

FROM  
FUNCTION

TO  
FEELING

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# INTRODUCTION

“The transportation experience is often thought of as a liminal space between here and there... Transforming spaces for such involves incorporating a people-centric approach that recognises human nature’s desire for community and the traveller’s desire for exploration.”

FRANÇOIS-LUC GIRALDEAU & NOOR AL QAYAM, FRAME MAGAZINE<sup>1</sup>

# Welcome

Airports are liminal spaces of transience and transition. Portals of transportation from one place to another. A surreal in-between.

Yet, airports are not empty. More than ever, they're full of people. Larger airports experience a density that feels akin to footfall in a megacity — everyone trying to move from A to B in their own way, hopefully without collision. Many cities with a swelling population are asking, how can we live well together? Rather than passengers bearing the brunt of airport growing pains, we're also curious: how can we 'do airports well' together?

Meeting functional needs is the essential first step in creating a positive airport journey. Yet because airports have been built solely with function in mind, they are also stress-inducing spaces. How can we break this feedback loop of contradictions?

**“A 1% increase in passenger satisfaction leads to a 1.5% increase in non-aeronautical revenue.”**

AIRPORTS COUNCIL INTERNATIONAL<sup>2</sup>

New traveller demographics, needs and desires are making it more apparent than ever that we need to rethink how we design these spaces — to design for feeling. A seamless airport experience from arrival to departure is vital to encouraging a positive mindset which, in the end, has a high influence on spending behaviour.

What if we could create spaces, services, and products that lower stress, increase satisfaction, and actively encourage travellers to arrive early to the airport — not for fear of missing their flight but for fear of missing out on the unique airport experience on offer?

*Airport Futures: From Function to Feeling* is the first in a series of reports by Gharage examining shifting traveller preferences and what they mean for the future of airports.

In this report, we ask: what drives passenger happiness? We explore how future airports can foster connection and inclusivity, have a positive impact on our well-being, integrate emerging technologies in meaningful, seamless ways, and enhance the magic of airports through the senses.

We include 12 strategic opportunities to pull airport futures into the present and test exciting new concepts to engage the travellers of tomorrow.

This report is just the beginning — a wide-reaching thought starter with the potential to move deeper into demographics, cultural contexts, and passenger desires.

Through this research, we want to identify what drives passenger happiness to enhance the global airport experience. However, we understand that tomorrow's traveller isn't a singular being with universal desires. So, we're curious to explore the many futures of airports.

This series will examine trends and shifts in traveller behaviour and expectations. It explores what new developments in technologies mean for airports and unfolds expert perspectives and inspiring case studies. We do this to understand future trends and innovations — and decide what insights to implement to elevate the airport experience.

We conducted a three-stage mixed-method research study that surveyed global travellers and expert stakeholders.

## EXPLORE

We started with a qualitative exploration via 9 x 45-minute interviews with experts within the airport travel sector and from different airports. The findings from these interviews informed the design of the quantitative survey.

## MEASURE

We surveyed more than 6,000 people across 12 countries (n=500 per country) to gather quantitative data. This large-scale, multi-country online survey engaged frequent travellers (aged 18+) who have taken two or more return flights in the last year.

## ENRICH

We conducted additional qualitative depth interviews to animate the numbers with rich traveller stories. We performed 45-minute in-depth interviews with 10 travellers from six countries.

## INSIGHTS &amp; OPPORTUNITIES

We want to understand what the findings mean for the future of airports. So, we identified drivers that situate the airport experience in broader social and economic contexts and considered the cultural trends emerging from the airport's multiple users. We conducted supplementary research, exploring sources from both inside and outside the airport industry, to identify innovative case studies and develop strategic insights and opportunities for the future of airports.



COUNTRIES SURVEYED (QUALITATIVE)

China, Denmark, Germany, India, Saudi Arabia, United States

COUNTRIES SURVEYED (QUANTITATIVE)

Australia, China, Denmark, Finland, Germany, India, Saudi Arabia, Singapore, South Africa, Turkey, United Kingdom, United States

# CONTEXT

# 02

“It’s very noisy in the world right now. We are drowning in content, both real and fake. We are trapped in a cult of busyness and stressed from the polycrises we exist within. New generations view travel not just as a means to escape, but as an opportunity to learn about new cultures and to spend quality time with their friends or family. They are conscious of both people and the planet in their planning.”

HELEN JOB, FORMER HEAD OF RESEARCH, SPACE10

# What's Going on

The world feels very uncertain right now, and it's clear people can often feel lost and nihilistic. Yet tomorrow's generation is continuously evolving towards a new sense of purpose — and travel is playing a key role. With changes in the world around us, what people need from travel is shifting.

These evolving needs and values mean the fly and flop holiday or all-inclusive resorts with no relationship to their destination or local communities are feeling outdated.<sup>3</sup> A new breed of traveller is interested in cultural exploration and authentic experiences, which begins at the booking process and continues until arriving back at the home airport.

## GROWING COMMUNITIES

The importance of community in difficult times can not be overstated. From super niche interest groups on social media to the growth of IRL book and chess clubs, people are seeking collective experiences that offer a sense of belonging. Travel, like other activities, is an increasingly social act, viewed as an opportunity to deepen human connection with new and familiar faces.

## INFORMATION OVERWHELM

People are overworked and overwhelmed. Shifting behaviours (increased use of technology) and information (and sensory) overload are leading to information anxiety, which makes it difficult for people to make decisions.<sup>4</sup> The travel experience could provide ways to reduce the noise and enable true disconnection — so we might see the world clearly and unfractured rather than through the filter of our devices.

## NEW JOY

What it means to treat yourself has moved from expensive luxury goods to local experiences and small indulgences that provide micro-moments of joy. Travellers want to feel awe and surprise to activate positive brain waves in new and playful ways. Magic is lacking when it comes to air travel — it's become transactional and mundane. Travel can provide awe-inspiring experiences that suspend worries, make people feel alive, and create memories that continue to spark a dopamine response long into the future.

# How this Manifests at the Airport

This manifests at the airport in a number of ways. Traveller patterns and behaviours are in flux, requiring airports to diversify their approaches and imagine new ways to engage travellers and optimise revenue. How the aforementioned social, ecological, economic, and technological trends manifest within the travel industry and, specifically, for airport contexts reveal traveller attitudes, needs, and desires – and how to intervene to drive greater satisfaction today and elevate the future airport experience.

## GROUP TRAVEL

In the age of the 90-day dinner, where young people are juggling hectic schedules, multiple group chats, and planning up to three months ahead to spend time with their closest friends, the process of planning has become an act of care.<sup>5</sup> This extends to travel and adopting a voorpret mindset, where the anticipation of the trip is almost as fun as the trip itself – which sees airports as not just a means to an end but a very important stage in the holistic experience.<sup>6</sup>

## GLOBAL-LOCAL GUIDES

Whether exploring near or far, people desire more authentic experiences when travelling. There's a desire to see and understand destinations through the lens of locals, learning about the culture from the people who shape it. Travellers are seeking hyperlocal recommendations from those who know all the best-hidden corners. This craving for more personal and intentional travel experiences can be an opportunity for airports to bring local cultures and cuisines to the fore.

