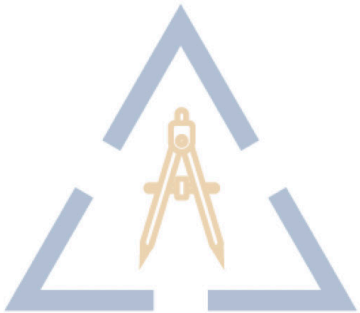
CULTURAL REGENERATION
FOR GENERATION_RE

THE CONTINUUM



EDUCATE

COLLABORATE

INTEGRATE

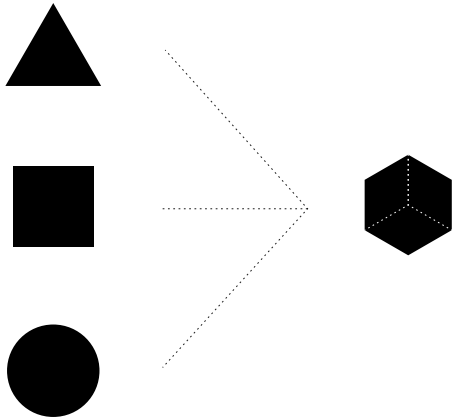
CACB
CCCA

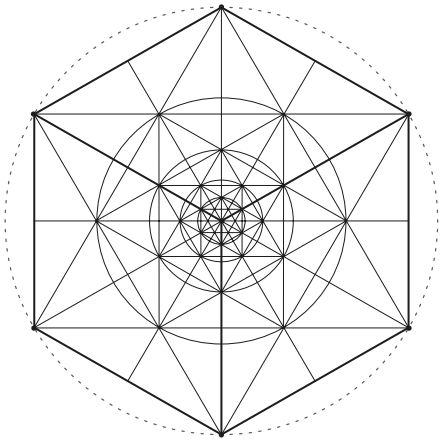
CANADIAN ARCHITECTURAL CERTIFICATION BOARD

CONSEIL CANADIEN DE CERTIFICATION EN ARCHITECTURE

PROFESSOR LAURA LEE _ Architect_ FAIA _ Hon FRAIA

29 OCTOBER 2022 _ Ottawa, Canada

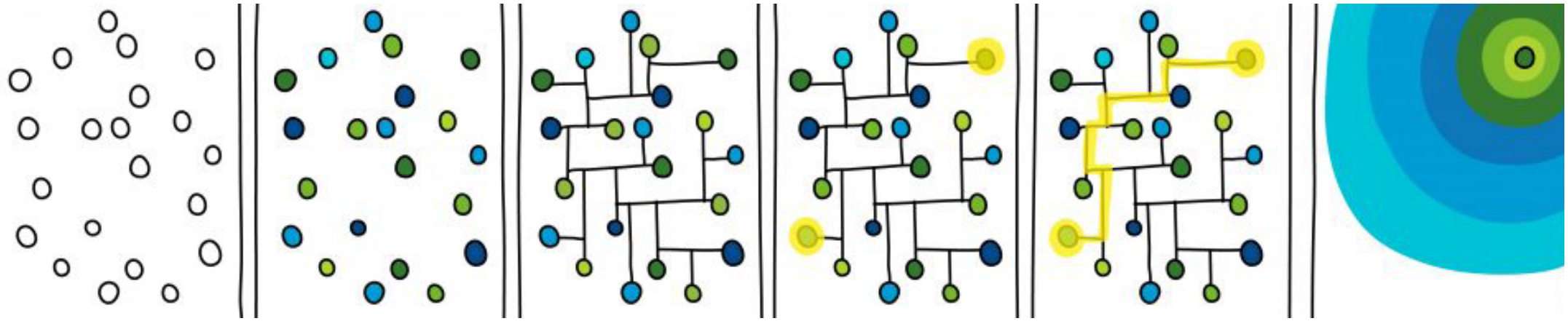




MISSION 1
COMMON GROUND

Darryl **Laura**

THE FUTURE OF ARCHITECTURE **THE ARCHITECTURE OF FUTURES**



PARTICIPANTS **POSITIONS** **PROGRAM** **POSSIBILITIES** **PATHWAYS**

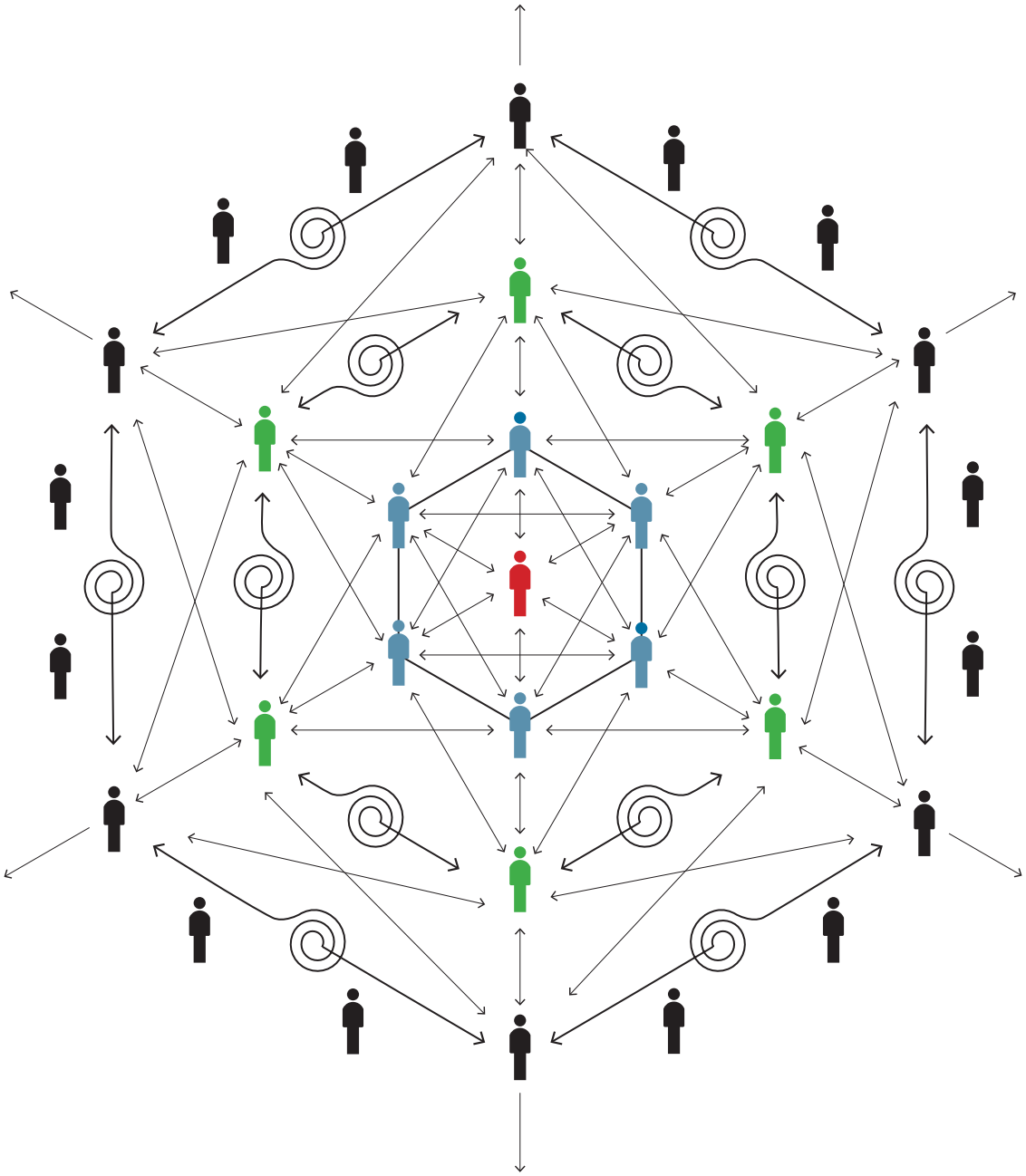
Themes ... *Questions ?* *Insights !*

Building Your Future

Building Our Future

MISSION 2
COMMON GOALS

MISSION 3
COMMON GOOD

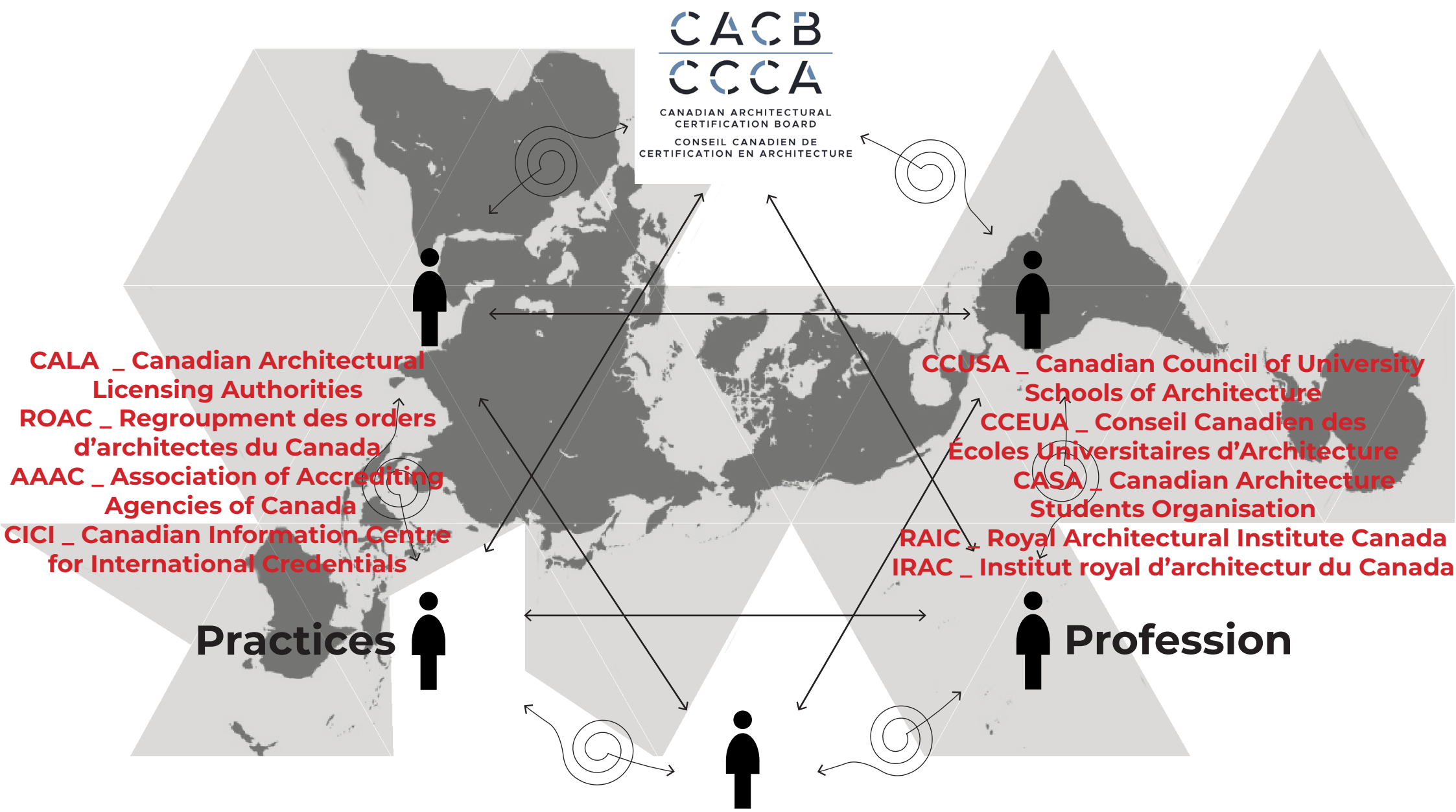


students
educators
advocates

interns
researchers
mentors

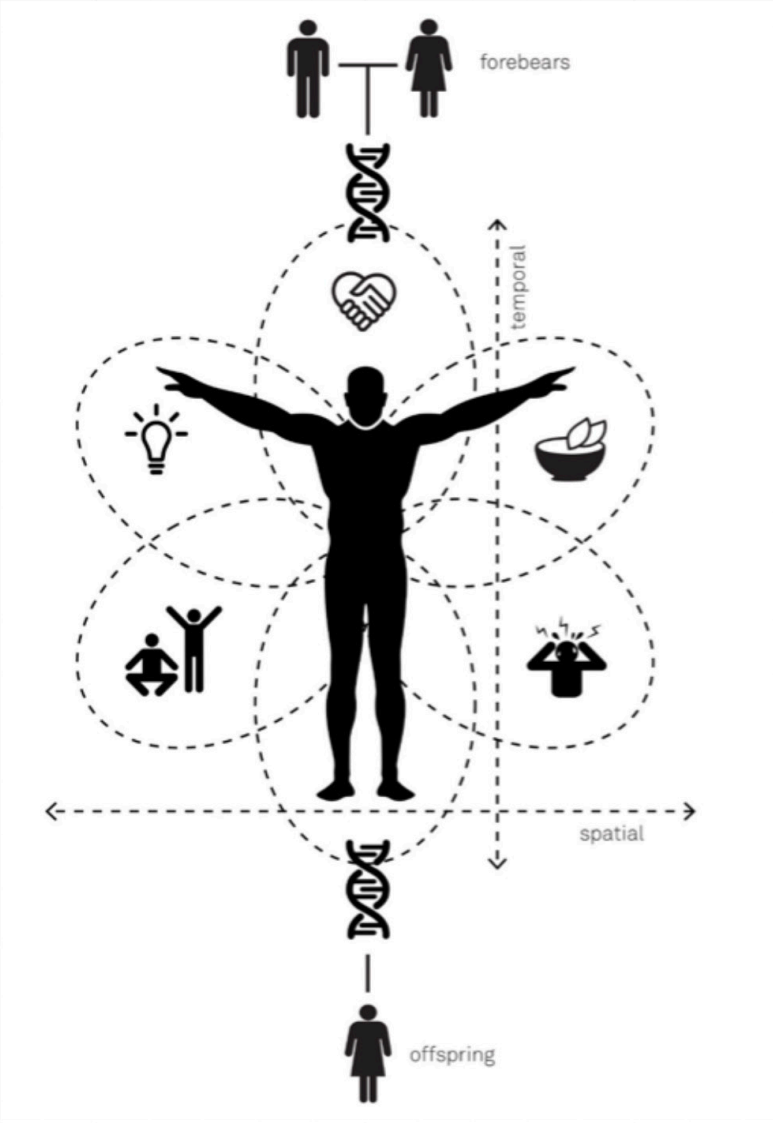
practitioners
administrators
regulators

PARTICIPANTS > INDIVIDUALS



NCARB _ National Architectural Accrediting Board, USA
NCARB _ National Council of Architectural Registration Boards, USA
ASCA _ Association of Collegiate Schools of Architecture, USA
Canberra Accord Secretariat

PARTICIPANTS > ORGANISATIONS



CULTURE — (re)cultivate

LANGUAGE — harvest / gesture

IDENTITY — nurture / imprint

VALUES — hold / nourish

HISTORY — seed

PARTICIPANTS > INTERCULTURAL | INTERGENERATIONAL | INTERDISCIPLINARY

Justice and Responsibity for future generations

and towards others, culture and nature

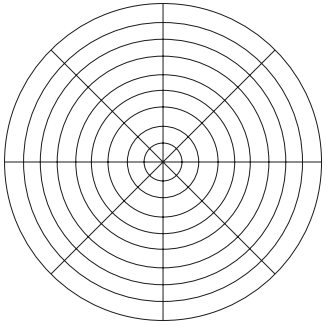
for health, well-being, thrivability in harmony with built and natural environments

Consider ... the average life span of a building is 50 years

Consider ... decisions today will ripple for 100 years

1950

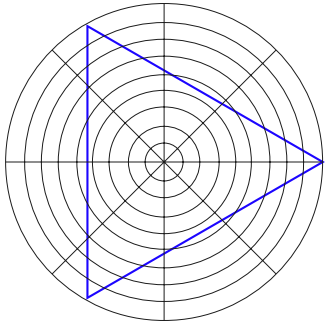
Good Ancestors



reduce
reuse
recycle

1975

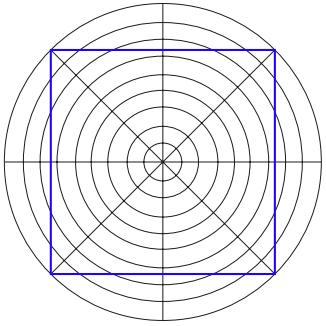
Role Models



reimagine
reflect
rethink
reframe
rewind
rebel
redefine
revise
rediscover

2000

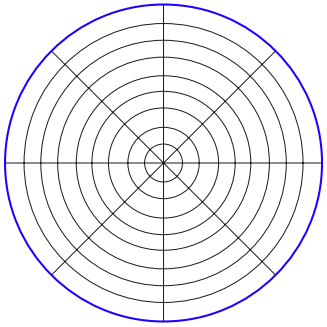
Crusaders



restore
research
reset
reform
recover
repurpose
reconfigure
restructure
repair

2025

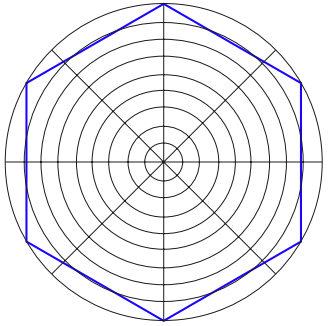
Generation Re



redesign
replan
retool
rewire
reposition
rework
retrofit
redistribute
rewild

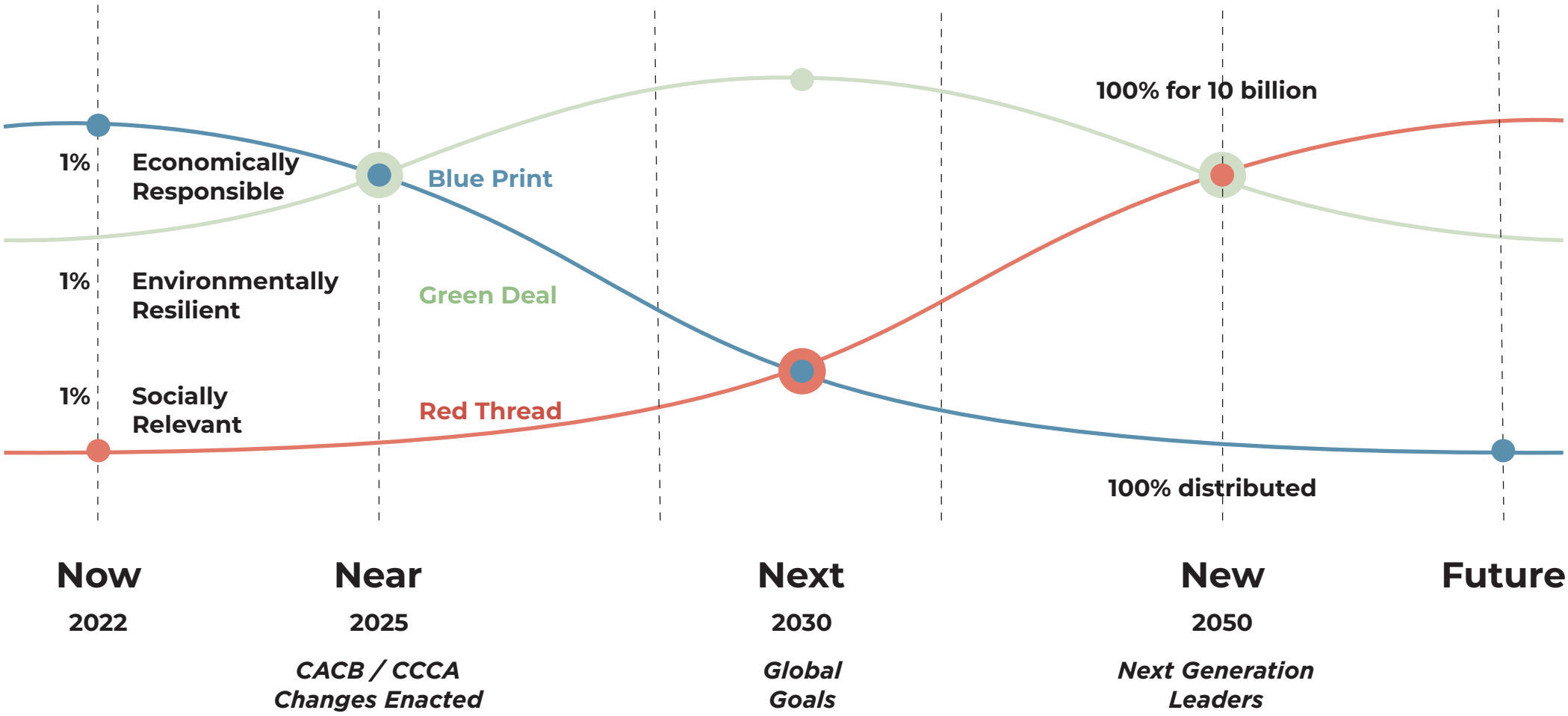
2050

Inheritors

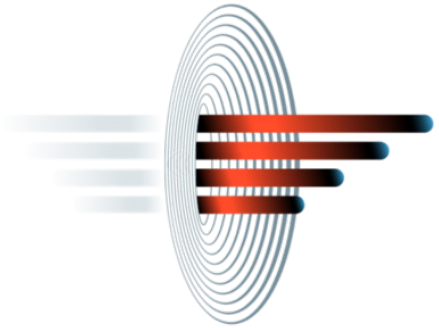


RECONCILE
REGENERATE
RENEW

REASON + RESPONSIBILITY = REWARD


1%
Economically
Responsible
1%
Environmentally
Resilient
1%
Socially
Relevant
Blue Print
Green Deal
Red Thread
100% for 10 billion
100% distributed
Now
2022
Near
2025
CACB / CCCA
Changes Enacted
Next
2030
Global
Goals
New
2050
Next Generation
Leaders
Future

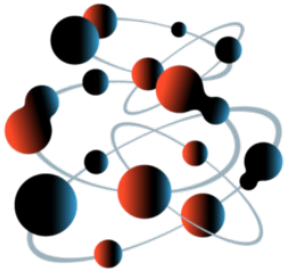
RANGE + REACH



SECTION 35

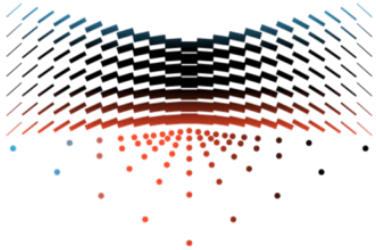
VERBS NOT NOUNS

COUNSELING WITH NATURE



ECONOMIES OF CARE

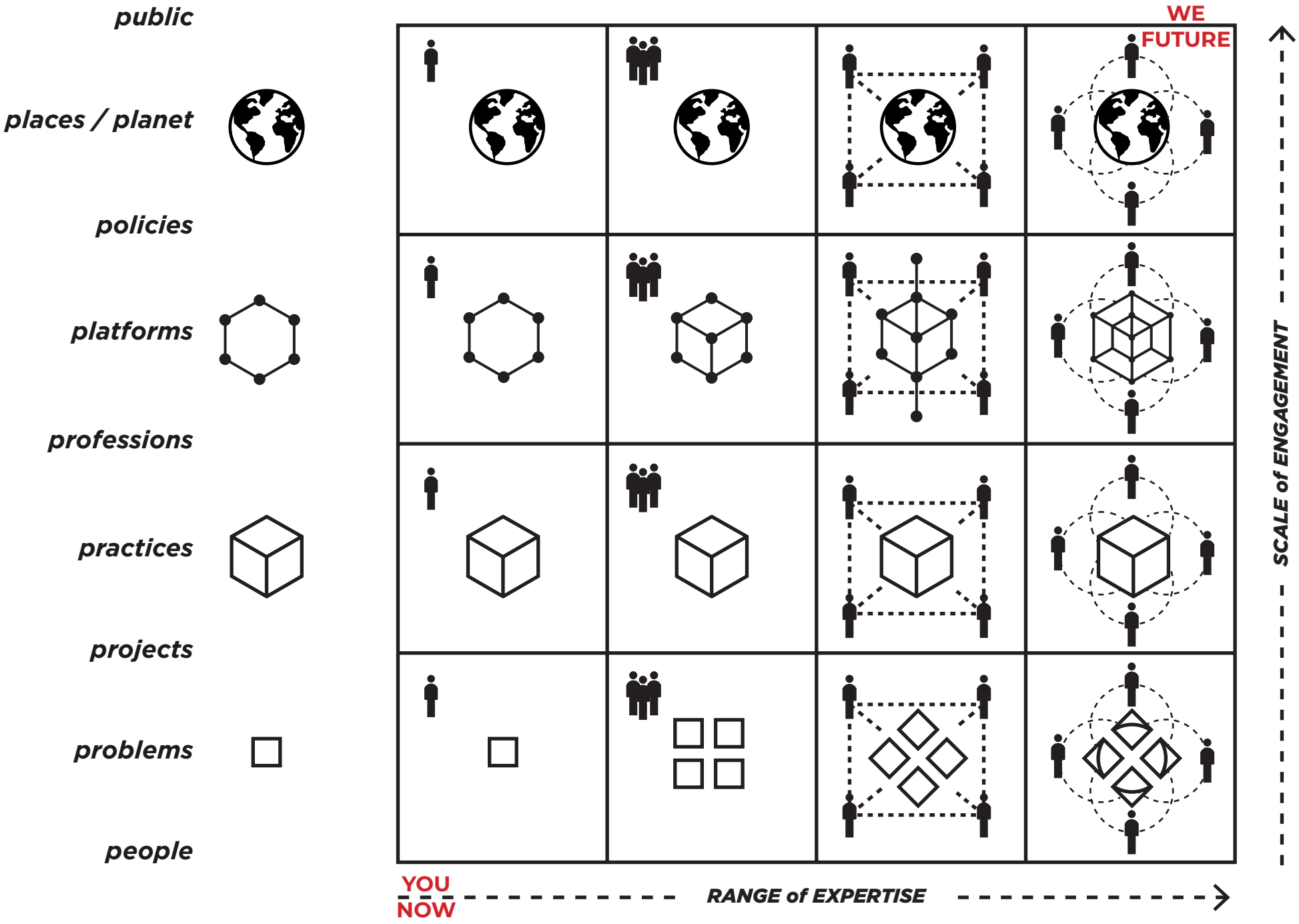
EVERYDAY LAWING



INHERENT RIGHT

INDIGENOUS > 7 GENERATIONS INTO THE FUTURE

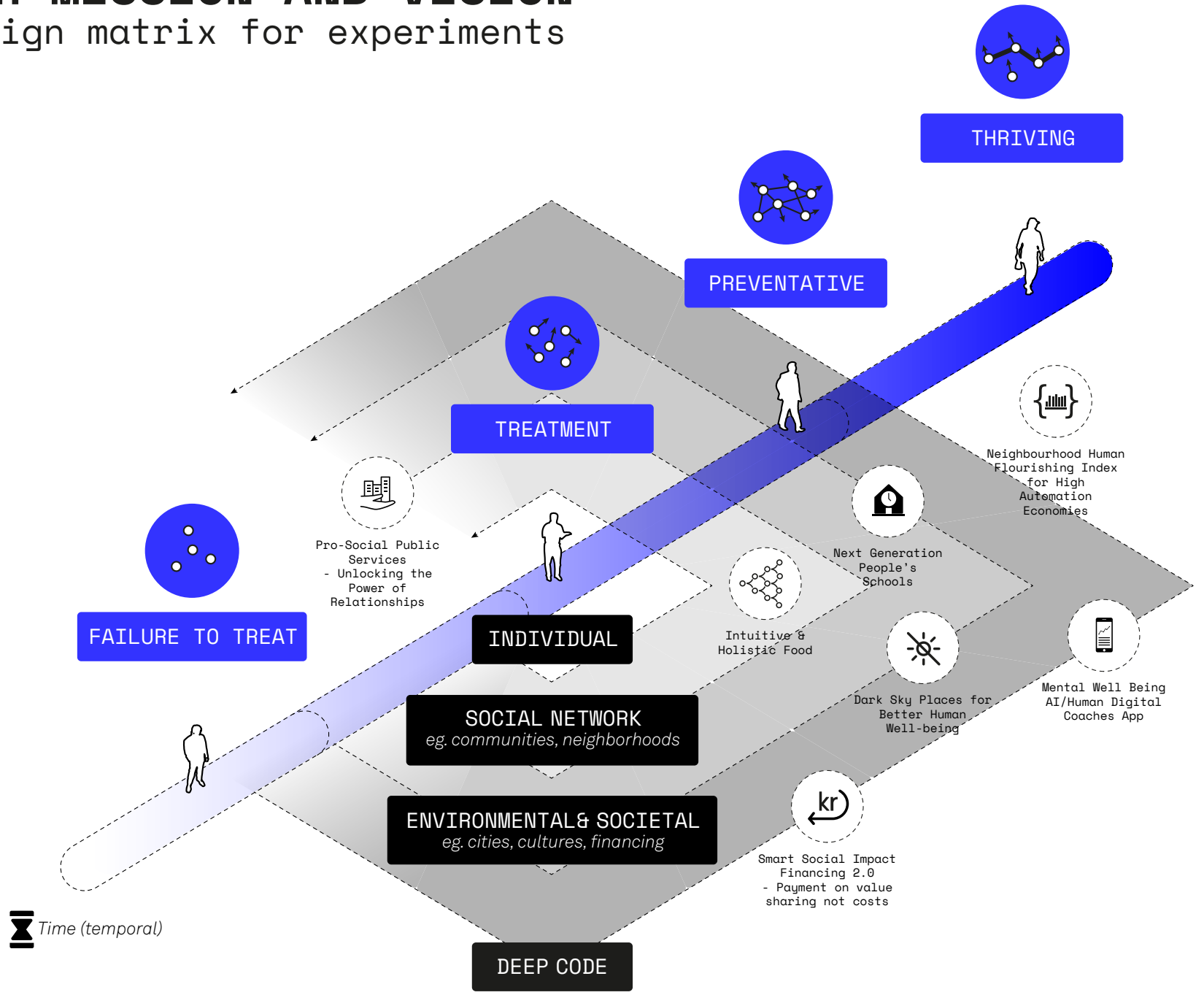
Credit: Dark Matter Labs



JOURNEY FROM INDIVIDUAL TO PLANETARY

OUR MISSION AND VISION

design matrix for experiments

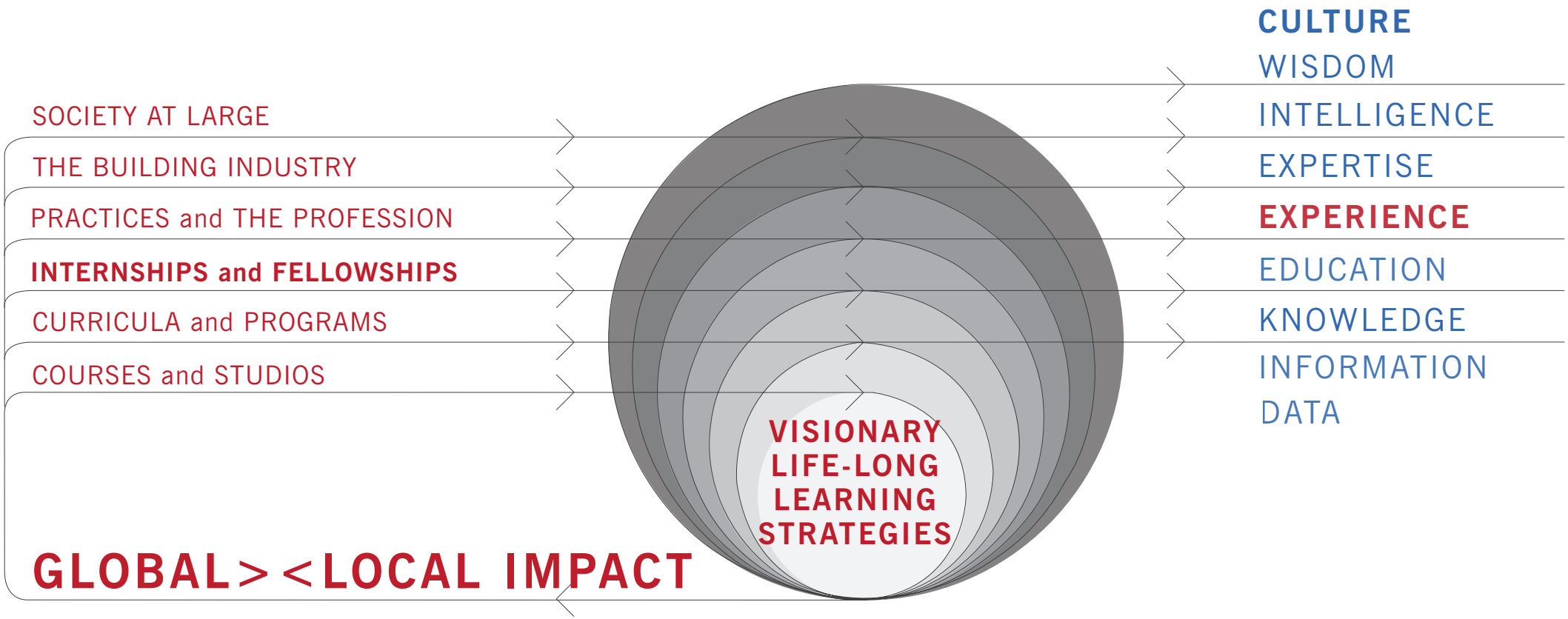


MOBILISING FOR EVERY SINGLE PERSON TO THRIVE

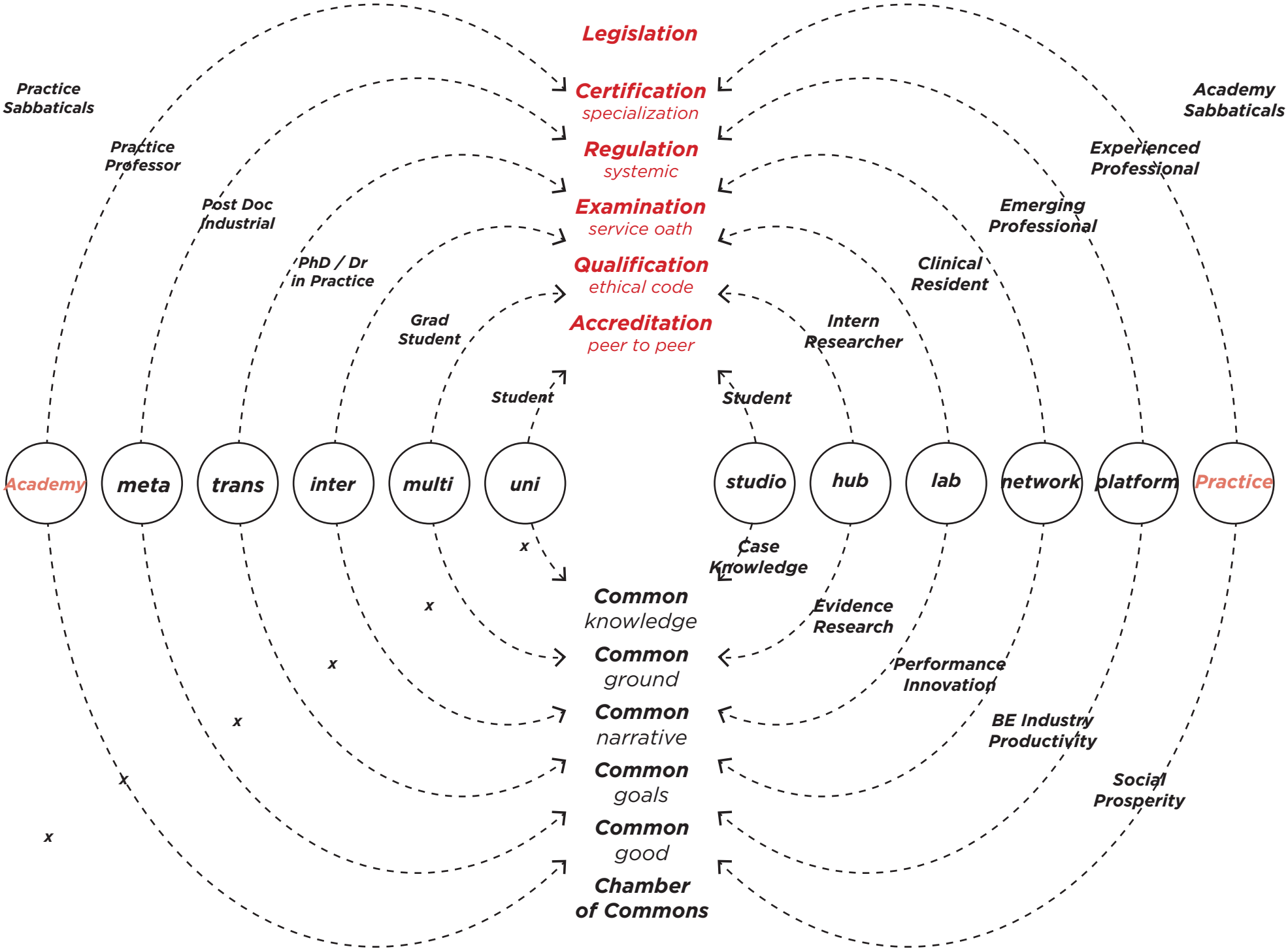
Credit: Dark Matter Labs

				
Now	***Near***	***Next***	***New***	***Future***
LESS THAN	***ADDITIVE***	***MULTIPLIED***	***EXPONENTIAL***	***INFINITE***
remote	***RELATIONSHIPS touching***	***ROLES connected***	***REACH meshed***	***REGENERATIVE unified***
silos	*education + practice*	*education + practice x research*	*education + practice x research √ innovation*	*education + practice x research √ innovation ∞ policy*
people	***Institution***	***Infrastructure***	***Industry***	***the public***
	new accreditation new quallfication new regulation	*knowledge clusters research consortia innovation co-labs*	*professional service practice scope project scale*	
PERSONAL FORMS OF ACTION	*CASE CLUSTERS*	*CONSORTIA NETWORKS*	*CO-LAB PLATFORMS*	*COLLECTIVE FORMS OF ACTION*
Remote	***Touching***	***Connected***	***Meshed***	***Unified***

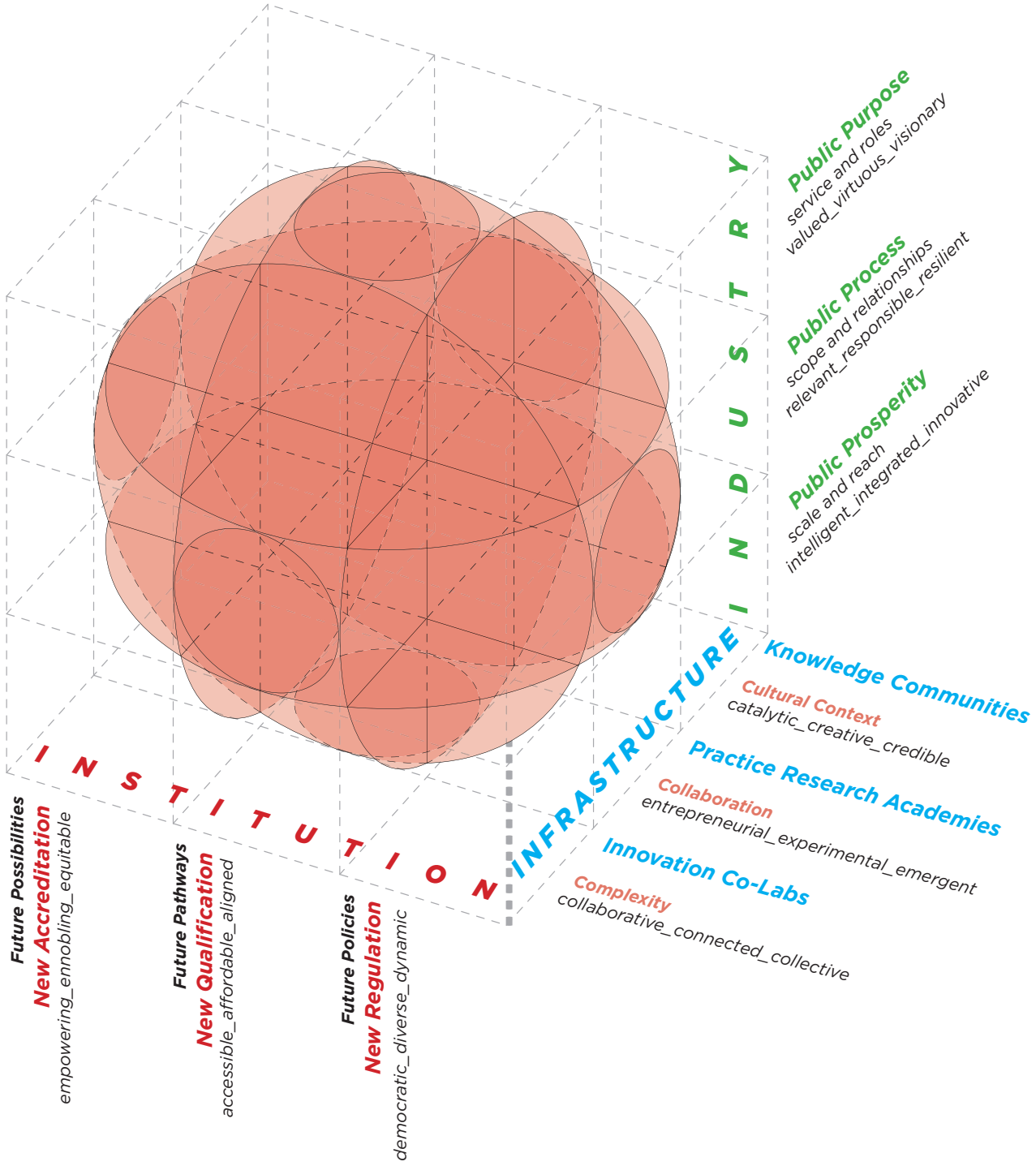
INTEGRATION AND COLLECTIVE FORMS OF ACTION



INTERSCALAR INTERVENTIONS



NEW ACADEMIC PRACTICES PARTNERSHIPS AND IMPACT



NEW INSTITUTIONS INFRASTRUCTURES INDUSTRIES

THE MEDIUM IS THE MESSAGE > 1752 Miro Pieces - OVER TO YOU ...

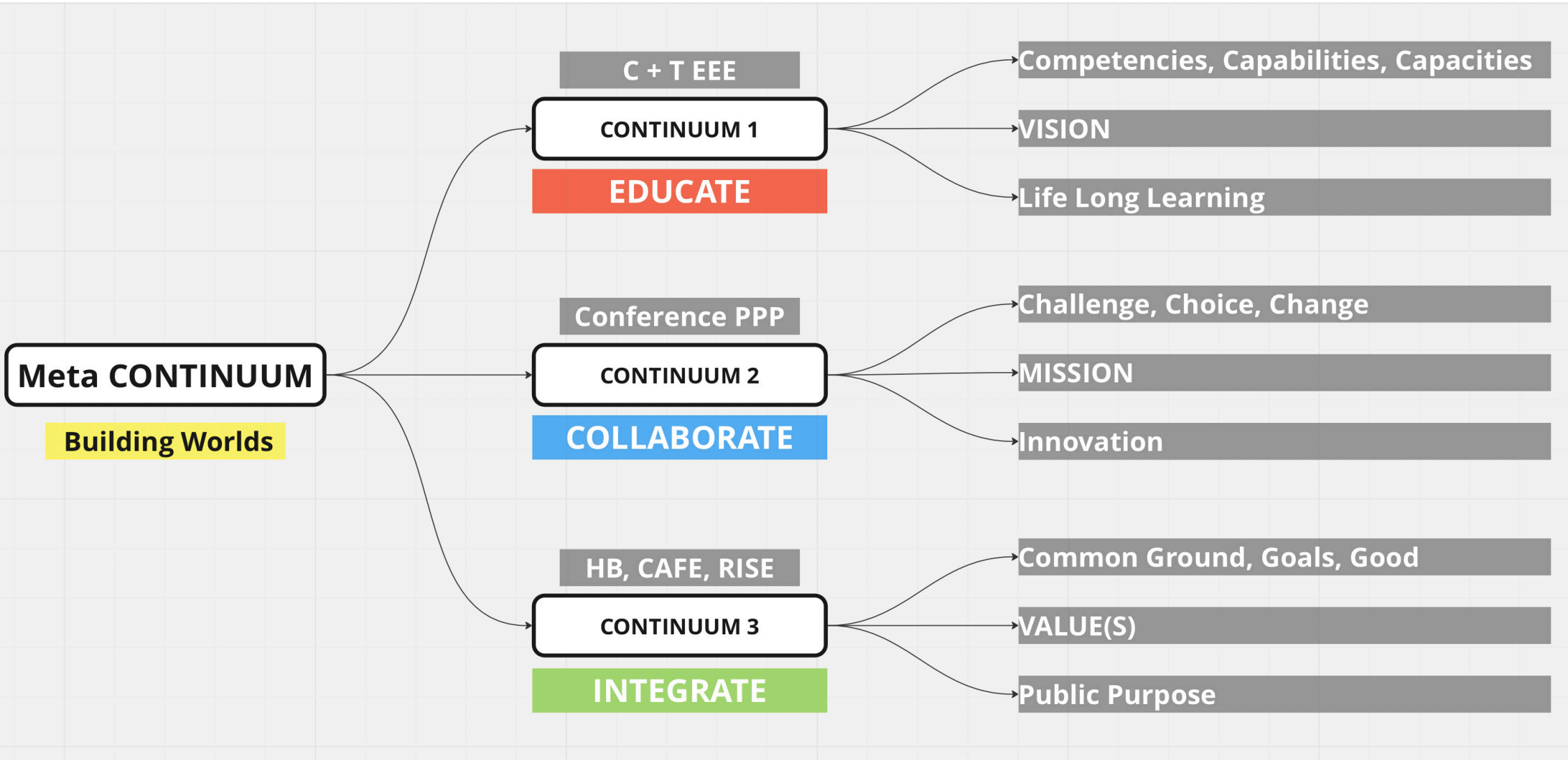
CONTINUUM 1	EDUCATION, EXPERIENCE, EXAMINATION +++				
	COMPETENCIES / INDIVIDUAL LEVEL				
Conditions and Terms for Accreditation 2014 PERFORMANCE Criteria : STUDENTS	**Conditions and Terms for Accreditation 2014 PERFORMANCE Criteria : PROGRAM**	**Canadian Education Standard - CES EDUCATION**	**Intership in Architecture Program (IAP) 2020 EXPERIENCE (3720 hours)**	**Examination for Architects in Canada EXAMINATION**	**Conditions for Licensure in Canada LICENSURE**
Design (8 SPCs)	Design education	5.1 Design (50)			0. Foundation Education
Comprehensive design (1 SPC)	**Global perspectives, environmental stewardship**				
Culture, communications, critical thinking (5 SPCs)	**Collaboration, leadership, community engagement**	5.2 **Culture** and **Communications** (24)			
Technical knowledge (5 SPCs)	Technical knowledge	5.3 Technical Knowledge (22)			
Professional practice (5 SPCs)	Professional development	5.4 Professional Practice (6)			
	Breadth of education	5.5 General Education (32)			
Electives		5.6 Electives (24)			
			Category A-Design and Construction Documents		
			1. Programming	1.Programming	1. Programming
			2. Site and Environmental Analysis	2. Site and Environmental Analysis	2. Site and Environmental Analysis
			3. Schematic Design	6. Schematic Design	3. Schematic Design
			4. Engineering Systems Integration*	3. Coordinating Engineering Systems	4. Engineering Systems
			5. Building Cost Analysis*	4. Cost Management	5. Building Cost Analysis
			6. Code Research*	5. National Building Code of Canada	6. Code Research
			7. Envelope Detailing		
			8. Design Development	7. Design Development	7. Design Development
			9. Construction Documents	8. Final Project	8. Construction Documents
			10. Specifications and Materials Research*		
			11. Document Checking and Coordination*		
			12. Energy Literacy/Sustainability		
			Category B-Construction Administration		
			13. Procurement and Contract Award	9. Bidding & Contract Negotiations	9. Bidding & Contract Negotiations
			14. Construction Phase-Office	10. Construction Phase-Office Function	10. Construction Phase
			15. Construction Phase-Site	11. Construction Phase-Field Function	
			Category C-Management		
			16. Management of the Project	12. Project Management	11. Management of the Project
			17. Business/Practice Management		12. Professionalism & Professional Practice

CONTINUUM 1 > COMPETENCIES > THINKING > BUILDING KNOWLEDGE

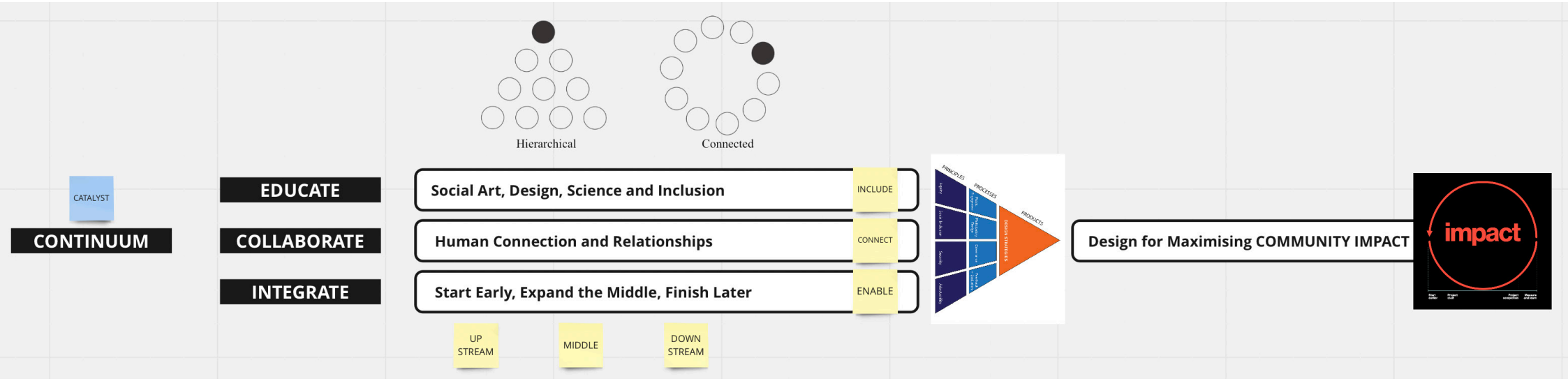
CONTINUUM 2	CONFERENCE PARTICIPANTS x2, PROGRAM x2, POSITION PAPERS	
CAPABILITIES / ORGANISATION LEVEL		
CACB / CCCA Conference	**CACB / CCCA Conference**	**CACB / CCCA Conference**
PROGRAM THEMES (5)	**PROGRAM SESSIONS Questions (12)**	**POSITION PAPERS (34)**
1. The **Future** of Architecture: **Visions**		
2. **Social Justice** & **Well-being**	2.1 **Social Justice**	
	2.2 **Accessibility, Equity, Inclusion**, Anti-Racism	
	2.4 Cultural sensitivities / **Diversity**	5 University **Electives** Redefining Architecture
	2.5 **Well-being** / Mental Health / Burnout / COVID 19	25 Architect **Mentors** Within the Academic Environment
	3.3 **Indigenous**	
3. **Climate Action, Sustainable Development**	3.5 Equity, **Climate** and SPCs	
	3.1 **Competencies** / Pedagogy for climate action	15 **Exposure** to the **practice** and **profession** of architecture
	3.2 Climate action **leadership** / Decarbonisation	3 **Systemic Change** for the Climate Crisis
	3.4 Architecture / **Curriculum** and SDGs	21 **Transdisciplinarity**: Challenges and opportunities
	3.6 **Proactivity** in Education and Profession	
4. The Architecture **Continuum**	4.3 Academic **Appointments for Practitioners**	
	4.4 **Internship**	1 **Structure of Guiding** Students / Interns
		14 New approaches to the **Learning Continuum**
		8 Mandatory **internship** during studies
		22 **Community Volunteering** in Intern Experience Hours
5. **Changes** to the Conditions & Procedures		13 **Cooperative education** must be reassessed
		29 **Managerial Strategies** Imperative Academia to Practice
		34 Getting on the **path to licensure**

CONTINUUM 3	HANDBOOK, CAFÉ, RISE, DARRYL, LAURA	
	CAPACITY / SYSTEMS LEVEL	
CANADIAN HANDBOOK PROFESSIONAL PRACTICE	CANADIAN ARCHITECTURE FORUMS ON EDUCATION CAFÉ > Top Concerns and POSSIBILITIES	CANADIAN NATIONAL ARCHITECTURE POLICY RISE
	1. Climate change & environmental stewardship. *Climate action!*	
	2. Equity and inclusion. *Radical diversity!*	
	3. Mental health and well-being. *Architectures of healing!*	**Prosperity** - design to stimulate our **social and environmental well-being**
	4. Meaningful community engagement. *Social action!*	**People** - architecture to support and enrich the **quality of our daily lives**
	5. Culturally-relevant, regionally-meaningful design. *Public understanding!*	**Place** - designed environments to **shape our culture** and **to reflect place**
		Potential - architecture built on **research** and **innovation** for a **resilient future**
1: **Theory** and Background		
2: The **Context** of Practice		
3: **Management** of the Architectural Practice		
4: The **Design-Construction** Program		
6: **Phases** of the Design Project		
5: **Management** of the Design **Project**		

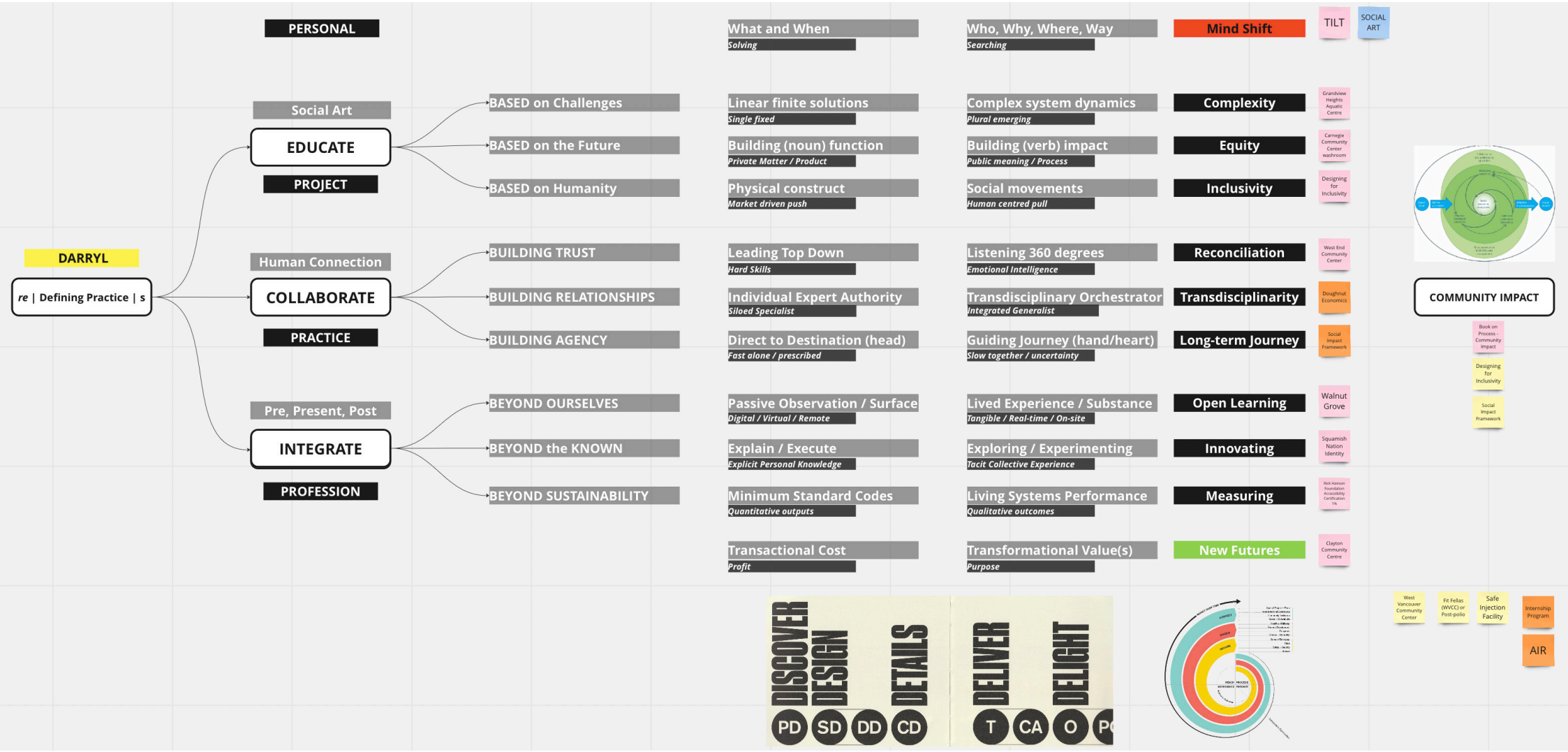
CONTINUUM 3 > CAPACITY > DOING > BUILDING COMMUNITIES



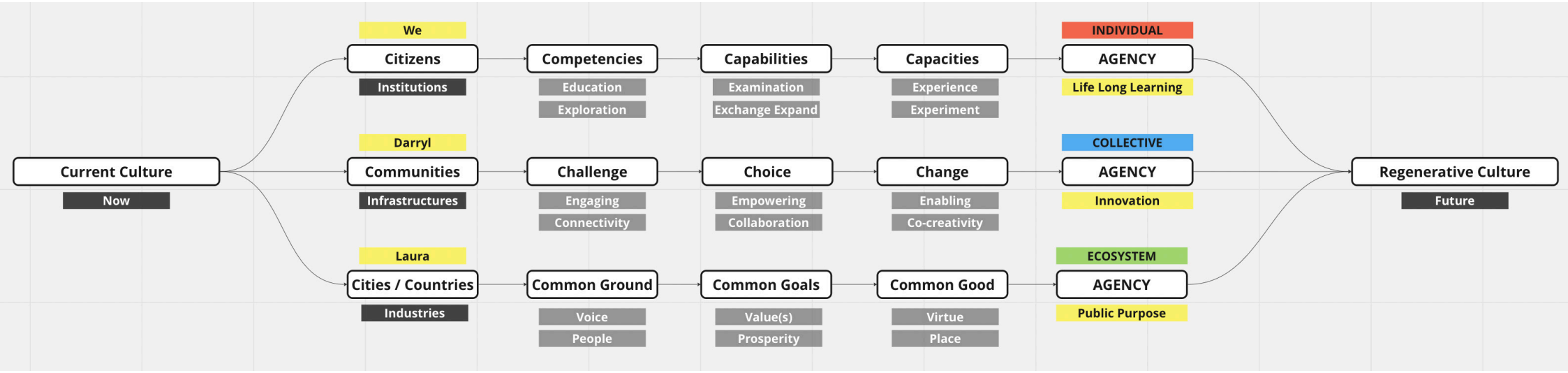
META CONTINUUM > VISION MISSION VALUE(S)



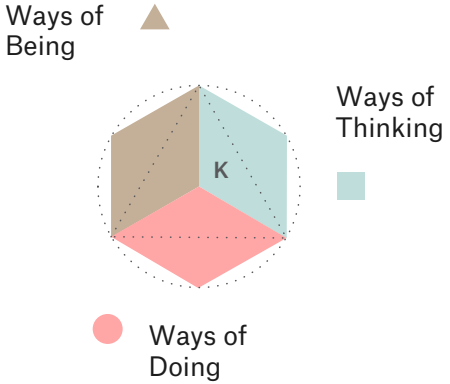
INTERPRETING DARRYL > THE CONTINUUM

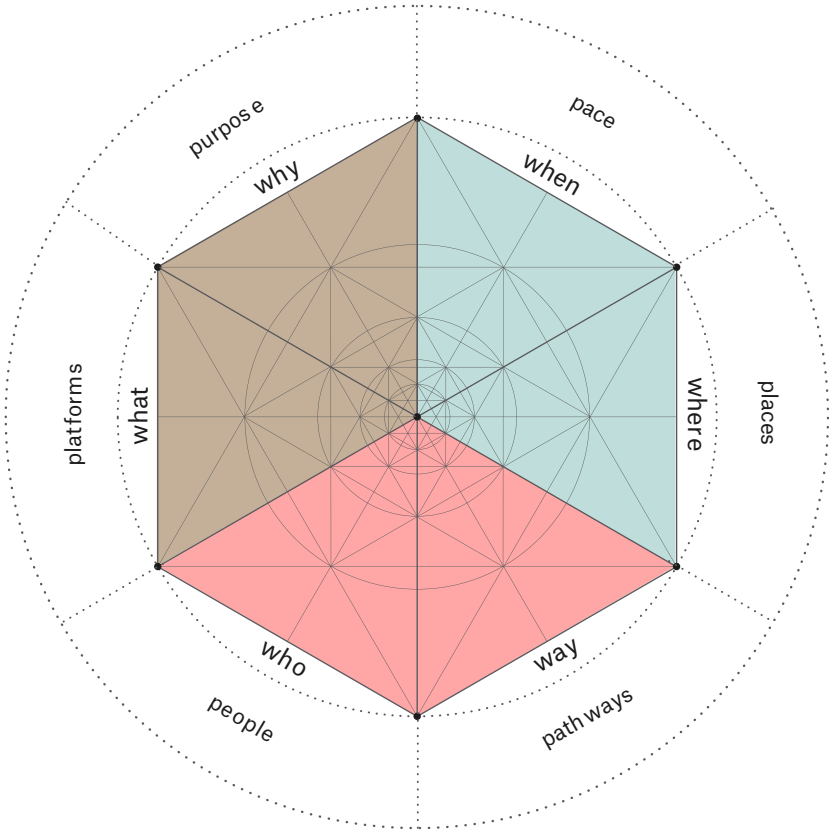


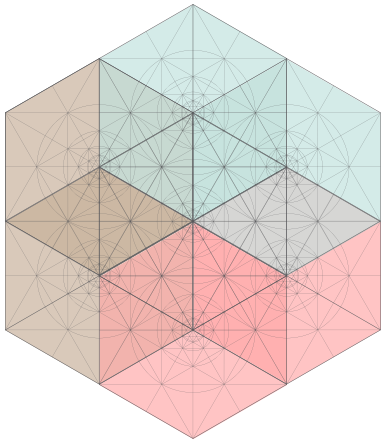
INTERPRETING DARRYL > EDUCATE COLLABORATE INTEGRATE



REGENERATIVE CULTURE > CHALLENGE CHOICE CHANGE







INTERPRETING RISE POLICY > WHO WHY WAY WHERE WHEN WHAT

Existing value system & context

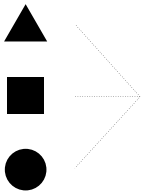
New shapes of knowledge

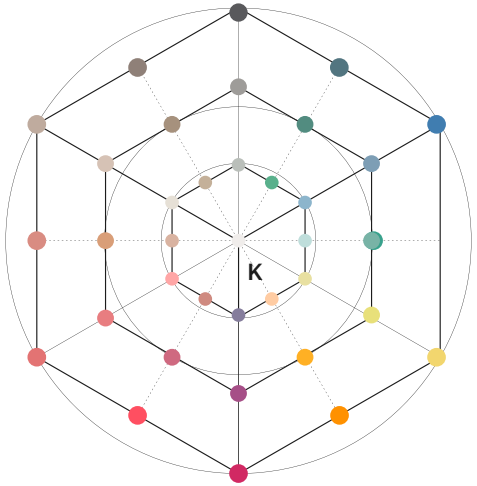
New forms of experimentation

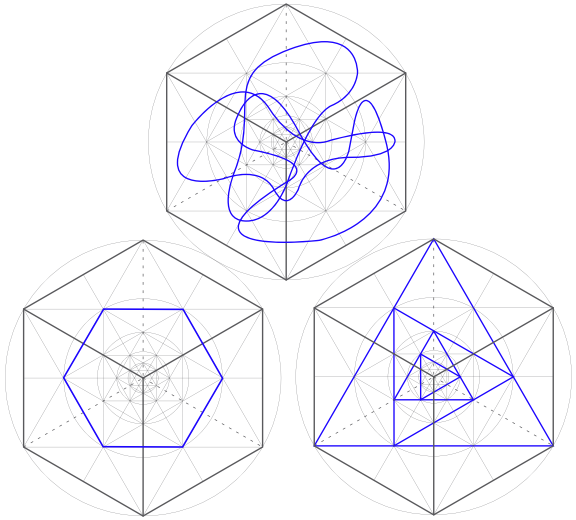
New spaces of opportunity

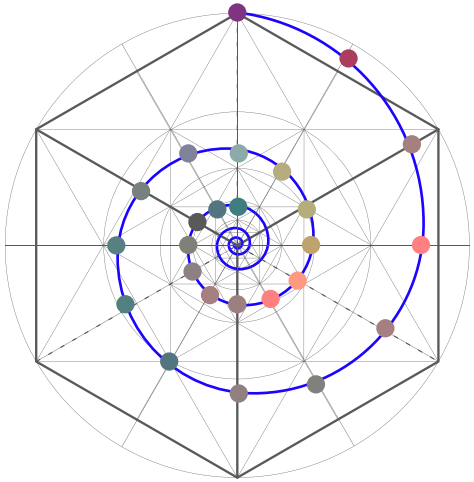
New movements for change

New cultural expression

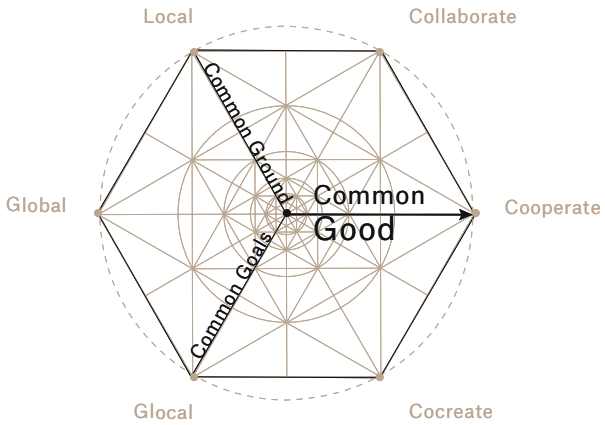




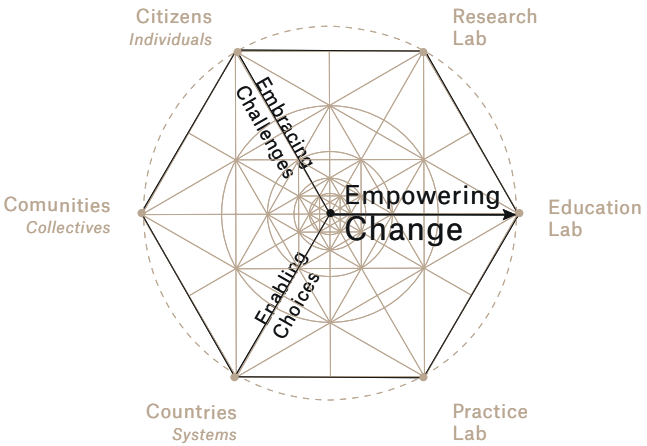




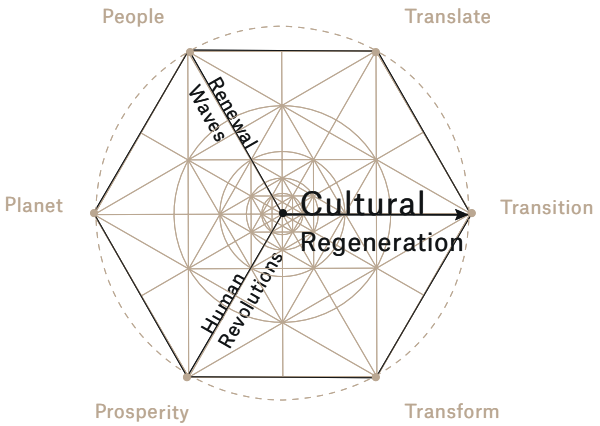
INTERPRETING CAFE > NEW MOVEMENTS FOR CHANGE



VALUES

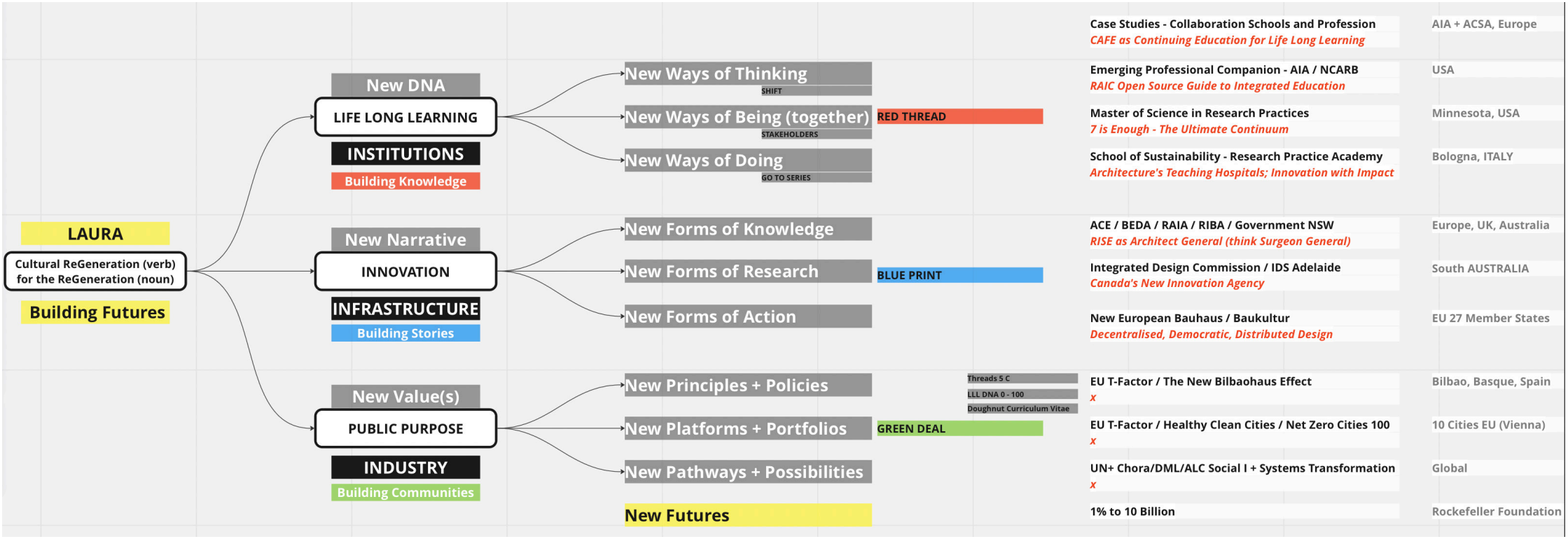


MISSION



VISION

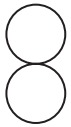
GENERATING VALUES | MISSION | VISION



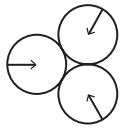
LIFE LONG LEARNING | INNOVATION | PUBLIC PURPOSE

OUTLINE

Thinking **Educate** **Competencies** **Individuals**

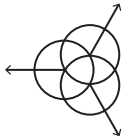


Being **Collaborate** **Capabilities** **Collectives**

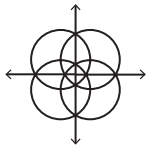


Doing **Integrate** **Capacities** **Systems**

Education **Accreditation** **Life Long Learning**



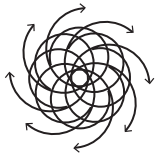
Research **Qualification** **Innovation**



Practice **Regulation** **Public Purpose**

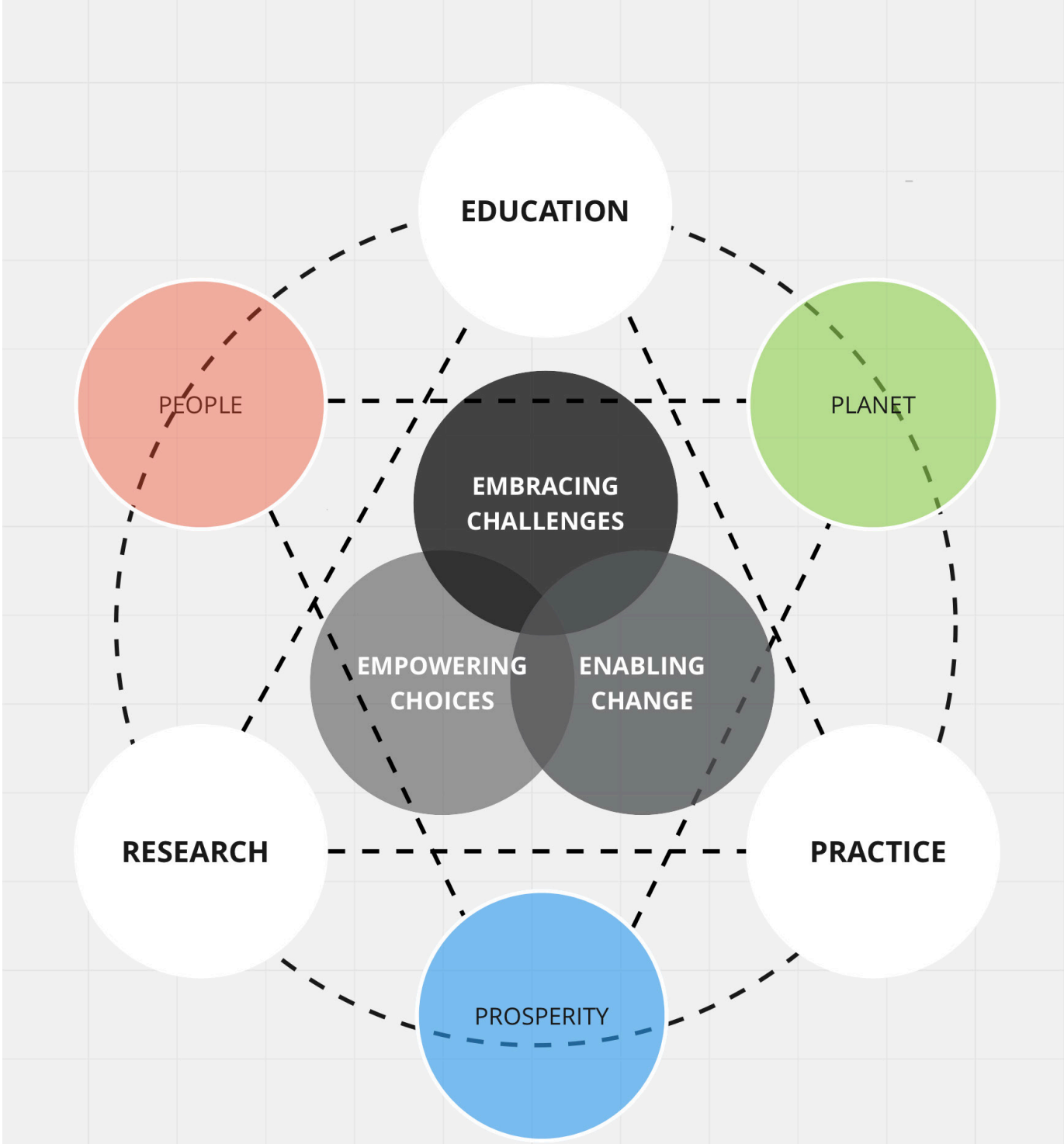
Profession, Programs, Practice **Intern Handbook, Research Practices, Teaching Hospital**

Policy, Power, People **Design of Policies, Design Commission, Baukultur**

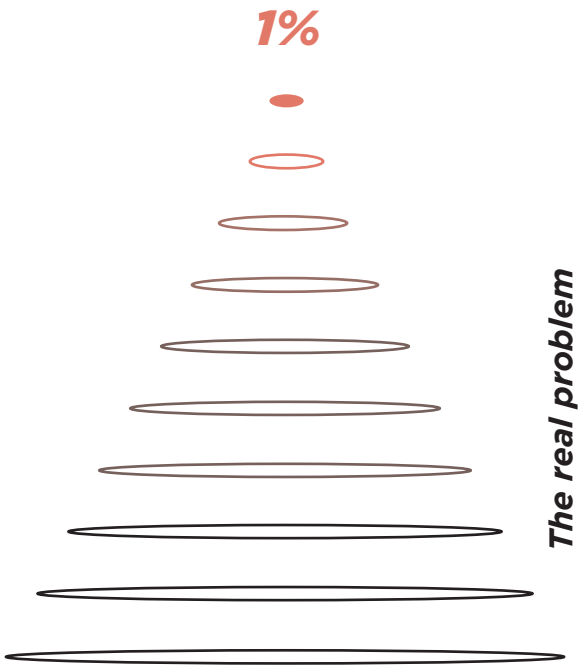


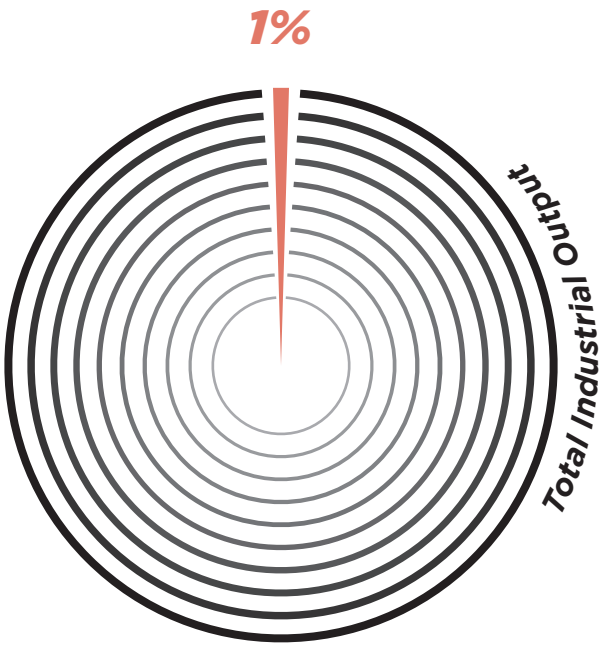
Communities, Cities, Countries **Regenerative Urbanism, Net Zero, Innovation Platforms**

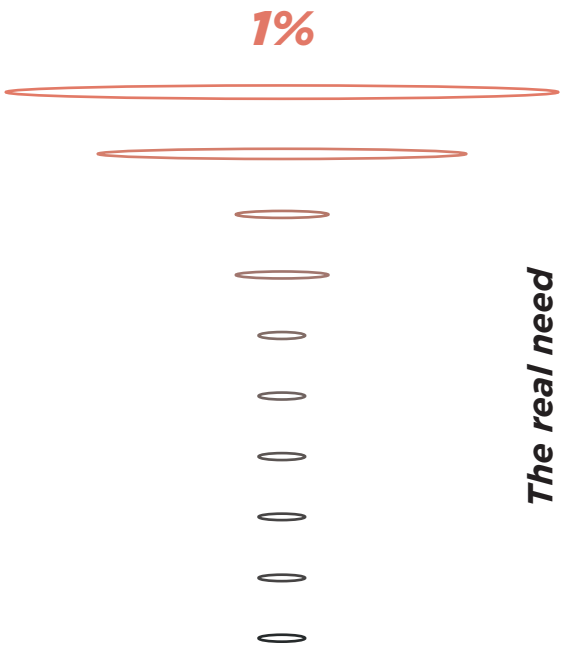
BUT FIRST ... CHALLENGES, CHOICES, CHANGES



EMBRACING CHALLENGES







The Architect's Share

1% of WORLD CHALLENGES

.1 % part of delivery process
.01 % measured social impact
.001% life cycle of a building

Architecture's Share

1% of INDUSTRY INFLUENCE

1 % growth in building sector
1 % investment in research
1 % circular construction

NEWS FLASH > IPCC REPORT

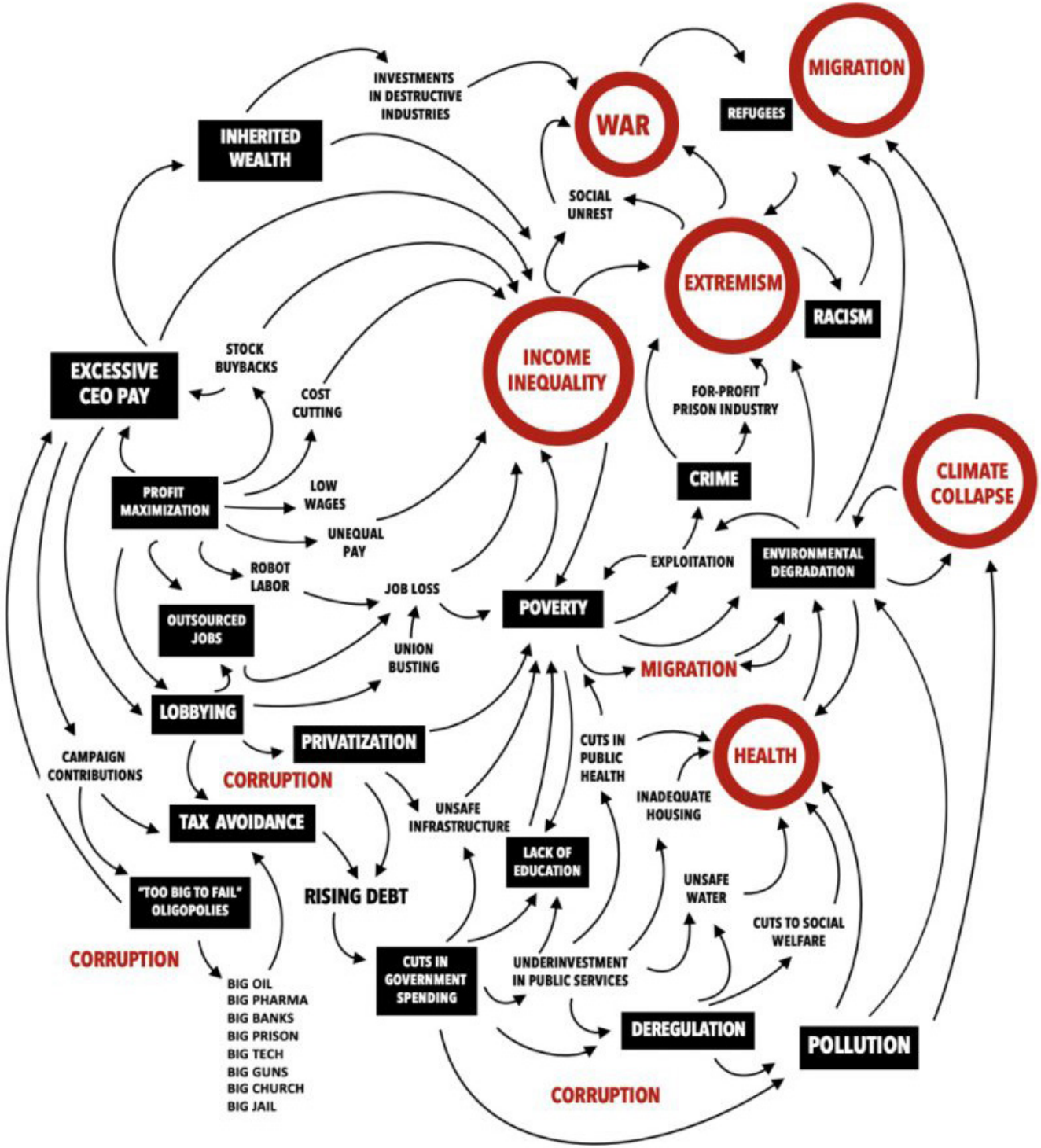
No growth since world war two !!!

