

LOOK AHEAD TO 2024

WHAT'S IN STORE FOR DESIGN

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 Travel Editor

Where can I find Chinese-style durian pastries in Shanghai? How do I get to the matchmaking corner in Renmin Park from the Conrad Shanghai hotel?

Ask TripGenie. In seconds, the travel assistant powered by artificial intelligence (AI) will personalise answers for travellers in the Chinese metropolis, or elsewhere in the world.

Rollled out by online travel agency Trip.com in July, TripGenie covers multiple aspects of the journey, from itinerary crafting to immediate bookings.

"TripGenie's major differentiator lies in its ability to provide actionable responses," Ms Amy Wei, senior product director at Trip.com, said during the chatbot's unveiling.

"Unlike traditional conversation-based AI tools, TripGenie not only answers questions, but also takes users directly to relevant information."

TripGenie is among the virtual concierges now proliferating, with platforms such as GuideGeek, Roam Around and Forgemytrip also in action. Globetrotters have flocked to ChatGPT, the virtuoso of "Ask Me Anything", since its launch in November 2022.

This is still the beginning for the AI trip-planning supertrend. Only 6 per cent of travellers used generative AI tools to create itineraries in 2023.

But in 2024, the emergent cohort of Gen Gen AI (Generation Generative AI) will come of age and fully embrace the tech, predicted travel technology company Expedia Group in its recent Unpack '24 report on travel trends.

A significant number of Singaporeans (68 per cent) are interested in using generative AI to plan their next trip. They outrank American travellers (50 per cent), based on data from Expedia's poll of 20,000 respondents across 14 countries.

"What drives this trend is generative AI's ability to simplify planning and shopping through a conversation," observes Expedia, which in April announced a partnership with ChatGPT, bringing the game-changing chatbot into its app.

Global travel technology company Amadeus elaborates on AI's conversational forte: "Instead of selecting filters to fine-tune a search on a metasearch site or online travel agency, travellers can simply provide a brief to a chatbot in the same way you would a human advisor."

Enhanced, even empathetic, conversations with chatbots are likely in 2024, freeing travel employees to deliver specialised services.

As the Amadeus 2024 Travel Trends report sees it: "The next generation of generative AI-powered customer service will be delivered with greater patience and empathy, reducing the workload of employees to deal with the bulk of after-sales servicing and customer review management, giving them the bandwidth to provide the human touch on more specialist issues."

Overall, the promises and perils of hyper-personalised AI are evident to travel tech leaders.

In October 2023, the Global



Trip planning driven by artificial intelligence can save time and money. PHOTO: AMADEUS

Travel powered by AI and Taylor Swift, diminished by bugs and prices

Travel Tech Thinktank event, organised by Singapore's Web in Travel community for online travel professionals, gathered close to 60 global industry leaders to brainstorm the way forward for travel in the age of AI and tech.

They concluded in their executive summary that AI can unlock unprecedented levels of personalisation, enhance customer experience, and streamline operations.

But AI can also lead to job displacement, entrench bias in decision-making and heighten privacy concerns.

Because AI-driven travel is a supertrend, it will power other major trends, such as the search for alternatives to over-touristed destinations or the ascent of music tourism dynamically defined by American pop star Taylor Swift's The Eras Tour concerts.

Dwelling on over-tourism, Mr Subramanian Ganeshan, senior vice-president (travel distribution engineering) and centre head at Amadeus, reflected: "Citizens are up in arms in places such as Venice, Bali and Ladakh, and telling tourists not to come."

"How can we use AI and machine

learning to manage traffic flow, widen the horizon and divert tourism? It is important to get all of us together - including destination boards, local agencies, hoteliers - to bring the goodness back to travel," he said at the Global Travel Tech Thinktank.

In this light, generative AI can help to incentivise adjacent tourism spots, the conference-goers agreed. These alternatives can also be value for money, a bonus in these days of pricier travel.

Expedia highlights the "dupe" trend - affordable alternatives to popular products - that has flooded TikTok feeds and is now influencing travel.

Expedia's "destination dupes" are described as a little unexpected, some-

times more affordable, and as delightful as the tried-and-true destinations travellers love.

Dupe destinations are experiencing an uptick in global searches and these include Sapporo in Japan (dupe for Zermatt in Switzerland) and Palermo in Italy (dupe for Lisbon in Portugal).

Within the same countries, less-pricey and also-worthy dupes exist, such as England's Liverpool (dupe for London) and United States' Memphis (dupe for Nashville).

Certainly, travel spending is also influenced by mega-concerts. Think Swift's The Eras Tour, American singer Beyonce's Renaissance World Tour and British rock band Coldplay's Music Of The Spheres World Tour.

In 2024, music tourism will continue to boom.

