ALDAR

INNOVATION
REPORT

2022-2023

Contents

ALDAR

INNOVATION
REPORT
2022-2023

ALDAR TODAY

ALDAR

INNOVATION
REPORT
2022-2023

Who We Are

Aldar's purpose is to shape a better future and create long-term value for all our stakeholders.

Established in 2004, Aldar Properties is the UAE's leading integrated real estate developer, investor, and manager. We have been playing a key role in supporting the long-term development of the country and its communities for almost two decades, steadfastly delivering on our promise to develop desirable destinations where people can live well. Fostering innovation to unlock a better, more sustainable future for all our stakeholders across Abu Dhabi and beyond has been our guiding principle all along.

11.2bn

2022 total Group
revenues (AED)

3.1bn

2022 total Group
net profit (AED)

ALDAR

INNOVATION
REPORT
2022-2023

Innovating Over the Years...

For years, Aldar has been leveraging innovation to drive sustainable growth.

2018/2019

▼

- ▶ LAUNCH OF INNOVATION DEPARTMENT
- ▶ LAUNCH OF IBTIKAR
- ▶ FIRST START-UP COLLABORATIONS

2020/2021

▼

- ▶ LAUNCH OF MANASSAH AND SCALE UP
- ▶ LAUNCH OF CLOUD SPACES AND CLOUD LIVING
- ▶ LAUNCH OF INNOVATION STRATEGIC FORUM
- ▶ FIRST VENTURE CAPITAL FUNDS PARTNERSHIPS

2022/2023

▼

- ▶ LAUNCH OF DIGITAL FUTURES
- ▶ LAUNCH OF YAS ISLAND METAVERSE
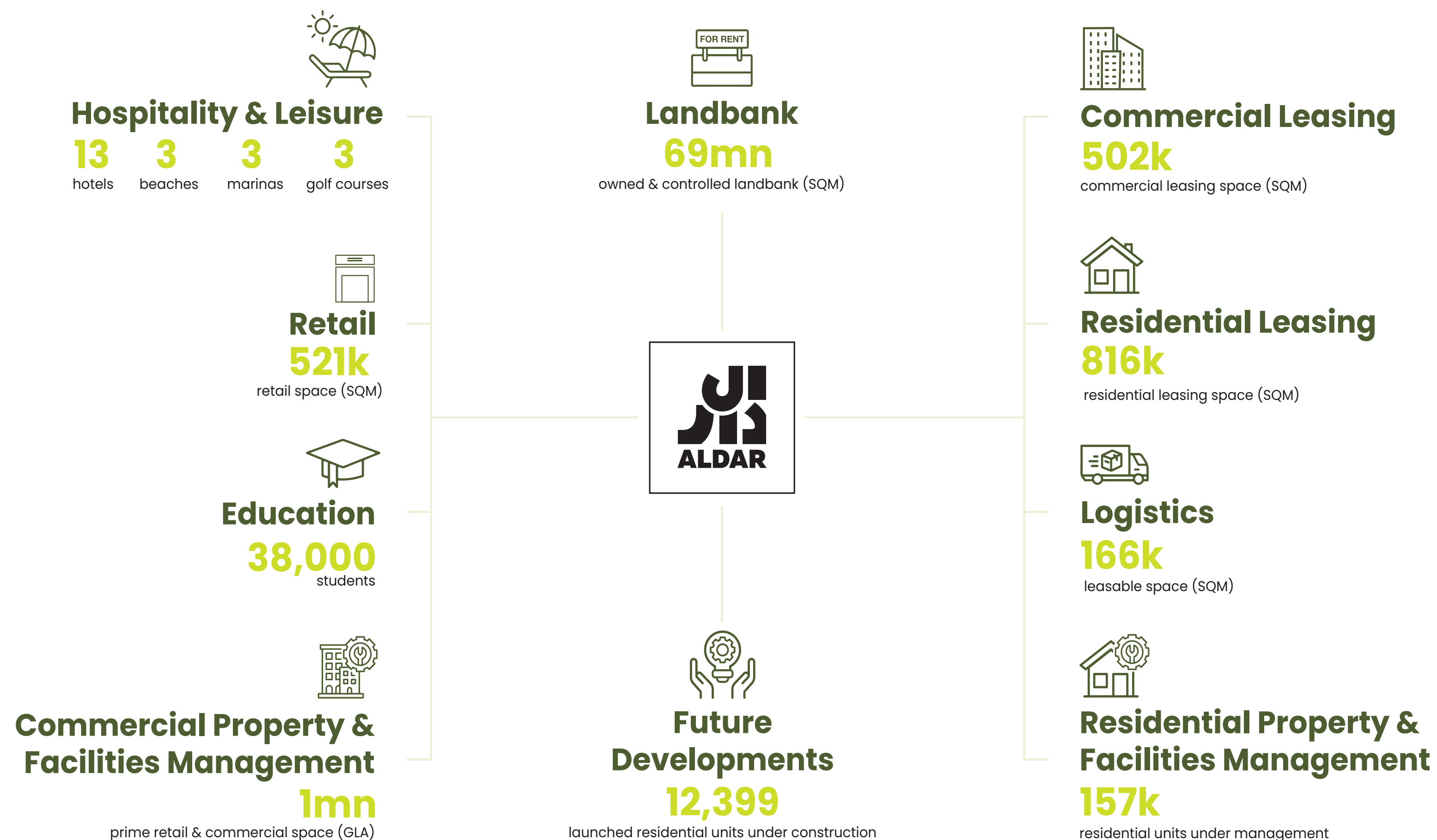- ▶ LAUNCH OF ETHER BY CLOUD SPACES

INNOVATION REPORT **2022-2023**

...Across our Footprint

We consistently and responsibly activate innovation throughout our diversified operating model to realise Aldar's business strategy across the full real estate value chain.

Hospitality & Leisure
13 hotels **3** beaches **3** marinas **3** golf courses

Retail
521k
retail space (SQM)

Education
38,000
students

Commercial Property & Facilities Management
1mn
prime retail & commercial space (GLA)

Landbank
69mn
owned & controlled landbank (SQM)

Future Developments
12,399
launched residential units under construction

Commercial Leasing
502k
commercial leasing space (SQM)

Residential Leasing
816k
residential leasing space (SQM)

Logistics
166k
leasable space (SQM)

Residential Property & Facilities Management
157k
residential units under management

Numbers reported at Q3 2023.

INNOVATION REPORT **2022-2023**

Why We Focus on Innovation

We understand that technological trends are reshaping real estate, and we welcome this transformation with open arms.

The real estate industry stands on the cusp of a revolution. Its future resilience and growth hinge on its stakeholders' ability to recognise and adopt technological progress.

Property Tech (PropTech), powered by artificial intelligence, machine learning, and big data, enables predictive analytics, personalised services, virtual tours, blockchain transactions, IoT-enabled smart homes, and much more. It can be harnessed for greater efficiency, enhanced customer experiences, and a competitive edge in the market.

Climate Tech, through sustainable design and materials, as well as energy-efficient systems, ensures developers meet not only the increasing demand for eco-friendly living but also growing regulatory pressure for green certifications.

Construction Tech, with 3D printing, augmented reality (AR), robotics, and Building Information Modelling (BIM), optimises processes, improves safety, reduces costs, and empowers evidence-informed decision-making. Embracing it leads to better project management, increased productivity, and superior quality standards.

The future is here and we're ready for it.

To seize this unique opportunity, we imperatively need a dynamic, future-oriented innovation strategy, that aligns with our vision and evolving market dynamics.

Innovation is not only about adopting new technologies; it's about creating value, understanding customer needs, shaping communities, and driving change. We aim to redefine real estate and ensure a legacy of sustainable, efficient, and inclusive growth.

As we step into the future, our aim is not to be spectators but pioneers who innovate, not just to succeed but to lead.

