



Our Innovation Journey





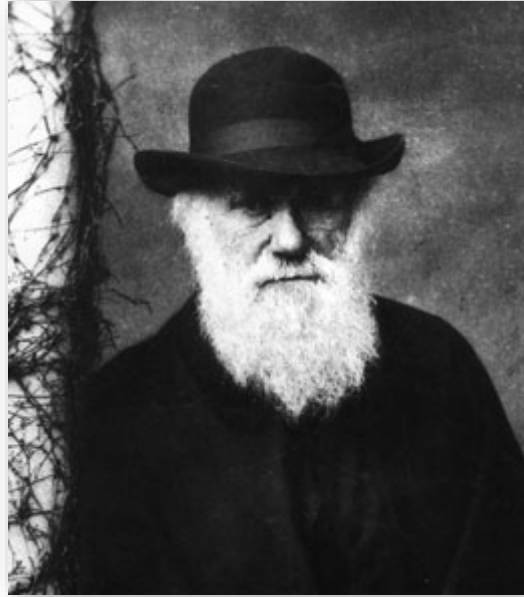
AGENDA

1. Why is it important to innovate
2. Problem: Diversity Equality Inclusion
3. Why Now?
4. Solution
5. Market Size: Global
6. Competition
7. Product: Digital Platform
8. Business Model
9. Team
10. Questions and Answers



Why Is It Important To Innovate

"Innovation increases our chances to react to changes and discover new opportunities"



"It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change" (Charles Darwin, 1859).



"A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" (Lewis Carroll, 1871).





The Future is coming, ready or not

For many, the entrepreneur is the one who “identifies and creates opportunities and then takes action to realise new ideas in an appropriate market in such a way as to bring value to that domain” (Kirkham, Mosey & Binks, 2009).]

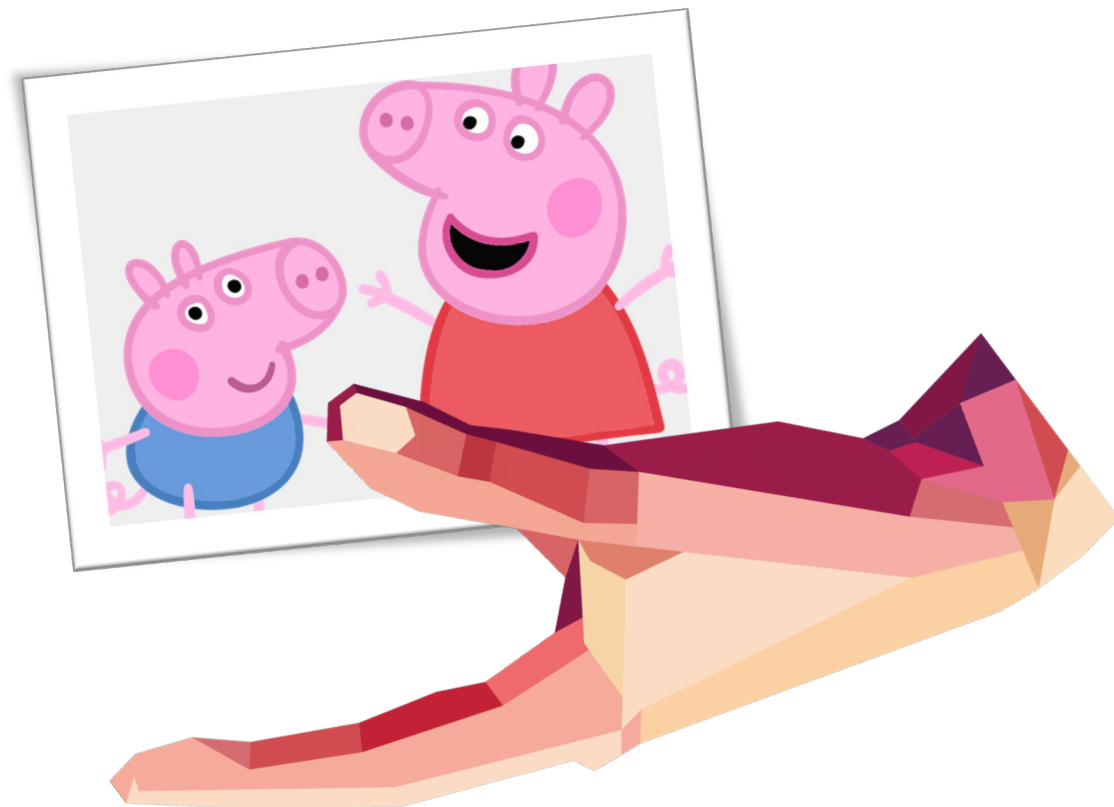


Why bolder creativity is challenging?

Bold Ideas aren't born on a hamster wheel



Who would believe that a pig that looks like a hairdryer..... would now be exported to 180 Countries?





Empowering City
Management & Citizens to a
Safer Future



Diverge

Converge

Create
Choices

Make
Choices



**Analyze the
Marketplace**

Look at trends , drivers,
and current dynamics
in the marketplace
according to the 10
Types of Innovation.



**Analyze the
Competition**

Look at strength &
weaknesses of min
competitors according
to the 10 Types of
Innovation



Analyze SDL

Look at your own
strength & weaknesses
according to the 10
Types of Innovation



**Innovation
Focus**

Discussion where to
emphasize the
innovation focus and
efforts for SDL
Contents



**Strategy, Tactics
& Hypothesis**

Set focus for Innovation
(business model, platform,
experience), formulate strategy,
select set of tactics, formulate
hypothesis including metrics for
validation

CONFIGURATION

OFFERING

EXPERIENCE

Profit Model	Network	Structure	Process	Product Performance	Product System	Service	Channel	Brand & Message	Customer Engagement
The way in which we make money	Connections with others to create value	Alignment of our talent and assets	Signature or superior methods for doing our work	Distinguishing features and functionality	Complementary products and services	Support and enhancements surrounding our offering	How our offerings are delivered to customers and users	Representation of our offerings and business	Distinctive interactions

These types of innovation are focused on the innermost workings of an enterprise and its business system

These types of innovation are focused on an enterprise's core product or service, or a collection of its products and services

These types of innovation are focused on more customer-facing elements of an enterprise and its system

Back Stage

Front Stage



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Safer Future

OUR JOURNEY



Stages

- 01** Searching for a problem
- 02** Searching for a solution
- 03** Searching for a business model



Objectives

- Finding Insights
Framing Problems
/ Opportunities
- Generating Ideas
Choosing Ideas
Running Experiments
Scaling Experiments
- Designing
Business Models
Building a Company



Outcome

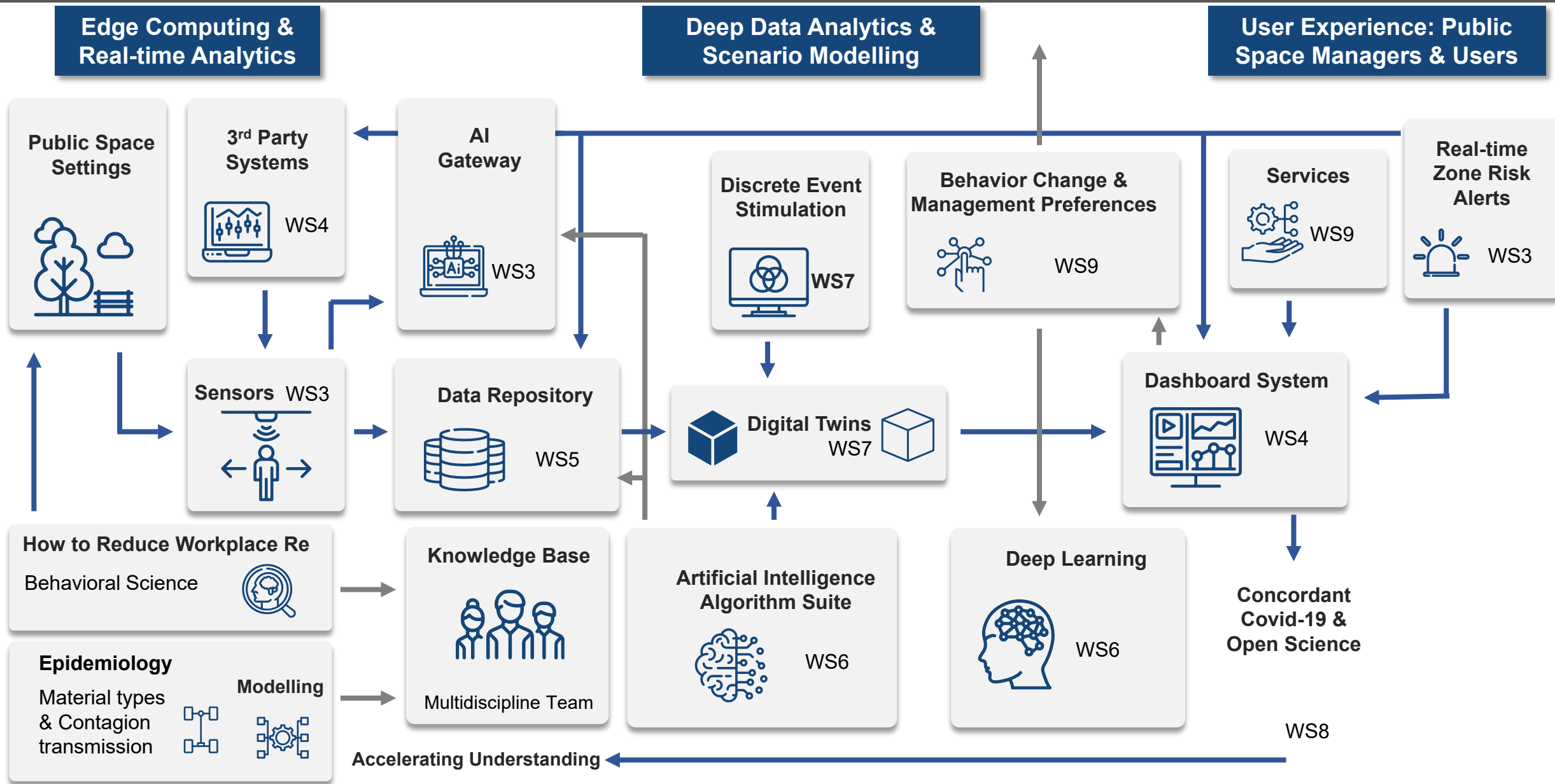
- Customer / Problem Fit
- Problem / Solution Fit
- Solution / Market Fit

A PROBLEM CONTEXT



What makes Smart Cities smart?