Research from Amadeus indicates that Swift's concert dates in Singapore, Australia and Japan for 2024 had a significant impact on travel searches and booking volumes to these countries.

Among Singaporeans, 65



Travel spending is influenced by mega-concerts, such as Beyonce's (right) Renaissance World Tour and Taylor Swift's (far right) The Eras Tour. PHOTO: TAYLORSWIFT/INSTAGRAM

per cent say they will travel to watch their favourite artist perform live. "Fans are willing to travel outbound to catch their favourite artist if tickets are cheaper elsewhere (44 per cent) or are sold out in Singapore (28 per cent)," Expedia reported.

Overall, vacationers are expected to look to AI increasingly to save time and money, and to plan sharper, in 2024.

Newcomer GuideGeek, an AI-driven personal travel assistant that chats with travellers via WhatsApp and Instagram in 20 languages, points out: "The biggest barrier to ideal vacation time, planning difficulties, was cited by 1 in 3 (30 per cent) travellers, including 35 per cent of parents, who find research and planning for vacations too time-consuming."

Meanwhile, the scourge of bedbugs may also persist as an unwelcome trend. From Paris to South Korea, cities and countries have declared war on the vermin. Ask GuideGeek which destinations to avoid and its reply is positive.

"It's not about avoiding specific destinations, but rather taking precautions wherever you go."

Its 220-word response focuses on tips to minimise bedbug risks. It emphasises that infestations can occur anywhere, from budget digs to luxury resorts.

And so the travel trends of 2024 interlock, from the large language models of AI to tiny bedbugs, at a time of resurgent journeys.

TikTok's continuing pop culture domination

Yamini Chinnuswamy  
 Correspondent

In 2023, TikTok officially became the town hall of the Internet - the social media space where trends are made and broken, with a new headline in the form of the latest viral moment every other week.

There was, for instance, the "canon event" trend inspired by the animated superhero film Spider-Man: Across The Spider-Verse (2023). TikTok users have used this phrase as a platform to lament and accept unfortunate events as being important and character-building in their personal story arcs.

And following in the tradition of 2020's Dalgona whipped coffee

and 2022's butter boards, 2023 had another food-related TikTok trend take off around the world: #girl-dinner.

Girl dinners are generally some variation of charcuterie boards or snack plates arranged to look aesthetically pleasing. They took off in May when TikTok user Olivia Maher, based in the United States, posted a video showing her haphazard late-night assembly of bread, cheese, wine and grapes.

A whole "girl" universe of TikTok-driven trends followed.

July had the emergence of #girlmath - a social media moniker given to the illogical ways women justify frivolous expenses, such as spending an extra \$30 to get free shipping online.

Since August, the #tubegirl hash-

tag has amassed more than a billion views after London-based Malaysian student Sabrina Bahsoon posted a stylised video of herself bopping along to music while riding a London Underground train.

It could even be argued that TikTok was the main force in turning 2023 into the Year of the Girl.

Beyond the various girl trends, fans of superstar American musicians Taylor Swift and Beyonce took their fandom to a whole new level on the app, sharing live streams and clips of their concert tours, in addition to countless tutorials on concert outfits, dances and fan chants.

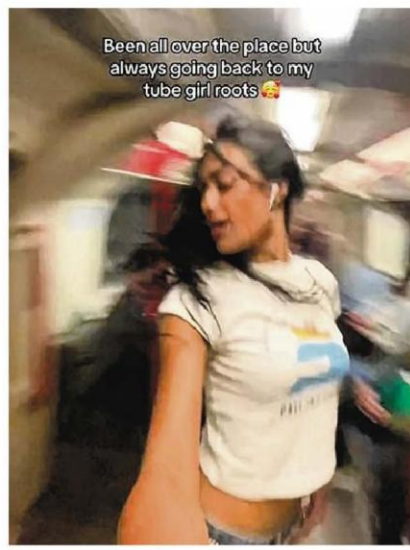
In particular, 34-year-old Swift dominated "sgtok" for a few weeks in July, as local users frantically shared strategies and commisera-

tions over "the great war" to secure tickets for the singer-songwriter's The Eras Tour concerts in Singapore in March 2024.

Tickets sold out within hours, but local "Swifties" continued to use TikTok to celebrate other developments related to the pop phenomenon, such as the release of her 1989 (Taylor's Version) record and her budding romance with American football star Travis Kelce.

TikTok's users also drove the "Barbenheimer" phenomenon in July, when two very different films - Barbie, a comedy inspired by the iconic Mattel doll, and nuclear arms biopic Oppenheimer - opened in cinemas on the same day.