## NATURAL ESCAPES

To counter stress, people are re-rooting into nature through the senses. There has been a rise in wholesome group activities like hiking, bird-watching, and foraging, as well as more inclusive outdoor adventures. This feeling of reconnecting with nature could start at the airport – embedded into the journey through biophilic design, nature-based scents, and field-recording radio stations.<sup>7</sup>

## FOURTH SPACES

The airport is, in many ways, the ultimate third space: an in-between location bridging the gap between two destinations. Yet our needs now go beyond third places – which deliver space but not meaning – to fourth places. These non-prescriptive alternative spaces suspend reality briefly, enrich social relationships, and enable people to make sense of the world and their place in it. In moving beyond pure function to an environment designed for feeling, the airport of the future could be a shining example of a holistic fourth space.

EXCITED

OPTIMISTIC

BORED

STRESSED

SURPRISED

DISSAPPOINTED

ANXIOUS

FRUSTRATED

Let's talk about feelings.

Excited, optimistic, bored, stressed, surprised, disappointed, anxious, frustrated. How travellers feel impacts their satisfaction and behaviour at the airport – and impacts spending.

Scientific research has not commonly focused on travellers' feelings. By looking at this emerging field of research, we hope to expand the breadth and depth of emotion discourse in the travel industry and offer insights for shaping a feeling-centred airport experience.

Being safe and secure remains of utmost importance to passengers, yet it's the processes that are meant to ensure this that cause passengers the most stress.

64%

Agree that the overall airport experience has declined in recent years, becoming more commercialised and less customer-friendly.

52%

Agree that the noise, lighting, and smells of an airport can make them feel stressed.

54%

Agree airports are more stressful than relaxing, even when everything goes smoothly.

71%

Agree there are too many luxury/premium stores in airports that are unaffordable.

64%

Of people want to spend as little time in the airport as possible.

18-24

Younger age groups (18-24) tend to feel more negatively while spending time at the airport.

Efficiency and seamless travel experiences are key hygiene factors contributing to passenger satisfaction.<sup>8</sup> Airports need to innovate in line with the needs and desires of their market, striking a balance between necessary convenience and elevated experiences.

94%

Of people strongly state that a nice airport experience is as important as safety and security.

91%

Of passengers want a seamless experience from start to finish.

92%

Of passengers are looking for a calm and relaxing experience.

93%

Would be happier if their basic needs were better met, including water, food, and seating.

70%

Agree that they are happy to arrive at the airport early when there are lots of things to do.

90%

Want to feel in control of their experience.

# DESIGNING FOR FEELING

# 03

Travellers want a more relaxed, comfortable, and efficient airport experience than they currently have.

Arriving early is a requirement for passengers — in case things go wrong. But what if they go right? When the points of increased stress (check-in, bag drop, security) run smoothly, passengers win back time. Extra time they haven't planned for — a calm, empty, unexpected gap in the day that brims with potential.

This could be the magic of airports. A magic space that creates extra time in a fast-paced world. So, how can we facilitate time well spent for people in this liminal zone?

# 3.1. TRAVEL FOR TRANS- FORMATION

In an age where improving user ease and efficiency is a constant driver of progress, people have come to expect spaces that function increasingly well. Stressors need to be made invisible. Services and operations need to appear effortless. But people are also expecting more from spaces and services: post-pandemic, there's a heightened need for everything we engage with to support our social and psychological needs.

When travellers encounter obstacles like subpar cleanliness, confusing navigation, or the (un)availability of toilets, they are removed from a state of enjoyment. Without these basics in place, even the most luxurious amenities or personalised services become irrelevant. Yet when an airport delivers on basic needs, this allows travellers to focus on exploring and relaxing.

We know that spaces impact how we act and what we feel and can have a positive impact on our well-being.<sup>9</sup> What if airports could raise their functionality baseline and become spaces of rest, care, and healing? Experts have noticed travellers are increasingly focusing on their well-being not just in everyday life but also while travelling. Expedia recently cited that 56% of USA study respondents liken travel to a healing activity. This was echoed in Design Hotels' latest report, which found travel is emerging as a pathway to well-being.<sup>10</sup> Additionally, according to McKinsey, Gen Z is obsessed with wellness.<sup>11</sup>

What services, experiences, or infrastructure could enhance function and feeling? So, people experience feelings of care and well-being while making the most of their time at the airport?

# Space as a Service



In our research, travellers consistently emphasise the importance of efficient security processes, clear signage, and smooth operations. Yet we also know our surroundings affect our emotional and mental well-being. Spatial design must deliver function seamlessly, but it can also go beyond this to drive positive feelings. What if we designed spaces to do more than function well? Space as a well-being service.

Airports that fail to meet functional needs are heavily criticised for their poor organisation and lack of essential facilities. In contrast, airports like Copenhagen, Changi in Singapore, and King Khalid in Riyadh are praised for their well-designed layouts and streamlined processes. Temporary and permanent spatial interventions can elevate passenger satisfaction and well-being — and optimise revenue.

ABOVE: Copenhagen Airport is Denmark's main airport and the busiest in Scandinavia. Arriving at CPH, you experience a feeling of care and comfort. The walls are home to site-specific works including 'Something in The Way We Move' by Ruth Campau, which uses the power of art to enhance traveller's experiences as they move throughout the space.<sup>13</sup>

46% of travellers currently find the airport stressful, particularly business, long-haul, and families.

China, Finland, Australia, the UK and the USA all rate airport efficiency and ease as more important than security for making the airport enjoyable.

# Rest Assured



People are seeking solace from information saturation and noise-heavy existences. Humans have a limited capacity to process and store information, and are seeking ways to limit overwhelm and enable disconnection. Rest and silence become a form of resistance, and privacy is a critical element of this.

The cult of busyness in the workplace, paired with the noise in everyday life, has led to perpetually stressed people. So, people are seeking calm and rest from travel experiences more than ever. For long-haul travellers, rest is valued above connectivity and entertainment experiences. The ability to choose from various calming spaces and experiences supports people's desire for autonomy.

When comfort level is met, passenger happiness can be fulfilled at a higher level. So, how can rest start at the beginning of the travellers' journey and not just at the arrival at the destination?

ABOVE: Elusis builds a variety of loungers and pods to elevate well-being.<sup>14</sup> Designed to support relaxation, focus, flow states, and sleep, the loungers can be paired with a generative music system that suggests personalised sonic journeys. Brainwave Entrainment technology synchronises brain activity with auditory and tactile stimuli to soothe stress.

**“We have to re-think spaces to reduce stress and encourage travellers to engage more with their environments.”**

Travellers are most willing to pay for sleep and quiet pods (23%) and say that they would prompt them to spend more time in the airport.