The World's Share

1% = MAJORITY CLIENT BASE

1 % top posesses 56 % all wealth
10 % top = 90 % CO2 emissions
40 % bottom live on 3 $ per day

CHALLENGES > A 1% PROFESSION IN A 1% WORLD



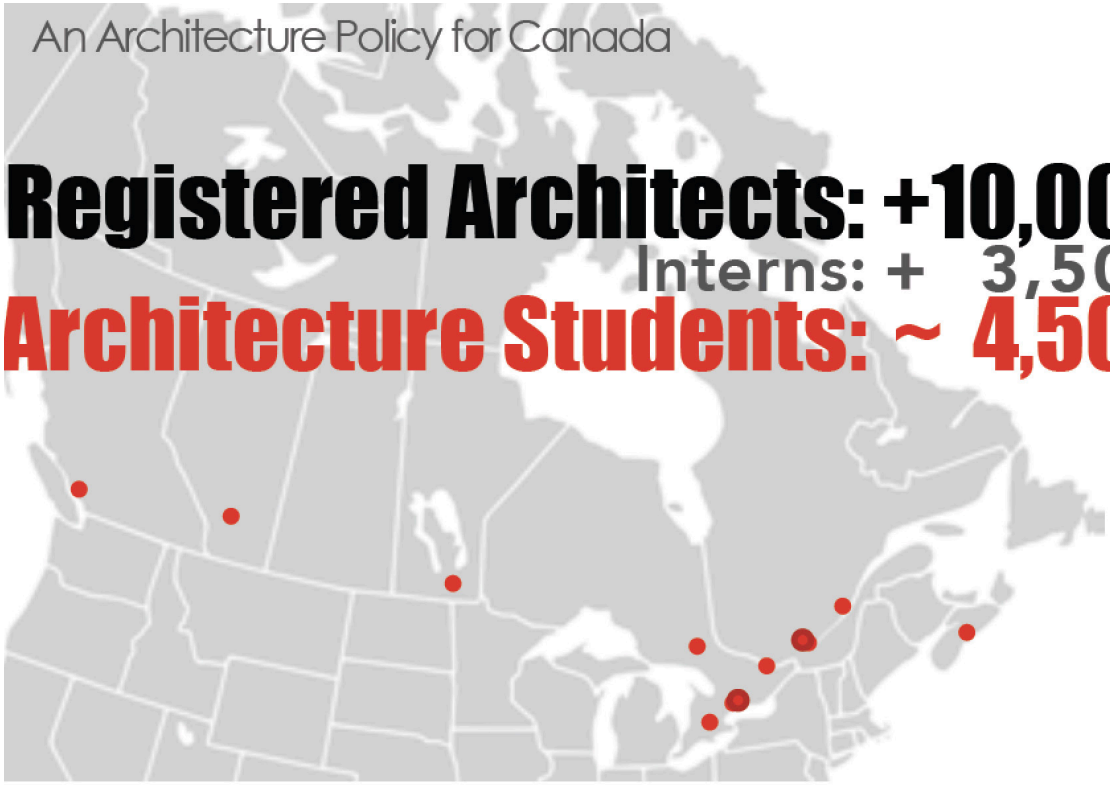
CHALLENGES > ECO-SYSTEM OF COMPLEX GLOBAL WICKED PROBLEMS

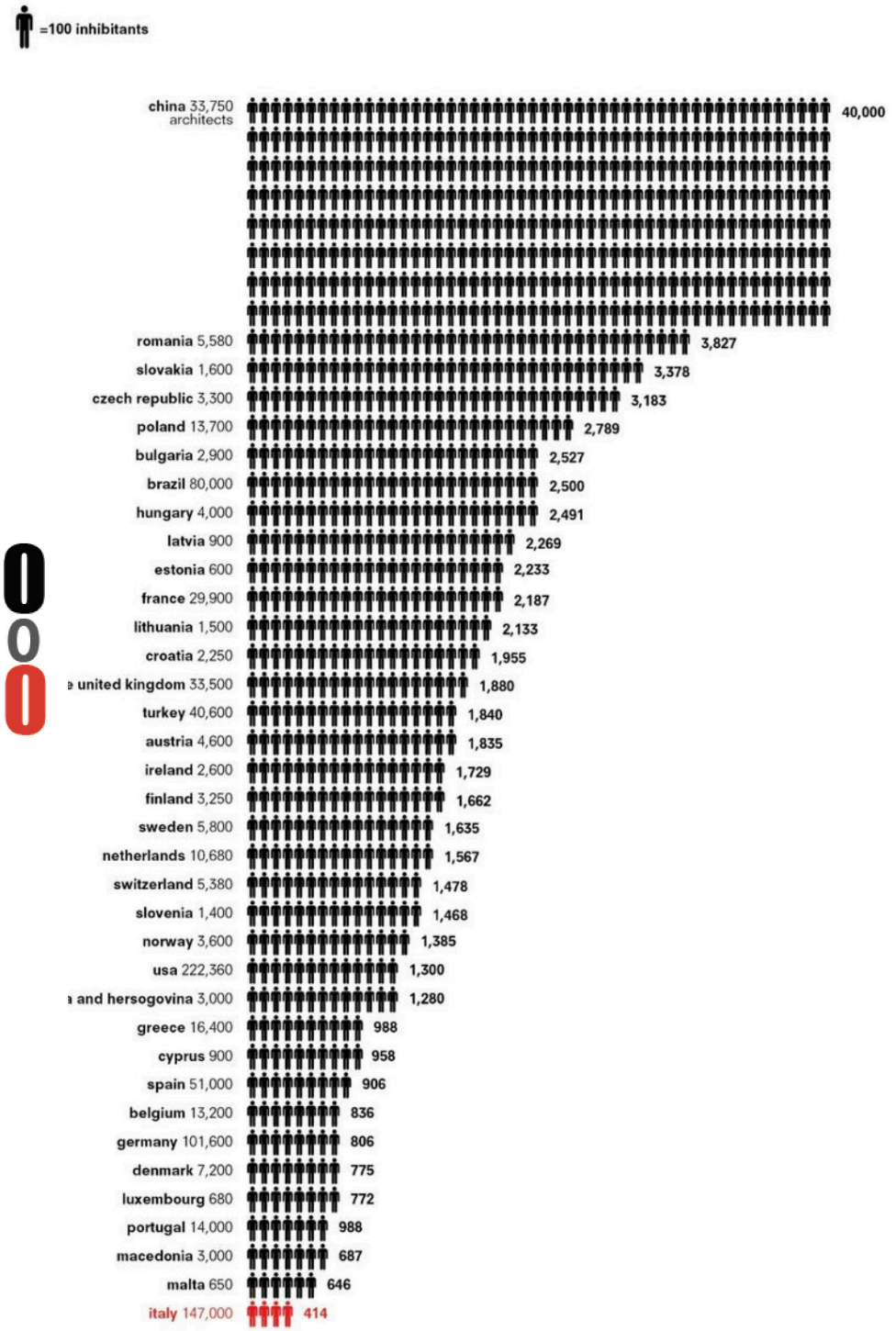
An Architecture Policy for Canada

Registered Architects: +10,000

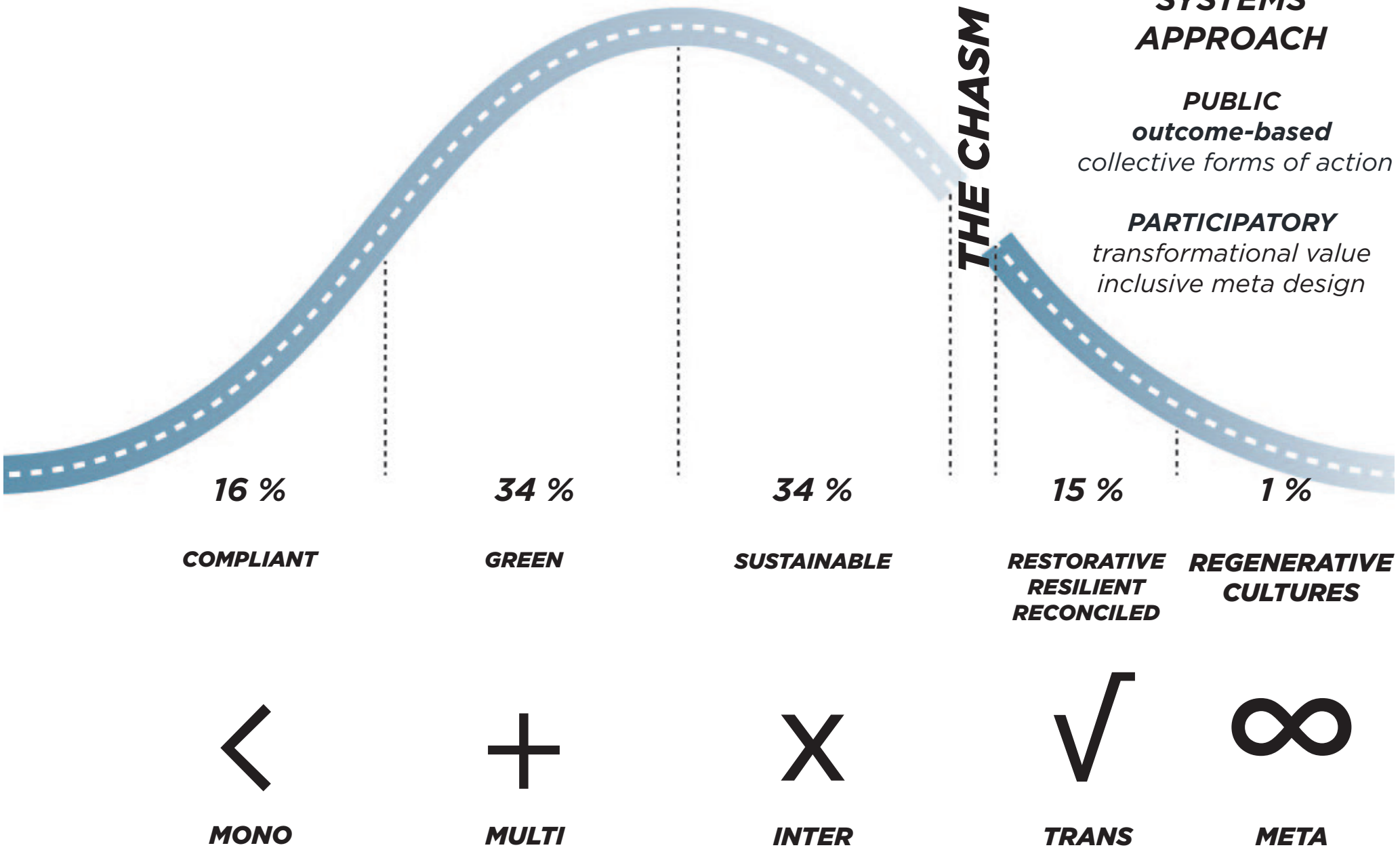
Interns: + 3,500

Architecture Students: ~ 4,500



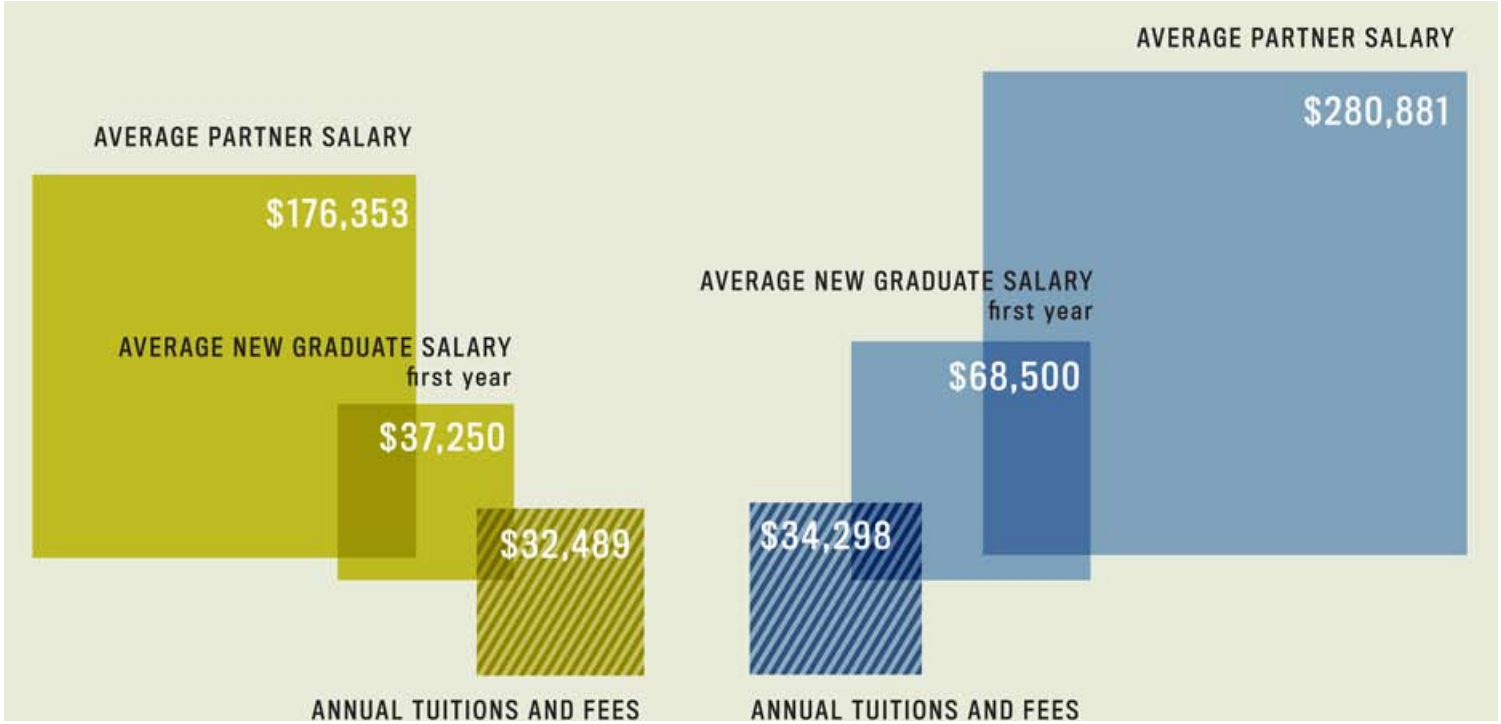


CHALLENGES > FULFILLING THE NEEDED COMPETENCIES | CAPABILITIES | CAPACITIES ?

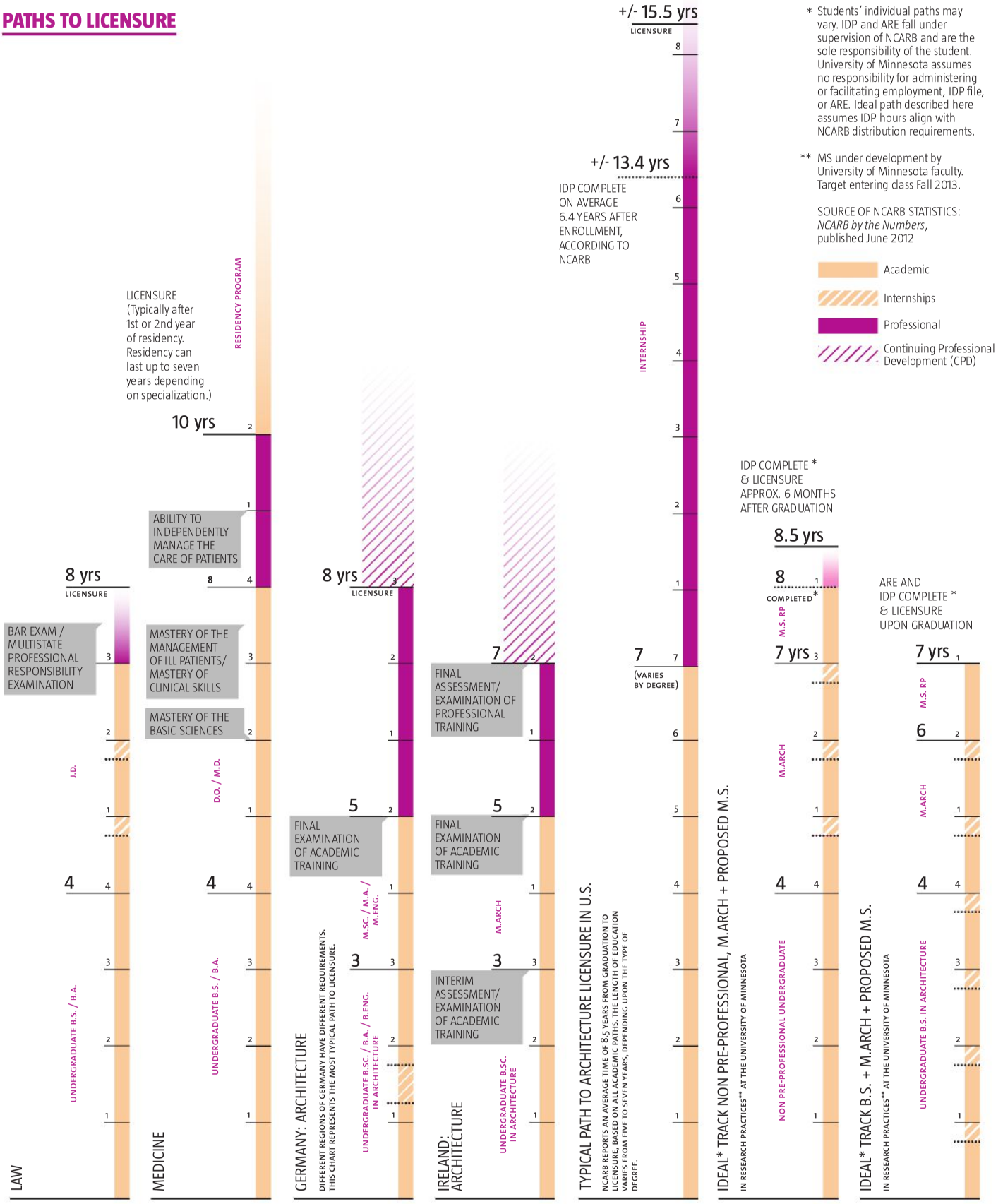


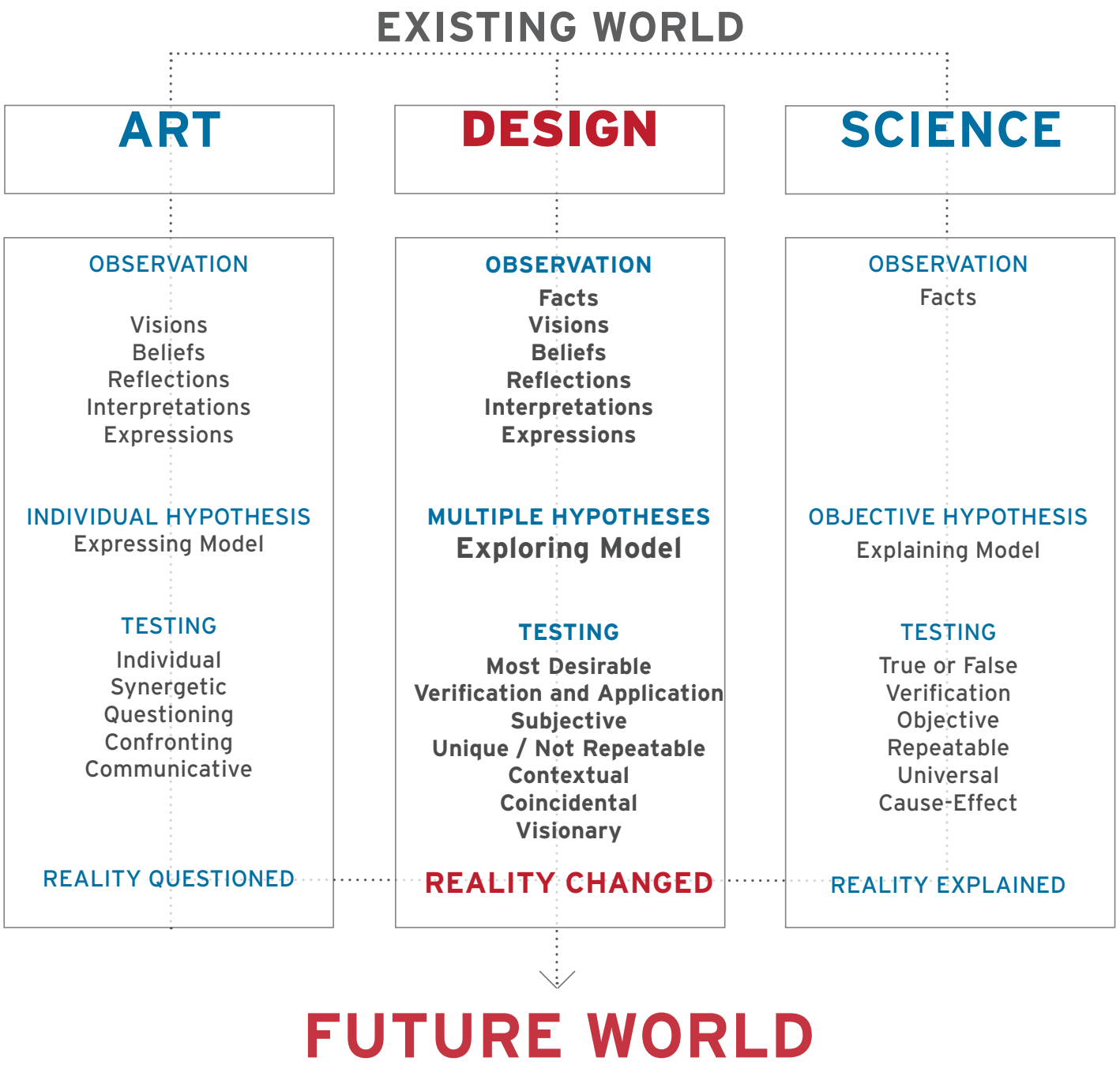
WHERE WE STAND > THE INNOVATION CURVE

	common knowledge base	shared research	title	licensure
LAW	legal cases	yes	jd	articling + exam
MEDICINE	human cases	yes	md	residency + registration
ENGINEERING	building physics	yes	p.eng	internship + registration
ARCHITECTURE	??	no	architect ??	internship ?? exam ??

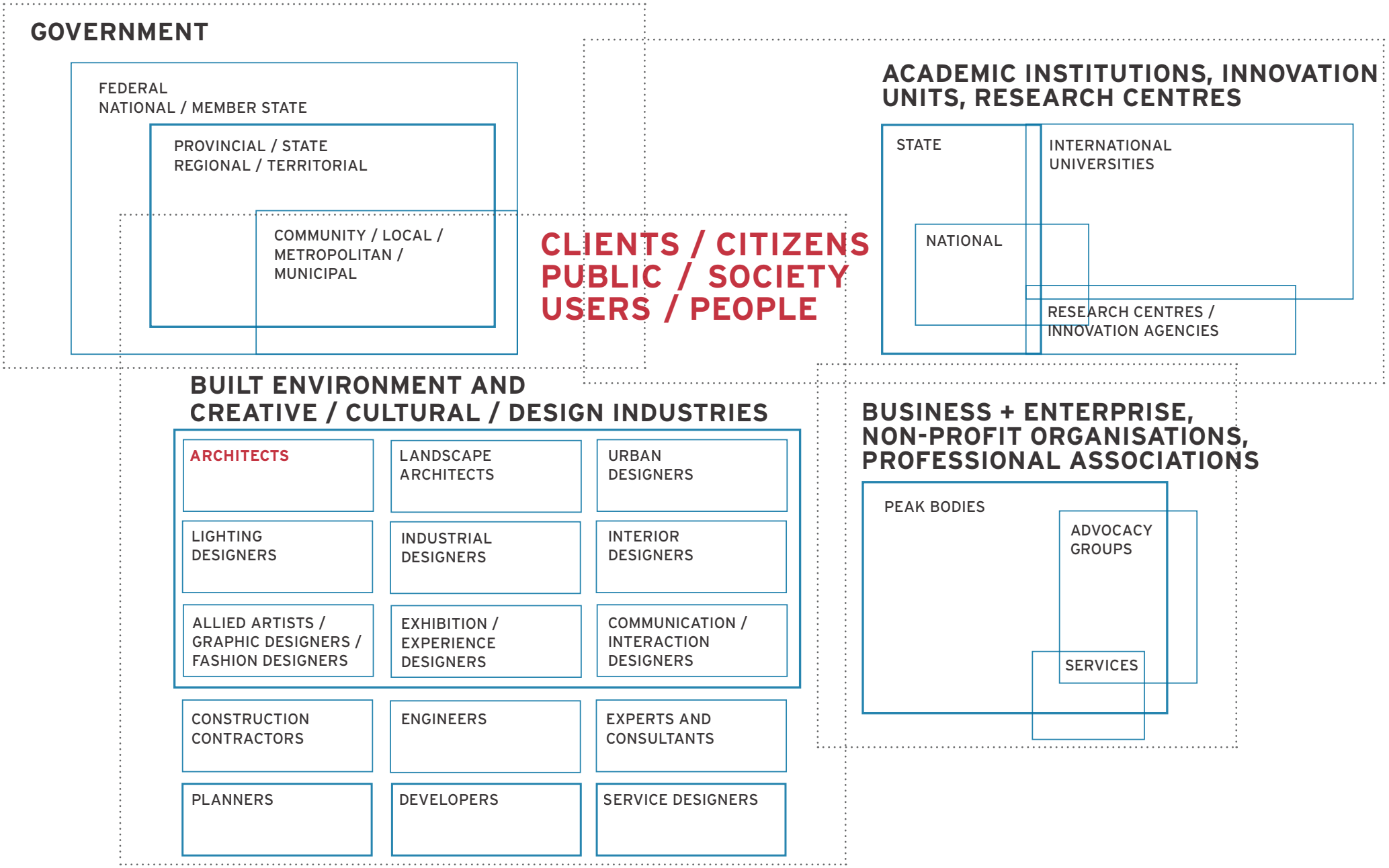


PATHS TO LICENSURE



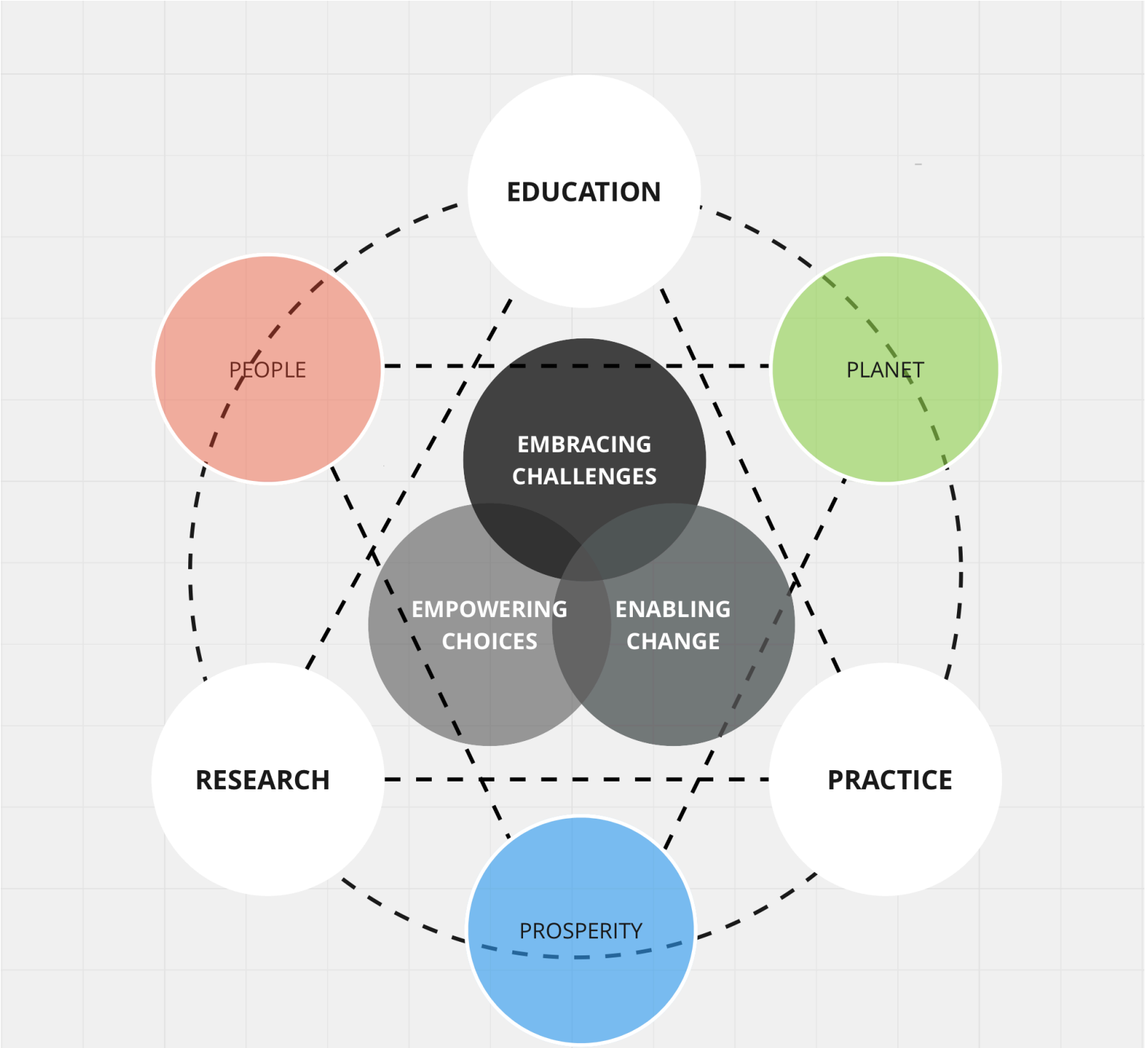


OUR POTENTIAL > FUTURE FOCUSED > EDUCATION + CO-CREATION



OUR POTENTIAL > CITIZEN CENTRED > COLLABORATION + COLLECTIVE ACTION

OUR POTENTIAL > MISSION ORIENTED > INTEGRATION + INNOVATION



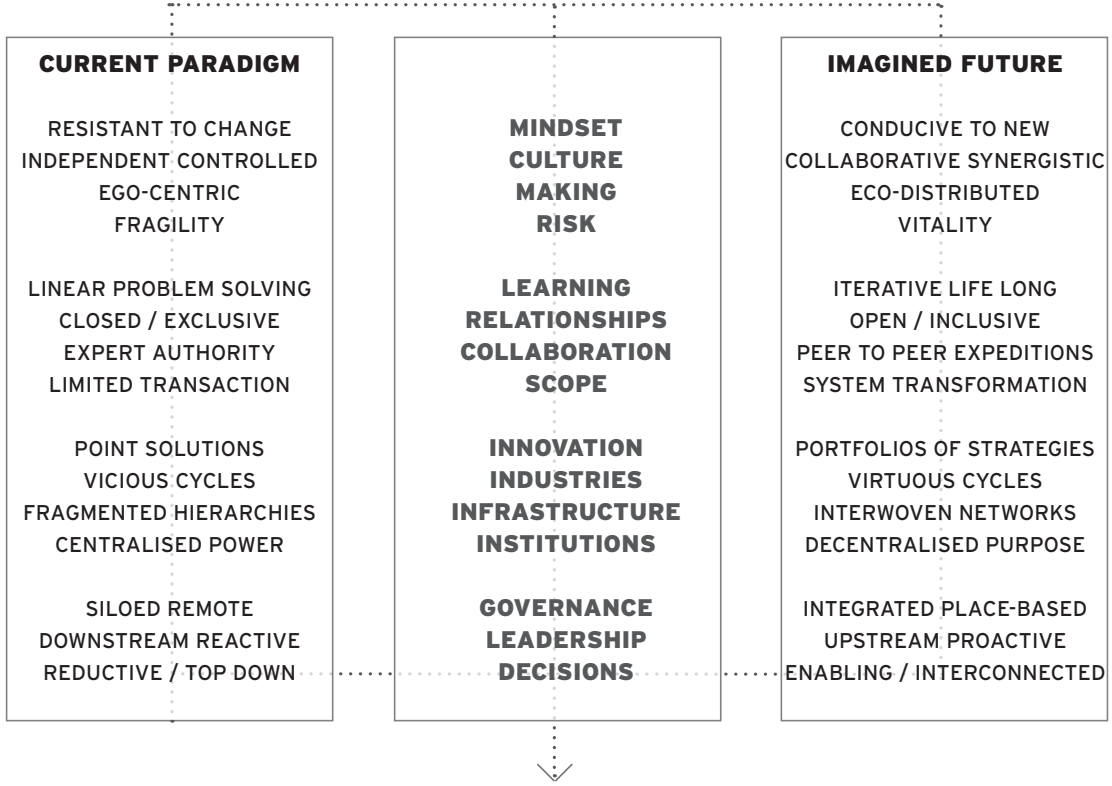
EMPOWERING CHOICES

CHANGE YOUR WORDS

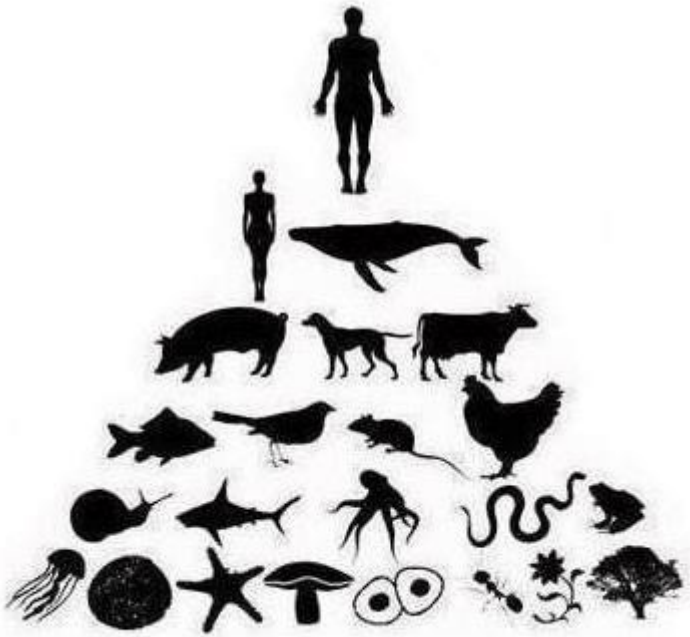
DESIGN as noun
BUILDINGS as things
(ST)ARCHITECTURE

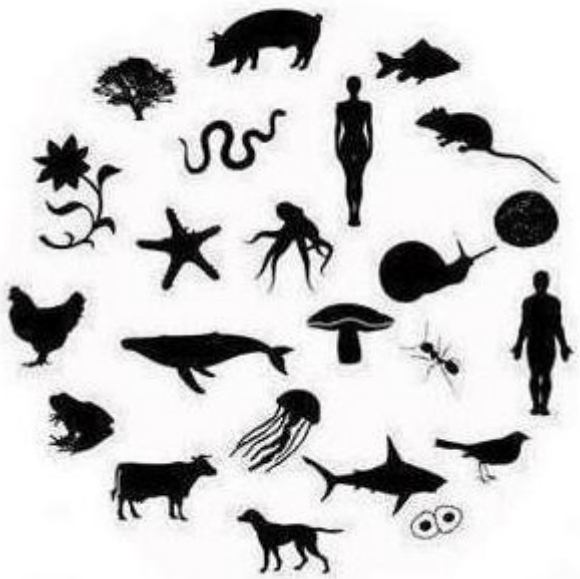
CHANGE YOUR WORLD

design as verb
building as making
the architecture of ...

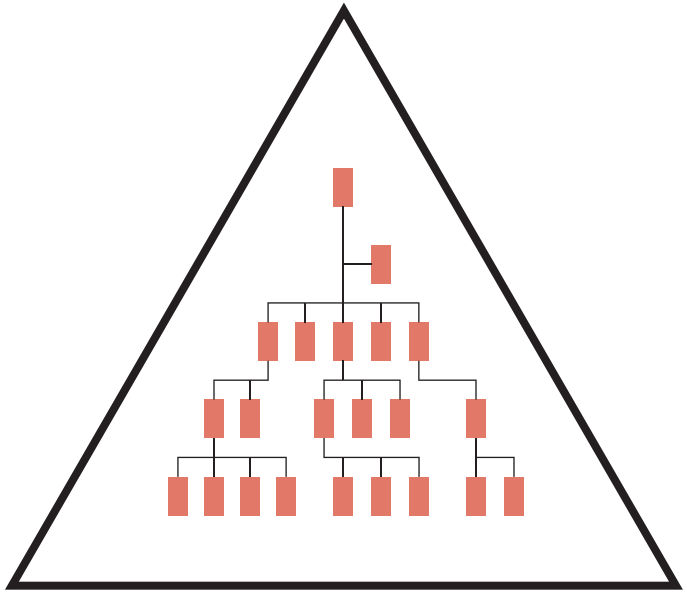


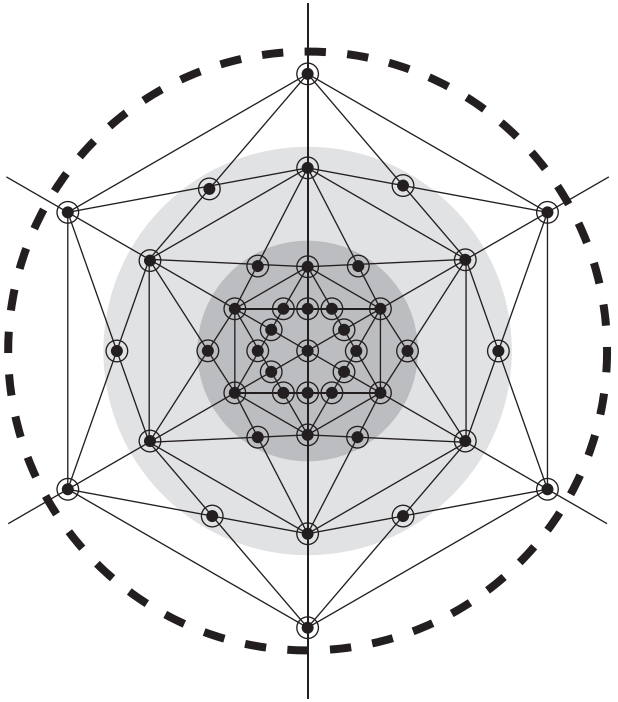
CHOICE > PRESENT PRACTICE TO FUTURE PRACTICES



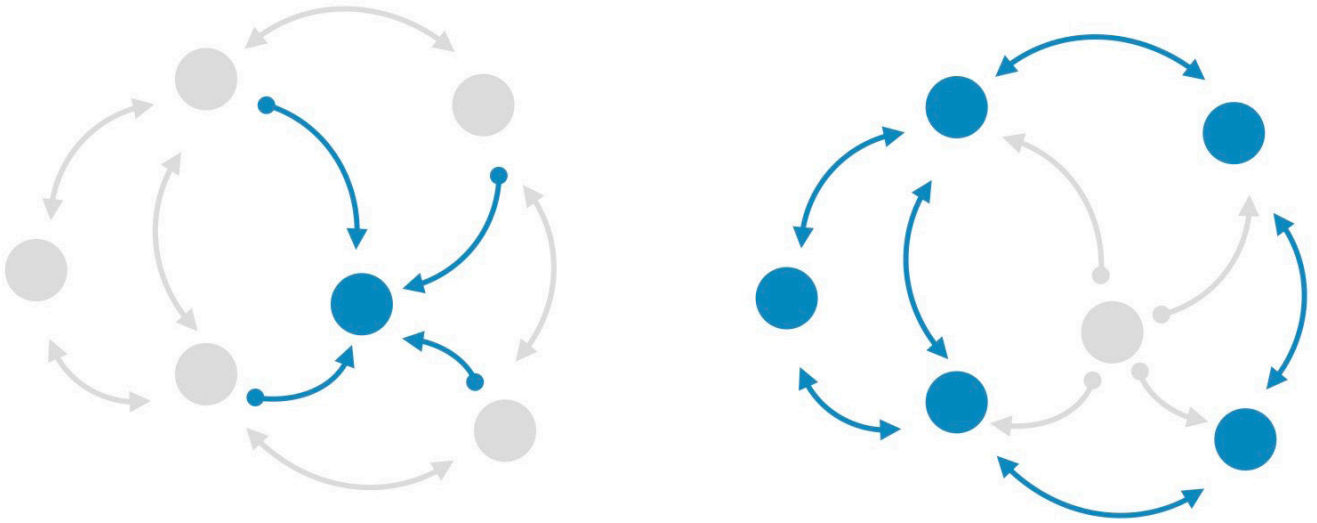


CHOICE > EGO to ECO

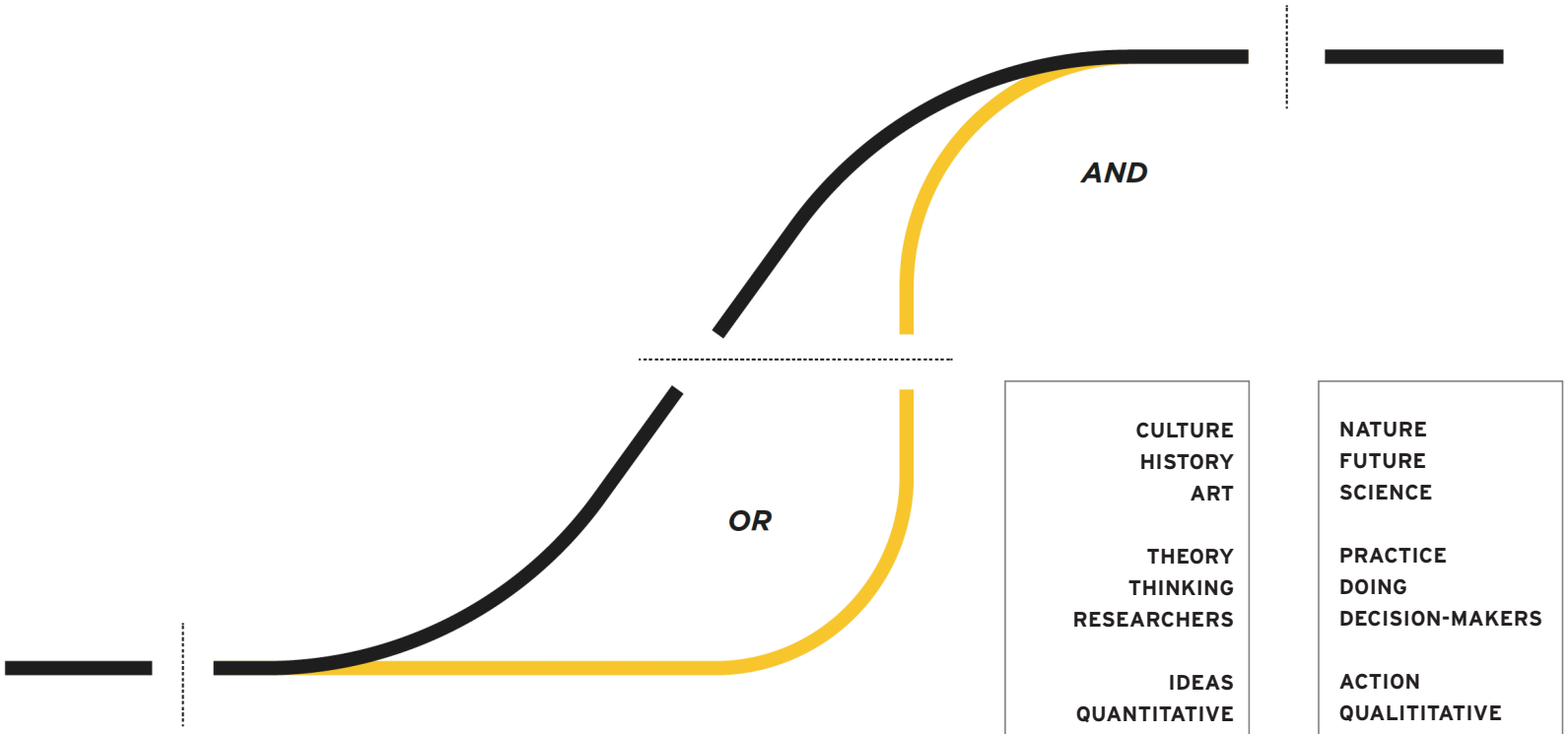




CHOICE > SILOS to SYNERGIES

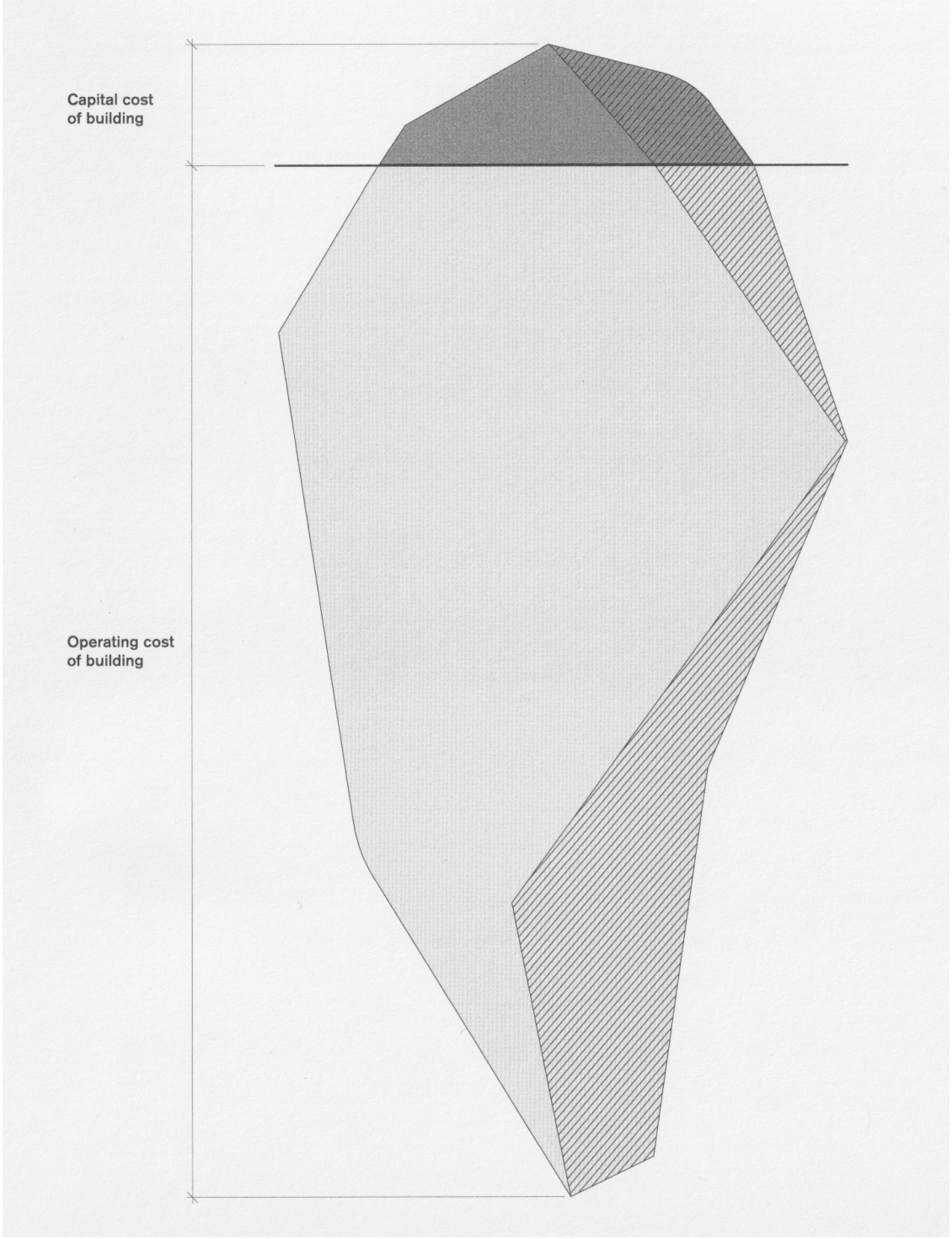


CHOICE > REDUCTION TO SIMPLE PROBLEM to HOLISM FOR SYSTEMIC



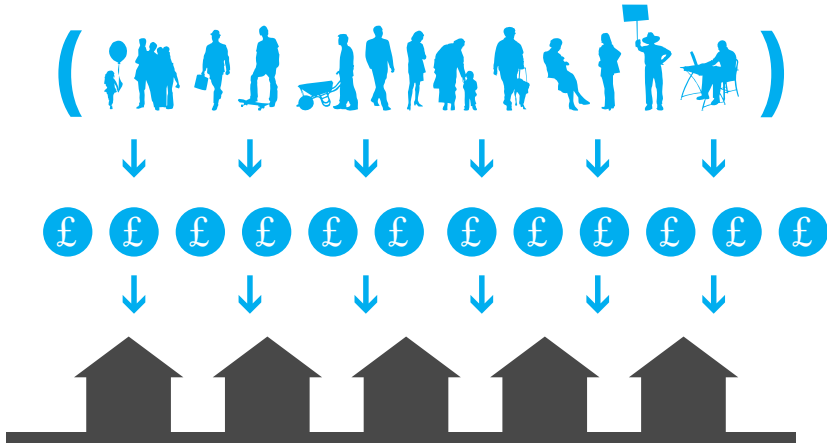
CULTURE	NATURE
HISTORY	FUTURE
ART	SCIENCE
THEORY	PRACTICE
THINKING	DOING
RESEARCHERS	DECISION-MAKERS
IDEAS	ACTION
QUANTITATIVE	QUALITITATIVE
SUBJECTIVE	OBJECTIVE
PRIVATE	PUBLIC
AUTONOMY	SOLIDARITY
INDIVIDUAL RIGHTS	COLLECTIVE NEEDS
DIGITAL	PHYSICAL
VIRTUAL	TANGIBLE
TECHNOLOGY	TRUTH

CHOICE > MATERIAL WORLD OF “OR” to HUMAN WORLD OF “AND”



CHOICE > SHORT-TERM COST to LONG-TERM VALUE

Credit: HCMA



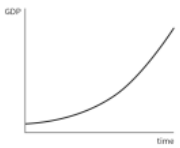
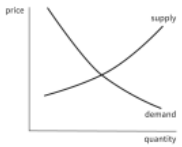
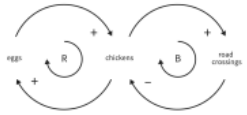
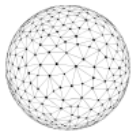
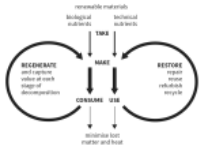
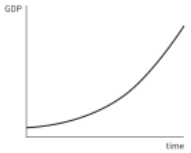
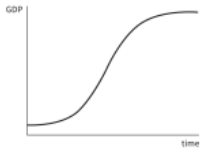
Credit: DMLabs

CHOICE > CENTRALISED PRIVATE POWER to DISTRIBUTED PUBLIC PROSPERITY

DOUGHNUT ECONOMICS ACTION LAB

Seven ways to think like a 21st century economist

Credit: Kate Raworth

Seven Ways to Think:	From 20th-Century Economics		To 21st-Century Economics	
1. Change the Goal		GDP		the Doughnut
2. See the Big Picture		self-contained market		embedded economy
3. Nurture Human Nature		rational economic man		social adaptable humans
4. Get Savvy with Systems		mechanical equilibrium		dynamic complexity
5. Design to Distribute		growth will even it up again		distributive by design
6. Create to Regenerate		growth will clean it up again		regenerative by design
7. Be Agnostic about Growth		growth addicted		growth agnostic

CHOICE > EXTRACTIVE 1% ECONOMY to DOUGHNUT 100% ECONOMICS

Beyond Sustainability: Designing Regenerative Cultures

Living Systems Design

Pays attention to quality & quantity
Effectiveness- doing the right thing
Informed by a Systems View of Life
Thinking in patterns and principles

The SDGs as a bridge towards regeneration?

Regenerative Development

Depletion fossil energy stocks

Using renewable energy flows

Degenerative Development

Design of Technical Systems

Values only the quantifiable
Efficient - doing things right
Informed by Mechanism & Technology
Siloed & fragmented thinking

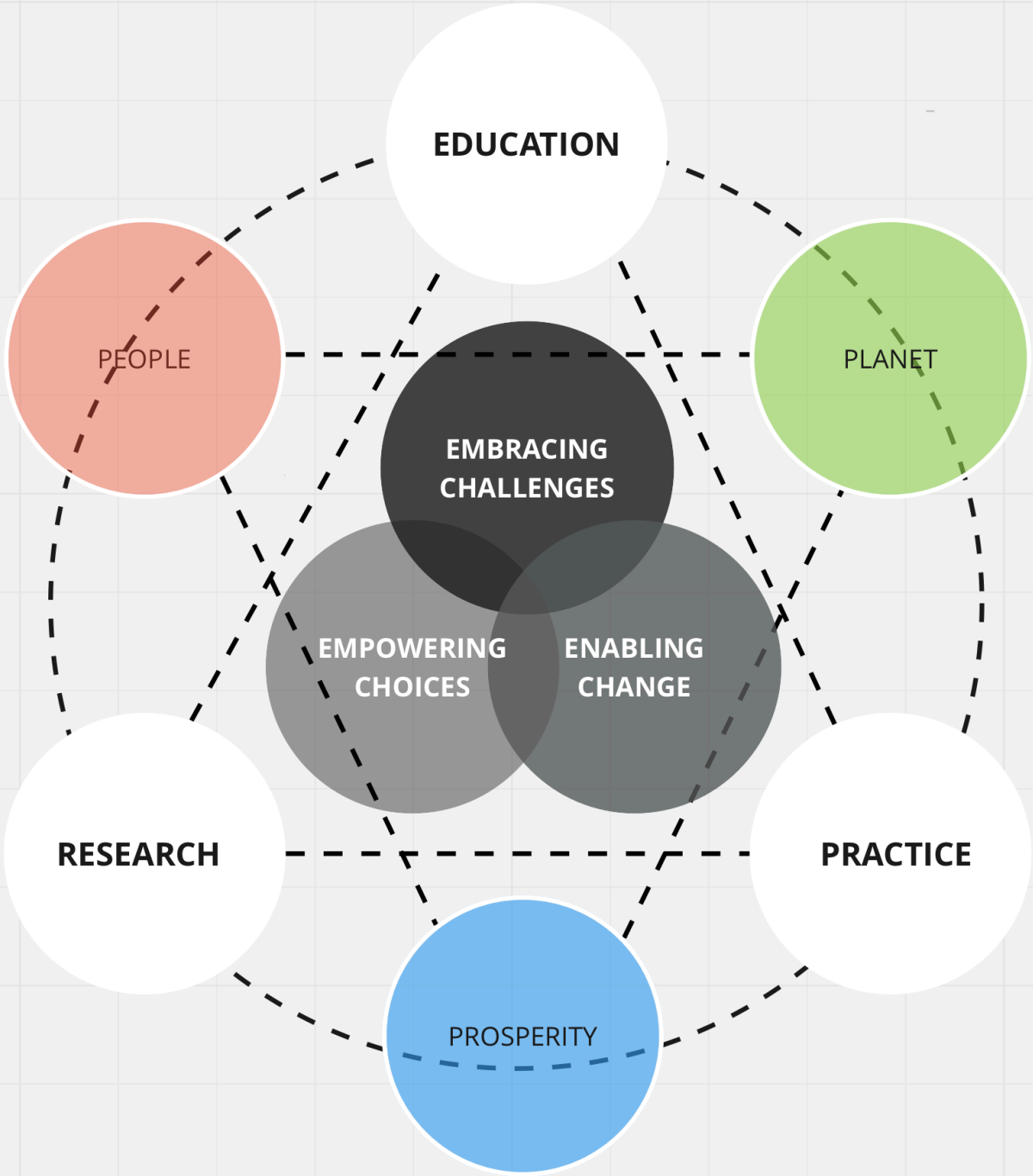
Conventional	Green	Sustainable	Restorative	Regenerative
(staying within the law)	(a little less negative impact)	(adding no additional harm)	(humans doing things to nature)	(humans doing things as nature)

Degenerative Cultures — **Regenerative Cultures**

Based on Reed, 2006 & Roland, 2018

CHOICE > DEGENERATIVE TO REGENERATIVE

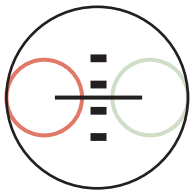
Credit: DC Wahl et al.



