

ACTIVE CITY INNOVATION WORKBOOK

How to use innovation
to make your city
an Active City

How to bring
Joy of Movement
into urban areas



Who is behind this Workbook?

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Hello dear Active City Innovators!

This workbook is dedicated to you! To all passionate people from city governments, to their partners and to all other creative protagonists who put their heart, soul, expertise, and resources into designing lively urban areas that invite people to move and play.

What you are holding in your hands or following on your screen is your inspiration and general guidance on how to make your city an active city using innovative concepts geared to your interest and environment.

You will also be stimulated to make Joy of Movement a core driver for new interventions, events and infrastructure design.

This workbook is designed as an easy way towards systematic thinking and acting in Active City Innovation. It will inspire you, but also offers concrete checklists, examples, and background information.

This workbook complements Active City Innovation Capacity-building workshops, offered by TAFISA and Innovationsmanufaktur. Contact the editors for more information on this opportunity.

But now: Enjoy! Immerse! Get Started!

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Prelude: Why this Workbook?

Developing new ways to bring physical activity to urban areas may sound like it is of secondary importance at first glance, given climate change, demographics, and energy cost. However, the “modern” sedentary lifestyles, much aggravated by the COVID-19 pandemic, and the resulting diseases like obesity, diabetes, heart problems and depression render this more important than ever. WHO in 2022 explicitly states that the pandemic of physical inactivity will result in 500 million sick people in the upcoming ten years, resulting in around 300 billion EUR treatment cost. Inactivity today means low efficacy and low quality of life tomorrow, and high cost in healthcare and medical treatment after tomorrow.

The good news is: This trend can be reversed. And, as life is getting more and more urbanized, cities can and should play a key role

in this reversal. By inspiring and providing for an active lifestyle they help increase quality of life, quality of living, attractiveness of the city and resilience of the population, and dramatically decrease all sorts of sickness-related cost. And for maximum efficiency and effect and best adaptation to respective social, cultural, geographic, physical, and economic environment, it is vital to not only copy good practice from other urban areas but to be innovative in your own right. By creating original distinct solutions cities also have an opportunity to address special interest, and will at the end benefit from the unique selling propositions as well as internal city marketing.

Cities are **the Sport for All** venues of the future. Through innovation, urban spaces can develop into universal playgrounds, providing for healthy and happy people. This workbook will be your guide to achieve all this.

Origin: Active City Innovation and the International Sports-Innovation-Network

This workbook is based on a number of preparative activities. The development already started in 2017, as main practical outcome of the Active City Innovation project conducted within **the International Sports-Innovation-Network** (SINN-i), a front-running network stimulating and creating innovations in physical activity, sports & health – with the core focus of bringing more **Joy of Movement** into the world. Right from the start the network encompassed a wide array of competent partners representing all relevant stakeholders, with special focus on bringing together enthusiastic and passionate innovators in the field of promoting physical activity. Its projects were based on a joint vision, mission and passion towards the imminent importance of

movement, worked upon in an informal innovation and cooperation culture under the paradigm of cooperative globalization, sharing of resources and production of synergies towards global learning and local effect.

The **Active City Innovation** project addressed the challenge of how to turn cities into active cities through innovation. Specific activities were the development and joint reflection of Experimentation Scenarios in five different countries, the elaboration of an understanding of motivations and barriers regarding physical activity and Joy of Movement, the development of capacity building instruments for city governments and other stakeholders, and the creation of this workbook.

Umbrella: The Joy of Movement Pioneers Innovation Hub (JOMP)

The Joy of Movement Pioneers Innovation Hub (JOMP) was initiated as a legacy of the SINN-i. As main advancement, JOMP explicitly puts the derived expertise and insights on what is Joy of Movement into the origin of innovations and interventions for more physical activity. First indications show that this change from the rational to the emotional in fostering more movement is what will make the decisive change in getting more people to become physically active, especially among those who

need it most.

At the time of writing of this workbook, JOMP is building up an inspiring collaborative environment, including global inspirations and exchange, materials to innovate advocate in Joy of Movement, and supporting global synergies and resource sharing. Check out the latest advances and the whole story under www.jomp.world

JOMP

JOY OF MOVEMENT PIONEERS

Making Emotion Power Vitality

JOMP Initiators and Members



Practice: How this book works

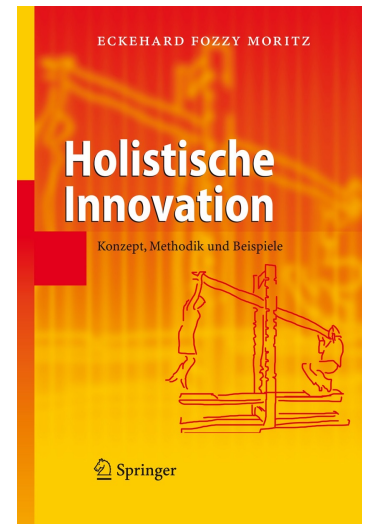
The aim of this workbook is to enable interested innovators to make their city active, to bring Joy of Movement everywhere. Its practical part is oriented along the eight steps of Holistic Innovation that act as a leading structure to make the adventure of innovation more comprehensible and logical. To increase practical relevance and applicability the steps are illustrated using a fictionary Active City Innovation project, on a fictionary island designed for Active City Innovation ventures, with a fictionary task force made up by typical actors and stakeholders in Active City Innovation endeavors. To still add practical and inspirational value, this workbook is concluded with "real" experimentation scenarios from around the world.

Introducing Holistic Innovation

Holistic Innovation is a system-oriented methodological framework allowing to address complex challenges and help design a desirable future, while improving efficiency and effect and reducing risk and resource needs. It combines systemic thinking with systematic proceeding while still providing plenty of room for focused creativity. It is based on ten years of reflections and forward thinking, combined with experimental projects of all sorts. The book **“Holistic Innovation”** was published by Springer in 2009, and the methodology is being complemented and advanced ever since.

Holistic Innovation is presented in eight master-steps that will lead innovators from the early intention to become innovative in a certain area

through to the valuation of the innovative solutions. It includes ensuring the readiness for innovation, selecting the most suitable corridor, developing a TargetVision, contextualizing the work and focusing on core functions, creation and elaboration of solutions, and their inevitable valuation.