Videos proliferated on the app of



Been all over the place but always going back to my tube girl roots



POV: When you go Oppenheimer and Barbie at

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## Robots to the rescue in the building industry

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Robots and robotic systems are expected to boost Singapore's building sector from 2024, judging by a slew of recent tech roll-outs.

Robots and building automation software were trotted out in September 2023 at the International Built Environment Week (IBEW), billed as the most important event in the built environment industry in the Asia-Pacific region.

Launched in 2019, the three-day event drew local and global players to network and share knowledge. The annual event organised by BCA International, a wholly owned subsidiary of the Building and Construction Authority (BCA), also featured its sister event, the BEX Asia trade show.

BEX Asia had 160 booths in 2023, showcasing 250 brands from across 14 countries.

The 2023 show focused on innovations that improved the safety and working conditions of construction workers, as well as upped the ante in the battle to reduce greenhouse gas emissions in construction.

In its latest report from November 2023, the World Business Council for Sustainable Development said that the built environment is still contributing about 40 per cent to global carbon emissions. The council comprises a global community of more than 200 of the world's leading businesses.

The report was published in collaboration with experts such as global sustainable development consultancy Arup. Several global initiatives such as the United Nations' Race To Zero seek to halve carbon emissions by 2030 for all the world's building projects.

Leveraging technology in building projects is one way to pick up the pace.

A highlight at BEX Asia 2023 was a floor tile grouting robot rolled out by Singapore start-up Fabrica.AI, co-founded by Singaporean Keeffe Wayne Teo, 26, and Czech nationals Jakub Suchanek, 24, and Ronald Luc, 26.

Manual grouting of tiles is back-breaking work which takes a toll on workers' knees. Construction workers can now simply press a button and the tile grouting does the work of five people, automatically grouting and cleaning tile gaps.

Another ground-breaking invention was Sky Wash, a safe cleaning system for buildings designed by Hong Kong-based technology company SquareDog Robotics.

It launched a robot that cleans the facades of skyscrapers. It can be operated safely from a distance by a team of cleaners, eliminating the need for workers to scale extreme heights on a gondola.

These timely tech innovations can help save lives at construction sites. In Singapore, the building industry recorded 14 deaths in 2022, according to the Ministry of Manpower.

It had the highest workplace fatality among a cluster that also included transport and storage,



which had nine deaths, and manufacturing, which had seven. Collectively, the three sectors accounted for about 65 per cent of workplace deaths in 2022.

According to Dr Xu Jingfeng, Australasia leader for digital services at global sustainable development consultancy Arup, digital technology and automation will play an important role in the building industry in 2024.

Arup is looking at how it can use digital systems and automation to push the boundaries of the building industry and develop solutions to complex problems.

"For instance, we're trialling an autonomous system for building facade inspections in Australia," says Dr Xu. "The technology involves an integrated hardware robot mounted to existing building maintenance infrastructure which surveys the facade using a range of sensors including visual, thermal, GPS and Lidar."

Lidar or Light Detection and Ranging is a remote sensing method that uses light in the form of a pulsed laser to create a precise, three-dimensional digital replica of a space.

The robot, which is permanently mounted on a building, is able to efficiently capture critical maintenance data, from changes in colour to thermal fluctuations to other points that the human eye is unable to assess. There is no need for a specialist operator, while allowing for wider scanning access, greater accuracy and better quality of capture.

"The beauty of this technology is that you can run it during regular maintenance operations like window cleaning, and it will passively record and monitor the building facade," says Dr Xu. The data collected will then be fed into an artificial intelligence (AI) model to analyse the information and point out the areas that maintenance teams need to focus on.

"It's these types of innovations that will change the nature of the industry and generate significant benefits for the way we build and

maintain infrastructure."

Over at Gensler, the world's largest architecture and design firm, there is a clear global trend towards the increased integration of robots in the construction industry, primarily driven by the pressing issue of labour shortages, as well as the potential for enhanced efficiency and safety.

The firm has more than 6,000 professionals working across 53 cities around the world.

Mr David Calkins, regional managing principal of Gensler Asia Pacific and Middle East Region, says it is crucial to acknowledge the challenges associated with integrating robots in construction.

But a big barrier is the high initial investment required for adopting robotic technologies, which can be expensive when compared with traditional construction methods. The transition to a more automated construction environment also requires a skilled workforce capable of operating and maintaining the robotic systems.

"Gensler recognises the significance of this global trend towards increased integration of robotics in construction," says Mr Calkins. "We have strategically adapted our design approach by embracing construction processes that leverage technology such as incorporating robotics into prefabricated construction methodologies."

In prefabricated construction, building components are assembled in controlled factory environments before transporting to an on-site installation. With the help of robots, the production process is streamlined, elevating precision levels far beyond what traditional on-site construction can achieve manually.