ENABLING CHANGE

Architecture and Urban Design as Cultural Agents to build relationships between

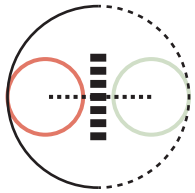
I and self	*personal consciousness*
I and others	*personal relationships*
I and nature	*personal resonance*
we and Institutions	*social structures*
we and Ecology	*social systems*
we and The Future	*social synergies*
humans and nature	***eco-**structures*
human and culture	***infra**structures*
culture and nature	***intra**structures*



Age of Agriculture

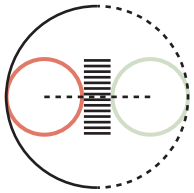
Optimal Halocene
Solar / Surplus Food

Masterbuilder



Age of Early Industry

Halocene
Wind Water

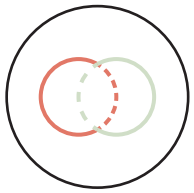


Age of Late Industry

Global Warming
Fossil Fuels

Age of Information

Increasing Warming
Nuclear Power

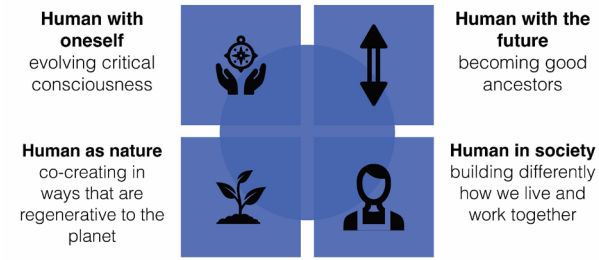


Age of Integration

Anthropocene
Renewable Energy

Citizen Architect

****** NIDA ******

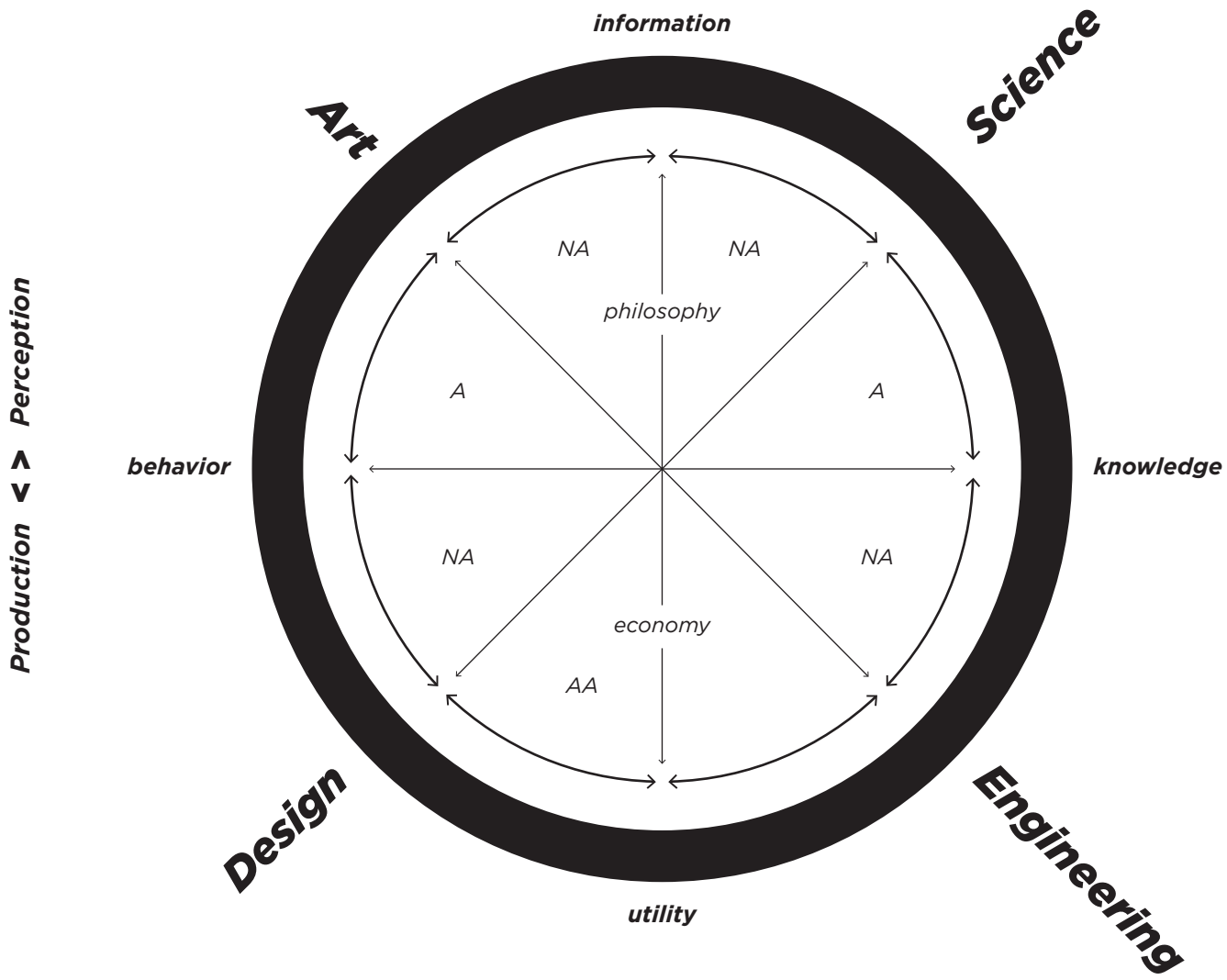


CHANGE > RELATIONSHIPS

Perception & Culture

Culture < > Nature

Perception & Nature

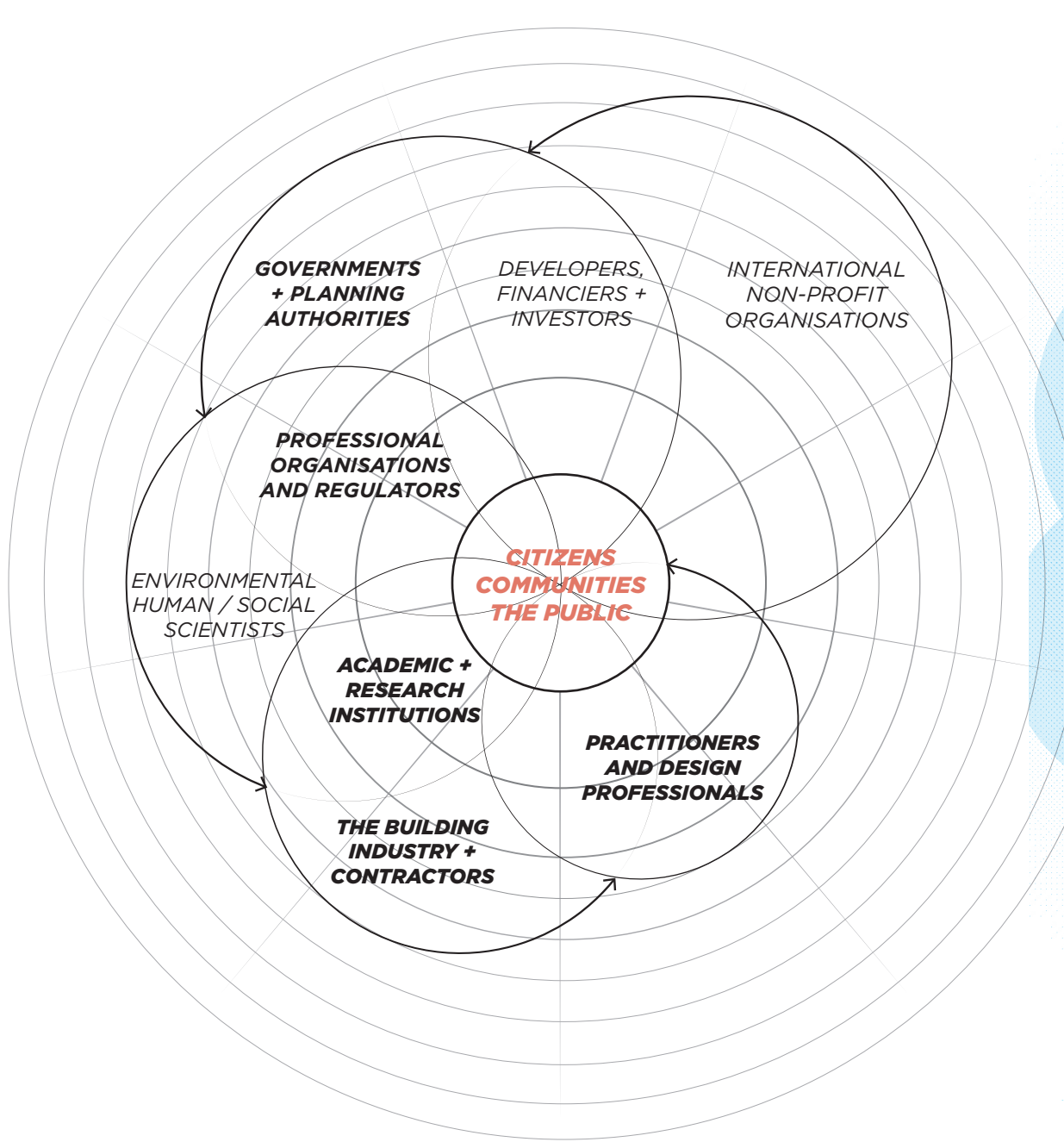


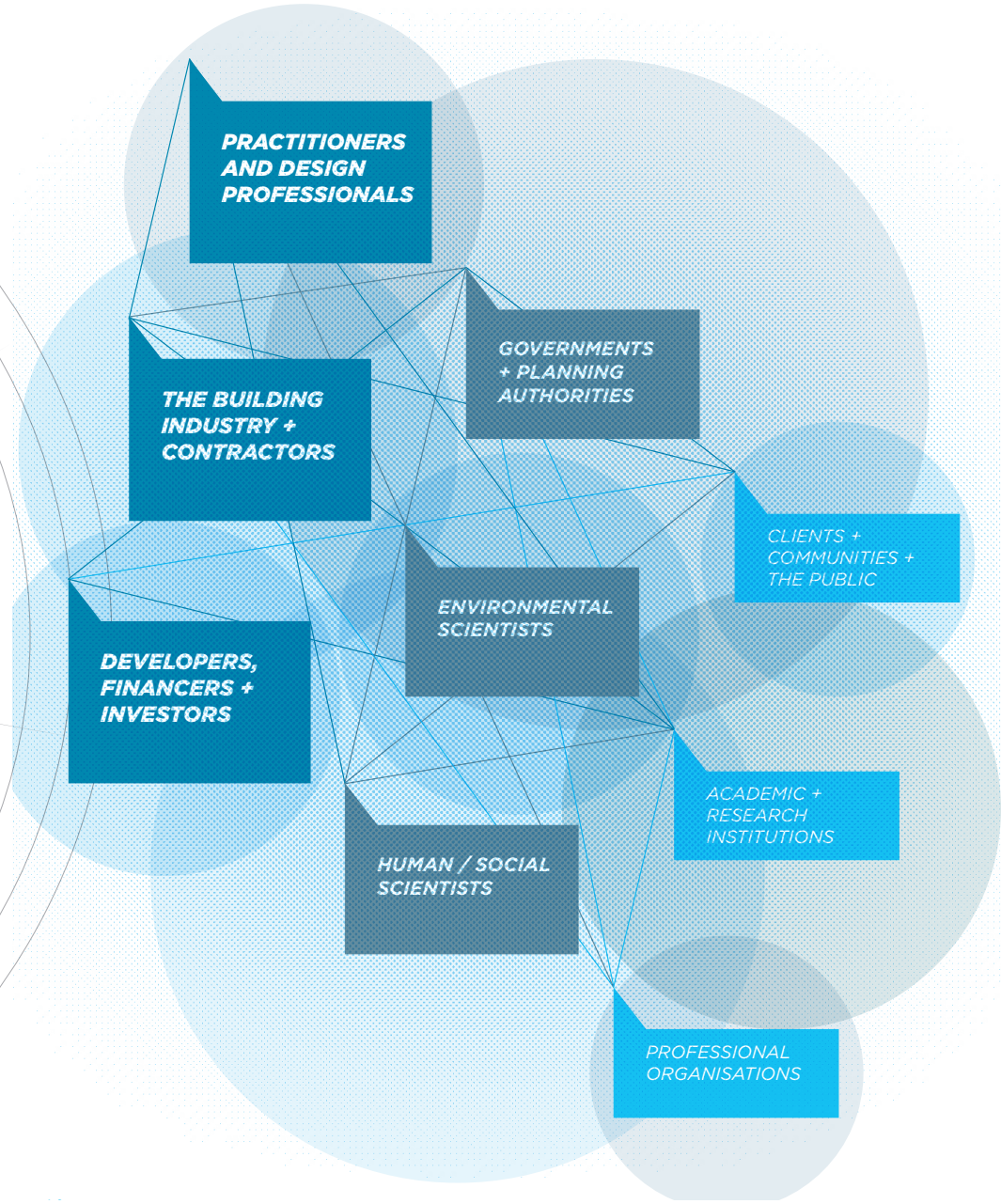
Production & Culture

Production & Nature

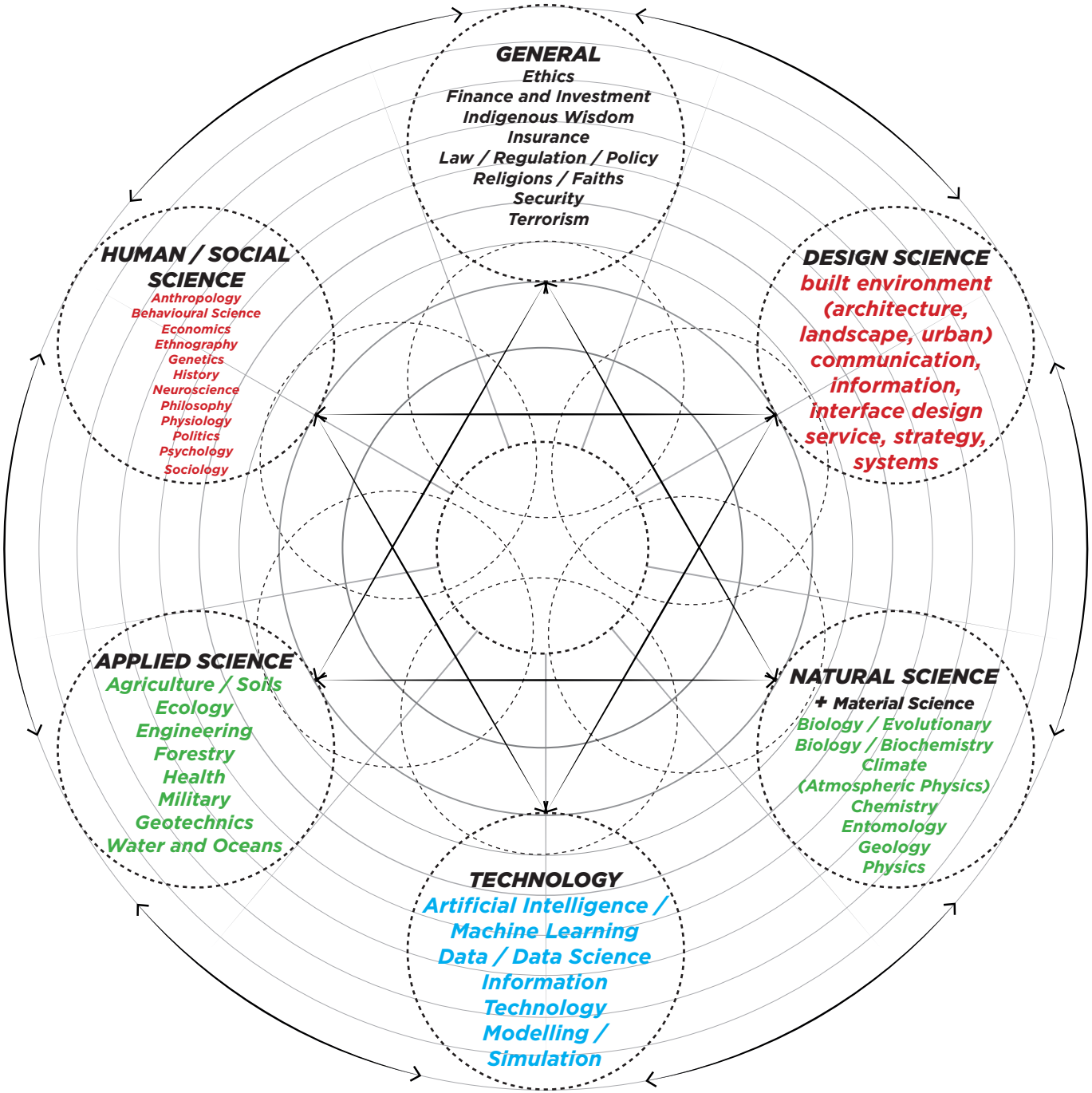
CHANGE > COLLABORATION > INTERDISCIPLINARY

Credit: Krebs



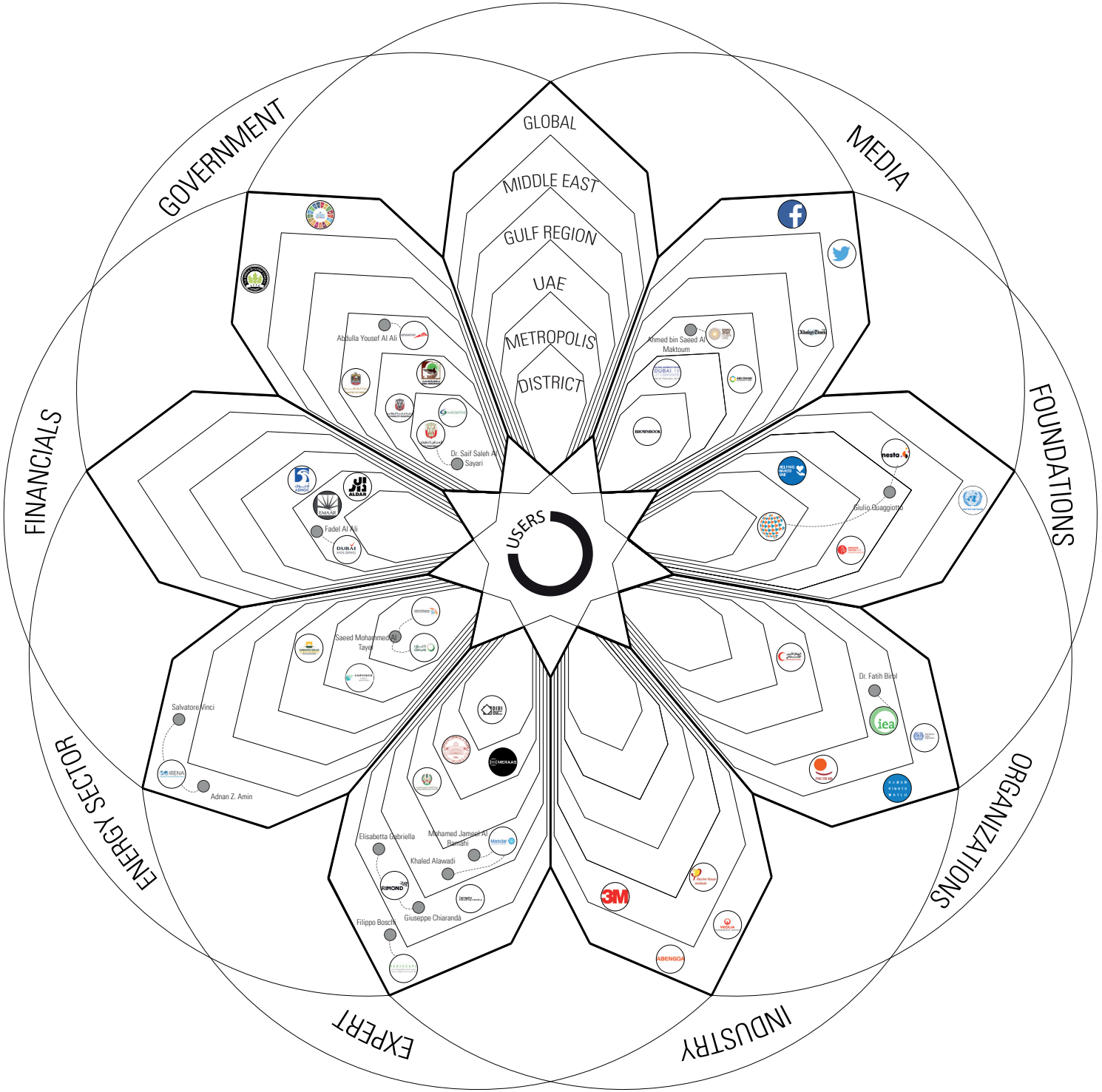


CHANGE > COLLABORATION > KNOWLEDGE EXCHANGE LOOPS AND NETWORKS

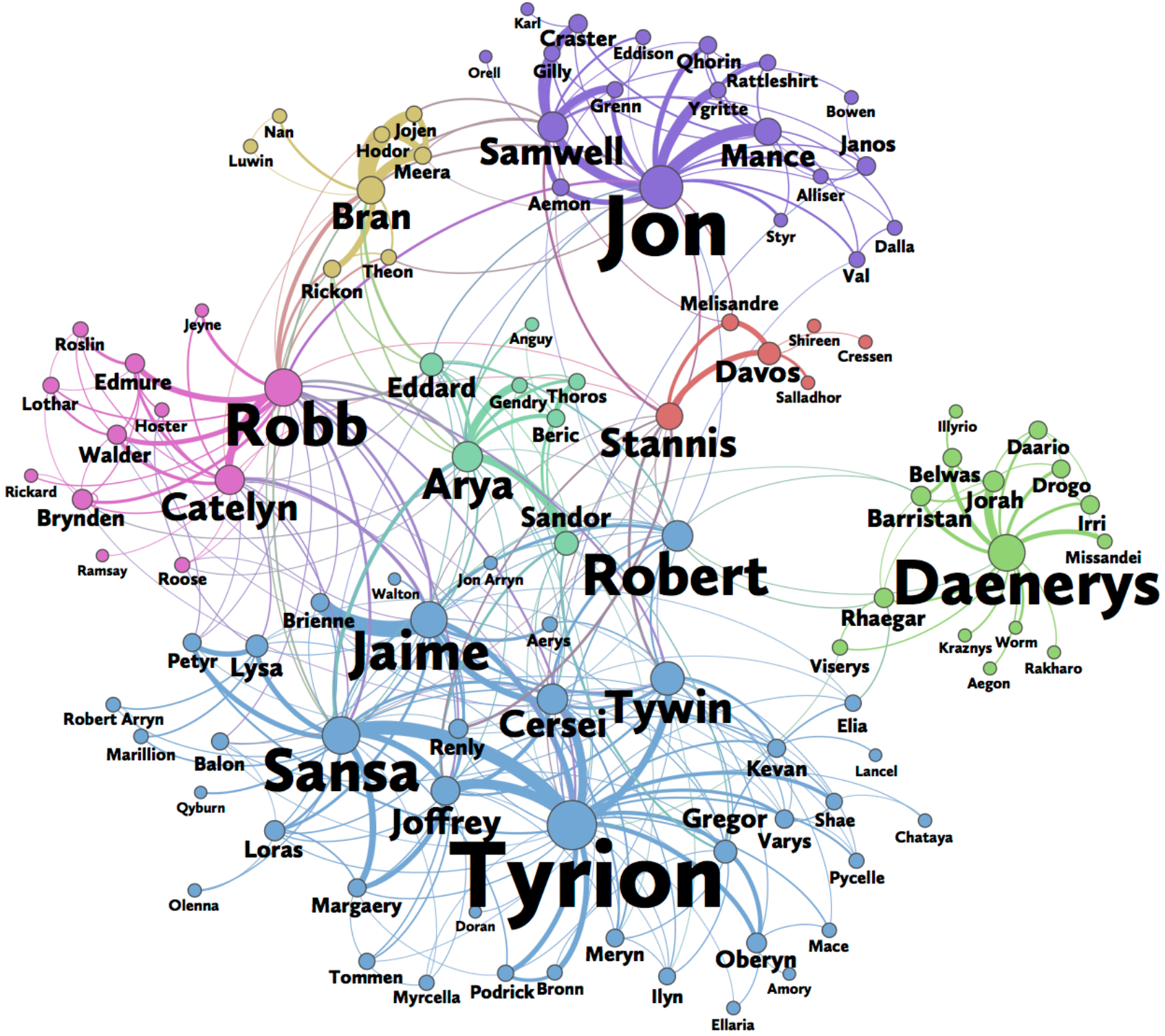


CHANGE > COLLABORATION > HARNESSING INTERDISCIPLINARITY

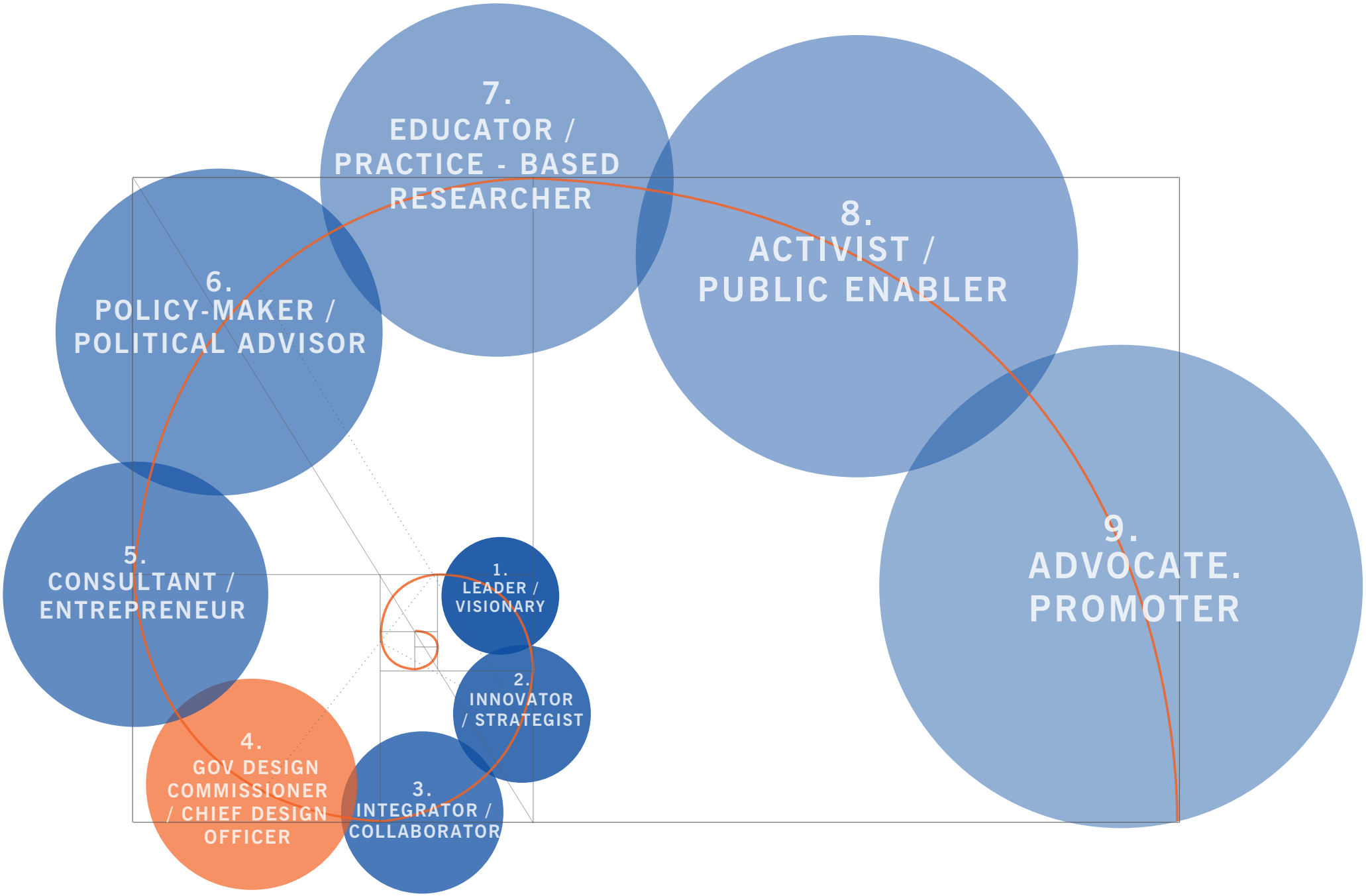
CHANGE > COLLABORATION > ALIGNING AGENCIES AND TIERS OF GOVERNMENT



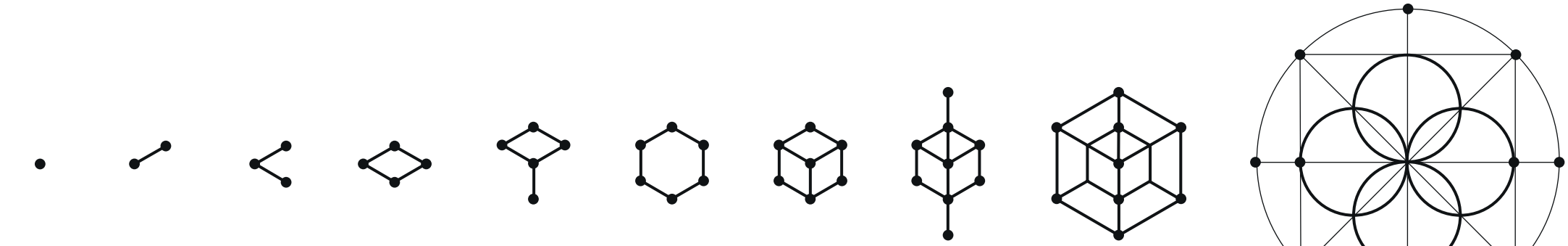
CHANGE > COLLABORATION > GEOGRAPHIC SPHERES OF INFLUENCE



CHANGE > COLLABORATION > SHIFTING POWER + PURPOSE



CHANGE > COLLABORATION > COLLATERAL ORGANISATION ROLES



PERSON
PEERS
PARTNERS
PLACES
PATHWAYS
PLATFORMS
PROJECTS
PROGRAMMES
POLICIES

PROFILE
PASSPORT
PERFORMANCE

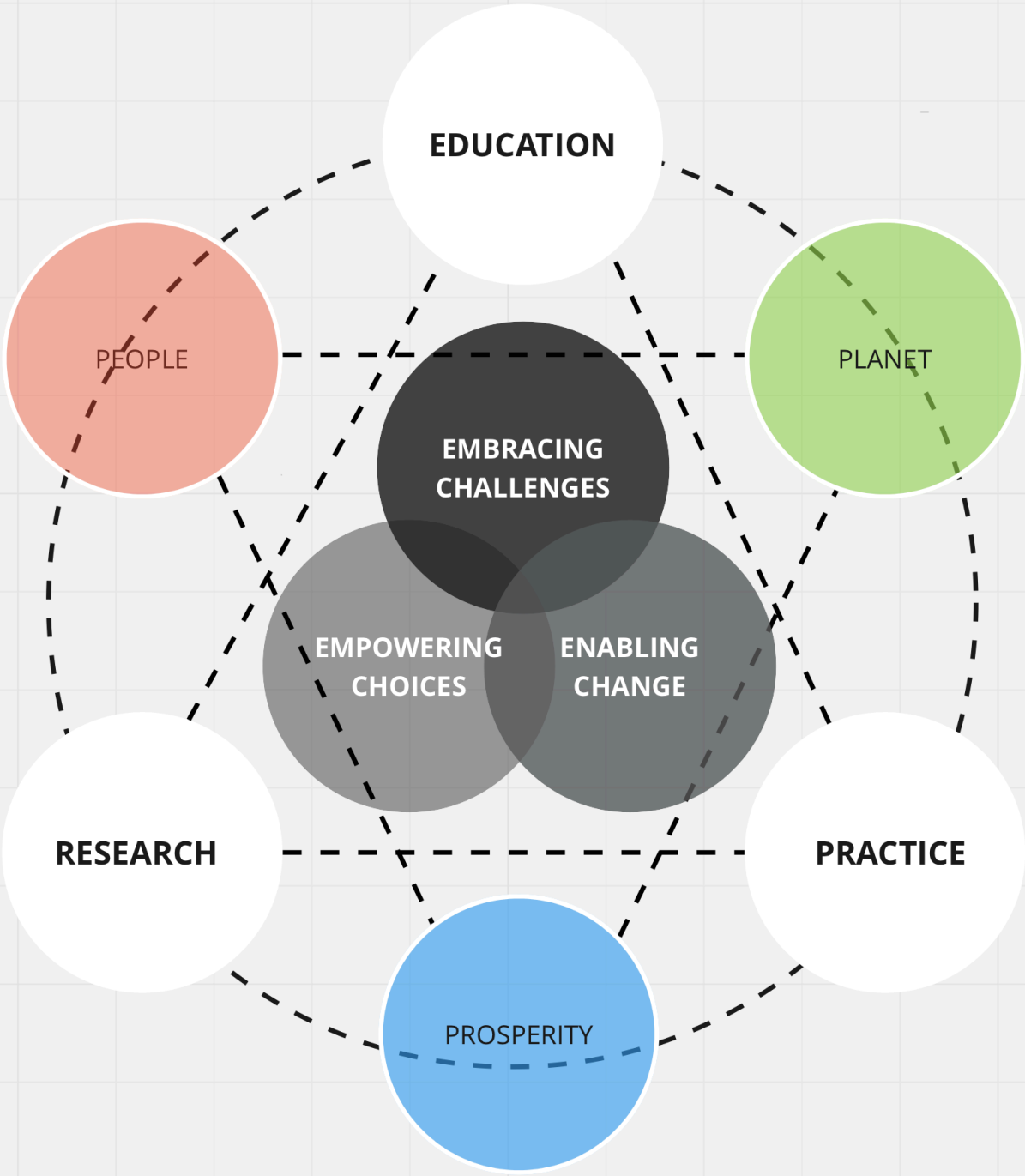
TEAM 1 > Designing for Common Ground
TEAM 2 > Designing for Common Sense
TEAM 3 > Designing for Common Goals
TEAM 4 > Designing for Common Good

WHO
WHERE
WHAT
WHEN > Preferable Plausible Possible

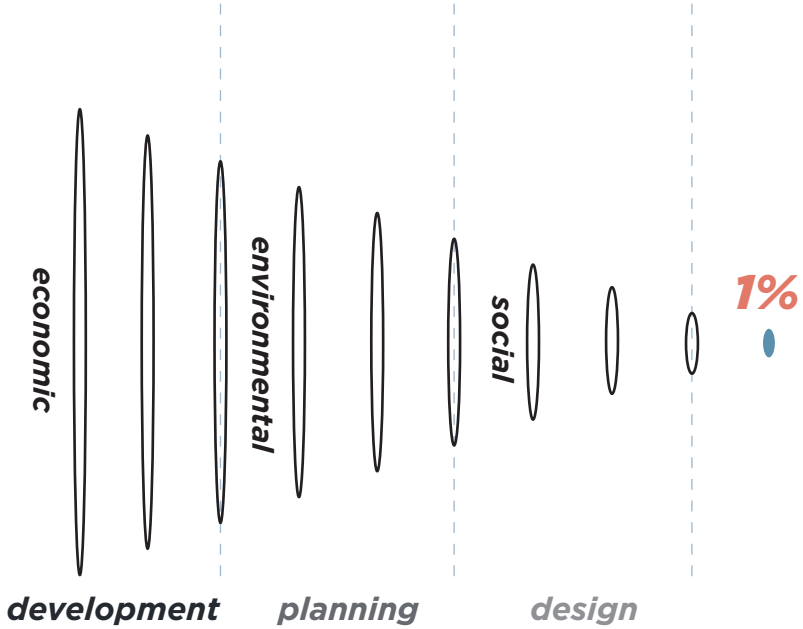
WAY > Principles Processes Practices

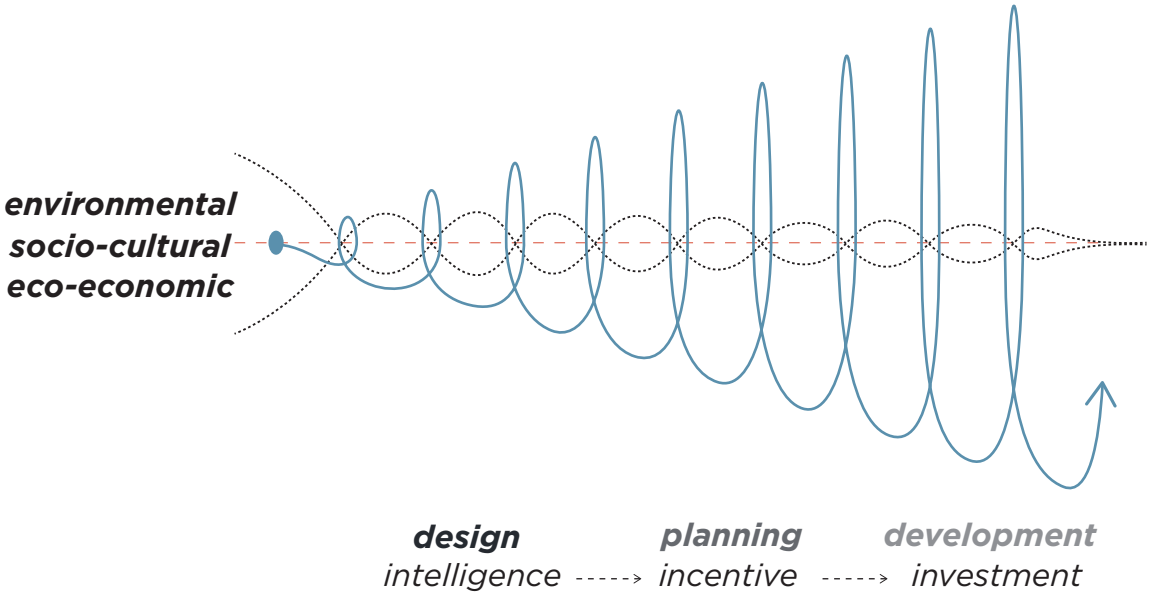
WHY > Purpose Promise Prosperity

CHANGE > TOWARD PELETONS AND COOPETITION



PEOPLE PROSPERITY PLACE / PLANET

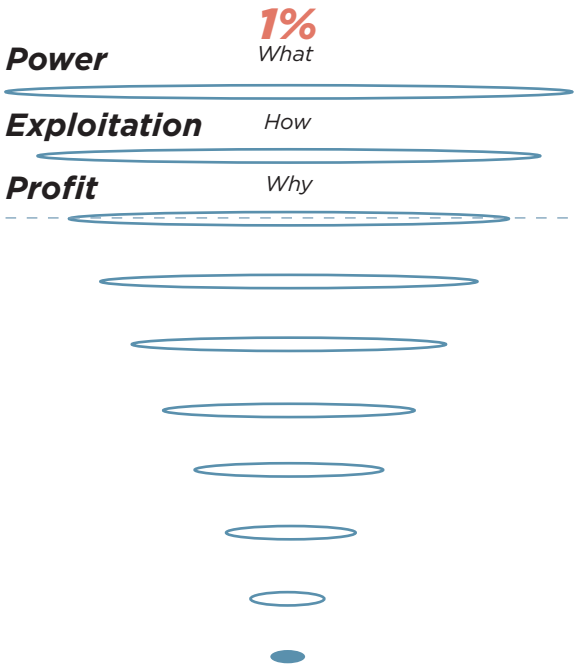




Present Practices
Real Estate

Imagined Future
Real Value

PRINCIPLES > DESIGN LED > Embracing Challenges



culture

SERVICE

impact of built environment on quality of life

convergence

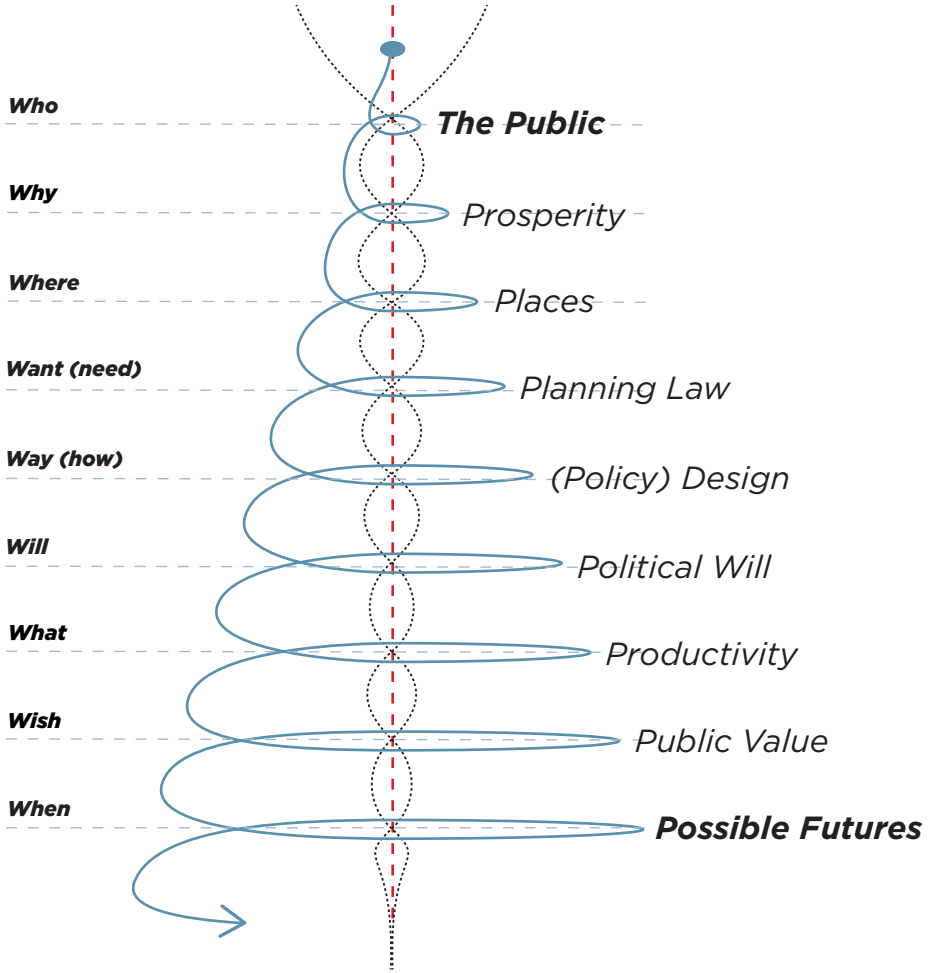
STRATEGY

inter-scalar interdependent conditions

context

SYSTEM

complex cultural / natural challenges

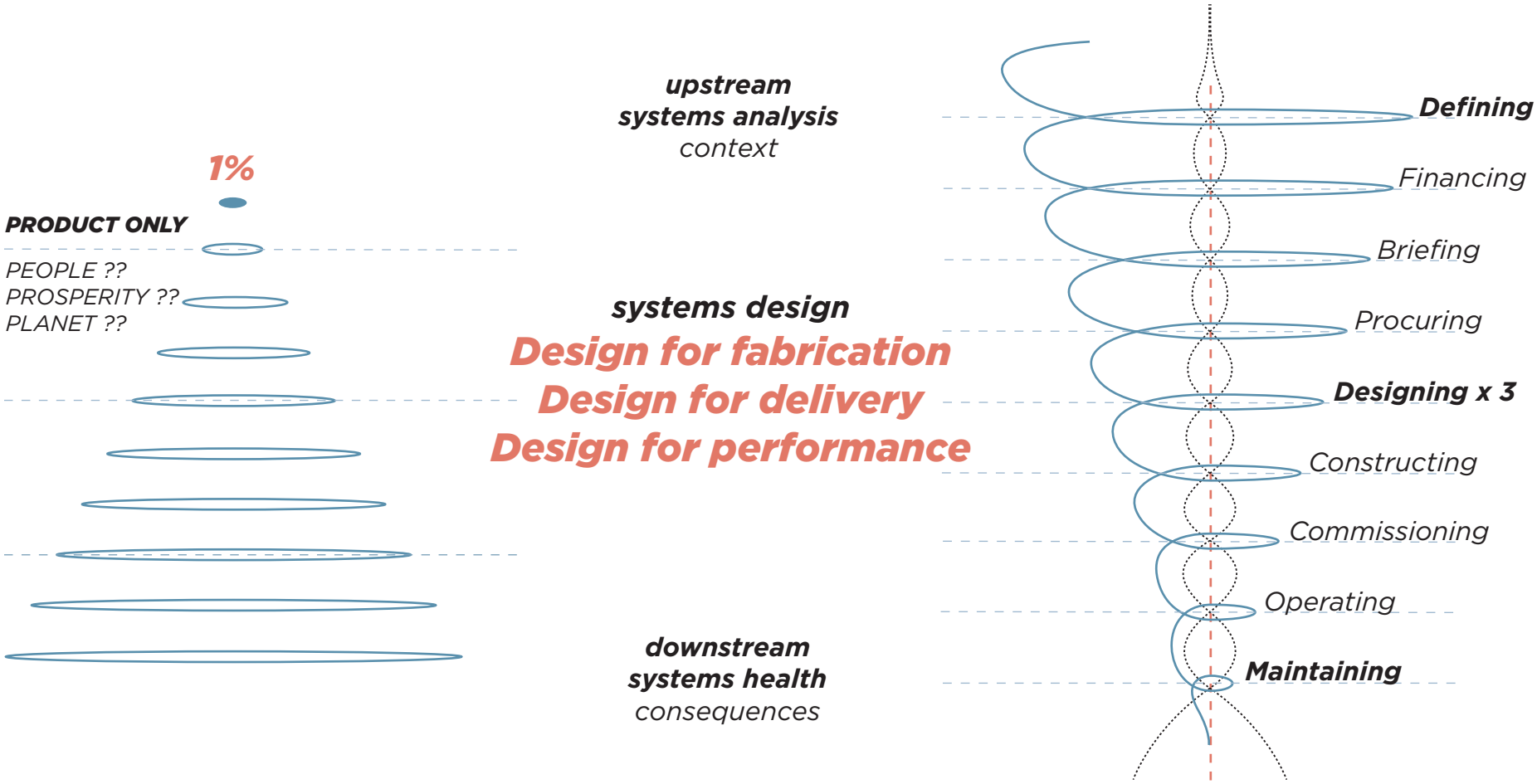


Present Practices
What Wows

The Missing Middle

Imagined Future
What Works

PRINCIPLES > LOCALLY GENERATED > Empowering Choices

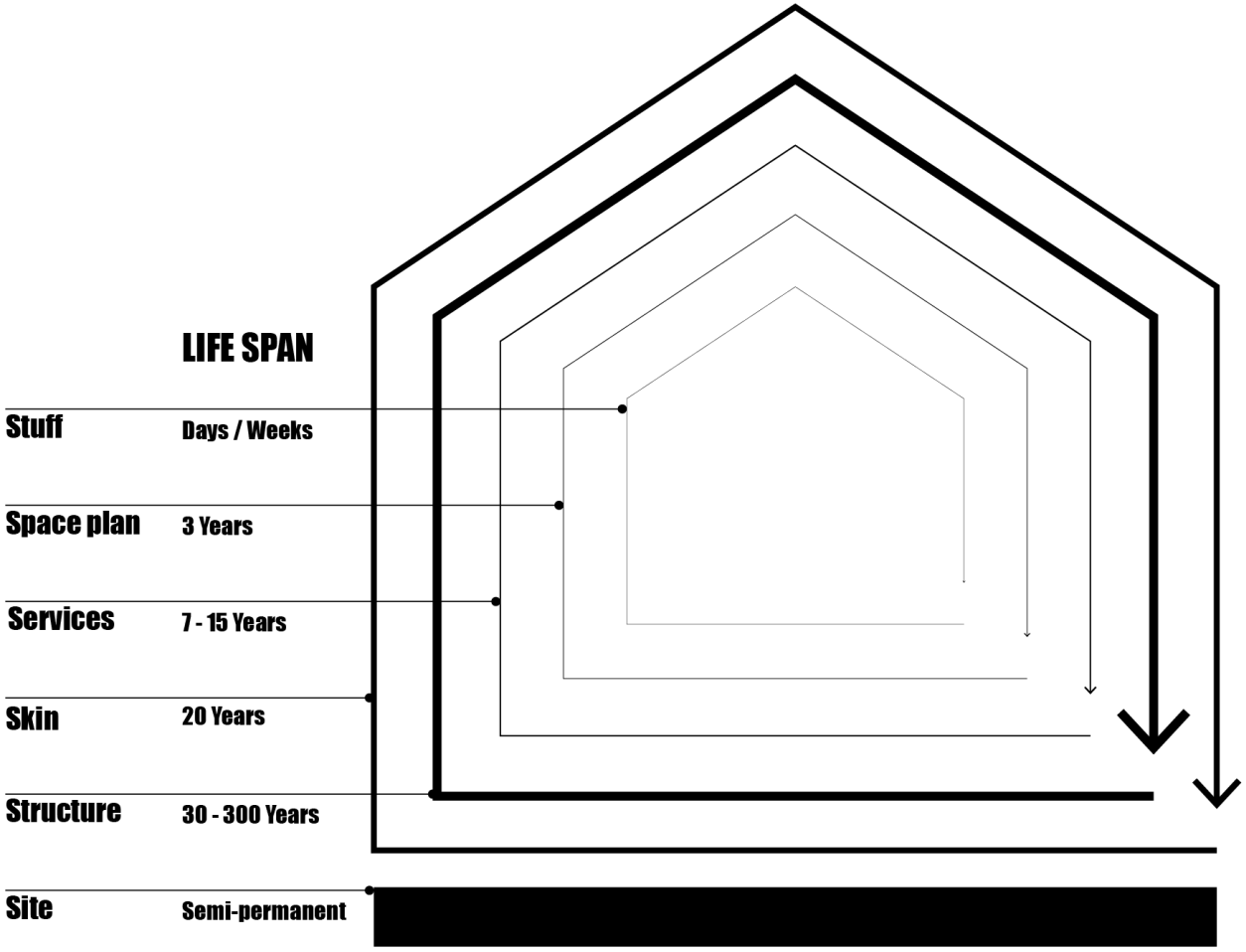


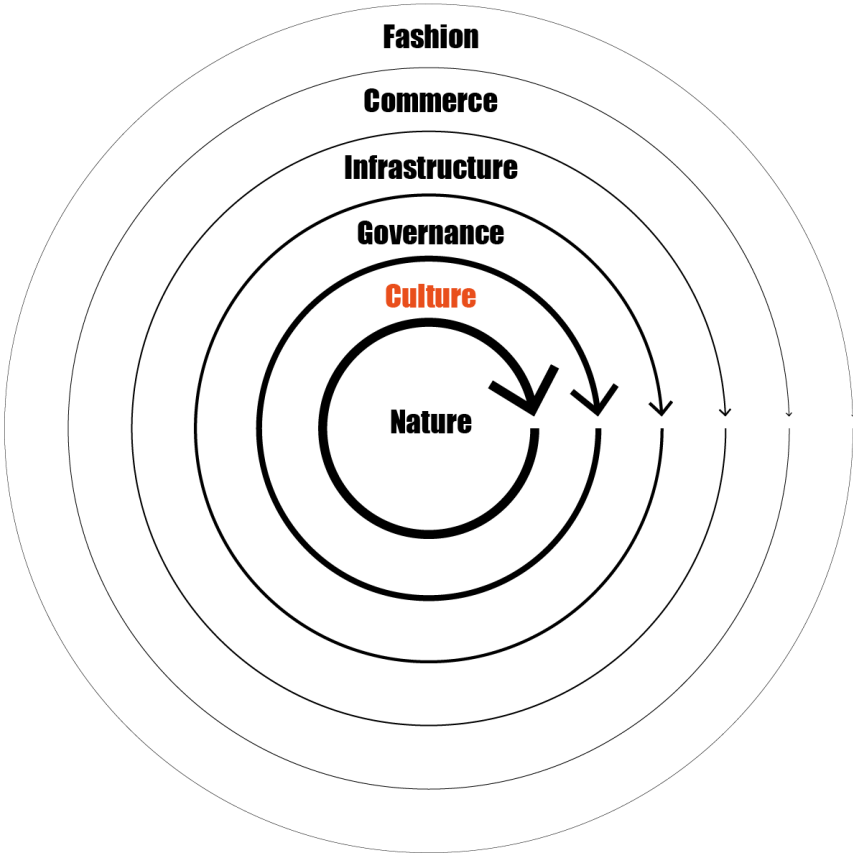
Present Practices
Design as Noun

The Missing Middle

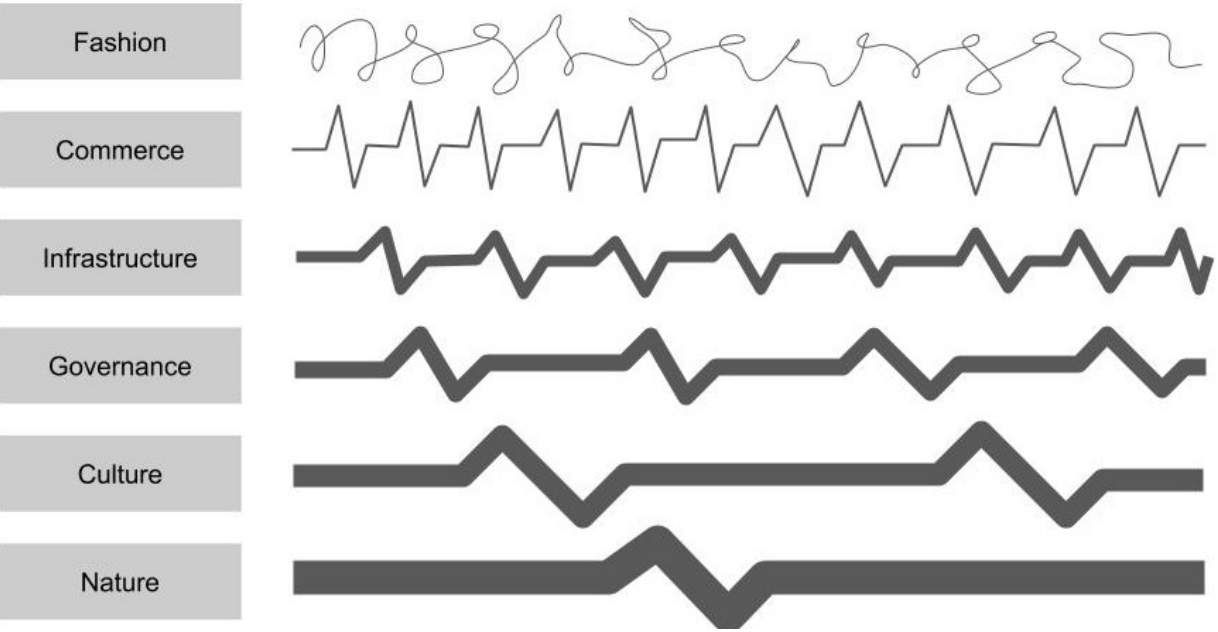
Imagined Future
Design as Verb

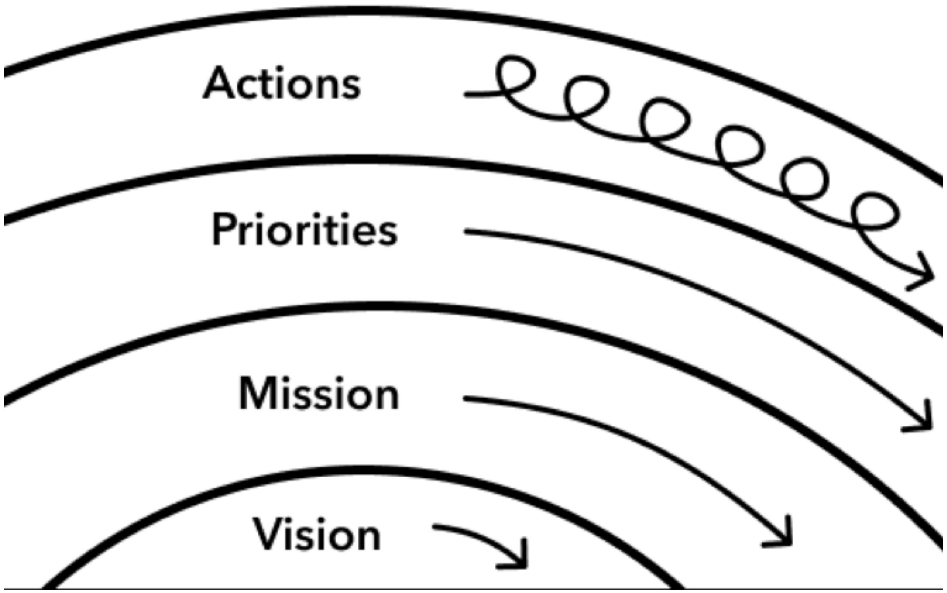
PRINCIPLES > USE INSPIRED > Enabling Change



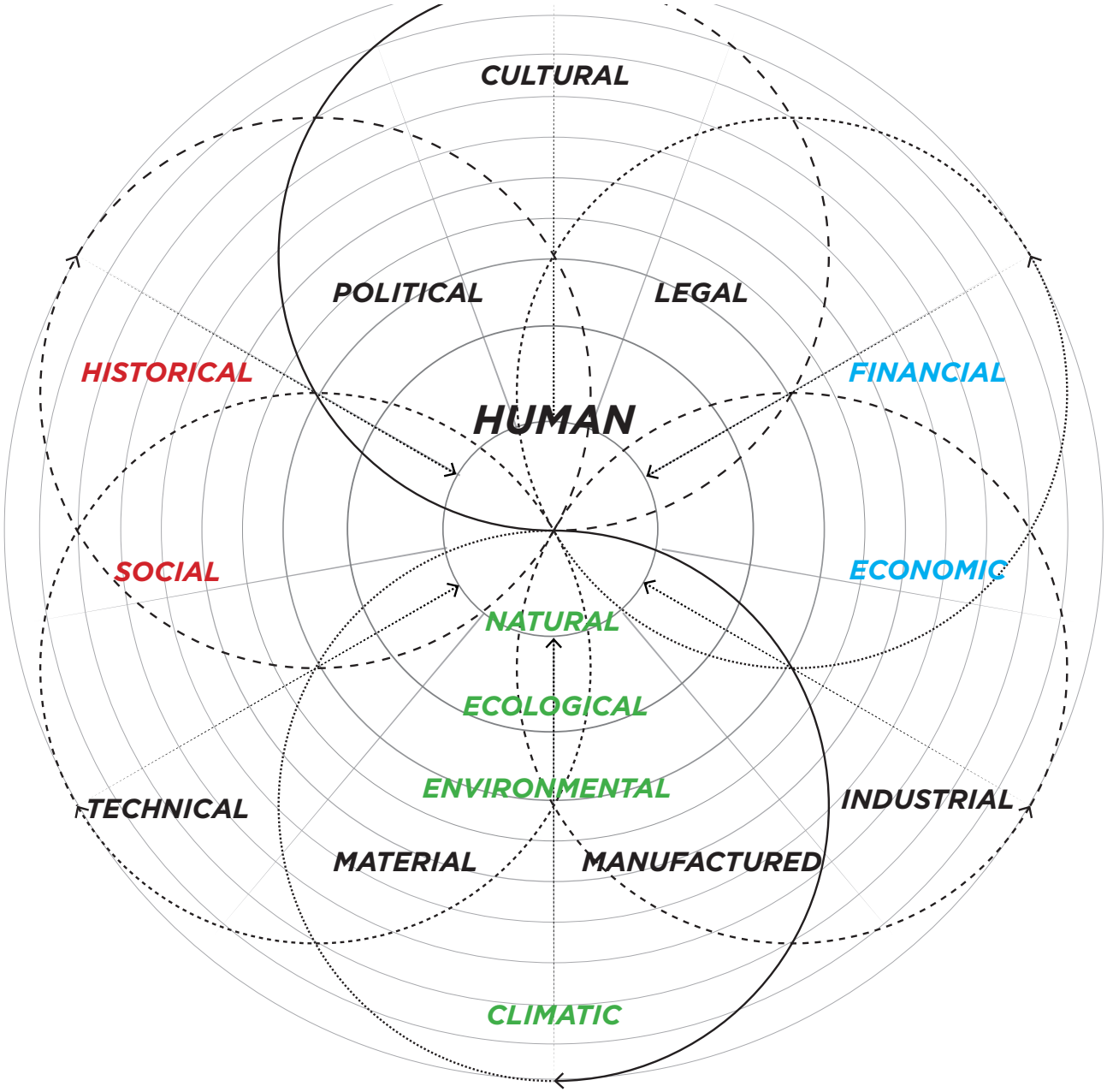


PROCESSES > TIME > PACE LAYERING > Centuries Years Days



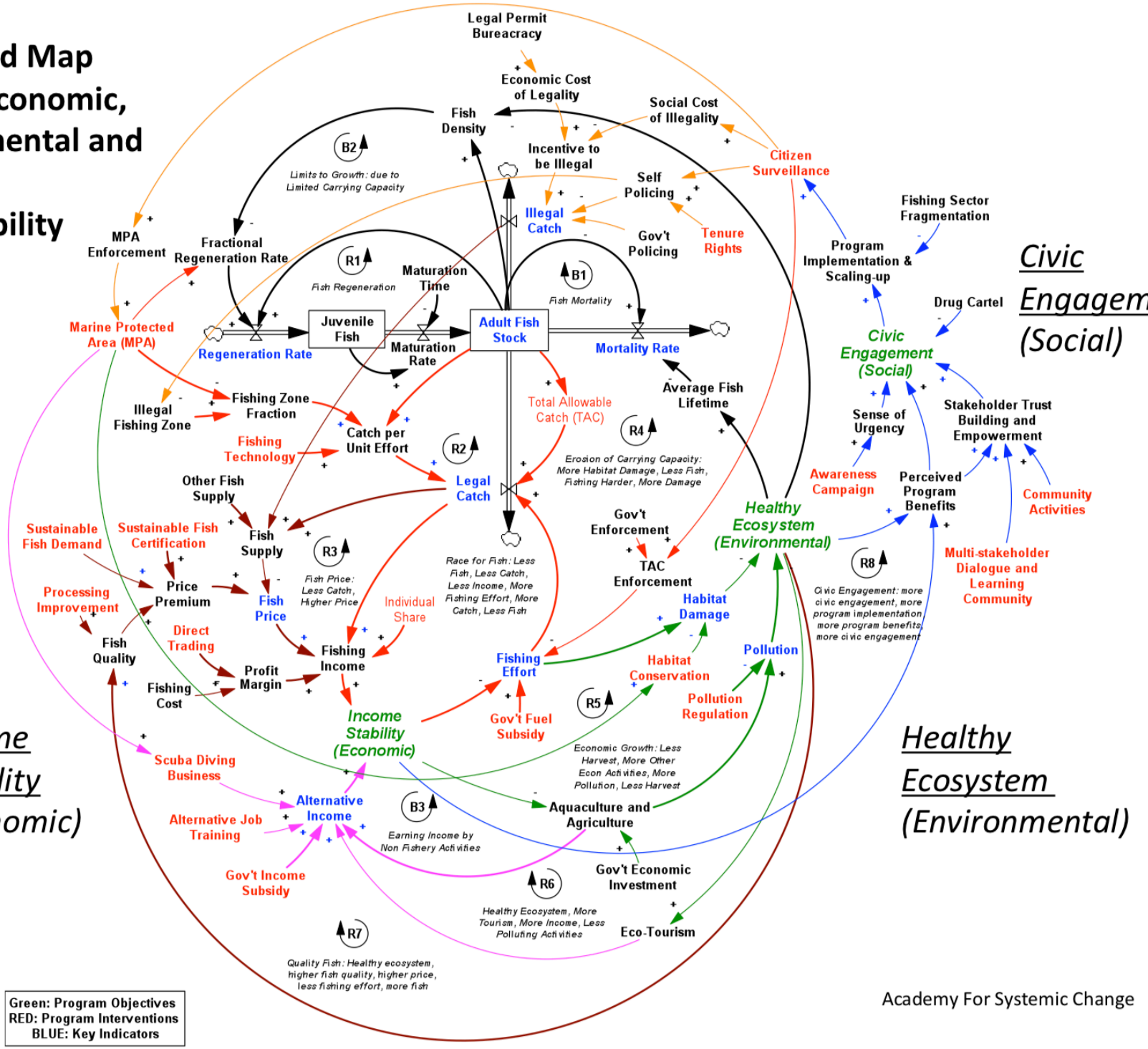


PROCESSES > TIME > PACE LAYERING > Fast Steady Slow



PROCESSES > SYSTEMS

A Detailed Map Linking Economic, Environmental and Social Sustainability

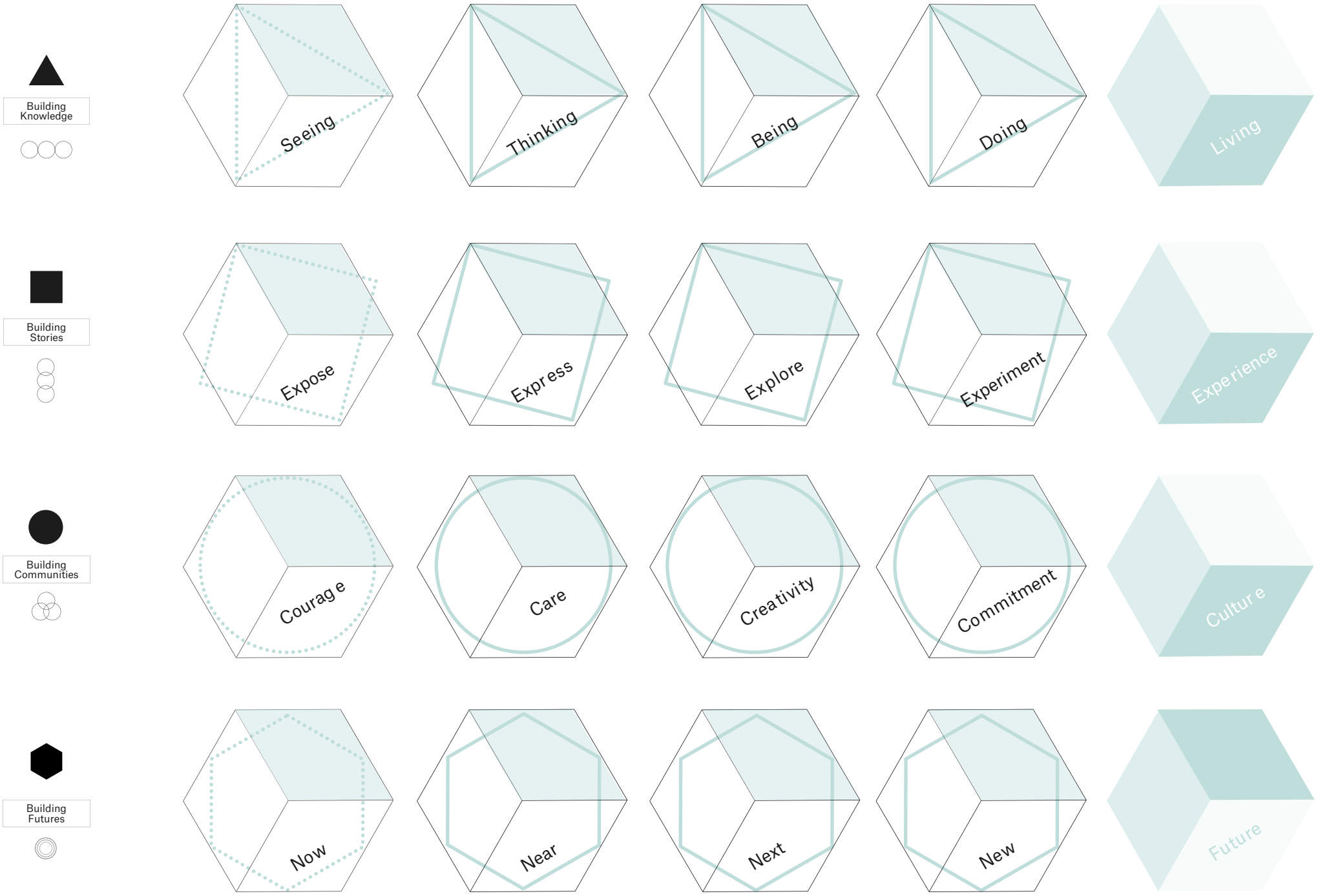


Green: Program Objectives
RED: Program Interventions
BLUE: Key Indicators

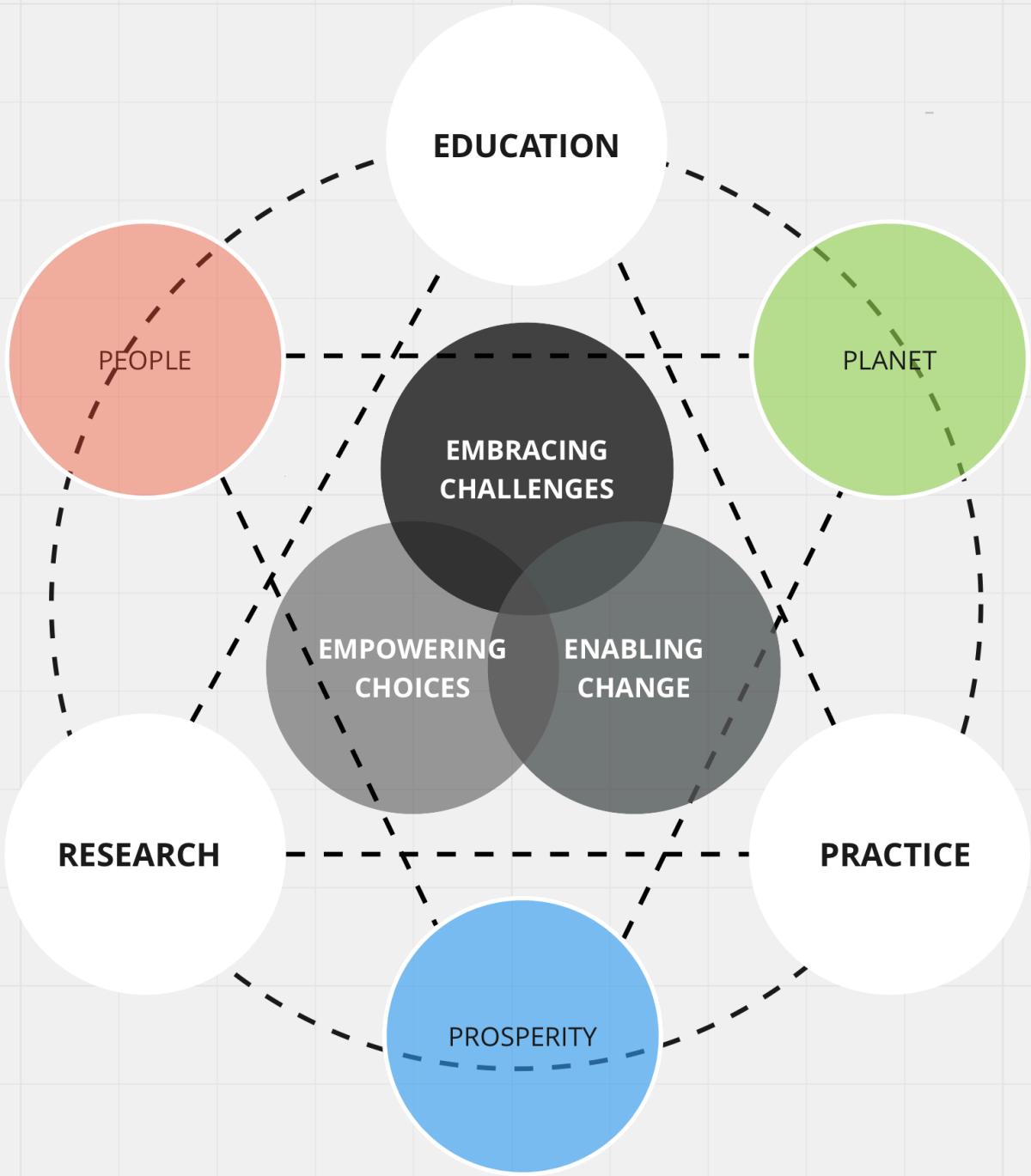
Academy For Systemic Change

PROCESSES > SYSTEM MAPPING

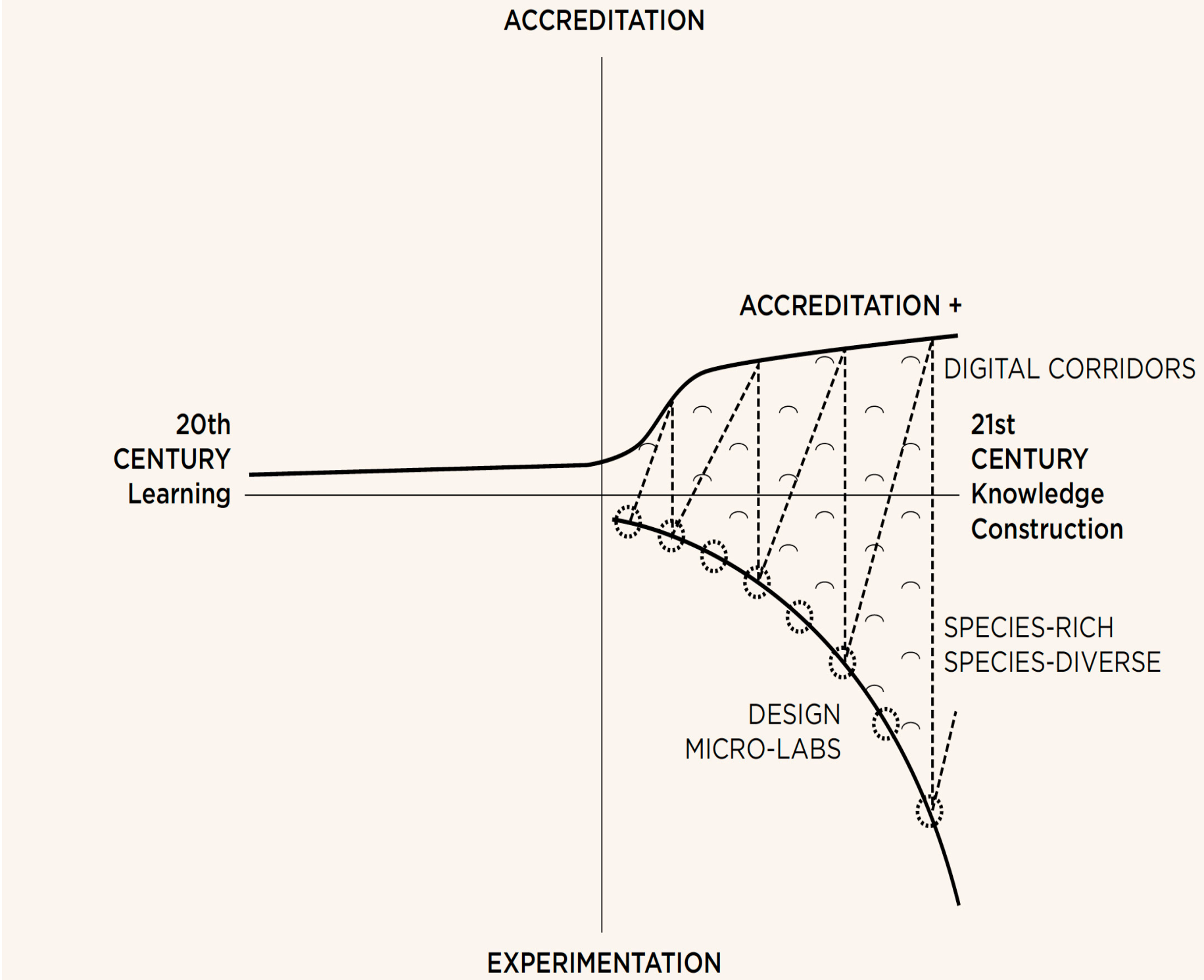
2.



