sector-focus growth to the cross-sectoral coordination and collaboration between technology, culture, and other industries. This interdisciplinary approach is potentially shaping Chengdu's overall competitiveness in CCI clustering ecosystem.
- Competitive Advantage and Key CCI Sub-Sectors:** 8 sub-sectors of cultural creative industries has been identified as key industries in Chengdu's creative economy, namely creative design, animation & gaming, fashion, music & arts, museum & gallery, events and advertising, media film & TV and cultural equipment. Chengdu enjoys competitive advantages in digital creative industries, namely audio-video content, online literature, digital music, digital art, gaming and e-sports.
- Evolving Infrastructure with Locality and Chain-Linkage:** Chengdu continues to invest in its infrastructure and cultural assets, particularly in form of cultural district, creative cluster, CCI demonstrator, tech park, innovation hub, co-working space, as well as CCI facilities like studio, R&D centre, incubator & accelerator. As of 2023, the city has developed 404 urban new cultural spaces with a total 9.68 million square meters dedicated for cultural creative clusters. Local features, chain-linkage and international resources have been integrated into its ambitious strategic CCI landscape.
- Strategic Location with Access to Massive Consumer Market:** Serving as a gateway to western China, Chengdu enjoys its strategic location for digital creative companies with an easy access to a massive consumer market, and a young diverse audience for cultural and arts professionals. With a legacy in a matured media and film & tv sectors, Chengdu has huge potential to tap into the emerging market of digital content, eg. short video, live streaming, virtual production, and even AI generated content.



Chengdu faces certain challenges that need to be addressed for it to fully realize its potential.

2 Challenges

- **Industry Competition:** Data shows that Chengdu is relatively less competitive than Alpha cities in attracting leading cultural creative enterprises, investment and “cluster projects”. Regardless of cultural districts and clusters being developed over the years, the level of CCI chain-led industry concentration and the supporting business environment needs to be further strengthened.
- **Post-Covid Resilience:** Covid-19 hit hard on Chengdu's culture & tourism, as well as small media-sized creative businesses. In the post-Covid era, the economic downturn at city level and national scale negatively impacted the CCI's growth. However, the city and its people demonstrated strong resilience in the cultural and economic recovery. The emerging capacity of digital content productions for short videos, live streaming covers the loss in some sectors.
- **Funding and Investment:** Most of Chengdu's cultural creative sectors rely on local consumption which was dropped significantly during and post-Covid. The shortage of cash flow threatened creative businesses in large scale. Some of the investment had to stop or postpone due to lack of capital. City government shall work closely with financial institutions and investors to offer access to risk capital, public funds and financial resources to start-up and scale-up businesses.

- **Talent Attraction and Retention:** The innovation cluster narrative is rooted in people. Chengdu boasts several prestigious universities and technical institutions, producing a steady stream of talented graduates in creative fields. However, influential entrepreneurs and individuals are less emerged from Chengdu than other established hubs. Chengdu shall provide a conducive environment to attract and retain skilled professionals with entrepreneurial spirit.
- **International Recognition and Global Connectivity:** Though Chengdu out-performs other Chinese provincial capitals for being regarded as a New Tier 1 City, it is still far from reaching to a sound international recognition. Chengdu needs to enhance its global connectivity to facilitate int'l collaboration, like expanding international flights, hosting international events and conventions. The city shall also develop more export-oriented products to explore int'l market.

In conclusion, Chengdu has significant potential to thrive as a hub for creativity and innovation in China and beyond, thanks to its cultural richness, strategic location, tourism appeal, supportive ecosystem, government policy, growing talent pool and quality of life. However, to fully realize it potential, the city faces challenges in industry competition, talent pool, global connectivity and CCI infrastructure development.