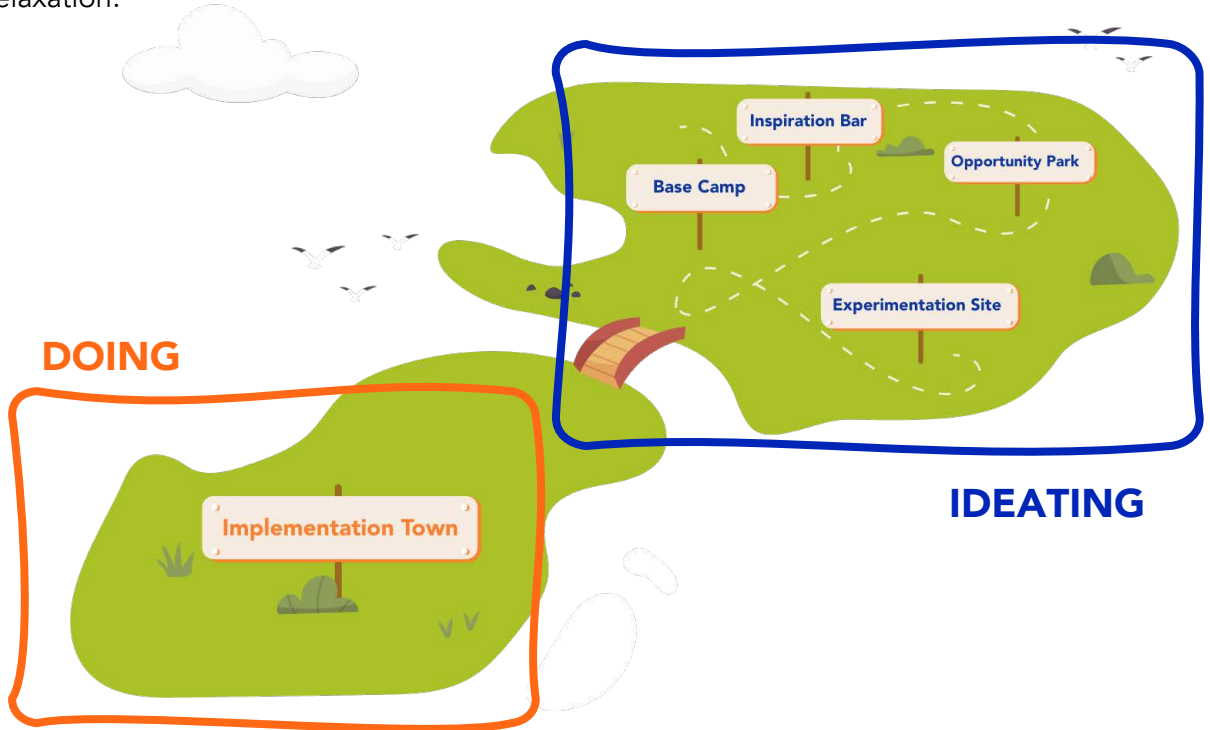


Steps of the Innovation Process

Making yourself ready for innovation success	1. PREPARE
Finding topics that afford success	2. DETERMINE
Framing the project	3. DESIRE
Exploring the context	4. UNDERSTAND
Understanding core functions & success factors	5. FOCUS
Developing high quality concepts	6. CREATE
Turning concept quality into solution quality	7. ELABORATE
Generating effect and added value	8. VALUATE

Introducing the Fictionary Setting -

The **Island Horcharra** has been designed as an ideal environment for exemplifying Active City Innovation projects, including being an offsite for creativity and inspiration. It is far from everyday life and everyday thinking, yet realistic. It contains different sites and different facilities hosting the different innovation steps. And it combines good working infrastructure with a nature of inspiration and relaxation.



Base Camp

A place for preparation, framing, resources, etc.

Opportunity Park

A place where a variety of innovation opportunities are presented in a structured way

Inspiration Bar

This is a good place for social and creative interaction

Experimentation Site

Here you can experiment, tinker ...

Implementation Town

Perfectly prepared to build / implement something close to reality

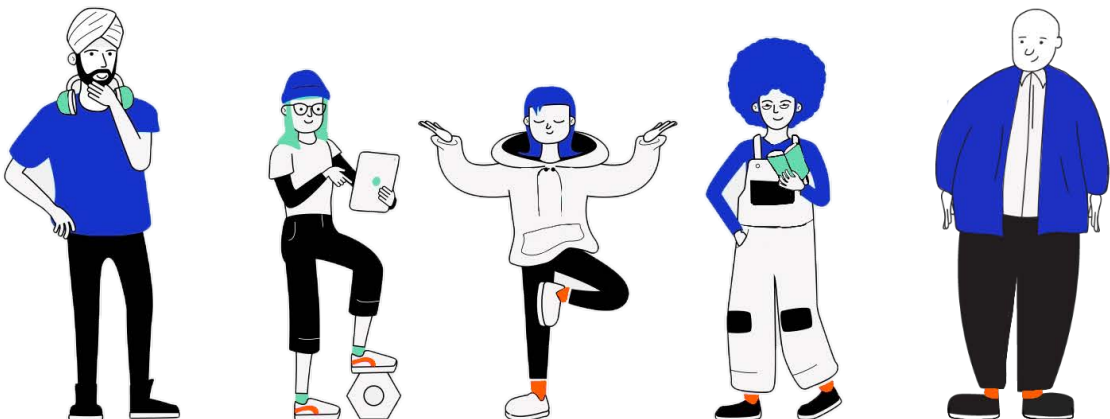
Holly is the personal innovation guide, both in process and atmosphere. She can and will explain what is necessary, and heedfully leads the "Innovation Squad" through their innovation adventure, giving advice, inspiration, empathy and context wherever needed.



Hi! I am Holly. Holly Stick. Your personal innovation guide on your way to making your city an active city.

You can use this manual in two ways: If you are just curious or like to get inspired you can browse our experimentation scenarios in the appendix. But if you are dedicated to creating something new yourself, then come join our innovation journey on the Active City Innovation island of Horcharra. Here I will escort you on your individualized innovation adventure; from the passion to make your city more active to the determination, ideation, and implementation of the most effective solutions.

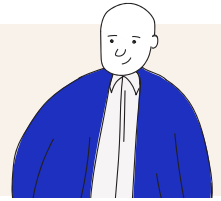
The '**Innovation Squad**' consists of representatives of all stakeholder groups that would typically form an innovation task force: in our case from the city government, from academia, from special interest groups and from benevolent sponsors. The members are stylized into personae, they exchange typical arguments, thoughts and ideas throughout the eight innovation steps and come to delightful solutions of their own at the end.



Bob

53 years old

elected City Councilor



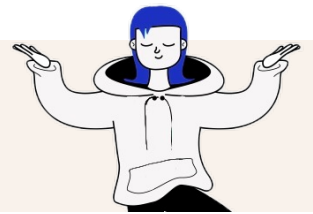
Among other things responsible for infrastructure and sports; Bob is overweight and not physically active but is involved in sport through his daughter who is part of the regional swimming team.

Bob has set up the squad and is leading the mission. He is sure that his popularity and likelihood of becoming re-elected will increase by an Active City Innovation project. Likewise, this project will be contributing to the image of his city and the health and quality of life of his citizens. He has some budget set aside and wants to invest wisely.

Daisy

37 years old

associate of the Director of Public Health



She stays active through her interests in outdoor and fitness activities.

Daisy has been appointed to the squad as a leading and very active protagonist in the Public Health Department to promote physical activity in public space. She is aware of many models on how to measure the economic and social benefits of physical activity, and is driven to make her city more active.

Abdul

25 years old

student



He is a local activist in cycling and Fridays for Future and volunteers at his local youth club. Abdul cycles everywhere, experiments with other micro vehicles and is admired by young people in his community.

Abdul has been invited to seek for opportunities to bring in the potentials of active mobility into Active City Innovation. Abdul is very enthusiastic, idealistic and has many ideas, but he can be disappointed if things do not move fast enough.

Shea

47 years old

Professor in physical activity



Occasionally does yoga but she spends most of her free time taking her energetic daughter to do parkour.

Shea has seen the world in research projects, guest professorships and conferences around physical activity. She knows about innovative developments elsewhere on the globe, and is intrigued to find new approaches to evaluate the effect of movement opportunities in public space.

Katharina

67 years old

a now retired financial consultant



Also an official supporter of the JOMP (Joy of Movement Pioneers) Innovation Hub; a former national champion in gymnastics, still competing in her age group.

Katharina has been sponsoring the trip to Horcharra in an attempt to bring some new creative yet focused energies into fostering physical activity in her home town. She has also promised to support the seeking for local resources.



This is the visiting **Innovation Squad** now embarking onto an **Active City Innovation** journey.

Arrival on Horcharra

Welcome to **Horcharra**

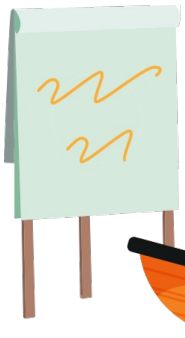
Your Active City Innovation Adventure Island

- arrive with a mission and leave with a solution
- advance on our professionally laid-out Innovation Trek and individualize it to your needs and desires
- discover the worth and the fun of an Innovation adventure
- develop an innovation strategy how to get your citizens more active!



Please let me introduce the stations of the **Innovation Trek** we have laid out for you. In general, our adventure trek will lead you through eight different activities, for which we have prepared four sites and, for the last step, basically all of the island, depending on where our excursion will direct us.

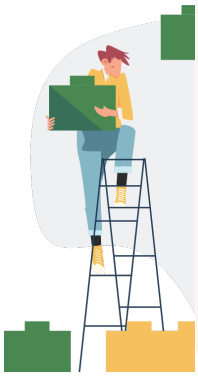




1

We have a **Base Camp**. Here we will **PREPARE** everything for your innovation journey.