- Cities cover 2% of the earth's surface area but drive 80% of the world's GDP.
- Urban areas are growing by 1.3 million people every week.
- Currently 50% of the world's population live in cities, this is predicted to grow to 70% by 2050 or 6.5 billion people.
- Cities consume 75% of natural resources.



~~Equality, Diversity, Inclusion???~~



Smart cities in many ways are failing people with disabilities and older persons. The technologies that they are developing and deploying are not really working for everyone in the city.



The decision-makers of cities should look at questions of physical accessibility simultaneously with digital accessibility.



Elderly people, who often have a disability, are those who have the greatest trouble in adapting to new tools.



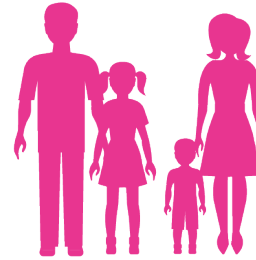
Experts from around the world identified the lack of awareness about disability and accessibility in design and innovation as one of the main impediments to the “Smart City for All.”

Target Users Group Parameters

These are the target group
from a developer in KSA.

Our Question is **why**
the people of
determination seem to be
not included?

FAMILIES



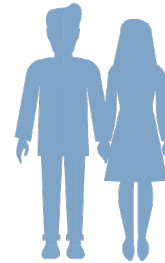
FAMILIES



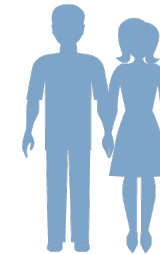
YOUNG
FAMILIES



COUPLES



YOUNG
COUPLES



MIDDLE AGED
COUPLES



ELDERLY
COUPLES

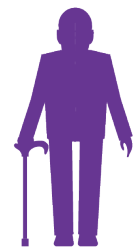
SINGLES



YOUNG SINGLES



MIDDLE AGED
SINGLES



ELDERLY
SINGLES

BUSINESS

Ghadan 21 initiatives such as Ma'an are "transforming" Abu Dhabi

More than 200km of cycle paths will be added as part of the \$13.6bn (AED50bn) Ghadan 21, which marks a year in Feb'20

by [Staff Writer](#) | February 17, 2020 SHARE



Ghadan 21 initiatives such as Ma'an are "transforming" Abu Dhabi

The chairman of the Abu Dhabi Executive Office and member of the Abu Dhabi Executive Council, HH Sheikh Khalid bin Mohamed bin Zayed Al Nahyan has said that the emirate's accelerator programme Ghadan 21 has transformed Abu Dhabi's economy, knowledge ecosystem, and its community.

According to the state-run *Abu Dhabi Media Office*, the launch of the Ma'an Authority of Social Contribution led to Ghadan 21's most prominent social initiatives.

Ma'an, which is a platform for volunteer-based social innovations such as social incubator programmes, focused on solutions for People of Determination in its first cycle and will focus on mental well-being in its second cycle.

[Construction Week: Ghadan 21](#)

PROJECTS AND TENDERS

DEWA refurbishes classrooms at National Charity School-Elementary

The school has 1,700 students, including People of Determination and those from families with limited incomes

by [Staff Writer](#) | February 17, 2020 SHARE



DEWA refurbishes classrooms at National Charity School-Elementary

The [Dubai Electricity and Water Authority \(DEWA\)](#) has launched a project to refurbish the classrooms at the National Charity School-Elementary in Dubai and meet the needs of the school, teachers, and students.

Approximately 37 volunteers from DEWA participated in the project, with a total of 296 working hours, to refurbish the classrooms of the school.

The school has 1,700 students, including People of Determination and those from families with limited incomes. As part of the project, DEWA also checked the health and safety procedures at the school.

The volunteers also refurbished the staffroom as well as the arts, music, and computer rooms.

[Construction Week: DEWA](#)

Abu Dhabi launches 30 initiatives for people of determination

Programmes aim to ensure equal access to rights and opportunities

Published: October 03, 2020 16:17
Staff Report



Abu Dhabi's strategy for the people of determination over the next five years will see the implementation of at least 30 initiatives. Abu Dhabi skyline photo for illustrative purpose only.
Image Credit: Ahmed Ramzan/Gulf News

ALSO IN THIS PACKAGE

[In Pictures: Dubai's Harbour Marina welcomes first yachts](#)

[The Saudi sites you must see: Top places to visit](#)

[Philippines: \\$85 billion infrastructure spending in 104 projects](#)

[Crowds in face masks pack out China auto show after COVID-19 delay](#)

[In Pictures: Learn how to make a sofa or a bed at a traditional furniture factory in Sharjah](#)

Abu Dhabi: Abu Dhabi's strategy for the people of determination over the next five years will see the implementation of at least 30 initiatives, according to the Department of Community Development (DCD).

[Gulf News: Abu Dhabi Initiatives](#)



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People of determination

The UAE refers to the people with disabilities as 'people of determination' in recognition of their achievements in different fields. This page provides information about how people of determination are protected and empowered through services and facilities in the areas of education, health, jobs and more.

Protection, support and assistance of people of determination

Rehabilitation of people of determination

The People of Determination Retreat

Education for people of determination

Employment of people of determination

Health of people of determination

Abu Dhabi Comprehensive Strategy for People of Determination 2020-2024

Caring for people of determination amid COVID-19

The National Policy for Empowering People of Determination

Strategic Plan for the Rights of Children with Disabilities 2017-2021

[UAE: People of Determination](#)

LIVE WHERE
PEOPLE COME FIRST

NEOM will reimagine the way we approach urban development, overcoming challenges of modern cities and prioritizing people.

WALK ANYWHERE -
EVERYTHING IS 5 MINUTES
AWAY

Replacing cars and streets with walkable distances for a healthy lifestyle. The longest journey will never be more than 20 minutes.

LIVE A SIMPLIFIED LIFE
ENHANCED BY
PREDICTIVE TECHNOLOGY

Making everyday life seamless through invisible AI-enabled infrastructure that continuously learns and predicts ways to make life easier for residents and businesses.

LIVE IN HARMONY WITH
NATURE

Protecting stunning landscapes and integrating nature into the heart of communities for unmatched lifestyle and well-being.



نيوم NEOM

[NEOM](https://neom.com)

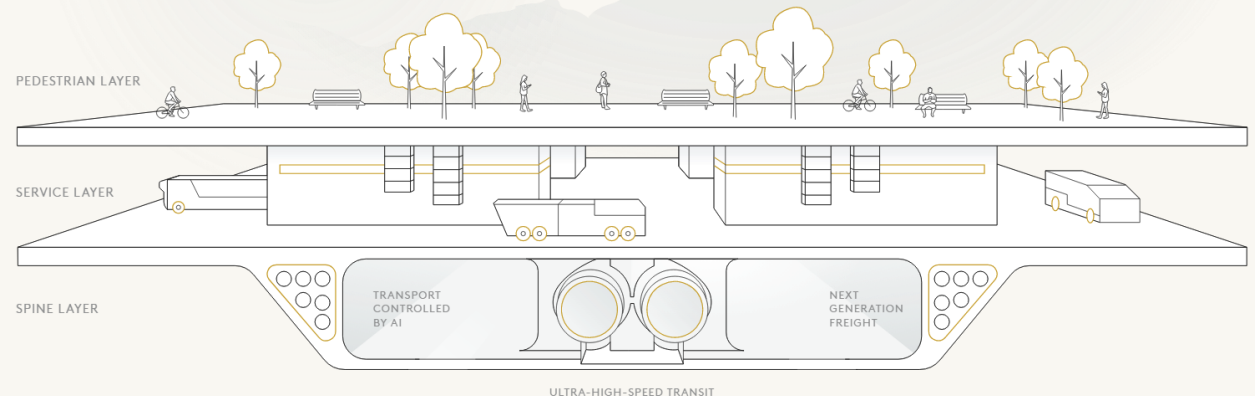
NEOM Smart City

NEOM is not about building a smart city, it is about building the first cognitive city, where world-class technology is fueled with data and intelligence to interact seamlessly with its population.

NEOM aims to making everyday life seamless through invisible AI-enabled infrastructure that continuously learns and predicts ways to make life easier for residents and businesses.