PROCESSES > BUILDING AS VERB



EDUCATION Life Long Learning



EDUCATION > ACCREDITATION

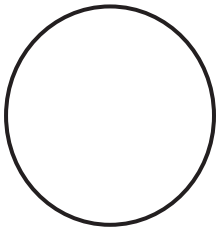
1 dimensional

SIGNS
symbols
signing

Print
transitory value
forgotten

communication
graphic
visual

CONSUMPTION
popular



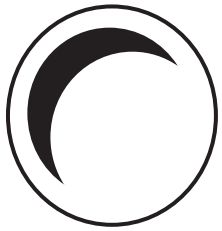
2 dimensional

PRODUCTS
things
styling

Objects
transactional value
fashion

architecture
engineering
industrial design

COMMODITY
trendy



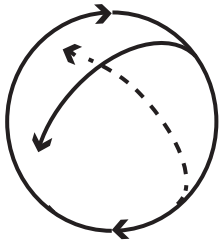
3 dimensional

SERVICES
experiences
journeys

Interactions
transfer value
fixing

instructional
interface design
process design

CAPABILITY
established



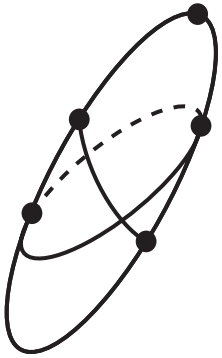
4 dimensional

STRATEGIES
ecologies
behaviour

Actions
transitional value
function

business
institutions
transition design

CAPACITY
emergent



5 dimensional

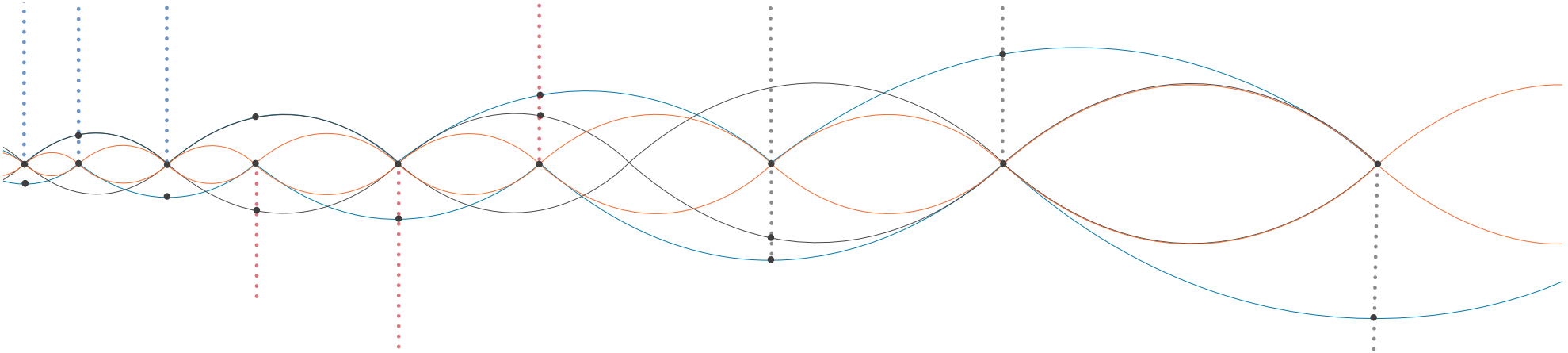
SYSTEMS
environments
performance

Participation
transformation value
framing

government
organisations
inclusive meta design

CULTURE
nascent

EDUCATION > COMPETENCIES CAPABILITIES CAPACITIES



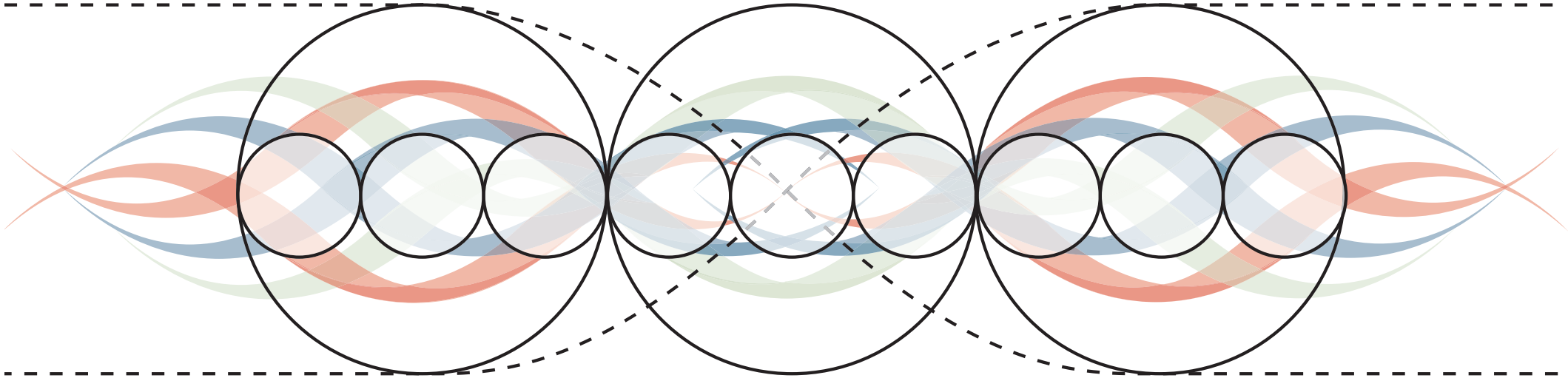
Level 1 Common Knowledge	Level 2 Common Ground	Level 3 Common Goals	Level 4 Common Good	Level 5 Chamber of Commons
Mastering CONTEXT	Mastering CREATIVITY	Mastering COMPLEXITY	Mastering CONVERGENCE	Mastering CONNECTIVITY
design as value asset	design for fabrication	design for delivery	design for performance	design in the public interest

EDUCATION > CONTEXT CREATIVITY CONVERGENCE

Architecture, Landscape, Urban
Knowledge Communities *Local to Global*
civic and regional live studios
responsive and responsible

Research Practice Academies
Consortia Networks *Glocal Hybrids*
practice-based collaborative research
radical and relevant

Citizen Co-laboratories
Open Innovation Platforms *Global to Local*
industry-wide public innovation
revolutionary and resilient



Creativity
Character
Communication

Community
Citizenship
Culture

Critical Thinking
Collaboration
Connectivity

Local Innovation
open institutes, craft based polytechnics
impact hubs, production spaces, workshops

Glocal Innovation
skills + training / supply + demand incubator
change labs, fab labs, share labs

Global Innovation
III Co-Labs, social innovation labs, IDC's
intelligence teams, policy sandboxes

EDUCATION > Ages 5 to 95 ! > INTELLIGENCE INNOVATION IMPACT

Building a Co-Learning Eco-Economy in Practice

PUBLIC SPHERE
New Schools of Thinking and Doing
peer-to-peer learning
mentoring chains and loops
intergenerational experience exchange

Learning Level 1 *5 - 8 years*
PLACE
design experience in assembly making
eco experience making edible schoolyards

Learning Level 2 *9 - 12 years*
PATTERN
design experience in hackathons, boot camps
eco experience making community gardens

Learning Level 3 *13 - 18 years*
PROCESS
design experience in fab-labs, maker spaces
eco experience making urban farms / farming

Learning Level 4 ***Local Innovation***
PLACE + SPACE
experience in community-based design build
complex challenge problem solving

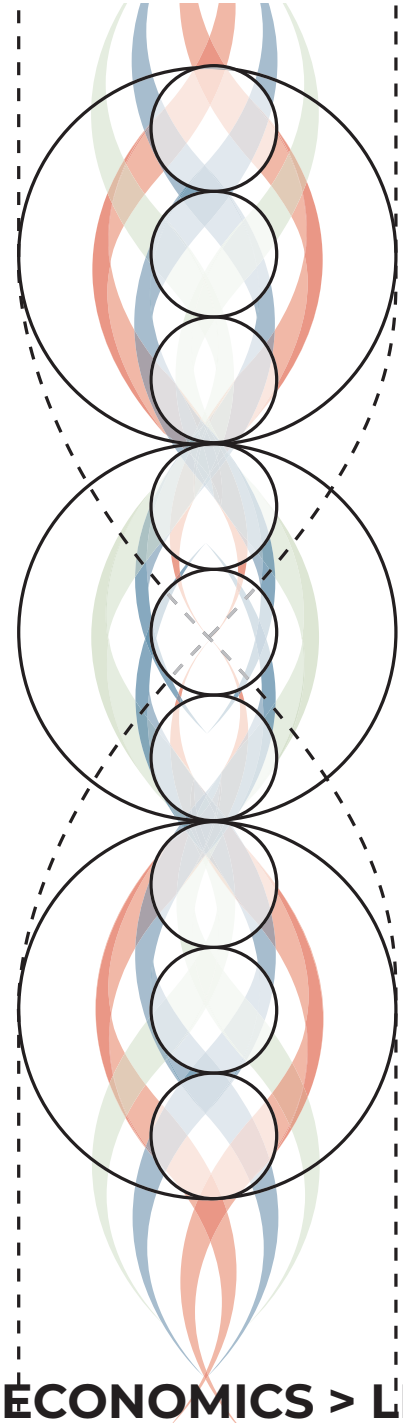
Learning Level 5 ***Disruptive***
PATTERN + SYSTEM
experience in practice-based research
evidence based decision making

Learning Level 6 ***Global Innovation***
PROCESS + STRATEGY *embedded*
experience in interscalar performance design
value creation judgement

Learning Level 7 ***Emerging***
PLACE + PLANNING ***democratic***
expertise in community regeneration
planning reviews and regulatory sandboxes

Learning Level 8 ***Embodying***
PATTERN + POLICY ***disruptive***
expertise in urban systems design
citizen juries and open policy making

Learning Level 9 ***Embedding***
PROCESS + POLITICS ***distributed***
expertise in global development
co-laboratories and open innovation



PRACTICE SPHERE
New Forms of Action and Making
engineering garage
open polytecnic (field based)
jam factories (arts and crafts)

Creativity, Character, Communication

Community, Citizenship, Culture

Critical Thinking, Collaboration, Connectivity

Architecture, Landscape, Urban
Knowledge Communities *Local to Global*
civic and regional live studios
responsive and relevant

Research Practice Academies
Consortia Networks *Glocal Hybrids*
practice-based collaborative research
radical and relevant

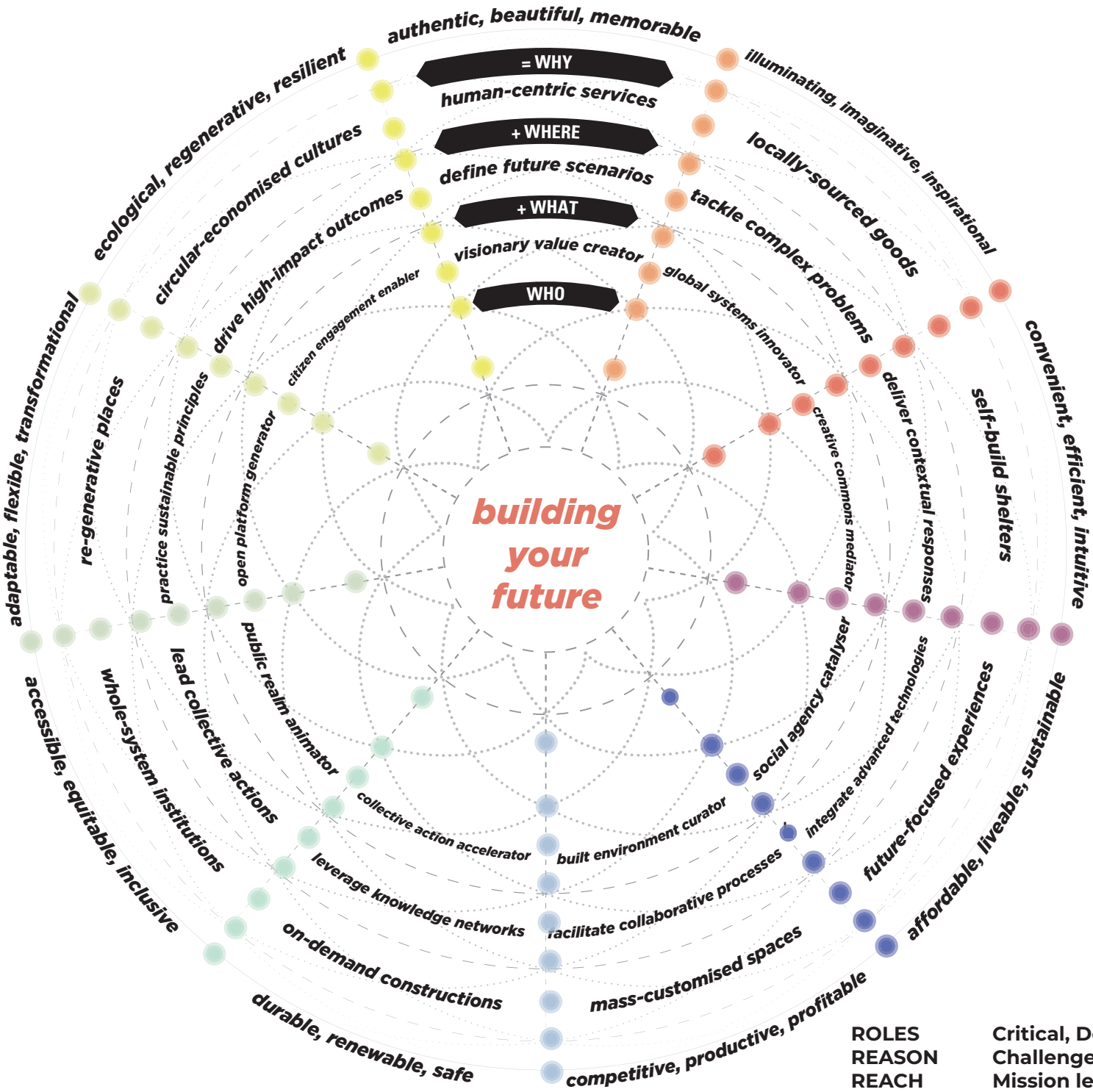
Citizen Co-laboratories
Open Innovation Platforms *Global to Local*
industry-wide public innovation
revolutionary and resilient

Continuing Professional Development
Local Innovation
open institutes, craft based polytechnics
impact hubs, production spaces, workshops

Continuing Professional Development
Glocal Innovation
skills + training / supply + demand incubator-
change labs, fab labs, share labs

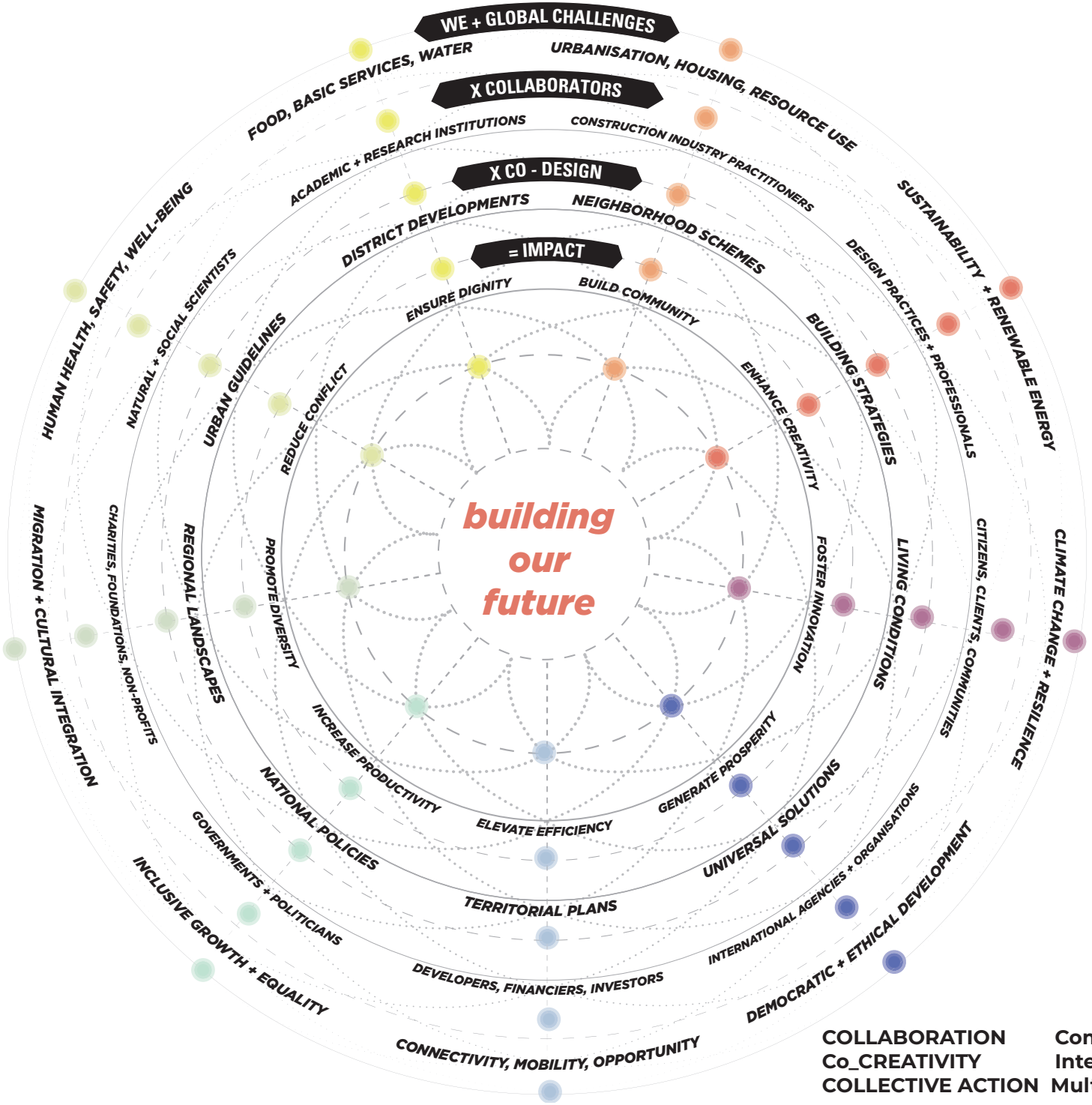
Continuing Professional Development
Global Innovation ***UN, International***
III Co-Labs, social innovation labs, IDC's
intelligence teams, policy sandboxes

EDUCATION > DOUGHNUT ECONOMICS > LIFE LONG LEARNING LOOPS



ROLES — Critical, Design, Systems Thinking
REASON — Challenge Driven Learning by Doing
REACH — Mission led Creativity + Innovation

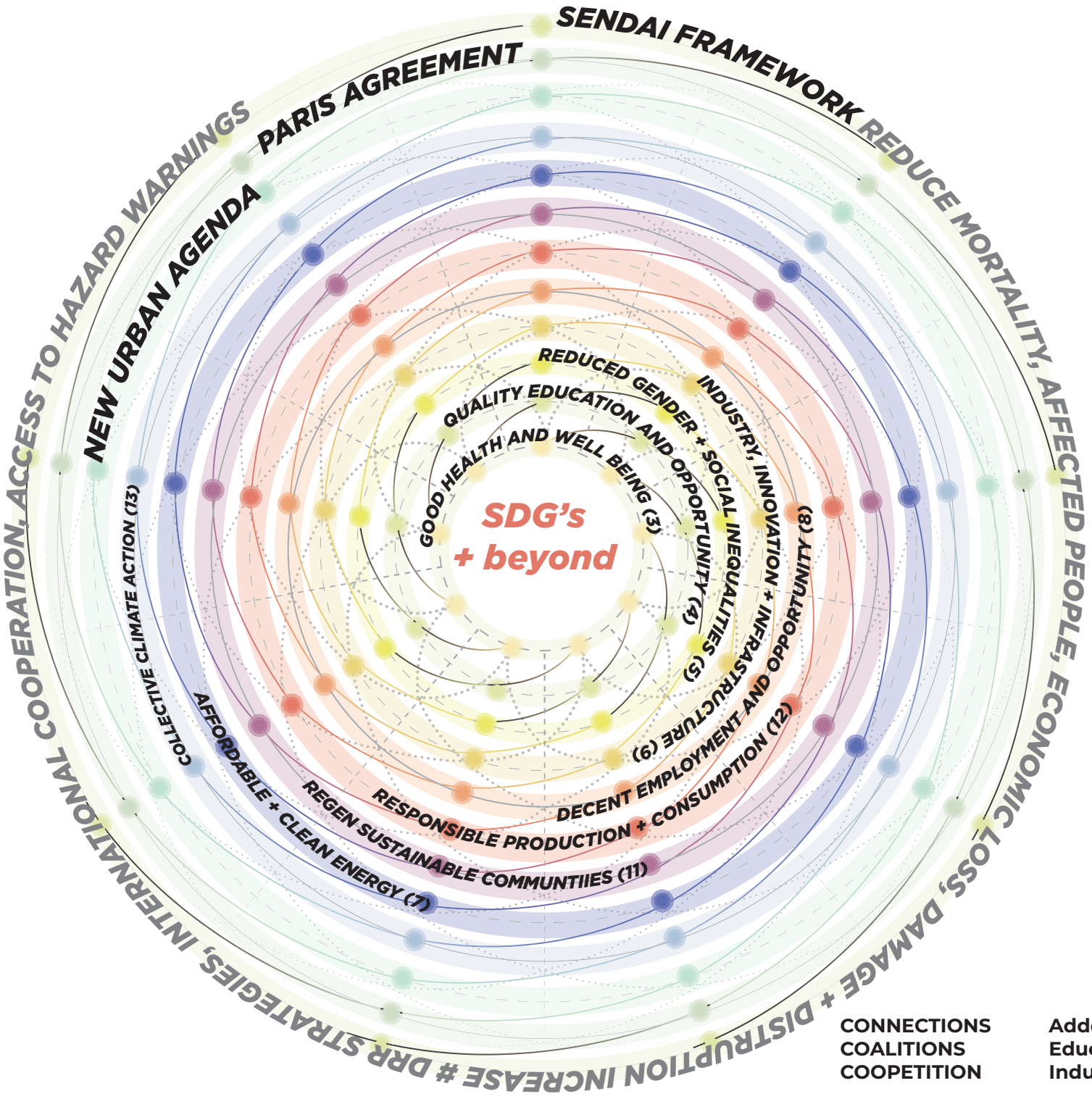
NEW ROLES _ REASON _ REACH



COLLABORATION
Co_CREATIVITY
COLLECTIVE ACTION

Complexity + Urban Challenges
Interdisciplinarity
Multi-actor System Dynamics

NEW COLLABORATIONS _ CO-CREATIVITY _ COLLECTIVE ACTION

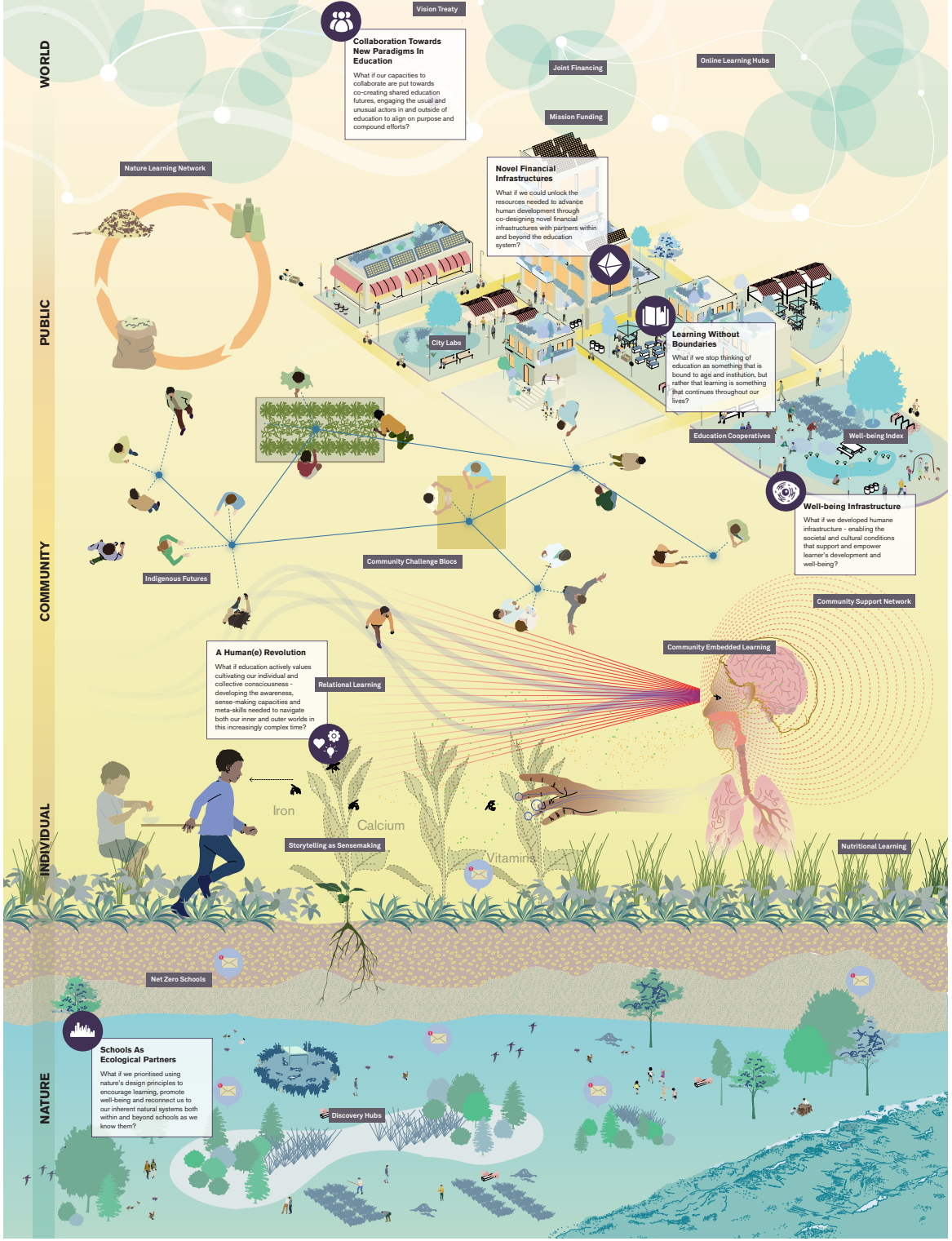


CONNECTIONS
COALITIONS
COOPETITION

Added Value to Community
Education, Research, Practice
Industry Radical Innovation

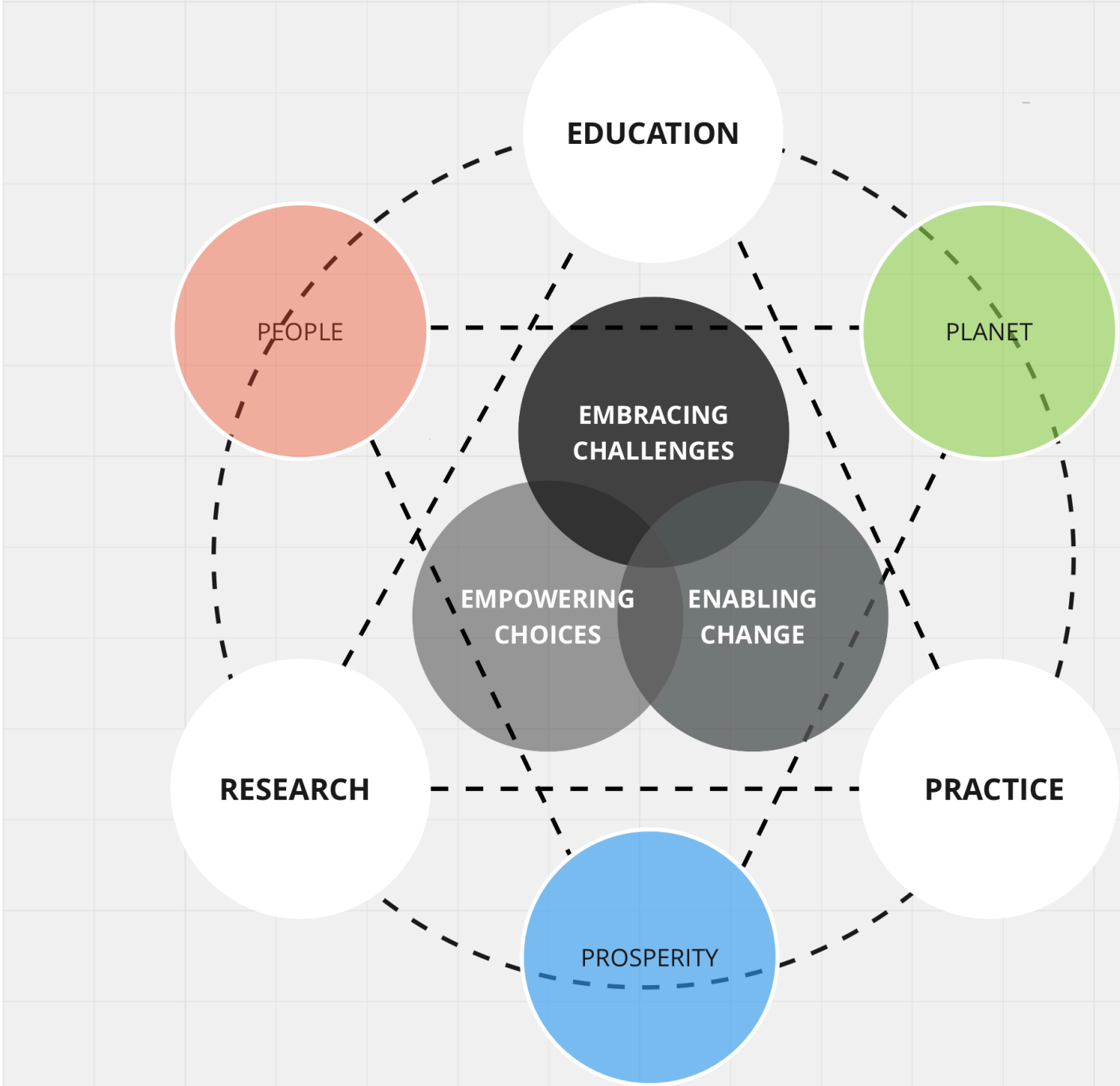
NEW CONNECTIONS _ COALITIONS _ COOPETITION

ALCHEMISTS
BIOMIMICRISTS
CROSS POLINATORS
EDGERIDERS
FREE RADICALS
FRONTIER FINDERS
FUSIONISTS
IMAGINEERS
KNOWMADS
LIMINALISTS
PANARCHISTS
MAVERICKS



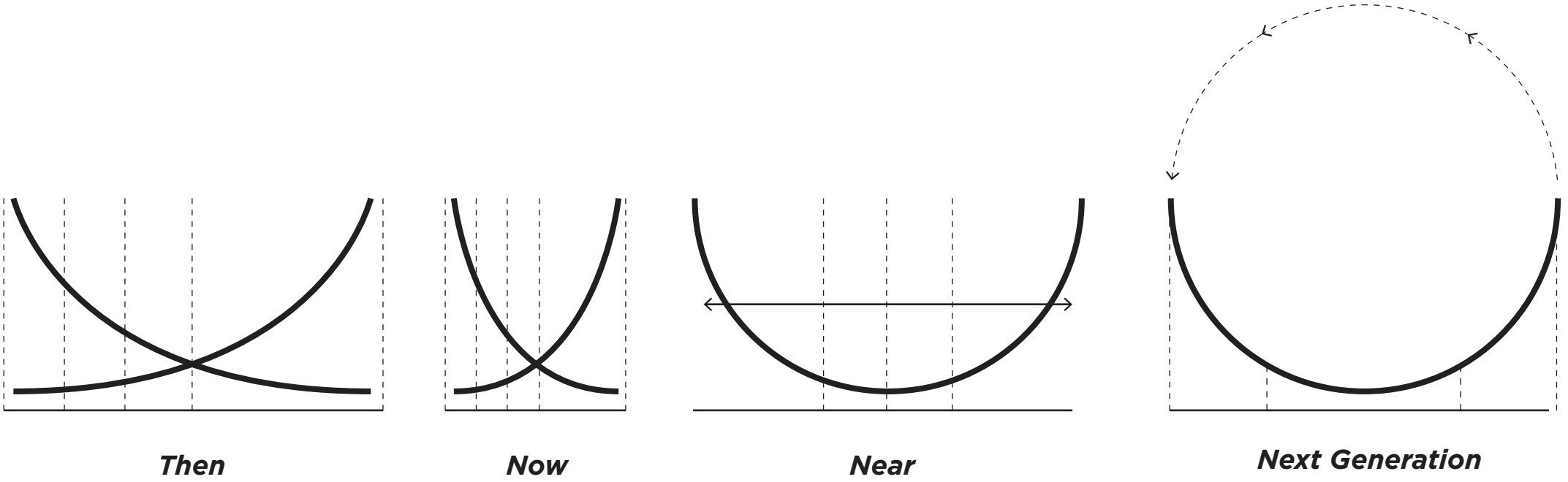
PRACTICE ACADEMIES
CREATIVE ATELIERS
BOOT CAMPS
JAM FACTORIES
HACKATHONS
ENGINEERING GARAGES
IMPACT HUBS
SKILLS INCUBATORS
CHANGE LABS
POLICY SANDBOXES
MAKER SPACES
CLASSIC STUDIOS

COLLABORATORIES FOR LIFE LONG LEARNING _ INNOVATION _ PUBLIC PURPOSE

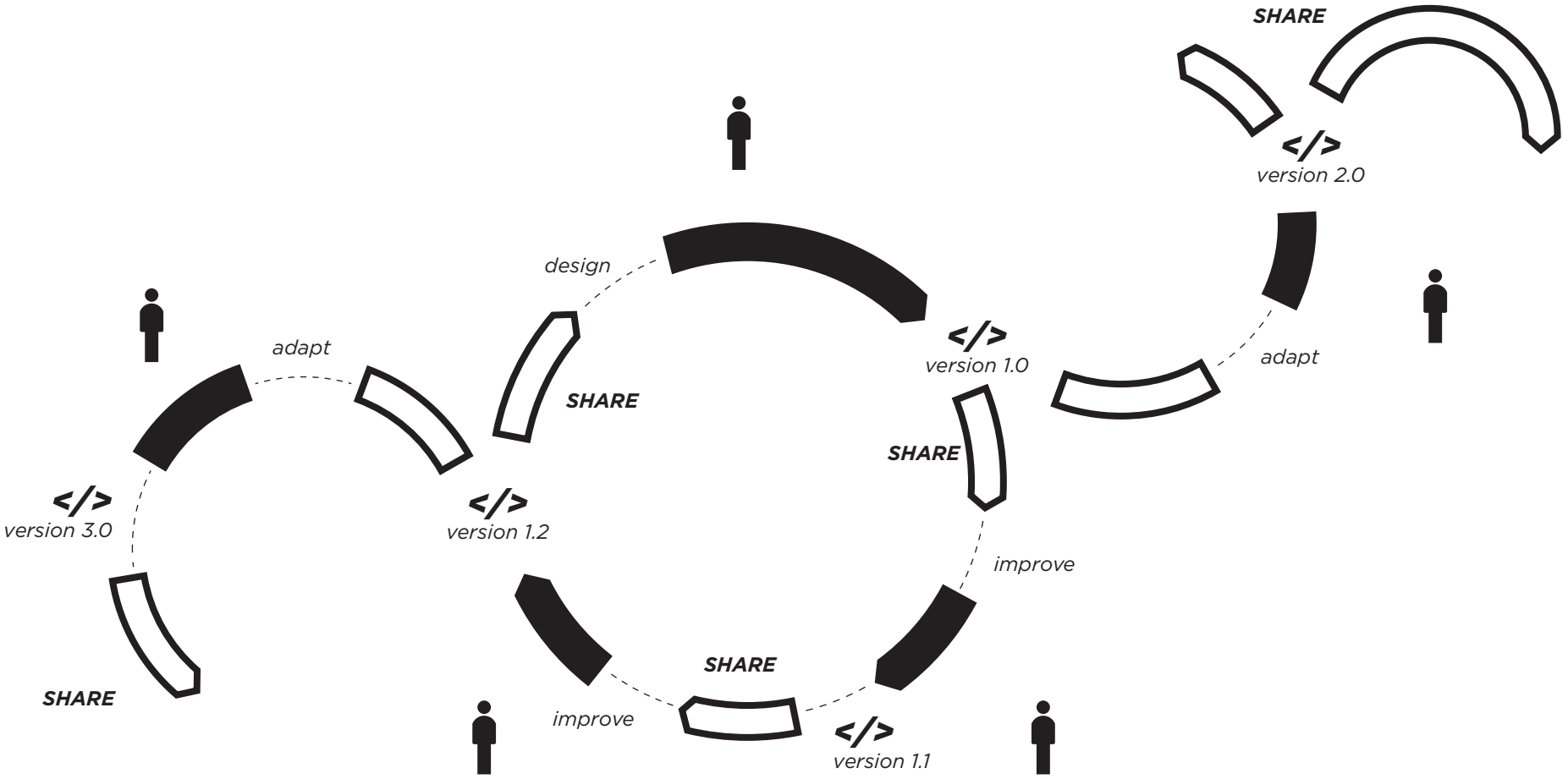

EDUCATION
PEOPLE
PLANET
EMBRACING CHALLENGES
EMPOWERING CHOICES
ENABLING CHANGE
RESEARCH
PRACTICE
PROSPERITY

RESEARCH

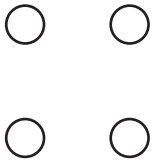
PRACTICE BASED RESEARCH < > RESEARCH BASED PRACTICE



PRACTICE BASED RESEARCH LOOPS



COLLABORATIVE RESEARCH > FORKED + OPEN



Problem
fore-grounding
explore

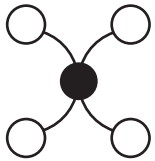
personal
academic circles
scientific metrics

fundamental
long-term
hypothetical

knowledge
disseminated
disciplinary

OPEN ACADEMY

UNI



Project
back-grounding
experience

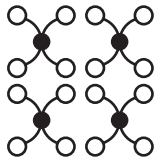
project team
intractabke issues
internal metrics

applied
mid-term
transactional

knowledge
managed
proprietary

KNOWLEDGE COMMONS

MULTI



Practice
real time
experiment

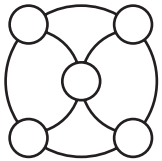
consultants + clients
practice-based research
POE feedback loops

context / use-inspired
just in time
looped

knowledge
structured
inter-practices

PRACTICE ACADEMIES

INTER



Profession
combined / hybrid
expertise-based

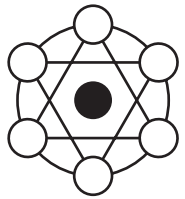
broad industries
networks
shared metrics

action / situation
now and near
exchanged

knowledge
networked
industry-wide

CONSORTIA INDUSTRY CLUSTERS

TRANS



Public
converged
impact-focused

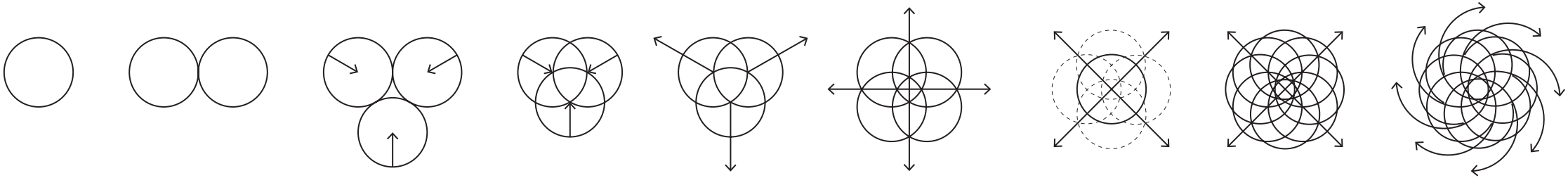
multi-sector
partnerships
aspirational metrics

mission-oriented
next and new
forked

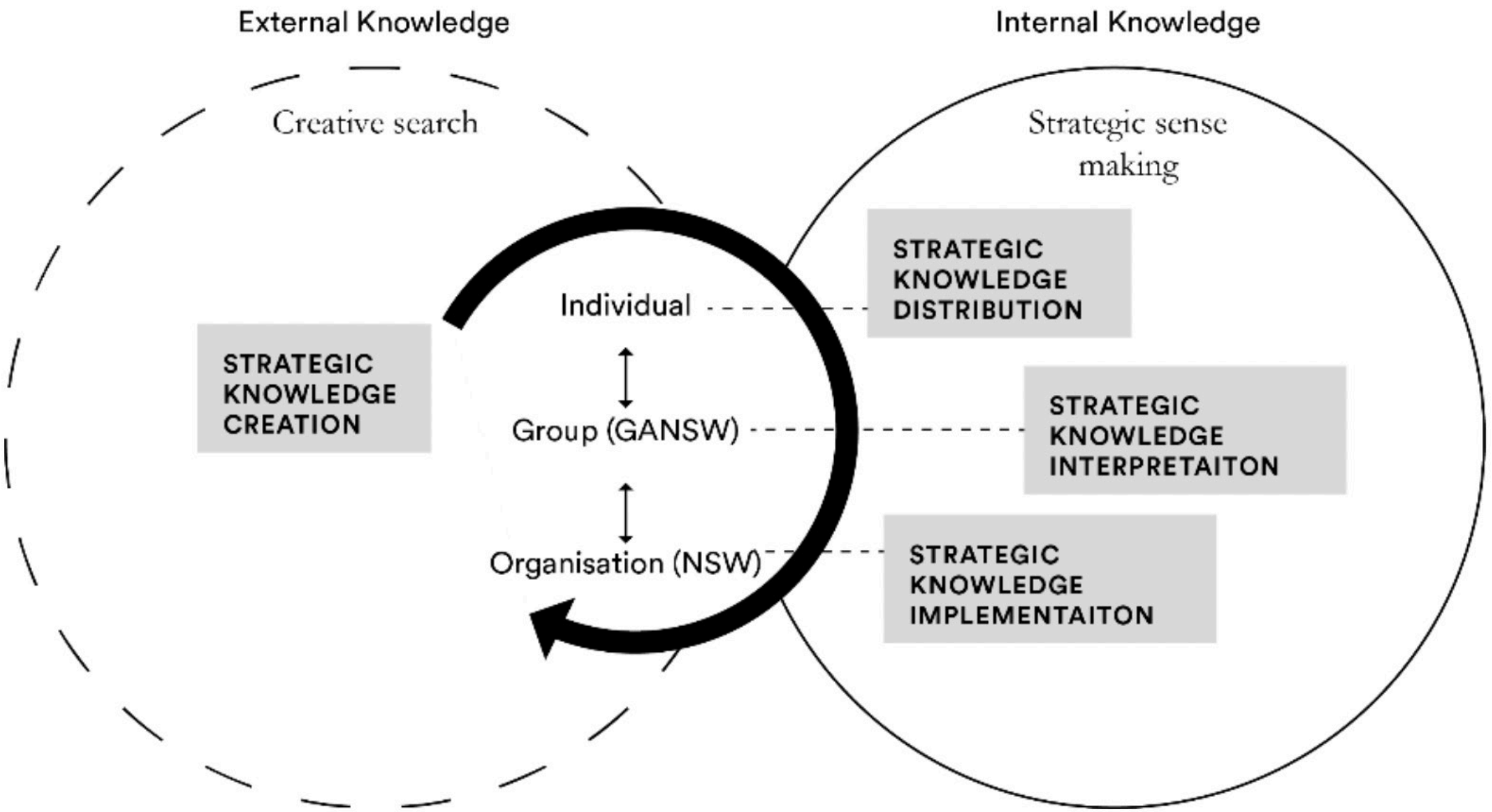
knowledge
systemic
for industry / public

OPEN SOURCE PLATFORM

META

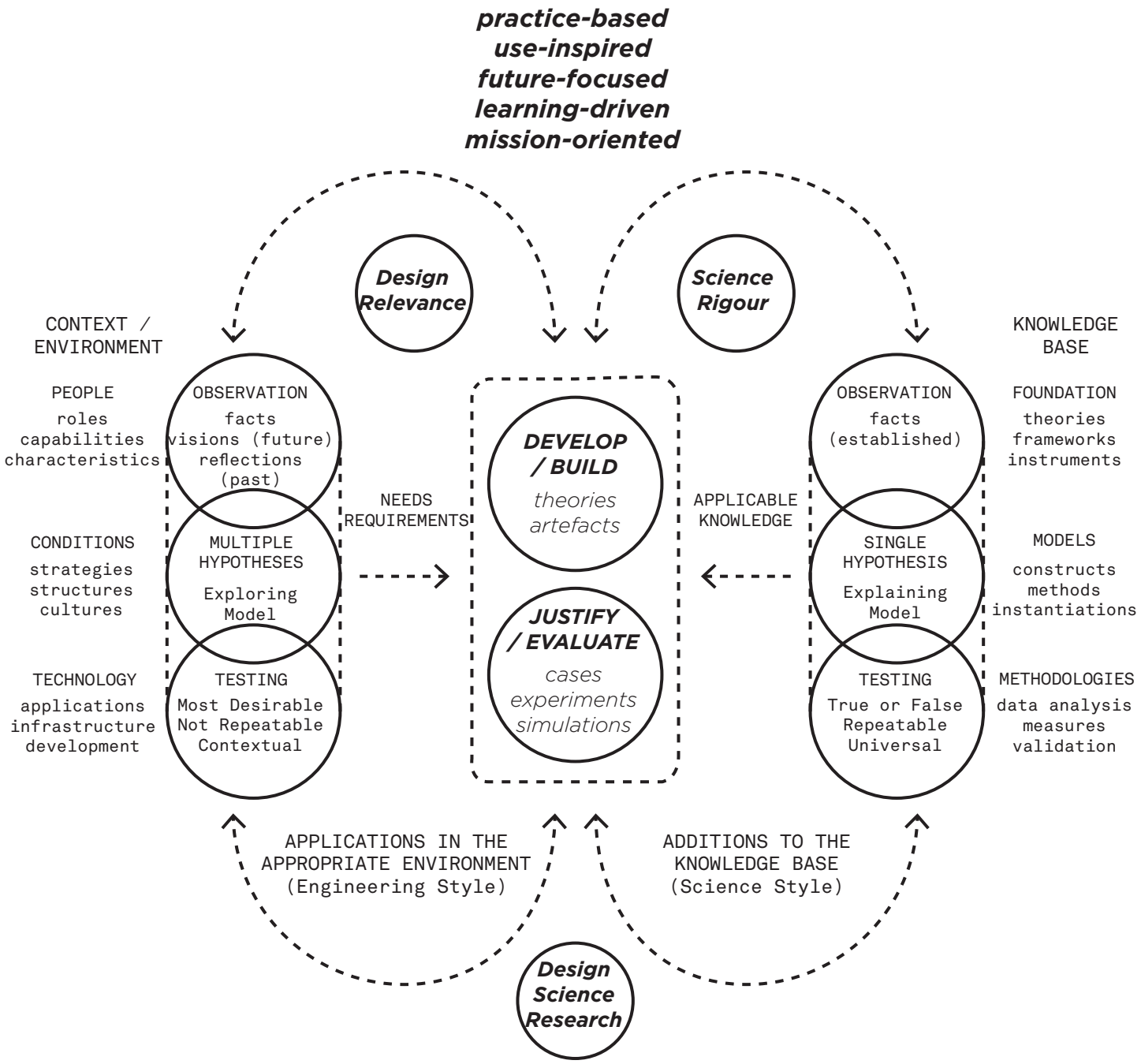


RESEARCH > TOWARD OPEN SOURCE PUBLIC PLATFORMS

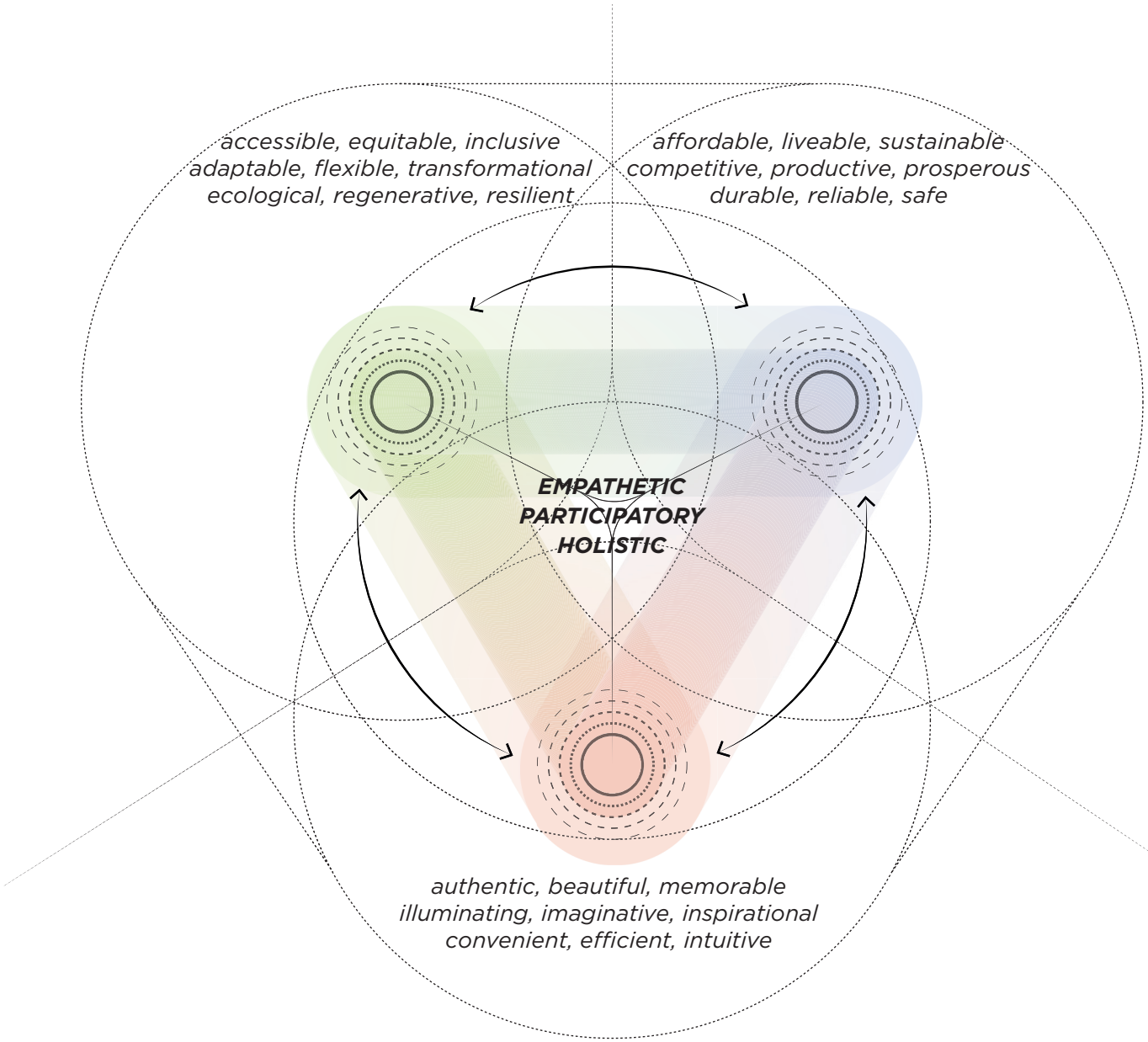


RESEARCH > OFFICE OF THE GOVERMENT ARCHITECT

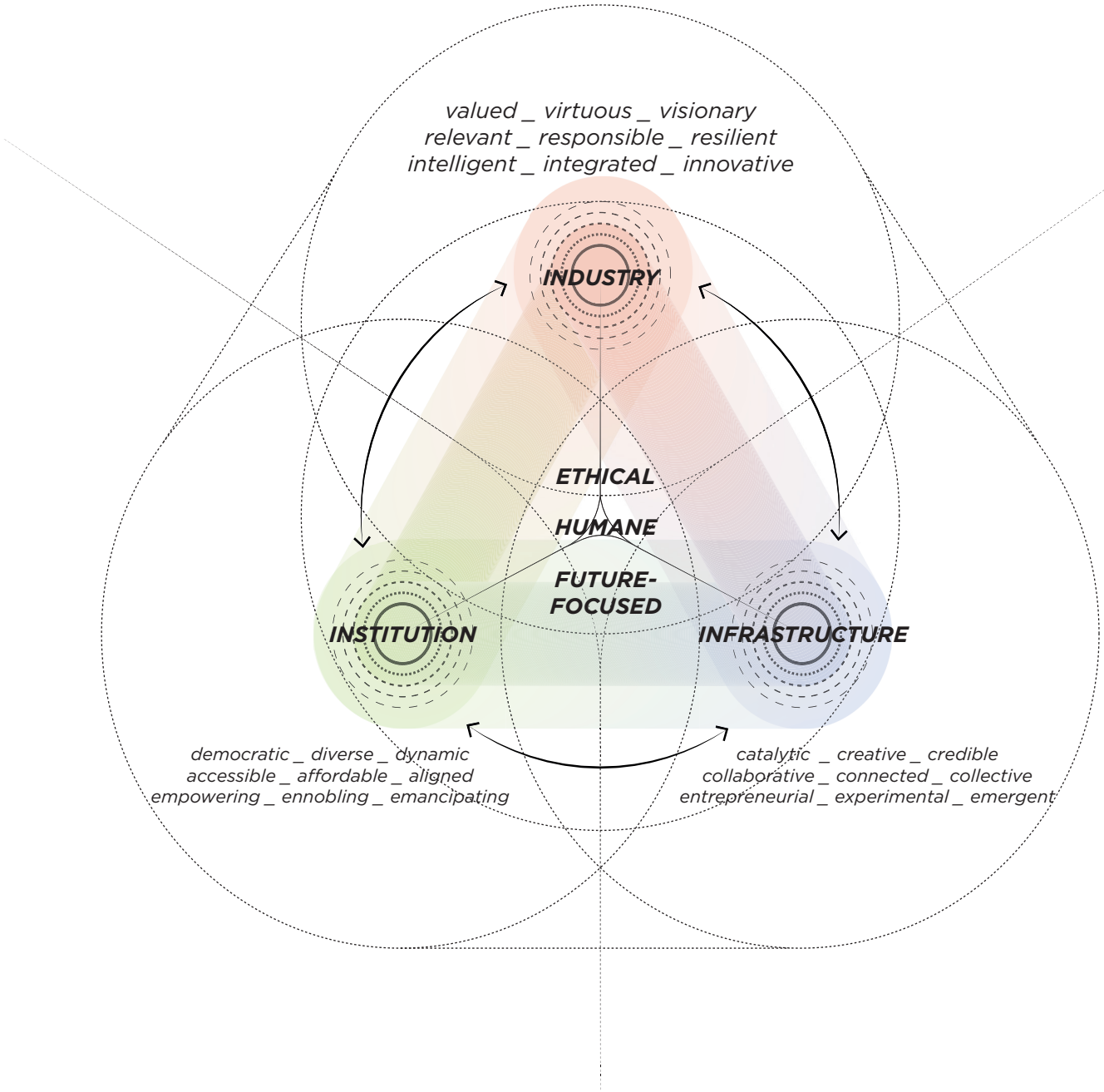
Credit: NSW Government



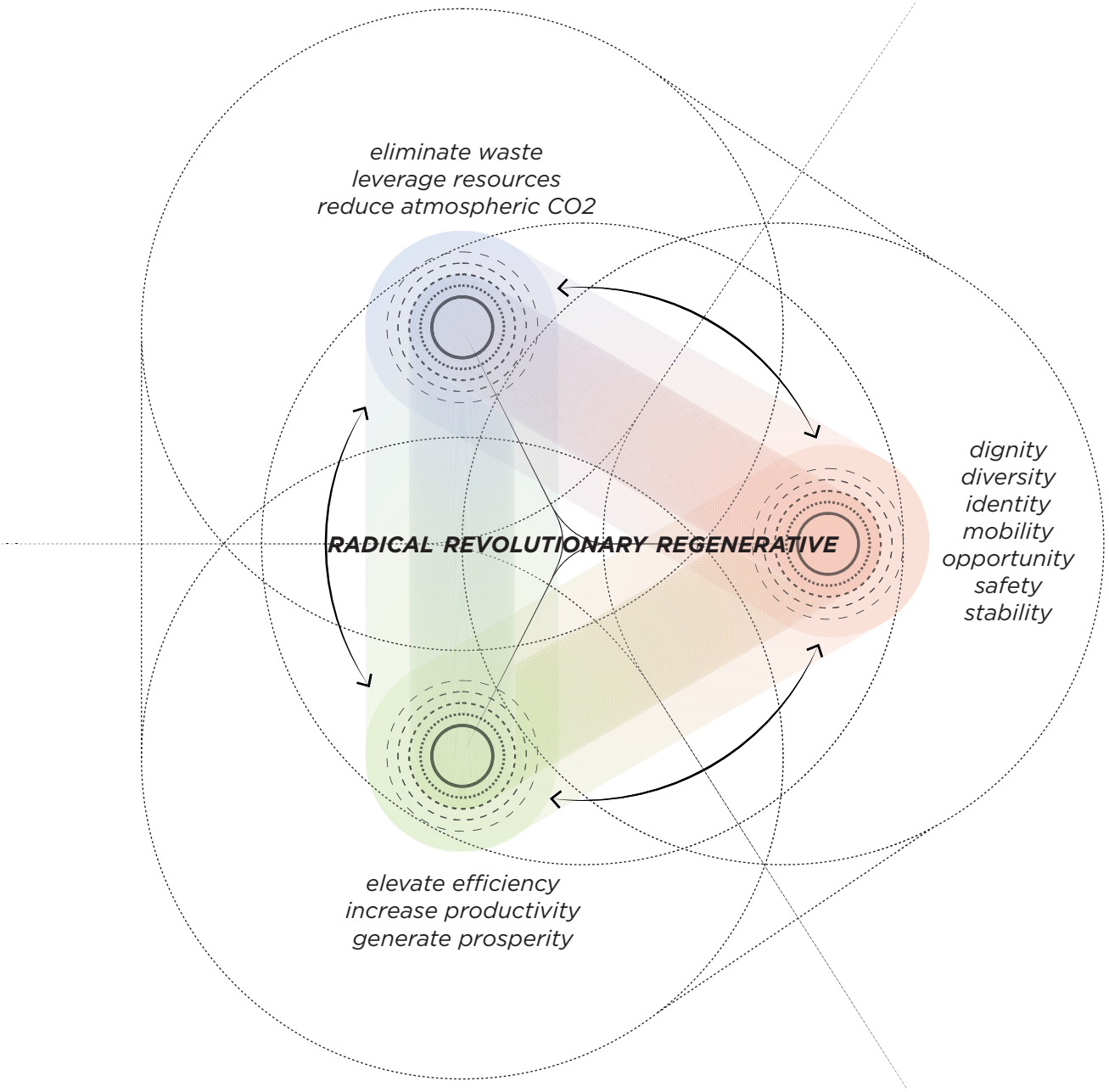
RESEARCH > DESIGN SCIENCE PARADIGM



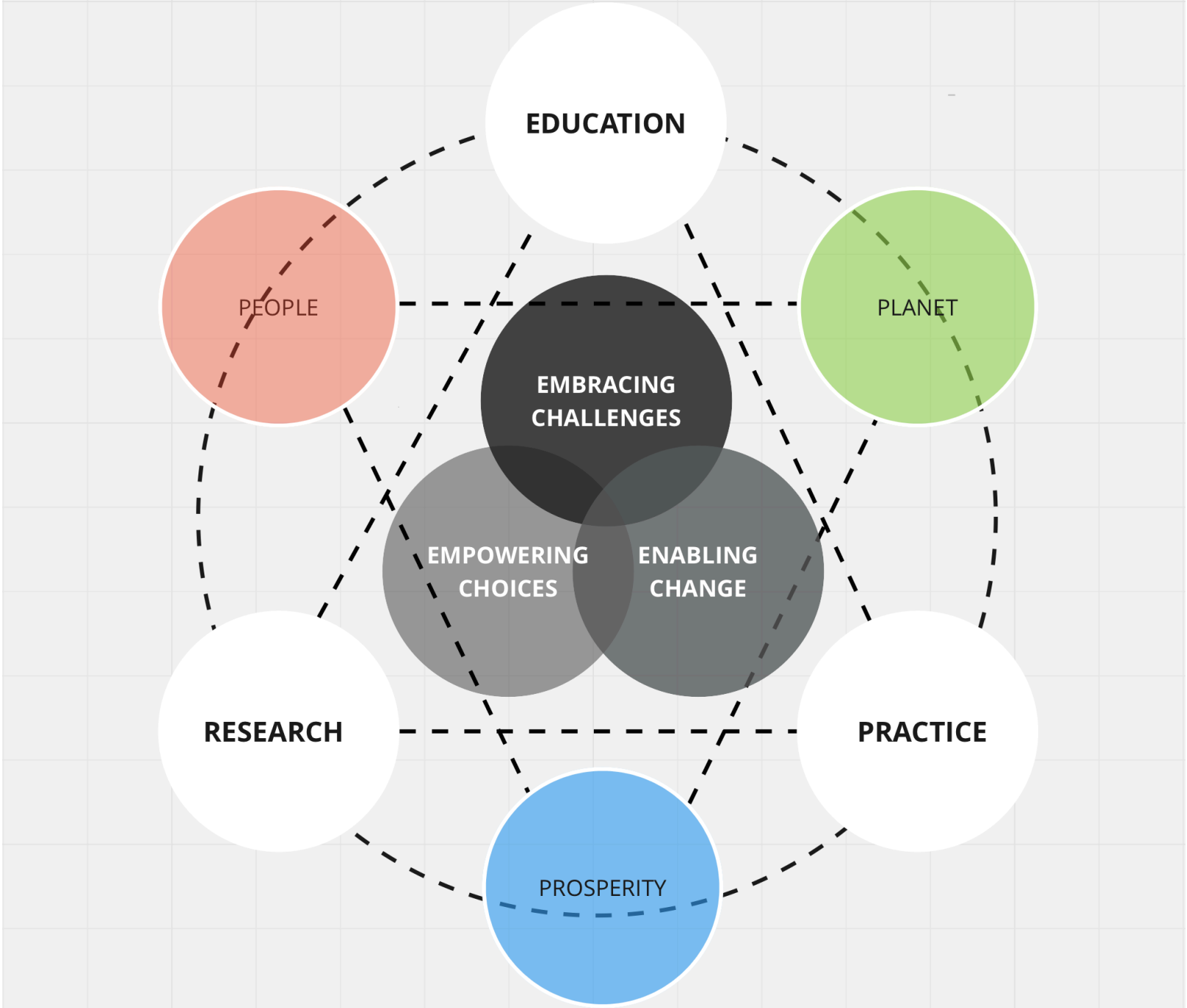
RESEARCH OUTCOMES > Quality of Life



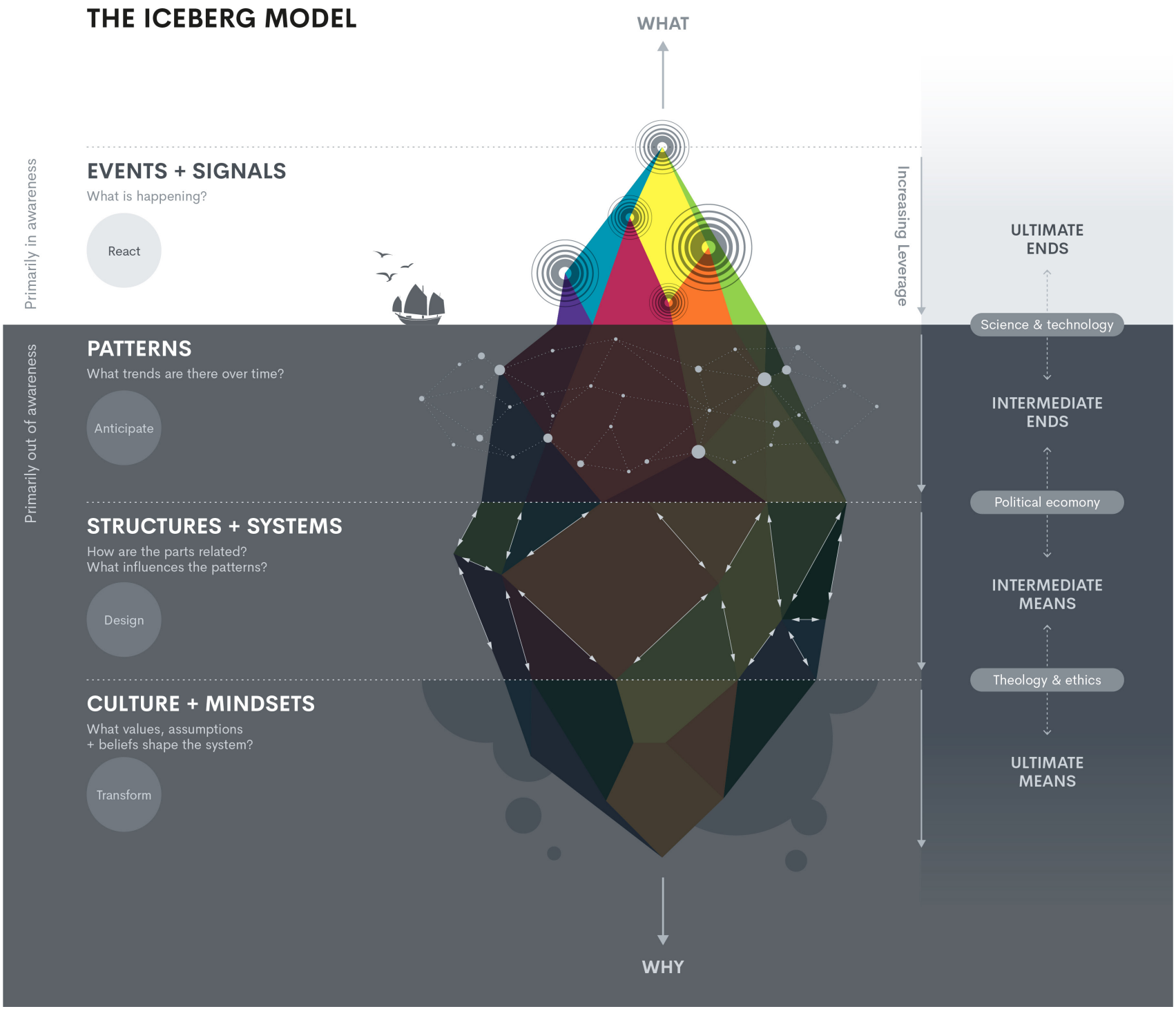
RESEARCH OUTCOMES > Return on Investment



RESEARCH OUTCOMES > Performance


EDUCATION
PEOPLE
PLANET
EMBRACING CHALLENGES
EMPOWERING CHOICES
ENABLING CHANGE
RESEARCH
PRACTICE
PROSPERITY

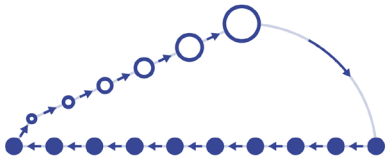
PRACTICE



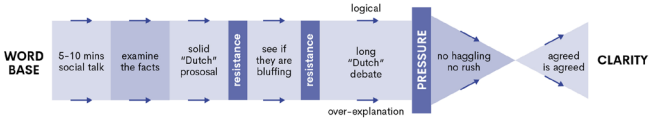
CULTURE > CITIZENS

AMSTERDAM

NETHERLANDS



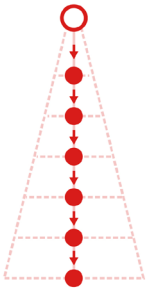
DUTCH



Amsterdam				
Country Flag: Netherlands	Map & Region Name	County Population & Size: 17.28 million M	Form of NATIONAL GOVERNMENT: Info	Language: Dutch
City Map	City Population & Size: 1.140k M	City Government Mayor/Party: Femke Halsema. GroenLinks (leftist green party)	City Government Deputy/Party: Info	Year of (first) election: 2018
City Size: 219.3 km²	Foreign-born population: 34%	Population density (per sq. m): 4908	Population change (yearly): growth 0.8%	Unemployment rate: 6.00%
Total dependency ration (youth/elderly) (%): 54.57	Population Over 60: 12.50%	Children per household: 1.79	Avarage Life expectancy: 81	M:F ratio (%): 50 - 50

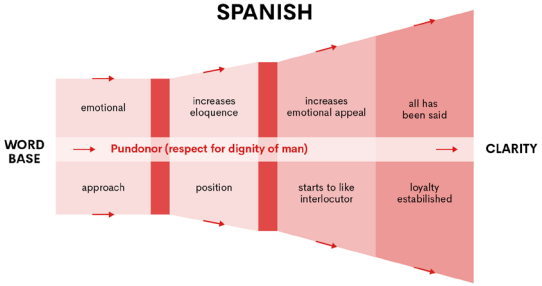
MADRID

SPAIN



human force

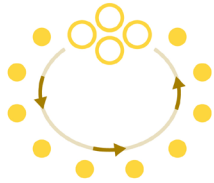
SPANISH



Madrid				
Country Flag: Spain	Map & Region Name	County Population & Size: 46.94 million L	Form of NATIONAL GOVERNMENT: Info	Language: Spanish
City Map	City Population & Size: 6.550k XL	City Government Mayor/Party: José Luis Martin-ez-Almeida/People's Party - conservative	City Government Deputy/Party: Begoña Villacís Sánchez, Citizens	Year of (first) election: 2019
City Size: 604 km²	Foreign-born population: 16%	Population density (per sq. m): 5400	Population change (yearly): Slow increase 0.2% by 2030	Unemployment rate: 10%
Total dependency ration (youth/elderly) (%): 51	Population Over 60: 24%	Children per household: 1.2	Avarage Life expectancy: 85	M:F ratio (%): 45 - 55

DAEGU

SOUTH KOREA



consensus rule

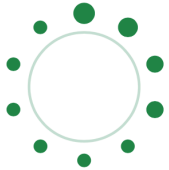
KOREAN

Deagu				
Country Flag: South Korea	Map & Region Name	County Population & Size: 51.64 million L	Form of NATIONAL GOVERNMENT: Info	Language: Korean
City Map	City Population & Size: 2,470 k ?	City Government Mayor/Party: Info	City Government Deputy/Party: Info	Year of (first) election: Info
City Size: km²	Foreign-born population: Info	Population density (per sq. m): Info	Population change (yearly): Info	Unemployment rate: Info
Total dependency ration (youth/elderly) (%): Info	Population Over 60: Info	Children per household: Info	Avarage Life expectancy: Info	M:F ratio (%): Info

CULTURE > POLITICS and DECISION MAKING

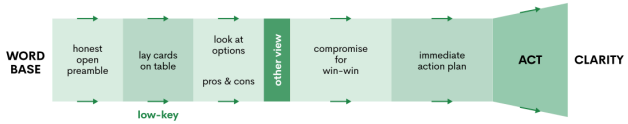
MONTREAL

CANADA



subtle leadership

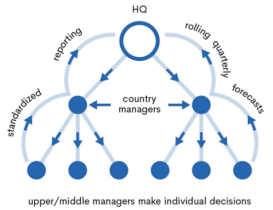
CANADIAN



Montreal				
Country Flag Canada	Map & Region Name	County Population & Size 35.85 million L	Form of NATIONAL GOVERNMENT Info	Language English (79%) French (21%)
City Map	City Population & Size 1,704 k M	City Government Mayor/Party Info	City Government Deputy/Party Info	Year of (first) election Info
City Size km²	Foreign-born population Info	Population density (per sq. m) Info	Population change (yearly) Info	Unemployment rate Info
Total dependency ration (youth/elderly) (%) Info	Population Over 60 Info	Children per household Info	Avarage Life expectancy Info	M:F ratio (%) Info

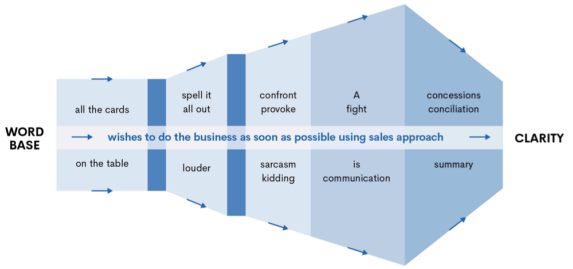
LOS ANGELES

UNITED STATES OF AMERICA



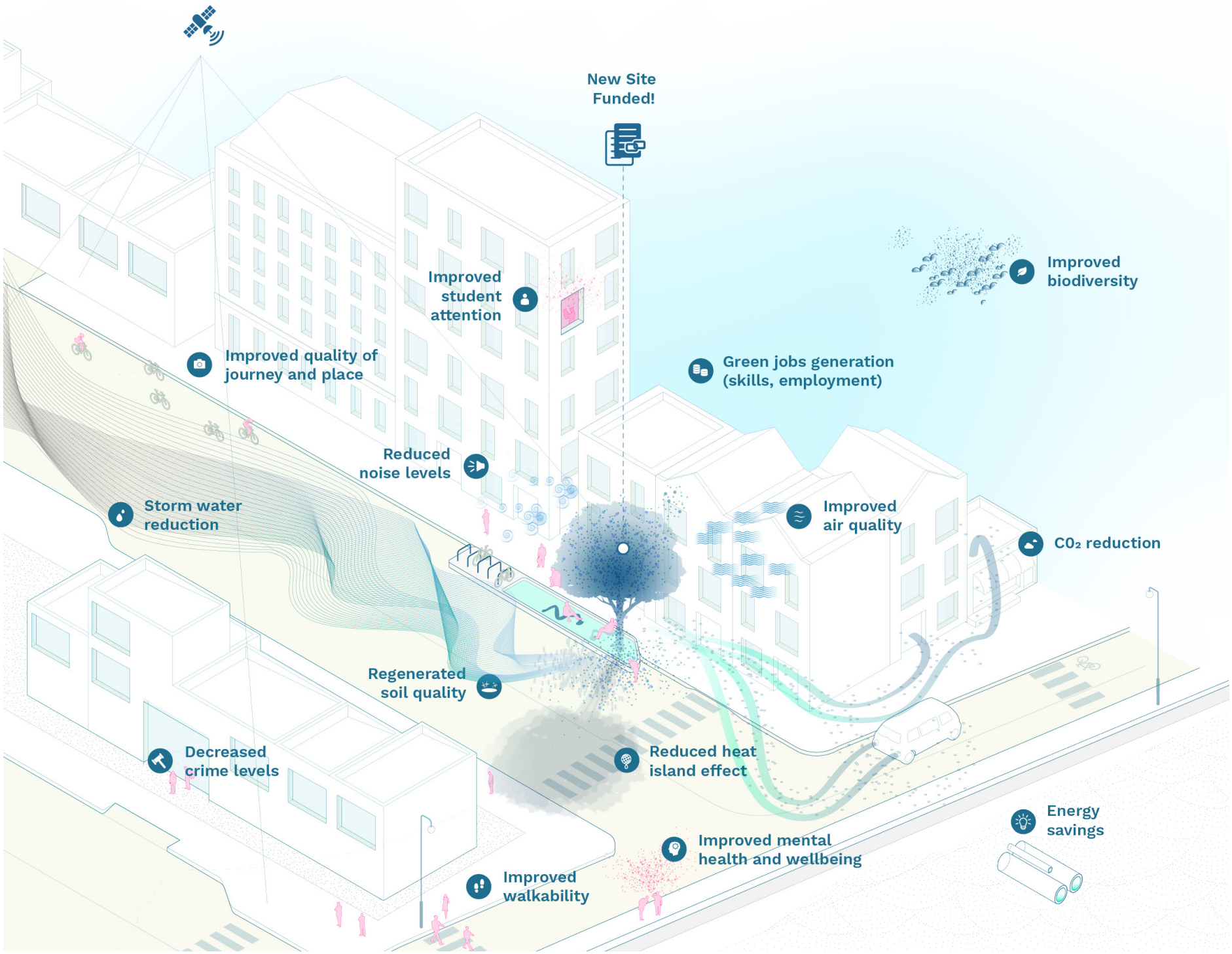
structured individualism

AMERICAN



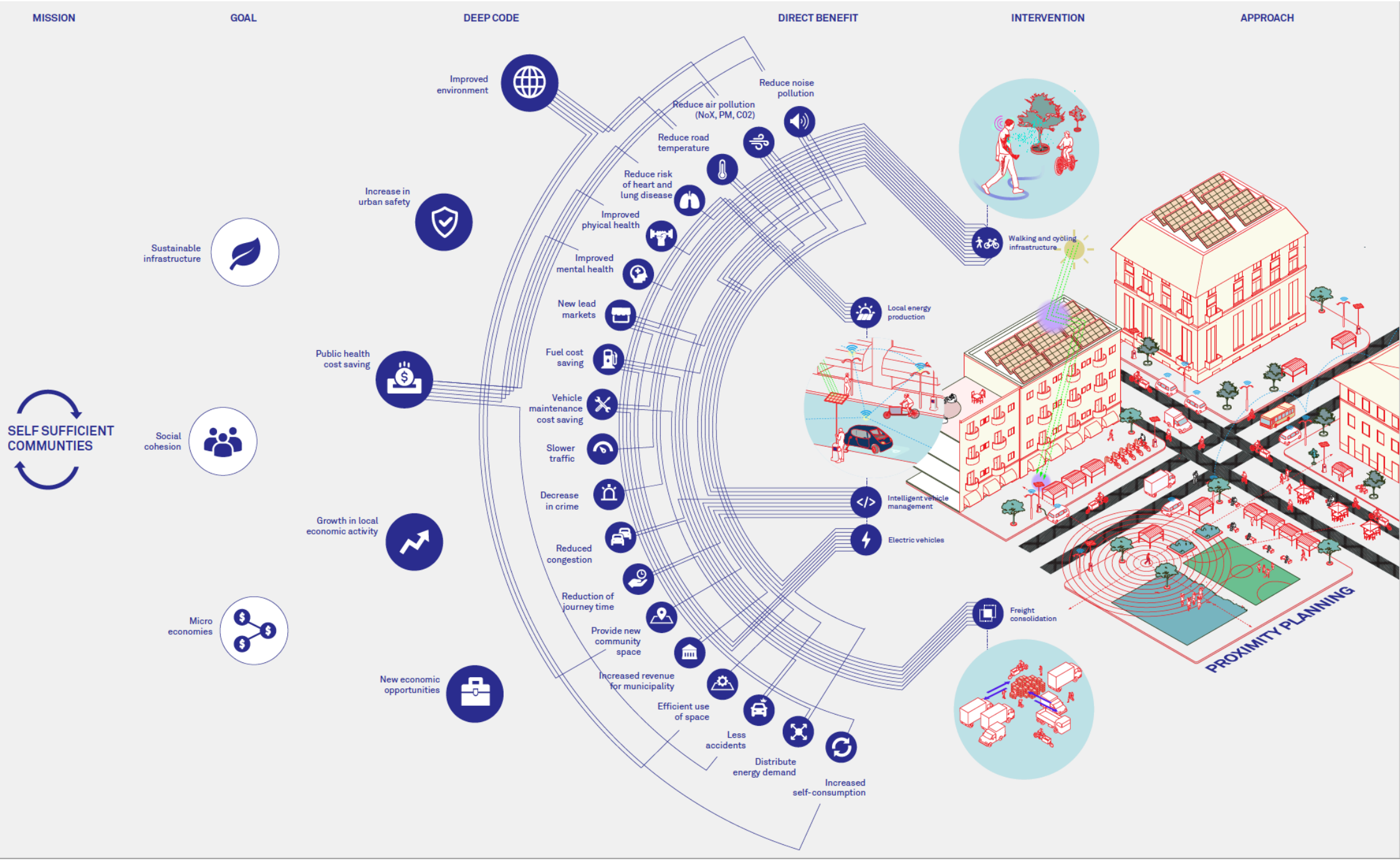
Los Angeles				
Country Flag USA	Map & Region Name	County Population & Size 323.20 million XXL	Form of NATIONAL GOVERNMENT Info	Language English
City Map	City Population & Size 3.990k L	City Government Mayor/Party Info	City Government Deputy/Party Info	Year of (first) election Info
City Size km²	Foreign-born population Info	Population density (per sq. m) Info	Population change (yearly) Info	Unemployment rate Info
Total dependency ration (youth/elderly) (%) Info	Population Over 60 Info	Children per household Info	Avarage Life expectancy Info	M:F ratio (%) Info