2



Then we will move to the **Opportunity Park**. Here you will be getting a great structured overview over all the possibilities you have to create an active city. Together with knowing the success factors, this will help you **DETERMINE** your innovation project.

3



Then we will have a first visit to the **Inspiration Bar**. Here we will be creating a joint vision for our project, accumulate resources and instill passion so that we all really **DESIRE** our new project.

4

On the next morning, we move back to the corner of the **Opportunity Park**, which is closest to embed our vision. It is very important that we **UNDERSTAND** the complete context before moving on to the Experimentation Site.



5



At the **Experimentation Site**, it is all about creative play around the core functions. We aim to realize, in order to **FOCUS** well and open creative horizons where it suits best.

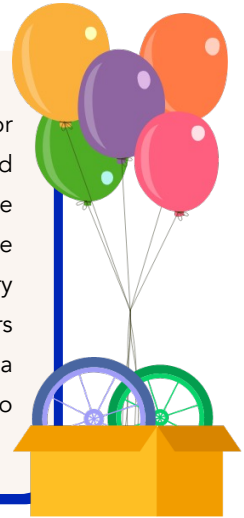
6

To then ideate and **CREATE** great and successful concepts to realize our vision, the best possible environment, of course, is the **Inspiration Bar**.



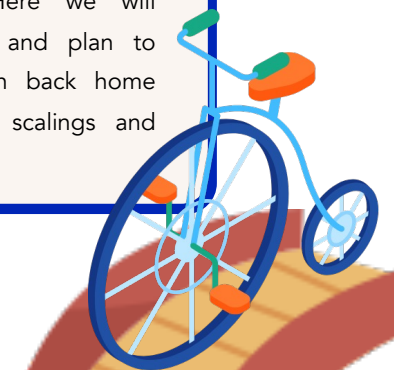
7

Before the prototype or demonstrator gets realized and rolled out, we once more move back to the **Base Camp**: here we find or acquire all necessary resources, gadgets, and partners and **ELABORATE** our favorite idea so that we can confidently go towards realization.



8

Goodbye Ideation, hello **Doing**: This basically can be anywhere on Horcharra. Here we will realize our idea and plan to **VALUATE** it both back home and in potential scalings and transfers.



1. PREPARE

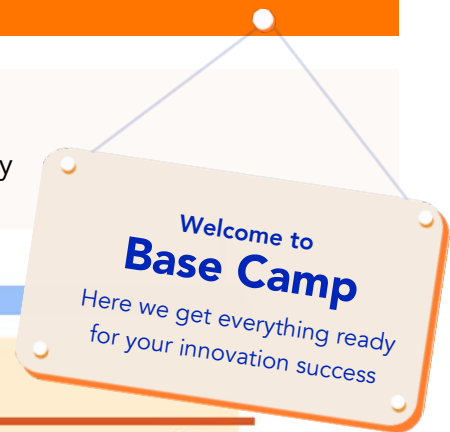
Making yourself ready for innovation success

STARTING POINT



Decision

We need *SOMETHING NEW* to make our city an active city



OUTCOME



City government and core stakeholders
on board



Resources
available

Before travelling to Horcharra, the squad has defined its general mission:

General Mission

Our city is determined to pursue new ways to create an inviting environment for healthy living and attractive offers for physical activity addressing all age groups. We will be bringing fresh ideas into our city, thereby increasing health and quality of life of our citizens, and general appeal of our living environment.

1. PREPARE

Making yourself ready for innovation success

Here comes a checklist for you guys.

Please take your time, concentrate and make sure the requirements are fulfilled. We will discuss them together so that we all have the same understanding.

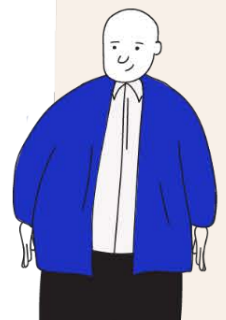


Innovation Adventure Readiness Checklist

To make sure that your innovation journey will result in success, please verify that all of the following is in place:

- enough dedicated **stakeholders** in your city are willing and prepared to help implement new ideas to enhance physical activity
- an **initial implementation budget** has been set aside according to the importance of this venture, and **access to all sorts of other resources** has been prepared
- an **Active City Innovation Task Force** representing core innovation stakeholders has been established, with passion and dedication to act
- awareness** is being built that the long-term success of the innovation initiative is depending on accompanying organizational, cultural and communication measures

Thanks Holly!



Bob | (confident) Hey, the **Task Force**, that is us, and budget is there: all set!

Daisy | Thorough reading has never been your strength, has it? Hmm...critical mass of all stakeholders. I am a little worried about the conservative brickheads of the department of infrastructure...

Shea | Don't panic. Who knows if our new concept will need a big deal of brick moving... (smirking) and even if: With my new models I can quantify all the saving on health-related costs for almost anything we will come up with and present them to the mayor...

Katharina | Great. And my vast network will sure be enough to tick the '**access to all sorts of other resources**' box as well. But what do they mean by accompanying cultural measures?

Abdul | A '**Joy of Movement Culture**': dancing parties in the streets, the mayor and all interested city government working out in their offices, schoolyards turning into PowerPlay areas...

Bob | Oh my goodness, this trip may become tiresome...



Summary: How to PREPARE in Active City Innovation

Activities

- roughly determine scale and scope of the innovation venture: How important are the project and its effects to your city, your institution?
- set up a Task Force, Innovation Squad etc. with forward-looking representatives of core early innovation stakeholders. Take care of heterogeneous member composition
- provide for an initial budget free of bureaucratic restrictions, to determine and prototype a best fitting solution
- spread vision and work towards general commitment of core stakeholders

Insights/Results

You will find this kind of checklist at the end of every chapter.

The goal is to summarize main activities to be conducted in working on each step.

2. DETERMINE

Finding topics that afford success

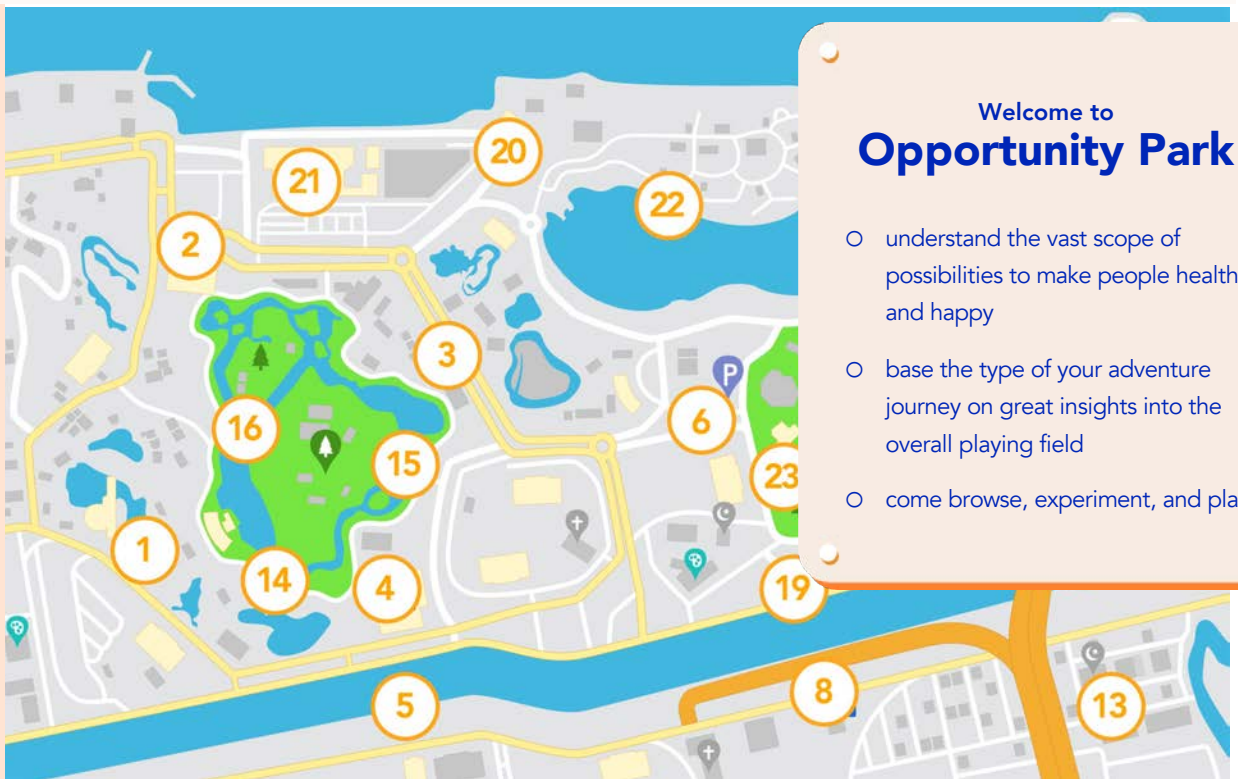
STARTING POINT



Suitable Expertise
is incorporated



Task Force
is set up



OUTCOME



Most Promising Approaches
identified



Solution Corridor
decided

The Opportunity Park shows plenty of possibilities for innovative action. You find structure and examples on the next page.