POWERED BY AN INNOVATIVE INVISIBLE INFRASTRUCTURE

The invisible backbone running all transport, networks and utilities beneath the surface with unprecedented efficiency and sustainability.



Problem Definition and Context

Disability And Accessibility In The Urban Environment

Urban environments, infrastructures, facilities and services can impede or enable, perpetuating exclusion or fostering participation and inclusion of all members of society.

Persons of determination (people with disabilities, elders, etc.) face widespread lack of accessibility to built environments, from roads and housing, to public buildings and spaces and to basic urban services such as sanitation and water, health, education, transportation, and emergency response and resilience programmes. Barriers to information and communications, including relevant technologies and cultural attitudes including negative stereotyping and stigma also contribute to the exclusion and marginalization of persons with disabilities in urban environments.

At the moment URBAN ENVIRONMENT is the most dangerous place for children, elder ones, people with physical and mental disabilities.

A blue-tinted background image showing a person's hand holding a smartphone, with the person's face partially visible in the background.

**LET'S
MAKE A
CHANGE!**

Multimodal transit centers turn out to be major nodes of transportation in large cities that aim at improving transport efficiency. They can easily connect together different means of transportation, thus saving time for passengers who need to commute. But how can such crowded and complex places be accessible to people with disabilities?

Using public transit means having a seamless mobility chain to go from point A to point C. This means that point B needs to perfectly link together point A and point C. The mobility chain actually concerns any passengers, not just those with disabilities.

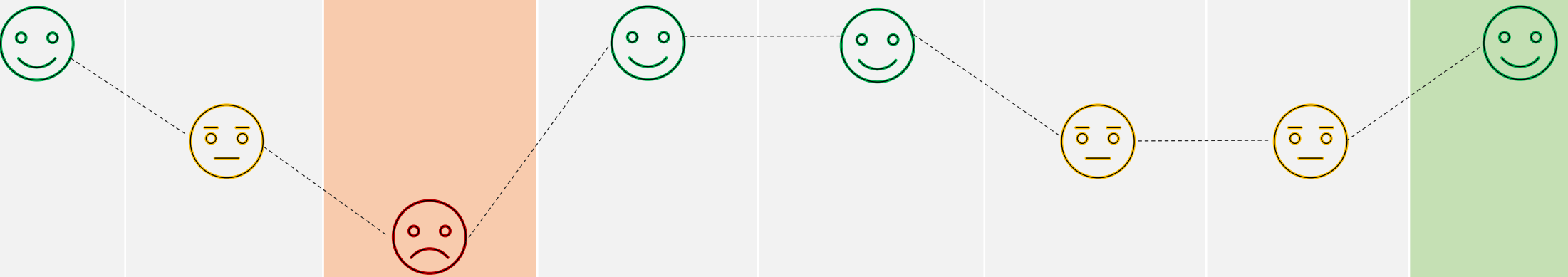





Obviously, removing accessibility barriers is what provides a seamless mobility chain. It implies being aware of the difficulties met by people with disabilities. This can happen at any stage of their journey.



**How can
multimodal
transit centers
be accessible
for people with
disabilities?**

Category of people with disabilities	Obstacles	Solutions
People with a visual impairment	<ul style="list-style-type: none"> • Unsuitable steps • Significant differences in height between floors • Slippery floors • Elevators hard to use • No clear distinction between entry and exit gates 	<ul style="list-style-type: none"> • Audio beacons like NAVIGUEO+HIFI • Smartphone apps like MyMoveo • An efficient signage system with tactile guide paths, visual contrast and detectable warning strips • Secured stairs: handrails and contrasting non-slip stairs • Embossed buttons or Braille on the ticket machines
People with a mental disability	<ul style="list-style-type: none"> • Maps and guides hard to read or understand • Long distances • Small spaces 	<ul style="list-style-type: none"> • Using universal pictograms that are easy to understand • Accessible vocabulary (easy-to-read) • Clear crowd organization
People with reduced mobility	<ul style="list-style-type: none"> • Unsuitable steps • Difficulties to insert a ticket • Slippery floors • Elevators hard to use • Counters too high • Fast closing mechanisms 	<ul style="list-style-type: none"> • Elevators and escalators • Access ramps • Large automatic doors • Lowered counters • Dedicated airlock for wheelchair users • Contactless validation • Presence Detectors
People with a hearing impairment	<ul style="list-style-type: none"> • Unclear audio messages and signal 	<ul style="list-style-type: none"> • Audio induction loops at station booths • Clear visual signals

CUSTOMER JOURNEY

Stages of Journey	Idea / Design Intent / Budget Allocation	Going to Designers – Getting the Design	Budget Assessment	Going to Peoplespace – Browsing the solutions	Generating the report with options for budget	Selecting the best option	Agreement with the preferred vendor	Results
Activities	Client generates the idea	Client review the idea with designers	The budget is estimated	Client consults smart solutions with Peoplespace	The report is generated	Proceeds to pay a preferred vendor	Proceeds to make the agreements with vendor	Client saves a lots of time and possibly m oney
Feelings								
Very Happy								
Overall Satisfied								
Unhappy								
Experiences	Excited for the idea	<ul style="list-style-type: none"> Happy to see options Confused about how to choose 	Annoyed with obstacles	Surprised to see lots of diferent options	Happy with the Informative service	Has all the information to choose the most suitable vendor	Completes the agreements	Satisfied with service
Customer Expectations	Easy to achieve idea	An achievable approach	Clear budget assessment	View more options to achieve their idea	High quality solutions	High quality vendors and easy payment	Complete agreements without obstacles	Time and money savings

Platform Architecture

Monetary Exchange

Exchange of Reviews / Feedback

Double Sided
Network Effect

Producers

CBA/SVM

Consumers

Materials
Devices
Prefab
Service Providers

Developers
Consultants
Contractors
Government bodies

Logistics Providers
Payment Service Providers
Quality Assurance Agents
Insurance Providers

Complementors/Ecosystem

Integration Management
Application Development Environment
Data Analytics
Data management

Complementors/ Ecosystem

Lifecycle Costing
Smart City strategies
Insights
Benchmarking report

People Space



What We Deliver

Accessibility and convenience



Consultancy offering help & advice with standards, policy, planning and implementation.



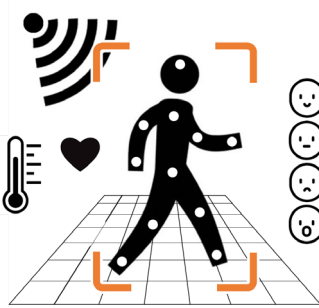
Supply Chain Partner providing selected solutions for your project



Product Development Consultant that can contribute to your solution with feature, standards and marketplace intelligence

1. Unique aggregated data in one place
2. Access to comparative prices and solutions.
3. Time and costs saving
4. We provide vendors the best advice to integrate their product to the system and get the best value.
5. Powered AI algorithm that calculates social value and provides Cost Benefit Analysis (CBA) immediately.
6. Space and access for collaboration
7. We provide CBA that is an analytical tool and comparative approach for the long-term impact.
8. We provide Social Value measurement crucial in today's economical context.

Intelligent Environments

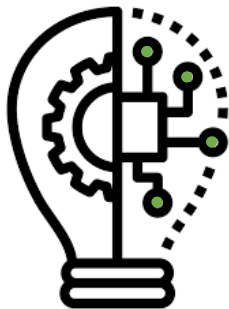


Peoplespace Impact: enabling better experience

Real-time interaction detection and predictive analytics

- Monitoring changes in health and wellbeing impacts, behaviour and emotions in response to different place design elements
- Measuring artifact affordances and **Social Value**
- Real-time interaction assistant and zone risk alerts

Intelligent Environments



Peoplespace Ecosystem: enabling better innovation

Digital Transaction Platform for Smart Place products

- **Marketplace match making tool**
- User profiler and reputation mechanism
- Product **Social Value** Measurement

Global Forecast to 2026

Smart Cities Market by Focus Area, Smart Transportation, Smart Buildings, Smart Utilities, Smart Citizen Services (Public Safety, Smart Healthcare, Smart Education, Smart Street Lighting, and E-Governance), and Region.

The global Smart Cities Market size to grow from USD 457.0 billion in 2021 to USD 873.7 billion by 2026, at a Compound Annual Growth Rate (CAGR) of 13.8% during the forecast period. Growing urbanization, need for efficient management and utilization of resources, demand for fast and efficient transport and commuting, public safety concerns, and increasing demand for a healthy environment with efficient energy consumption are expected to be the major factors driving the growth of the Smart Cities Market.

457.0 USD Billion
2021-e



873.7 USD Billion
2026-e



CAGR of 13.8% The global smart cities market is expected to grow from USD 457.0 billion in 2021 to USD 873.7 billion by 2026, at a CAGR of 13.8% during the forecast period.



Factors such as the need for public safety and communication infrastructure and increased adoption rate of advanced technologies are driving the smart cities market.



Acquisitions and product launches would offer lucrative opportunities for market players in the next five years.



Increased environmental concerns, growing demand for advanced technologies such as IoT and 5G, and developing economies are generating a number of opportunities.



The market growth in APAC can be attributed to increasing technology investments and ongoing smart city projects in the region.