# Reciprocal Care



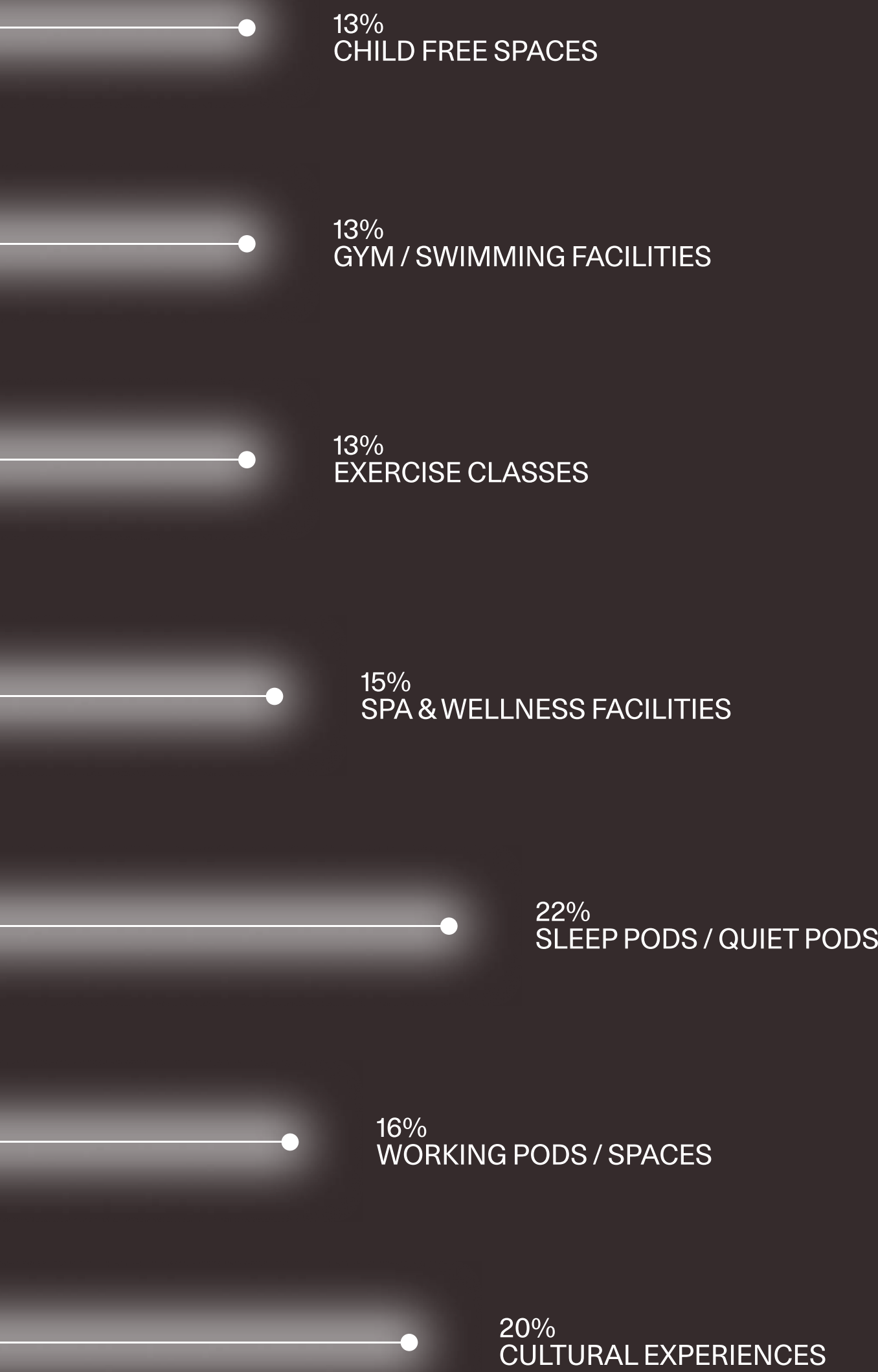
Care and consideration for all people (customers and staff) ensures ease of travel and a positive experience. From a warm, personal welcome to accessible and inclusive seating, there are many obvious and subtle ways to ensure people feel cared for.

Just because it's the airport — a liminal zone that's not really here or there — the level of quality and care shouldn't drop. If a city is known for good coffee, great food, or kind hospitality — that level of passion and respect for product and service should extend to the airport. Often, it's familiar, simple things that are the most comforting.

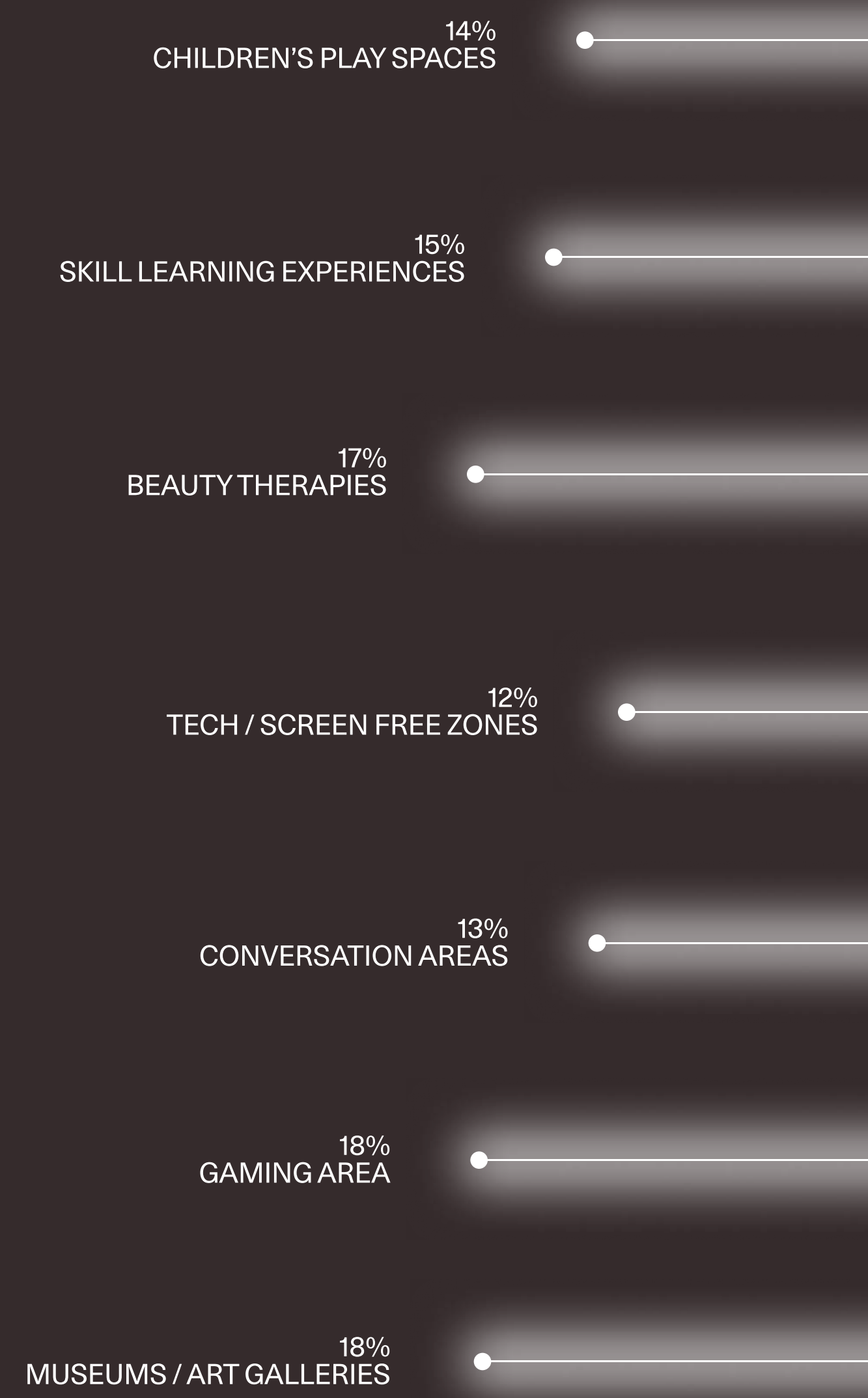
ABOVE: Guided by qualified therapists, *Walk Club* facilitates conversations on the move, designed to reduce stress, replenish energy, and boost morale.<sup>15</sup> Participants are assigned a walking partner and provided with talking prompts to ease strangers into conversation. Applied to an airport setting, the sessions could enable gentle movement before the multiple sedentary hours ahead — and give people something to think about on the flight.