These are categories in which innovations could be targeted and developed!

1

Programs & Events

4

Cooperation & Partnership

2

**Communication,
Knowledge & Awareness**

5

Spaces & Places

3

Equipment & Technologies

6

People & Groups

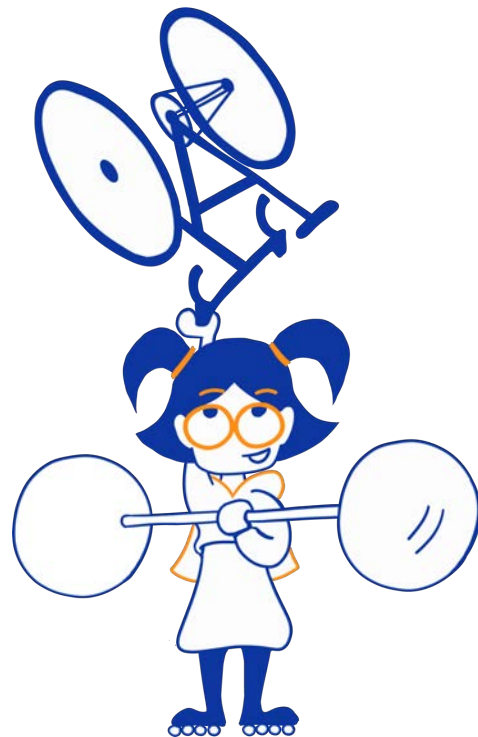
2. DETERMINE

Finding topics that afford success

Welcome to the **Opportunity Park**.

Here you can learn about the different opportunities and starting points to approach innovations for Active Cities!

You are really lucky that here in Horcharra we could put so much energy and resources into this Opportunity Park. Getting to know the options is sooo helpful to make you choose the right type of innovation adventure before you even start.



Abdul | (excited) Spaces and places, equipment, events, partnerships, awareness, communication... I want innovation in all of this. Then we have no more worries about 'Joy of Movement Culture'.

Shea | And I got many inspirations about new evaluation approaches...

Daisy | As we are here to be inspired... all these health approaches... that sure includes activation events. Based on Abdul's idea I think we should combine various solution categories to maximize effect...

Katharina | And to minimize trouble with infrastructure guys. If I now recall our mission to make people move more who do not yet move enough, with long-term effect while not constantly plundering resources; why don't we, as a city, initiate an attractive to-become-regular public '**Just Join 'n Play**' event. A little like the Park Run idea I have heard of, just across all physical activities.

Abdul | This could become a very playful initiative!

Bob | And I will get the mayor to inaugurate and open it.

Summary: How to DETERMINE in Active City Innovation

Activities

- create or get access to a structured overview over Innovation Opportunities to make your city an Active City

- determine the opportunities that can best create the desired effects

- develop your list of criteria to help select and define the currently appropriate innovation corridor. *Examples of possibly useful criteria include: efficiency, effectiveness, resource adequacy, attractiveness, fit to future trends and Zeitgeist,...*

- focus and circumscribe your innovation corridor and ensure continued acceptance of decision makers.

Insights/Results

3. DESIRE

Framing the project

STARTING POINT



Solution Corridor
is decided



Stakeholders
are ready to act



OUTCOME



Target Vision
defined



Passion
shared



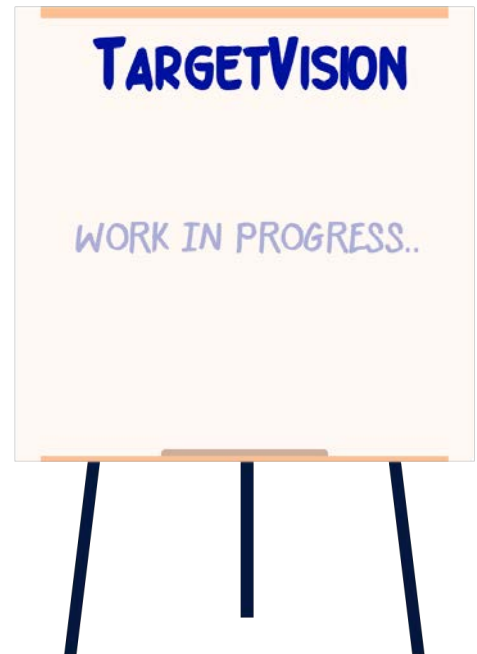
Project Setting
created

The Inspiration Bar is a place that is dedicated to social and creative interaction.

3. DESIRE

Framing the project

Welcome to the **Inspiration Bar** – and the third leg of our innovation journey, with the task to formulate the **TargetVision** and lay our important cornerstones of the innovation setting.



Shea | What do you mean by **TargetVision**?

Holly | You can think of a **TargetVision** as the conceptual soul of an innovation journey. You specify the basic essence of what you commit yourself to achieve; without any reference to possible solution elements.

Shea | And why do you call this step **DESIRE**?

Holly | Because innovation is never only rational: Especially in early stages, innovators need **empathy and passion, sense and sensibility**.

Katharina | Okay, if I now follow up on what I had suggested in the opportunity park, a **TargetVision** could be based on something like this: 'A regular public happening that continuously motivates people to engage in enhanced physical activity.'

Daisy | Add the main target groups; let us call them **WannaGos**, which could stand for inactive people who have an initial interest in becoming active but face barriers or do not know how to.

Shea | Should we also define the '**Quality**' of the physical activity?

Daisy | An important thought. But will this not distort from '**How to motivate?**'

Abdul | What about calling it '**Diversely Challenging**'? This is open in interpretation and execution, but still avoids triviality.

3. DESIRE

Framing the project

Bob | Okay. Let us see if you got that right in summary. We will be developing 'A regular public happening that continuously motivates WannaGos to engage in diversely challenging physical activity.' I am buying it: If we achieve this, it will really make a difference...

Holly | (smiling) Which is just another way of describing the nature of a **TargetVision**.



Summary: How to DESIRE in Active City Innovation

Activities

- compile all crucial descriptors (format, functions, attributes) of your intended solution and formulate an abstract yet intelligible **TargetVision**. 'Crucial' here refers to the importance in fundamentally shaping the eventual solution.

- adapt and specify resource plan and early-innovation project setting.

- identify and address partners with possibly needed expertise and resources

Insights/Results

4. UNDERSTAND

Exploring the context

STARTING POINT



TargetVision
is defined



The Need To Create A System Solution
is understood



OUTCOME



Context System around the TargetVision
understood



Implications
derived and compiled

DeepDive:

Organized Movement in Public Space

Explore all relevant aspects into which your innovation topic is embedded

Have a look at the **DeepDive** information that you can find attached to several items. Here further knowledge has been worked out already for your convenience.