SMART CITY VENDORS & SERVICE PROVIDER ANALYSIS

- Major Strategic Initiatives by Several Companies
- 2020 Imaging
- ABB
- Accela
- Accenture
- Aclara
- Aclima
- Advantech
- Aeris Communications
- AGT International
- Airspan
- Airtel
- Alibaba
- Allegro
- Ally
- Alstom SA
- Altair Semiconductor
- Alvarion
- Amazon
- Ambience Data
- AMCS
- AMD
- America Movil
- Amplia Soluciones SL
- Analog Devices Inc.
- Apple
- Appyparking
- Altran
- Arista Networks Inc.
- ARM Holdings
- Ascom
- Asus
- AT&T
- Atos
- Autogrid
- Ayyeka
- Azavea
- Baidu Inc.
- Banyanwater
- Barbara IoT
- Bentley Systems
- Blackberry Ltd
- Bosch Software Innovations GmbH
- Breezometer
- Bridj
- Broadcom Corporation
- BT Group
- BlynCSy
- Calthorpe Analytics
- Capgemini
- Cavium Inc.
- China Mobile
- China Unicom
- Ciena Corporation
- CIMCON Lighting
- Cisco
- Citrix Systems
- Cityflo
- Citymapper
- Civicsmart
- Clarity Movement Co.
- Cobham Wireless
- Colt
- Compology
- Contus
- Cradlepoint
- Cubic Corporation
- CyanConnote
- Dassault Systems
- Delta Controls
- Dispatchr
- Double Map
- DOVU
- Elichens
- Emagin
- Emerson Electric Co
- Enel
- Energyworx
- Enevo
- ENGIE
- Ericsson
- Evopark
- EZparking
- Fathom
- Filament
- Flamencotech
- Flowlabs
- Fluentgrid
- GE
- Get My Parking
- Google
- Gridcure
- HCL Technologies Ltd
- HFCL
- Hitachi
- Honeywell
- HPE
- Huawei
- IBM
- Infarm
- Inrix
- Inspira
- Intel
- Intelizon Energy
- Inventum
- Technologies
- Itron

SMART CITY VENDORS & SERVICE PROVIDER ANALYSIS

- Johnson Controls
- Kapsch Group
- Koninklijke Philips NV
- KORE Wireless
- LG CNS
- Libelium
- Logic Ladder
- Mapillary
- Maven Systems
- Meter Feeder
- Metrotech
- Microsoft
- Mindteck
- Miovision
- Mobike
- Moovel
- Moovit
- NEC
- Neighborland
- Nokia
- Nordsense
- NTT DATA
- One Concern
- Oorja On Move
- Opendatasoft
- Opusone
- Oracle Corporation

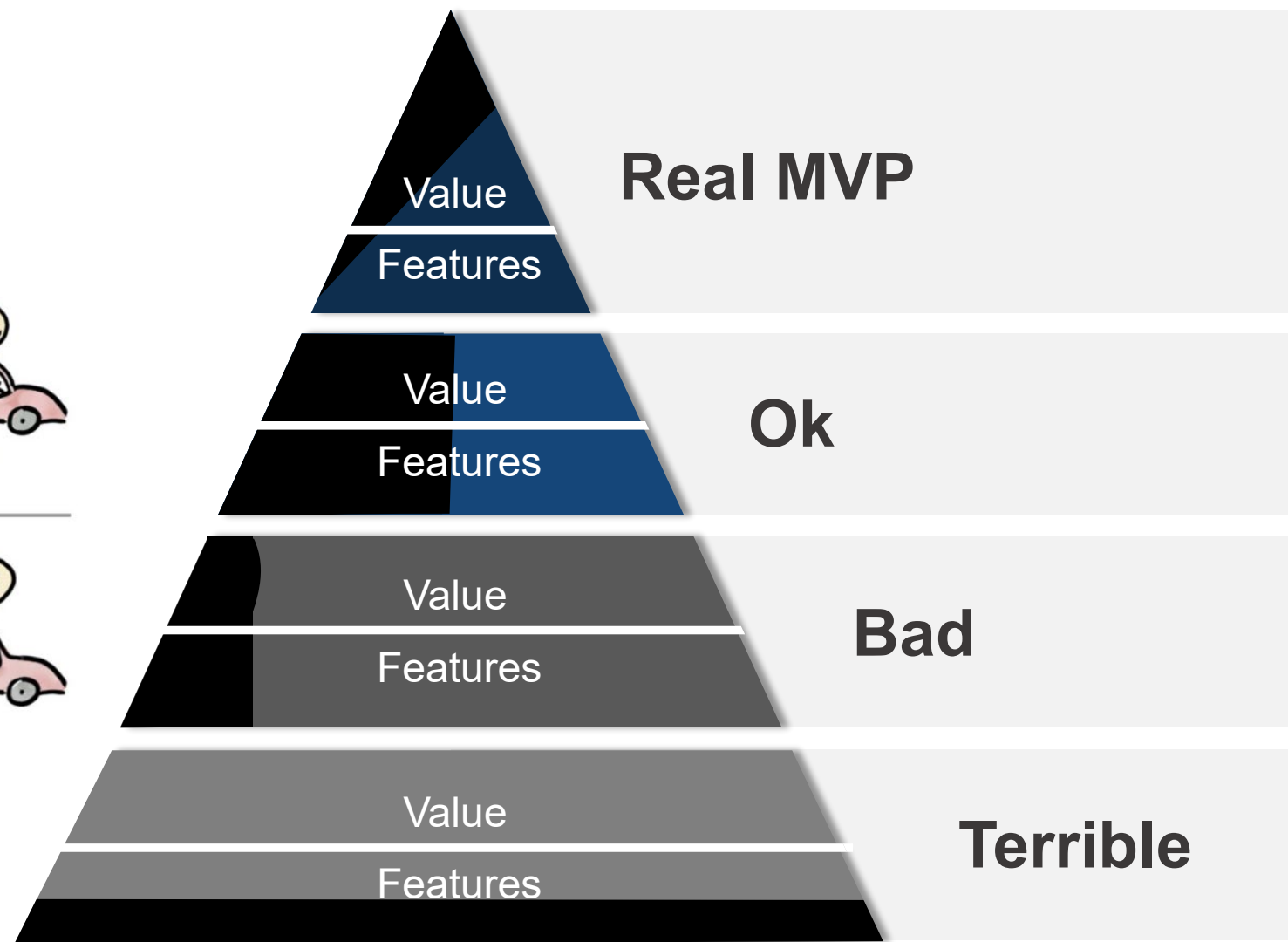
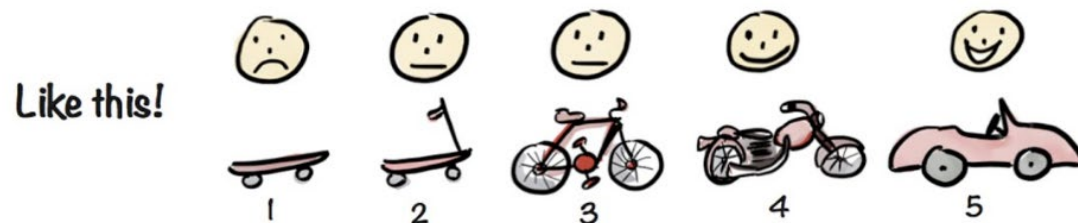
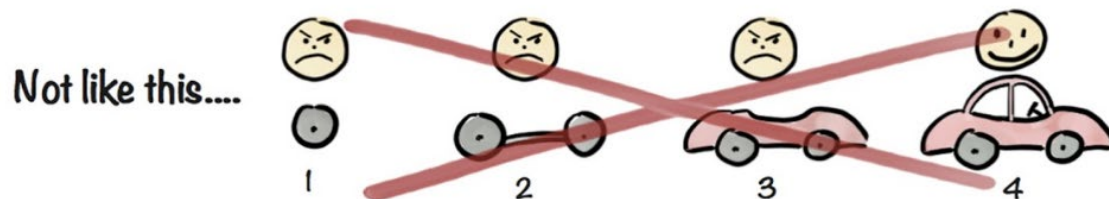
- Panasonic
- Parkwhiz
- Passport
- Phoenix Robotix
- Plume Labs
- Proclivis Technology Solutions
- Purple
- QInfra Solutions
- Qualcomm Incorporated
- Quality Theorem
- Rachio
- Remix
- Ridlr
- Rubicon
- SAP
- Schneider Electric SA
- Sentiance
- Siemens AG
- Sierra Wireless
- Sigfox
- Signify
- Soofa
- Spacetime Insight
- Spatial Labs, Inc.
- Spice Digital
- Spot Hero
- Stae

- Streetlight Data
- Swiftly
- Takadu
- Tantalum
- Telefonica
- Telensa
- Toshiba
- Tractebel
- Trafti
- Transit Labs
- Transit Screen
- Transloc
- Trilliant
- Understory
- UrbanFootprint
- Urbee
- Urbiotica
- Utilidata
- Valor Water Analytics
- Varentec
- Veniam
- Veolia
- Verizon
- Videonetics Technologies
- Vodafone
- Volocopter
- Watersmart

- Where Is My Transport
- Wipro
- Worldsensing SL
- Zagster
- Zenysis
- Zerocycle
- ZIFF Technologies

MVP

Testing



The current issue of Smart Cities

Smart cities in many ways are failing people with disabilities and older persons.

The technologies that they are developing and deploying are not really working for everyone in the city.