Finland's Helsinki Vantaa airport performs well across atmosphere, design, and cleanliness — nailing the key drivers of passenger satisfaction.

Saudi Arabia is one of the markets most driven by unique experiences, quiet areas, and entertainment.



Travellers are seeking spaces that would encourage them to spend more time at the airport.



## 3.2. EVERYONE WELCOME

Connection is ever-lacking in our daily lives — to people, place, and nature. With increasing fragmentation and polarisation, the desire to feel part of a community and connected to our identities is higher than ever. This need for real-world connections where people can feel honesty, empathy, and togetherness is defining future customer experiences.

So, who are the travellers of tomorrow?

Post-pandemic travel is on the rise, with no signs of slowing. By 2042, it's expected that the amount of travellers going through airports will reach 20 billion.<sup>16</sup> At the same time, airline tickets are soaring, outpacing inflation and disproportionately impacting lower income travellers.<sup>17</sup> Because of this increase, travel can feel elitist and exclusive. Going forward, it's important that each traveller is considered in rethinking airports — children, families,

diverse incomes, additional needs, new generations of travellers — not just those with spending power.

According to DAZED, close relationships were the most important thing in young people's lives in 2023.<sup>18</sup> Yet with busy and chaotic schedules, it can feel difficult to make new friends and plans. According to McKinsey, Gen Z is looking for connections in third places.<sup>19</sup> Travel is emerging as a more meaningful way to socialise.

With more and more people on the move, major international airports need to better cater to different languages, cultures, and abilities. Intersectionality needs to be considered, integrated and celebrated. Airports have the potential to be a unique place for instilling collective effervescence: the feeling of unity that people experience when they come together for a shared purpose.

# Families



Families particularly feel that their needs are not being met at the airport, with 79% of people agreeing the airport experience needs to be improved for people travelling with kids. 49% of families find the airport a high-stress experience, with 72% agreeing they would spend more time at the airport if there were more avenues for keeping children entertained. Those typically travelling with kids are more likely to browse most stores.

Channelling kids through crowded stress peaks (check-in, bag drop, security) in a timely manner is one challenge. But then how to balance basic needs and entertainment options amid that magic time at the other end? Dedicated spaces for families are one of the lowest-rated features of survey respondents' main airport. When considering interventions, airports need to remember that 'families' are not just kids — and design spaces that engage children but also serve the multigenerational members of a family. How can we ensure everyone who comprises a family feels welcome at the airport?

ABOVE: My First AI is a speculative design project by Modem and Wang & Söderström that imagines a future where children learn and play with intelligent, personalised tutors.<sup>20</sup> Blending playful design with emerging technologies, the project showcases how we might use interactive storytelling and hands-on activities to nurture creativity and curiosity for children and adults alike, even in the busiest of spaces.

4 in 10 travellers are typically flying with children — a large cohort who are not well-served at global airports.

76% of travellers would like to see children's play areas as a space intervention.

# New Gen Travellers



Interestingly, 77% of people would also like child-free spaces. While spaces for work are also highly desired (78%), there's a need to better understand and value the leisure traveller, as travel for leisure surpasses business. Those travelling for leisure currently find the airport experience more stressful and less relaxing than business travellers.

Younger travellers, in particular, are hungry for experiences and entertainment options at the airport. If they don't easily find these options, they quickly feel bored, turn their attention to their phones, and develop an 'anti-attitude'. Gen Z has a strong need for self-expression and expects a value exchange with the brands they engage with. In China, Gen Z's desire to travel is their incentive to work.<sup>22</sup>

ABOVE: Othership runs sauna socials to prompt a shared sense of play and aliveness, while delivering the many health benefits of sweating it out.<sup>21</sup> Visiting a sauna or bathhouse equivalent is embedded in many cultures. Communal saunas at the airport would enable intercultural and intergenerational connections, while relieving stress, boosting circulation, and enabling better sleep — all positive things for the next generation of travellers.

**“The future is the Gen Z traveller. They're expecting and demanding more from experiences than travellers have done before.”**

BRITTA HOFFMANN, DIRECTOR PURCHASING BEAUTY, GH

**76% of young people ages 25-34 would spend more time at the airport if entertained.**

# Inclusivity



According to [Airports Council International](#), global air passenger traffic is projected to rise by 11.5% in 2024,<sup>23</sup> surpassing pre-pandemic levels, while traveller numbers are set to double from 2024 to 2042. More people are travelling, and with that, who travels is shifting. With an increasing globalisation of products — and people — there's a need to provide spaces and experiences that cater to diverse needs.

Major international hubs need to innovate in human and technological ways to better connect with and across cultures and abilities. For example, experts have noted that Chinese-speaking employees and introducing AliPay and WeChat Pay more globally would help make purchasing easier for travellers from China. And while airports are hurried environments, some bodies need (or want) to move at a slower pace. How might we shift the status quo of infrastructure and services to take a variety of travellers into account?

ABOVE: While companies are innovating to create smart luggage that follows you around, how can we make access to this service more democratic — as infrastructure provided by airports? Robots have begun to carry luggage around the world, including [Care-E](#), the bright-blue baggage assistant tested in the USA.<sup>24</sup>

Baggage carrying technologies rank among the top 5 tech advancements desired by 10 out of 12 key markets.

69% of people agree that airports prioritise experiences for wealthy travellers over the needs of other passengers.

Efficiency and seamless travel experiences are key hygiene factors contributing to passenger satisfaction. Airports need to innovate in line with the needs and desires of their market, striking a balance between necessary convenience and elevated experiences.

79%

Agree the airport experience needs to be improved for families with kids.

77%

Agree they would be motivated to buy items at airports if the shops and products were more unique, and different from what they could buy at home.

76%

25-34 year-olds agree that they would spend more time in airports if there was more to keep them entertained.

# 3.3. ENGAGE THE SENSES

Elevating the traveller experience can happen in multiple ways and at every stage of their airport journey. Passengers have reported atmosphere, ambience, layout, design, cleanliness, and sense of safety as key drivers of passenger happiness at the airport. Singapore's Changi, Shanghai's Hongqiao, Delhi's Indira Gandhi and Dubai International Airport are top-ranked airports in meeting these key drivers.

While maintaining high-quality functional needs like safety and cleanliness is important, there is an appetite for airports to surprise and delight passengers through atmosphere, ambience, layout, and design opportunities.<sup>25</sup> From our research, many of the things travellers actively dread about the airport journey relate to the experience after security: having to wait around, uncomfortable seating, crowds, and an unpleasant atmosphere.