CULTURE > DEMOCRATIC DECENTRALISED DISTRIBUTED

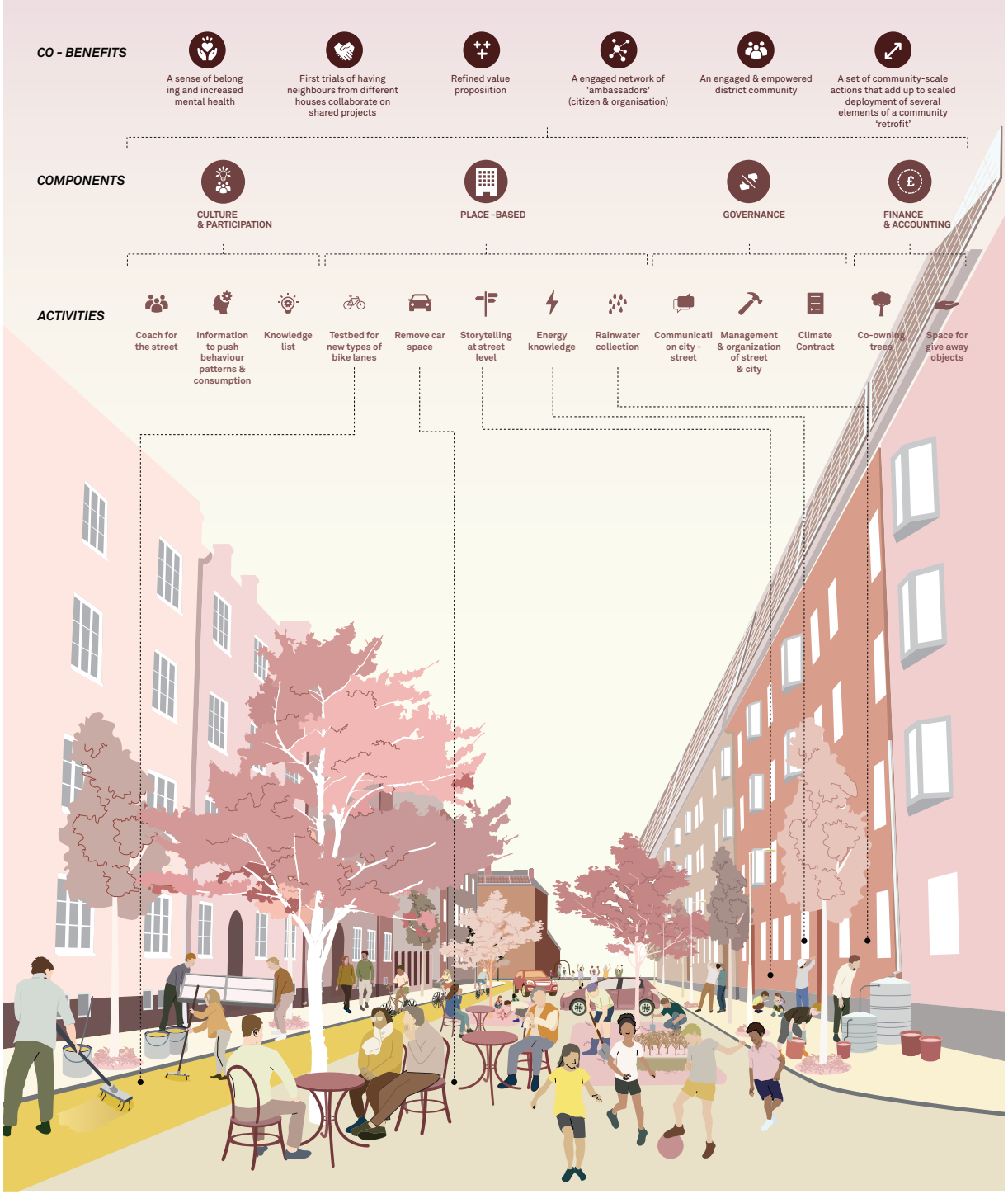


DESIGN FOR OUTCOMES > TREES AS INFRASTRUCTURE

Credit: Dark Matter Labs

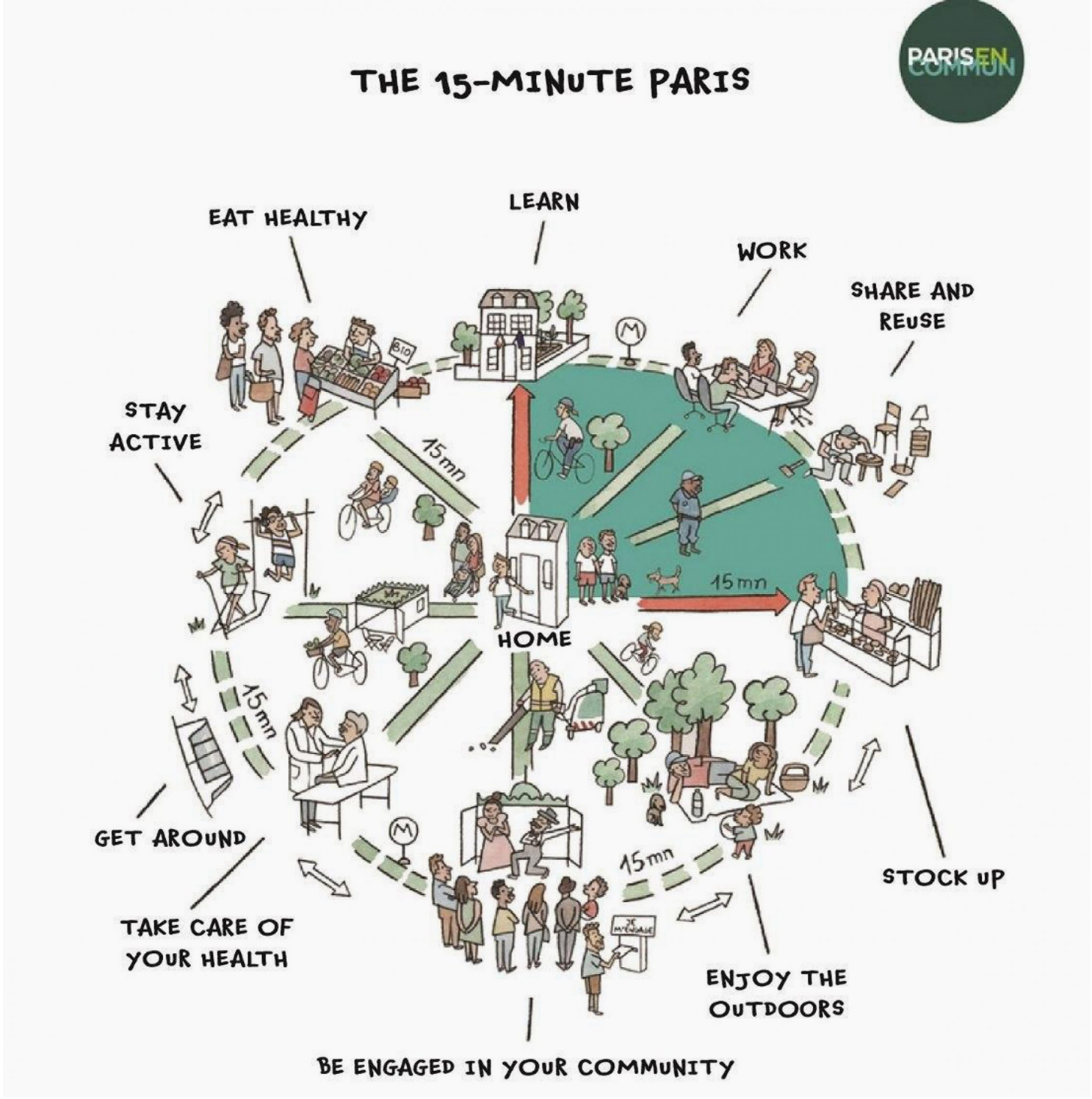


DESIGN FOR OUTCOMES > IMPACT

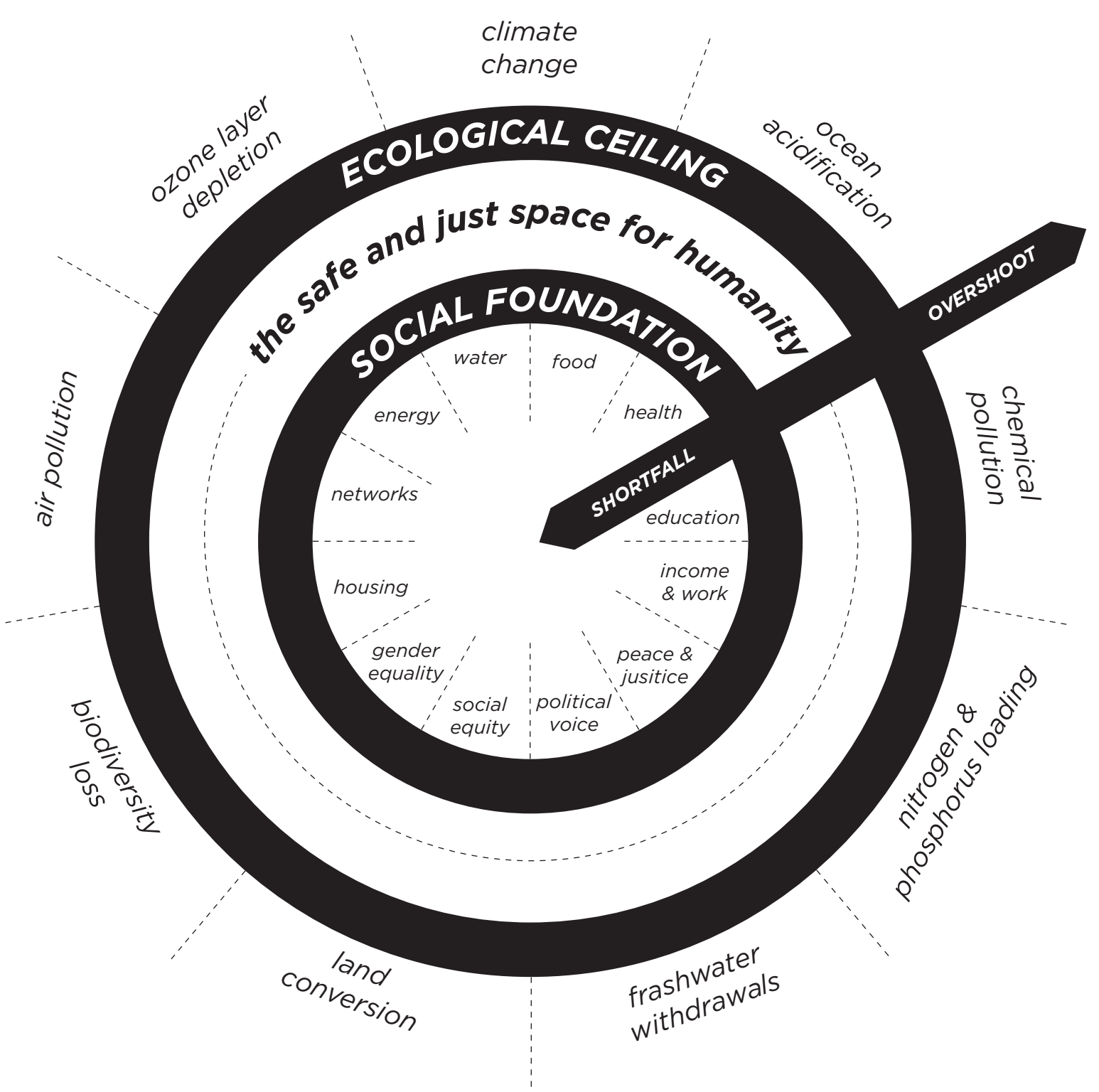


DESIGN FOR TIME > I MINUTE STREET

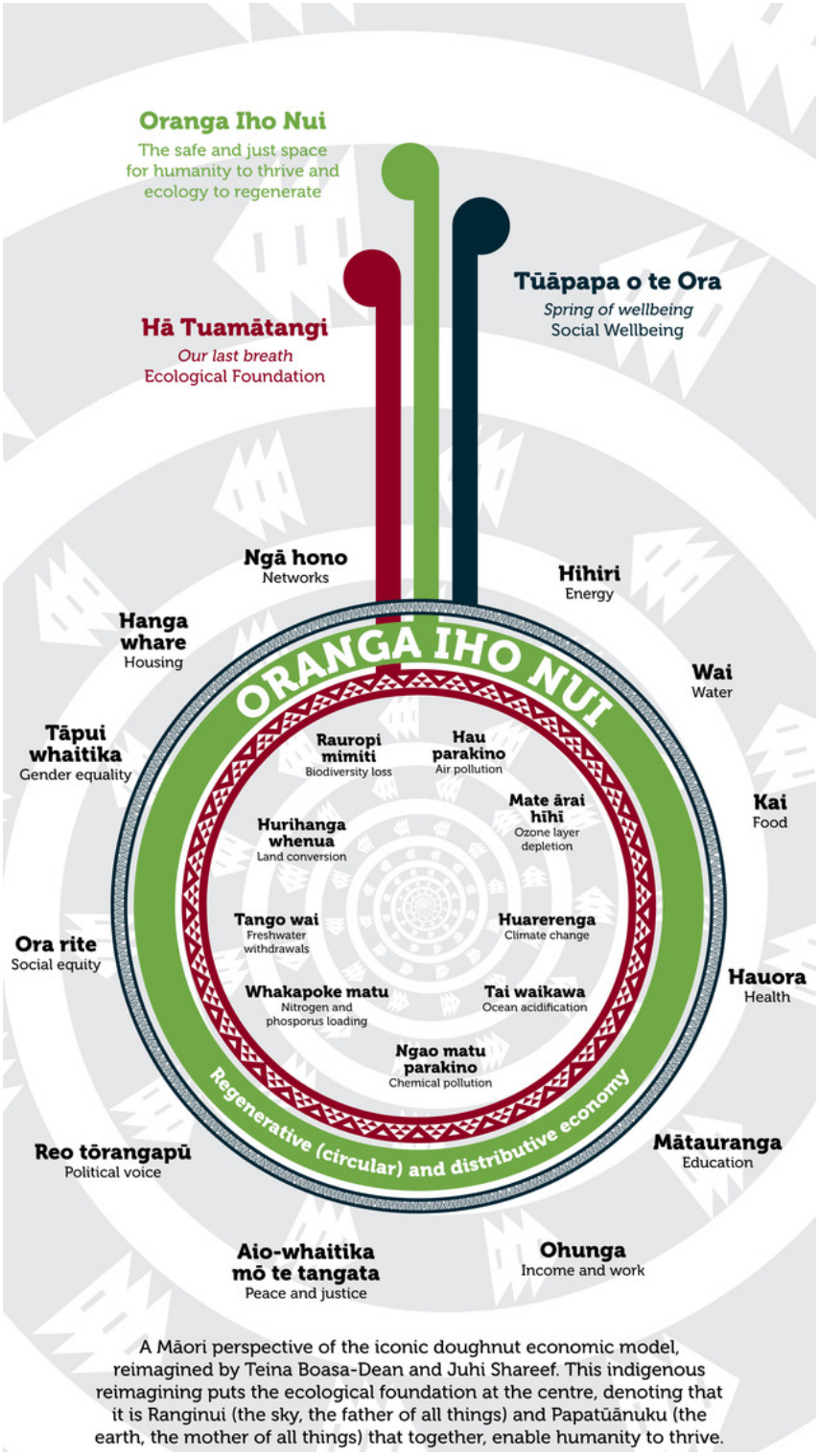
Credit: VINNOVA



DESIGN FOR TIME > 15 MINUTE CITY



DESIGN FOR THE DOUGHNUT



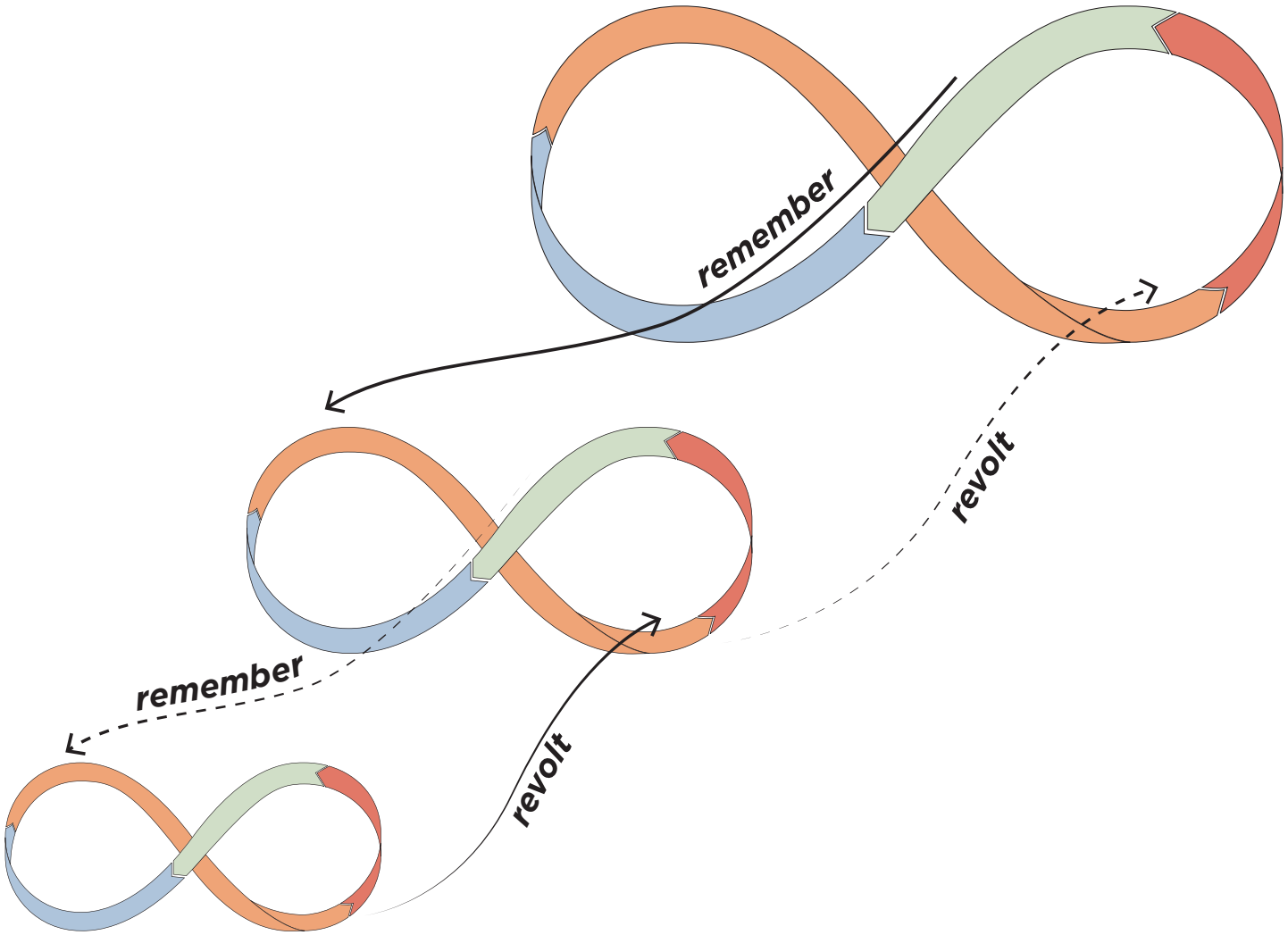
A Māori perspective of the iconic doughnut economic model, reimagined by Teina Boasa-Dean and Juhi Shareef. This indigenous reimagining puts the ecological foundation at the centre, denoting that it is Ranginui (the sky, the father of all things) and Papatūānuku (the earth, the mother of all things) that together, enable humanity to thrive.

DESIGN FOR THE INDIGENOUS DOUGHNUT

Institution
global reciprocity
large scale
and long-term

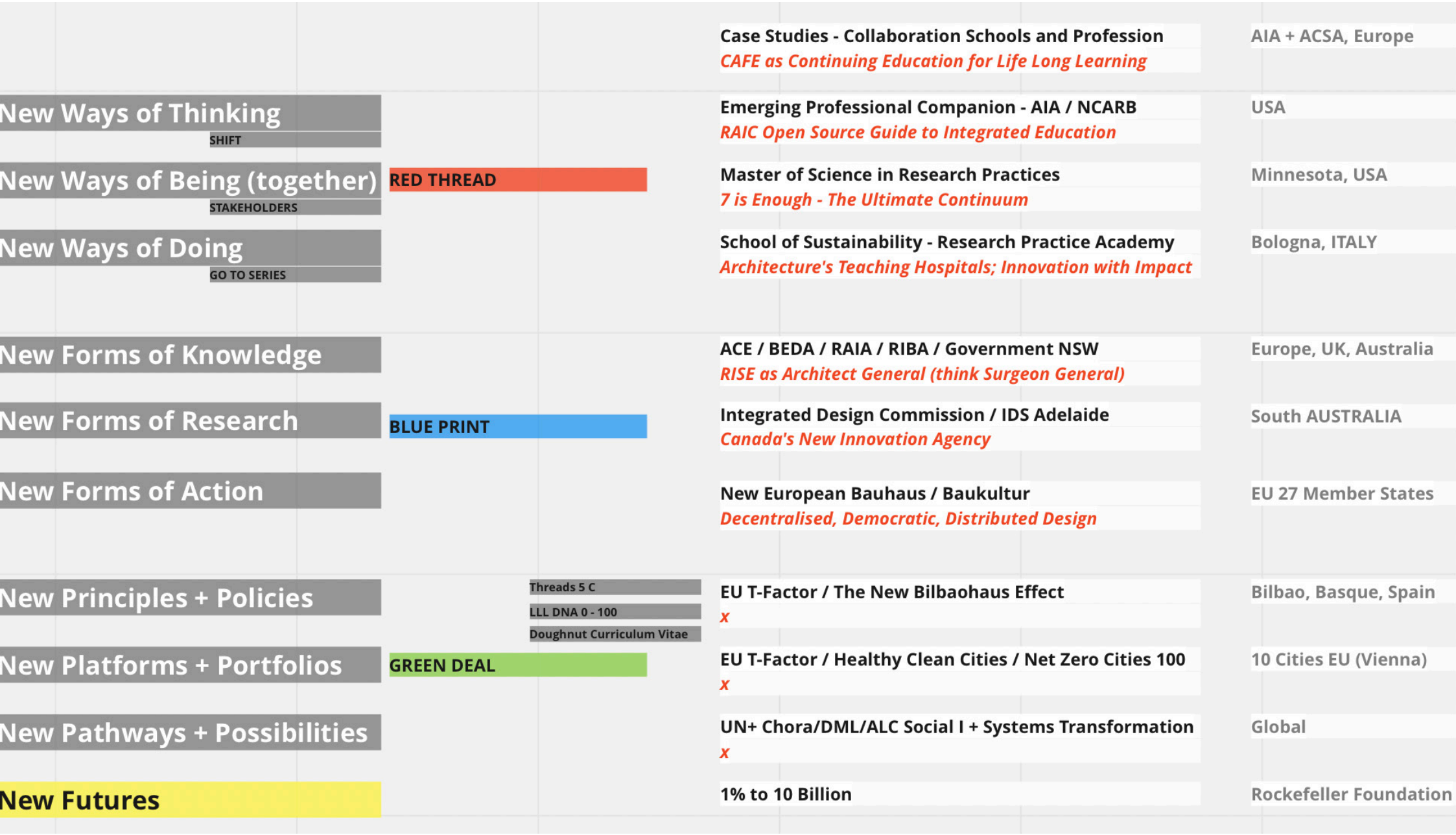
Infrastructure
glocal impact
intermediate scale
and paced

Industry
local agility
small scale
and fast



Hindsight	***Oversight***	***Insight***	***Foresight***	***Outsight***
Descriptive Analytics	*Investigative Analytics*	*Dignostic Analytics*	*Predictive Analytics*	*Prescriptive Analytics*
WHAT HAPPENED?	*WHAT IS HAPPENING?*	*WHY DID IT HAPPEN?*	*WHAT WILL HAPPEN?*	*HOW CAN WE MAKE IT HAPPEN?*
DATA	*INFORMATION*	*KNOWLEDGE*	*INTELLIGENCE*	*WISDOM*
Standard Reports	*Dashboards*	*Regression Analysis*	*Forecasting / Scenarios*	*Speculative Design*
KPIs / Data Mining	*Control Trials*	*Simulation/Visualization*	*Predictive Modelling*	*in context of VUCA*

DESIGN FOR LOCAL GLOCAL GLOBAL POLICIES AND PANARCHY



WORK SAMPLES 2000 - PRESENT

28 Cases

28 Interns

28 Practitioners

145 Students

1 Educator

4 Teaching Assistants

1000 Pages

BUILDING KNOWLEDGE CASE STUDIES IN ARCHITECTURE

Participating Firms

2003

2002

2001

Goals

Building community and channels of mutual influence between the academy and profession

For students: preparation for practice, verbal written communication, analysis, research skills

For practitioners: teaching, mentoring, reflective and best practices, and continuing education

0. CASE STUDIES 2000 - 2012

BUILDING STORIES

Each class session, the practitioner tells a story from a project, leaving off at a decision moment while giving the students all the information they had at that time. The following week, students propose solutions and the practitioner reveals what actually happened.

Building Stories, a course developed by two full-time faculty with extensive expertise in documenting case studies, uses a cliff-hanger format. Some of the most fascinating stories from practice fall within areas that are notoriously difficult to teach in a classroom setting: financial, contractual, personnel, management, etc. Stories can be told during internship mentoring, but an effective academic setting can make learning targeted, consistent and accessible to larger numbers of students.

This professional practice elective has been offered to M.Arch students since 2009. Building Stories meets twice per week for seven weeks, falling within the School's spring modular system. Two practitioners, one coming each Tuesday, the other each Thursday, do not need to coordinate with each other but are loosely linked by themes such as global practice or practice management.

Non-faculty practitioners who have detailed knowledge of the project join discussions. By placing the students in the shoes of the practitioner, Building Stories makes the minutiae of practice mesmerizing.

THE CLIFF-HANGER

The cliff-hanger is a storytelling format employed by penny-dreadfuls, pulp-fiction, and action movie series.

While stories from practice may lack car chases, they are full of charged human situations, financial drama and passionate design advocacy. These stories, told well, can rival any of Scheherazade's Thousand and One Nights.

EVERYONE HAS A STORY TO TELL

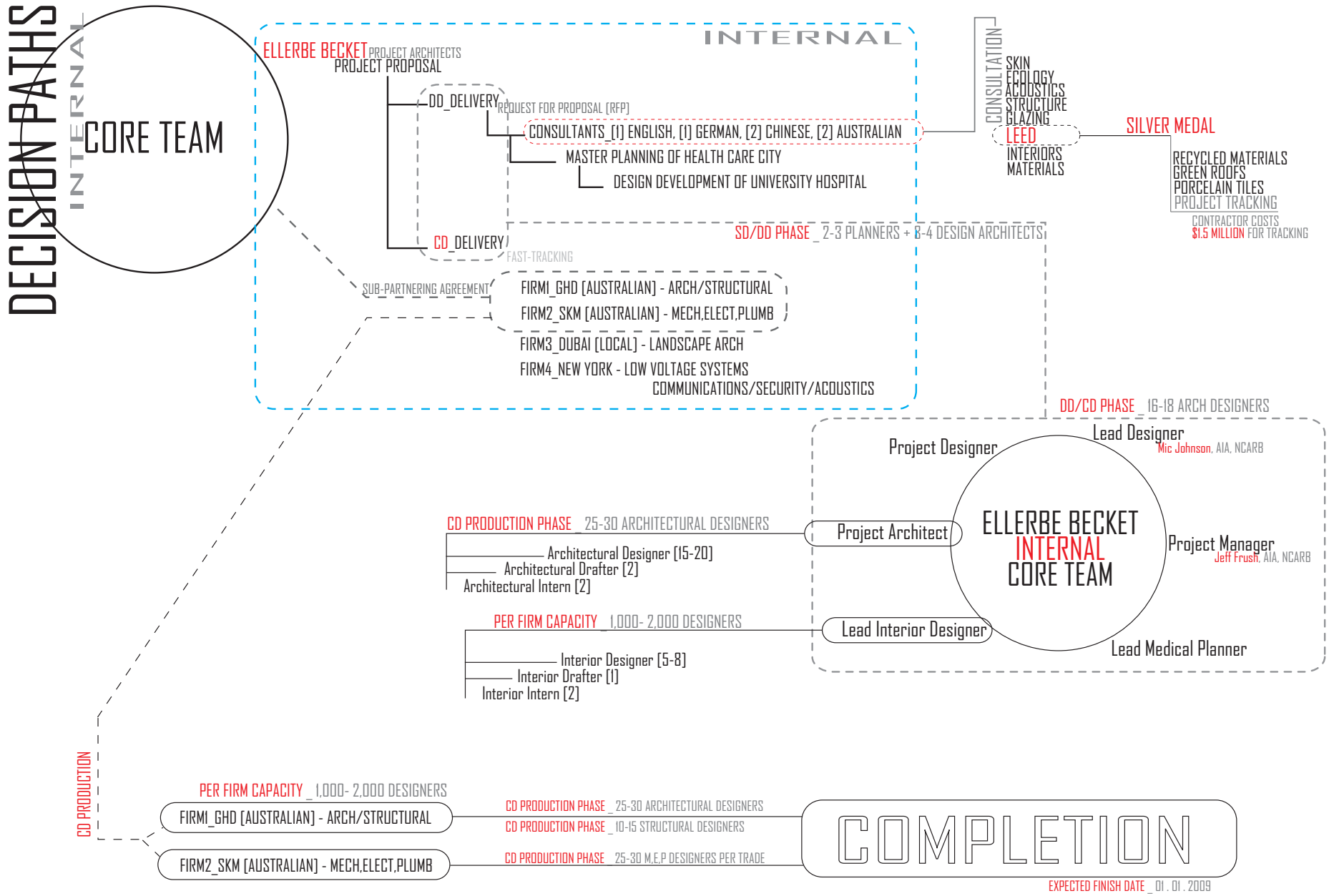
Building Stories' prime objective is to address the most difficult to teach areas of professional practice, those underserved areas without a home in professional curricula.

Most practitioners have one or two very knowledgeable colleagues they turn to for advice on project management, contracts or conflict resolution. Most will also be able to name a few colleagues who are natural teachers, who can explain even complex things to a relative novice. Unfortunately for the schools, the overlap between these two sets is extremely small, explaining why there are so few excellent professional practice teachers. Compounding this problem is the fact that teaching is hard. Teaching when the students have no immediate "need to know" is practically impossible. If a student needs to know the size of a structural member or the rise-to-run ratio of an ADA compliant ramp in order to advance their design, they are extremely receptive to anyone providing tools or information that will meet their need. Building Stories places students in the position where they urgently need to know how to address difficult practice issues.

CLASS STRUCTURE

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7
INTRODUCTION Objectives and Expectations **CASE CONTEXT**	**CASE ISSUE #1** Assignment Questions and Deliverables	**6 STUDENT PRESENTATIONS** Discussion	**CASE ISSUE #2** Assignment Questions and Deliverables	**6 STUDENT PRESENTATIONS** Discussion	**CASE ISSUE #3** Assignment Questions and Deliverables	**4 STUDENT PRESENTATIONS** Discussion
ILLUSTRATED NOTEBOOK ASSIGNMENT						
CASE STORY #1 In-class example How to set up a problem Propose a solution **CASE STORY #2**	**3 STUDENT PRESENTATIONS** Discussion **CASE STORY #3**	**3 STUDENT PRESENTATIONS** Discussion **CASE STORY #4**	**3 STUDENT PRESENTATIONS** Discussion **CASE STORY #5**	**3 STUDENT PRESENTATIONS** Discussion **CASE STORY #6**	**3 STUDENT PRESENTATIONS** Discussion **CASE STORY #7**	**3 STUDENT PRESENTATIONS** Discussion **WRAP UP**

0. CASE STUDIES > BUILDING STORIES



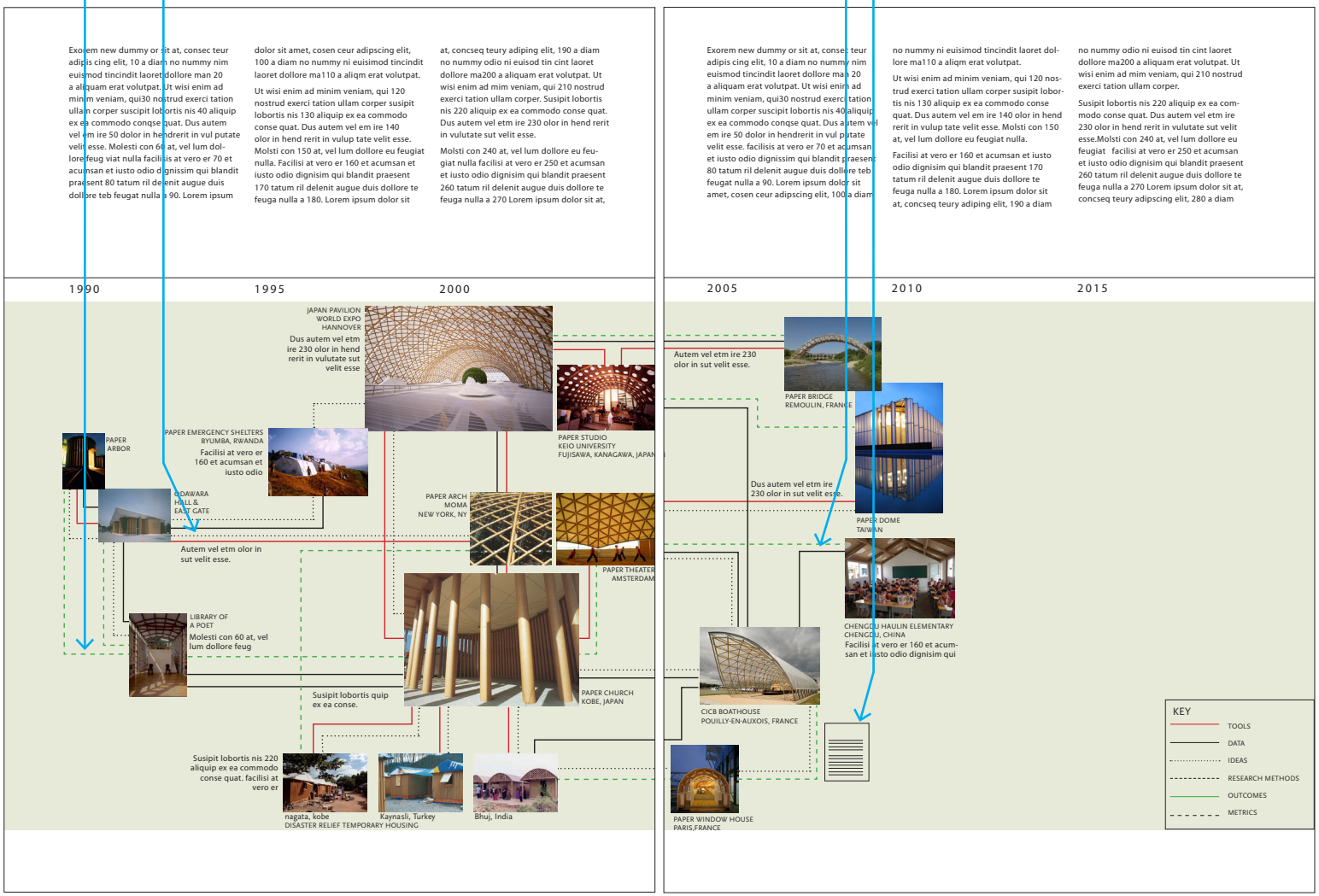
0. CASE STUDIES > DECISION PATHS

FLOWS OF RESEARCH TRAJECTORIES may be identified for firms with enough demonstrated research expertise. Other firms' flows may be more focused on potential research trajectories.

CONNECTIONS specifies how research ideas connect between multiple projects

KEY CODING indicates type or nature of project interconnection including: tools, data, ideas, research methods, outcomes, metrics, resources

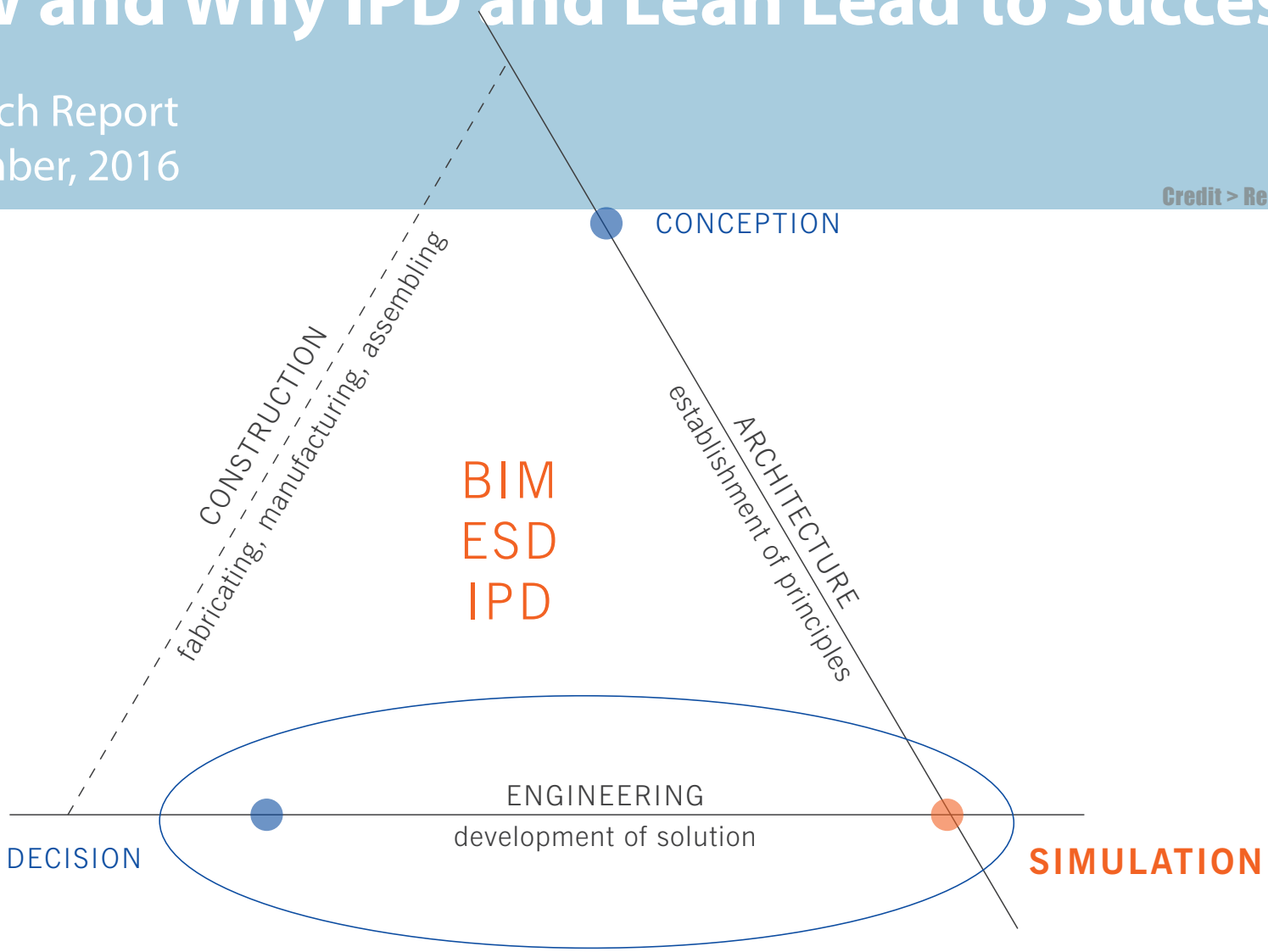
EXTERNAL INFLUENCES such as collaborators or innovative processes brought in from other disciplines.



0. CASE STUDIES > STORIES OF INNOVATION

MOTIVATION AND MEANS:
How and Why IPD and Lean Lead to Success

Research Report
November, 2016



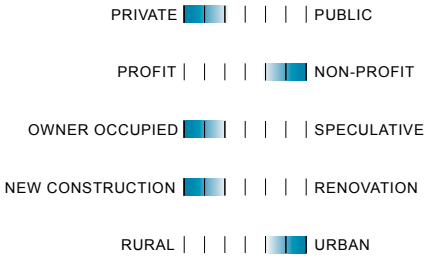
REDUCE conflicts, construction time, cost, errors, loss of information, omissions, waste
INCREASE communication, efficiency, innovation + opportunity, precision + productivity, predictability, prototyping

0. CASE STUDIES > IPD and LEAN

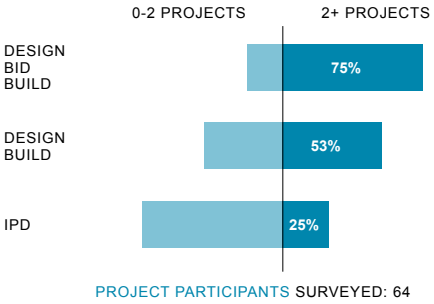
Project Description

PROJECT	Cathedral Hill Hospital
LOCATION	San Francisco, CA
BUILDING TYPE	Healthcare
CONTRACT	Single Multi-party Contract – (IFOA)
OWNER	California Pacific Medical Center, A Sutter Health Affiliate
ARCHITECT	SmithGroup, Inc
CONTRACTOR	HerreroBoldt – A Joint Venture
PROJECT START	August 2007
EST. COMPLETION	March 2015

Project Characteristics



Project Delivery Experience



PROJECT PARTICIPANTS SURVEYED: 64

This chart illustrates the number of projects survey participants have worked on since the year 2000 for each delivery model. Since IPD is relatively new, it's not surprising that the majority of participants have not worked on more than 2 IPD projects. This chart also identifies the relatively experienced teams, those with at least some participants who have worked on more than 2 IPD projects.

Building Size 858,000 sq. ft.

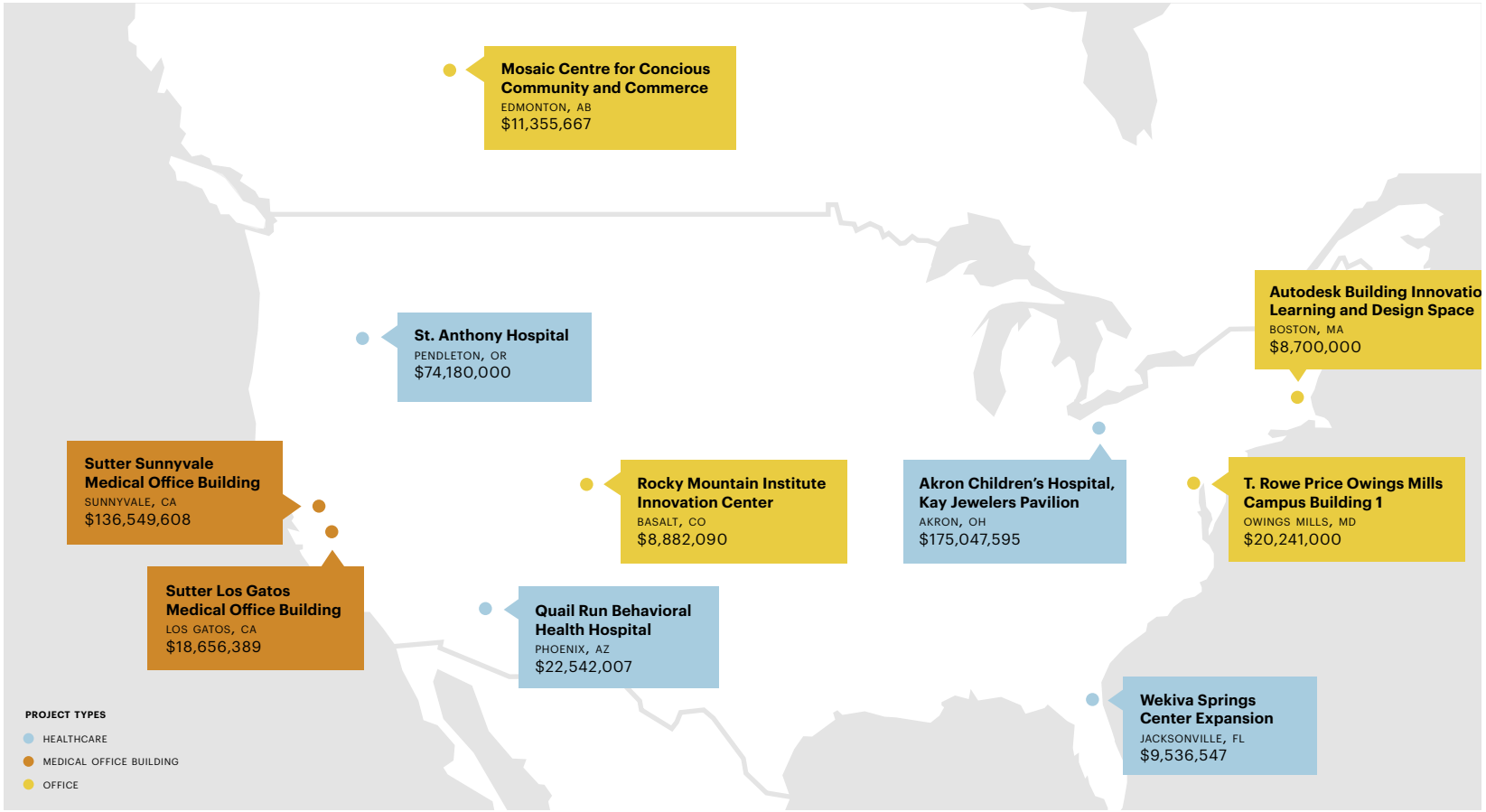
Project Cost $1,028,533,446

Schedule 55 months design 48 months construction

Credit > Renée Cheng

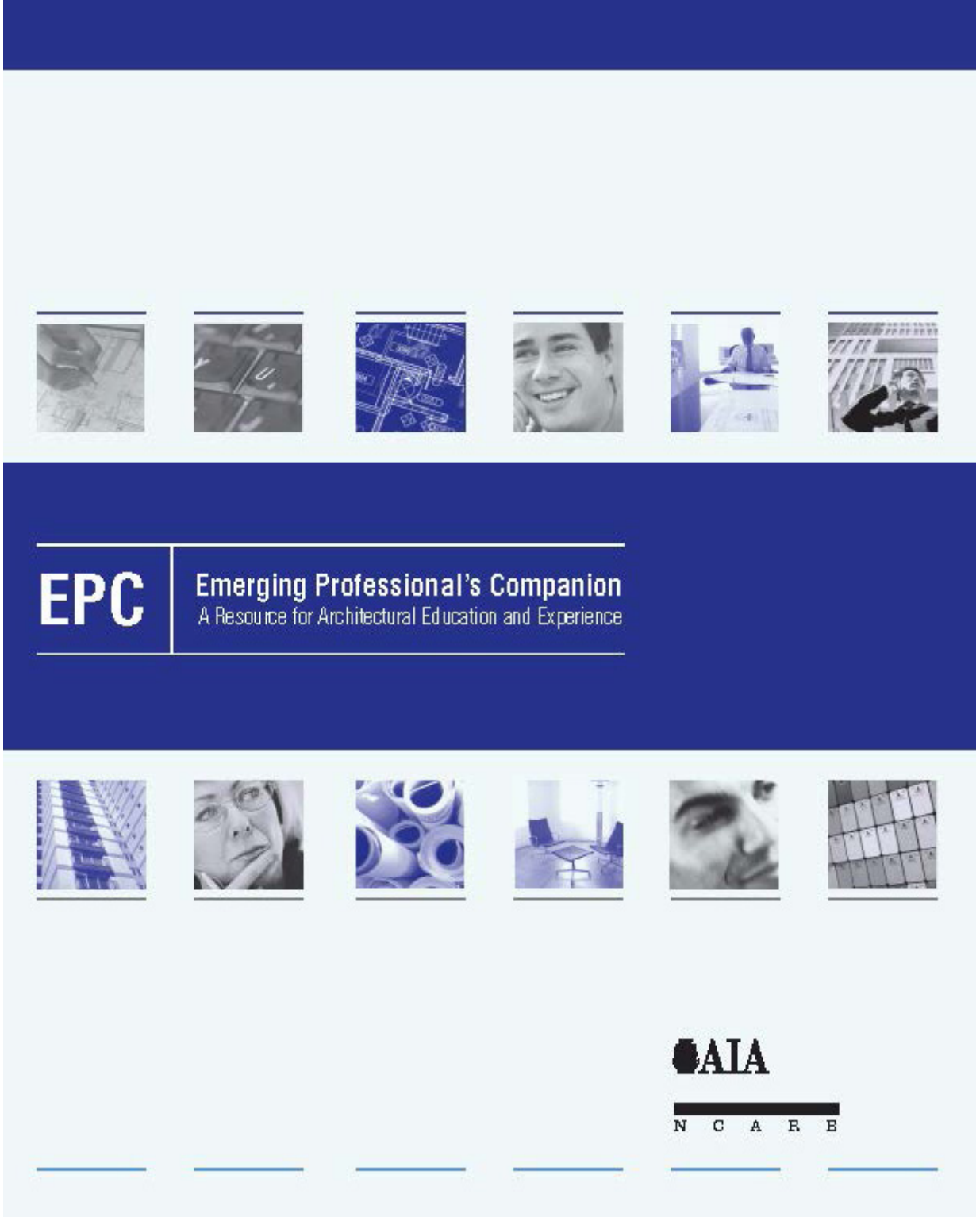
0. CASE STUDIES > MULTI DIMENSIONAL STRATEGIES

At A Glance



DISTRIBUTION OF CASES ACROSS NORTH AMERICA

The projects chosen for this study were solicited through a call for participation and selected to create a set of cases with diverse geographic locations, market sectors, project types, and project



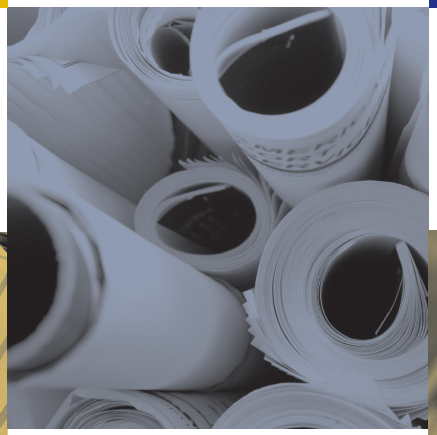
1. EMERGING PROFESSIONALS COMPANION 2004

COMING IN AUGUST 2004:

Emerging Professional's Companion

[online]

The AIA, together with NCARB, has revamped the 1992 *Supplementary Education Handbook*. The new, Web-based handbook, the *Emerging Professional's Companion*, will help interns obtain the IDP credit they need to become licensed architects.



The all new EPC will be available online at **www.EPCompanion.org**

AIA

NCARB

Internship Development Program 16 Core Competences

Category A: Design and Construction Documents	350	
1. Programming		10
2. Site and Environmental Analysis		10
3. Schematic Design		15
4. Engineering Systems Coordination		15
5. Building Cost Analysis		10
6. Code Research		15
7. Design Development		40
8. Construction Documents	135	
9. Specifications and Materials Research		15
10. Document Checking and Coordination		10
Category B: Construction Contract Administration	70	
11. Bidding & Contract Negotiation		10
12. Construction Phase—Office		15
13. Construction Phase—Observation		15
Category C: Management	35	
14. Project Management		15
15. Office Management		10
Elective Units In This Category		10
Category D: Related Activities		10

Typical Chapter Contents (as conceived in 2004, revised 2010)

1. Narrative
2. Exercises
3. Evidence-based Learning
4. Health Safety Welfare
5. Design and Construction Liability
6. Ethical Dilemmas
7. Professional Continuing Education
8. Further Study
9. Personal Portfolio
10. Bibliography, References, Resources, Links

The AIA, together with NCARB, has undertaken a complete revision of the 1992 Supplementary Education Handbook, used by interns to earn IDP credit. The new, Web-based resource—the Emerging Professional's Companion—has been created to reflect current practice models and recognize the varied paths an intern or licensed architect may consider during his or her career in architecture. The intent is to expand the market for this resource to firms and schools of architecture, recognizing that many of the Emerging Professional's Companion activities contribute to the development of professionals throughout their careers.

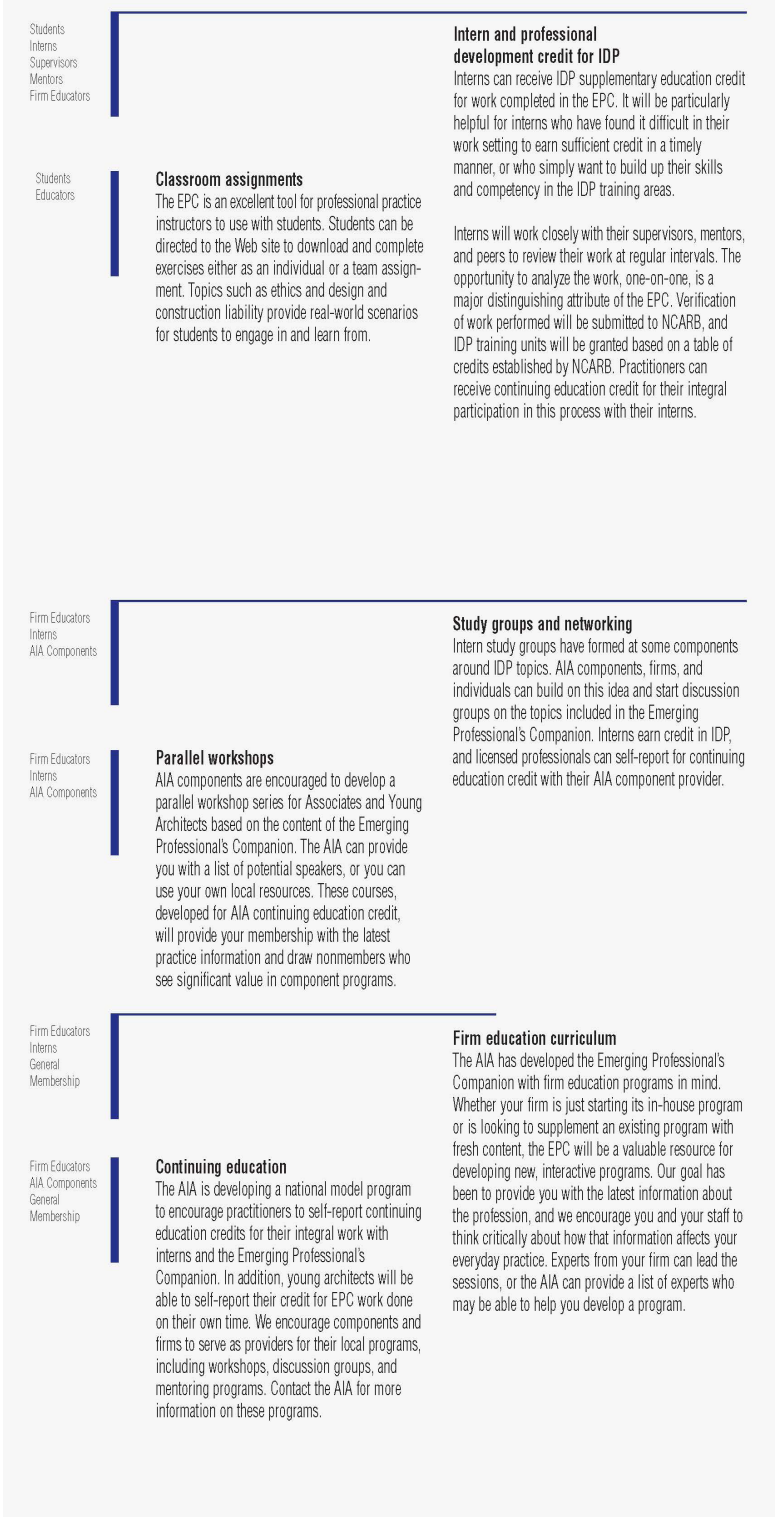
Goals of the Emerging Professional's Companion
- Support the intern in the IDP process, particularly in gaining credit
- Encourage practice competency through design excellence and innovation
- Increase support, involvement, and mentoring of firms, supervisors, and mentors
- Provide a personalized but structured learning experience
- Perform as a resource that is stimulating, affordable, flexible, available, and easy to update

"Associate membership has continued to grow since the Fall of 1999 from 70 to over 130 today [February 2003]. I believe this is a result of the consistent programming and the recognition by Associates of the value-added benefits that the Associate Activities Committee (AAC) and the Chapter bring to its members."

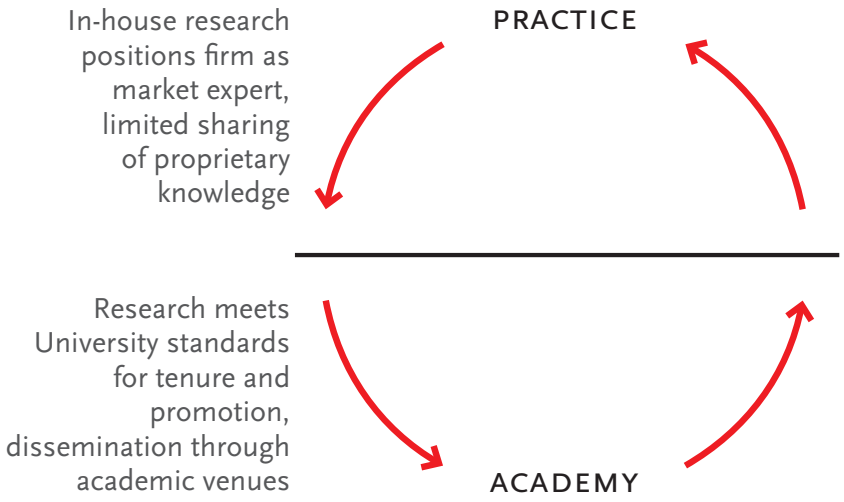
AIA Columbus letter of support for 2003 Chapter of the Year
—Associate Level, from Dan Becker, Assoc. AIA

Market
The market for the 1992 Supplementary Education Handbook was limited to architectural interns. Several additional groups have been identified as potential users of the Emerging Professional's Companion:
- Interns
- Students and their schools of architecture
- Educators and their schools of architecture
- IDP educator and state coordinators
- ARE candidates
- Newly licensed and young architects
- Mid-career professionals
- Practitioners and firm principals (for in-house education and training programs)
- AIA components (for continuing education programs)

1. EMERGING PROFESSIONALS COMPANION

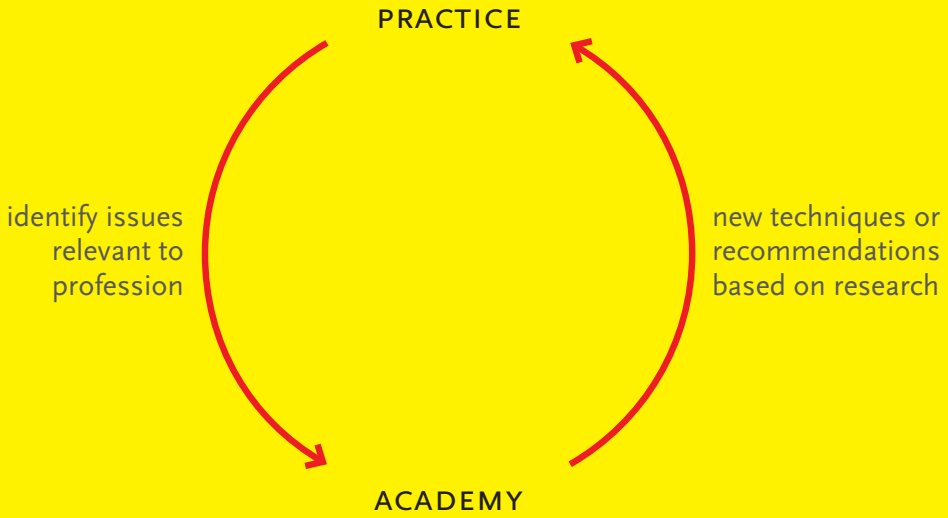


1. EMERGING PROFESSIONALS COMPANION



MS-RP

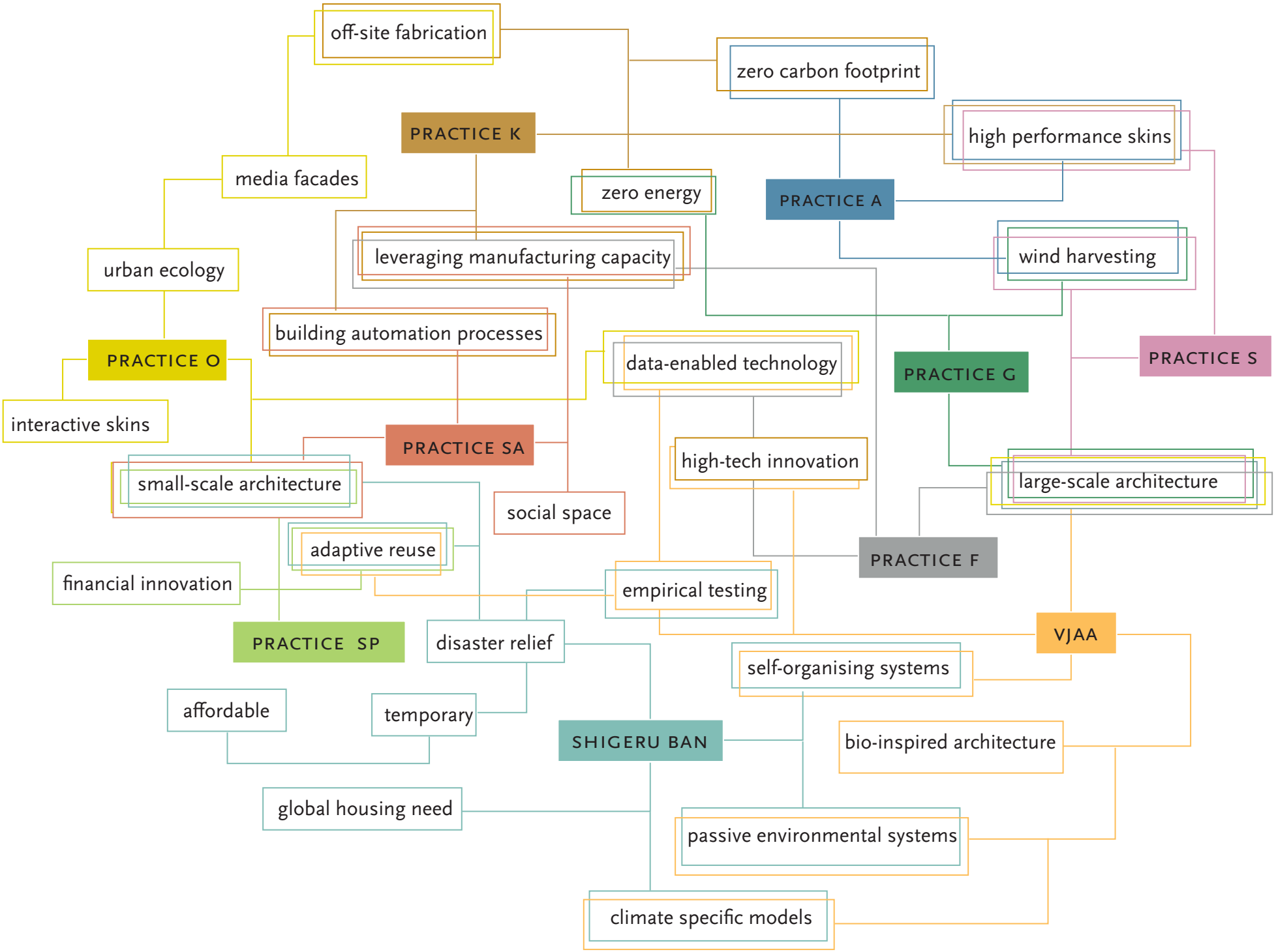
Master of Science in Research Practices



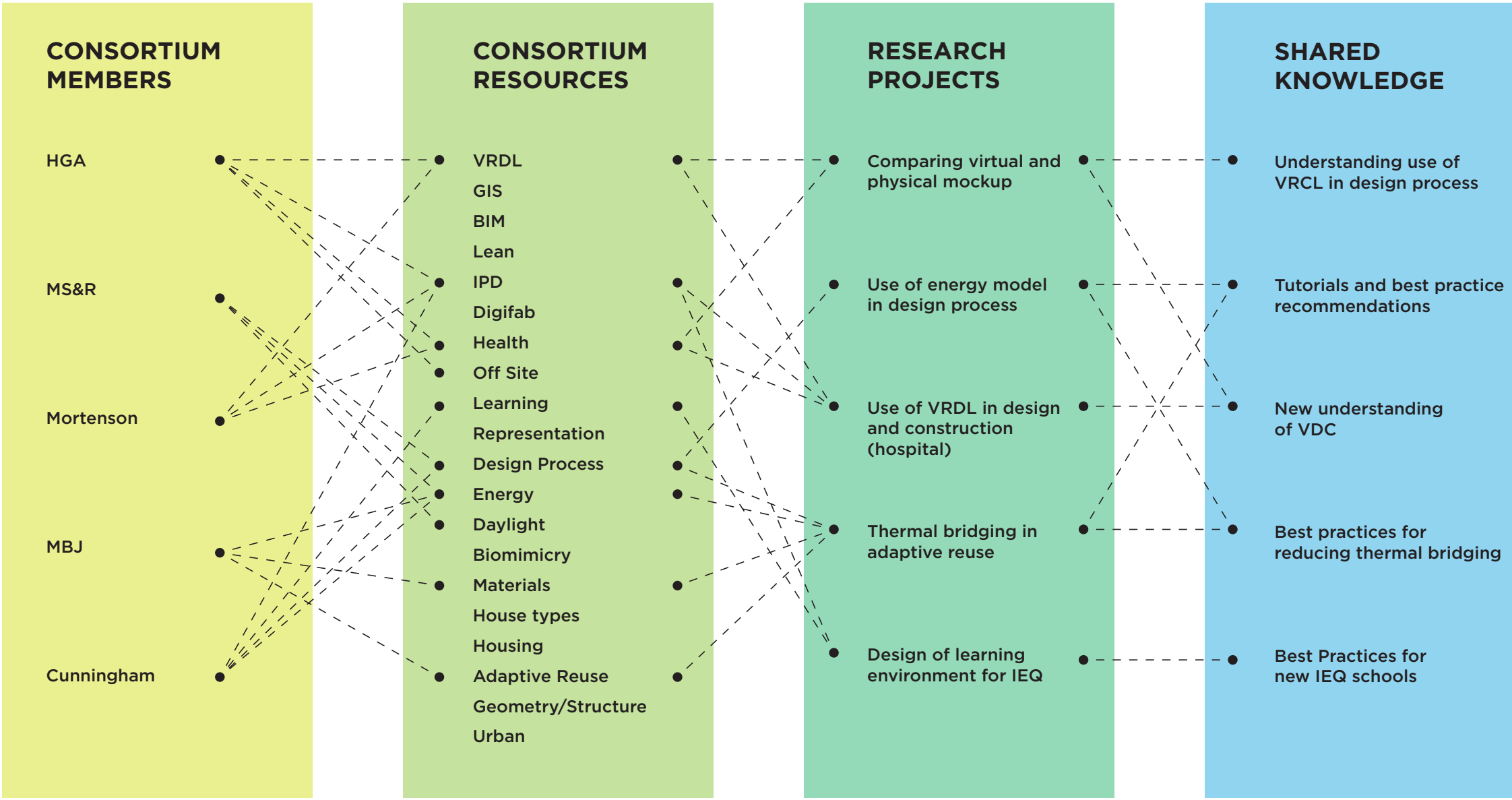
COMPRESS TIME
TUITION NEUTRAL
HIGHEST QUALITY + DIVERSITY
PRACTICE BASED USE-INPIRED RESEARCH
CONSORTIUM FOR INDUSTRY INNOVATION

University of
Minnesota
School of
Architecture

2. MASTER OF SCIENCE IN RESEARCH PRACTICES 2010

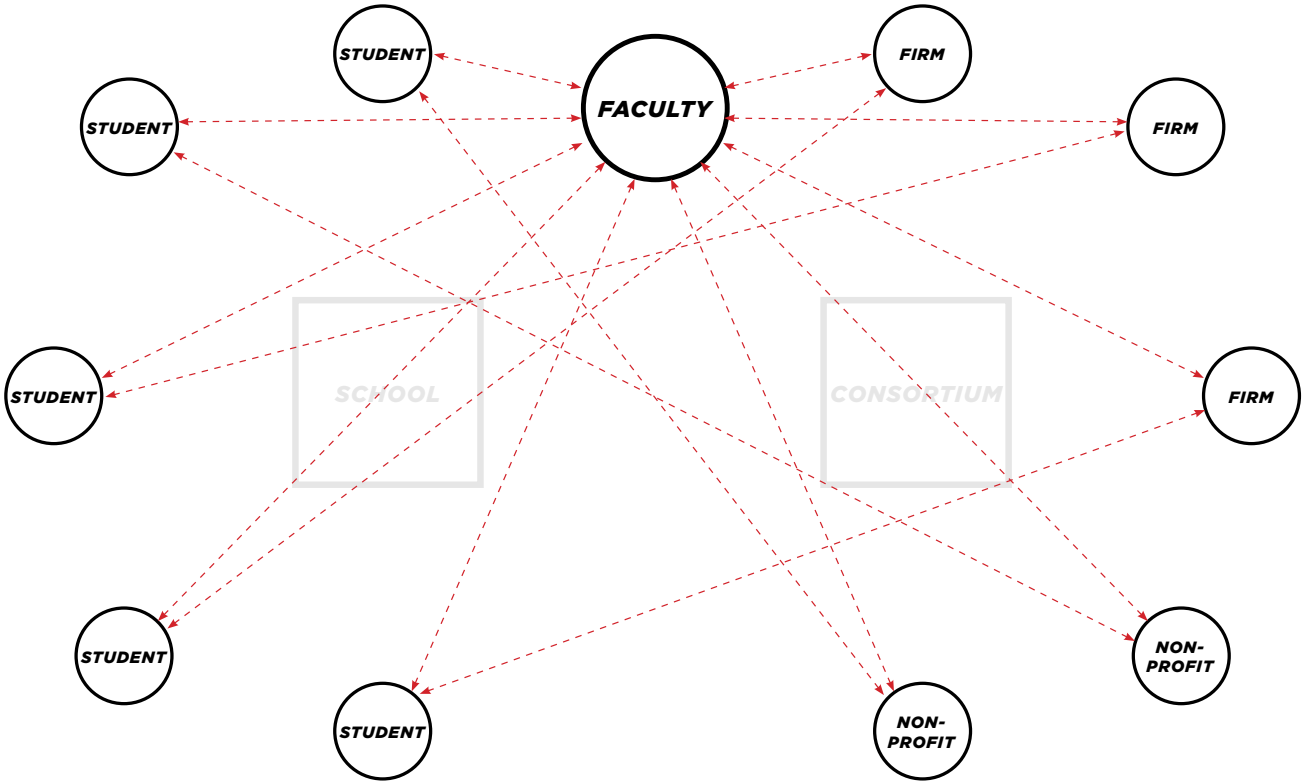


2. MASTER OF SCIENCE IN RESEARCH PRACTICES



2. MASTER OF SCIENCE IN RESEARCH PRACTICES

RELATIONSHIPS



Intern is ...

student earning MS degree
teaching assistant earning $
intern earning credit hours
intern earning $
intern preparing for exam
researcher in practice

Professor is ...

connected to practice
receiving research support
gaining new opportunities
advancing tenure case
publishing research

Architect is ...

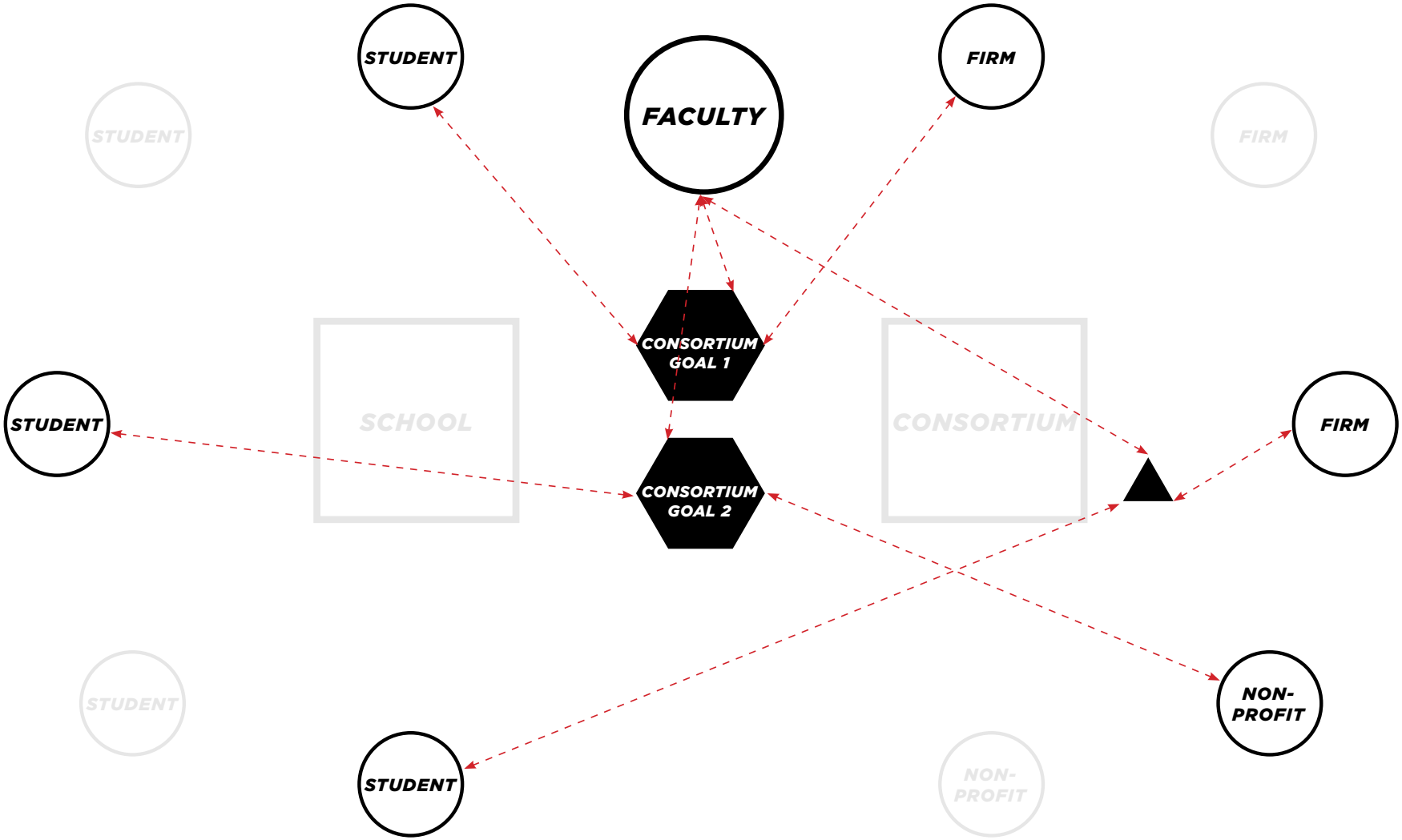
connected to academy
developing research skills
receiving project support
enhancing reputation

Consortium is ...

sharing knowledge
sharing resources
sharing research
gaining competitive edge

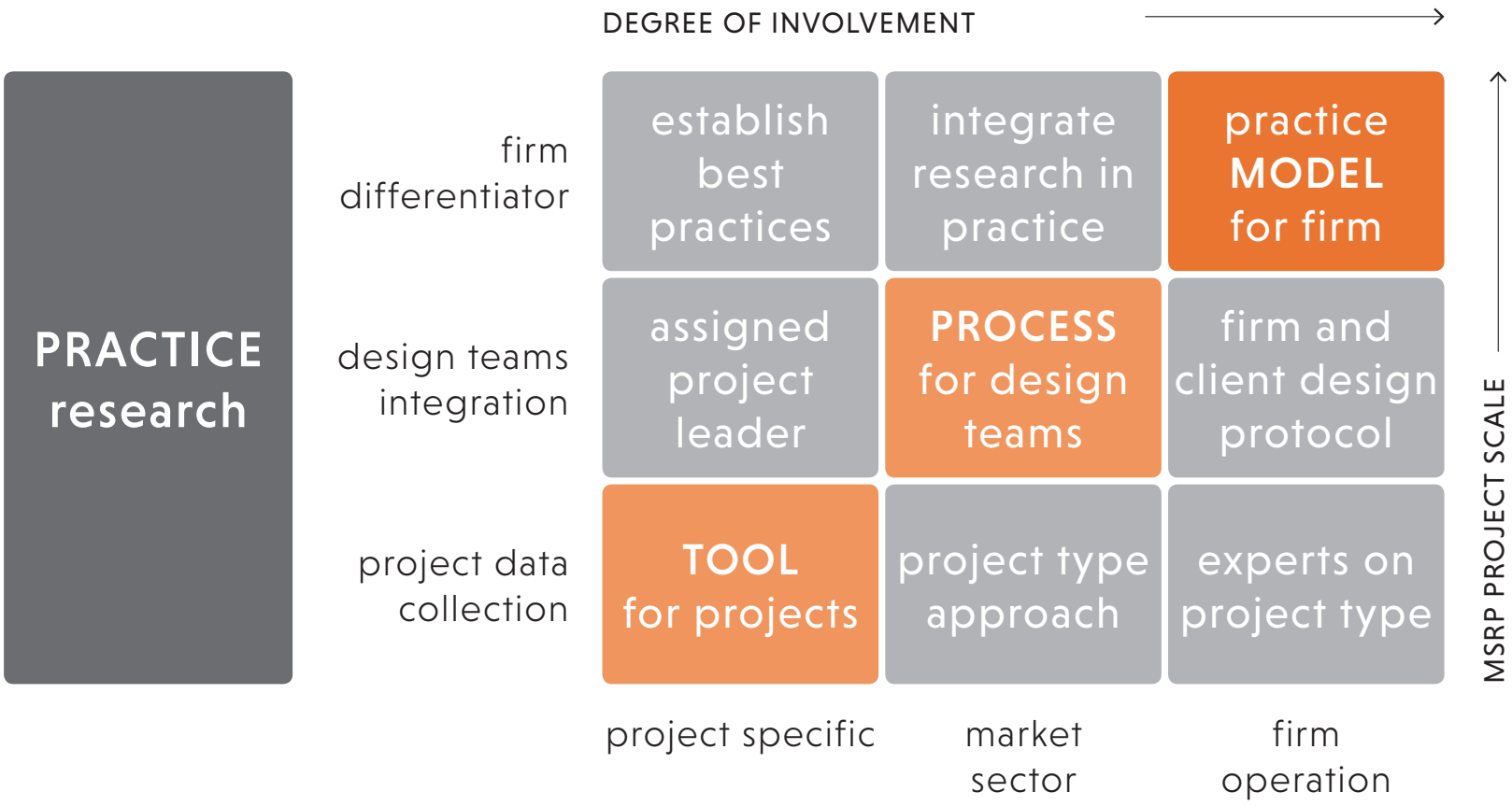
2. MASTER OF SCIENCE IN RESEARCH PRACTICES

RESEARCH GOALS



2. MASTER OF SCIENCE IN RESEARCH PRACTICES

RESEARCH AS CATALYST



2. MASTER OF SCIENCE IN RESEARCH PRACTICES > VALUE

F.R.E.E.