AN INNOVATION-CENTRIC STRATEGY

ALDAR
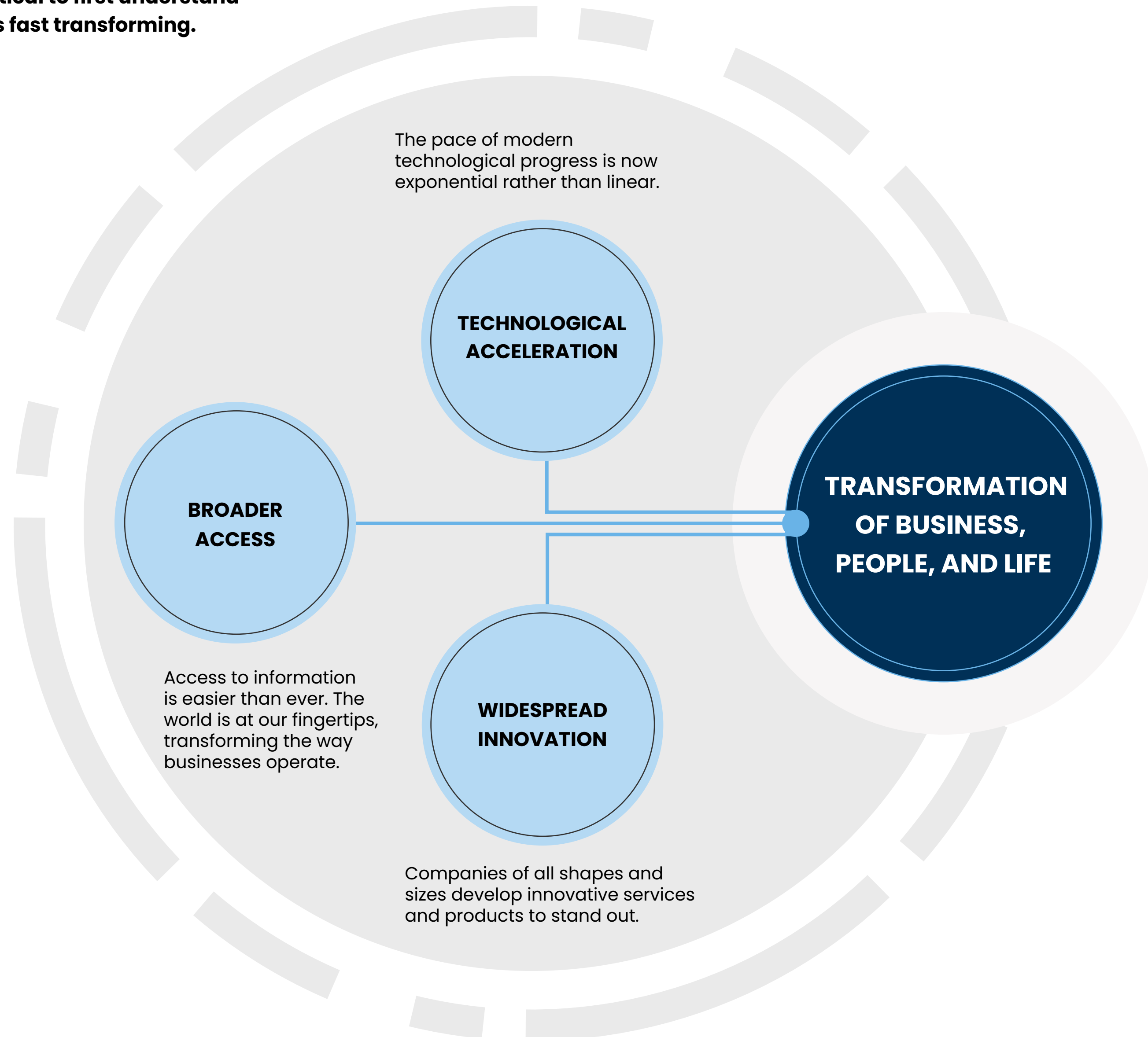
INNOVATION
REPORT
2022–2023

In order to approach innovation the right way, it is critical to first understand why and how the business landscape we operate in is fast transforming.

The Fourth Industrial Revolution, powered by digital developments, is characterised by its unique velocity, scope, and impact.

Driven by three critical factors, this extraordinary transformation is dramatically altering the world, the people who live in it, and our way of life.

The Age of Disruption

The pace of modern technological progress is now exponential rather than linear.

TECHNOLOGICAL ACCELERATION

BROADER ACCESS

Access to information is easier than ever. The world is at our fingertips, transforming the way businesses operate.

WIDESPREAD INNOVATION

Companies of all shapes and sizes develop innovative services and products to stand out.
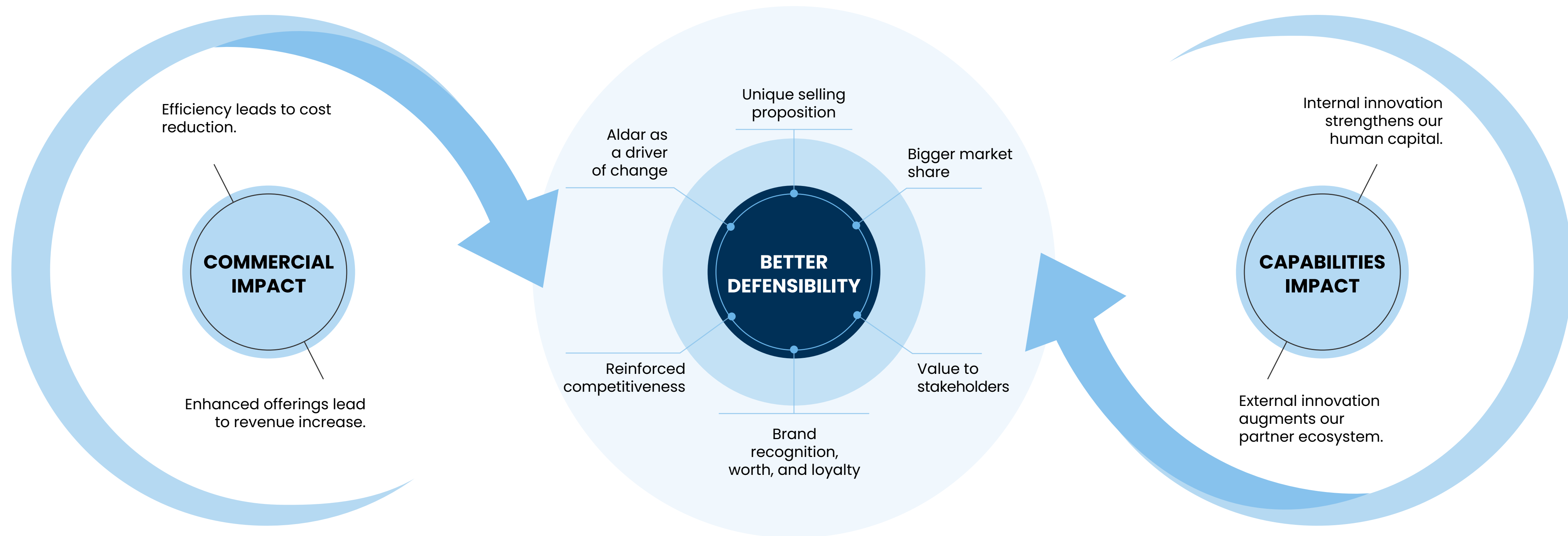
TRANSFORMATION OF BUSINESS, PEOPLE, AND LIFE

The Innovation Opportunity

In these times of transformation, innovation can be a catalyst for sustained business growth.

By giving us the insight necessary to see our work, our solutions, and our ecosystem from a different perspective, innovation brings a host of benefits to Aldar's businesses, from enabling complex problem-solving to edging out competition.

COMMERCIAL IMPACT

Efficiency leads to cost reduction.

Enhanced offerings lead to revenue increase.

BETTER DEFENSIBILITY

Unique selling proposition

Bigger market share

Value to stakeholders

Brand recognition, worth, and loyalty

Reinforced competitiveness

Aldar as a driver of change

CAPABILITIES IMPACT

Internal innovation strengthens our human capital.

External innovation augments our partner ecosystem.