Because humans relate to the world through our senses, there's an opportunity to better design for feeling by concentrating on sensory experiences. Multisensory stimuli and connecting with nature evoke joy and make people feel alive. They can also have a calming effect. Attention restoration theory proposes that people can concentrate better after spending time in nature. Watching clouds moving or leaves rustling requires effortless attention, softening stress and mental fatigue, and restoring peace and energy.<sup>26</sup> Neuroaesthetics is an emerging field of cognitive neuroscience that measures how art, music, architecture, artefacts, and nature affect our brains and bodies.<sup>27</sup>

How can we better enhance the magic of airports and create positive emotions through the senses?

# Multi-Sensory Experiences



Our senses are powerful tools for connecting to our identities and feeling more in tune with the world. Senses can trigger memories, ideas, and feelings, and ground us in the present. A nice airport environment is important to travellers (on par with feeling safe and secure), and 78% believe airports could do more to create a pleasant and more personal sensory experience.

Young people have a strong appetite for sensory uplift – they're also more likely to be stressed by an airport atmosphere. Sensory interventions could happen at multiple scales: from travel-size scent or noise-cancelling personal products to dedicated rooms for immersive experiences between flights to airport-wide shifts in lighting.

ABOVE: Kinda Studios partnered with Goldsmiths University, artist Lucy Hardcastle, and composer Nailah Hunter to create *Inspirit*, a digital well-being intervention blending the science of entrainment with spatial audio and 3D animation to facilitate an immersive experience.<sup>28</sup> Users breathe in time with artwork to reduce anxiety, with the ability to choose from programmes that range from energising to relaxing rhythms, and 6, 10, and 20-minute iterations.

**52% agree that the noise, lighting, and smells of an airport can cause them to feel stressed.**

**94% of people rated being in a pleasant environment as the most important aspect of an airport experience.**

# Micro-Moments of Joy



ABOVE: Assemble is a collaboration between the travel platform Trippin and dating app Hinge.<sup>29</sup> A series of workshops on meditation, movement, ikebana or chess, Assemble enables strangers to joyfully connect one hour at a time.

Passenger happiness increases when people can use the waiting time in a valuable way. And 70% of passengers agree that they are happy to arrive early when there is lots to do. Time-sensitive awe-inspiring experiences can break through the noise and prompt micro-moments of joy and delight.

There is an appetite for making airports more immersive, experiential, and fun in the future. Whether retail or art-based, pop-ups are enlivening because they feel exclusive and experiential — and may offer products that people can't find anywhere else. These small moments of joy help to combat stress and relieve boredom, kicking off a travel journey with a positive start and inspiring a sense of wonder and awe to carry beyond the departure gate.

**“Travellers are consumers. They want to be pleasantly surprised by the unexpected.”**

SOREN BORCH, GEBR. HEINEMANN

**Airports with more experiences rank highest in satisfaction levels.**

# Bringing Nature Inside



It's well documented that spending time in nature reduces stress, helps us think better, inspires creativity, and enables connection with and greater empathy for people and the planet.<sup>31</sup> Touting biophilic architecture and indoor nature experiences, Singapore's Changi is strongly seen as the best airport travellers in Asia Pacific (APAC) have ever visited. 86% of people would like to see more sustainable design to improve an airport's atmosphere and ambience. And one in three travellers would like to see airports implement sustainable practices.

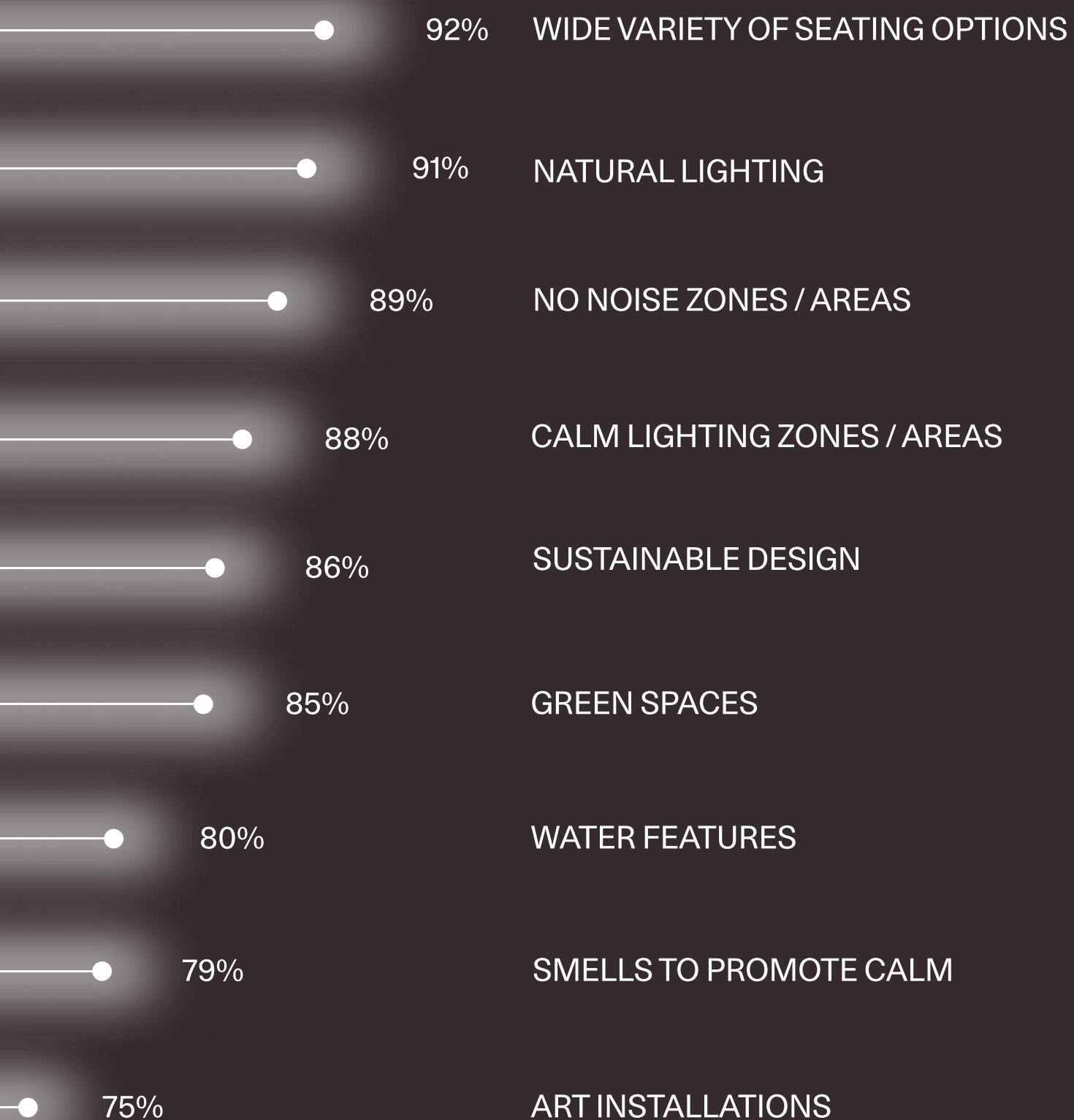
Nature interventions could also be less tactile and more ephemeral, with similar sensory impact. Just listening to nature recordings can promote relaxation.<sup>32</sup> What if airports could bring nature indoors using infrastructure that is already at hand, like audio speakers?