Free Range Learning in Elementary Education

An ongoing project for the understanding, development, discovery and design of open learning environments in elementary education.

design **with**, not for!

Feedback!

2nd Grade
Construction of 2nd Grade Classroom July-Sept. 1

Charrette
April 26. Design Charrette

3rd Grade
Construction of 3rd Grade Classroom July-Sept. 1

Charrette
May 9. 1st design charrette
May 27. 2nd design charrette

2012 | 2013 | 2014

Charrette
May 30. Design Charrette
June 5. Design Charrette

Master Plan
March 5. Master Plan submittal by CGA
June 28. 1st Master Plan meeting
July 25. 2nd Master Plan meeting

Evaluation
Evaluation of 2nd and 3rd grade classrooms by Matt Tracy, University of Minnesota School of Architecture.

4th Grade
Construction of 4th Grade Classroom July-Sept. 1

CUNINGHAM GROUP
beautiful places, balanced world

2. MASTER OF SCIENCE IN RESEARCH PRACTICES > INTERN RESEARCH

Marc UMN Fabrication Expertise

Blair and Houminn Practice.

Phil as RA

QUESTION
How can variable formed panels be made?

QUESTION
What are effective applications of variable formed panels?

Alex HGA facade specialist

Jim HGA Research Council

QUESTION
How would variable formed panels be applied in practice?

Phil as RP intern

HGA

QUESTION
How can variable formed acoustic panels be used in concert halls?

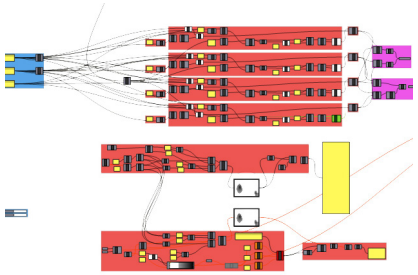
RESEARCH PROJECT
What tools do designers need to work in informed ways with acoustic panels?

KNOWLEDGE
Economics. A variety of shapes and forms can be the same price as mass production.

ACOUSTIC consultants

NATIONAL R&D AWARD

ACADEMIC PUBLICATIONS



BETA LEVEL TOOL FOR DESIGNERS

OFFICE PROTOCOLS ON ROLE ACOUSTIC CONSULTANTS

2. MASTER OF SCIENCE IN RESEARCH PRACTICES > INTERN RESEARCH

THE CHANGING SHAPE OF PRACTICE

Integrating research and design in architecture

Edited by
MICHAEL U. HENSEL
and FREDRIK NILSSON

THE CHANGING SHAPE OF ARCHITECTURE

Further Cases of Integrating Research and Design in Practice

Edited by
MICHAEL U. HENSEL
and FREDRIK NILSSON

ROUTLEDGE

SOS MISSION

Provide the highest quality practice-based experience and opportunities for the next generation of professionals.

Serve as a nexus for the exchange of knowledge for the building industry, the community and the profession.

develop a culture of responsible and sustainable design methods, processes and practices.

SOS VISION

TO DESIGN THE FUTURE

- to advance a humanistic approach in architecture and urban design while addressing our present and future challenges.
- to advance architecture's cultural, social, economic and environmental impact, relevance and value.
- to define processes of transformation for a sustainable world and lead systemic change through collaboration.

TO DEFINE THE FUTURE

- of professional education through a revolutionary model of integrated education / research / practice.
- of practice by transforming the professional development path through an open and shared culture.
- of the profession by repositioning architects through innovative and intelligent driven strategies.

SOS IMAGINED FUTURE

IMAGINE A FUTURE WHERE

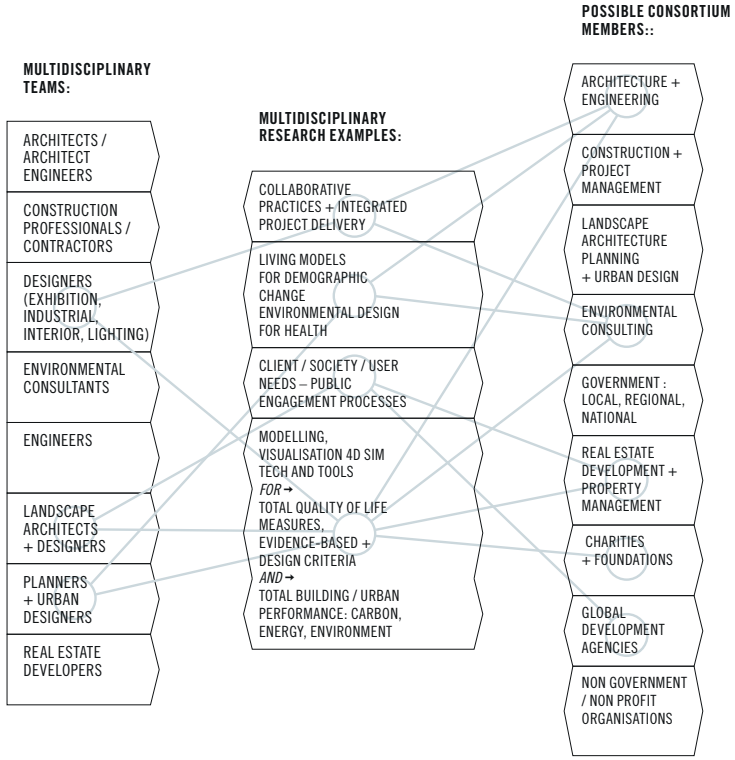
- the intelligent investment of design positions us as global experts, leaders and stewards of the environment.
- design delivers outstanding quality that is responsive and sustainable.
- all stakeholders are involved from the initiation of a project.
- decisions are performance-based and value-driven.
- all communications throughout the design and building process are clear, concise, open, transparent and trusting.
- outcomes are innovative and visionary.

3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy

SOS Students-
SOS Team-
SOS Experts Network-
SOS Industry Partners-

SOS provides case studies, simulations, or project research for Consortium members

SOS Consortium members provide six-month paid internship

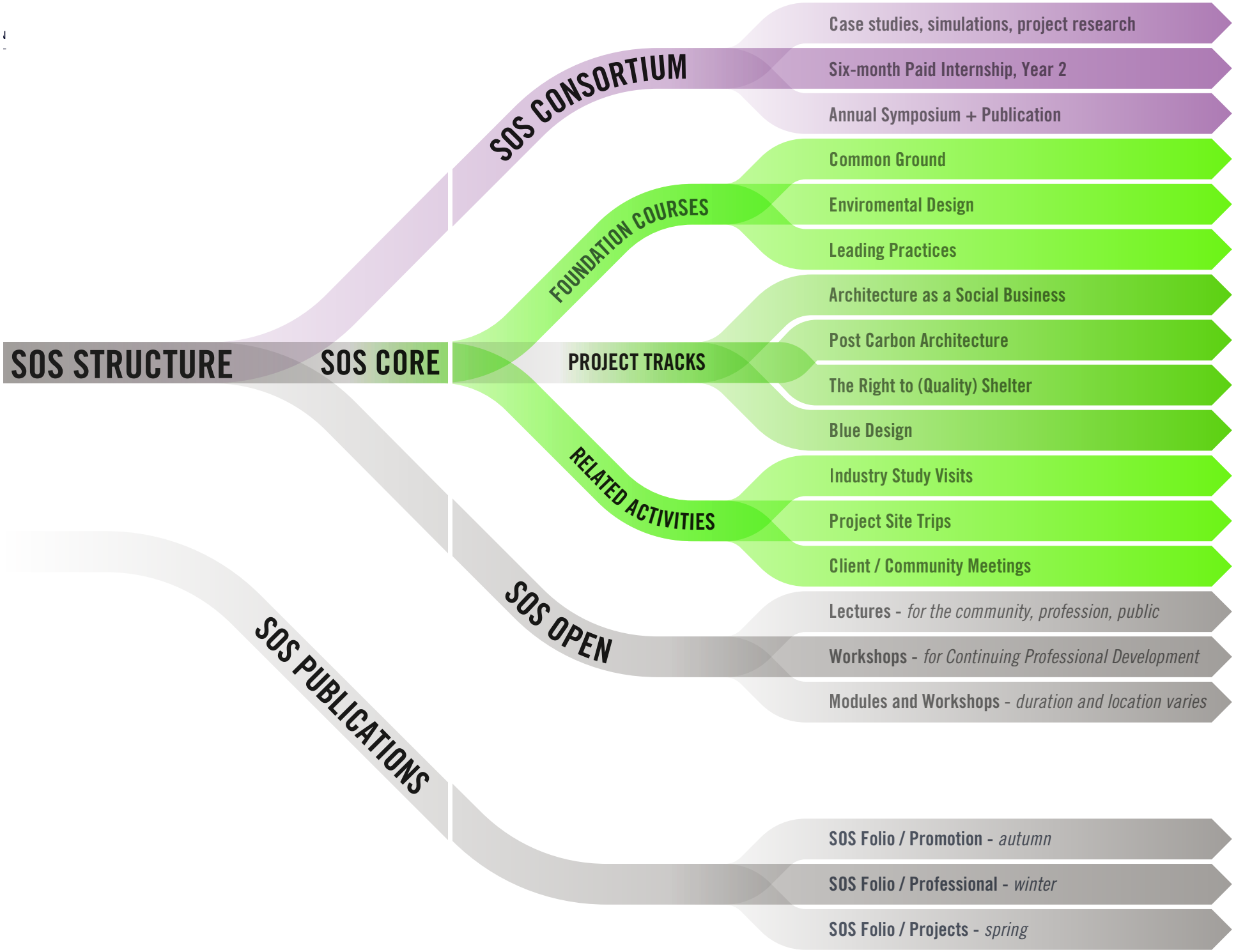


SOS + Consortium members share resources internally

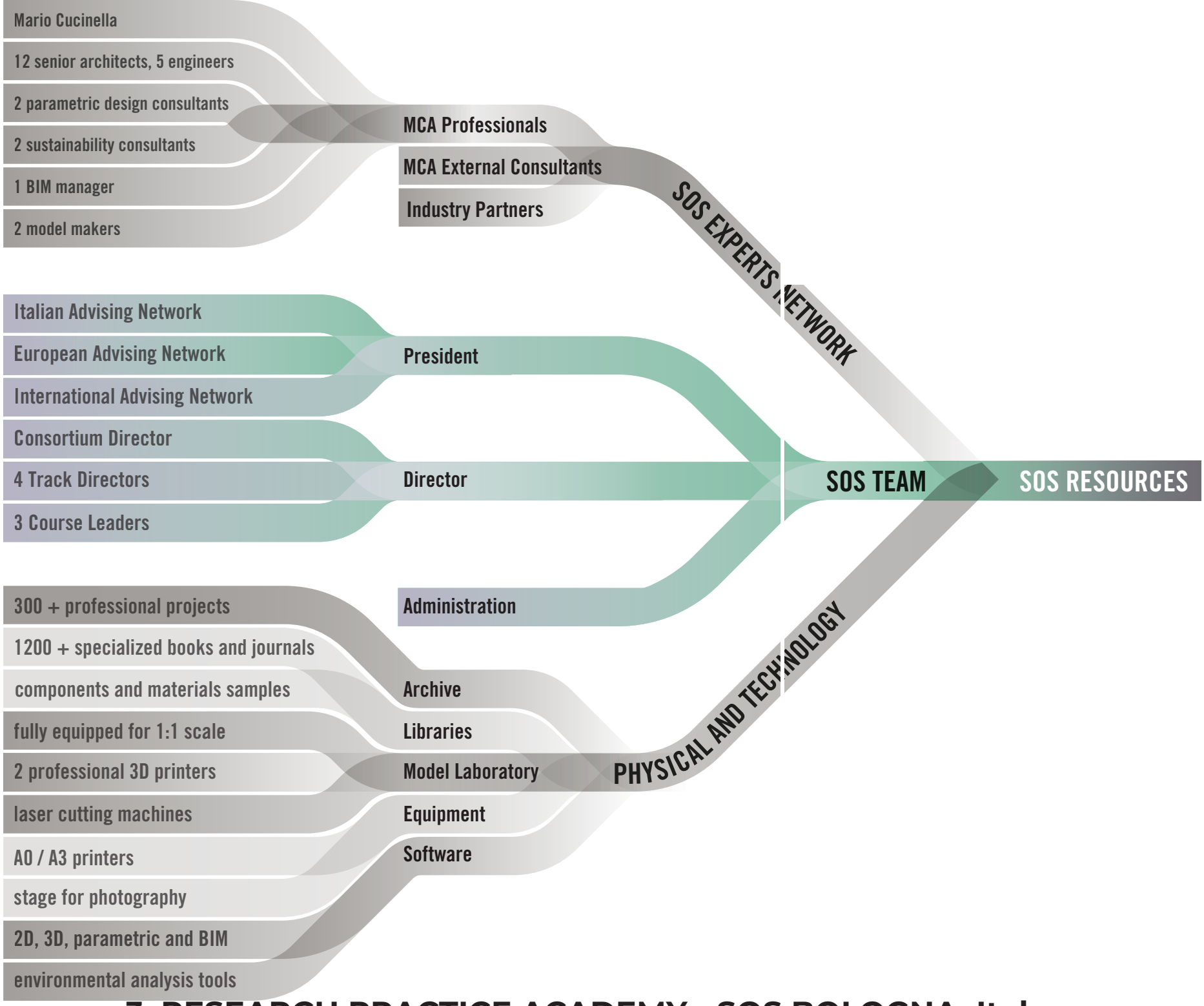
SOS produces professional publication + hosts annual symposium with CPD credits

SOS + Consortium members share knowledge externally

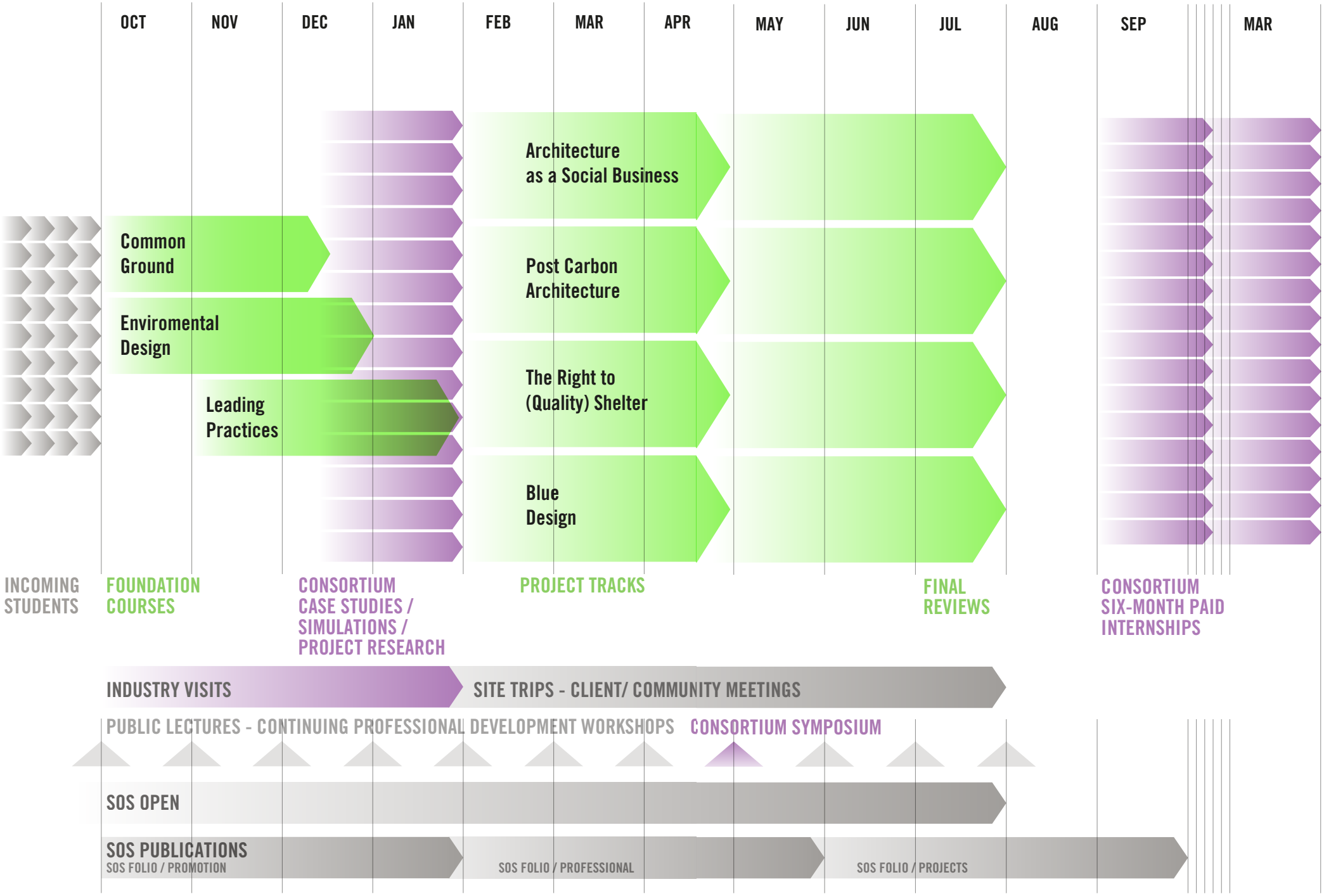
3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy



3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy



3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy



3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy

COMMON GROUND

The course introduces students to the Culture of Sustainability through dialogue with different personalities, but who share a vision of the future.

Course Leader: Alberto Bruno
9 weeks (2 days/week)

▸ Common Ground analyzes key issues and challenges that lie ahead, providing the knowledge and tools necessary to design a decent and fair future for all.

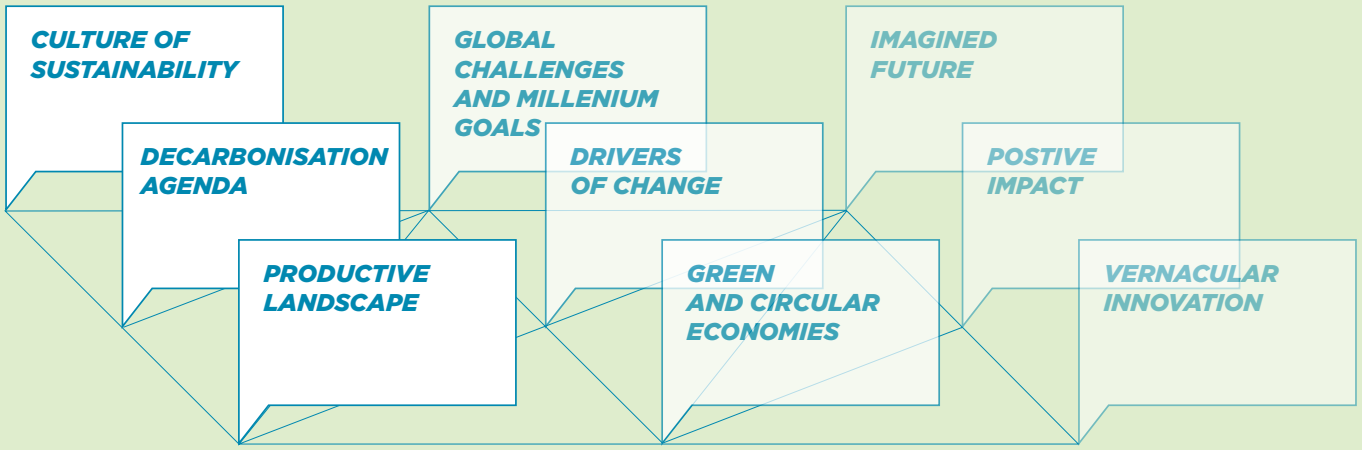
▸ Common Ground fosters growth of a group of creatives engaged in the search for appropriate solutions in harmony with the environment and the cultural context.

▸ Common Ground includes keywords for building a 'common vocabulary' of the key themes of sustainability, the environmental challenges we face in the coming decades as well as the emerging needs of people. The course is engaged in developing the 'meaning' of keywords through the acquisition of new knowledge. Moreover, a special focus is devoted to analyse and discuss the body of work already developed in the previous editions as a springboard to identify the course research themes. Students are involved in processing data collected to identify main themes and challenges.

▸ Common ground is based on a multidisciplinary introduction to the principal lines of research and professional activities in the field of sustainability. Classes are taught by established professionals, innovators and researchers, who will engage in discussion with students. Topics include climate, emerging technologies, social innovation, the relationship between economy and ecology, growth forecasts and opportunities for society and the region.

KEY THEMES

KEYWORDS



ENVIRONMENTAL DESIGN

The course goal is to apply an understanding of the principles, strategies and analytic techniques of environmental design to real world design problems at both the urban and individual building scales.

Course Leader: Brian Ford
11 weeks (3 days/week)
+ thematic seminars and workshops

A key objective is to embed evidence-based environmental design thinking within the design process. Students have the opportunity to apply this approach to the critical evaluation of casestudy projects and of their own proposals.

The final design exercise contributes to the focus on current projects developed by Consortium Members.

In the project phase, the design development is based on environmental performance targets. In addition, a series of thematic workshops and seminars are organized to address specific project objectives, including the selection of material and components according to environmental criterias, the exploitation of renewable energy sources and techniques for water and waste management.

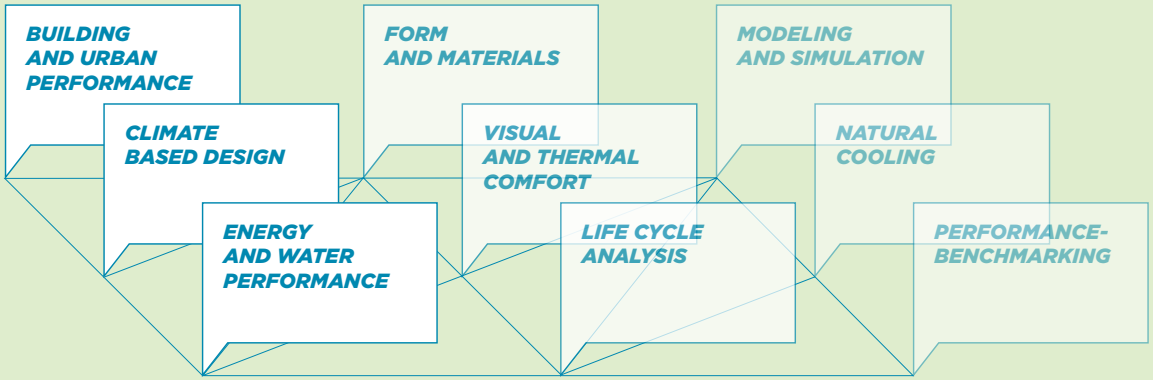
MODULES		*TOOLS*
1. COMFORT AND WELL BEING	→	CBE THERMAL COMFORT
2. CLIMATE AND CONTEXT	→	CLIMATE CONSULTANT
3. URBAN COMFORT	→	ECOTECT + FLOW DESIGN
4. URBAN ENVIRONMENT AND DESIGN	→	ECOTECT + FLOW DESIGN
5. SOLAR CONTROL	→	SOLAR TOOL + ECOTECT + LADYBUG
6. DAYLIGHT DESIGN /1	→	RADIANCE + HONEYBEE
7. DAYLIGHT DESIGN /2	→	RADIANCE + DAYSIM + HONEYBEE
8. THERMAL PERFORMANCE /1	→	PASSIVE DESIGN ASSISTANT
9. THERMAL PERFORMANCE /2	→	PASSIVE DESIGN ASSISTANT
10. VENTILATION AND AIR MOVEMENT	→	OPTIVENT
11. PASSIVE COOLING	→	PHDC AIR FLOW

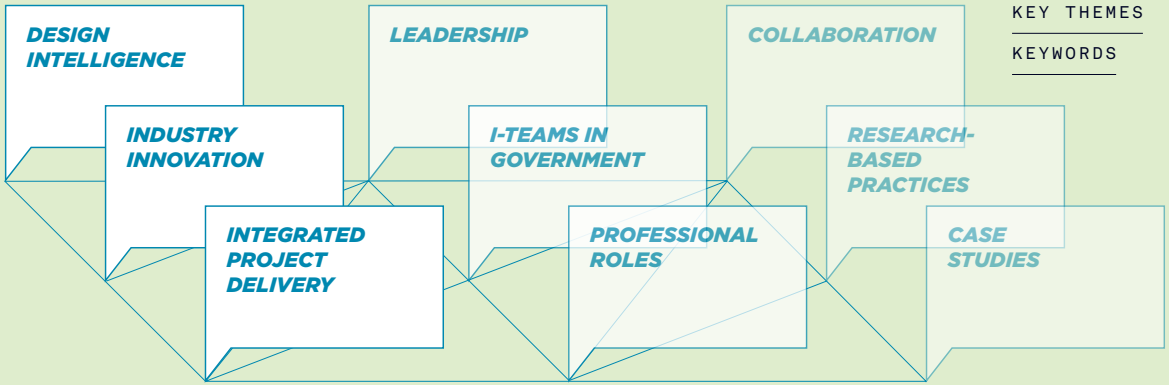
Additional Thematic
Workshops and Seminars
(to be selected according
to project objectives)

MODULES
1. ENVIRONMENTAL IMPACT OF MATERIALS AND COMPONENTS
2. LIFE CYCLE ANALYSIS – CRADLE TO CRADLE DESIGN THINKING
3. RENEWABLE ENERGY SOURCES
4. WATER MANAGEMENT
5. ENVIRONMENTAL ASSESSMENT METHODS OVERVIEW
6. PERFORMANCE BENCHMARKING

KEY THEMES

KEYWORDS





KEY THEMES

KEYWORDS

LEADING PRACTICES

The course is defined by both as an investigation and intense study of global "leading practices" in the building industry in the broadest sense. The goal is to provide the ability and potential for design professionals and specifically SOS students "to lead" in the professional, in practice and in projects.

Course Lecturers: International Guests
9 weeks (1 day/week) +
3 weeks (4 days per week) for Consortium case studies, simulation or project research

The course covers three main topic areas to provide approaches, processes, strategies and structures for projects in the four tracks.

▸
INTELLIGENT INVESTMENT IN THE PROFESSION
Content focuses on the role of professionals in Design, Planning and Development processes at large scales.

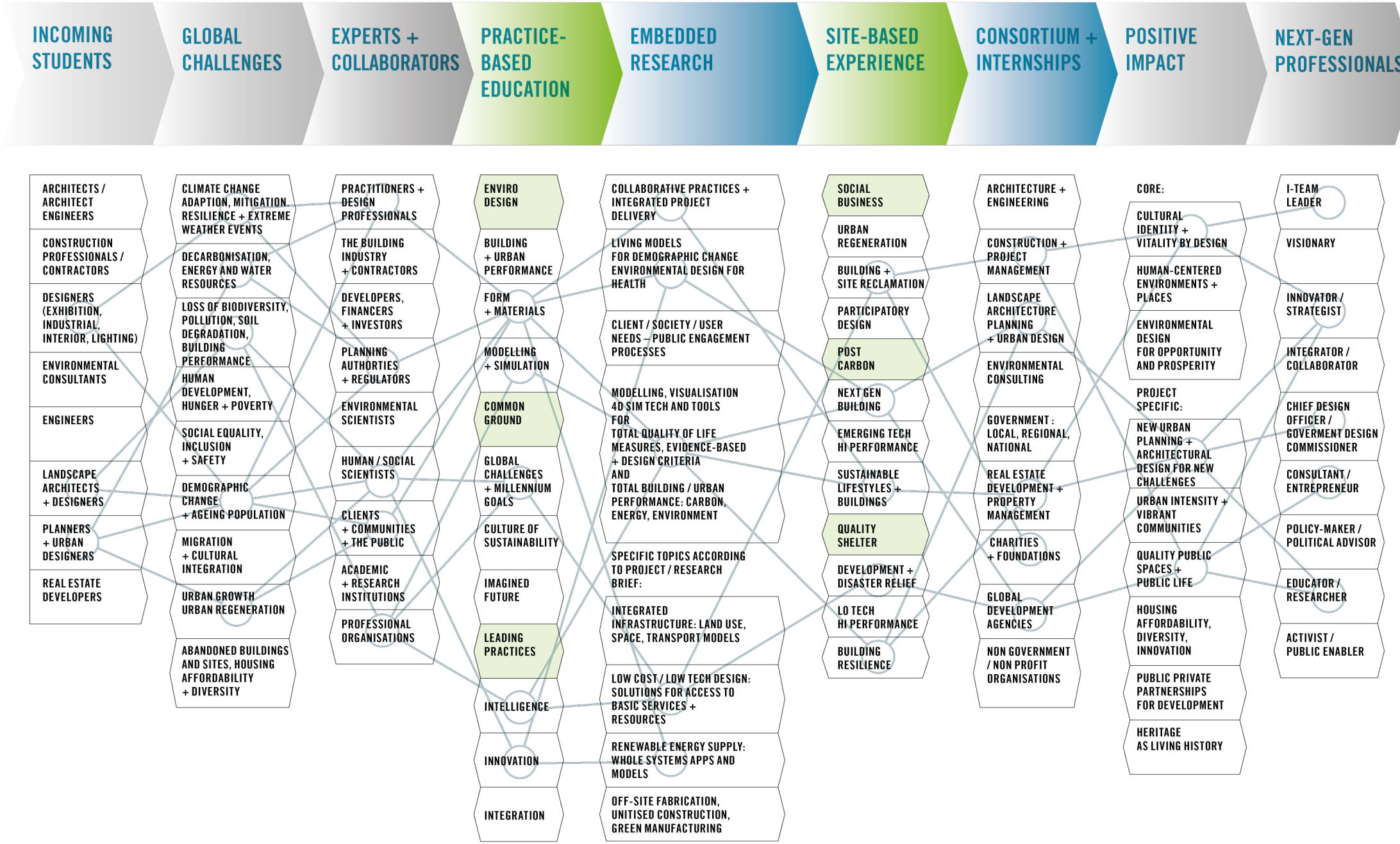
▸
INDUSTRY INNOVATION IN PRACTICE
Content focuses on the emergence of practice-based use-inspired research leading to building innovation.

▸
INTEGRATED DELIVERY FOR PROJECTS
Content focuses on the particular methods of high performance teams to deliver high performance projects at a range of scales.

Leading Practices is designed to support the SOS Consortium for Practice and Research. Specifically, a one month intense period following the foundation courses is devoted to developing comprehensive and detailed case studies, simulations and / or project research for the SOS Consortium Members.

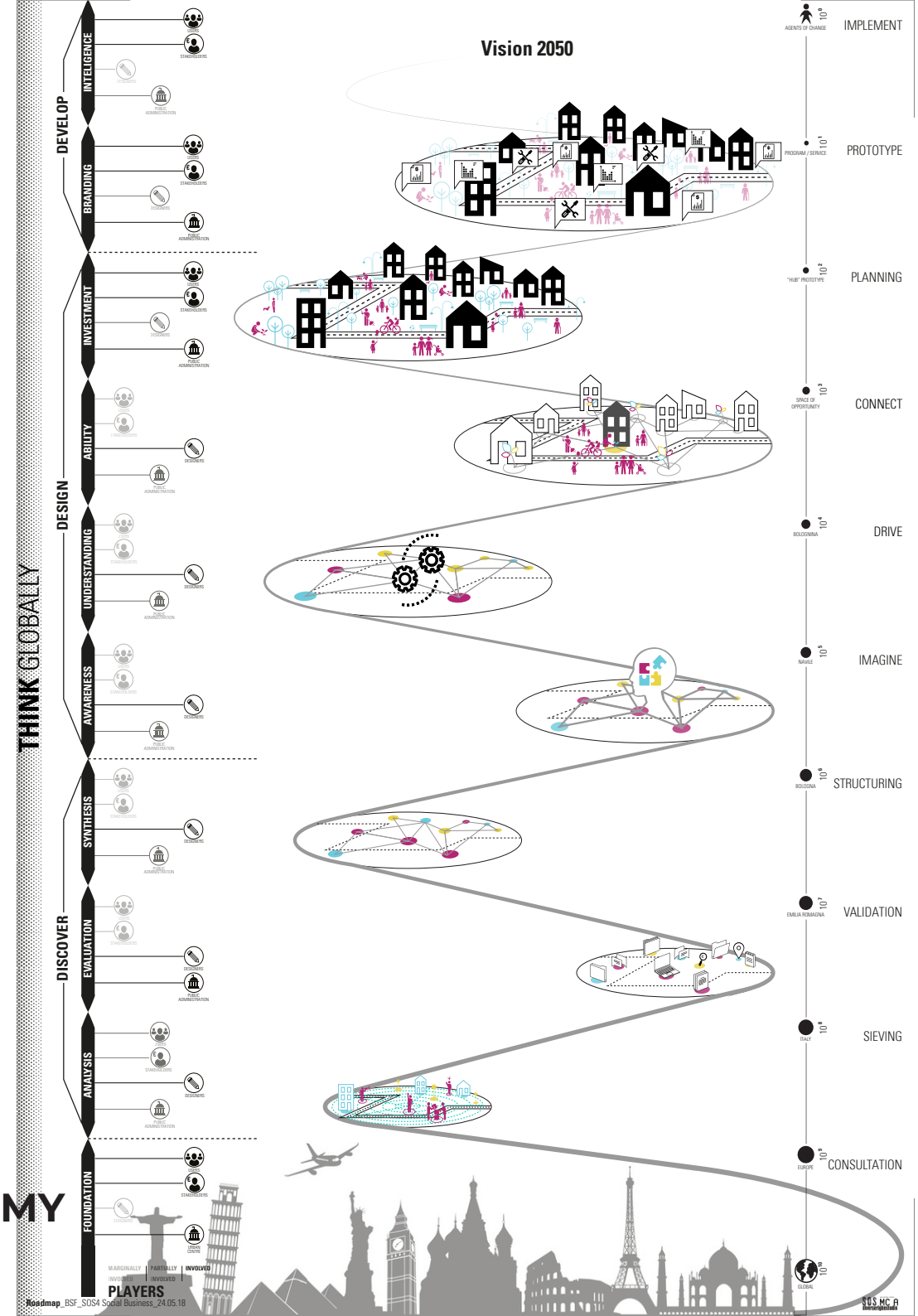
CASE STUDIES FOR PUBLICATION ARE STRUCTURED AS FOLLOWS:

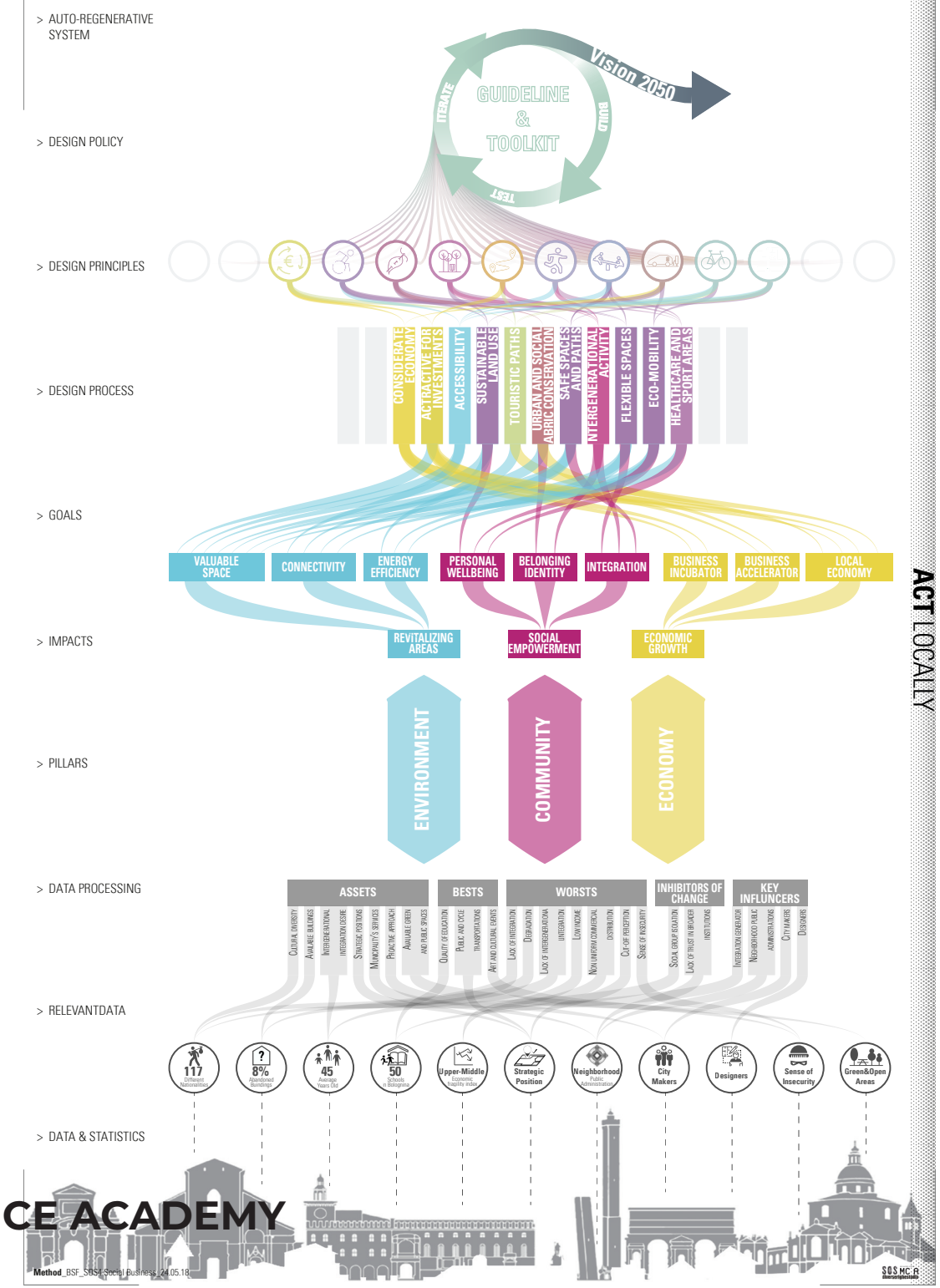
PROJECT SET-UP	→	DEVELOPING A BRIEF \ DEVELOPING A TEAM \ CONTRACTS AND LEGAL REQUIREMENTS
HIGH PERFORMANCE DESIGN	→	ECONOMIC AND SOCIAL PERFORMANCE\ ENVIRONMENTAL PERFORMANCE \ POSITIVE IMPACT
LEADERSHIP STRATEGIES	→	TEAM BUILDING AND COLLABORATIVE CULTURE \ GOALS AND ALIGNING STAKEHOLDER VALUES \ ROLE DEFINITION AND ACCOUNTABILITY
LOGISTICS AND PROCESS TACTICS	→	MANAGING DESIGN COMPLEXITY \ MANAGING SCHEDULE AND BUDGET \ BIM, PARAMETRICS AND DESIGN DOCUMENTATION
BUILDING INNOVATIONS		



3. RESEARCH PRACTICE ACADEMY - SOS BOLOGNA, Italy

3. RESEARCH PRACTICE ACADEMY
SOS BOLOGNA, Italy
Architecture as a Social Business





3. RESEARCH PRACTICE ACADEMY
SOS BOLOGNA, Italy
Spaces of Opportunity

3. RESEARCH PRACTICE ACADEMY
SOS BOLOGNA, Italy
Local Culture

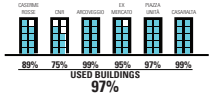
IMPACT > INDICATORS > DATA MAPPING > RELEVANT DATA > PROFILE

> BOLOGNINA
6 DISTRICTS

WHAT MAKES THE SPACES VALUABLE AND CONNECTED?

use of buildings (2011)

buildings in good status (2011)



ENVIRONMENTAL PROFILE

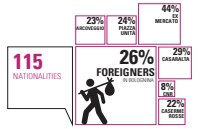
WHAT MAKES THE PEOPLE A HAPPY COMMUNITY?

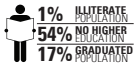
mixed cultures (2017)

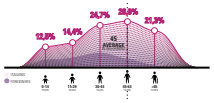
cultural level (2011)

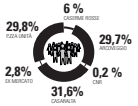
mixed ages (2017)

social density (2017)

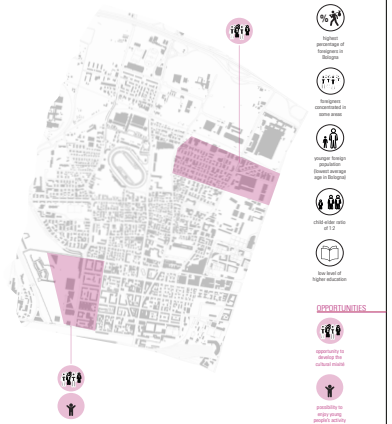








SOCIO-CULTURAL PROFILE



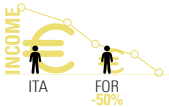
WHAT AFFECTS THE ECONOMICAL SELF-SUFFICIENCE?

income (2014)

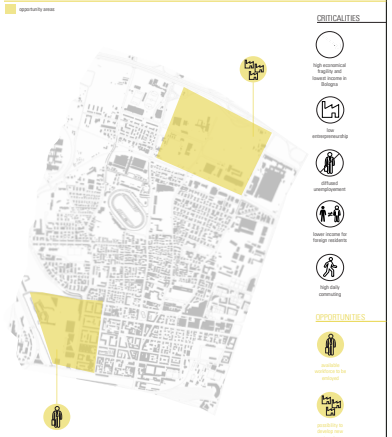
unemployement (2011)

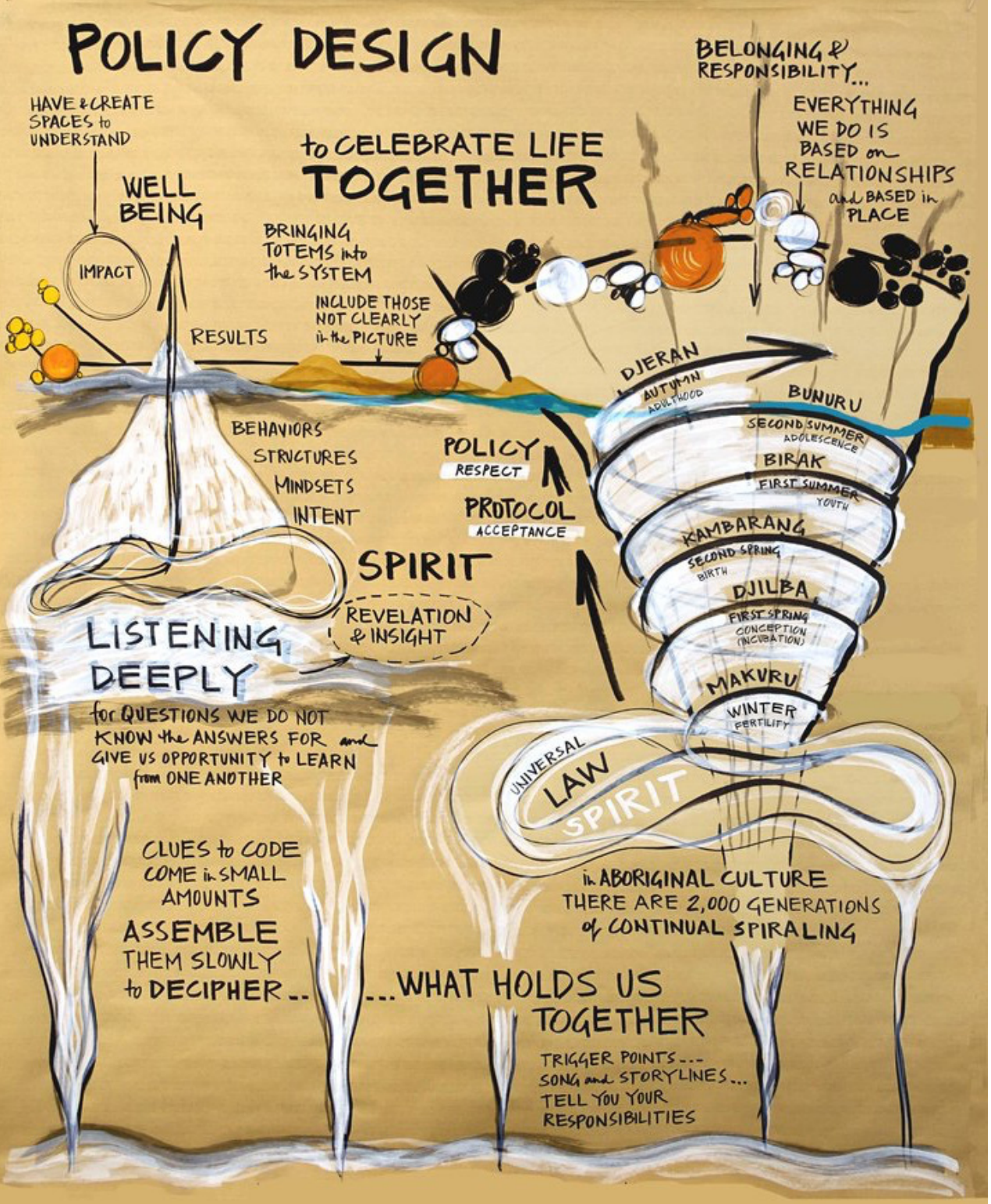
entrepreneurship (2011)

economical fragility (2016)



ECONOMIC PROFILE





ACE Architects Council of Europe
Internship Alignment Across Europe

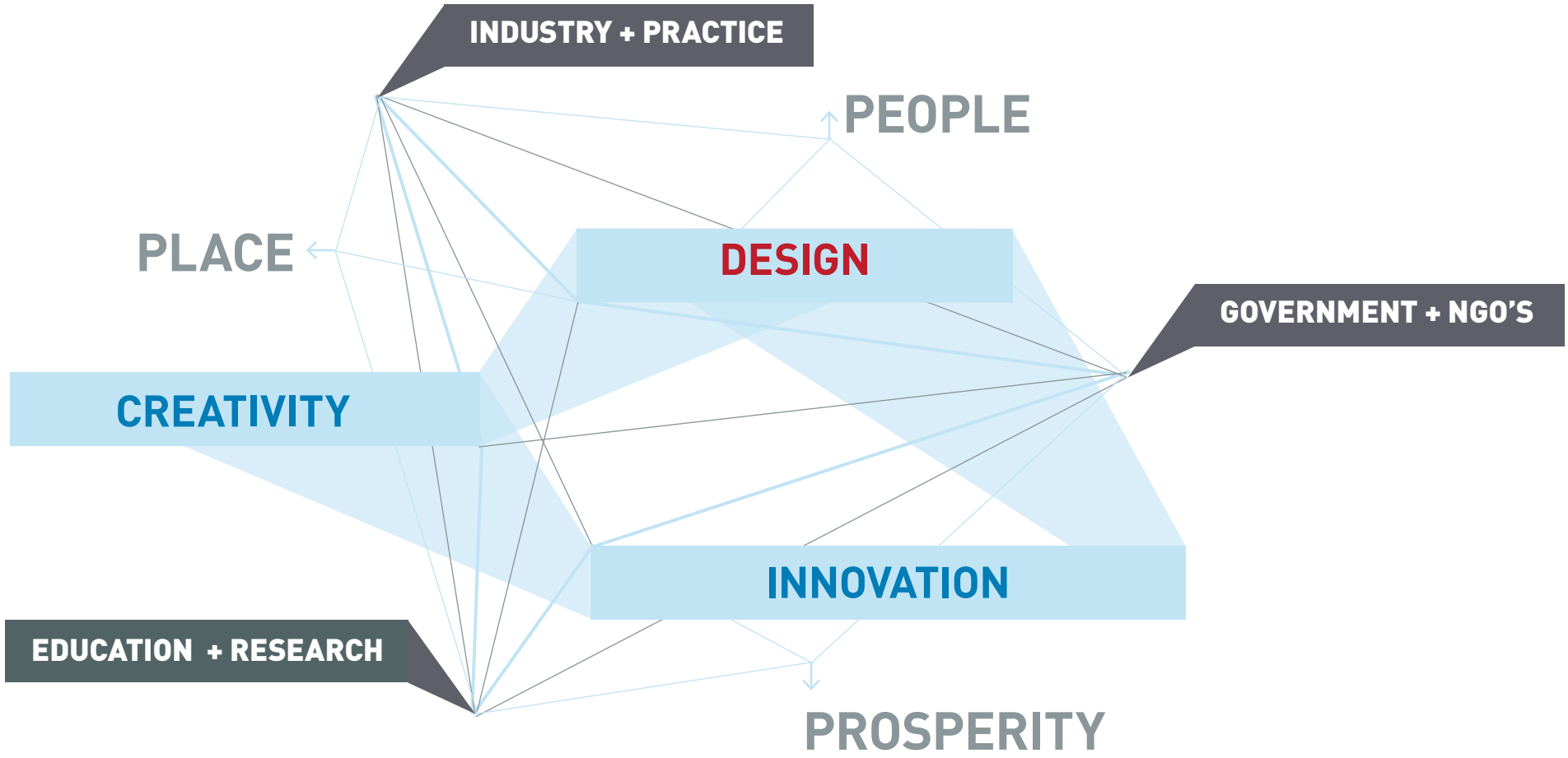
BEDA Bureau of European Designers Associa
Strategic Plan on Value of Design

RIBA United Kingdom
Integrated Design Policy

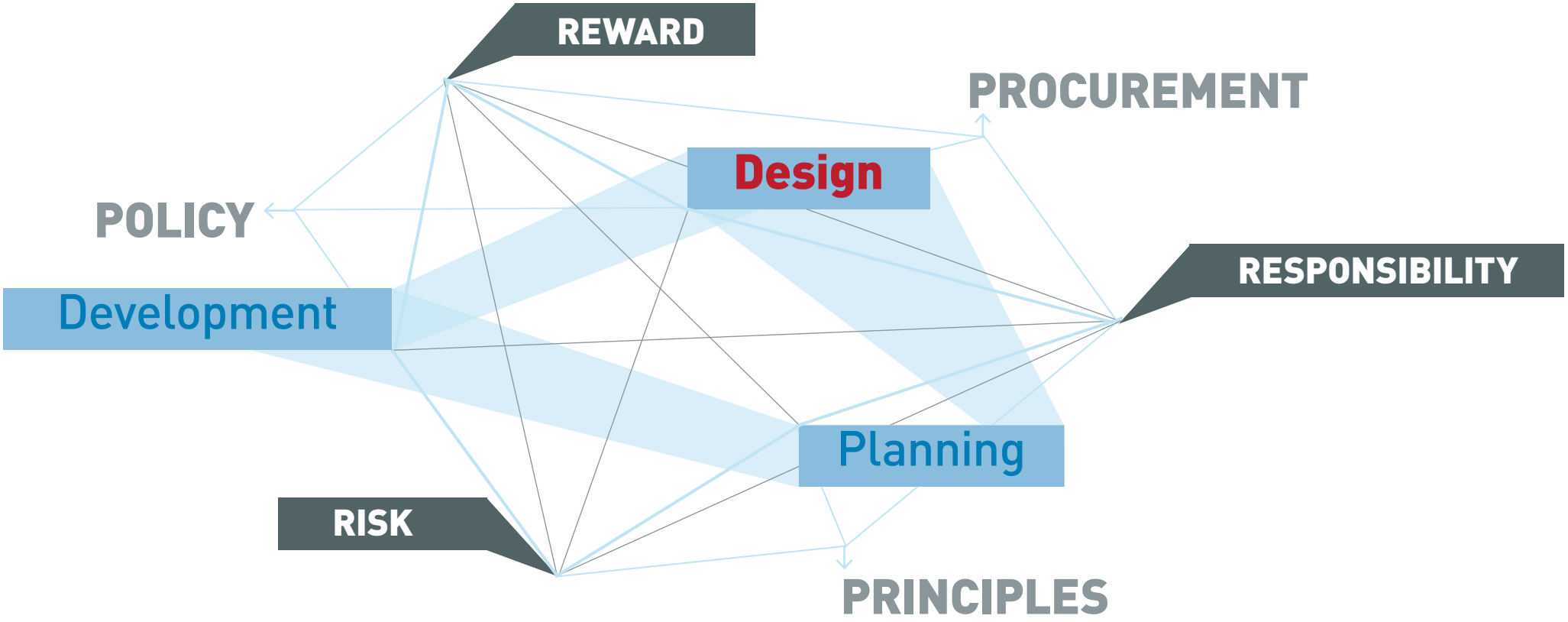
RIAI Ireland
Built Environment Policy

Office of the Government Architect
New South Wales, Australia
"Better Placed" Design Policy

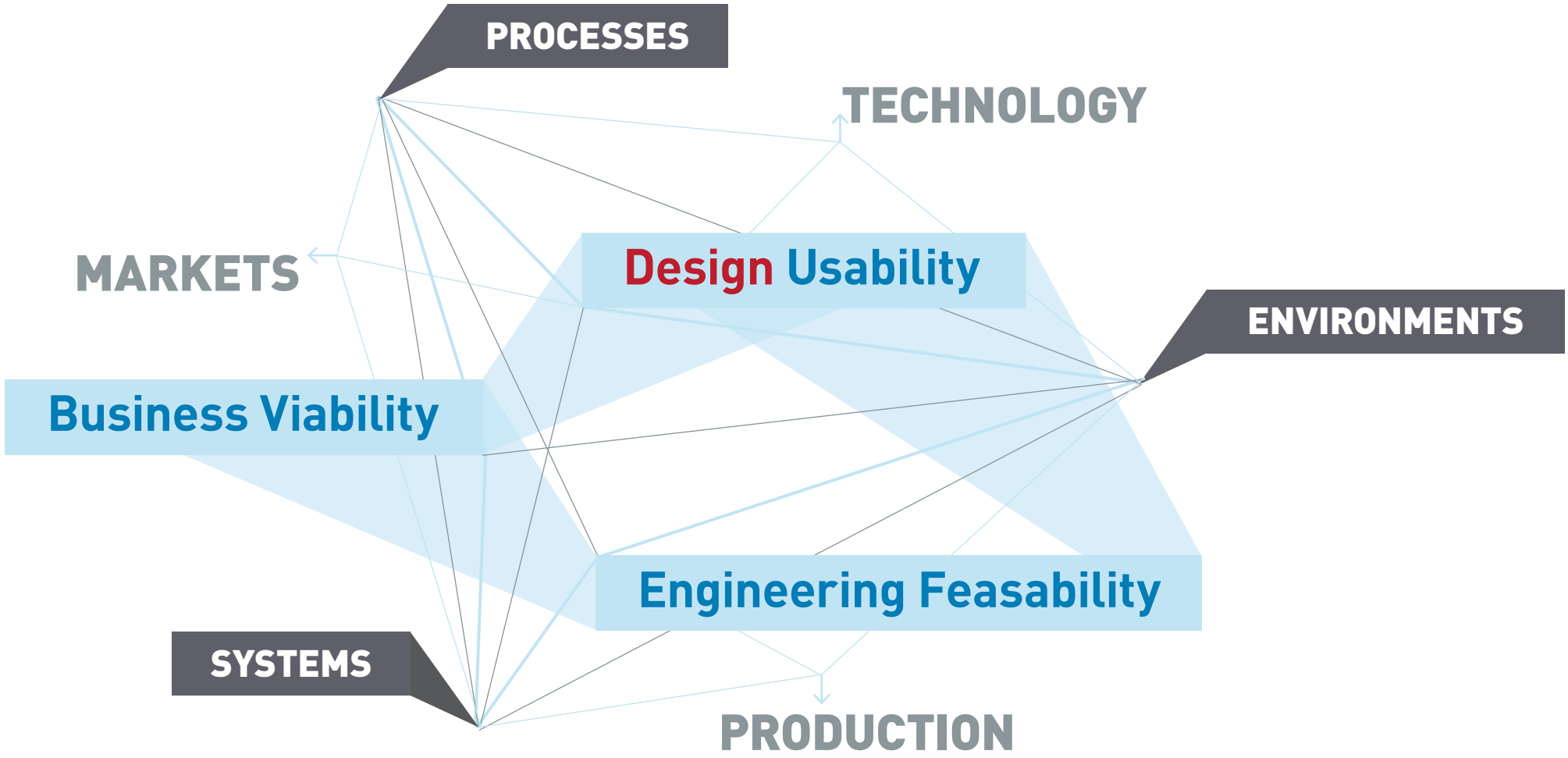
4. STRATEGIC AND POLICY DESIGN



4. STRATEGIC AND POLICY DESIGN > GLOBAL INNOVATION



4. STRATEGIC AND POLICY DESIGN > LOCAL INNOVATION



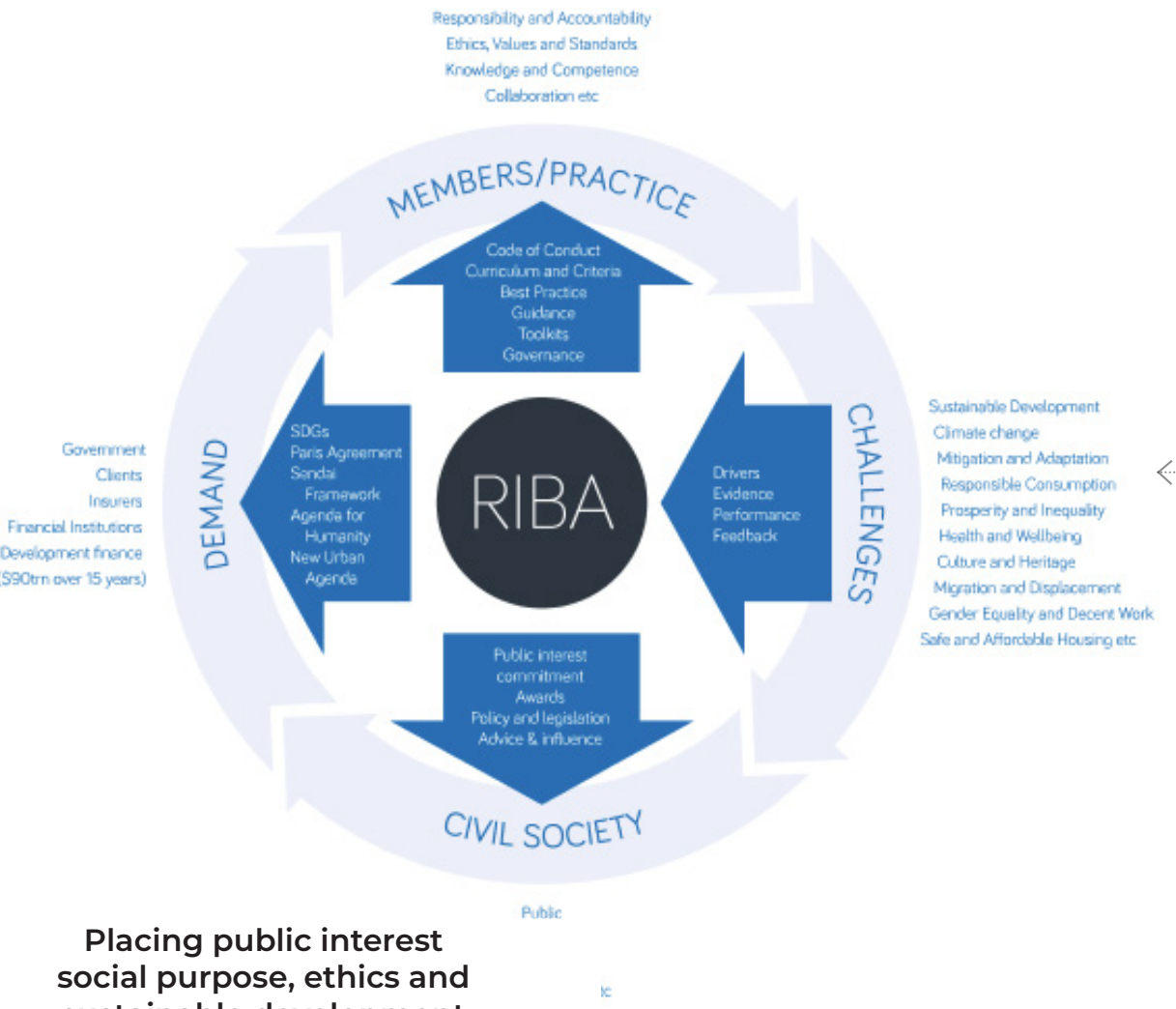
4. STRATEGIC AND POLICY DESIGN > INDUSTRY INNOVATION

Government Policy on Architecture 2009 – 2015

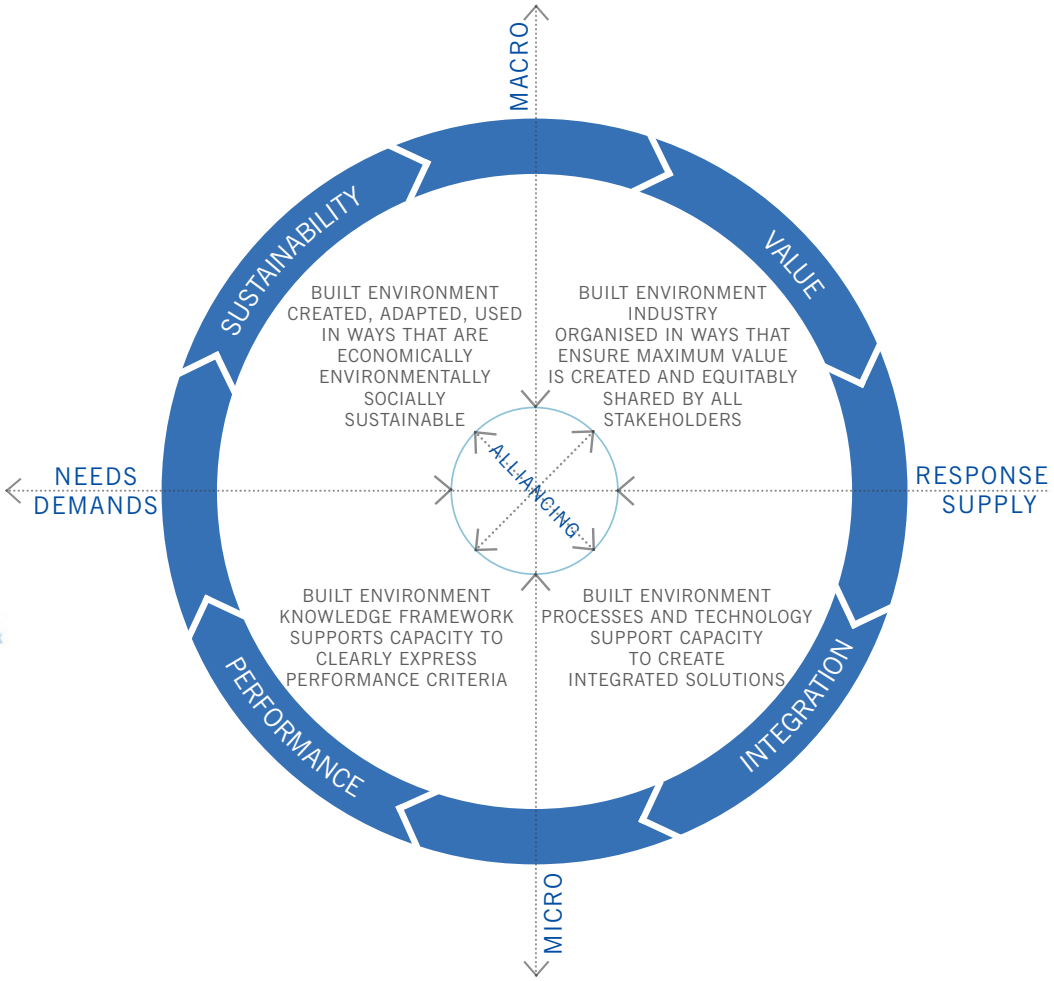
Towards a Sustainable Future:
Delivering Quality within the Built Environment

Comhshaol, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government

4. STRATEGIC AND POLICY DESIGN > IRELAND RAIA



Placing public interest social purpose, ethics and sustainable development AT THE HEART of the Institute



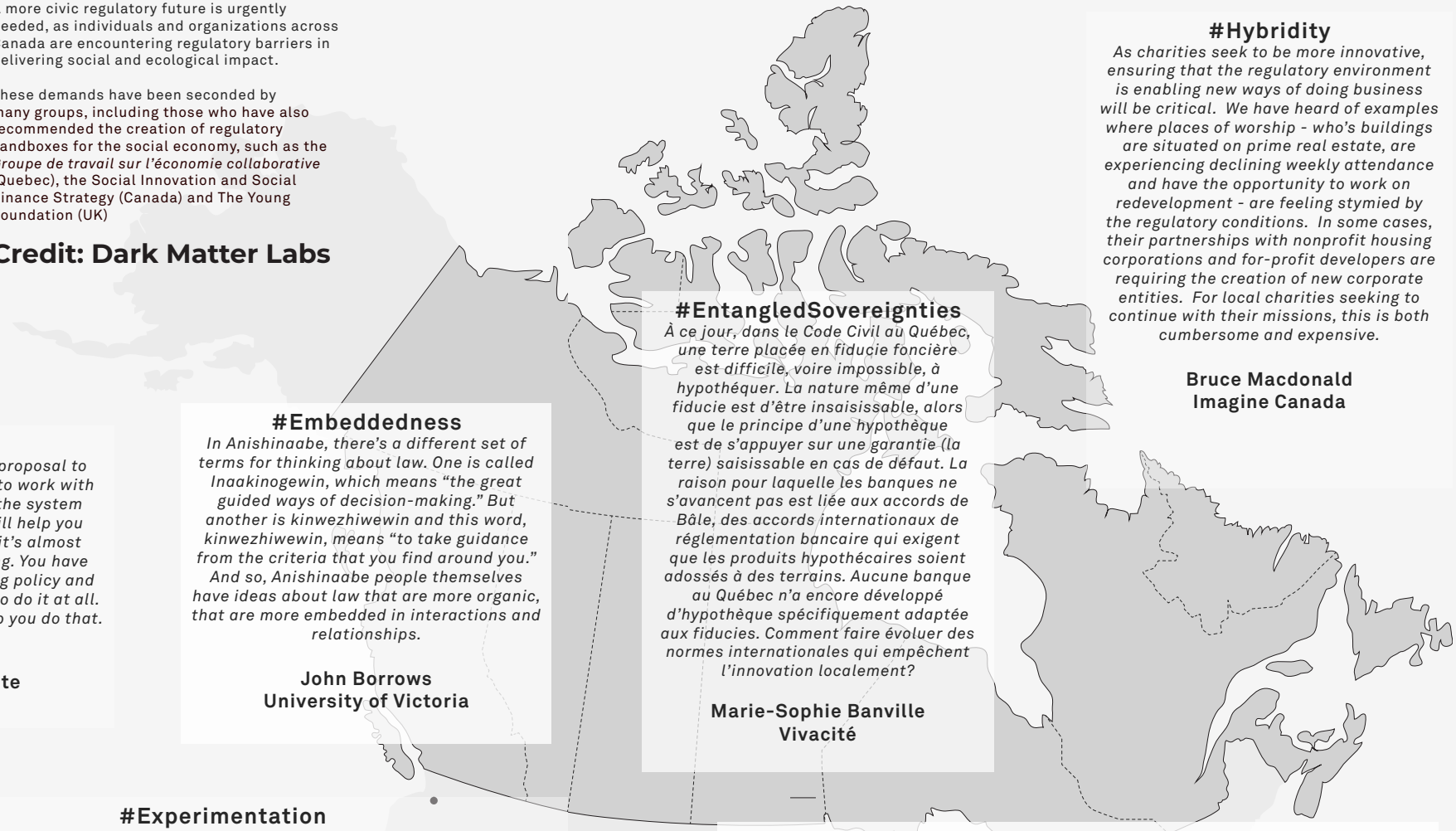
4. STRATEGIC AND POLICY DESIGN > RIBA United Kingdom

THE RULES NEED CHANGING

A more civic regulatory future is urgently needed, as individuals and organizations across Canada are encountering regulatory barriers in delivering social and ecological impact.

These demands have been seconded by many groups, including those who have also recommended the creation of regulatory sandboxes for the social economy, such as the *Groupe de travail sur l'économie collaborative* (Quebec), the Social Innovation and Social Finance Strategy (Canada) and The Young Foundation (UK)

Credit: Dark Matter Labs



#Hybridity

As charities seek to be more innovative, ensuring that the regulatory environment is enabling new ways of doing business will be critical. We have heard of examples where places of worship - who's buildings are situated on prime real estate, are experiencing declining weekly attendance and have the opportunity to work on redevelopment - are feeling stymied by the regulatory conditions. In some cases, their partnerships with nonprofit housing corporations and for-profit developers are requiring the creation of new corporate entities. For local charities seeking to continue with their missions, this is both cumbersome and expensive.

Bruce Macdonald
Imagine Canada

#EntangledSovereignties

À ce jour, dans le Code Civil au Québec, une terre placée en fiducie foncière est difficile, voire impossible, à hypothéquer. La nature même d'une fiducie est d'être insaisissable, alors que le principe d'une hypothèque est de s'appuyer sur une garantie (la terre) saisissable en cas de défaut. La raison pour laquelle les banques ne s'avancent pas est liée aux accords de Bâle, des accords internationaux de réglementation bancaire qui exigent que les produits hypothécaires soient adossés à des terrains. Aucune banque au Québec n'a encore développé d'hypothèque spécifiquement adaptée aux fiducies. Comment faire évoluer des normes internationales qui empêchent l'innovation localement?

Marie-Sophie Banville
Vivacité

#Embeddedness

In Anishinaabe, there's a different set of terms for thinking about law. One is called Inaakinogewin, which means "the great guided ways of decision-making." But another is kinwezhiwewin and this word, kinwezhiwewin, means "to take guidance from the criteria that you find around you." And so, Anishinaabe people themselves have ideas about law that are more organic, that are more embedded in interactions and relationships.

John Borrows
University of Victoria

#Legibility

There's no place to submit a proposal to change regulations. You have to work with bureaucrats that know how the system works from the inside and will help you navigate it. Without a guide it's almost impossible to change anything. You have to be really good at influencing policy and regulation in order to be able to do it at all. There is no organization to help you do that.

Paul Born
Tamarack Institute

#Experimentation

Novel experimentation and demonstration are highly effective ways to drive the necessary regulatory frameworks (e.g. building code, by-laws, finance) and industry practices forward if we are to realistically address pressing environmental, economic, and societal challenges. The political will to tether legislative requirements and temporary incentives designed to mitigate inevitable risks is crucial to the success of first adopters if sustainable development goals are to be achieved. The triad of incentivize-legislate-demonstrate is a proven strategy for innovation, in expediting ambitious societal and climate change goals, and in the creation of new economies.