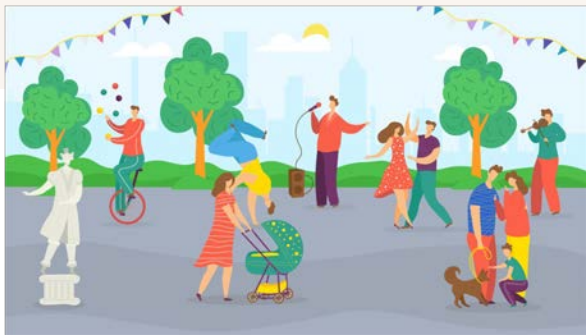


The following are the three most important dimensions to look at in Active City Innovation projects:

Target Group: WannaGo

Motivations and Success Factors

- perceived usefulness and progress
- diversion, entertainment, and fun
- integration into the physical, social and emotional environment



Environment: Urban Area

The City as Stadium

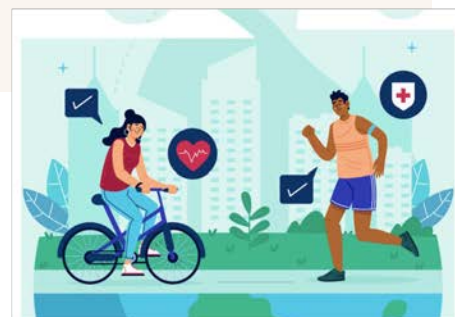
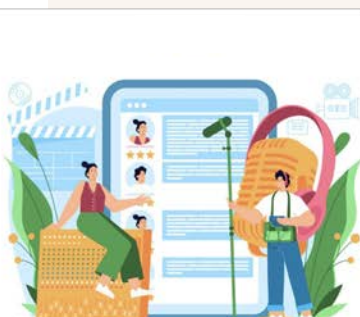
- parks, green areas, riverbanks, lakes
- playgrounds, schoolyards, soccer fields
- streets, squares, crossings
- traffic lights, benches, fountains



Enablers

Digitalization, bio-solutions and more

- social media, personalization, artificial intelligence, situative control
- biological transformation, urban gardening, bio-surfaces
- energy harvesting, sensorized textiles, illumination sheets, sturdy screens and projectors





See here, regarding your **TargetVision** a group prior to you has already derived some success factors. Lucky you...

Success Principles for Public Offers in Physical Activity

Regularity

Activities should be associated with time and place when they happen to have a chance to get into the routines of people and to lower entrance barriers

Social action

At the end of "events", there should be opportunities for informal meetings

Gratis

Offers should be for free; money derived from public or private sponsors or through extra side business

Inclusivity

Activities must be offered in a way that all interested people could possibly take part on a perceived equal footing

No last/worst

Means must be put in place so that nobody will feel last and worst

Sense of achievement

For the ambitious ones, opportunities must be created to see/feel achievements, strive for personal best etc.

Safety (physical and psychological)

Environments must be created that are not perceived as harmful in any sense

Accessibility

It must be ascertained that the organizational, emotional and physical access to an activity does not pose barriers that potential participants would not want to surpass

Longevity

If at all possible, activities should be designed to be repeated, possibly scaled and transferred

by Steve, Ben, and Fozzy

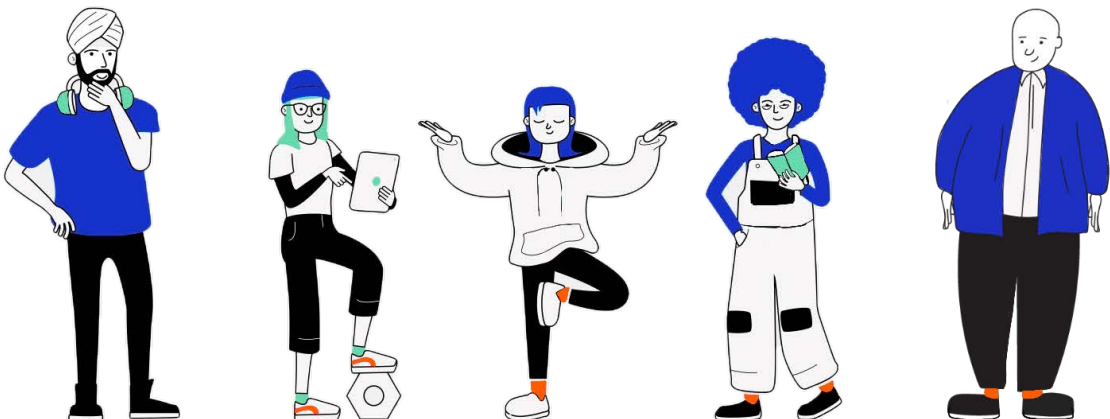
Daisy | Oh, wonderful. It feels almost like this trip here is scripted. And some items on this list I would sure not have thought of...

Katharina | For example '**sense of achievement**'. I kept thinking that this would rather put WannaGos of: fighting to perform best in sports was even taken out of most school curricula. We seem to have neglected that by doing so we lose an important intrinsic motivator for the whole of life... I would like to put this in focus as well and combine it with 'no last/worst'. Getting both done sure is possible and should be one of our challenges.

Abdul | But let's not neglect the other dimensions either; I especially wonder what was written under the '**Success Principle Bulletin**' originally... wasn't it 'environment'? See, usually we think physical activity in cities to happen in parks or yards, and are angry about kids claiming squares with skateboards. But let us reclaim public space; what better use can it have than for health, communication, and joyful purposes.

Bob | *(Smiling)*... seems we managed to avoid trouble with the infrastructure guys, only to have traffic management and police come after us.

Shea | At first they may not like us for impeding their orderly environment, as it seems to turn into now. But I will sure be able to prove that public space with visible life is not only livable and attractive, but also a safe public space, in every regard.



Summary: How to UNDERSTAND in Active City Innovation

Activities

- determine all relevant dimensions that will help you understand the overall context into which you will realize your Target Vision.

Typically useful dimensions include stakeholders, rationalities, user motivation, use scenarios, innovation enablers, trends, barriers, resources (in a wide sense), boundary conditions, interfaces...

- generate and/or compile information and inspirations in these dimensions that could be helpful in ideating, elaborating & implementing your innovative solution

Insights/Results

5. FOCUS

Understanding core functions & success factors

STARTING POINT



Target Vision
is defined



Context System Conceived
is conceived

Welcome to
Experimentation Site

Immerse into what Joy of Movement can mean to you, and to the world
Here you can start to play!



OUTCOME



Core Functions and their creative Realization Potential
comprehended



This fifth leg, **FOCUS**, is directed towards physically and intellectually grasping the essence of the core functions we want to realize. You usually derive them from the **TargetVision**; remember: **'A regular public happening that continuously motivates WannaGos to engage in diversely challenging physical activity.'** So, what is and provides for 'continuous motivation', and what can 'diversely challenging' encompass? As joyification of movement is of core importance in about any Active City Innovation journey, we have set up a **'Joy of Movement Experimentation Site'** including an overview over most of the relevant aspects, qualities, and rationalities on this complex issue.

Come closer, come ponder, come play, come embody Joy of Movement...



Bob | Oh wow. I thought '**Joy**' would just mean something like playing around and laughing... but this is really massive.

Shea | I like the three dimensions; maybe we can name them differently. '**Get ready to Enjoy**' could become '**Anticipation**', '**Experience Intrinsic Joy**' be called '**Immersion**', and '**Enjoy Great Results**' possibly '**Achievement**'. This means a lot of opportunities, but also challenges, for evaluating...

Abdul | Better... for creating fancy new solutions. I especially like the 'passion, love, aesthetics, humor..' section. What about a competition about who laughs most during physical activity; what about aesthetics in active mobility, what about...