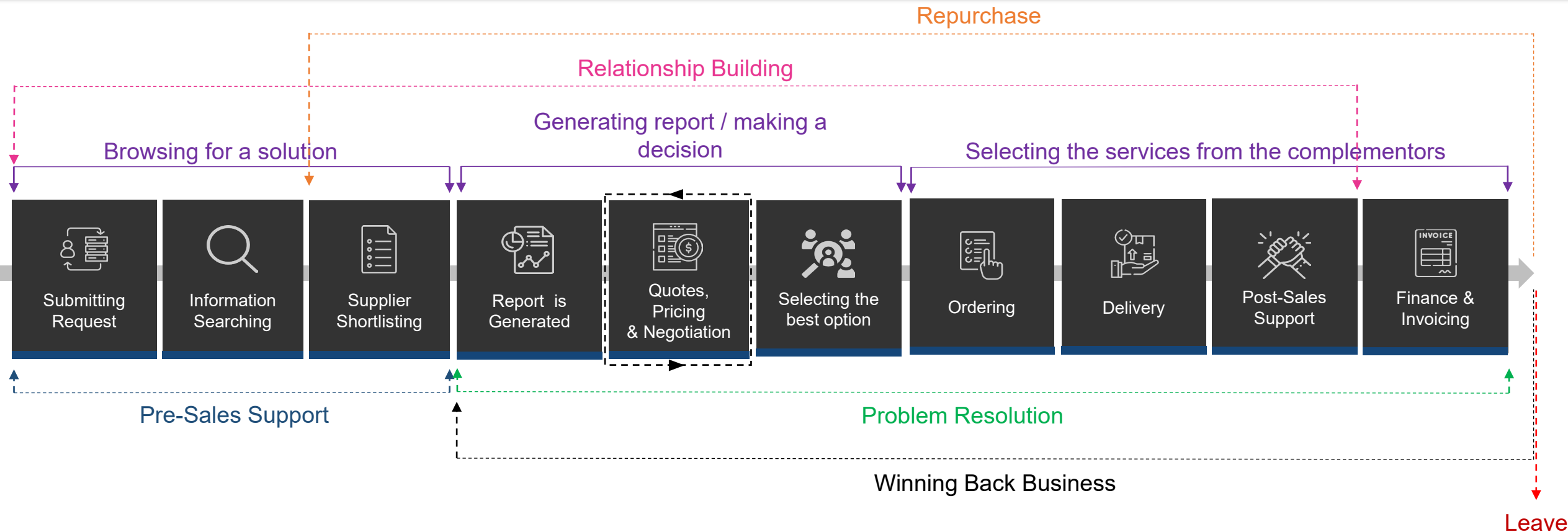


WE KNOW HOW

WE KNOW WHERE

WE KNOW HOW MUCH

COMMERCIAL JOURNEY MAP



Wider Societal

- Improved mental and physical health
- Improved local environment
- Reduced crime
- Reduced congestion
- Improved social relations
- Enhanced skills and knowledge
- Sustained Employment
- Better workplace safety
- Fairer distribution of benefits

Environmental

- Reduced carbon emissions
- Improved air quality
- Reduced noise pollution
- Increased biodiversity
- Wildlife protection
- Increased renewable energy
- Reduced energy use
- Reduced waste
- Fairer distribution of benefits

Social value is concerned ultimately with:

- How a project or intervention impacts on society's wellbeing or quality of life.
- What is in society's interests and defining what has value for society as anything that improves people's quality of life overall.

SUSTAINABLE DEVELOPMENT GOALS

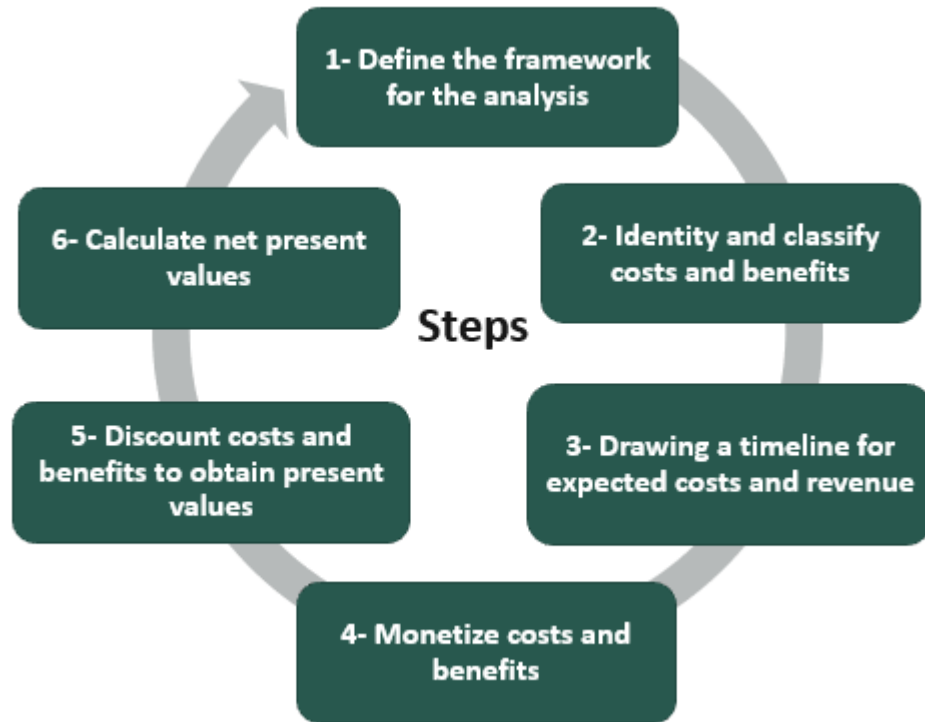


UN's Sustainable Development Goals can be understood as a set of metrics that are relevant to people's quality of life, in other words metrics that are relevant to social value.

This helps practitioners prioritise which goals to focus on, by understanding which affect quality of life the most and which they are likely to influence, and incorporate other concerns not covered by the SDGs that are relevant to quality of life – such as family and social relationships, sports participation, culture and heritage, and crime – into evaluation and project design.

The Cost Benefit Analysis for the Concept of a Smart City: How to Measure the Efficiency of Smart Solutions?

One of the tools for assessing the efficiency of planned activities (ie whether it's Smart) is a cost-benefit analysis.



The parameters for a CBA in relation to a Smart City can be defined as follows:

- What does the smart solution concern? What is the contribution of the solution to the society or individuals?
- Who/how was the need for a smart solution detected?
- What are the direct costs of implementation?
- What are the ongoing costs over time?
- What are the direct benefits of the solution, over what period, and for how many users?
- What are the indirect benefits of the solution to households, companies and the public sector?

Expanding the Possible :

Meeting objectives & Exceeding Expectations

Making...

Combining ideas, tools and processes, in synchronized efficiency, to **set innovation free from silo thinking.**



Holistic Benefits
Senior Buy-in
Risk Avoidance
Leadership
Decisions
Teamwork
Optimal Design
Project Success
Innovation
Cost Certainty
Excellence
The Future

... Easier

In time and within budget, with strategic solutions optimized to **accelerate benefits and the return on investment**

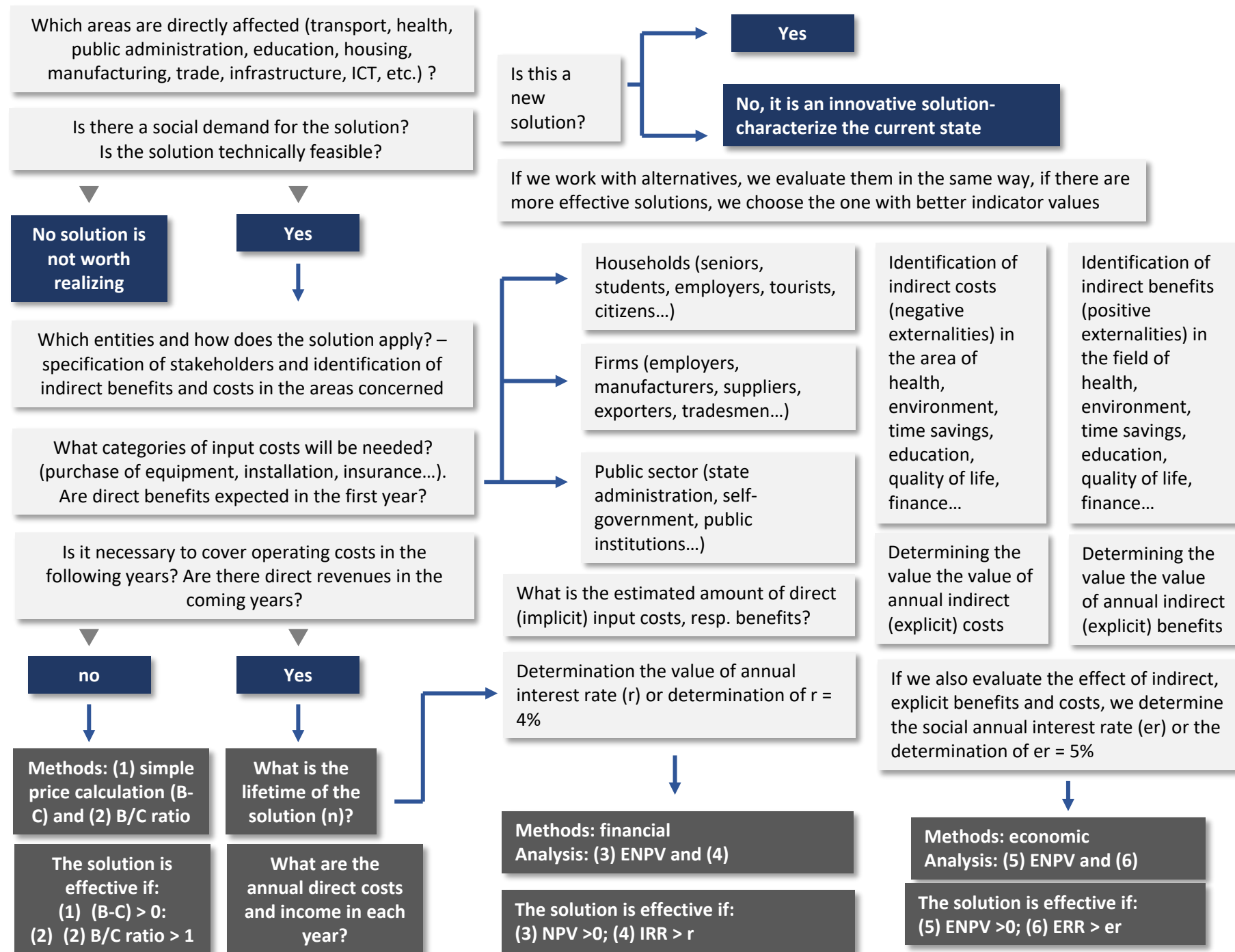
The steps of the cost-benefit analysis is (CBA)