This innovative construction method not only mitigates the risk of human error, but also elevates productivity levels and optimises resource allocation, says Mr Calkins.

In 2016, Gensler also built the world's first 3D-printed office in Dubai using a massive 3D print-

er based in China which churned out modular, prefabricated structures that were assembled into an office in the Arabian desert.

"Beyond the technological marvel, this project significantly reduced labour and materials costs, offering a tangible testament to the transformative potential of tech innovations in the construction industry," Mr Calkins says.

He adds that Gensler's Design Technology team has also developed a proprietary technology suite called NForm, a blend of tools and workflows empowering designers to visually explore diverse options through computer-generated data simulations.

The latest addition to the suite in 2022 is called gFloorz 2.0, which seamlessly integrates design elements with a wide array of data sources, incorporating real-time feedback that allows dynamic exploration and delivery of bespoke design solutions for building projects.

Mr Calkins adds: "By adopting this technology-driven methodology, we not only facilitate confident and productive design exploration, but also emphasise our dedication to forging a sustainable and resilient future."

(Above) Gensler built the world's first 3D-printed office in Dubai in 2016, using a massive 3D printer based in China which churned out modular, prefabricated structures that were assembled into an office. PHOTO: GENSLER

(Below) Fabrica.AI's robot is said to do the work of five people, grouting and cleaning tile gaps at the press of a button. ST PHOTO: NG SOR LUAN



users going from one movie to the other, shedding their dark-hued outfits in favour of hot pink get-ups or vice versa.

TikTok's continued importance in the culture is notable given the 2023 entry of new social media upstarts - notably Threads, a Twitter-wannabe built by the Instagram team - and the hostilities aimed at the app by governments around the world.

The app has been accused of sharing data or having connections with the ruling Communist Party of China.

TikTok's Singapore chief executive Chew Shou Zi was grilled by lawmakers in the United States Congress in March over concerns that the app posed a national security threat to the country.

The American lawmakers did not seem swayed by the 40-year-old,

TikTok trends that took off in 2023 include #tubegirl, started by London-based Malaysian student Sabrina Bahsoon (far left), and the "Barbenheimer" (left) phenomenon. PHOTOS: SABRINA BAHSOON/TIKTOK, HAARIUS/TIKTOK

but TikTok certainly was won over, with users declaring him to be the newest "Internet daddy" - slang for a successful, attractive man.

One user even wrote: "We stan Tiktok Daddy." Stan means to be a devoted fan of something or somebody.

The sentiment is clear. TikTok and its creators have become what celebrities such as talk-show host Oprah Winfrey were for the Gen X and boomer generation: the new taste-makers and agenda setters of popular culture.

But the underlying truth of TikTok's rise is that even as some younger millennials turn 30 in 2024 - practically middle-aged in pop culture years - Gen Z has officially become the "ruling class", passing judgment on what is "fire" (cool) and "cheugy" (uncool) and curating the trends, memes and news that will dominate the world's headlines and conversations.

Market research company Insider Intelligence suggests that users aged 18 to 24 years old on the app - estimated to comprise about 18 per cent of its 1.2 billion users -

spend a staggering 79 minutes on the app daily.

Meanwhile, Gen Z's successors, Gen Alpha - born in 2010 to 2024 - are only now just hitting their teen years, but growing up in a climate where "TikTok influencer" is a real career that anyone with a smartphone and a dream can aspire to.

In its forecast for 2024, TikTok highlighted what will continue to keep the app relevant in the popular culture landscape. One asset is its multiple post formats - confessional videos, lip-synching and dance videos, and photo slideshows - which allow users to experiment and reinvent how they tell their life stories.

Another is the ability of its algorithm to organically introduce users to new, unexpected topics across geographical lines, such as #girlmath and #tubegirl.

Dr Shilpa Madan, assistant professor of marketing at Singapore Management University, says this TikTok feature has helped users from around the world better understand and learn about other cultures and perspectives - a function that will continue to serve

it well into 2024.

"Through TikTok, people can explore traditions, cuisines, music and lifestyles from around the world, fostering a greater understanding and appreciation of global diversity," she notes.

But its longevity depends on several things. "These factors include digital wellness and privacy concerns, intense competition among social media apps, regulatory issues, content moderation and misinformation, changing user demographics, and shifts in advertising trends," she says.

"Its future relevance lies in its ability to adapt to user needs, leverage its unique format for different purposes, and continue innovating in response to the changing digital landscape."

Will 2024 be the year TikTok achieves world domination? If the app can continue to evade threats, break cultural barriers and foster the creative ecosystem that gives it its unique "rizz" (slang for charisma), then it will ace the ultimate TikTok challenge of staying relevant in a world always hungry for the next viral trend.