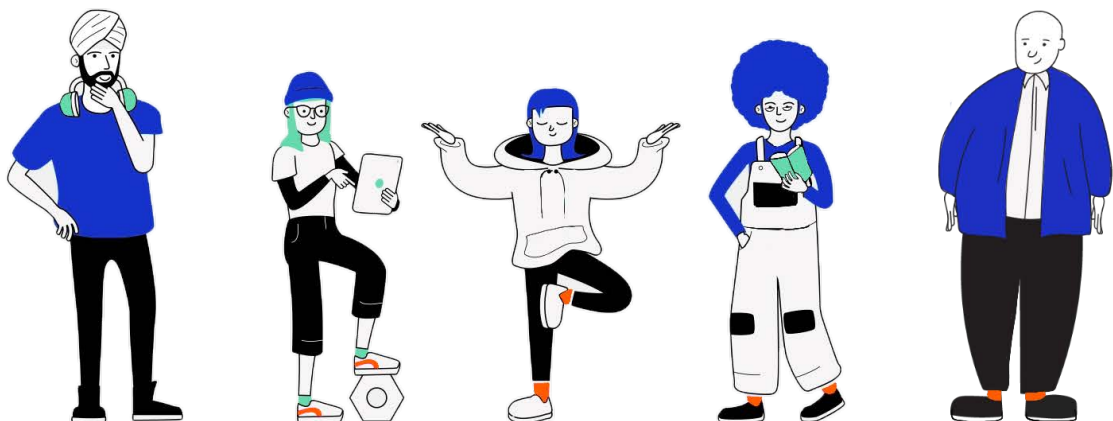
Katharina | Your creativity is really infectious. Combine this with instagrammability and satisfaction of curiosity...

Shea | Aren't these contradictions?

Katharina | Well, anyway it seems we have many opportunities, and hence will sure be able to approach many different '**Joy Personalities**'.

Daisy | Definitely, the creative stage is set, and the possibilities endless. Now the challenge will become to nevertheless create something consistent and concise.

Katharina | Let us not forget the need for maintaining motivational dynamics.



Summary: How to FOCUS in Active City Innovation

Activities

- identify the core functions that the solution(s) you are preparing to create will need to address
These are mainly functions from the user and system perspective, most are already integrated in the Target Vision. Examples in the Active City Innovation context typically include issues around use motivation, accessibility, and/or inclusivity.

- try to physically or mentally “play” with possible realizations of the Target Vision, to understand their scope and provide for creative realizations.
In the Active City Innovation context, just think about the many ways to induce Joy of Movement, and the many options to re-use public space.

Insights/Result

6. CREATE

Developing high quality concepts

STARTING POINT



Target Vision
is defined



Content System
is understood



Creative Potentials
comprehended



OUTCOME



Creative Concepts
generated



Plan and Passion to proceed
reinforced

Idea Worksheet

Name:

My idea:

Core:

Why cool?

Bob | Wow. Drinks and sofas have been prepared...

Holly | ...or balance boards: Whatever helps individuals and teams to stimulate creativity should be prepared for this decisive step. With the opening question we **change our mindset from analytic to creative**. Then it is vital that every member of the squad produces some idea: Ingenuity is within the individual mind, afterwards in teamwork quality of solution concepts will be ensured. Finally, ideas should really be creative, and thought-through. We do not need hundred quick ideas, but ten great concepts... Okay now, enough said, please give yourself half an hour, and then come up with a really great and creative idea how to realize '**A regular public happening that continuously motivates WannaGos to engage in diversely challenging physical activity**'.

How to CREATE in Active City Innovation

Summary

- prepare a setting that is as conducive as possible to stimulate creativity. *Depending on the cultural environment, this may include an inspiring informal atmosphere, artefacts to play with, adequate food and drinks, humor, movement opportunities...*
- invite inspiring guests; take care of maximum plurality
- organize a concept finding event including, in this order:
 1. a deep understanding of and immersion into the task
 2. a creative opening
 3. an ideation with everyone producing one to three concepts
 4. a clustering
 5. prioritization
 6. concretization of concepts

Insights/Results

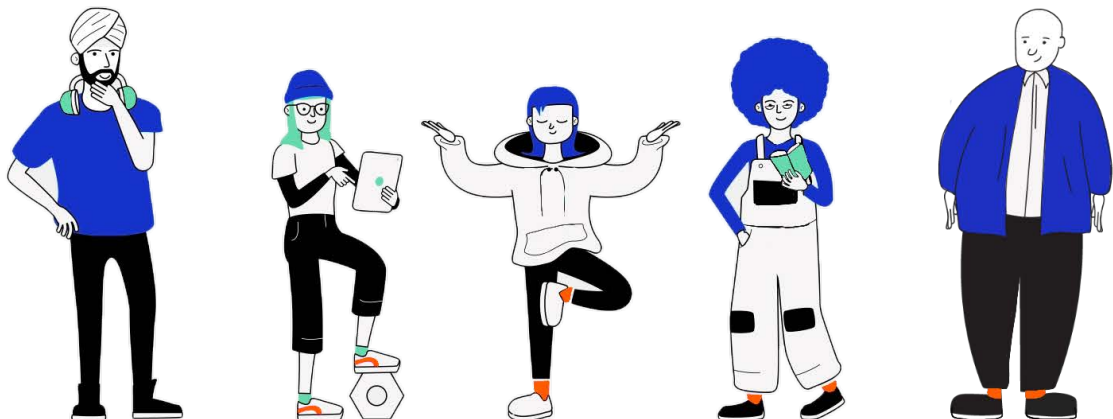
Abdul | My idea is called '**Move 'n Play Fitness Trail**'. We set up fitness stations across the city, and one Sunday a month close down the streets in-between them for car traffic. People can cruise between the stations with all sorts of non-motorized vehicles; if they want time is taken and prices for different vehicle categories given, also one for the craziest vehicle.

Katharina | My idea is probably quite dominated by my gymnastics history. It is called '**Balance Walk**'; a walkway is designated and created in the city using walls, ropes, demarcations; also at crossings balance boards are set up for you stand on while waiting for green light.

Daisy | That blends in well with my idea '**Hour of Power**'. I thought this should actually happen every day, between 6:00 and 7:00 PM. We would designate and set up all sorts of sites within the city which would be more or less appropriate for physical activity, and start a campaign that people should feel especially provoked to use these sites to play during this hour...

Bob | I was not very creative, but it would be nice to have a sort of '**Motivation Agents**' during this time. They would be around at core venues, and could also stimulate new exercises, make sure that risk of injury or long-term harm is reduced and so on. I am sure my daughter would volunteer; and if only to get to know new buddies to play with for herself.

Shea | Already I can see how all of this will merge into a really creative new city happening. Let us call it '**Power Sunday**'...



7. ELABORATE

Turning concept quality into solution quality

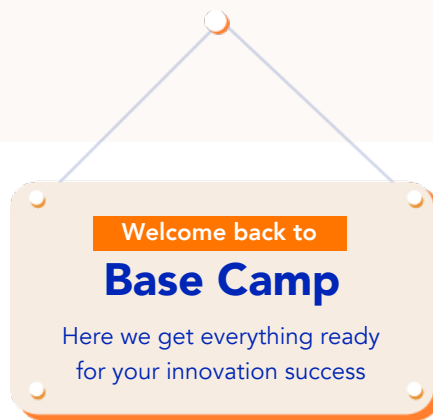
STARTING POINT



Creative Concepts
are generated



Content System
understood



OUTCOME



One Solution
focused and matured



System Developments
prepared

Bob Why are we back here, now, Holly? Last night at the Innovation Bar, we were even close to finalize our concept around the **Power Sunday**:

- we defined locations / spaces in the city that could invite for creative physical activity, and complement these, guided by Daisy and Shea, with simple installations for additional challenges and fun.
- we defined different routes in the city that connect between these locations; all start and end at the main square. Every route is patronaged by a different club or institution organizing guidance on that respective Sunday, making sure that core locations are serviced and animated.
- the main square will be revamped to provide for public physical activity and party, not only on Sundays. Partners participating in the determination of the routing will provide for prizes; for fastest time, most calories burnt, most laughs, craziest vehicle, most fashionable outfit ...

Isn't that great? Why don't we just start now?



It is great. But before going to implement this, it is vital that you acknowledge and prepare for the whole system that will need to be part of the long-term functioning of the solution. To give just a few examples:

Who are the caretakers of the locations and routes, what are their long-term needs? Who will close off the streets? Who will support cleaning up and maintenance? How will the whole idea be promoted? Who will take care of questions and suggestions? I do not want to put you down, just make sure you find solutions; otherwise the whole thing will not be sustainable...