1. Presentation of the socio-economic, institutional and political context			
2. Definition of objectives; needs assessment, projects relevance			
3. Project identification; project activities, body responsible			
4. Technical feasibility and environmental sustainability; demand analysis, manufacturing feasibility			
5. Financial analysis; cash-flows for project costs and revenues, tariff and affordability analysis, sources of financing, financial profitability and sustainability			
NPV < 0		NPV > 0	
<p>The activity does not require financial support.</p> <p>*does not apply to activities with significant non – monetary benefits (e.g. concerning cultural values, biodiversity, landscape, etc.)</p>		The activity does not require financial support.	
		6. Economic analysis; evaluation of non-market impacts, fiscal connections	
		ENPV < 0	ENPV > 0
		The society is better off without the activity	The society is better off with the activity
			7. Risk assessment; sensitivity analysis, qualitative risk analysis, probabilistic risk analysis

SAMPLE CBA SMART CITY FEATURES

Source	Smart Solution	Sector	Broader Presentation in a Social Context	Link to Demand Analysis	Alternatives	Described Subjects	Category of Costs	Direct Costs (Benefits) in CBA—Measured Parameters	Indirect Costs and Benefits (Measured)	Other Specific	Methods	Interest Rate	Sensitivity and/or Risk Analysis	Concrete Solution
[50]	Swimming areal—Ústí nad Labem	public-sport (other)	yes	general (city demand)	yes (3 alt)	especially residents	undivided	Fixed costs: investment costs and operation costs (for electricity, material, wages, overheads, maintenance and repairs, etc.)	Direct income: from swimming pool and swimming pool operation, sauna operation, fitness centre operation etc. Indirect cost: savings associated with job creation and a positive impact on the health and morbidity of the population	—	NPV; ENPV; IRR; ERR	n = 15; er = 5%	yes	the project is effective if the subsidy is included in income
[51]	Smart grids technologies, Sweden	other	short—social welfare	general	Effects: (1) most common: Costs of energy production, Technical energy losses in transmission & distributional grids, Operational costs for transmission and distributional grids, Emissions of CO ₂ , NOX & SO ₂ . (2) common: not specified whether positive or negative, Security of supply (value of lost load, fewer disruptions), Power Quality, Congestion costs, Costs for reserve capacity, Restoration costs, Management costs, Monitoring costs (if not included in grid operational costs), Customer service costs, Costs of theft/fraud, Security. (3) little common: Electro technology industry development, Quality of service.				effects not specified if positive or negative	—	—	—	—	—
[52]	Drinking water, Sweden	public-water management (other)	yes	general	yes (5 alt)	yes (33 categories of stakeholders)	undivided	All category together: (1) Water utility costs & benefits (Investments, Operational & maintenance costs, Other costs and benefits) (2) Water supply reliability effects (Lost value added in economic sectors, Losses for residential consumers), (3) Water-related health effects (Costs for health care, Lost production, Discomfort & loss of life), (4) Effects on ecosystem services (Drinking water, Irrigation, Hydropower, Industrial water use, Recreational activities, Flood & erosion risk reduction, Other water services, Retention of contaminants), (5) Effects on agriculture, forestry & industry due to water protection restrictions		—	NPV	n ₁ = 30; n ₂ = 70; r ₁ = 1.4%; r ₂ = 3.5%	no	theoretical comparison of results
[53]	Freetime Park—České Budějovice	public-sports (other)	yes	general (city demand)	yes (zero variant)	tourists, local citizens, other visitors	undivided	the cost of acquiring tangible fixed assets and current assets	socio-economic effects: (1) benefits for the city and other municipalities (corporate income tax payments; investment support; economic development of these municipalities); (2) benefits for the state & public institutions (payroll tax for new workers, social & health insurance, reduction of unemployment benefit payments, value added tax); (3) benefits for businesses in the region (increase in net profit)	financial and economic analysis; valuable and invaluable effects	NPV; IRR; profitability index IRR/I; payback period	r = 5%	risk analysis	this project is social and cost-effective

Note: PP—public private; LR—long run; FA—financial analysis; EA—economic analysis.





As part of a national strategy to empower people with disabilities, Dubai introduced a new term to refer to people with special educational needs and disabilities: "people of determination".

This change came as part of a [mission](#) to, by 2021, make the UAE a more inclusive country that "integrates all segments of society while preserving culture, heritage and traditions".

The idea behind the "people of determination" label, therefore, was to acknowledge the tenacity of [people with SEND](#), who often go on to achieve much in life, despite having additional challenges to overcome.

Social Impact

How do you assess the **Social Value** of your built environment?

What is the **true value** of objects within the space?

What is the **Social Impact** of your project?

- Responsible Growth
- Community
- Sustainability
- Health & Wellbeing
- Diversity & Inclusion
- Promoting Social Innovation

Introducing:



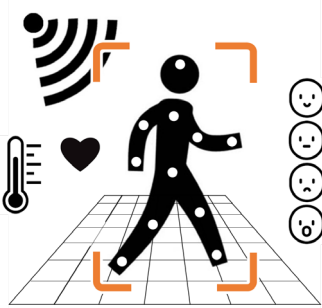
Intelligent Environments

Using live anonymous data to create an adaptive user centric experience

with real-time assessment and response to Social Value success factors

Improving innovation, sustainability, experience, wellbeing and quality of life

Intelligent Environments



Peoplespace Impact: enabling better experience

Real-time interaction detection and predictive analytics

- Monitoring changes in health and wellbeing impacts, behaviour and emotions in response to different place design elements
- Measuring artifact affordances and **Social Value**
- Real-time interaction assistant and zone risk alerts



Peoplespace Ecosystem: enabling better innovation

Digital Transaction Platform for Smart Place products

- Marketplace match making tool
- User profiler and reputation mechanism
- Product **Social Value** assessment

Impact

Real-time interaction detection and predictive analytics



- ◇ Create places that adapt to the user, rather than the other way around
- ◇ Measure movement, non-verbal communication and prevailing sentiments to understand how your spaces influence interaction behaviours, group dynamics and decision making
- ◇ Interpret which elements impact Social Value in dynamic place scenarios with real-time analytics
- ◇ Continuous measurement and forecasting of Social Value performance throughout operation



Impact

Prioritising Wellbeing & Enriched Living for All



- ◇ Create places that promote health and well-being, and positively impact the **quality of life**
- ◇ Enable every user to be more empowered and the environment **more inclusive**
- ◇ Pin point which zones and objects need intervention to improve **health, wellbeing and user experience**
- ◇ Enable **real-time interaction assistant & zone alerts**
- ◇ **Monitor experiences and risks** and provide optimal targeted response to changing circumstances



Impact UX : Place User



Impact UX : Place Manager



Ecosystem

Digital Transaction Platform for Smart Place products



- ◇ Enable your project teams to achieve outstanding results, informed by a better understanding of how product choices can influence **Social Value**
- ◇ Find the best products for delivering **human-centricity**, sustainability and resilience in your built environments
- ◇ Review supplier reputations and product Social Value assessments to **maximise benefits for society** while mitigating the emerging risks



Ecosystem

Optimising Resource Efficiency



- ◇ Deliver **greater sustainability** and resilience in your built environments
- ◇ Enable a more circular economy with increased reliance on sustainable and recycled natural resources, **reducing the environmental impact**
- ◇ **Multiply the benefits and sustainability** of each built environment