Our Fields of Play

To go beyond ideation and innovate with confidence, we focus on specific areas centred around our values, core businesses, and communities.

Based on an in-depth analysis of Aldar's strategic pillars and innovation ambitions, as well as external market trends, we direct our innovation effort to the areas that are most relevant, show potential for expansive business growth, and allow us to serve our customers.

Our 2022-2023 fields of play

▶ **Net Zero** – supporting the achievement of Aldar's science-aligned decarbonisation targets.

▶ **Optimisation** – innovative and efficient solutions and business models

▶ **Smart Development** – new technologies that allow us to build more efficiently without compromising on quality.
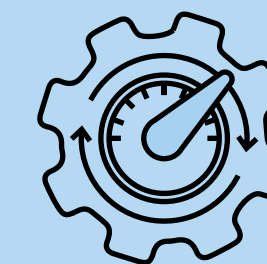
**NET ZERO**   **OPTIMISATION**   **SMART DEVELOPMENT**
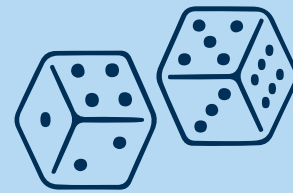
An Always-On Journey

Innovation is not about chasing the next big breakthrough. Rather, it means continuously and simultaneously enhancing existing business models while creating new capabilities to respond to future opportunities.

Aldar balances its attention and investments between:

▸ **Incremental innovation** – projects that are relatively low risk/ low return but improve operational excellence.

▸ **Big bets** – emerging opportunities likely to generate substantial profits in the future but that will require major financing.

▸ **Moonshots** – ideas for profitable growth further down the road.
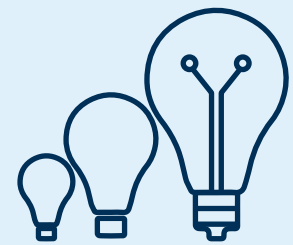
INCREMENTAL INNOVATION

BIG BETS
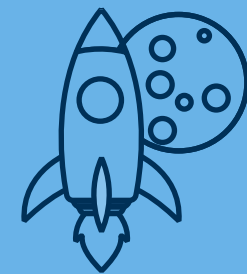
MOONSHOTS

INNOVATION REPORT

2022-2023

Aldar's Year-on-Year Progress on the GIMI Innovation Index

3.56
2019

▼

4.05
2020

▼

6.87
2021

▼

7.00
2022

Governing Innovation

The innovation team has been tasked with building a robust innovation governance system in line with international best practices.

▶ **Group Innovation Policy** - key principles and elements to focus on to achieve Aldar's innovation agenda.

▶ **Innovation Processes** – standard mechanisms and procedures to align goals, allocate resources, and assign decision-making authority.

▶ **Economic Value Framework** – appropriate reporting metrics to measure the return on investment of innovation activities.

▶ **Innovation Strategic Forum** – composed of representatives of all levels and operating through three sub-committees: New Projects, Governance & Engagement, and Partnerships & Government Affairs.

This strong accountability ensures that innovation is prioritised in all strategic decisions.

Since 2018, the Global Innovation Management Institute (GIMI), which provides standards and audit methodologies to measure and rate organisations' innovation levels, reviews Aldar's innovation performance annually. We continue achieving year-on-year improvement across all verticals on the GIMI Innovation Index.

ALDAR

INNOVATION
REPORT
2022-2023

Building Capability

Developing an organisation's innovation capability starts with its most important asset: its people.

At Aldar, we ensure that all our teams fully understand why innovation matters, why they are at the forefront of our innovation drive, and how they can and should contribute. To this end, we have been promoting holistically a long-lasting innovation culture.

▶ **INSEAD "Innovation in the Age of Disruption" certification**

▶ **Incubator and accelerator employee-training opportunities**

▶ **Employee mentoring & internal innovation consulting**

▶ **Innovation knowledge sharing & panel discussions**

72

Innovation Champions
trained

ALDAR

INNOVATION
REPORT
2022-2023

Executing Effectively

At Aldar, we chose to rapidly infuse innovation across our business functions and into our ecosystem at large. Our innovation department, a central function established in 2018, enables effective innovation management and the delivery of new, high-impact solutions.

INTERNAL INNOVATION

We crowdsource and incubate innovative ideas, organise internal programmes, and explore venture-building opportunities.

SPACES
CLOUD

LIVING
CLOUD

ETHER
by Cloud Spaces

INNOVATION
BEGINS WITH
IMAGINATION
IBTKAR

EXTERNAL INNOVATION

We search for and partner with new start-ups, while investigating collaborative scouting and investment opportunities.

منصة MANASSAH

FIFTH WALL

TARONGA VENTURES

SHOROOQ PARTNERS

global.ventures

SCALE UP By Aldar

مبرمج ال٥٠ MUBARMIJ50

pilabs property innovation

CAMBER CREEK

MODERNE VENTURES

ECOSYSTEM AUGMENTATION

We bring diverse players together to nurture an innovative ecosystem and create greater value.

دائرة الثقافة والسياحة
DEPARTMENT OF CULTURE AND TOURISM

HUB71

فلاش Flash ENTERTAINMENT
An Ethara Company

صندوق الوطن Sandooq Al Watan

twofour54 Abu Dhabi

دائرة التنمية الاقتصادية
DEPARTMENT OF ECONOMIC DEVELOPMENT

STARTAD
powered by TAMKEEN

MAKEX

MIRAL ميرال

ESTARS
THE HOME OF EDUCATIONAL ESPORTS

ALDAR

INNOVATION REPORT
2022-2023

INNOVATION IN PRACTICE

INNOVATION
REPORT
2022-2023

Cloud Family

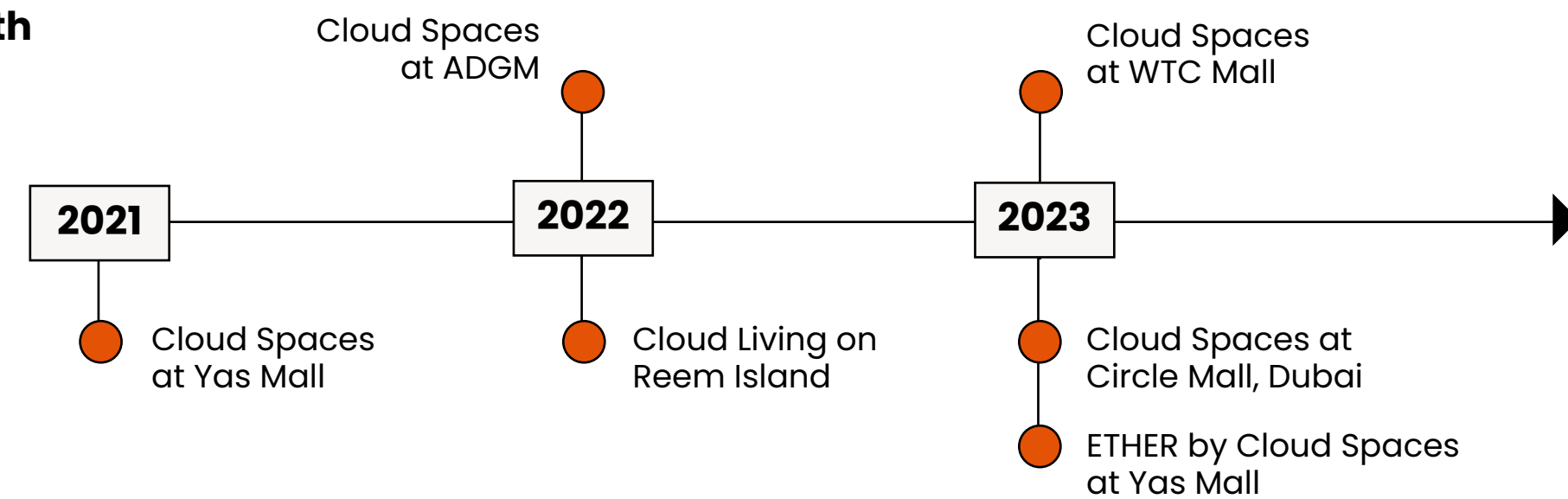|	
Category	Internal innovation venture
Definition	**Cloud Spaces:** A hybrid, carefully curated, and cost-effective workspace/co-retail environment for entrepreneurs and businesses of all sizes, elevated by serviced amenities and superior locations.
	ETHER by Cloud Spaces: A co-retail, creative multi-brand lifestyle and fashion retail concept, offering fully serviced temporary spaces to an array of local and international brands to showcase their products and test the local market hassle free.
	Cloud Living: Furnished apartments available to tourists and business travellers for short-term stays, with access to top amenities in prime locations.
Purpose	Leverage opportunities in the shared economy space by repurposing existing assets into a suite of innovative solutions.