ABOVE: Positioned as a "terminal in a garden", Kempegowda International Airport in Bengaluru, India, is radically reimagining the airport experience.<sup>30</sup> Set amid a bustling travel hub, the calm new terminal connects travellers to nature with green walls, hanging gardens, a forest belt, and greenery that cascades from the interior to an outdoor retail, event, and entertainment area — a new kind of space for an airport, designed to be a destination for local residents too. The sustainable design conveys a sense of place, built from local materials and construction techniques. BLR is a microcosm of sustainable growth and forward-looking planning in an expanding megacity.

**85% of travellers find the idea of more green spaces appealing.**

**Natural lighting is ranked in the top 5 desired atmospheric ideas across all surveyed countries.**

# Sensory and atmospheric changes to airports have high levels of appeal to travellers.



“Imagine the senses as our body’s inbuilt system for navigating the world around us. Biologically coded to help us connect, attune, and respond to our environments, their constant intermixing gives us feedback on our emotional responses to our experiences. Building coherent, multisensory and intentional environments can tap directly into our body’s physiology, helping create a sense of calm, uplift, energy or pleasantness to guide us through spaces and craft new emotional responses. Spatial design rooted on sensory experiences can be one of the most effective ways to combat feelings of stress, overwhelm, and create a sense of ease.”

ROBYN LANDAU, CO-FOUNDER, KINDA STUDIOS

# 3.4. SOFTER, SLOWER TECH

Tech is already enhancing the airport experience before, during, and after the airport. With the right application at the right time in the journey, tech can be a positive tool. While travellers are open to more technology, it must clearly enhance their experience. Caution is needed so we don't bombard travellers with more information, as we risk eroding convenience and causing frustration.

The readiness of airports to adopt technological solutions varies. And there are also differences between markets in terms of openness to tech. South Africa, India, and Saudi Arabia are the most open; while Denmark, Germany, and the UK are the least open.

Yet, without a greater frame of reference, many people struggle to

imagine future technologies that they may see or use. This makes blue-sky thinking regarding technology improvements difficult — people don't know what they don't know.

What people do know is they dread long waits for checking in and dropping bags. They're also worried about delayed flights and missing their flight. People are seeking an uncomplicated, streamlined airport journey. Less queuing and confusion, more calm. So, how can technology support the entire airport journey in a seamless and stress-free way? And how can we help people to feel safe and comfortable as airports introduce new technologies?

# Tech Hesitant



Travellers spontaneously associate ideas of the future with more technology and fewer human interactions — and this raises mixed feelings. While people are used to adapting to new technologies, integrating them must not come at the expense of human interaction. People are already experiencing multiple tech touchpoints at each stage of the airport journey — but it's not yet fully integrated or seamless. People are seeking meaningful applications that enhance the passenger experience and convenience.

At the same time, certain technologies prompt fear around the security and usage of personal information. It's necessary to balance exciting developments in AI-automated identification for enhanced speed and accuracy through security with concerns around ethics and autonomy. Transparency and privacy must be built into emerging applications to gain passenger trust.

In considering how to apply technology across the airport journey, it's essential that positive perceptions of and connections between people and new airport tech are at the core of implementation — to enable softer, more human interactions that feel healthy and harmonious.

ABOVE: In 2022, Chinese civil aviation authorities installed an easy security check service at 40 major airports.<sup>33</sup> While security in China is a rigorous, multi-stage process, the new pre-registration process is designed to better serve passengers by making them safer, more efficient, and more comfortable. And perhaps the effects are reflected in our study — travellers from China are the least stressed when it comes to security.

90% of people would like a single app that keeps everything they need in one place.

“We can't introduce tech for tech's sake. It needs to help the traveller and be easy to use.”

NICO REIFKOGEL, GEORGE HEINEMANN

# All About Me



There is no shortage of data points on passenger preferences or behaviour: where they're travelling from and to, how long before a flight they pass through security, what gate they're departing from and so what route they need to take to get there. The opportunities lie in making sense of the data, identifying patterns, and turning what we know into meaningful passenger prompts and engagement.

How can we layer technology across the airport journey in helpful ways, particularly with a personalised lens? What if notifications and information could be tailored to individual needs to soothe stress points and elevate the magic of the airport during the remainder of the airport journey?

Cultural nuances must be considered so that personalisation interventions don't treat people as homogeneous and desires as universally felt.

ABOVE: A speculative design project by StudioCone, *Orb* is an AI-powered decentralised platform that guides people through safe, personalised psychedelic journeys.<sup>34</sup> The experience melds psychedelic therapy with emerging technology to improve personal health and community well-being. The handheld tool guides users through spoken prompts and haptic feedback, syncing with biometric earphones that monitor brain activity. A companion app uses machine learning to offer personalised recommendations for wellness activities.

**68% of travellers would like to see more personalisation in the airport experience.**

Younger travellers, in particular, are keen to see more focus on unique products and stores, and personalisation available to them.

# Holistic Navigation



Travellers are particularly interested in technology-enhanced wayfinding, particularly when the route recommendations are based on personal preferences. This might include suggestions that improve efficiency and ease, like the estimated distance to gate, notification of services close to them, or a view of available toilets and seating. But it also might include creative suggestions, like a scenic route to spaces with natural light and greenery. This kind of intervention also reduces the impact of language barriers — another key concern for international hubs.