Ecosystem UX: Place Innovator

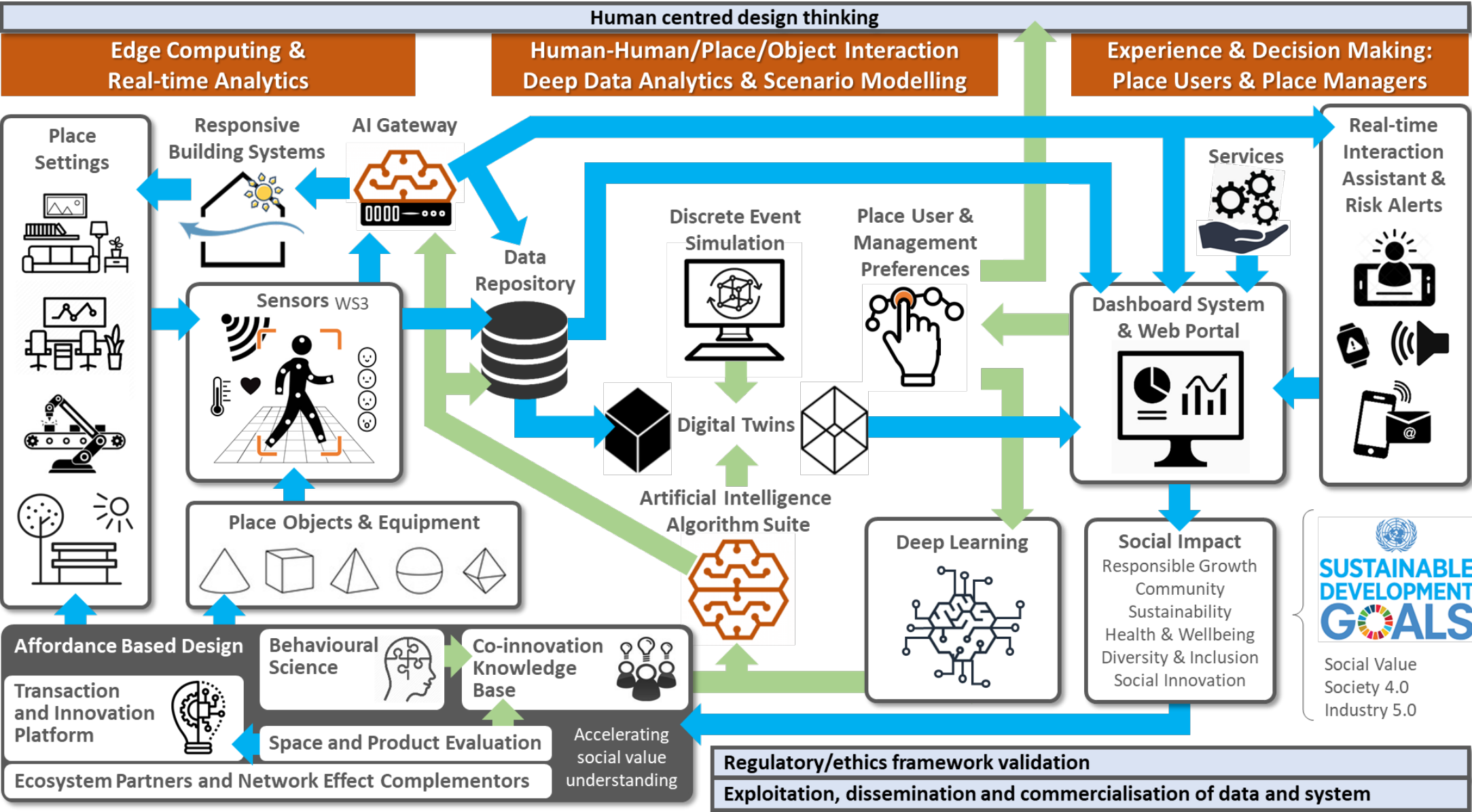


Appendices

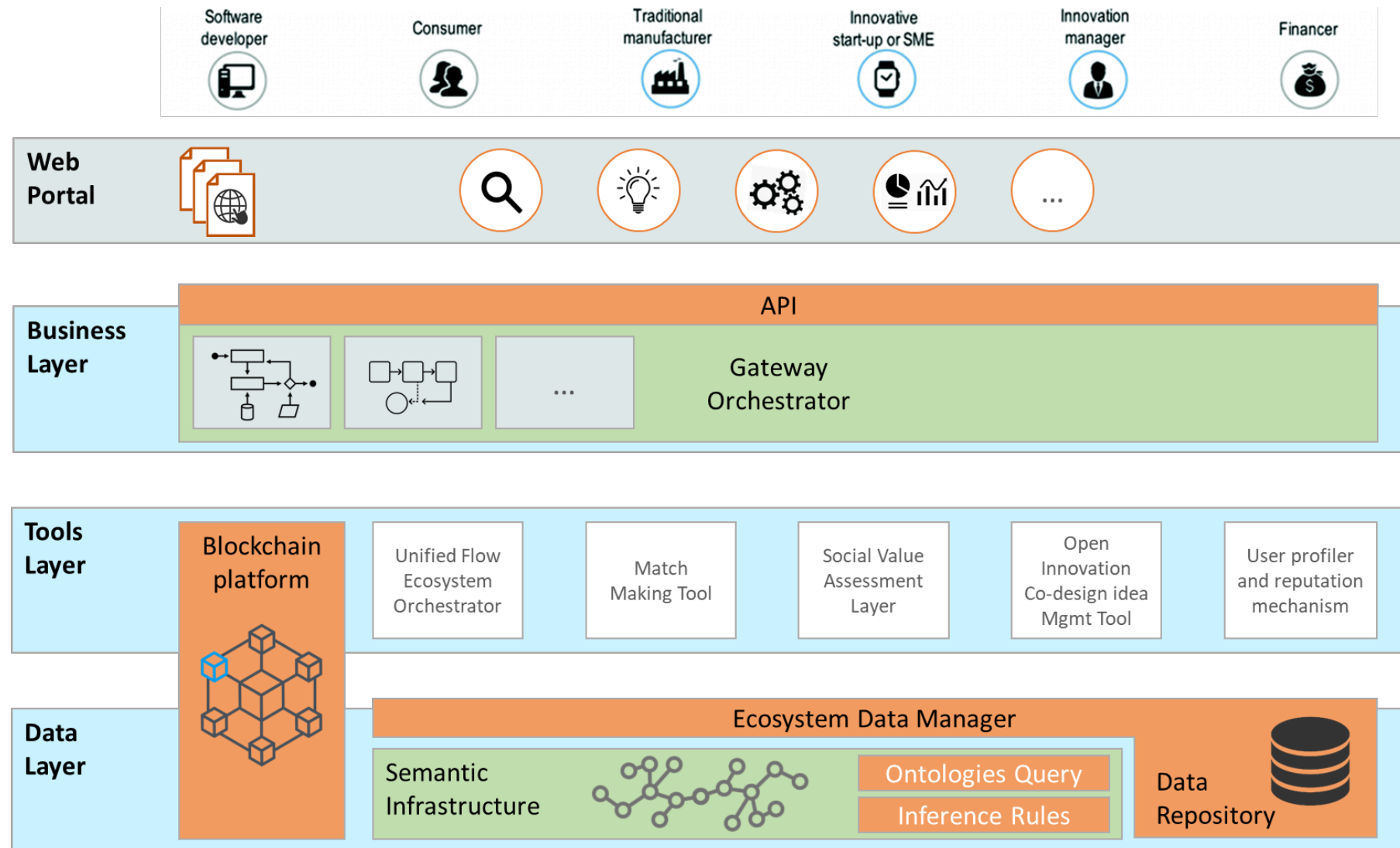
Impact system map

Ecosystem Framework

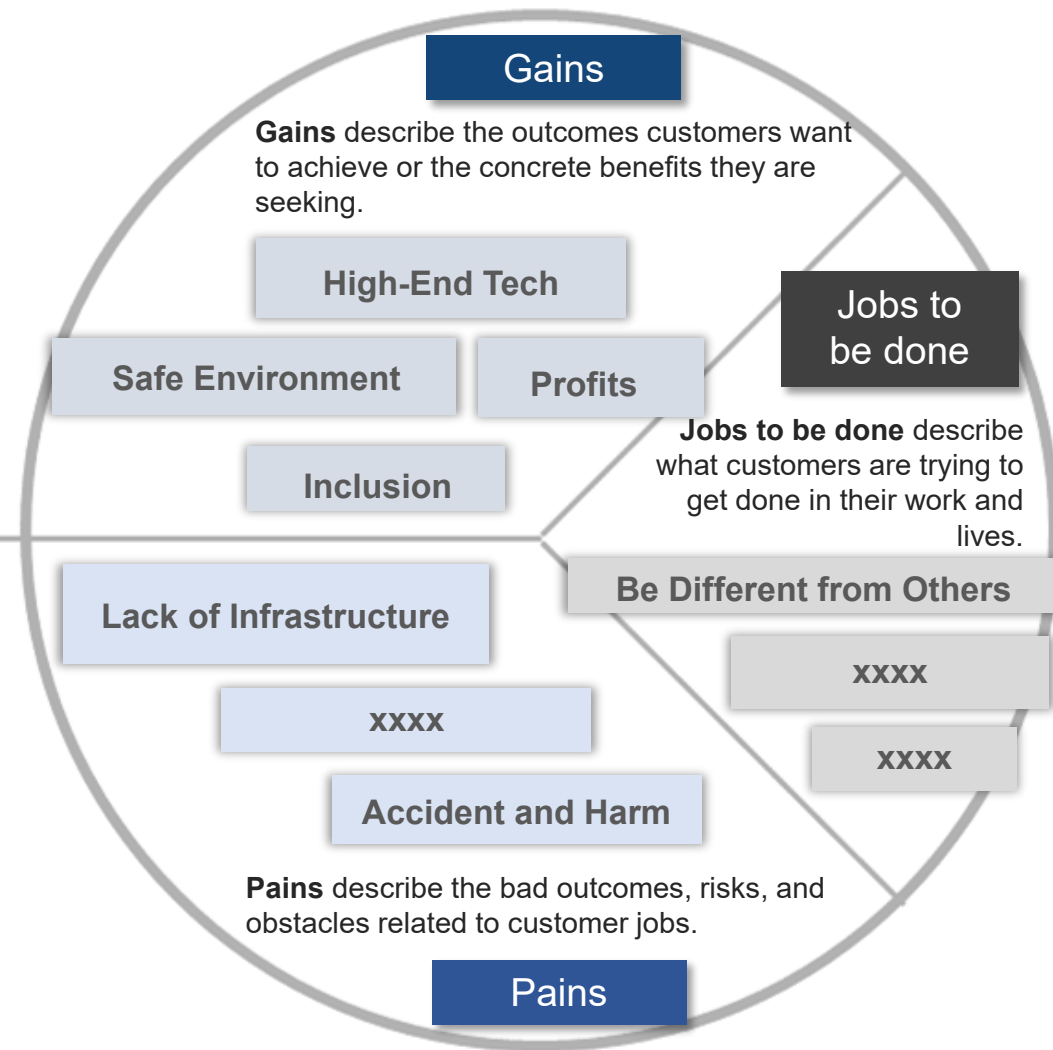
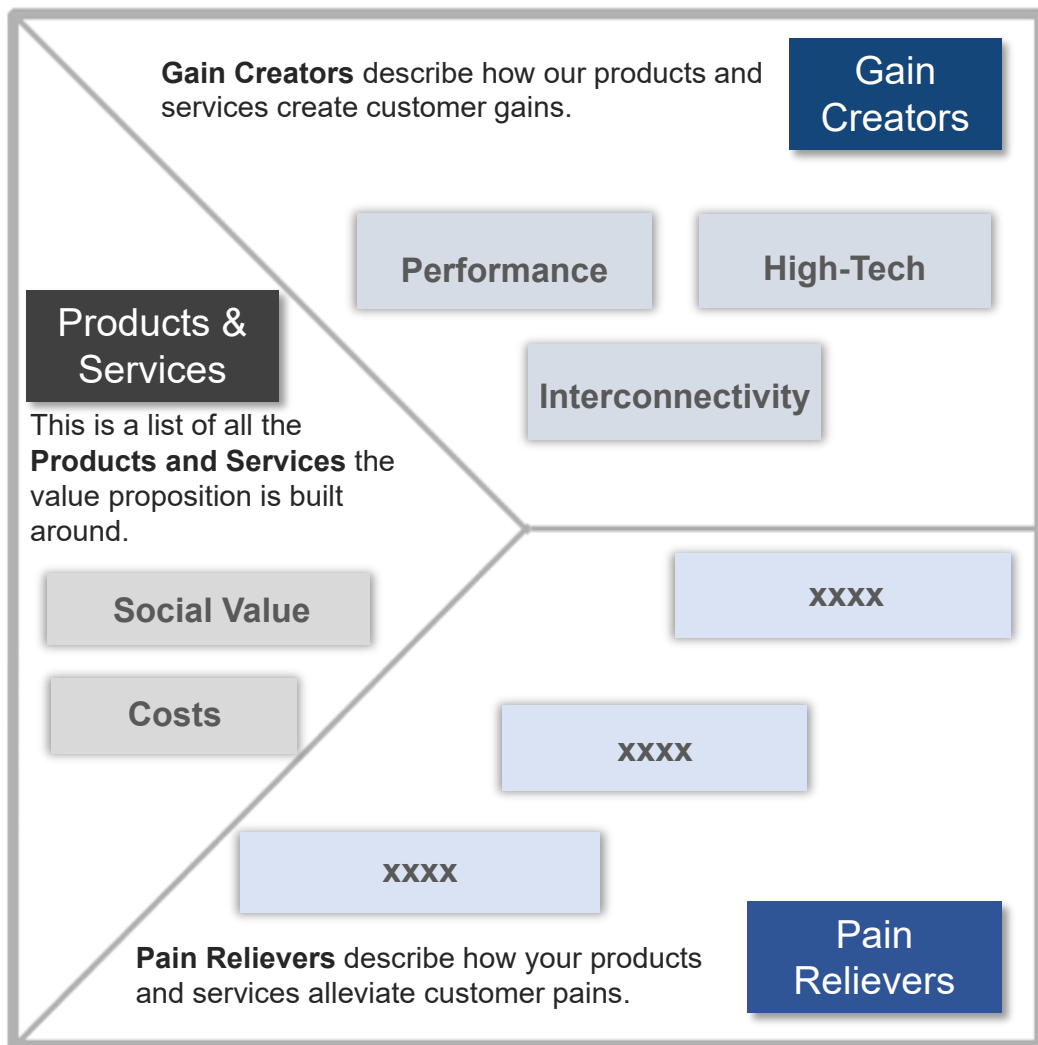
Peoplespace Impact: Enabling better experience



Peoplespace Ecosystem: Enabling better innovation



VALUE PROPOSITION CANVAS





Geographic

Divides customers into groups based on their location.



Demographic

Divides customers into groups based on census data.



Psychographics

Divides customers into groups based on interests and motivations.