Michael Jemtrud
McGill University

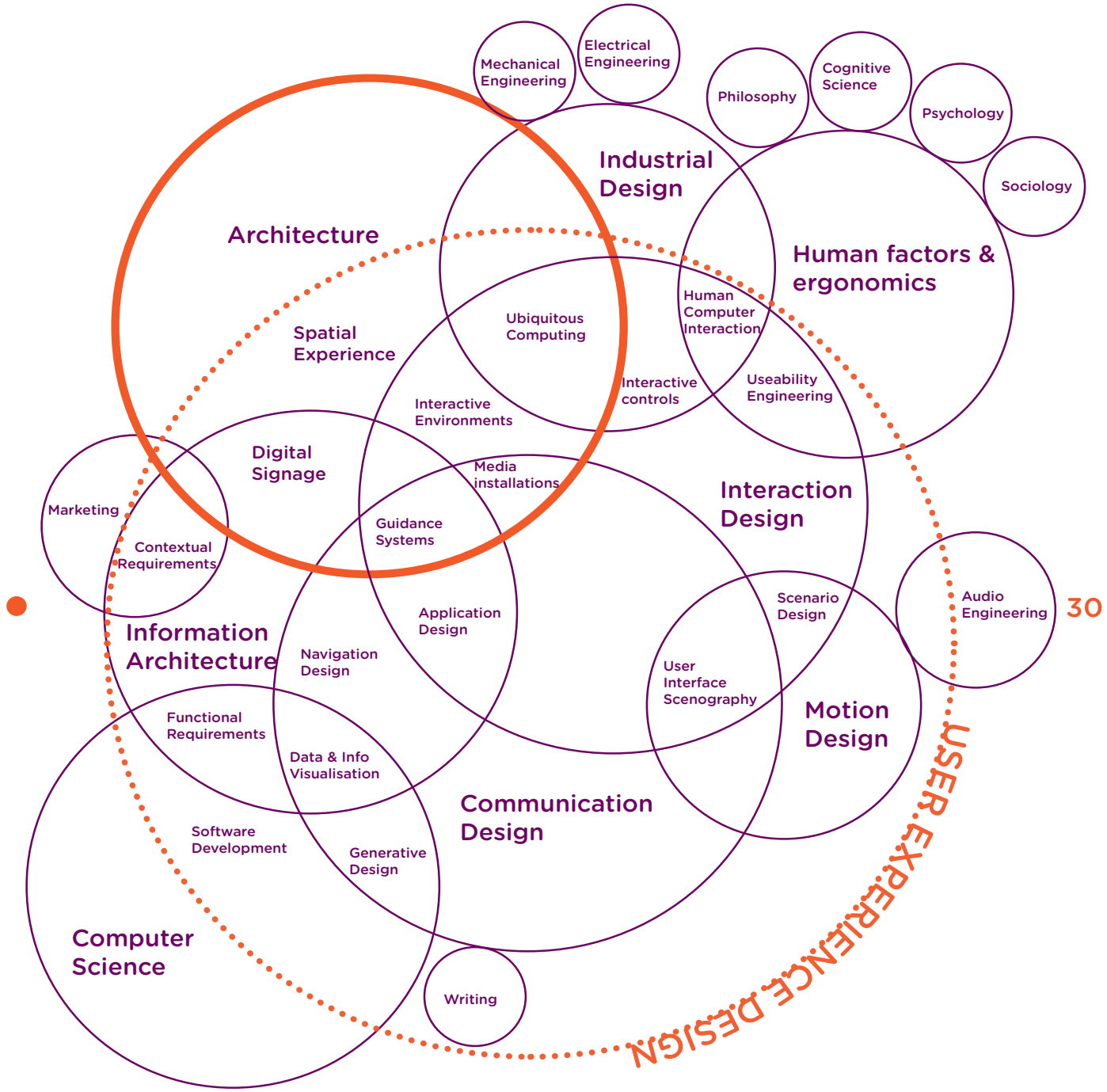
#UnknownJurisdictionOfResponsibility

Pour notre projet de géothermie de ruelle, nous souhaitons implémenter une infrastructure gérée par une coopérative (qui n'inclut a priori pas l'arrondissement dans sa gouvernance), mais pour un projet dans une ruelle qui, elle, est un espace public. Quelle est la réglementation applicable dans ce cas? Ce n'est pas clair. Ce flou réglementaire et le manque d'outils pour y faire face ralentit nos efforts de transition écologique avec la municipalité. Nous pourrions saisir davantage d'opportunités collectives si nous étions capables de mettre en place de réels processus de co-production des changements règlementaires. Aujourd'hui, trop souvent, l'appareil gouvernemental prend les demandes et les traite de façon peu transparente, tant au niveau du processus que du calendrier.

Bertrand Fouss
Solon

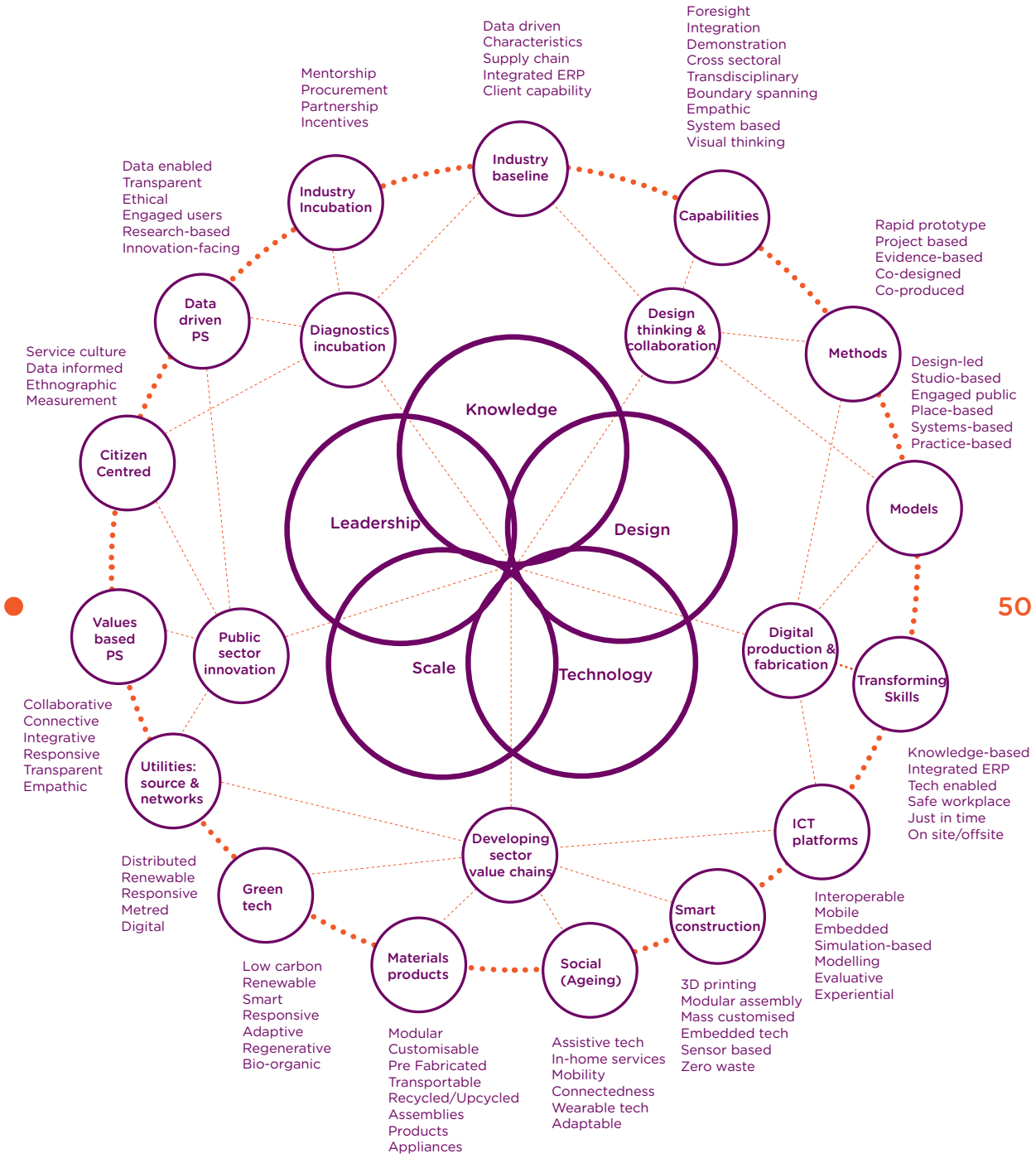
4. STRATEGIC AND POLICY DESIGN > CANADA Civic Regulatory Futures

4. STRATEGIC AND POLICY DESIGN > New South Wales INTEGRATED DESIGN



Credit > New South Wales Architects Registration Board

4. STRATEGIC AND POLICY DESIGN > COLLABORATIVE INNOVATION



Credit > New South Wales Architects Registration Board

4. STRATEGIC AND POLICY DESIGN > EXPERTISE

PLACE/POLICY

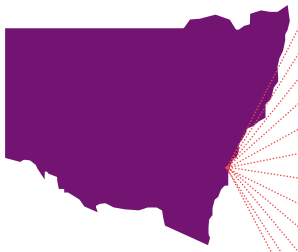
NSW: Making it happen

PRIORITIES

NSW Premier's personal priorities

HOW ARCHITECTURE HELPS DELIVER

How and where architecture makes its contribution

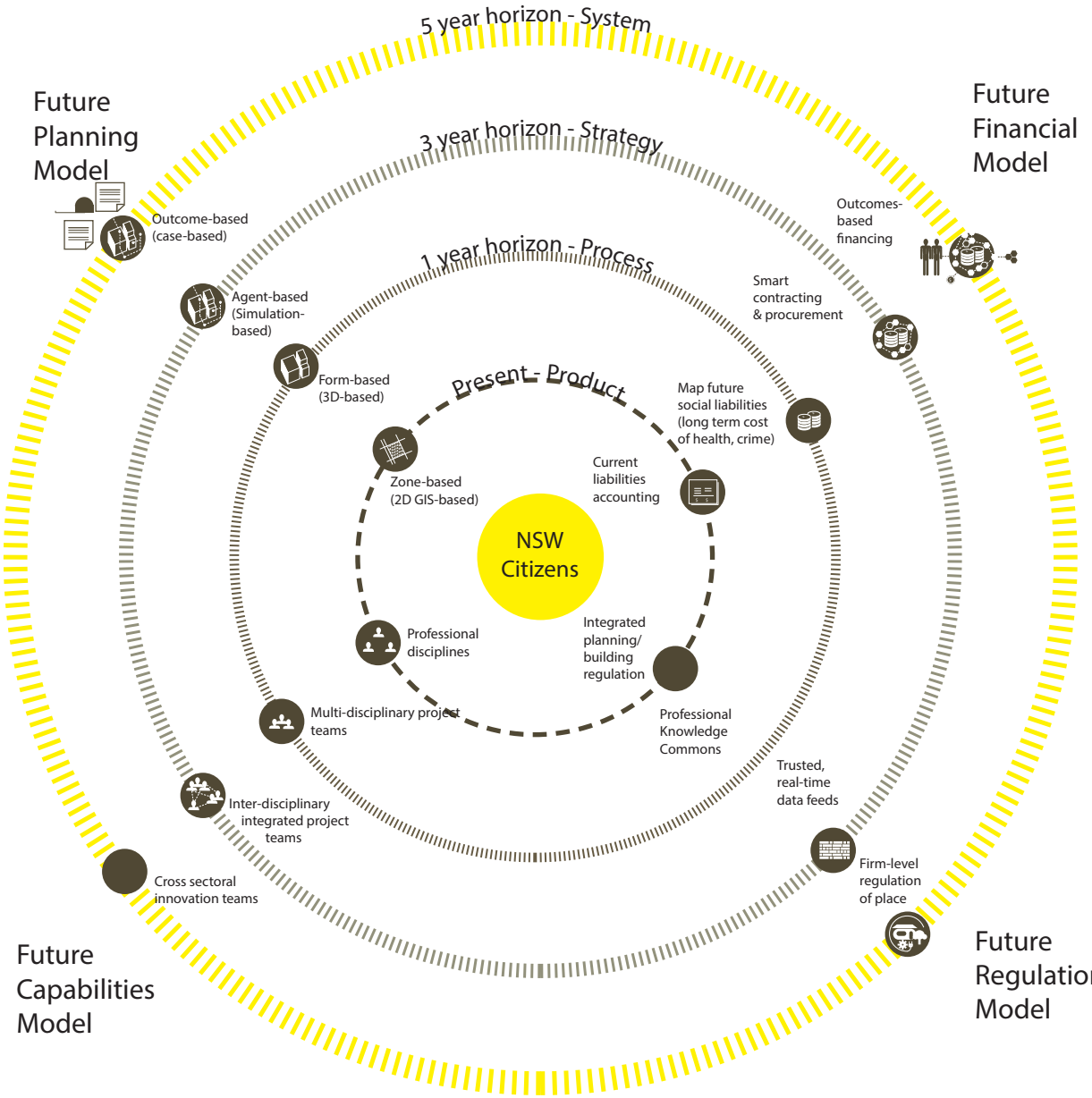


- Creating jobs
- Building infrastructure
- Reducing domestic violence
- Improving service levels in hospitals
- Tackling childhood obesity
- Improving education results
- Protecting our kids
- Reducing youth homelessness
- Driving public sector diversity
- Keeping our environment clean
- Faster housing approvals
- Improving government services

- Regional infrastructure and facilities based on local skills and materials that boosts cultural capital of regional communities and production of local trade and manufacturing innovation
- Contribute to development of STEM and STEAM capabilities in our next generation of founders and job makers through schools and univeristy teaching and research.
- World class rail, bus and light rail facilities suited to Australian conditions; safe, bright and welcoming
- Desirable, walkable precincts activated with people, business and culture to promote walking and biking as a preferred option. Design-in open stairs, green roofs and open sight lines in buildings to promote incidental exercise in the workplace.
- Patient-centred hospitals and other health facilities to aid faster recovery; medical research institutes, laboratories and universities to promote discovery.
- Accessible, inclusive and dignified housing, public space and community facilities suited to self-directed care and consistent with Liveable Housing Australia design standards
- Continue to develop innovative affordable and social housing models that reduce up front & ongoing costs
- Schools, VET & University campuses and buildings designed to promote new education standards and promote NSW as a smart education state.
- Designing out crime through environmental design and informal street surveillance from active building frontages, technologies and community action.
- Courts, remand & other justice facilities that balance the need for security with transparent and humane spaces for support and rehabilitation.
- Precinct master planning that embeds principles of liveability and sustainability in buildings and the spaces between. Innovative buildings that retain and reuse water, generate power and reduce demand on the grid.
- Precincts, apartment buildings & houses that promote strong healthy communities with strong social networks.
- Buildings designed to allow adaption and use by community groups for gathering & social enterprise
- Direct involvement by local communities in the design and planning decisions to ensure local knowledge and culture is retained and enhanced, and development is supported.
- Design of facilities that integrate sport, culture, recreation and creative enterprise in innovative, well located and well used facilities, connected to public open space.
- Visually-engaging, evidence based design collateral to communicate the opportunity of change through improving the environment we build around us.
- Events, talks & festivals designed to inform, engage and educate the NSW community on the options and alternatives for our future built environment.

Credit > New South Wales Architects Registration Board

4. STRATEGIC AND POLICY DESIGN > IMPACT



Future Planning Model

- Zone-based 2D GIS
- Form-based 3D BIM
- Agent-based 4D ABMS
- Outcomes-based/cased-based

Future Capabilities Model

- Professional disciplines
- Multi-disciplinary project teams
- Inter-disciplinary, integrated project teams
- Cross-sectoral innovation teams

Future Financial Model

- Current liabilities accounting
- Future social liabilities accounting
- Smart contracting & procurement
- Outcomes-based financing

Future Regulation Model

- Integrated planning/building regulation
- Professional knowledge commons
- Trusted real-time data feed monitoring
- Firm-level regulation of place

4. STRATEGIC AND POLICY DESIGN > SMART POLICY AND REGULATION

LAND MANAGEMENT CORPORATION

Phil Donaldson
Senior Manager, Sustainability Policy & Programs

DEPARTMENT FOR TRANSPORT, ENERGY & INFRASTRUCTURE

Peter Swift
Director, Project Services

DEPARTMENT OF PLANNING & LOCAL GOVERNMENT

Lois Boswell
Director, Sustainability

Melissa Bailey
Health in all Planning Officer

HOUSING SA
DEPARTMENT FOR FAMILIES & COMMUNITIES

Robyn Evans
Manager, Strategic Projects, Affordable Housing Innovations Unit

DEPARTMENT OF EDUCATION AND CHILDRENS SERVICE

Kathyn Jordan
Manager, Children's Centre Project

Nadia Carruozzo
Senior Project Officer, Education Works

Loris Glass
Manager, Neuroscience and Learning Partnerships

AUSTRALIAN INSTITUTE OF ARCHITECTS

Richard Hosking
Chapter Manager

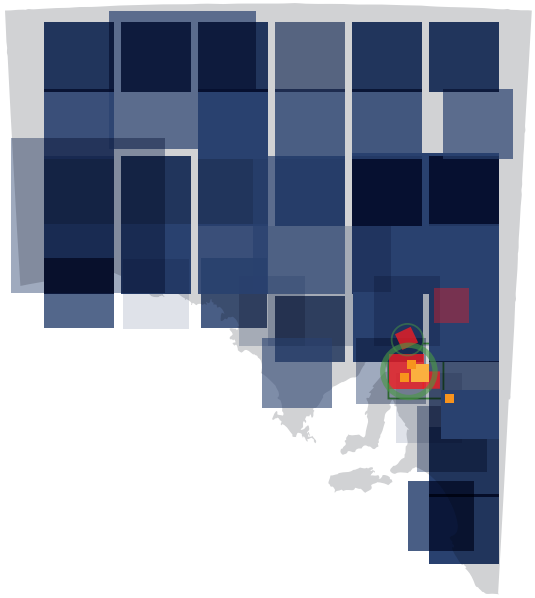
Mario Dreosti
Vice President, SA Chapter
Prinicpal, Brown Falconer Group

REGIONAL DEVELOPMENT AUSTRALIA BAROSSA INC

Anne Moroney
Chief Executive Officer

ADELAIDE CITY COUNCIL

Jason Pruszinski
Manager, City Design



DEPARTMENT OF THE PREMIER & CABINET

Greg Mackie OAM
Deputy Chief Executive, Cultural Development

Tim O'Loughlin
Deputy Chief Executive, Sustainability and Workforce Development

ARTS SA
DEPARTMENT OF THE PREMIER & CABINET

Eva Les
Director, Thinking Adelaide

Jennifer Layther
Manager, Public Art and Design

DEPARTMENT OF FURTHER EDUCATION, EMPLOYMENT, SCIENCE AND TECHNOLOGY

Dr Deborah Keighley-James
Principal Policy Adviser, Science and Innovation

HEALTH SA
DEPARTMENT OF HEALTH

Dr David Panter
Executive Director, Statewide Service Strategy

Damien Walker
Director, Major Projects

FLINDERS UNIVERSITY

Dr Andrew Beer
Professor and Deputy Vice-Chancellor
School of Geography, Population and Environmental Management

UNIVERSITY OF SOUTH AUSTRALIA

Mads Gaardboe
Professor and Head of
School of Architecture and Design

CARNEGIE MELLON UNIVERSITY

Tim Zak
Executive Director and Co-Director
Institute for Social Innovation
H. John Heinz III College

ADELAIDE THINKERS IN RESIDENCE

Gabrielle Kelly
Director

Emily Glass
Senior Project Manager

Samantha Haedrich
Designer

Stevie Summers
Project Catalyst

Louise Wormald
Project Catalyst

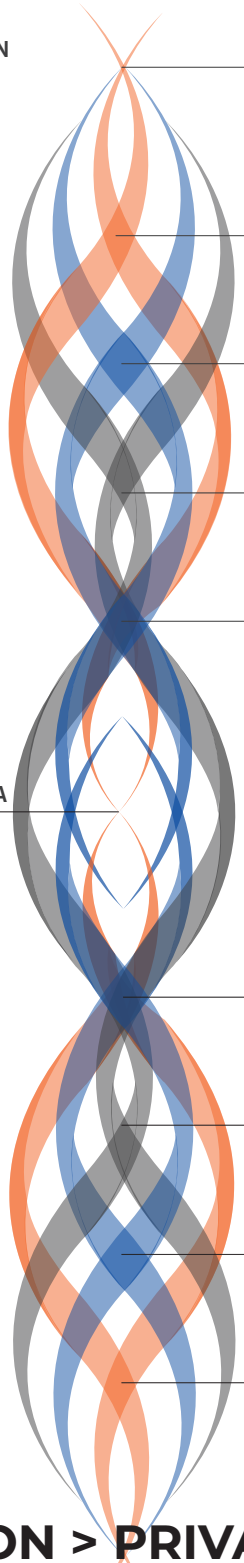
5. INTEGRATED DESIGN COMMISSION 2010 > SOUTH AUSTRALIA

SOUTH AUSTRALIA'S STRATEGIC PLAN

Creativity and Innovation
Building Communities
Expanding Opportunities
Improving Well-Being
Attaining Sustainability
Growing Prosperity

INTEGRATED DESIGN STRATEGY FOR SA

Economic Development Board statement
30-Year Plan for Greater Adelaide principles
State Reform Agenda policy priorities



1. INTELLIGENT INVESTMENT

Robust program of infrastructure investment
Economic growth and competitiveness
SA — The Entrepreneur State

2. HIGHEST QUALITY COMMITMENT

Social and regional benefits from economic growth
Healthy, safe and connected communities
Strengthening communities / people, places

3. COLLECTIVE ACTION

Productivity through innovation and value-chains
World class design and vibrancy
Vibrant Adelaide

4. GLOBAL ENVIRONMENTAL LEADERSHIP

Coordinated action plan for water security
Climate change resilience and carbon efficiency
Green South Australia

5. COLLABORATIVE CONSTRUCTION

Positioning SA as a leader in renewable energies
Environment and natural resource management
Renewable energy: a key economic sector

6. ECO-INDUSTRY INNOVATION

Raising workforce participation
Affordable living and housing diversity
Skills for all

7. BUILT ENVIRONMENT RESEARCH

Planning for population growth
Heritage and character enhancement
Engaging older and younger South Australians

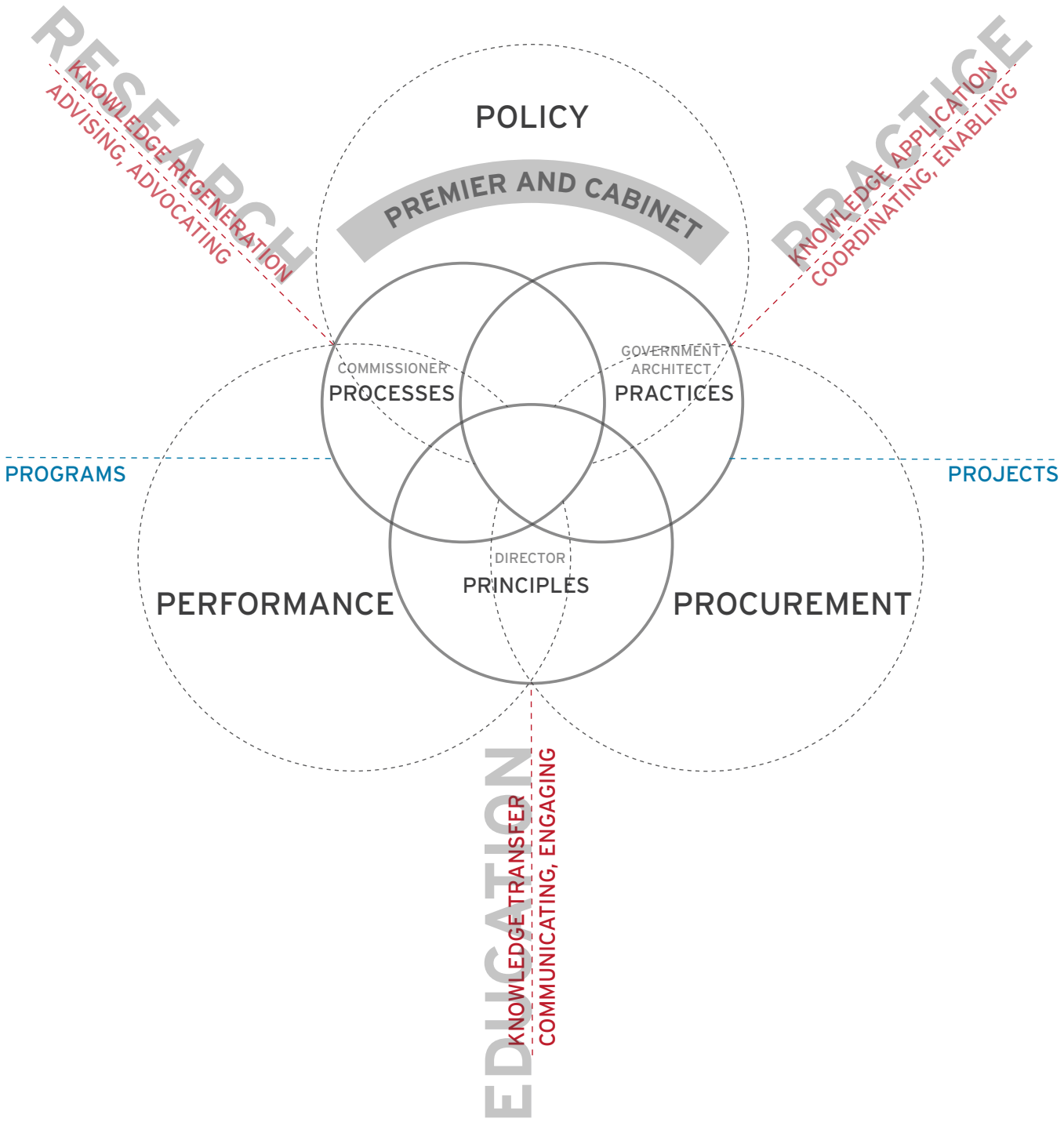
8. DESIGN LITERACY

Education and training system for the 21st century
Accessibility and social inclusion
Early childhood development

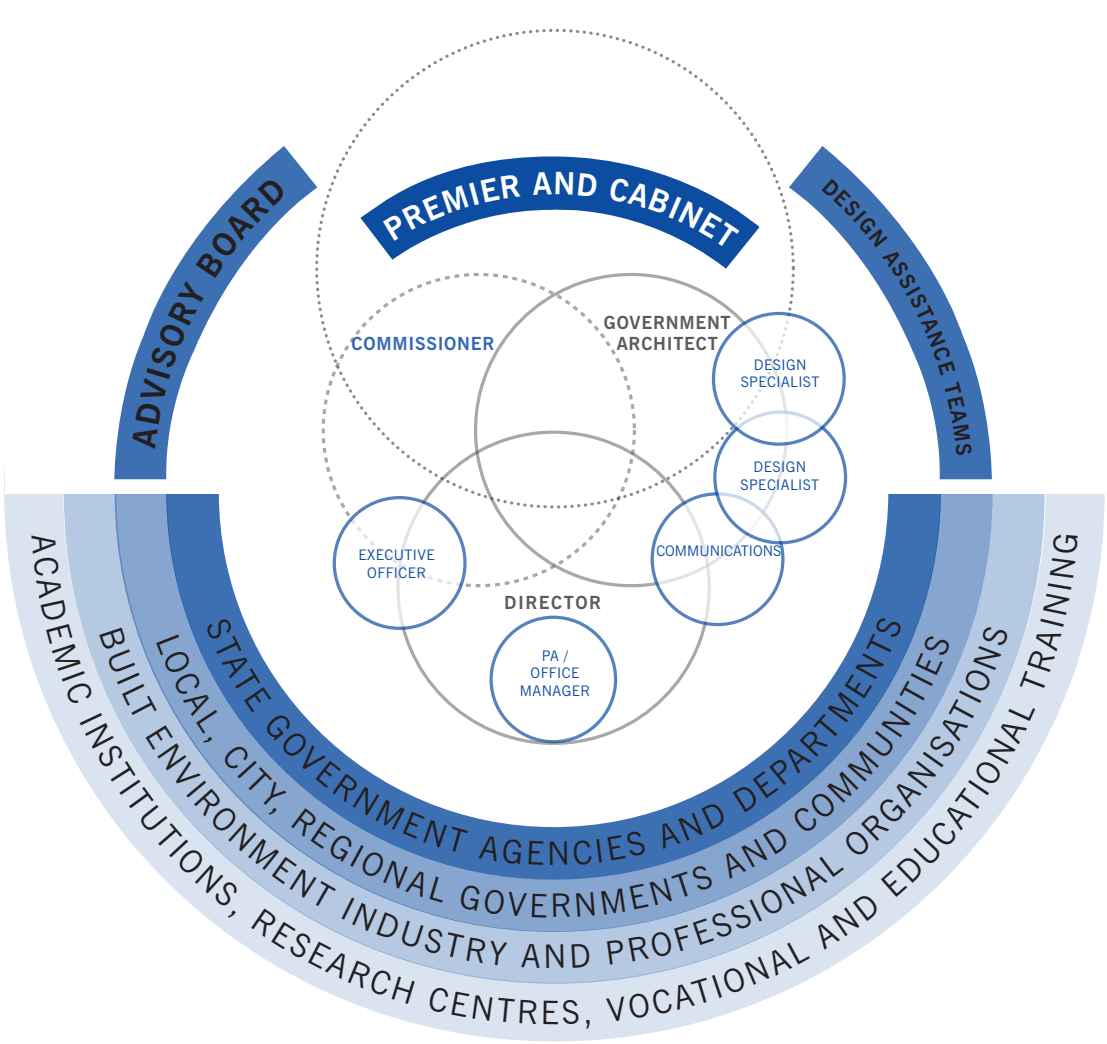
9. CONSTRUCTIVE ENGAGEMENT

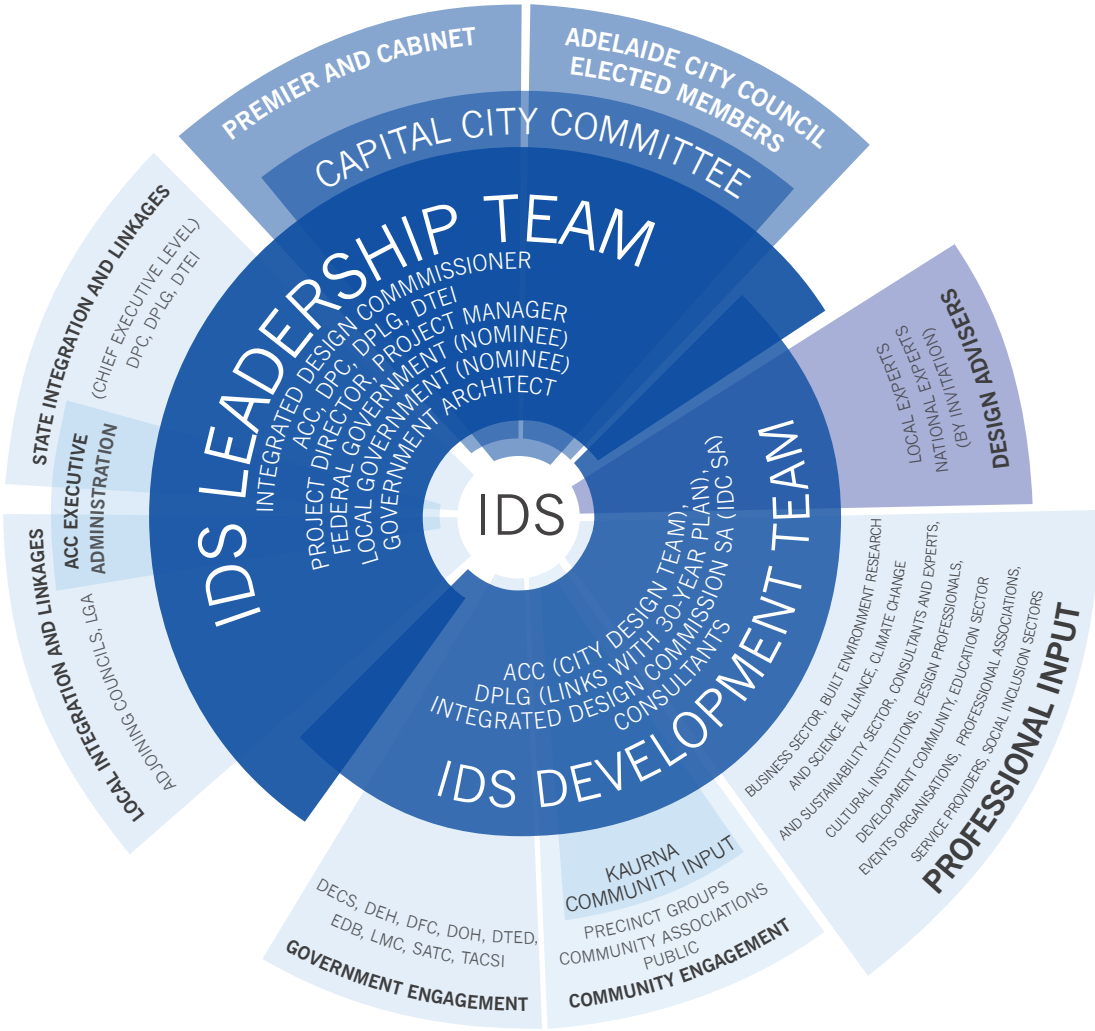
Efficient and effective public sector
Community engagement
Information for citizens

5. INTEGRATED DESIGN COMMISSION > PRIVATE and PUBLIC SECTORS DNA

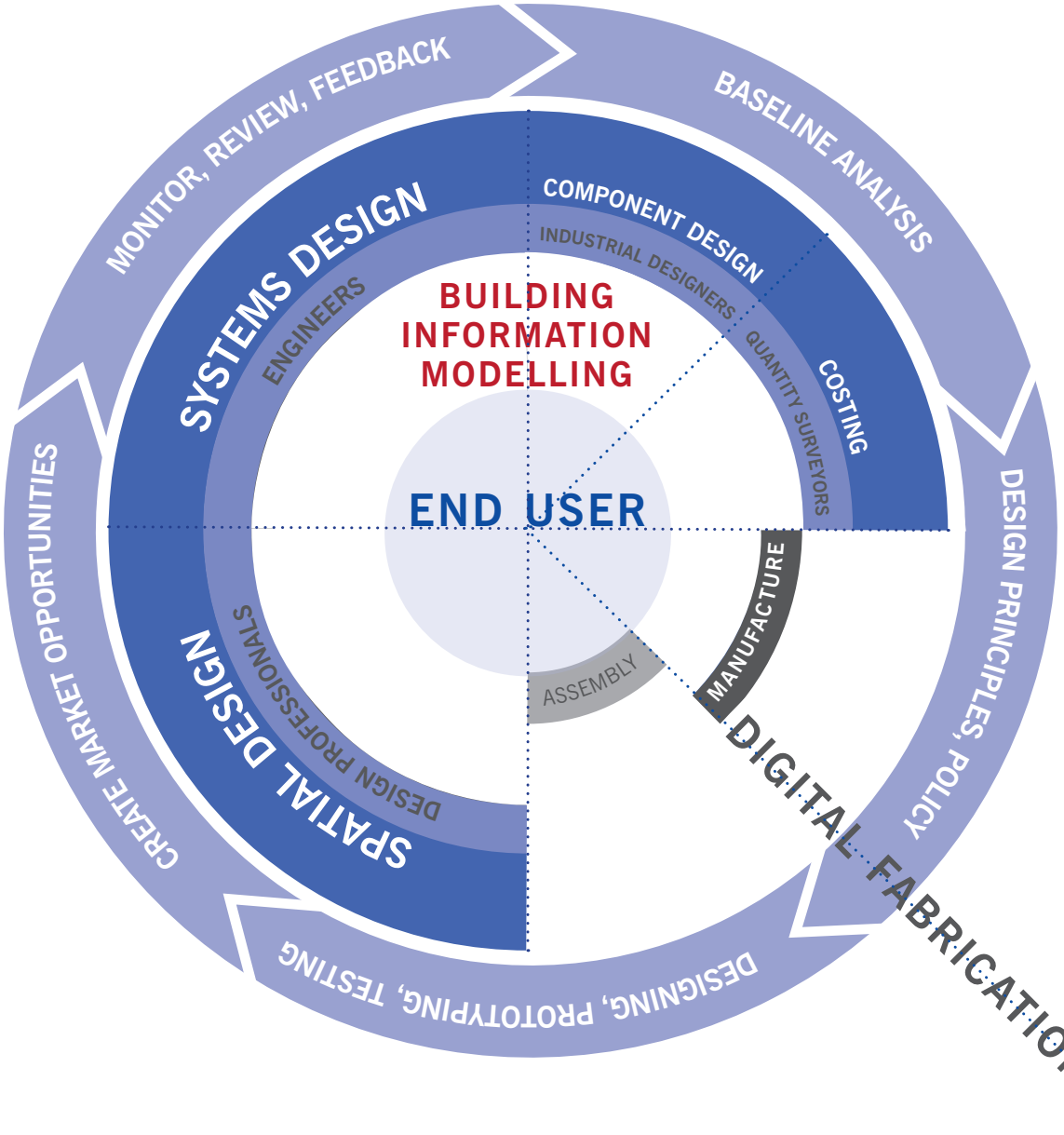


5. INTEGRATED DESIGN COMMISSION > DESIGN OF THE COMMISSION





5. INTEGRATED DESIGN COMMISSION > DESIGN OF THE COMMISSION



5. INTEGRATED DESIGN COMMISSION > MANUFACTURING for UNITISED CONSTRUCTION

COLLABORATORS

CLIENTS, COMMUNITIES, CITIZENS

OWNERS, MANAGERS, USERS

ENGINEERS AND CONSULTANTS

SERVICE PROVIDERS

REGULATORS

ARCHITECTS, ARTISTS DESIGN PROFESSIONALS

PLANNERS AND DEVELOPERS

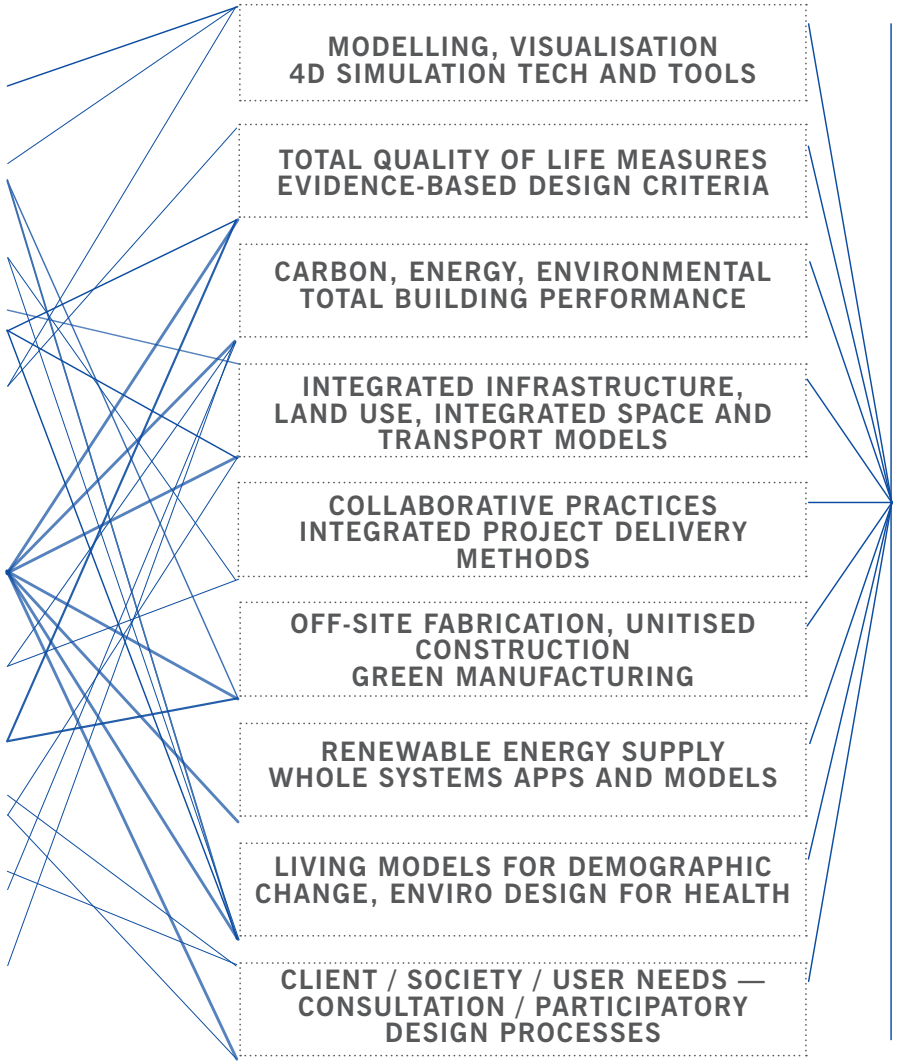
BUILDERS AND CONTRACTORS

EXPERTS AND SPECIALISTS

ENVIRONMENTAL SCIENTISTS

HUMAN / SOCIAL SCIENTISTS

"MISSIONS"



OUTCOMES

CULTURAL IDENTITY AND VITALITY THROUGH DESIGN

HIGH QUALITY PUBLIC SPACES PUBLIC LIFE

URBAN INTENSITY AND VIBRANT COMMUNITIES

CREATIVE CENTRES CORRIDORS AS CONDUITS

HUMAN-CENTRED ENVIRONMENTS AND PLACES

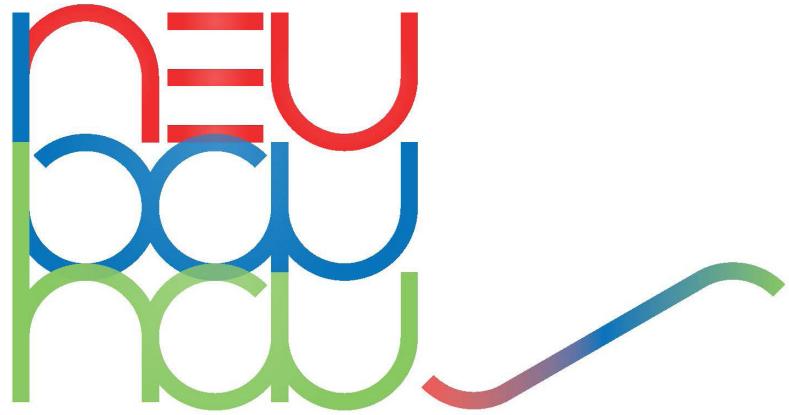
HOUSING AFFORDABILITY, DIVERSITY, INNOVATION

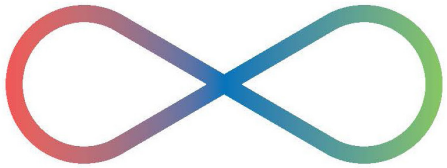
ENVIRONMENTAL DESIGN FOR EDUCATION AND HEALTH

RESPECTED LANDSCAPE

HERITAGE AS LIVING HISTORY

5. INTEGRATED DESIGN COMMISSION > IMPACT





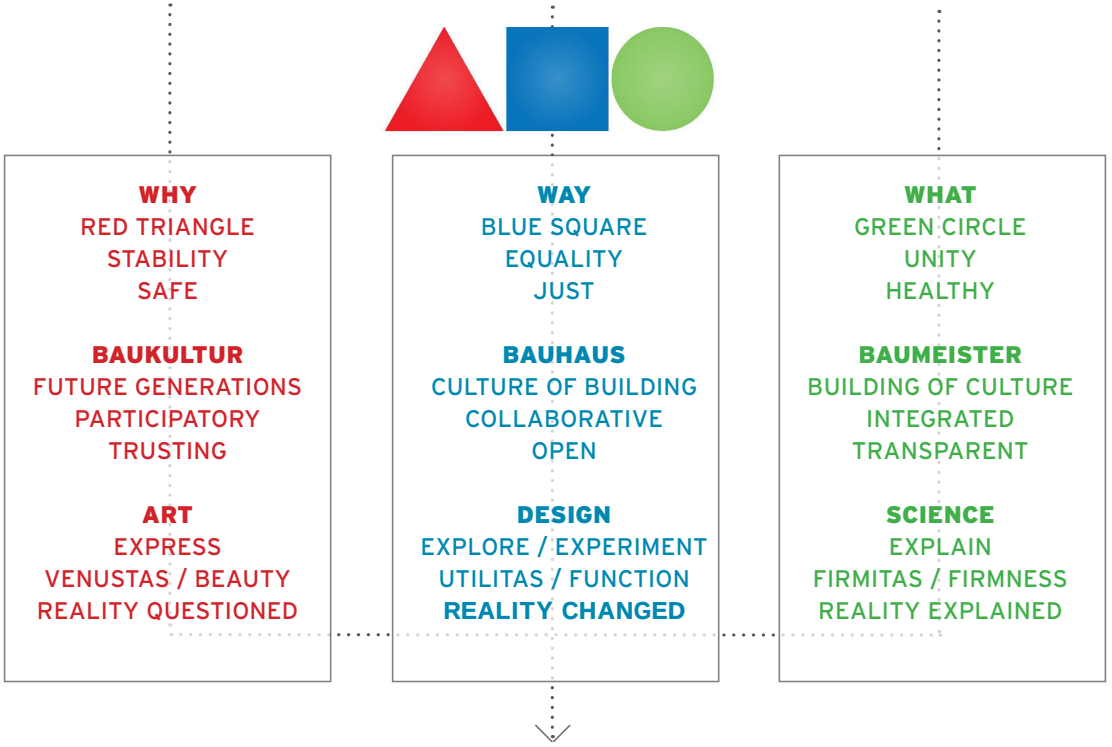
6. NEW EUROPEAN BAUHAUS 2021

We aim to define The New Bauhaus as ***Baukultur*** *based on its ability to combine*
the why (future) the way (process) the what (product)

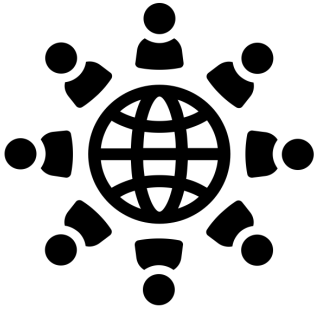
WHY *justice and responsibility towards* ***future generations*** *and towards others, culture and nature for health, well-being, thrivability in harmony with built and natural environments.*

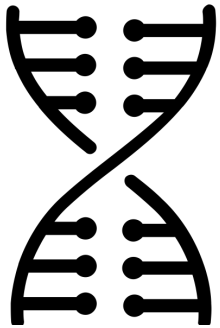
BAU the ***verb*** *to build or construct meaning society's 'culture of building'*
the ***WAY*** *of creating the built environment*
KULTUR *the* ***noun*** *for culture or meaning society's 'building of culture'*
the ***WHAT*** *of creating better quality of life*

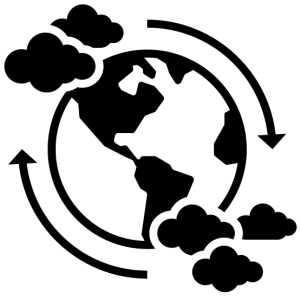
Together, this is a coordinated and connected system of knowledge and processes that are shared by people who participate in the act of building activity and determine places and spaces of quality.



6. NEW EUROPEAN BAUHAUS > BAUKULTUR

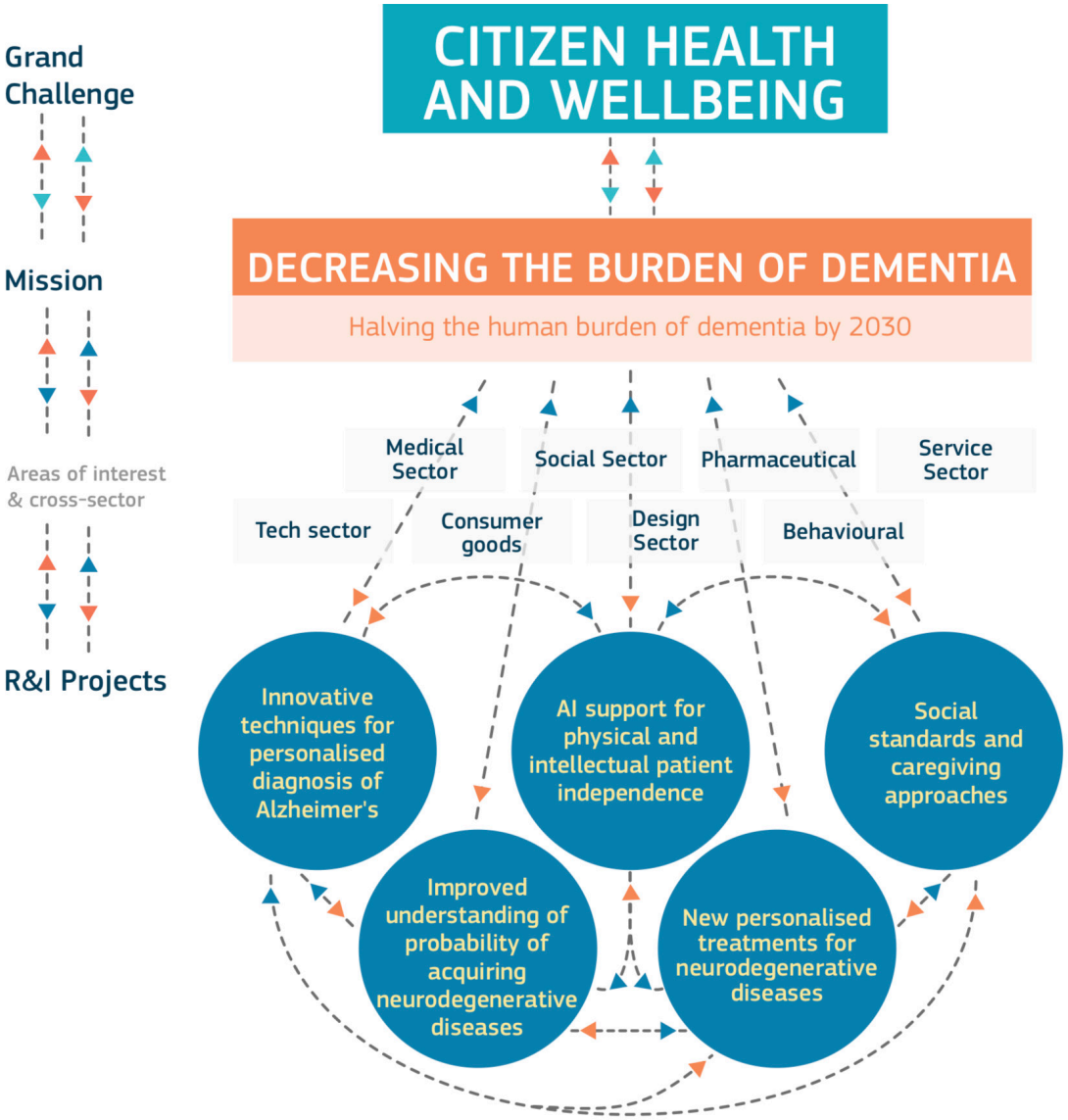


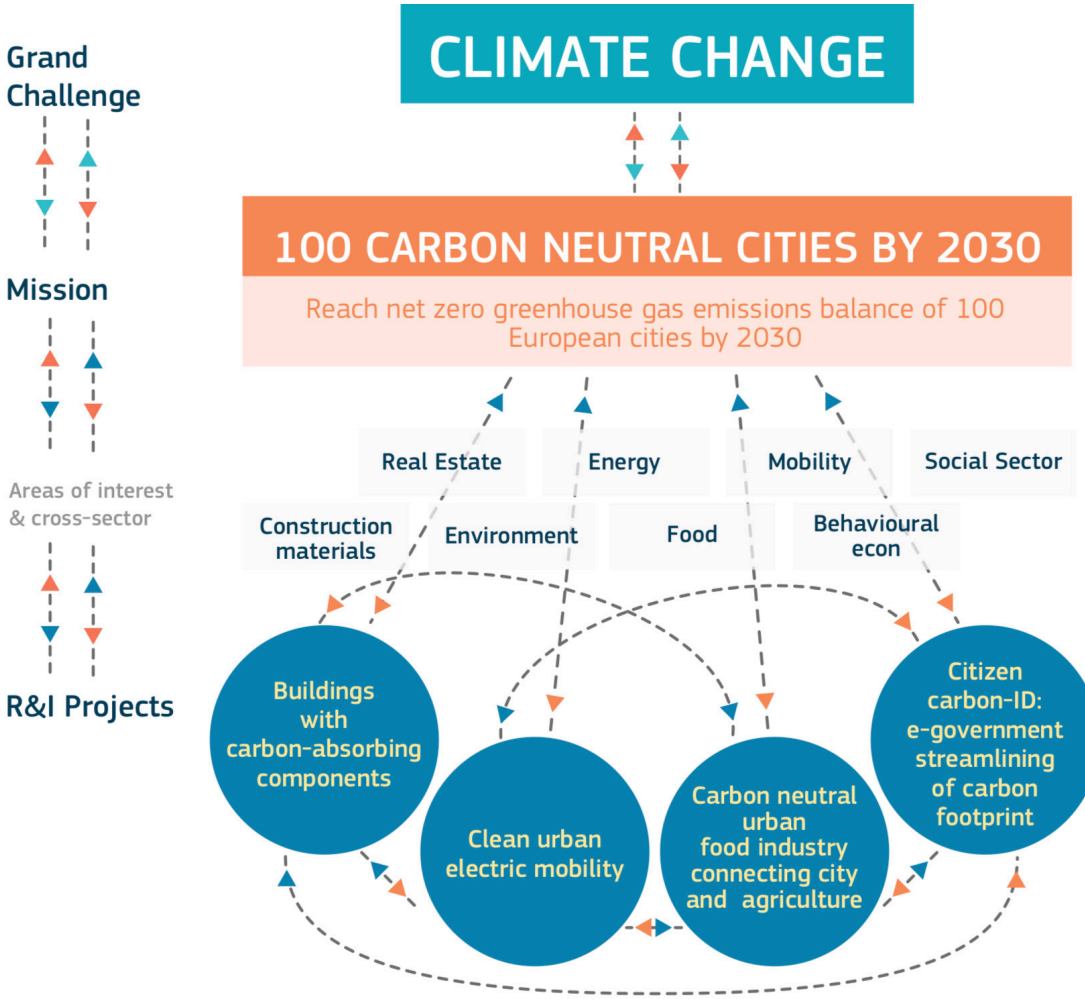




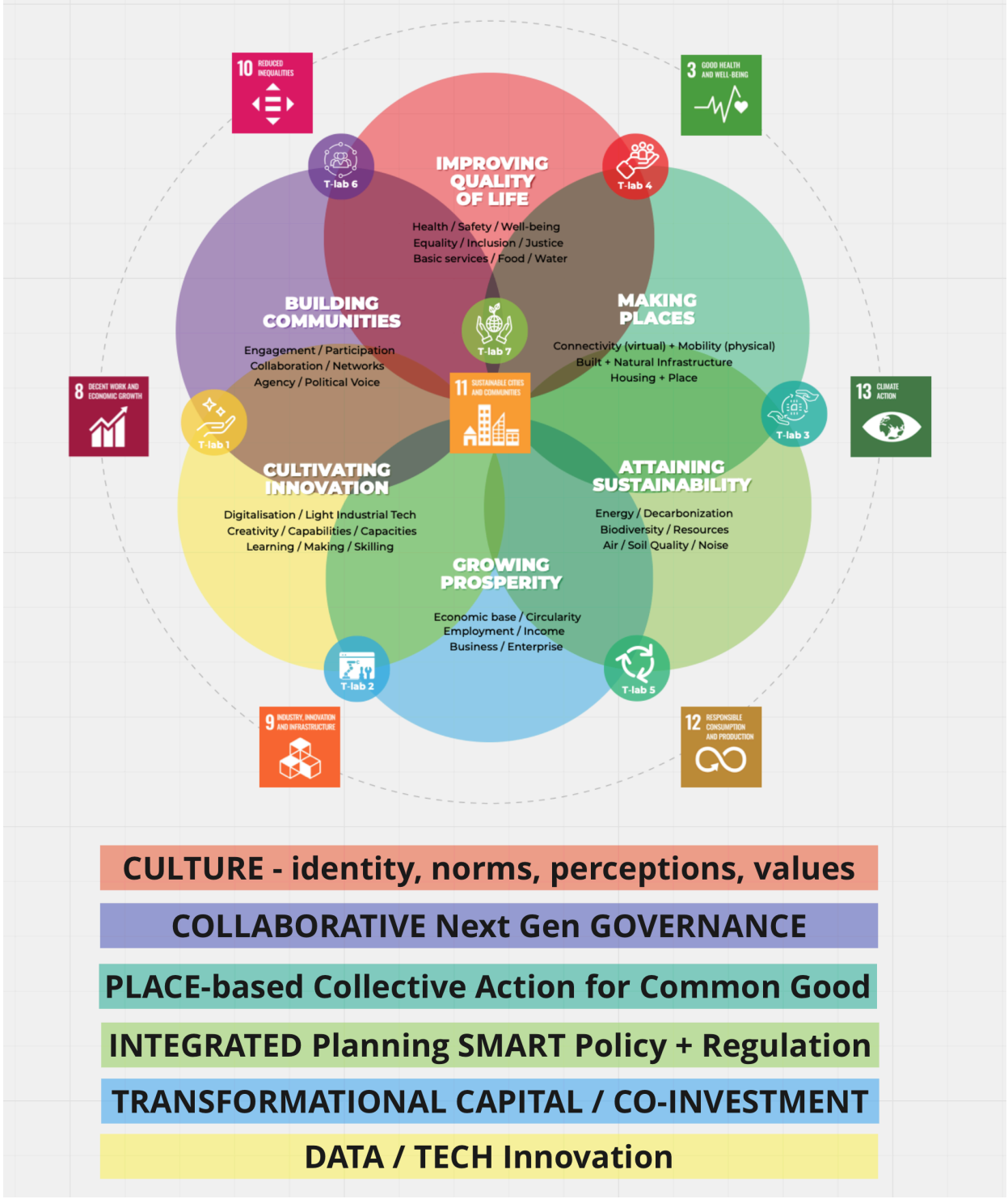
CULTURE	FUTURE	NATURE
Red Thread	**Blue Print**	**Green Deal**
People	Prosperity	Planet
Social	Economic	Environmental
Human	Built	Natural
Your House		**Our House**
Quality	Value	Impact
Livability	Thrivability	Sustainability
Accessibility	Affordability	Adaptability
Cultural Movement	**Humane Revolutions**	**Renewal Waves**
1% to 100%	Power of 1 to Power of All	All People + 1 Planet
Caring	Daring	Sharing
Engaged	Empowered	Enabled
New Learning	**New Practices**	**New Innovation**
Life Long-based	Practice-based	Place-based
Participatory Futures	Mission Innovation	Health + Wellbeing
Opportunity	Possibility	Harmony
COMMON GROUND	**COMMON GOOD**	**COMMON GOALS**

6. NEW EUROPEAN BAUHAUS > YOUR HOUSE TO BAUHAUS TO OUR HOUSE





6. NEW EUROPEAN BAUHAUS > MISSION ORIENTED INNOVATION

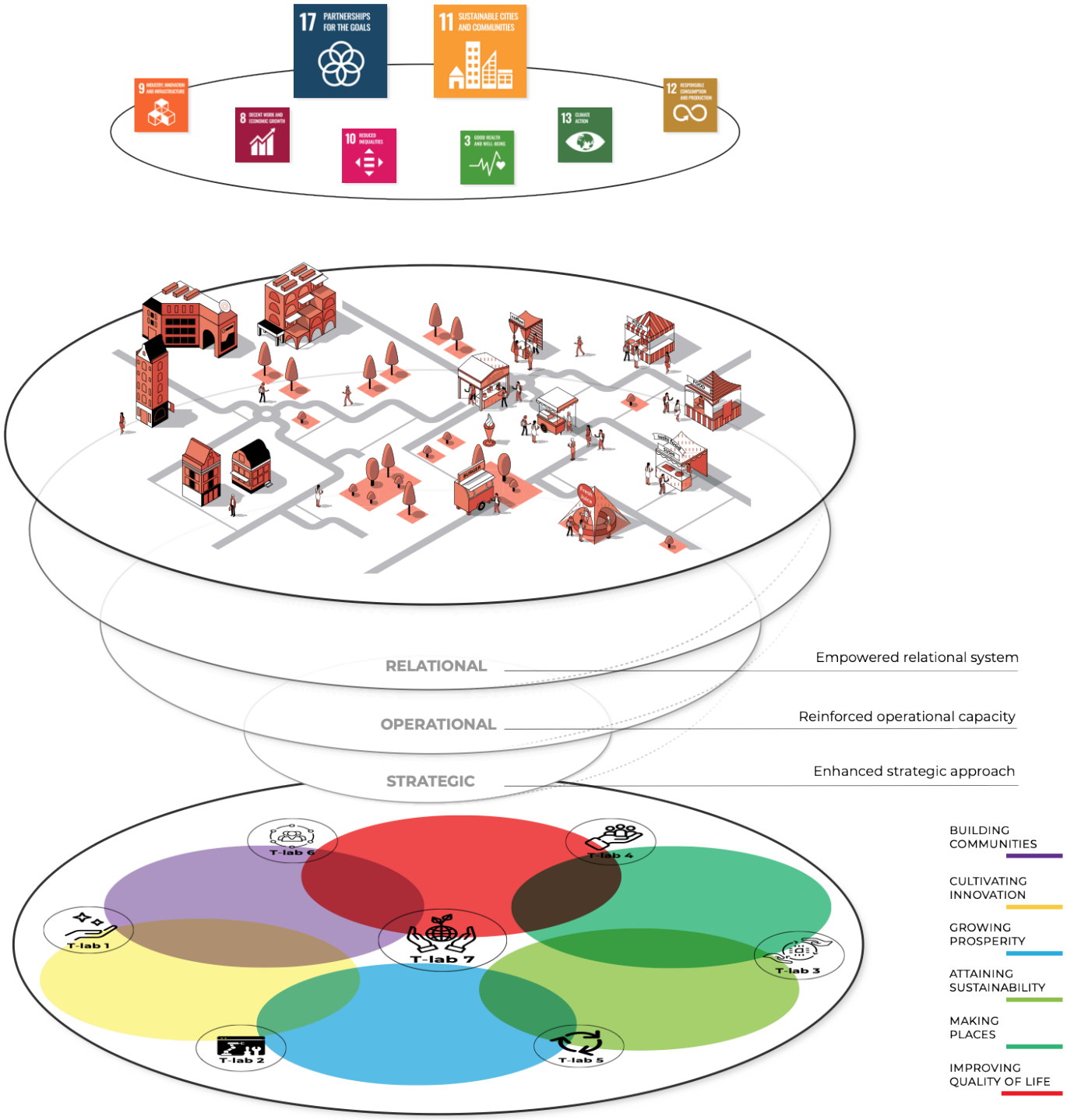


7. T-FACTOR > EUROPEAN TEMPORARY URBANISM

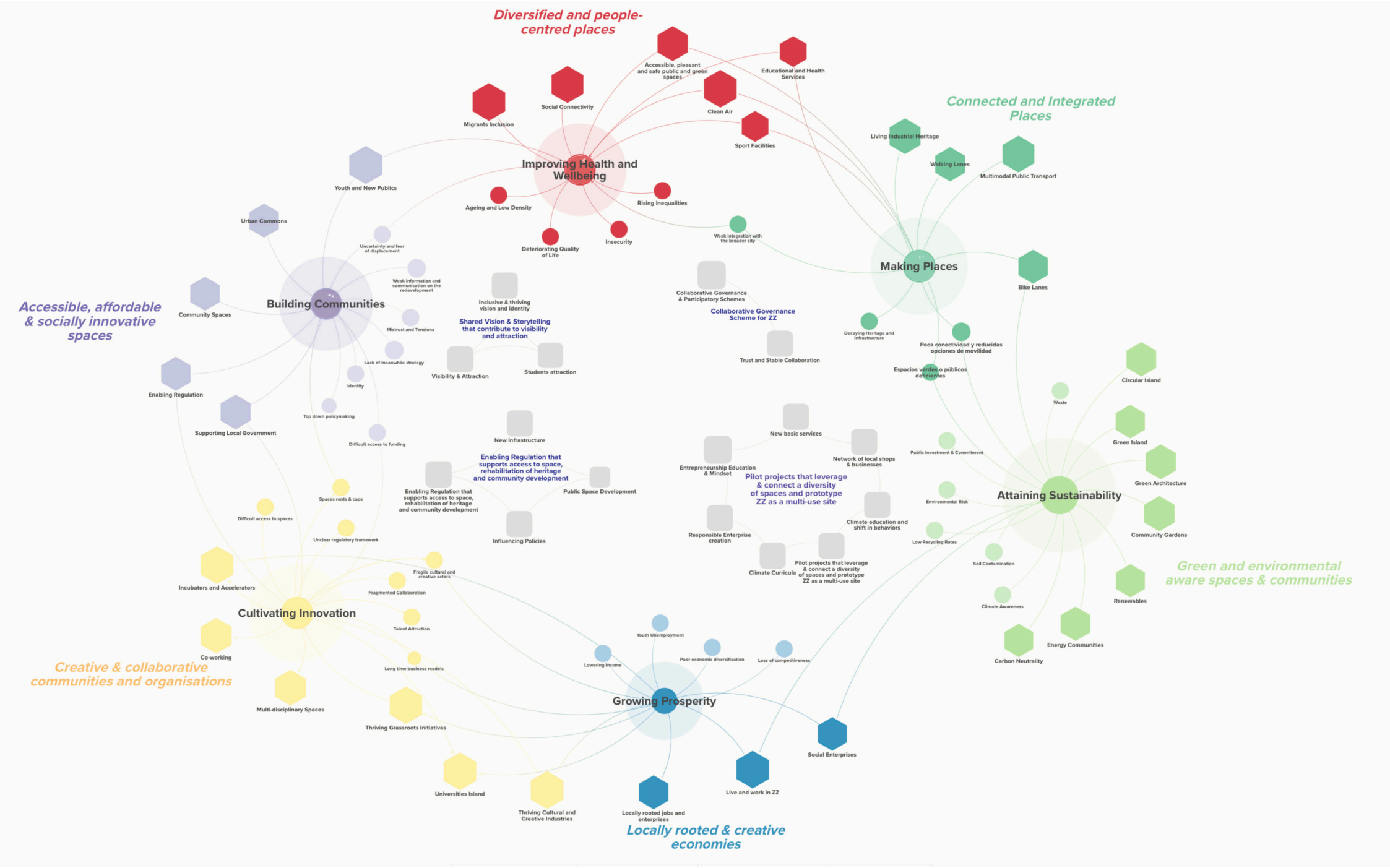
TRANSNATIONAL LEVEL

MASTERPLAN & REGENERATION LEVEL

MISSION LEVEL



7. T-FACTOR > EUROPEAN TEMPORARY URBANISM



7. T-FACTOR > EUROPEAN TEMPORARY URBANISM _ Challenges and Opportunities

PROBLEM

PARADOX OF URBAN REGENERATION

Rigid, deterministic and infrastructure-only approaches to urban regeneration are no longer able to deal with rapid changes in our societies.

We increasingly risk redevelopments unable to stand the time test, and with poor quality and value for the local communities.