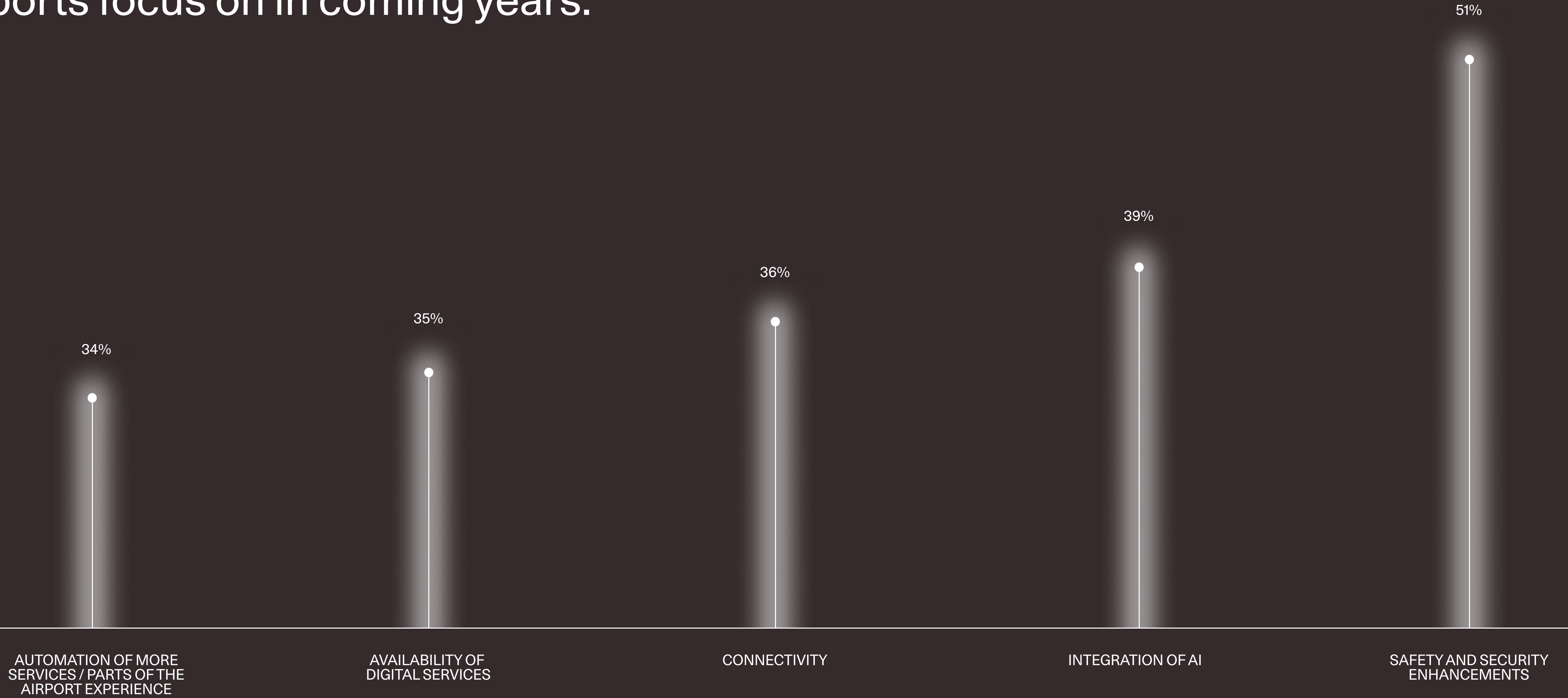
We also know that bored travellers spend more time on their phones. What if we could encourage tech use in a more meaningful way? Perhaps switching out phones for screen-free calm technologies that spark curiosity, movement, and a sense of adventure.

ABOVE: **TERRA** combines AI technology and ambient computing into a screen-free compass that enables users to wander without getting lost.<sup>36</sup> Users input what they'd like to do or see and set a time limit, and the pocket-size device delivers directions with gentle haptic feedback. As open-source software, the device could be tailored to personalise airport journeys. Just imagine: 'A 2-hour stroll featuring butterflies, a bookshop, ramen for lunch, and ending at gate C17'.

Apps enabling people to find their gate and flight alerts rank in the top 5 desired tech ideas in 11 out of 12 countries.

Travellers from the United States desire more personalised technologies, such as airport navigation apps with tailored recommendations.

# Key technological developments that travellers would like to see airports focus on in coming years:



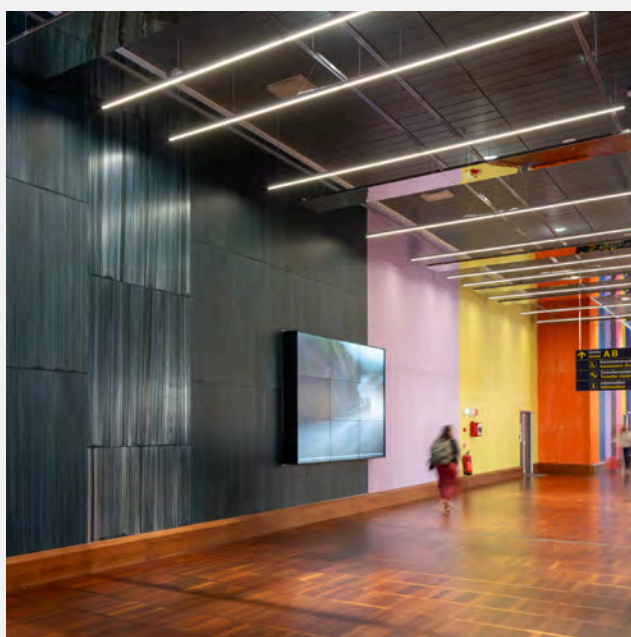
# STRATEGIC OPPORTUNITIES

# 04

“Airports need to create environments where travellers want to explore and spend more time. We must rethink the industry’s current business models to embrace profitable innovation that places the traveller at the centre.”

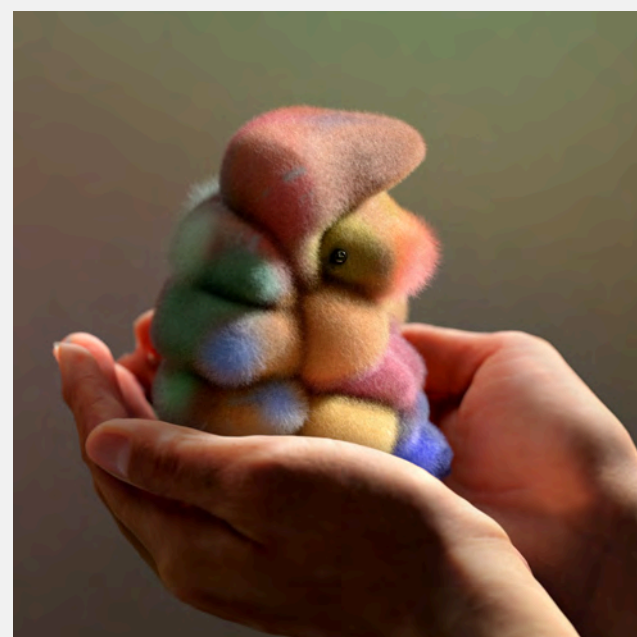
LENNARD NIEMANN, MANAGING DIRECTOR, GHARAGE

# How can we transition the airport into a liminal space of magic? Here are 12 ways tomorrow's airport might transform in considered, symbiotic, tech-integrated ways.



## SPACE AS A SERVICE

Devise a multi-tiered approach to improve passenger well-being through both operations and maintenance — clean floors, toilets that lock — and spatial revisions: a variety of comfortable seating, natural lighting, and pleasant sensory atmospheres.



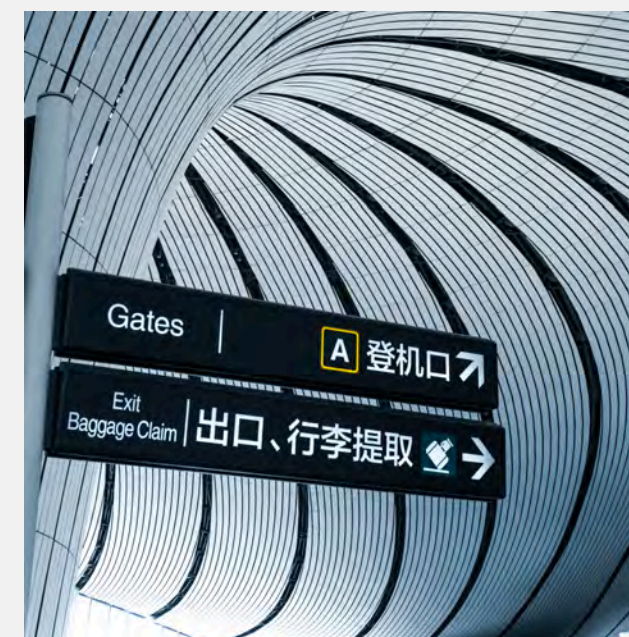
## FAMILIES

Create easy-to-find playful spaces and retail opportunities specifically for families, featuring food options for kids, activities that spark excitement, and something for the parents — they want to relax while knowing their kids are entertained and safe.