Our Growth

- 2021 — Cloud Spaces at Yas Mall
- 2022 — Cloud Spaces at ADGM / Cloud Living on Reem Island
- 2023 — Cloud Spaces at WTC Mall / Cloud Spaces at Circle Mall, Dubai / ETHER by Cloud Spaces at Yas Mall

Cloud Spaces
4 locations
11,565 surface (SQM)

ETHER by Cloud Spaces
124 brands
2,430 retail surface (SQM)

Cloud Living
2 locations
85 units

Yas Island Metaverse

Category Internal innovation venture

Definition A collaboration between DCT Abu Dhabi, Aldar, Miral, twofour54, and Ethara aiming to recreate Yas Island, a popular tourist destination in Abu Dhabi, UAE, in the virtual world. It marks the first attempt in the UAE to translate an entire physical destination of this scale into the metaverse, bringing together five partners to create an immersive digital experience for players globally.

Purpose Leverage the synergistic potential of emerging technologies such as the metaverse to unlock new avenues for Aldar's core business operations' growth, and strategically position the Group as a resilient, future-forward organisation at the vanguard of innovation in an increasingly digital landscape.

Our Partners

DEPARTMENT OF CULTURE AND TOURISM
دائرة الثقافة والسياحة

YAS ISLAND
ABU DHABI
جزيرة ياس
أبوظبي

twofour54
Abu Dhabi

MIRAL ميرال

ETHARA إثارة

Yas Island Metaverse to Date

25 virtual space (SQKM)

9 key attractions

5 partners

150k virtual visits

MANASSAH

Category   External incubation programme

Definition   An 8-week annual retail incubator programme that allows selected small and medium-sized enterprises (SMEs) from the region to work closely with Aldar, increase their business know-how and unlock commercial opportunities within Aldar retail assets.

Purpose   Identify the latest and most innovative retail and F&B trends and foster the development of novel retail concepts, which Aldar can leverage to differentiate its destinations while supporting entrepreneurs.
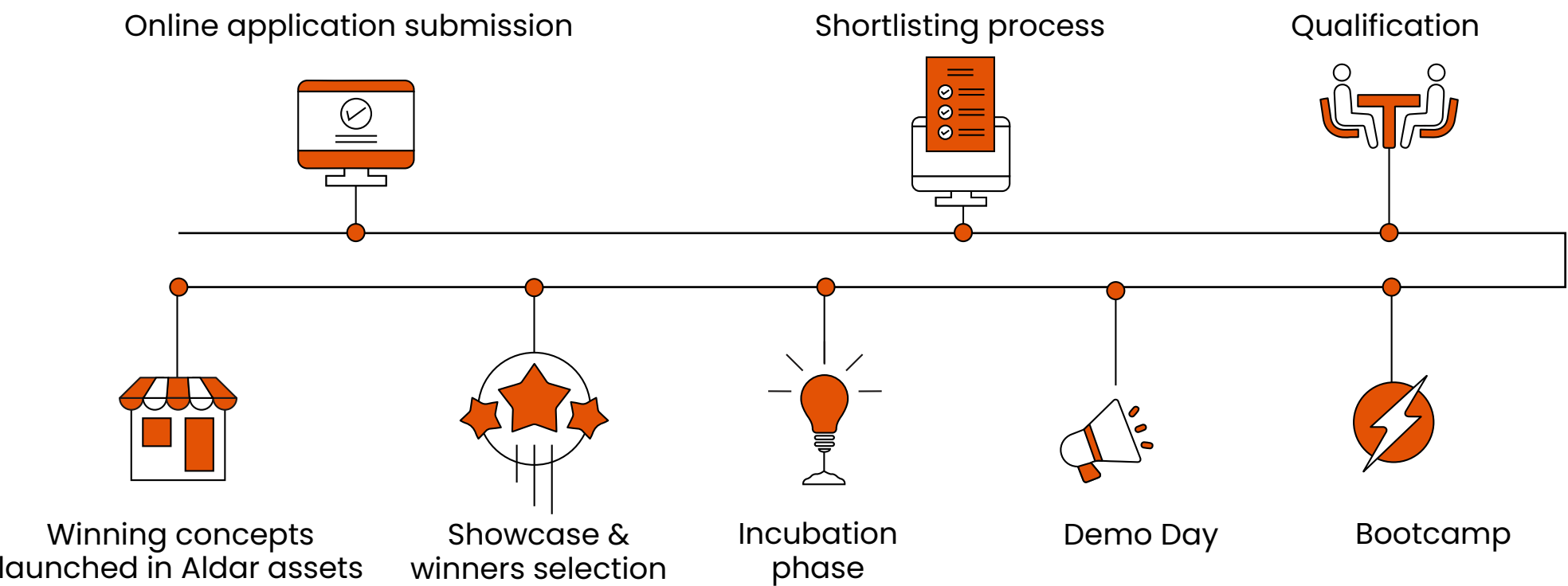
Historical   **MANASSAH 1.0** targeted UAE-based SMEs operating in the retail, café, and restaurant space.

MANASSAH 2.0 targeted GCC-based SMEs operating in retail, including technology-enabled start-ups and projects driving sustainability.

MANASSAH 3.0 targeted SMEs in the F&B industry, as well as retail products and services.

Process

Online application submission

Shortlisting process

Qualification

Winning concepts launched in Aldar assets

Showcase & winners selection

Incubation phase

Demo Day

Bootcamp

MANASSAH to Date

19 incubated

725 applications

45 in bootcamp

14 signed contracts

124 interviews

9mn content views

INNOVATION REPORT
2022-2023

MANASSAH 3.0 Highlights

Zali
A TASTE OF BEIRUT

Zali is a convivial eatery that embodies the essence of Lebanese cuisine. It offers a wide range of healthy, vegetarian, and gluten-free options.

Founded in Bali, 2020

Monica Bakes

Monica Bakes is a cloud kitchen offering a menu of outstanding desserts, novelty cakes, and scrumptious bakery available via online orders and deliveries.

Founded in Abu Dhabi, 2021

CO CHOCOLAT
Finally, truly healthy chocolates

Co Chocolat is a social enterprise committed to the fine art of chocolate-making and cocoa gastronomy, health, and the community of small-holding farmers in the Philippines.