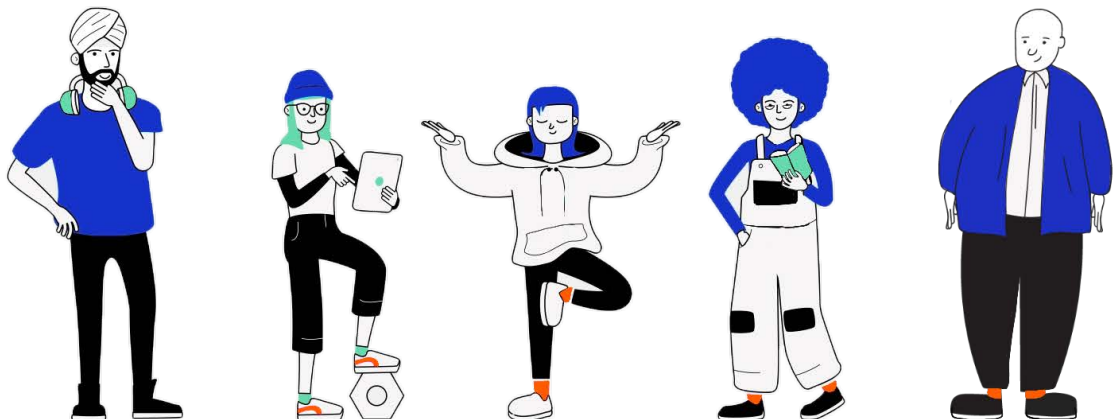
Daisy | Okay, this makes a lot of sense. At this point, passion and enthusiasm will have to be rounded off by mission and pragmatism. I will be talking to the local sports clubs if their staff can help support patronizing the more ambitious locations.

Abdul | I have good contacts to a network of street artists. I will talk to them if we can combine physical activity and arts in some way; physical paint challenge, ...

Bob | Let me talk to the police and our local football club. If police secure football games, I will be asking that football money goes to fund the police for securing Power Sunday. After all, police also needs young, motivated talents, and show social responsibility.

Shea | I will support you, Bob, to also raise city funds. After all, Power Sunday will make the population healthier and the city more livable. Let me quantify the potential effects to give you better arguments.

Katharina | Let us sit together tonight again in the Inspiration Bar. For most of what else we need, I am sure I can find and activate partners from my network.



Summary: How to ELABORATE in Active City Innovation

Activities

- expand upon and further detail the highlight concept(s), also taking into account your understanding of the overall system and its various implications

- decide upon
 - where you need to integrate new stakeholders

 - where you need further studies, experimentations or mock-ups

 - where and how you can advance towards pilot realization

 - how much money will be needed and where it comes from

 - what role evaluation should play

 - what are the next action items and who will take care

Insights/Results

8. VALUATE

Generating effect and added value

STARTING POINT



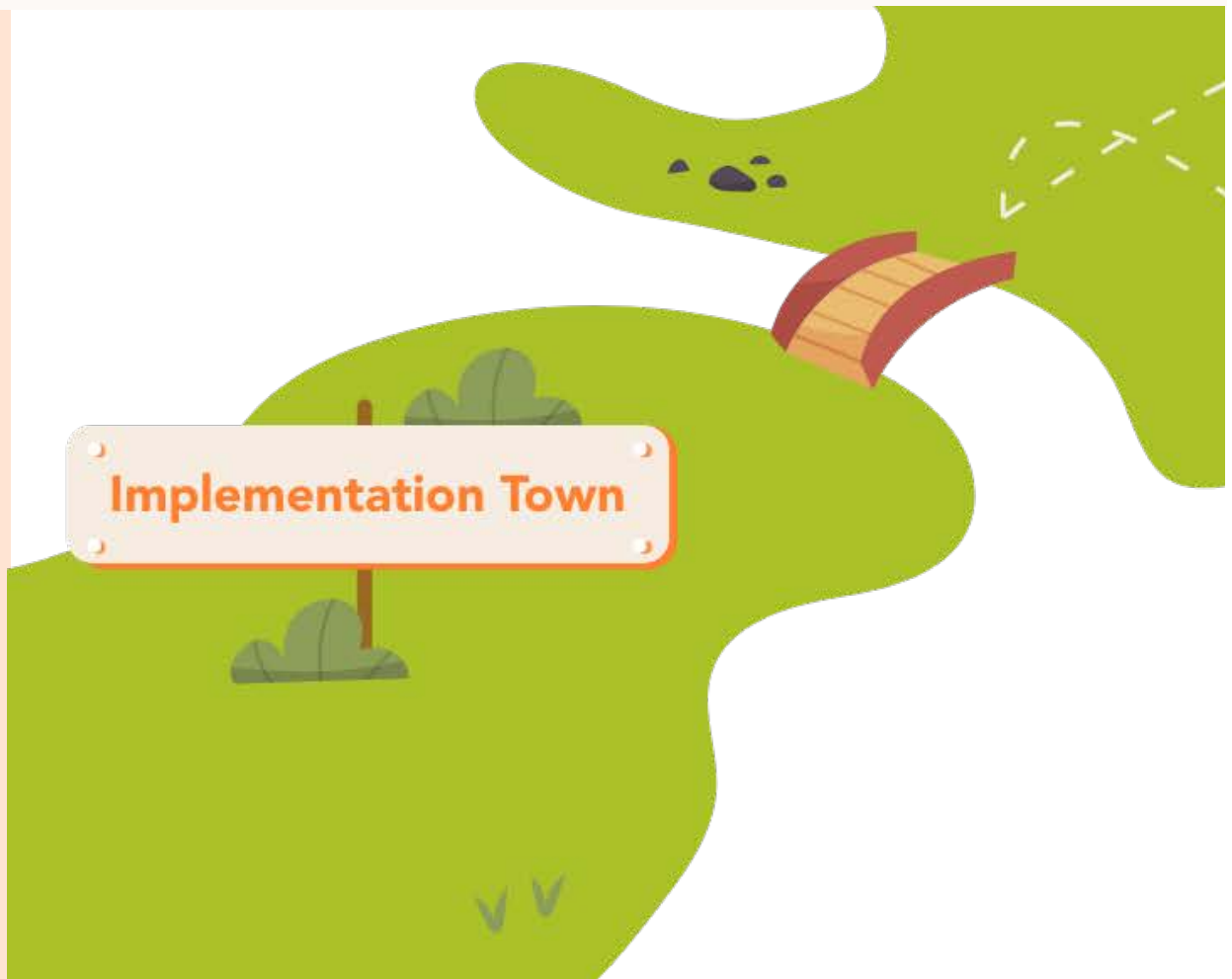
Solutions

demonstration-ready



System Opportunities

are conceived



OUTCOME



Demonstrator

implemented and tested



Roadmap for Sustained Effect

created

Katharina

I am grateful to you, Holly, that you pushed us to organize a first real Power Sunday right here on Horcharra. I have organized the current Olympic Champions in balance beam and pole vault to come help out and activated quite some media for coverage.



Well, it is common sense among all innovators that unless you at least start implementing, everything done before is really a waste of resources. With great and well prepared pilots you gain public awareness, and at the same time learn what else needs to be addressed that you had never thought of. As here on Horcharra, you are the core protagonists and caretakers at the same time, try to find your role that you can fill and promote yourself, while being a useful contribution to the overall event set-up.

Bob | I chatted to my daughter this morning: A '**swim with playful objectives**' could be interesting to those who can swim in principle but think it is too boring to count tiles in the pool. I will be setting up a bar on the small artificial island just 100 meters of coast...

Shea | ...so you don't need to get much need to be moving yourself, right? I will be volunteering to build a swimming bridge getting snacks and drinks to and waste from the pontoon. While doing so I can also take care of safety of those who did not swim for quite a while.