Behavioural

Divides customers into groups based on what they do.



Persona

Divides customers into groups based on blended data and customer goals.



Predictive

Predictive segmentation that uses historical behavioural patterns to predict and influence future customer behaviour.



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C-Quest Senior Vice
President



Olga Witchalls
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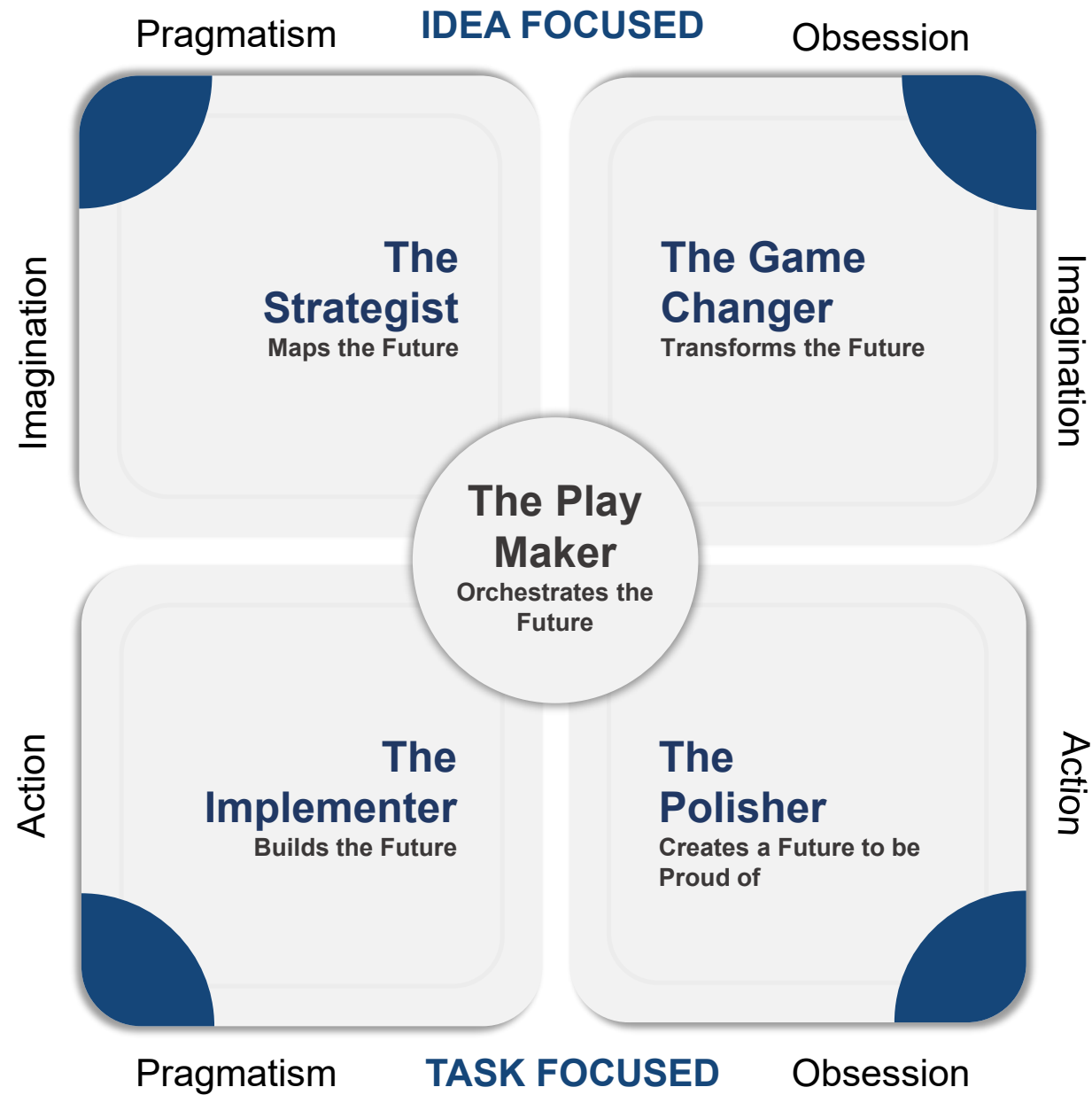
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People Space