Founded in Dubai, 2019

ALDAR TODAY

AN INNOVATION-CENTRIC STRATEGY

INNOVATION IN PRACTICE
Cloud Family
Yas Island Metaverse
MANASSAH
Scale Up
National Mubarmij50 Competition
Global Scouting & Piloting
Our Impact in Numbers

WORK WITH US

Media Metrics

5.3mn content views

1.9mn unique impressions

130k engagement

Start-up Metrics

342 applications

50 shortlisted

16 bootcamp

8 incubated

3 stores

4 Ether pop-ups

Knowledge Metrics

6 bootcamp days

24 business education sessions

INNOVATION
REPORT
2022-2023

#MANASSAH

ALDAR

MANASSAH
Retail Incubator

START
powered by TAMKEEN

Scale Up

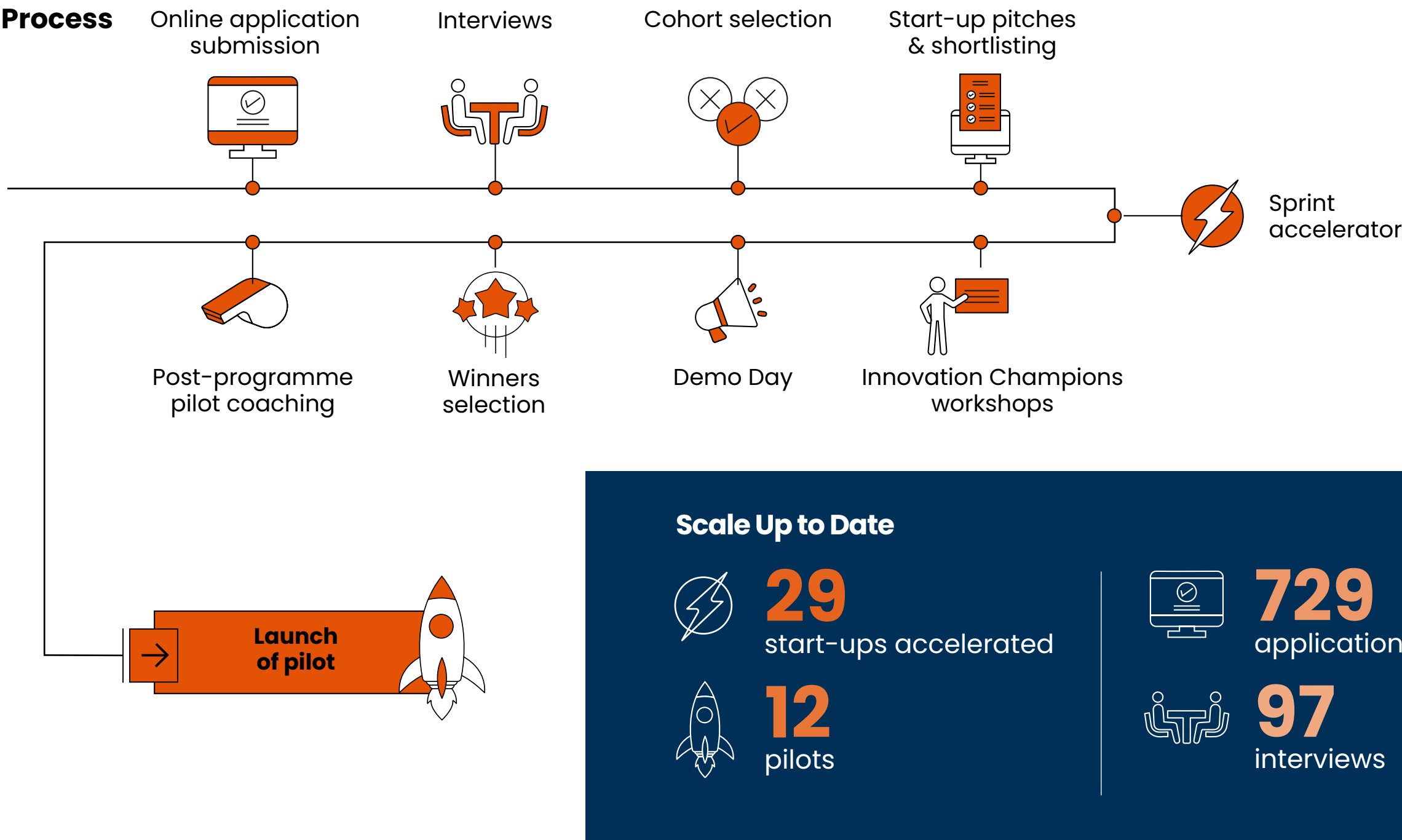**Category** External accelerator programme

Definition A 4-week, equity-free annual accelerator programme that helps PropTech start-ups from around the world access tangible growth opportunities, guidance, and networks in the UAE and the GCC via incentives and commercial partnerships with Aldar and other regional market leaders.

Purpose Attract and execute in a cost-efficient way pilot projects that can unlock operational efficiencies, enhance customer experience within our core assets, and enable us to tap into emerging trends while progressing PropTech innovation across the region.

Historical **Scale Up 1.0** focused on PropTech solutions augmenting efficiency for developers.

Scale Up 2.0 focused on data analytics, blockchain solutions, and customer experience.

Scale Up 3.0 focused on sustainable solutions reducing service charges across utilities, properties & facilities management, and security & safety.

SCALE UP BY ALDAR

Process

Online application submission → Interviews → Cohort selection → Start-up pitches & shortlisting → Sprint accelerator

Post-programme pilot coaching ← Winners selection ← Demo Day ← Innovation Champions workshops

Launch of pilot

Scale Up to Date

29 start-ups accelerated

12 pilots

729 applications

97 interviews

Scale Up 3.0 Highlights

Clairco

Clairco enables safe indoor air quality and HVAC energy savings for commercial buildings, using nano-tech, IoT, and AI-based patented products and services.

Founded in India, 2018

Conservation Labs

Conservation Labs enables cost-effective and sustainable water use by improving water efficiency and reducing leaks with a simple sensor.

Founded in the US, 2016

Voltaware

Voltaware helps individuals and businesses optimise their energy use, reduce their carbon footprint, and identify inefficient appliances through an energy insight platform.

Founded in the UK, 2015

Key Metrics

2mn content views	**42** interviews	**10** selected
283 applications	**7** countries represented	**3** winners of paid pilots

INNOVATION REPORT
2022-2023

ALDAR TODAY

AN INNOVATION-CENTRIC STRATEGY

INNOVATION IN PRACTICE

WORK WITH US

Case Study

|	
Company Name	Voltaware
Challenge Statement	Lack of tenant visibility on energy consumption and usage patterns.
Pilot Scope	Voltware's solution will monitor selected apartments' energy efficiency. Its proprietary machine learning algorithm will break energy bills down to each appliance, enhancing safety and security while allowing customers to easily understand their energy consumption and take action.
Desired Outcome	Optimise our energy use and reduce our carbon footprint.

INNOVATION
REPORT
2022-2023

National Mubarmij50 Competition

Category External innovation competition

Definition An annual initiative provided by Sandooq Al Watan and delivered by Aldar Education. It empowers young students to explore the latest technology trends, including Artificial Intelligence (AI), the Internet of Things (IoT), and robot construction & deployment, through hands-on experimentation with real programming languages such as Swift and Python. This not only provides children with a solid foundation in computer science but also helps them develop resilience, think critically, expand their creativity, experiment with mathematics and logical thinking, and build skills that will be in high demand in the future.