Conclusion

Understanding the character of the City as Creative Platform

In our study of these 10 creative digital city hubs, we've identified a number of common features which enable them to excel as creative platforms. All of these cities are well placed:

- 1 As creative nodes of the global economy
- 2 To maximise trends in digital technology
- 3 To maximise shift in content production and consumption accelerated by the pandemic



These dynamics of the global economy are enabling these new creative digital hubs, which we can summarise the 'City as Creative Platform' with those distinct set of common traits and potentiality through:

- 1 **Access to Global Markets:** Smaller cities can access worldwide markets with relative ease, tapping into consumer bases spanning continents, enabling global audience reach.
- 2 **Scale of Worldwide Markets:** The sheer size and diversity of global markets mean that smaller cities can identify niche markets or unique selling propositions that resonate with international consumers.
- 3 **Technology and Innovation:** Digital tools, e-commerce platforms, and cloud-based services empower businesses of all sizes to operate efficiently and scale rapidly, allowing start-ups and entrepreneurs in smaller cities to compete on a global scale.
- 4 **Global Supply Chains:** Smaller cities can become integral parts of global supply chains. By specializing in certain aspects of production or logistics, they can offer cost-effective solutions to global businesses.
- 5 **Talent Attraction:** Smaller cities can position themselves as attractive destinations for both local and international talent, fostering a culture of entrepreneurship and innovation, by pursuing affordability.
- 6 **Global Networking:** Participation in global networks, trade associations, and hosting global conferences, allows smaller cities to establish connections and partnerships with other international cities and commercial players.
- 7 **Agility:** Smaller cities have the advantage of agility and adaptability. They can respond quickly to market changes, emerging trends, and consumer demands. This nimbleness can be a competitive advantage when

These character traits are reflected in the data when we analyse a series of indicators of creative platform strengths:

	Indicators	Austin	Auckland	Barcelona	Berlin	Manchester	Montreal	Chengdu	Tel Aviv	Bangalore
Creative Dynamism	Start-up ecosystem rank (out of 1,000 cities, based on 2022 data)	21	122	40	11	85	44	97	10	8
	Best performing sector within that ecosystem	Foodtech	Transportation	Foodtech	Fintech	Social and leisure	Hardware and IoT	Gaming and Animation	Energy and environment	Edtech
Cultural Capability	BOP500 (Cultural) Infrastructure Availability Index (rank out of 250 cities)	55	11	47	6	74	9	122	92	119
Talent	Creative industries employment share of total employment	11.4% (in 2021)	3.6% (in 2019)	13.1% (in 2019)	9% (in 2013)	4% (in 2020)	4.6% (in 2012)	4.2% (in 2022)		

Key creative/digital sectors (acc. to local inward invest. bodies)

Sectoral Strengths	Indicators	Austin	Auckland	Barcelona	Berlin	Manchester	Montreal	Chengdu	Tel Aviv	Bangalore
	Film and TV	✓	✓		✓	✓		✓		
	Advertising and marketing					✓		✓		
	Video games	✓	✓	✓	✓	✓	✓	✓	✓	
	VFX and animation	✓	✓			✓	✓	✓		
	AR/VR		✓		✓	✓	✓	✓		
	AI			✓	✓	✓	✓		✓	✓
	IoT				✓	✓			✓	✓
	Cybersecurity			✓	✓	✓	✓		✓	✓
	Music	✓			✓			✓		
	Publishing				✓					
	E-commerce	✓				✓				
	Social media / networks	✓		✓				✓		
	Fashion				✓			✓		

Our analysis of the data has shown that the continuing internationalisation of the creative economy puts these creative and digital hubs in a strong position to contribute to any return to globalised economic activity as the world economy rebounds after recent shocks. Specifically, the agility of these cities, by the nature of their size and their continued investment in technology and innovation, will be an important feature of their success. Their cultural investment will be of particular relevance in talent attraction and likely lead to their improved competitiveness with alpha global cities. Many alpha global cities are facing challenges presented by their own success as financial centres, as residential real estate market changes potentially squeeze out new economic entrants and as commercial real estate responds to challenges of new ways of working, smaller, agile cities are poised to draw talent and generate new global network as creative city platforms.

In the case of Chengdu, the city's continued investment in these creative areas and an already established a reputation and global networks, enable it to compete and collaborate with established global cities. As we emerge into a new economic reality, it is clear that hundreds of years of globalisation are not about to come to a halt, but it is likely that a new network of nodes on the global economy will grow out of technological and market trends, and Chengdu is one such city ready to make the most of the opportunity.