## MULTI-SENSORY EXPERIENCES

Once an airport has the basics sorted, layer relaxing sensory interventions on top, in subtle (shopping) or drawcard (experiential) ways, creating positive memories of that airport because it looked and smelled really good.



## TECH HESITANT

Integrate safe, seamless tech that transitions stress points from abrupt and chaotic to calm and uncomplicated — people would like an app that facilitates greater ease throughout the airport journey.



## REST ASSURED

Invest in sleep pods and quiet zones (which people are most willing to pay for); the revenue from sleep as a high-desired experience could fund other infrastructure interventions, like calm lighting and soothing scents.



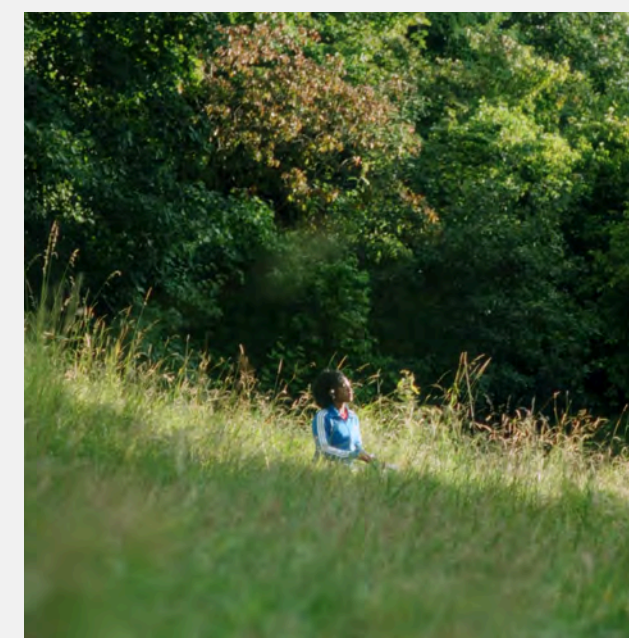
## NEW GEN TRAVELLERS

Rethink airport offerings as fourth places of time-sensitive cultural events, creative workshops, and human connection, facilitating a fun, meaningful exchange with brands and time well spent.



## MICRO-MOMENTS OF JOY

Install time-sensitive or limited-edition brand activations, exhibitions, and events, so the chance of travelling at that moment heightens the exclusive feel and notion of unexpected surprise.



## ALLABOUT ME

Develop soft, knowing-me tech that feels personal and meaningful, delivering highly curated recommendations for how to spend your time at the airport — based on already available data points.



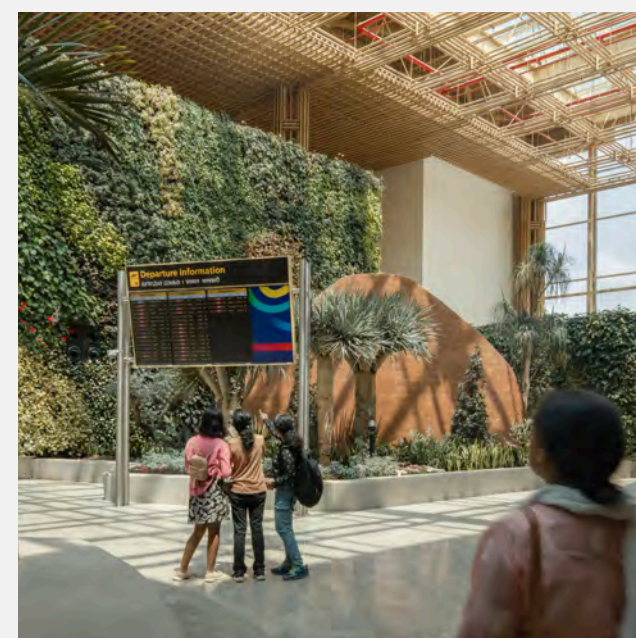
## RECIPROCAL CARE

Strengthen a high level of care in retail environments so that good service and refined spaces add a comforting human touch to this liminal zone — reduced stress translates to increased spend.



## INCLUSIVITY

Include thoughtful placement of spaces, products, and services designed for different uses — to assist, to gather, to work, to play, to rest, to discover — an array of different offerings so people can feel welcome no matter their backgrounds or abilities.



## BRINGING NATURE INSIDE

Prioritise biophilic design and create opportunities for people to engage with nature on the (long) walk to their departure gate — think a 10-minute podcast of underwater sounds and plant or water installations dotted along the journey.



## HOLISTIC NAVIGATION

Create wayfinding experiences that account for diverse needs and desires — guiding people to open toilets, quiet spaces, and their gate; or via playful, less-linear journeys: scenic route, sunlight route, wellness route.

# APPENDIX

# 05

# Further Reading

[Why airports are going green – in one way at least](#)

[A Meta-Analysis of Emotional Evidence for the Biophilia Hypothesis and Implications for Biophilic Design in PMC PubMed Central journal](#)

Design Hotels' Further Forecast report: [Neuroaesthetics—Design for the Mind](#)

Design Hotels' Further Forecast 2025 report: [Community Capital](#)

Stanford University on [Embodied Cognition](#)

[Kinda Conversations: Connection to Others](#) on Unseen Being podcast

[Air traffic finally above pre-pandemic levels in the first half of 2024](#) via Airports Council International

[Airport 4.0: The Future Of Airports Takes Flight](#) via Forbes

Matter Of Form CEO Anant Sharma on [future airport retail experiences](#)

[What is the future of travel?](#) via McKinsey & Company

[How Gen Z Is Changing the Travel Industry](#) via Travel + Leisure

# Experts

## TRAVEL

Bernard Schlafstein, Director Sales EMEA, Gebr. Heinemann

Britta Hoffmann, Director Purchasing Beauty, Gebr. Heinemann

Ceren Tonguç, CCO Istanbul Airport, Unifree

George Tsoukalas, Managing Director Sydney Airport, Gebr. Heinemann

Katrin Bamler, Managing Director Copenhagen Airport, Gebr. Heinemann

Lennard Niemann, Managing Director, GHARAGE

Nico Reifkogel, Director Business Development, Gebr. Heinemann

Richard John Hoyer, Managing Director Frankfurt Airport Retail, Gebr. Heinemann

Sören Borch, Director Sales Experience & Excellence, Gebr. Heinemann

## CULTURE

Helen Job, Futures Consultant, former Head of Research, SPACE10

Robyn Landau, Co-Founder, Kinda Studios

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17, 37 David Stjernholm for Creator Projects

18, 37 Elusis B.V.

19, 37 Olivia Purvis for The Self Space

22, 37 Wang & Söderstrom for Modem

23, 37 Graydon Herriot for Othership

24, 37 KLM Royal Dutch Airlines

27, 37 Lucy Hardcastle Studio for Kinda Studios

28, 37 Melissa Gardner for Trippin and Hinge

29, 37 Ekansh Goel, Studio Recall for SOM

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