Purpose Have a wider social impact on the overall UAE student community and their skills, while diversifying Aldar's sources of revenue and creating a unique value proposition for its portfolio of schools.
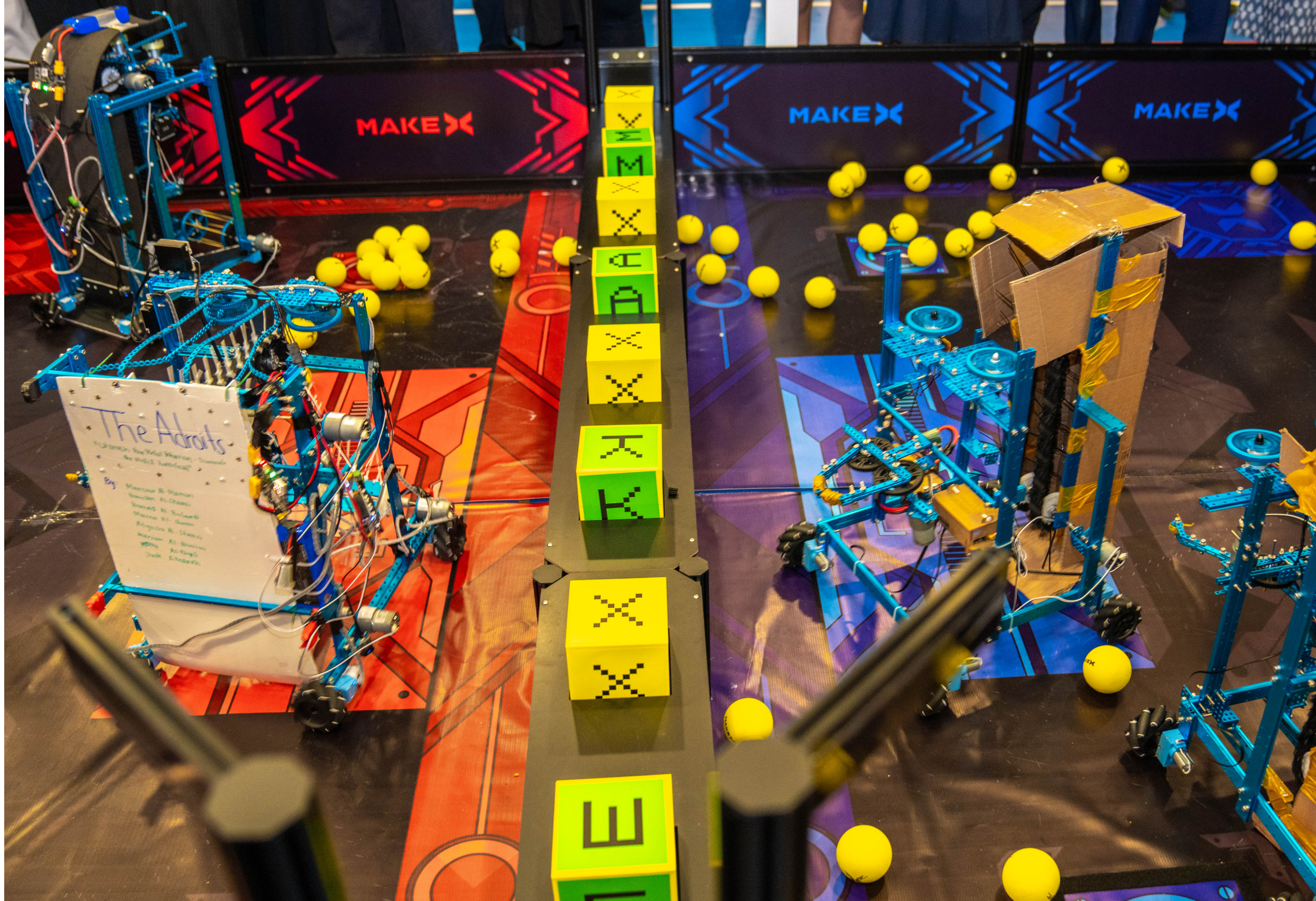
ALDAR

ALDAR TODAY

AN INNOVATION-CENTRIC STRATEGY

INNOVATION IN PRACTICE

Cloud Family
Yas Island Metaverse
MANASSAH
Scale Up
National Mubarmij50 Competition
Global Scouting & Piloting
Our Impact in Numbers

WORK WITH US

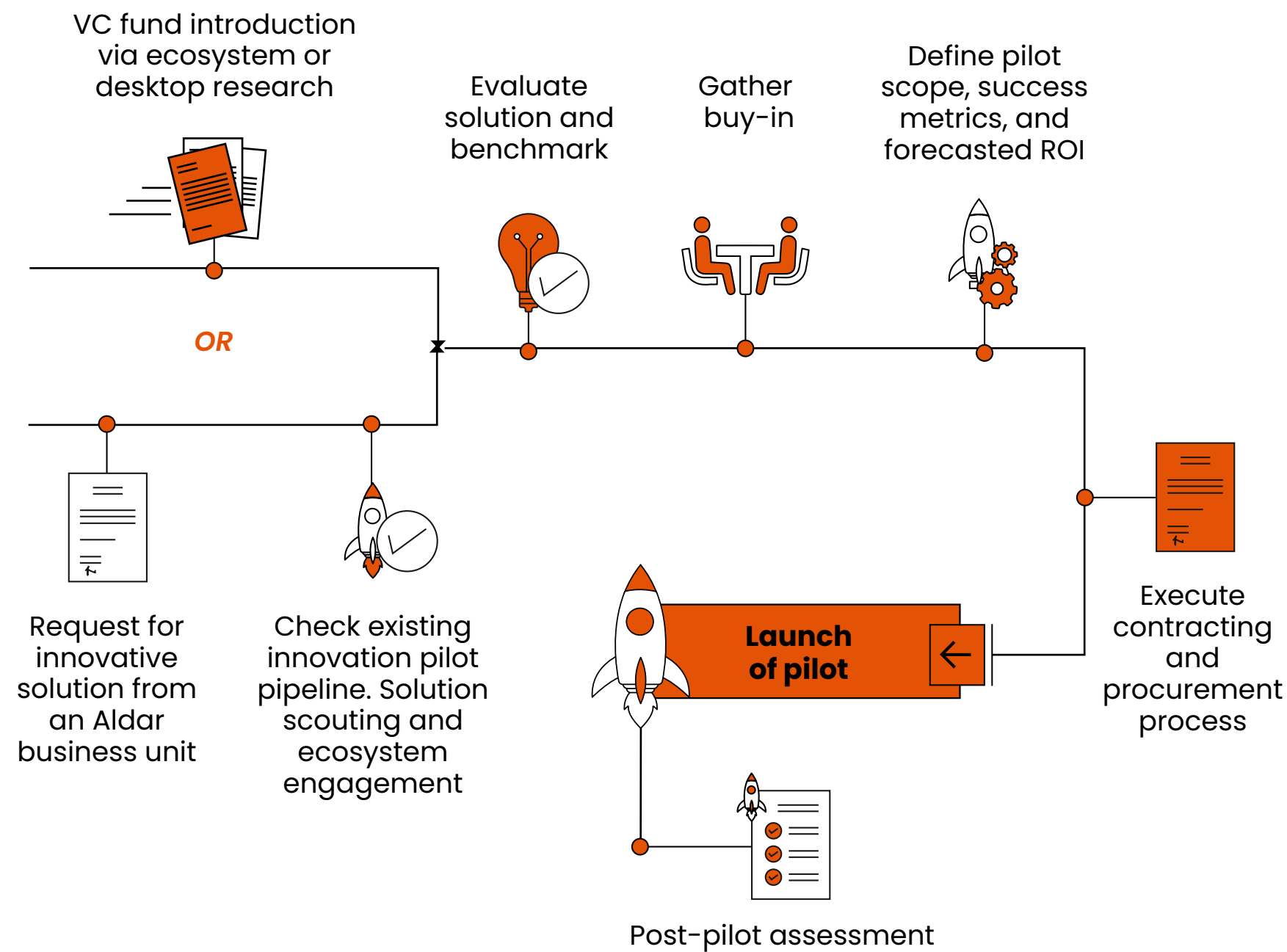| First Cohort	Second Cohort	Our Growth
53 students	**707** students	**1,234%**
4 schools	**55** schools	**X13.75**
1 emirate	**6** emirates	**X6**

Global Scouting & Piloting

Category External innovation programme

Definition An ongoing innovation programme leveraging Aldar's interconnected ecosystem of start-ups, mentors, venture capitalists, and partners. We identify leads and create an innovation pipeline through a systematic process. Relevant leads can be turned into pilot projects to test and assess in a controlled environment the potential impact of new technologies on the organisation. If successful, these pilots can then be developed into solutions addressing current challenges.

Purpose Explore Aldar's expanding innovation ecosystem to identify innovation leads and implement innovative pilot projects, eventually helping develop solutions that will generate incremental value across the organisation and address business unit challenges.