IF WE

MISSION LEVEL
The "micro" level of meanwhile activities

PILOT LEVEL
The "meso" level of the masterplan and regenera-tion project

TRANS-NATIONAL LEVEL
The "macro" level of T-Factor

BY

#MISSIONS-DRIVEN, CO-CREATIVE TEMPORARY USES

Leverage temporary uses in the waiting time of urban regeneration to address local, shared missions of innovation that are relevant to sustainable development challenges, and as the testbed to collaboratively explore and test co-creative solutions

#PORTFOLIO OF TEMPORARY USES & EXPERIMENTS

Design temporary use strategies as a portfolio of synergistic experiments that address innovation missions with a systemic perspective

#PROTOTYPING & ITERATIVE ORCHESTRATION FOR STRATEGIC LEARNING

Embrace a prototyping & iterative placemaking that allows to deliver temporary uses in sequences, observe interactions, and capture strategic learning in light of "permanent" uses, so as to improve masterplan value and regeneration process

#TRANS-NATIONAL COMMUNITIES OF KNOWLEDGE & PRACTICE

Foster international collaboration and the creation of CoK and CoP to inspire and support innovative temporary uses at the local level, while contributing to awareness-raising, learning and capacity building at the international level

#Mapping and sense-making

Mapping out perceptions, values & challenges that different publics attribute to the area to understand leverage points for intervention

#Local Coalitions

Engaging with local actors in order to build multi-sectoral coalitions in address to innovation missions

#Temporary uses development

Designing and delivering creative & collaborative meanwhile use programmes that unfold local missions

#Action Research

Applying action research to seize performance and progress over time, and feed ongoing discussion and exchange with developers (critical friend)

#Meanwhile City-Making method

Establishing a Transformation Agency in support to the design, delivery and critical observation of meanwhile use strategies

#Meanwhile City-mentoring model (T-Labs)

Developing an infrastructure of thematic Labs (T-Labs) that provide the pilots with living knowledge and expertise to unlock innovative meanwhile uses

#Knowledge Hub

Harvesting and systematising knowledge, practices and tools in the field in order to disseminate emerging approaches, inspire new initiatives and contribute to innovative practices

#Dissemination & Knowledge Sharing events

Organising knowledge sharing events across different challenges and opportunities driven by temporary uses

#Think Tank

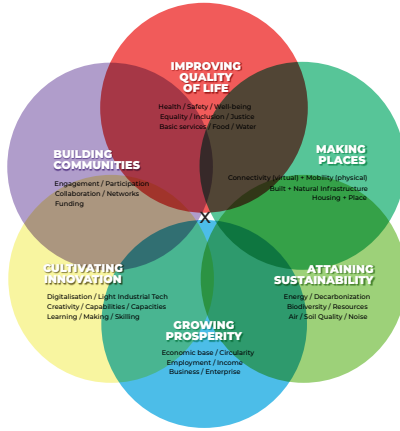
Understanding the viability of an international think tank on temporary uses able to keep on operating in the long term

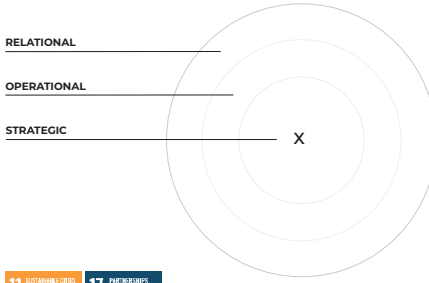
THIS WILL RESULT IN

- Stakeholders engaged and allied around shared missions & stakeholder typology
- Missions addressed relevant to SDGs
- New (meanwhile) services, products, programmes & activities that create opportunities for:
  - education & training
  - jobs & enterprises
  - active citizenship (volunteering, association, etc)
  - sustainable lifestyles
- Pooled material/immaterial resources
- Diversity in meanwhile uses delivered
- Outreach / Access to spaces
- Diversity in publics engaged
- Citizens and stakeholders actively engaged in co-creation, co-production & co-management of TU
- Tested tools and methods for designing & delivering meanwhile placemaking in UR
- Actual support delivered by the Agency/Labs to developers and key local stakeholders
- Tested innovations for regulating, governing and funding meanwhile uses in UR
- International collaborations established
- Knowledge and practical resources created, made available and accessed
- Knowledge exchange events realised
- Outreach & diversity in publics engaged
- Stories created
- Platform subscribers
- Think Tank model

AND EVENTUALLY IN

CONTRIBUTING TO





7. T-FACTOR > EUROPEAN TEMPORARY URBANISM > Theory of Change

CLIMATE RESILIENCE +
Nature-based Solutions for

Sites	**as temporary uses**
Streets	**as linear connectors**
Squares	**as green public space**

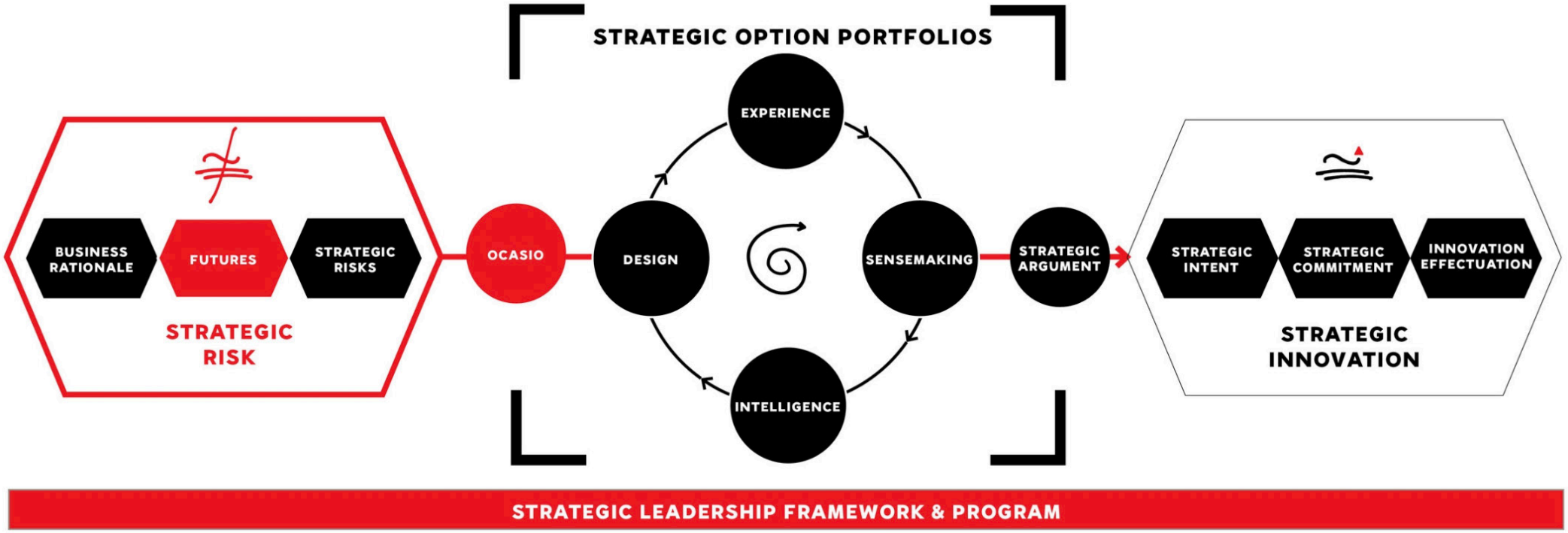
7. T-FACTOR >ZORROTZAURRE ISLAND, BILBAO

BILBAO CITY MISSION 2023 +
ZORROTZAURRE MASTERPLAN

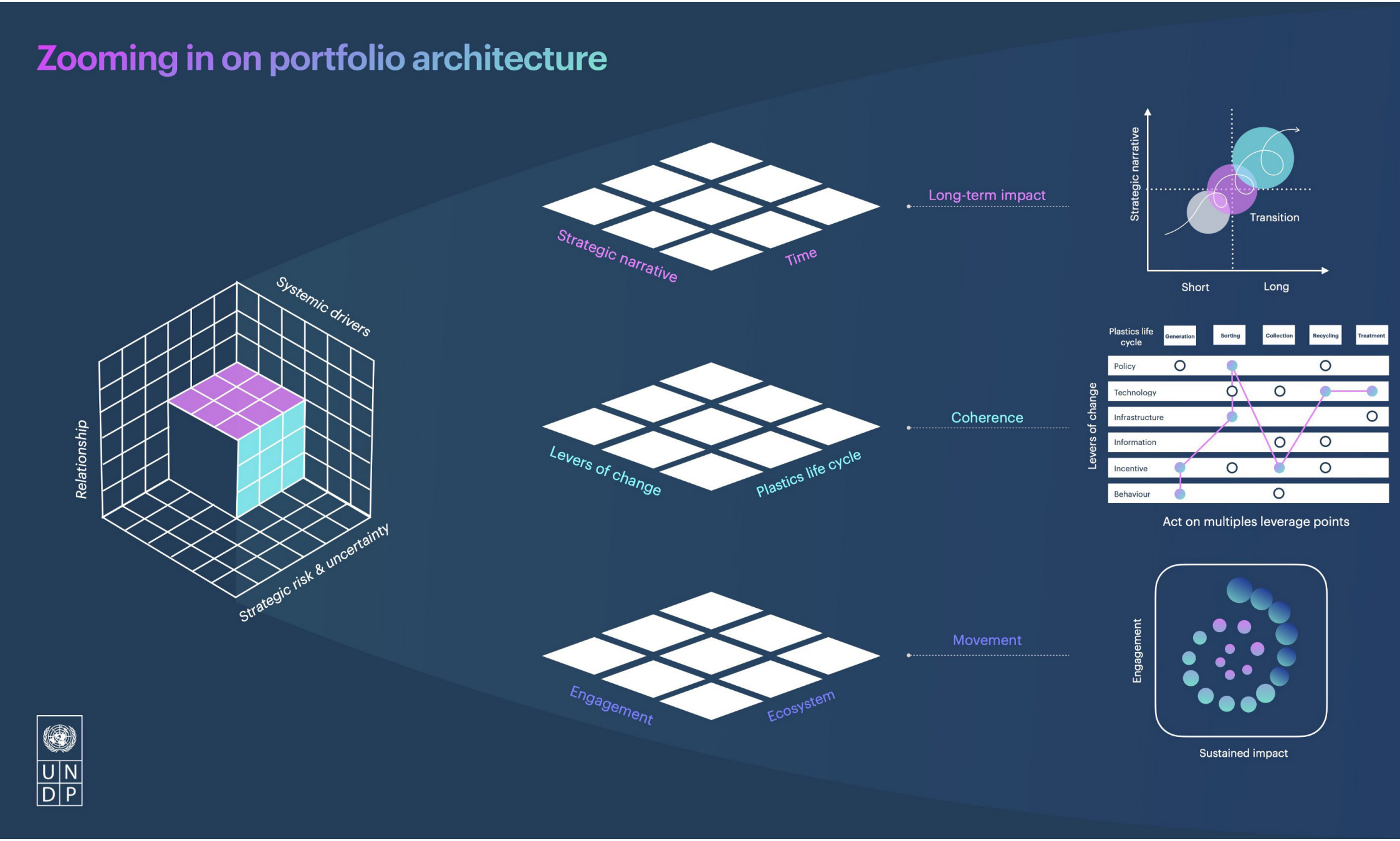
Competitive and Innovative =
- **Smart**
- **Social**
- **Sustainable**

7. T-FACTOR > ZORROTZAURRE ISLAND, BILBAO

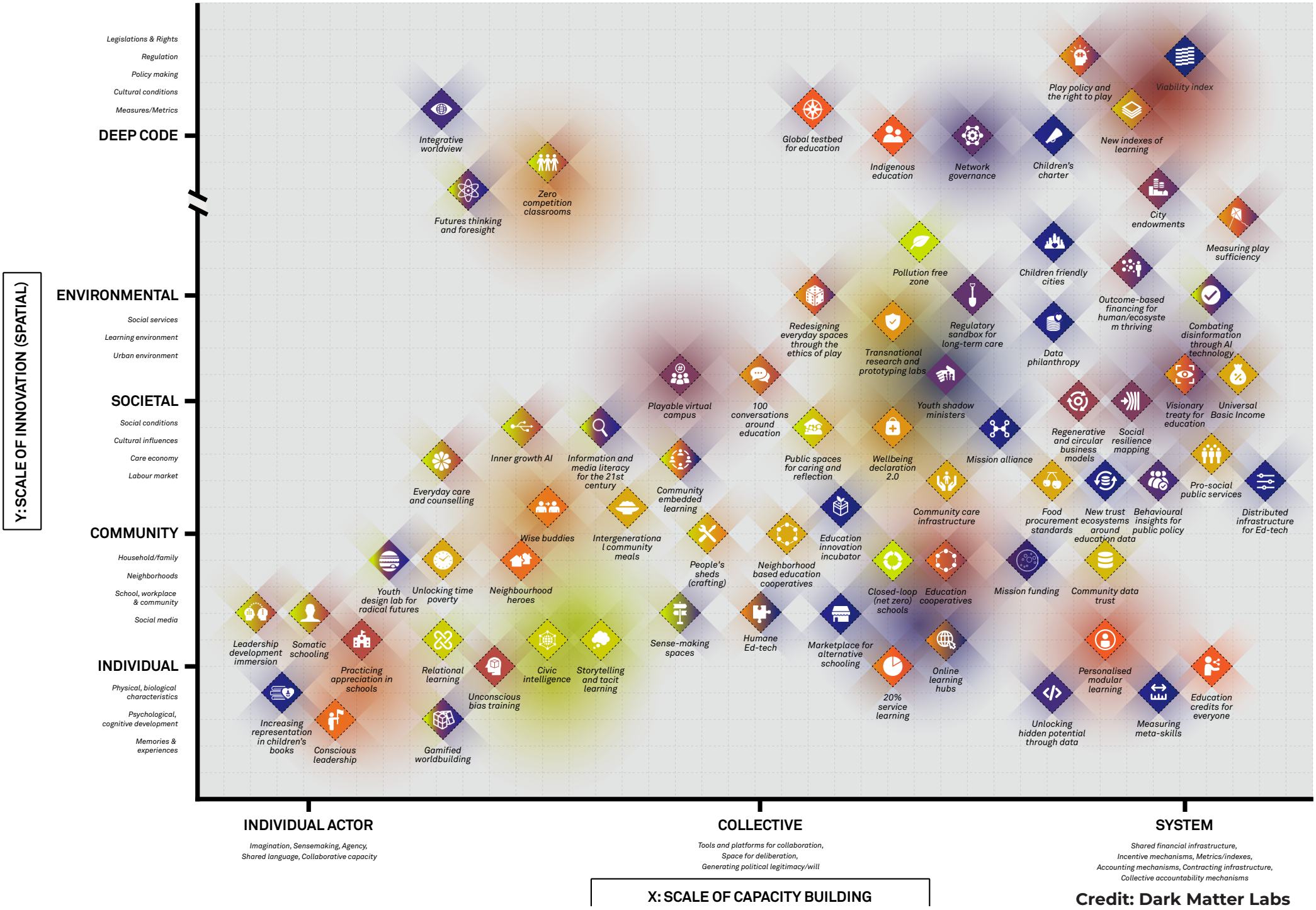
7. T-FACTOR > ZORROTZAURRE ISLAND, BILBAO



8. PORTFOLIO APPROACH > CHORA FOUNDATION

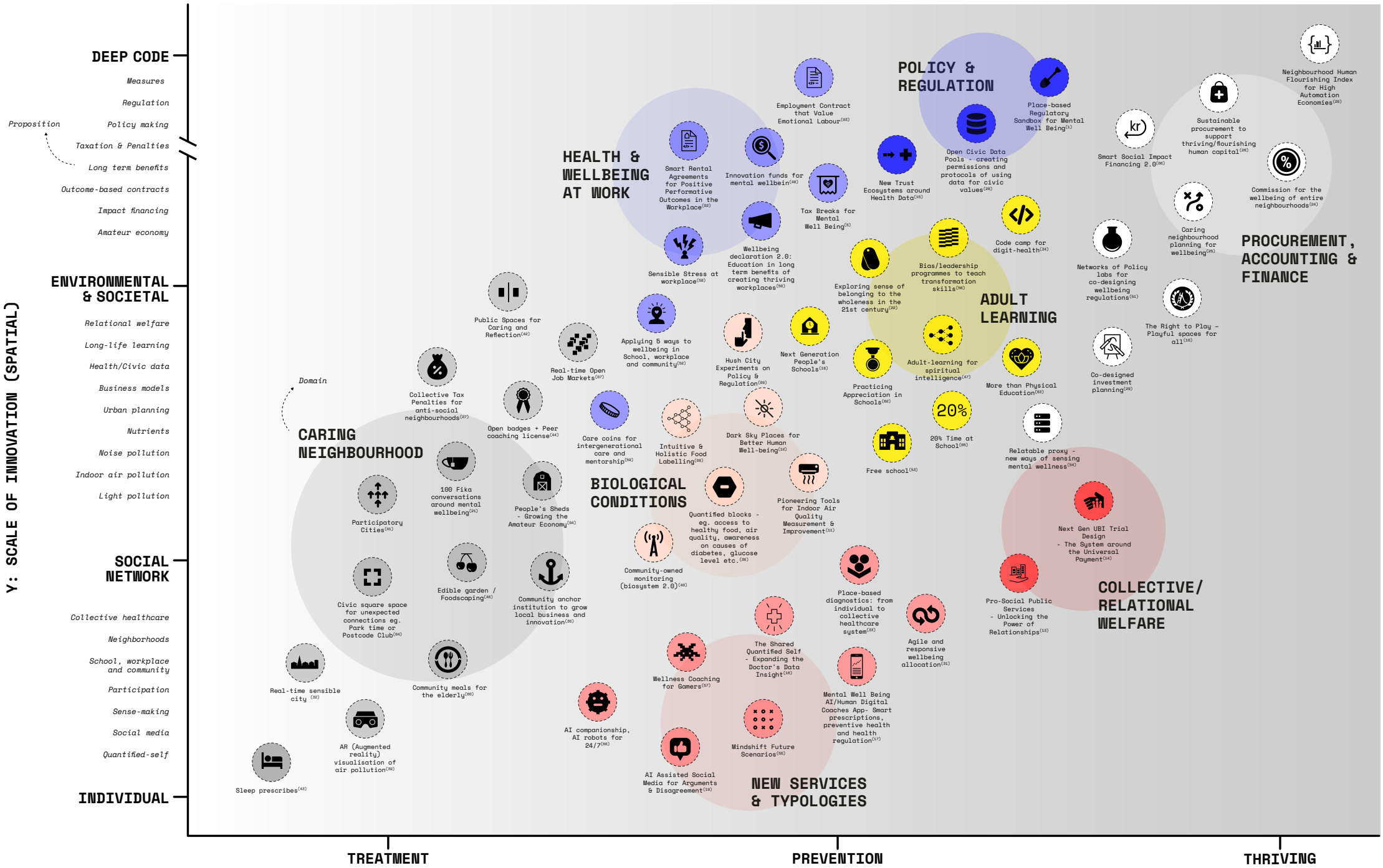


8. PORTFOLIO APPROACH > UNDP

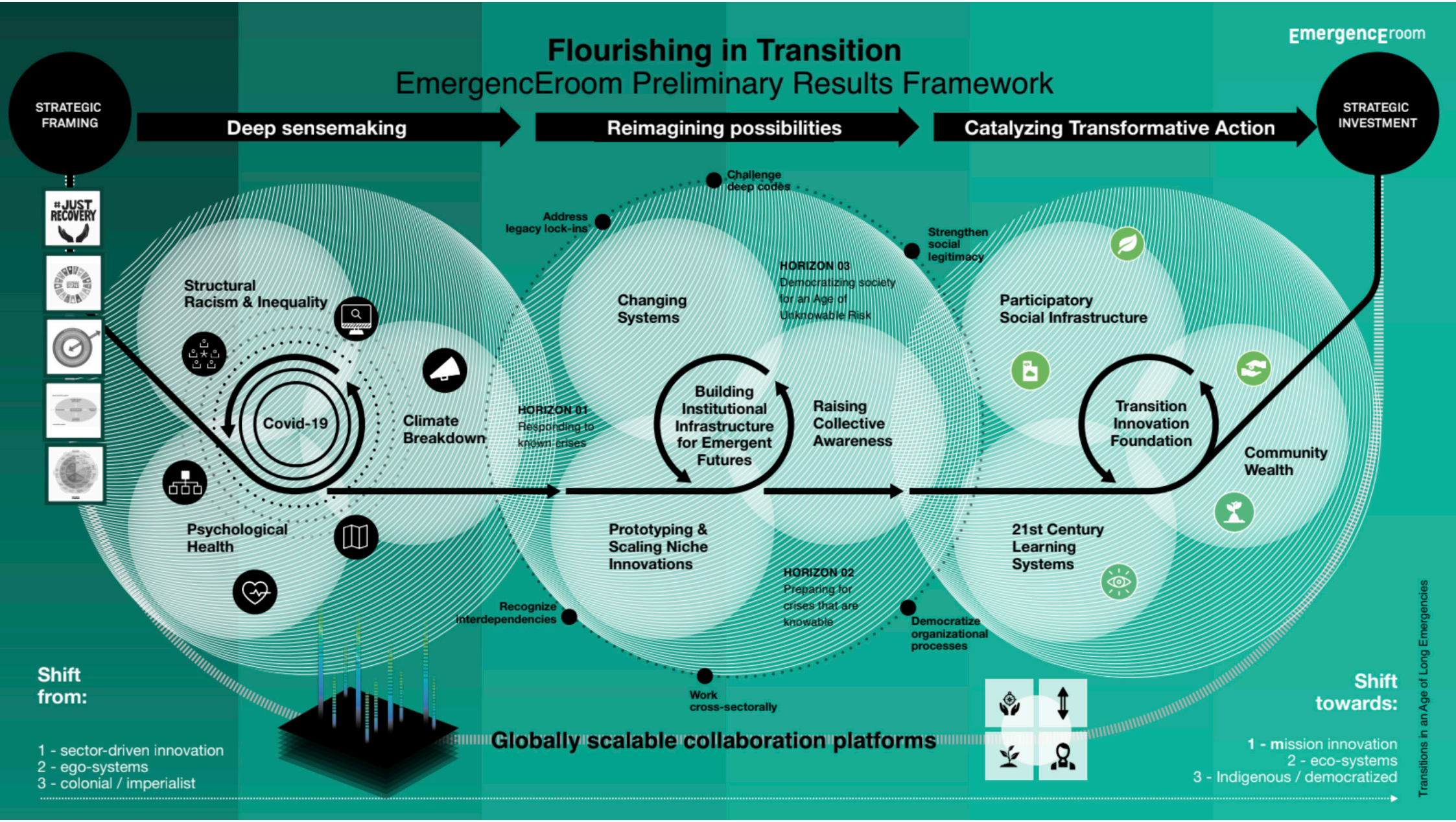


8. PORTFOLIO APPROACH > DARK MATTER LABS > REWIRED

MIND//SHIFT

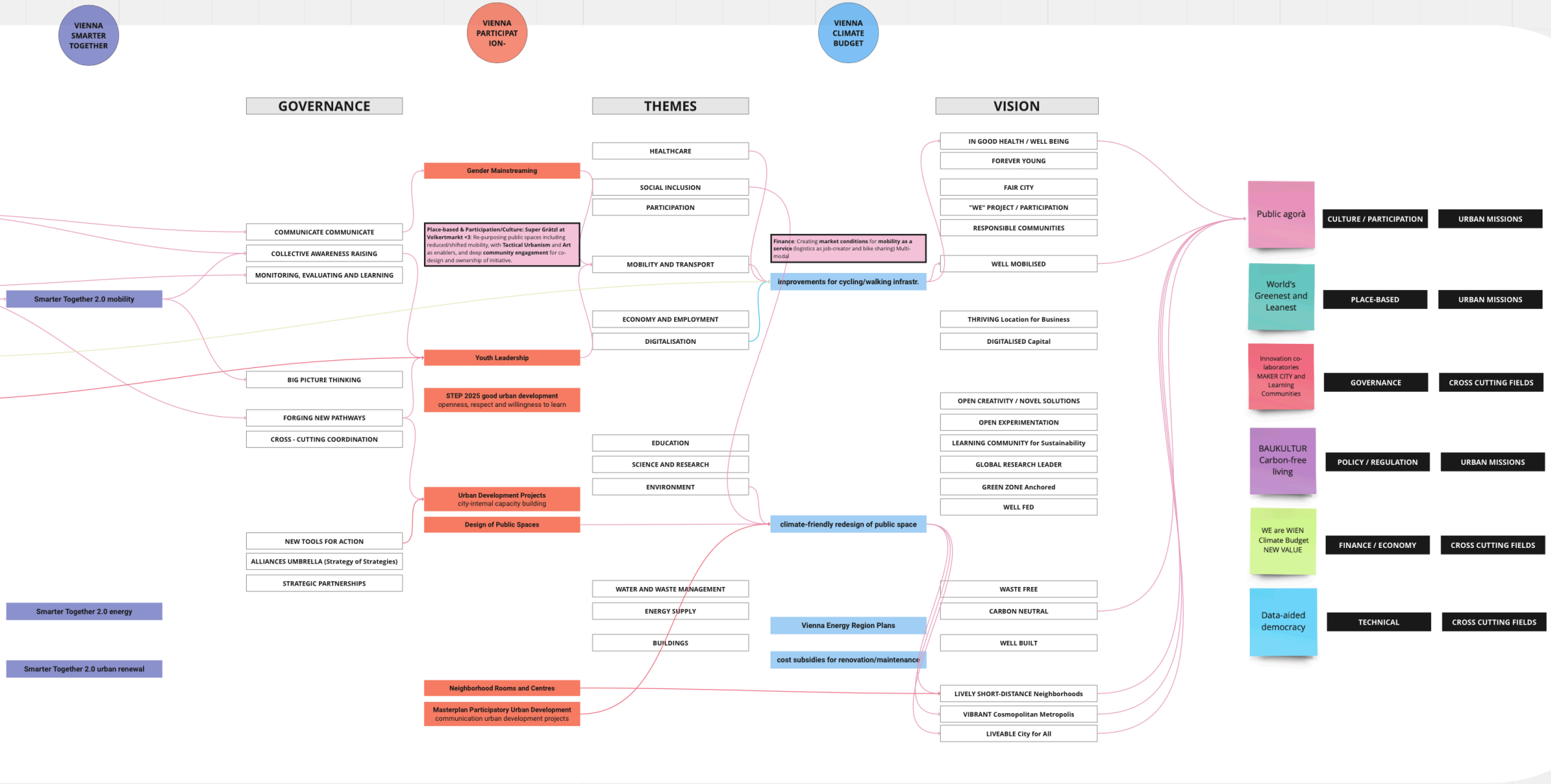


8. PORTFOLIO APPROACH > DARK MATTER LABS > MIND SHIFT

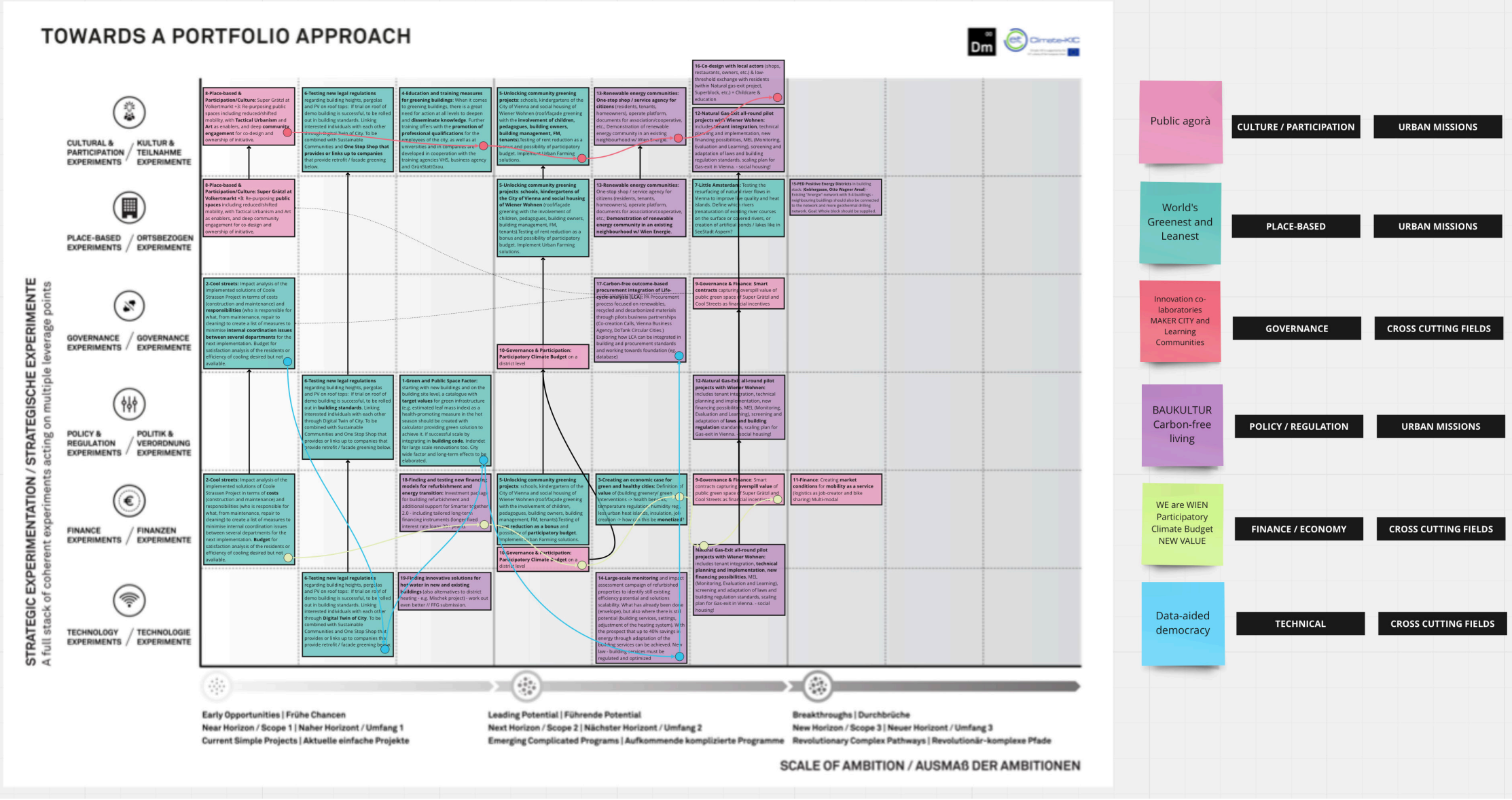


Credit: Dark Matter Labs

8. PROCESSES > DARK MATTER LABS



8. NET ZERO CITIES > VIENNA



8. NET ZERO CITIES > VIENNA > PORTFOLIO

sponge city technical term for water management

MISSION A - WORLD'S GREENEST LEANEST / Green Infrastructure

Experiments / Fields (Vienna proposal)

Regulation: leaves 10% unsealed, but easy to get exemption

Greening of buildings in the local building code: ensure to meet a "green and public space factor" on the site level and a target value for green infrastructure (e.g. estimated leaf mass index) as a health-promoting measure in the hot season

POLICY & REGULATION: NEAR
TECHNOLOGY: NEW (DM suggestion)

Greening of the city VS Covid (and other illnesses)

Could be deployed next year, depends on political will

1

GI - could provide new jobs, not only construction but landscaping, maintenance, gardening as well as nurseries

Planting trees and greenery has no clear revenue, financing?

Not only unusual the land but choose what GI you will install based on a catalogue (green wall, roof...)

Centralised public funding necessary

Are we ready to deploy now that money is available?

"Tracking Cool Streets" Involve citizens in monitoring; compliment official data with community-driven data; tourism (access to information; citizen science, awareness and behaviour change)

Cool streets: Impact analysis to support the scaling process of pilot projects (e.g. seating, tree planting, shading, play areas, etc.); Detailed catalogue and Analysis of the implemented solutions in terms of costs (construction and maintenance), effectiveness/impact and responsibilities (who is responsible for what, from maintenance, repair to cleaning).

POLICY & REGULATION: NEAR
(removed Governance, it wasn't clear why)

2

Very positive impact (e.g. fewer cars), should be included in more stacks

Scale up whole city

Training measures on greening for PA and promotion of technical qualifications for SMEs
DM suggests: **Implementation of Open badges** (Policy&Regulation)

GOVERNANCE: NEAR
PARTICIPATION & CULTURE: NEAR(DM suggestion)
POLICY & REGULATION: NEXT(DM suggestion)

3

Open badges for learning

Participatory greening projects: schools, kindergartens of the City of Vienna and social housing of Wiener Wohnen (roof/façade greening with the involvement of children, pedagogues, building owners, building management, FM, tenants); Testing of rent reduction as a bonus and possibility of participatory budget.
DM suggests: **School food labs** and **Community composting** (Participation&Culture)

PARTICIPATION & CULTURE: NEAR
FINANCE: NEAR (DM suggestion)
PLACE-BASED: NEXT (DM suggestion)

4

School Food Labs

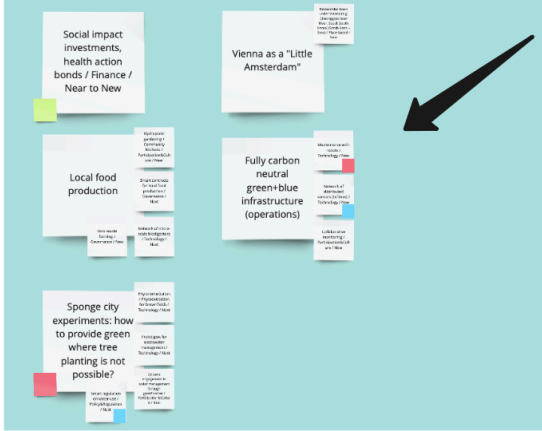
Community composting

Implementation of pilot project of PV roof garden (e.g. at University of Vienna); analysis of new legal regulation for buildings that improve the microclimate with MA22/19, (building height, shading...)

POLICY & REGULATION: NEAR
TECHNOLOGY: NEAR
PLACE-BASED: NEAR (DM suggestion)
(removed Governance, it wasn't clear why)

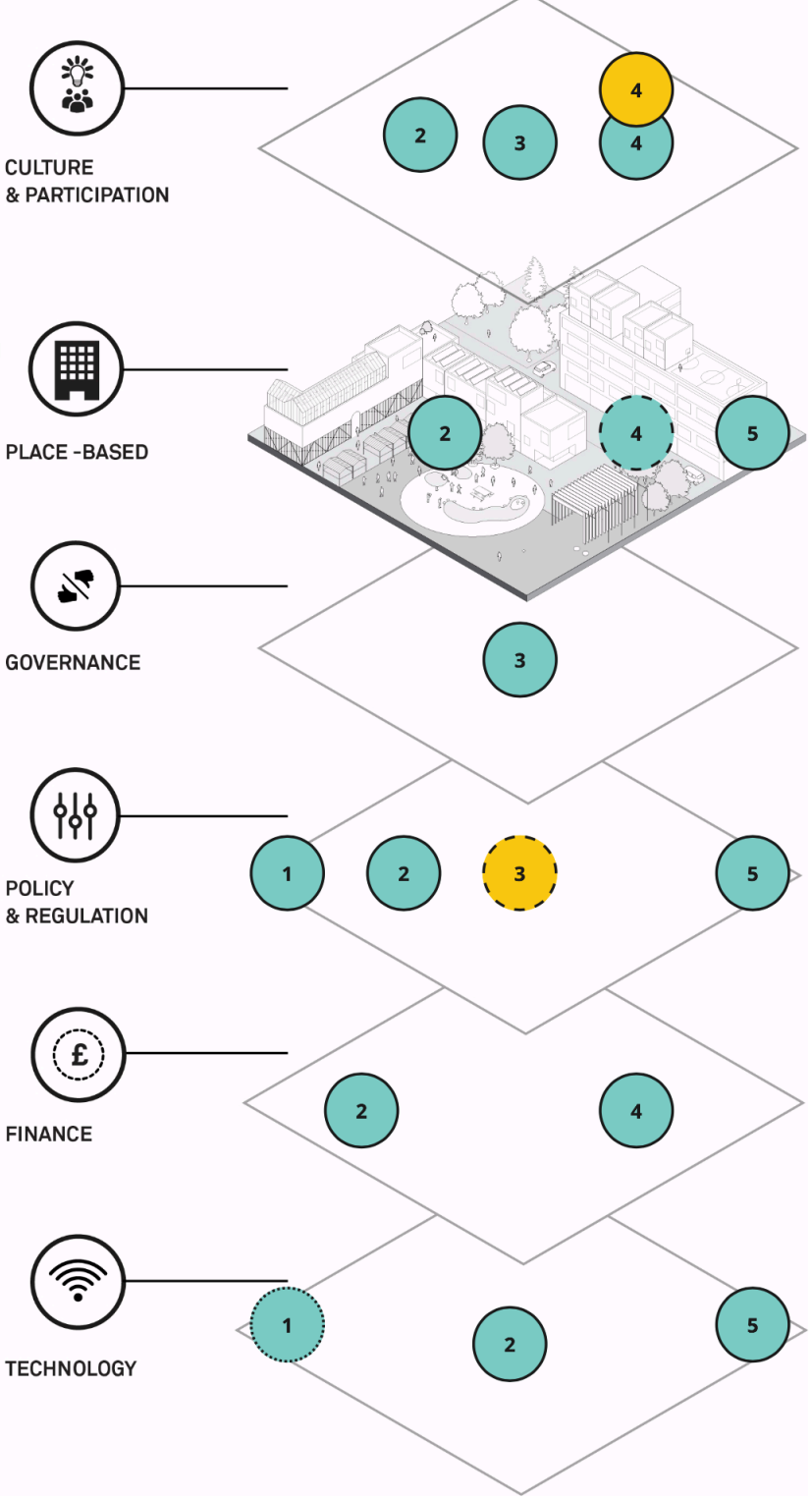
5

Further experiments (DM proposal)



Field weaknesses: Finance, Governance (both 1), Place-based, Technology (both 2)

Time weaknesses: lack of experiments within Next (2) and New horizons (0)



Further experiments (DM proposal)

Hydroponic gardening + Community kitchens / Participation & Culture / Near

Citizens engagement in water management through gamification / Participation & Culture / Next

Collaborative monitoring / Participation & Culture / New

Restore the rivers under Vienna (e.g. Cheonggyecheon River, Seoul, South Korea) (Sarah Haas + Svea) / Place-based / Next

Smart contracts for local food production / Governance / Next

Zero-waste farming / Governance / New

Smart regulation on water use / Policy&Regulation / Next

Social impact investments, health action bonds / Finance / Near to New

Social impact investments, health action bonds / Finance / Near to New

Social impact investments, health action bonds / Finance / Near to New

Prototypes for wastewater management / Technology / Next

Network of micro-scale biodigestors / Technology / Next

Manteinance with robots / Technology / New

Phytoremediation / Phytoextraction for brownfields / Technology / Next

Network of distributed sensors (IoTrees) / Technology / New

Near

Next

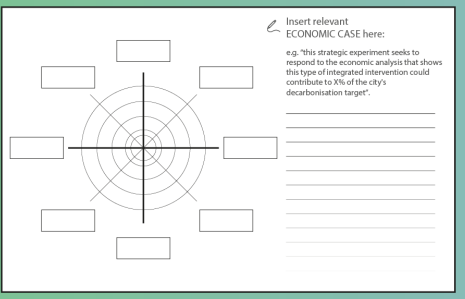
New

8. NET ZERO CITIES > VIENNA > EXPERIMENT STACKS

Q What is the logic behind this experiment?

Background and framing

Q Strategic experiment criteria: does the experiment consider..?



Insert relevant ECONOMIC CASE here:

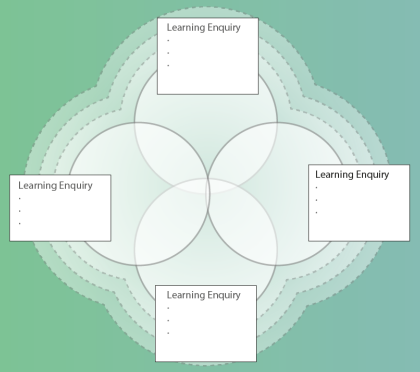
e.g. "this strategic experiment seeks to respond to the economic analysis that shows this type of integrated intervention could contribute to X% of the city's decarbonisation target".

EX Case Study
City, Country
Description

EX Case Study
City, Country
Description

EX Case Study
City, Country
Description

Q Strategic Learning: what will we learn to inform our city's future strategic investments?



IDENTIFYING RELATIONSHIPS

CO - INVESTMENT

BENEFICIARIES

VALUE CREATION €

CO - BENEFITS

DIRECT BENEFITS

EXPERIMENT

Supporting fact (source)

Supporting fact (source)

Supporting fact (source)

Supporting fact (source)

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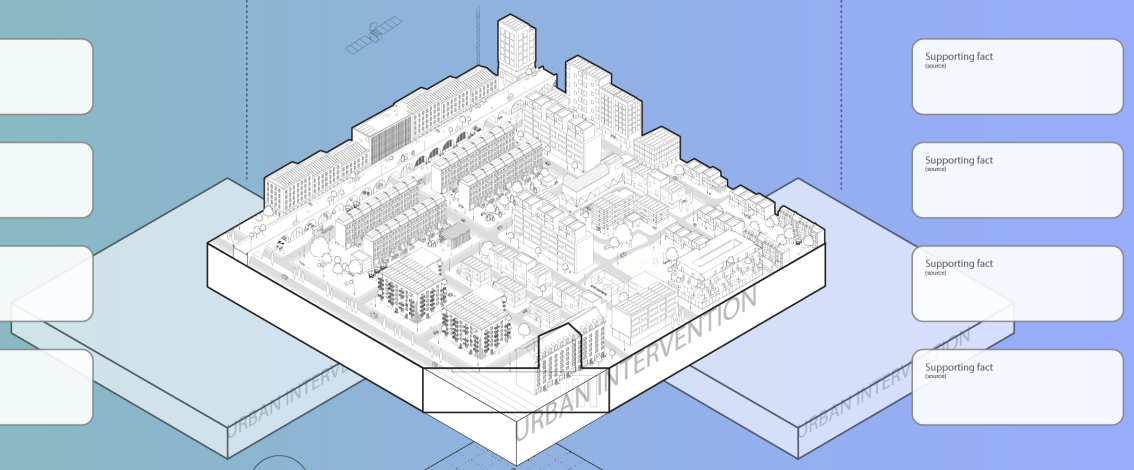
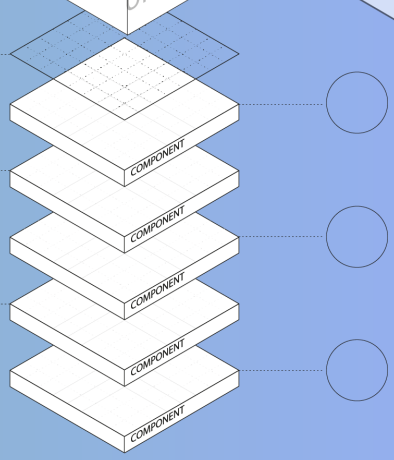


COMPONENT
Examples of what this layer could entail

COMPONENT
Examples of what this layer could entail

COMPONENT
Examples of what this layer could entail



COMPONENT
Examples of what this layer could entail

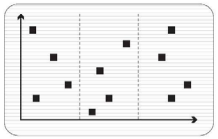
COMPONENT
Examples of what this layer could entail

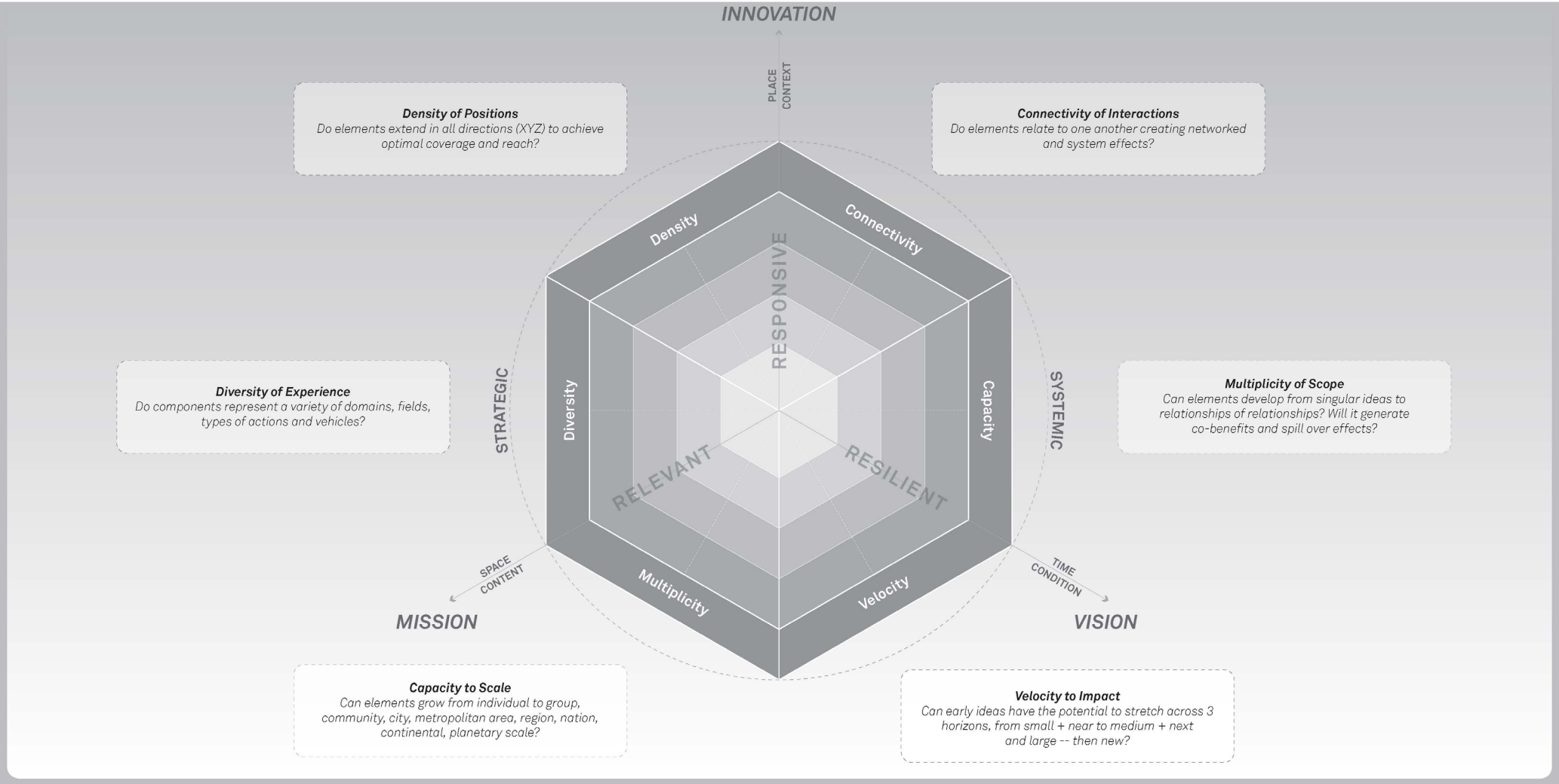
COMPONENT
Examples of what this layer could entail

8. NET ZERO CITIES > IMPACTS

HEALTHY CLEAN CITIES DEEP DEMONSTRATION
PORTFOLIO EVALUATION CRITERIA > QUALITY

Support stagegate requirements and local / national investments





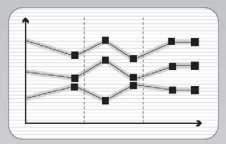
8. PORTFOLIO APPROACH TO NET ZERO CITIES > QUALITY MEASURES

HEALTHY CLEAN CITIES DEEP DEMONSTRATION

STRATEGIC EXPERIMENT EVALUATION CRITERIA > VALUE

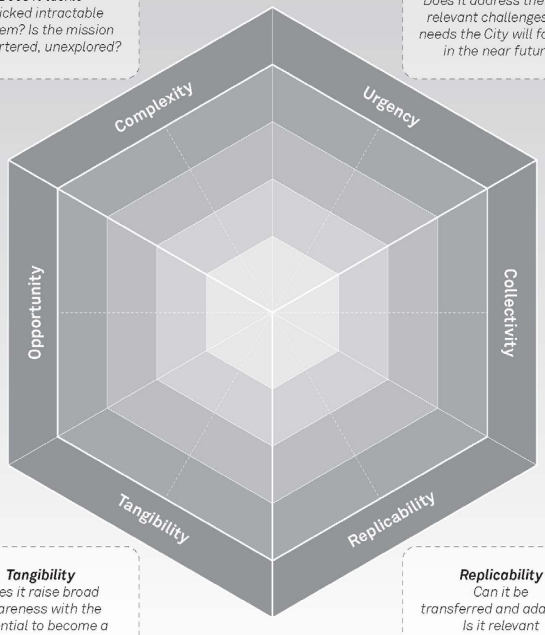
Support stagegate requirements and local / national investments

City Context
Horizontal Threads - Direction Toward MISSION



Complexity
Does it tackle a wicked intractable problem? Is the mission unchartered, unexplored?

Urgency
Does it address the most relevant challenges and needs the City will foresee in the near future?



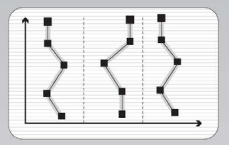
Opportunity
Does it incentivize timely investments and leverage current and new partnerships?

Collectivity
Does it stimulate new collaborations and new ways of working toward collective action?

Tangibility
Does it raise broad awareness with the potential to become a civic movement?

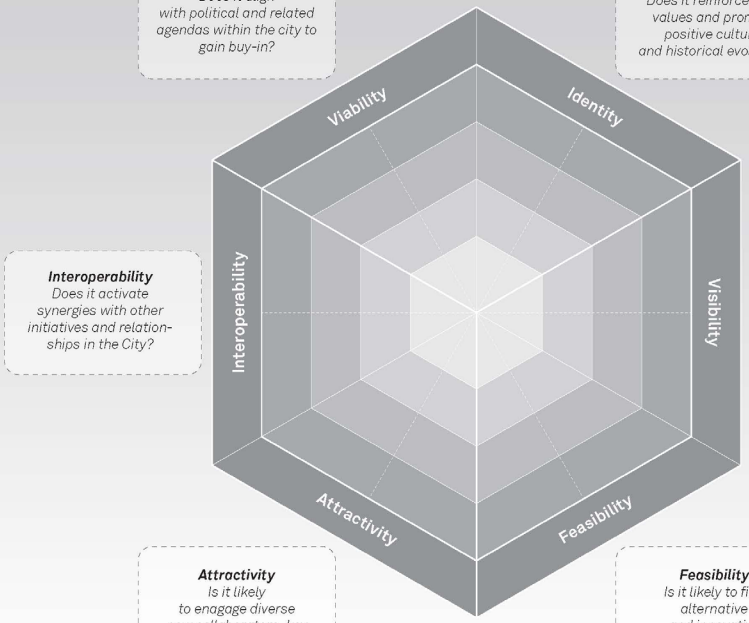
Replicability
Can it be transferred and adapted? Is it relevant as a leading practice

City Context
Vertical Threads - Systemic INNOVATION



Viability
Does it align with political and related agendas within the city to gain buy-in?

Identity
Does it reinforce local values and promote positive cultural and historical evolution?



Interoperability
Does it activate synergies with other initiatives and relation-ships in the City?

Visibility
Does it generate a compelling story that can be communicated in an accessible way to a broad audience?

Attractivity
Is it likely to engage diverse new collaborators, key influencers and stakeholders?

Feasibility
Is it likely to find alternative and innovative resources?

8. PORTFOLIO APPROACH TO NET ZERO CITIES > VALUE MEASURES

HEALTHY CLEAN CITIES DEEP DEMONSTRATION

COMPONENT CRITERIA > IMPACT

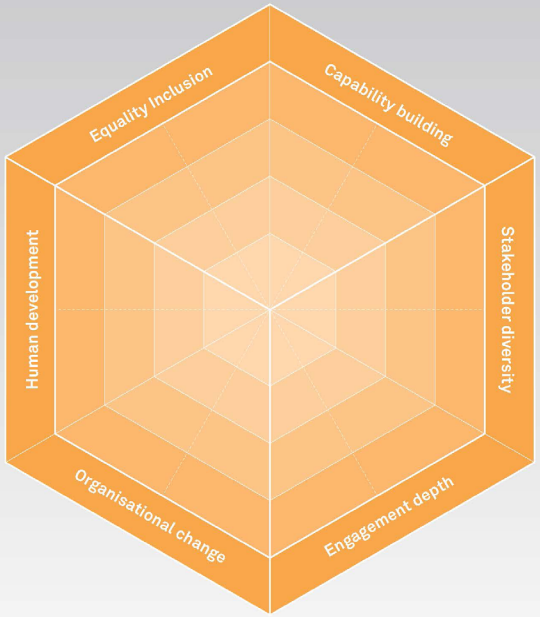
Support stagegate requirements and local / national investments

Social Value
Human + Community Capital

Equality
Is it likely to promote social inclusion (cultures, gender, language) and increase a sense of belonging and identity?

Capability building
Does it provide opportunities for learning and employment?

Stakeholder diversity
Is it likely to involve a diversity of stakeholders? Will it foster lasting collaboration?



Engagement depth
Is there minimum local buy-in for the approach? Is there potential for civic movement building?

Organisational change
Is the approach whole of government with the opportunity to re-design societal structures?

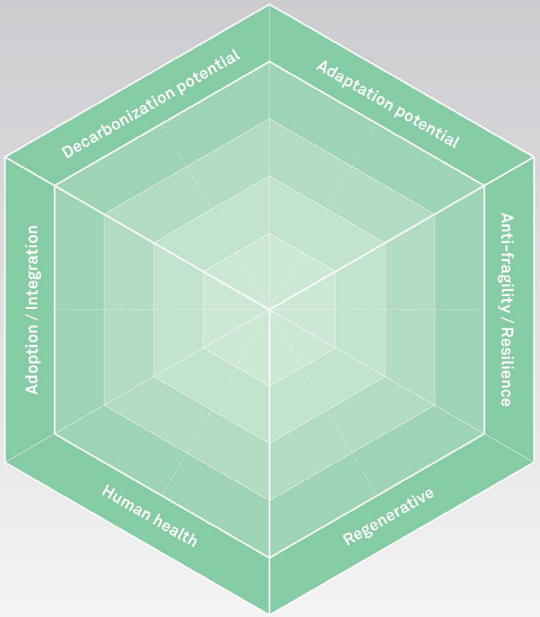
Human development
Is it likely to model positive behaviour? Will the intervention enhance life quality?

Environmental Value
Human + Natural Capital

Decarbonization potential
Does it have an ambitious carbon reduction potential?

Adaptation potential
Does it improve the life quality in a world already affected by undergoing changes?

Anti-fragility / Resilience
Does it ensure enough flexibility to embrace the volatility of alternative scenarios?



Regenerative
Does it stimulate renewal of place through an holistic approach?

Human health
Do the benefits consider improved physical, mental, psychological well being?

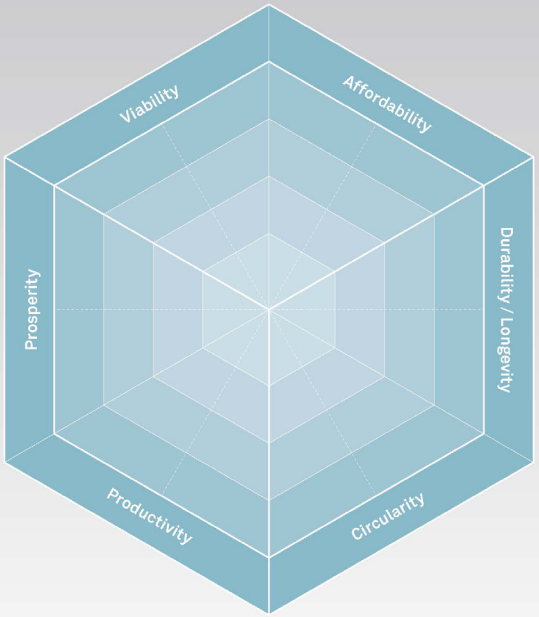
Adoption / Integration
Are the proposals relatable and likely to become a part of peoples' lives?

Economic Value
Human + Built Capital

Viability
Is there sufficient financial infrastructure for support?

Affordability
Is the expected result affordable for all?

Durability / Longevity
Does it have sufficient robustness to last beyond a trend?



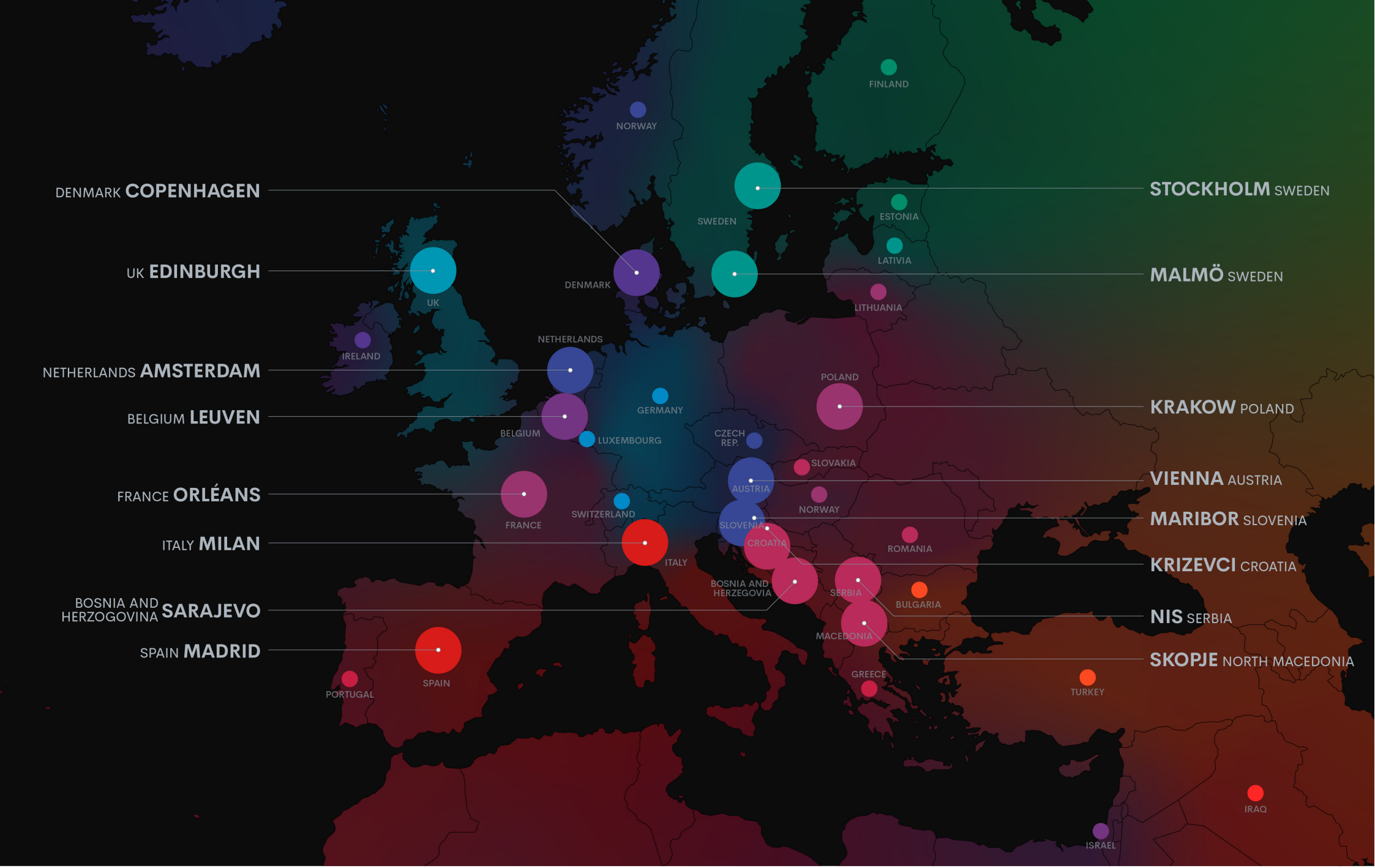
Circularity
Are resources used in such as way to achieve zero waste?

Productivity
Is it likely to increase efficiency and effectiveness at all scales?

Prosperity
Is it expected to leverage assets and generate a thriving the local economy?

8. PORTFOLIO APPROACH TO NET ZERO CITIES > IMPACT MEASURES

9. UNITED NATIONS SOCIAL INNOVATION PLATFORMS



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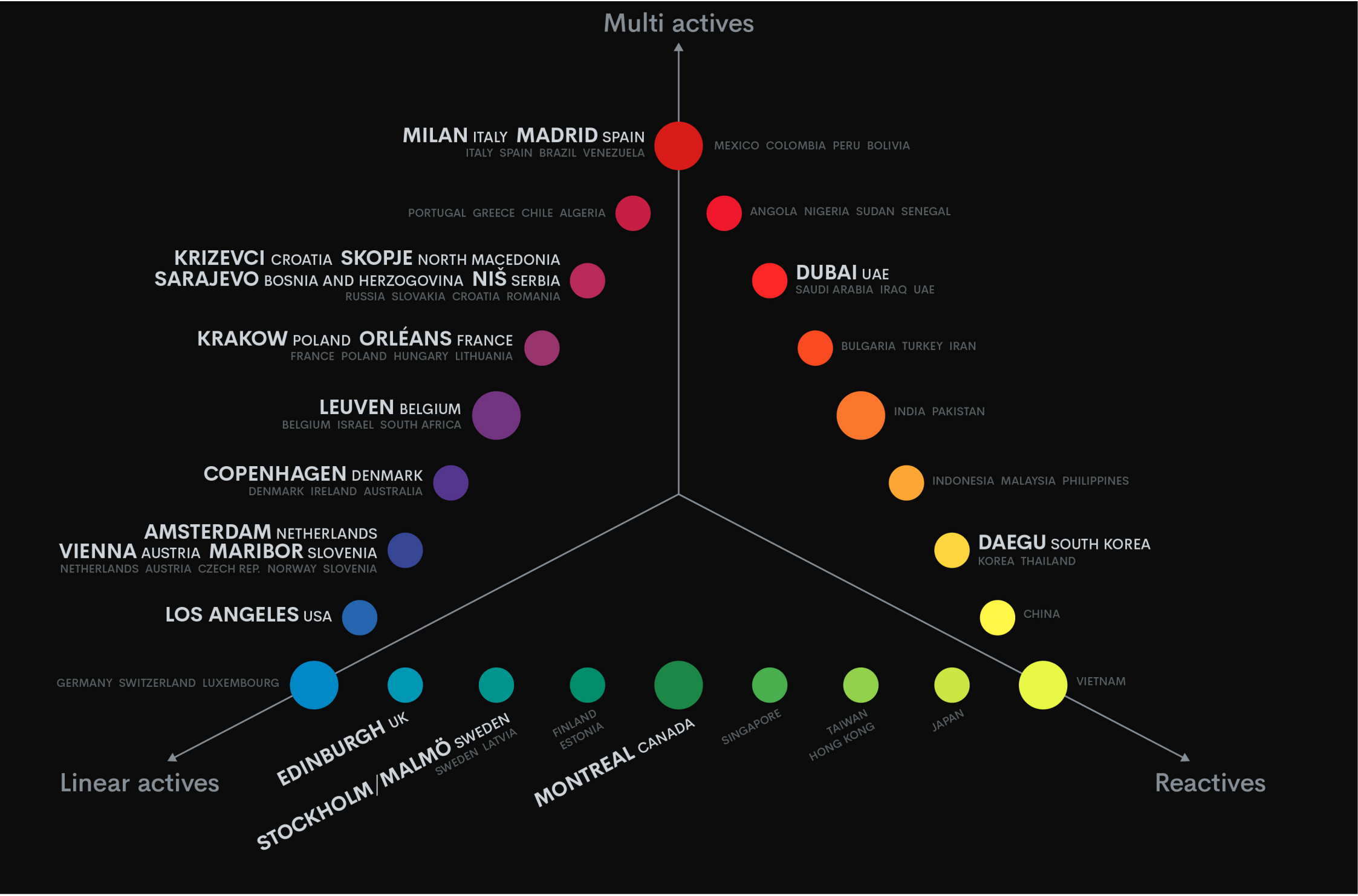

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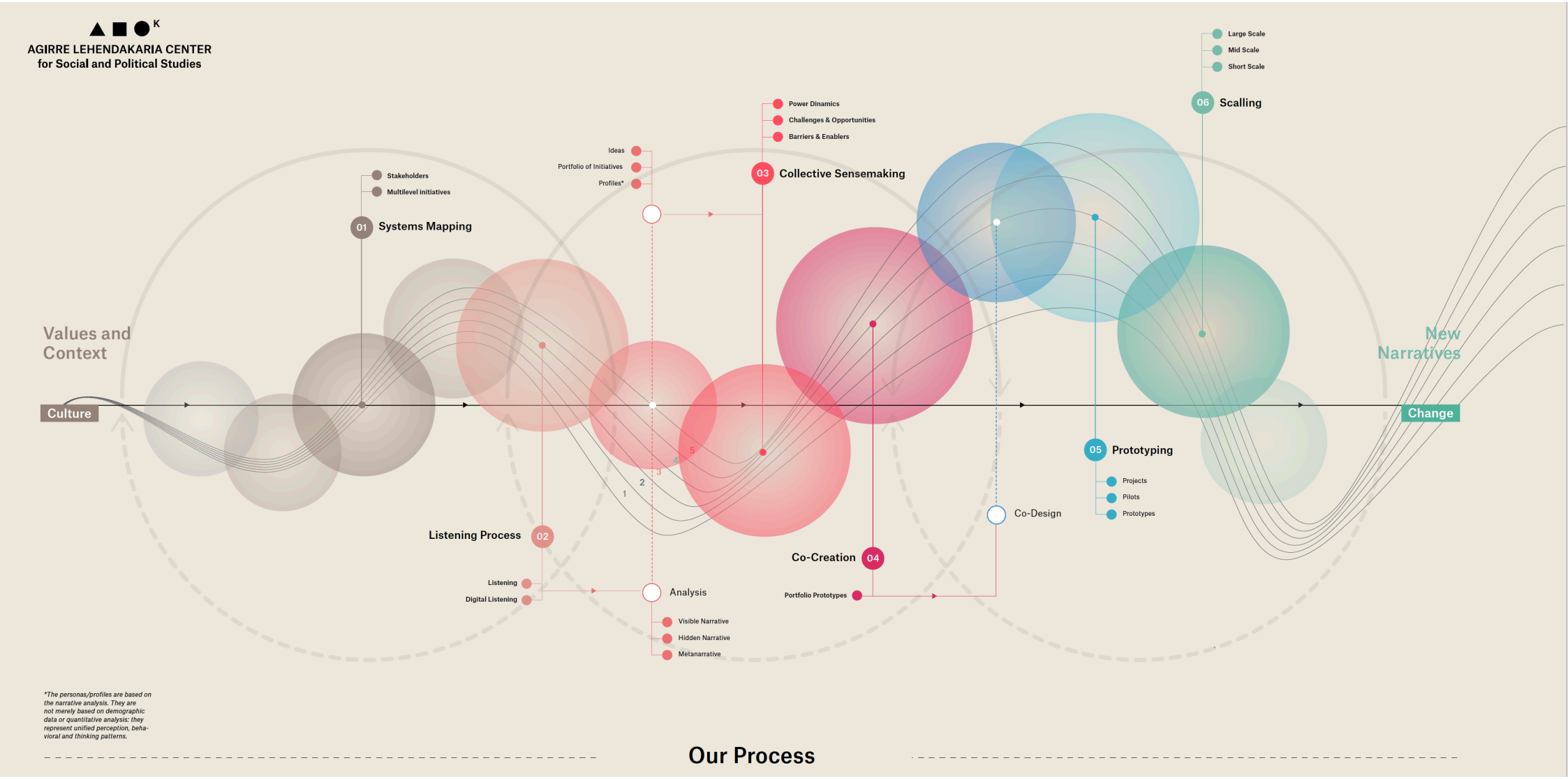
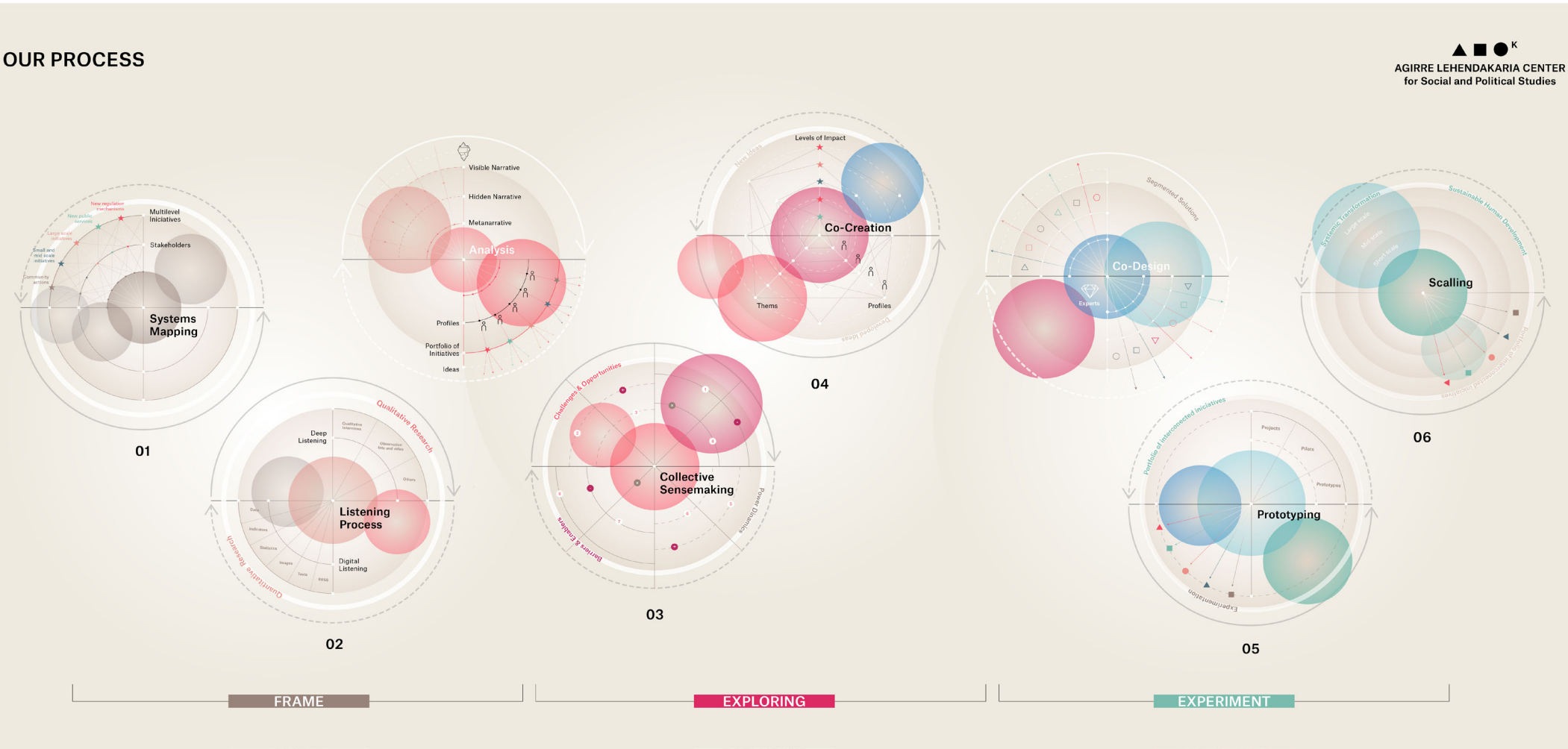


Credit: ALC

9. UNITED NATIONS SOCIAL INNOVATION PLATFORMS



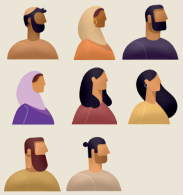
Credit: ALC

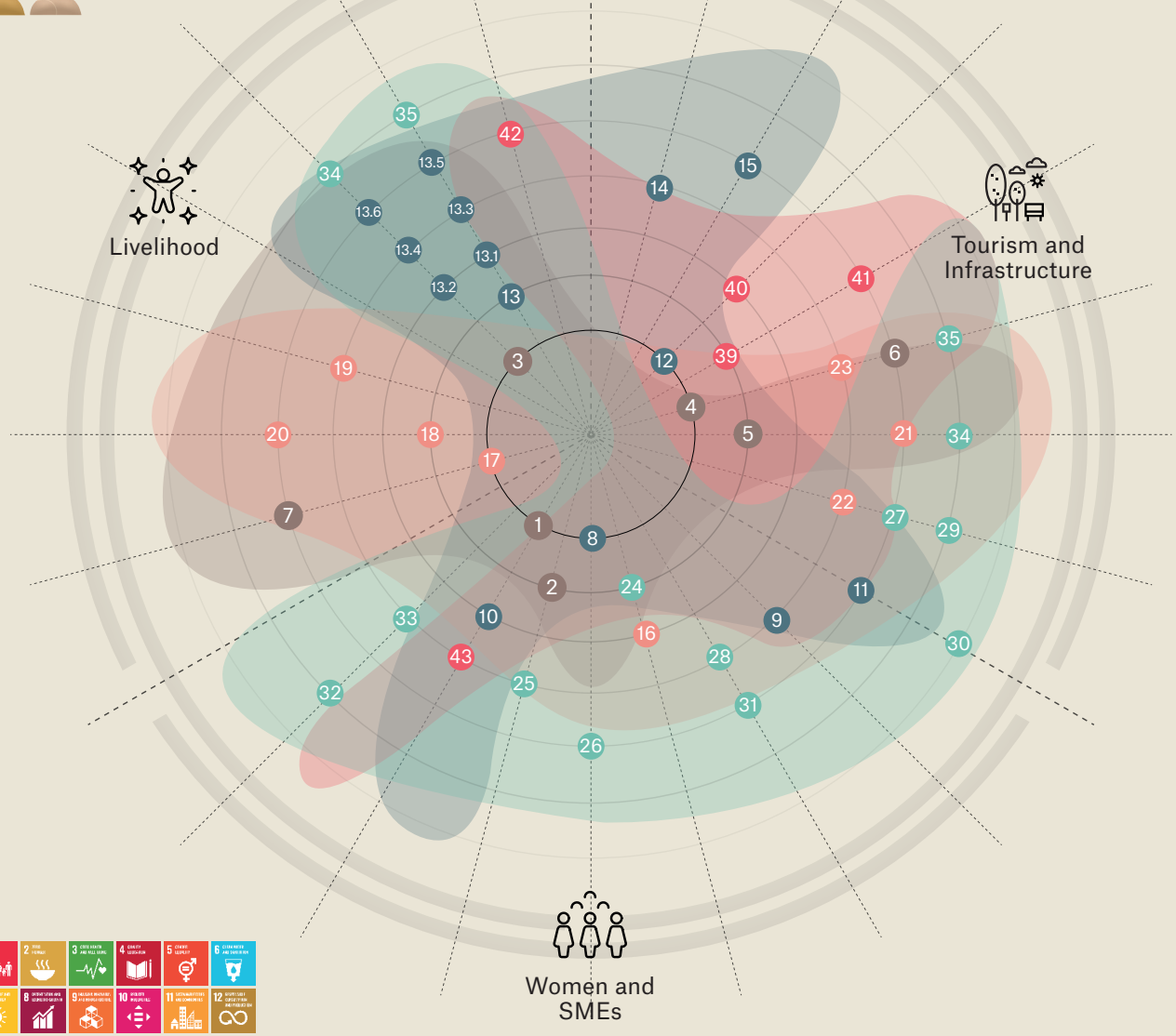
9. UNITED NATIONS SOCIAL INNOVATION PLATFORMS

GORONTALO, INDONESIA

Portfolio of Initiatives

AGIRRE LEHENDAKARIA CENTER
for Social and Political Studies





Community Actions

1. Saronde Festival Celebration
2. Revitalization of Ponelo and Katialada Boat Taxi Cooperatives
3. Revitalization (organizational strengthening) of Fishermen Groups
4. Revitalization (organizational strengthening) of Women Fishermen Groups
5. Revitalization of Farmers Groups (including Women Farmer Groups)
6. Food and seafood competitions and festivals
7. Videography competition event encouraging POKDARWIS/GENPI

Small/Mid Scale

8. Desa Ekowisata Ponelo: pilot village for blue ecotourism village (Community based tourism)
9. Capacity building for actors involved in different areas related to Tourism
10. Facilitate/establish the network of homestay/accommodation owners, local tour and travel agencies to collaborate and promote ecotourism at the village cluster
11. Prototyping on vernacular of floating house using local materials and knowledge
12. Digital Tourism Promotion
13. Development of Prukades (village cluster featured products)
13.1 Ponelo Prukades Gallery
13.2 Capacity building (training and technical assistance for UBK (Usaha Berbasis Komunitas) on local production of food
13.3 Training in post-harvest Management of the Prukades
13.4 Provision of processing and packaging tools for Ponelo Prukades
13.5 Training in packaging and marketing of the Ponelo Prukades
13.6 Curation of local indigenous knowledge on fishing practices (methods, tools, seasons)
14. Seed breeding specialists' company

Large Scale

16. Redesign of content and itinerary for Saronde Festival - linking with the local community and tourism packages of the surrounding area
17. Redesign of long-term ecotourism plan for Gorontalo Utara District based on marine conservation
18. Facilitation of access to funding through Fishermen/Farmer Groups/Bum-Des/Ma, local SMEs, Usaha Berbasis Komunitas (community-based small businesses) in collaboration with banks, fintech
19. Large scale development of an organic local food brand
20. Fish value chain redesign at provincial level
21. Development of Sentra UKM: Offline and online marketplace for Ponelo Prukades (featured products)
22. Revitalization of BUM-DES/MA
23. Millennial Fishermen Program Fishermen/fishery vocational training program targeting the youth and fishermen who can teach and talk at schools

Public Services

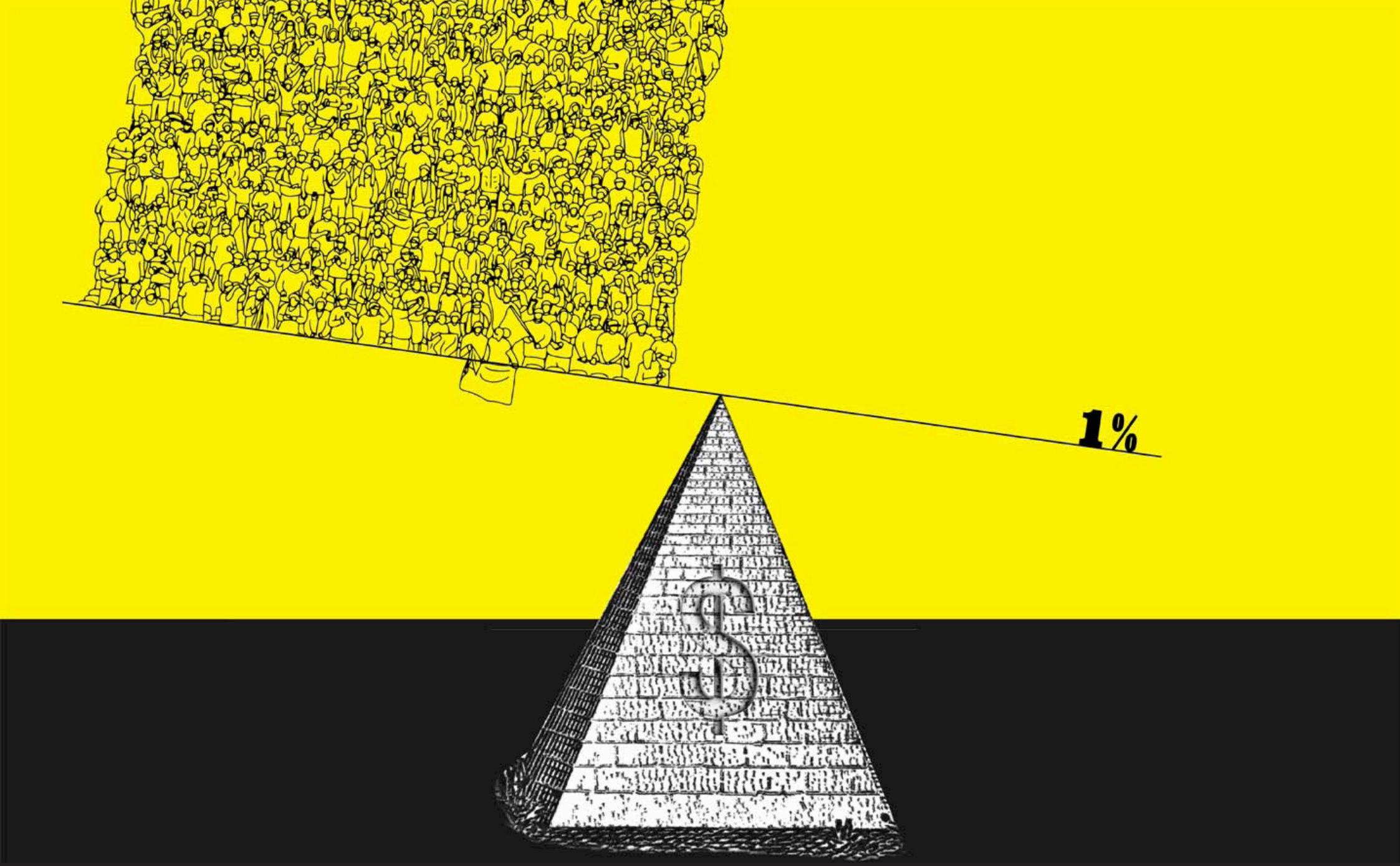
24. Clean water development program at provincial level
25. Desalination technology company
26. Ecotourism Information Center
27. Village cluster level sustainable waste management system to support marine conservation and ecotourism
28. Integrated monitoring system for fishing zones, garbage management, illegal fishing and conservation of mangroves and coral reefs
29. Public Internet access program
30. Blue shipping/transportation connecting Katialada and Ponelo Island
31. Provide certification for tourist guides
32. Redesign of waste recycling policies
33. Rethinking local government's online market place/platforms (FG, IG) as an online market-place for local food products
34. Public Internet access program
35. Scaling up the local government's tourism relationship network
36. Establishment/construction of roads connecting the villages to facilitate economic mobility and access to health and education services
37. Halal certification for local food products

Regulation Mechanisms

39. Socialization (reformulation) on existing regulation on Ponelo Islands as a conservation area
40. Village/village cluster level regulation on ecotourism/marine conservation
41. Waste management regulation development
42. Local seeds certification (seal of quality)
43. Local seeds certification (seal of quality)

Credit: ALC

9. UNITED NATIONS SOCIAL INNOVATION PLATFORMS



From 1% Now to 10 Billion in 2050

An Open Source Guide to Collaborative Innovation for Collective Action