Process

VC fund introduction via ecosystem or desktop research

Evaluate solution and benchmark

Gather buy-in

Define pilot scope, success metrics, and forecasted ROI

OR

Request for innovative solution from an Aldar business unit

Check existing innovation pilot pipeline. Solution scouting and ecosystem engagement

Launch of pilot

Execute contracting and procurement process

Post-pilot assessment

2022-2023 Status

63 active pilot projects in 2022

26 pilot projects contracted in 2022

78 active pilot projects in 2023 pipeline
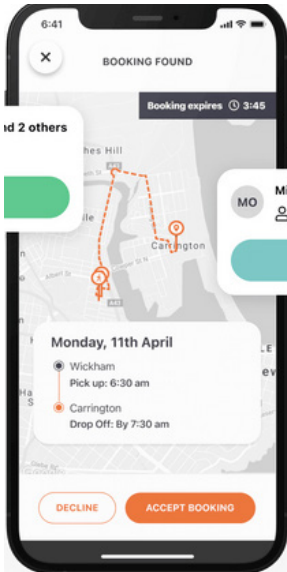
Liftango

Solution Overview

A demand-responsive shared mobility solution enabling route optimisation for staff transportation.

Start-Up	Liftango
Challenge Statement	To reduce the numbers of vehicles on the road, reduce carbon emission, and allow for cost savings.
Net Zero Focus Area	Resource efficiency & management
Lead Source	VC fund

Success metrics

25%
reduction in daily number of buses

207,900 KG of CO2 emissions reduction

2
new use cases scaled across Aldar

Source of emission factors: IEA Statistics

Immerse

Solution Overview
Gamified, digital AR experiences within Aldar assets that allow users to virtually interact with their physical environment.

|	
Start-Up	Rovar
Challenge Statement	To increase and enhance customer engagement through unique and immersive experiences.
Start-Up Selection Rationale	A winning start-up in the Ibtikar programme, specialising in branding and visual communication with a focus on making cities smart.
Lead Source	Ibtikar

Success metrics

1,500+
unique users

3
unique experiences deployed

Pinned

Success metrics

89%
Ether occupancy
enabled through
Pinned

182
bookings
successfully
processed

Solution Overview
An interactive short-term retail booking platform aiming to
simplify tenants' experience.

Start-Up	Pinned
Challenge Statement	To streamline boutique businesses' retail space booking process with ETHER, ensuring transparency and efficiency via a fully automated platform.
Start-Up Selection Rationale	A customisable and cost-efficient SaaS solution that takes into account our localised needs.
Lead Source	Ibtikar
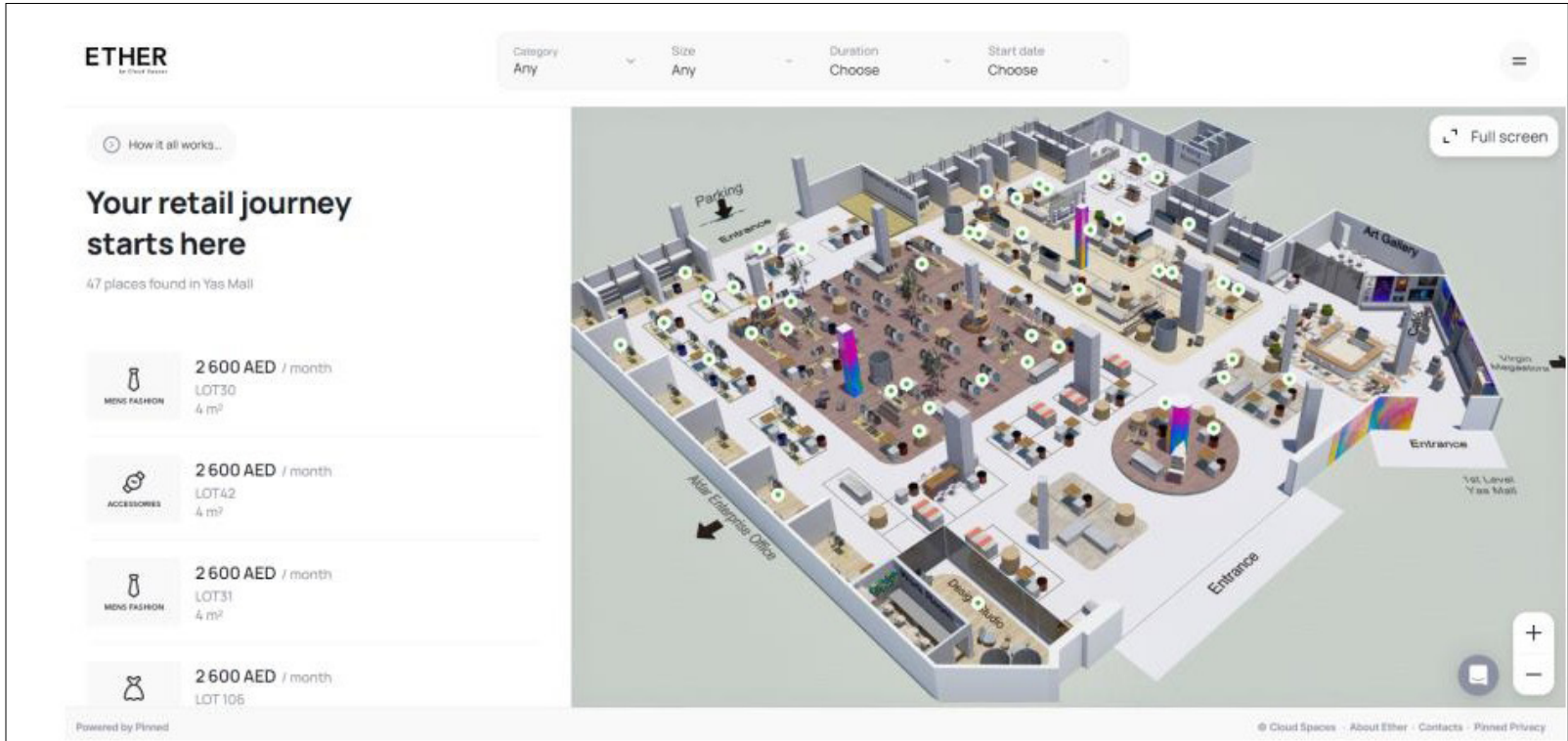
INNOVATION
REPORT

2022-2023

Opaala

Solution Overview

A smart ordering service for the F&B industry that provides customers with the ability to order food and beverages from different brands in the vicinity while paying directly from their phones. This pilot has had such strong traction among customers since its launch in 2022 that we have been expanding it to several other locations.
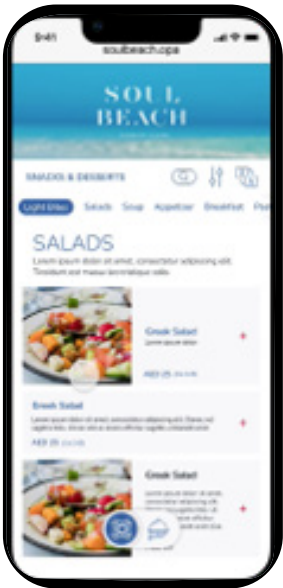
Start-Up	Opaala
Challenge Statement	To enable guests to conveniently order food from our retail tenants, whether they are at the beach, the mall, or home.
Start-Up Selection Rationale	A local start-up with a strong hospitality portfolio, offering a seamless customer experience and sharing Aldar's values of customer centricity and operational excellence.
Lead Source	Partner referral

Success metrics

Over **7,000** orders at Soul Beach since launch

Approx. **70%** growth in the first three months of implementation

ALDAR

Mrüna

Solution Overview

A waste-water recycling solution, built around two components:
BiomPods, a nature-based waste-water treatment system;
and BiomPortal, a suite of interconnected IoT devices for remote
monitoring and control.

Start-Up	Mrüna
Challenge Statement	To recycle waste-water on-site, thus reducing CO2 emissions and promoting a circular economy.
Net Zero Focus Area	Resource efficiency & management
Lead Source	Scale Up

Success metrics

730 sewage truck
collections per year
reduced to **0**

137,000 KG of CO2
emissions reduction

8.2mn
litres recycled

Source of emission factors: IEA Statistics + Second
GHG inventory for Abu Dhabi Emirate, EAD

Yalla Return

Solution Overview

A community recycling initiative combining smartbins and a digital engagement platform to help users understand how to recycle while ensuring full traceability. Collection bags are equipped with unique QR codes allowing participants to earn credits that can be exchanged for rewards.

Start-Up	Nadeera
Challenge Statement	To engage, educate, and reward residents for recycling while enabling efficient waste collection.
Net Zero Focus Area	Circular economy
Lead Source	Hub 71

Success metrics

11.8 tonnes
of waste diverted from landfills

37,000kg of CO2 emissions reduction

287m3
landfill space saved

Source of emission factors: US EPA

ALDAR

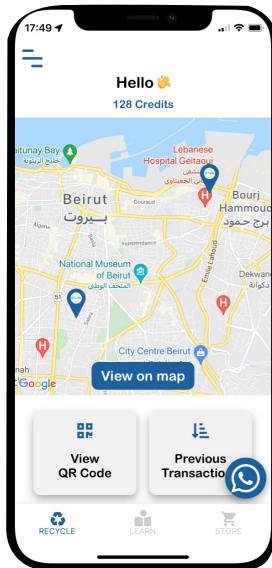ALDAR TODAY

AN INNOVATION-CENTRIC STRATEGY

INNOVATION IN PRACTICE

Cloud Family
Yas Island Metaverse
MANASSAH
Scale Up
National Mubarmij50 Competition
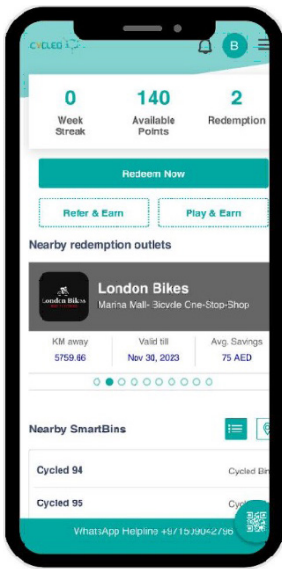▶ **Global Scouting & Piloting**
Our Impact in Numbers

WORK WITH US

Cycled

Solution Overview

An AI-powered waste sorting and recycling solution providing incentives for community recyclers in various Aldar retail assets. Dropping items and scanning the smartbin's QR code allows users to accumulate points that can be exchanged for shopping vouchers.

Start-Up	Cycled
Challenge Statement	To provide an easy-to-access recycling solution for our communities, thus contributing positively to Aldar's Net Zero Strategy.
Net Zero Focus Area	Circular economy
Lead Source	Innovation scouting

Success metrics

34 tonnes of plastic recycled

59,000kg of CO2 emissions reduction

2mn+ plastic bottles
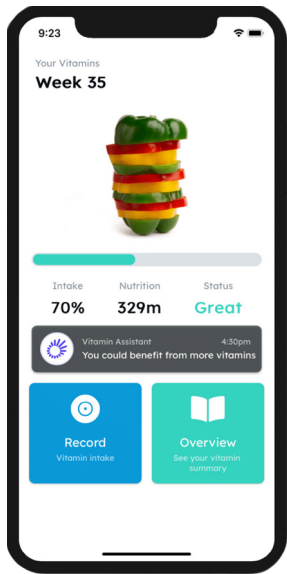
Source of emission factors: US EPA

ALDAR

HydroArt

Solution Overview

An indoor hydroponic smart growing solution enabled by HydroArt's smart app and hassle-free pods. The pilot was launched in the Yasmina school, providing students with hands-on sustainable growing cycle experiences and allowing for real-time observations.

Start-Up	HydroArt
Challenge Statement	To find a practical way to introduce sustainable growing as part of the curriculum.
Lead Source	Innovation scouting

Success metrics

4
growth cycles

1,500
students engaged

Our Impact in Numbers

ALDAR

ALDAR TODAY
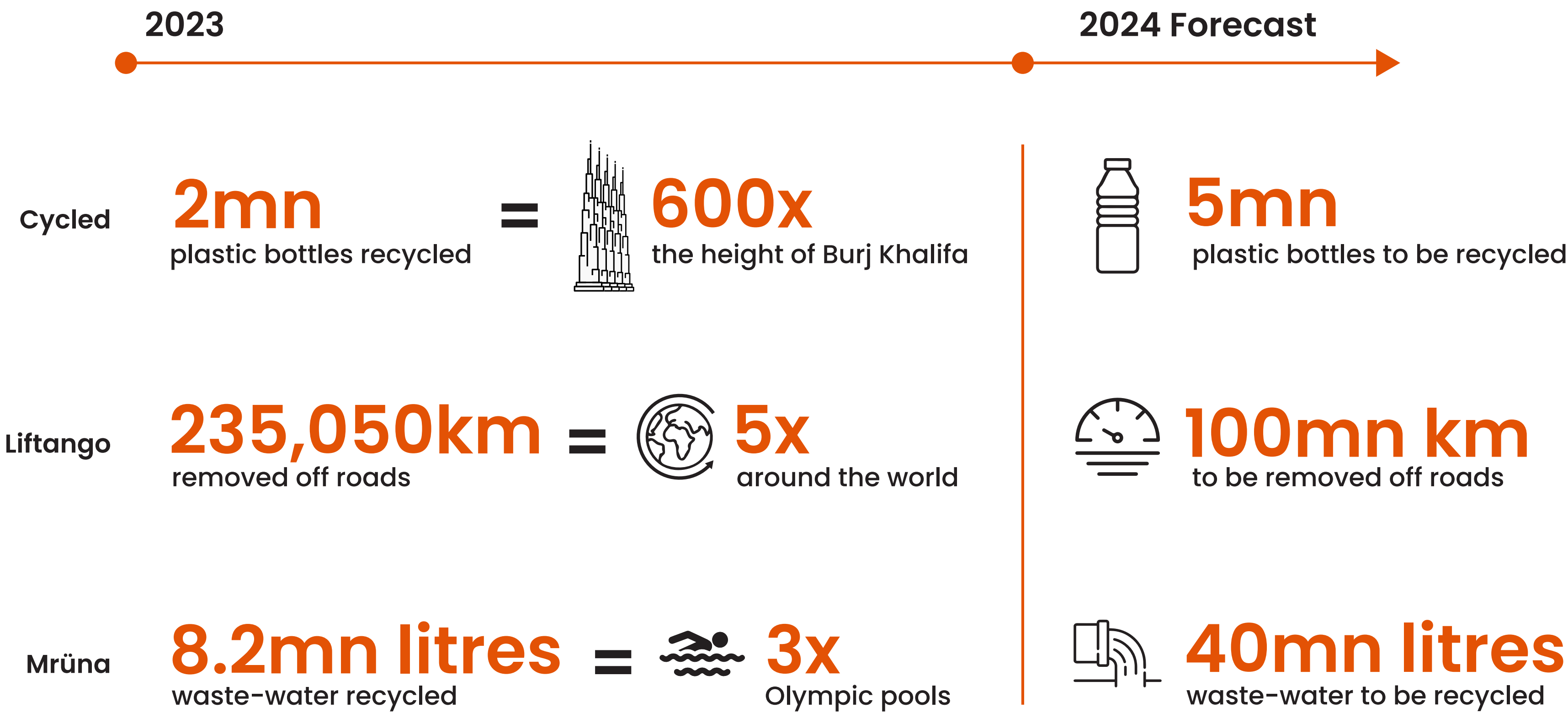
AN INNOVATION-CENTRIC STRATEGY

INNOVATION IN PRACTICE

Cloud Family
Yas Island Metaverse
MANASSAH
Scale Up
National Mubarmij50 Competition
Global Scouting & Piloting
▶ **Our Impact in Numbers**

WORK WITH US

2023

2024 Forecast

Cycled

2mn
plastic bottles recycled

= **600x**
the height of Burj Khalifa

5mn
plastic bottles to be recycled

Liftango

235,050km
removed off roads

= **5x**
around the world

100mn km
to be removed off roads

Mrüna

8.2mn litres
waste-water recycled

= **3x**
Olympic pools

40mn litres
waste-water to be recycled

Work with Us

Ready to embark on an innovation journey with Aldar?

Contact us:
innovation@aldar.com

Or explore
www.aldar.com/en/about-us/innovation

ALDAR

INNOVATION
REPORT
2022–2023