Abdul | I will be setting up a muscle micro vehicle factory, uh, I need to think of a better name. Anyway, we will be experimenting with all sorts of vehicles driven by muscle force; and with this I do not only mean legs. A mobile gym, like a skateboard powered by doing chin-ups, does not only make a lot of sense, but should also be a great feeling.

Daisy | You are all challenging me... so I will be identifying a corner in the park that I will be converting into an outdoor playgym: Using rocks, plants, trees, slopes, swings, ... for great fitness games.

Katharina | Nice ideas, go for it. You have just again forgotten what we learnt about system solution; PR, safety, nutrition ... even our Olympic Champions have not been put to use yet...

Daisy | Hey, balance beam and pole vault: I will want them in my outdoor playgym.

Bob | I will see if my police friends have relationships to Horcharra, sure something can be done, so that people here can benefit from their experience.

Katharina | Then I will set up a mobile healthy nutrition lab on a cargo bike, and travel the different stations. So I get to move myself as well...



I am really proud of all of you. And I am sure that this last leg of your innovation journey will be a great adventure experience and provides a lot of fun; closing the circle from your initial mission and passion to action.

Go endeavor, go play...

Summary: How to VALUATE in Active City Innovation

Activities

- apply creativity to also identify partners and resources that may support pilot implementation and later final realization, scaling, and transfer

- develop, realize and “run” a pilot implementation, possibly also addressing issues like safety, security, maintenance, operation model and job creation, access, PR, tentative evaluation, new partnerships

- decide upon
 - where you need to integrate new stakeholders
 - where you need further studies, experimentations or mock-ups
 - where and how you can advance towards eventual realization

Insights/Results

Summary and Future Directions

Summary

In summary, this **Active City Innovation workbook** provides substantial guidance on...

- How to use innovation to make your city an active city
- How to bring Joy of Movement into urban areas

Stakeholders are encouraged...

- To develop their own projects and apply the described 8 steps of holistic innovation to their specific community environments and circumstances
- To use this workbook as creative stimulus to guide their developments and decisions
- To allow exploration and failure as important drivers of innovation

Future Directions

In the future, more cities and communities worldwide will need to take specific actions based on more holistic approaches...

- To encourage their citizens to engage in pro-active initiatives
- To actively involve different segments of the urban population in the sense of co-creation
- To foster transdisciplinary cooperation between different city departments and local non-governmental stakeholders
- Of great variety as they provide for progress towards a sustainable but somehow unpredictable future

Experimentation Scenarios: Background and Overview

On the following pages you will find the gist of twelve Experimentation Scenarios realized in urban areas worldwide. These have been part of the Active City Innovation project activities in the context of the SINN-i. Browse them for inspiration, for learning, and for some elements of joy as well.

As a brief orientation, here is what you will find:

Digital Active Community (Munich, Germany): Create a community information service that directs individuals to active lifestyle locations, transforming cities into vibrant spaces of movement, enhancing their attractiveness, and providing an opportunity to explore and discover various activity sites.

Outdoor Judo (Wakayama, Japan / Melsungen, Germany): Development of a soft outdoor judo mat which aims to create opportunities for elderly people to engage in self-organized sports activities, including judo, yoga, and fitness, making judo accessible as a national cultural treasure and beyond.

City Challenge – kreuz & quer (Munich, Germany): A game that involves many competitors as a good approach to motivate individuals of all ages in a community approach to engage in low-threshold physical activity and simultaneously explore the local neighborhood.

Sheffield – The Outdoor City (Sheffield, England): Enhancing outdoor activities by promoting and beautifying suitable areas, removing barriers to physical activity, and establishing a green and activity-friendly environment to attract people.

Active Living Environments – Waverly's Masterplan (Sheffield, England): Incorporating physical activity into the planning and development of industry and housing sites, with the overall goal of recognizing and prioritizing physical activity as a fundamental requirement in urban development.

High Performance Centre – Opening up for the Public (Barcelona, Spain): Making sports venues accessible for everyone as an opportunity to improve their use and increase the possibilities for physical activities in cities.

fittoken and fittokenMove (Barcelona, Spain): Creating a novel rewards system for physical activity that utilizes gamification and both external and introjected motivation, with an exploration of innovative approaches for implementing this system in businesses and communities.

Public Dancing (Siegen, Germany / Stellenbosch, South Africa): Encourage collective movement and dance among citizens and tourists in public spaces through interactive music installations, utilizing socio-technical systems to facilitate intergenerational and international dance experiences, fostering cultural exchange through non-verbal movement sessions.

E-Cargo-Cycling – A Holistic Stellenbosch Approach (Stellenbosch, South Africa): Promote widespread bicycle usage by establishing an e-cargo ecosystem in South Africa, providing support for bicycle maintenance and repair, and creating opportunities for both children and adults to learn how to ride bicycles.

Activity Promoting Green Spaces – Durban Green Corridors (Durban, South Africa): Address developmental and lifespan needs in rural townships by implementing occupation-based wilderness programs, promoting environmental education to foster a connection with nature and sustainable solutions, and encouraging early childhood development to achieve long-lasting social cohesion and economic transformation.

Sheffield Olympic Legacy Park (Sheffield, England): Promote physical activity, particularly among young people from local deprived neighborhoods, by utilizing the entire Sheffield Olympic Legacy Park, fostering health and wellbeing for the nation, city, and region, and establishing a technology transfer pipeline that encourages collaboration, innovation, and involvement of academia.

Move More Sheffield (Sheffield, England): Explore and develop application cases for Move More, gathering insights on motivation, usage, and impact of movement-based apps in urban settings. Following the aim of fostering a culture of physical activity in whole community approach in Sheffield, improving the health of the population, and ensuring equal opportunities for individuals, families, and communities to engage in regular physical activity for their overall well-being.

Experimentation Scenario – Munich, Germany

Digital Active Community

Stakeholder:

Outdooractive / Hochschule München University of Applied Sciences

As the capital of Bavaria, Munich is the third largest city in Germany with a population of almost 1.5 million and is known as a sports city having hosted many top sporting events in the past decades.



In this project, a community information service (app and web platform) was developed, which guides active lifestyle places. While commercial offers (e.g., gyms) can already be easily found (e.g., through a google search), public playgrounds, football fields or basketball courts cannot. Other examples are grounds and tracks for inline skating, longboarding or street hockey. The new activity hub will be able to show possible activity sites and it will serve as inspiration for new ideas. Furthermore, it helps connect active people and it can easily be transferred to other participating cities.

By incorporating storytelling and themed exploration experiences with physical activity, individuals may be motivated to engage in physical activity more frequently, leading to the establishment of sustainable healthy habits.

Core objectives:

1. Develop a community information service which guides active lifestyle places
2. Make cities a place of movement and more attractive
3. Offer an opportunity to discover possible activity sites

Measures / Methods / Approaches:

- Outdooractive is an existing service that provides tours and guides to places of movement. In collaboration with Outdooractive and Hochschule München, several tours and places in Munich can be discovered while being physically active.
- Some tours can be done by foot, riding a bike or skating for example

Experimentation Scenario – Munich, Germany

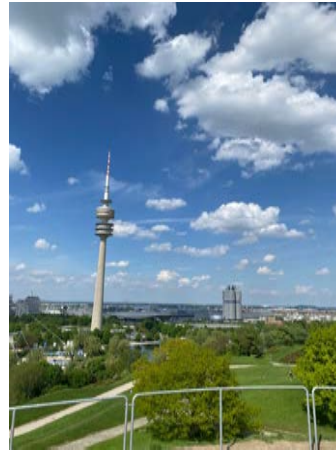
Digital Active Community

Opportunities:

- Motivating people to be more active by combining sport with exploring the city via several tours
- Discover places that are not easy to find, like public playgrounds, football or basketball courts and skate parks
- Connect people with same interests and active lifestyles

Challenges:

- Access to digital data sources is often unclear or difficult
- Data standards are still missing to ensure a minimum level of detail of the required information for consumers (locations, descriptions, imagery)
- Official stakeholders and the community needs to be coordinated to provide and maintain trustful data at a high quality



Lessons learnt:

The quality of the digital data infrastructure is extremely important and should be given the same level of attention as physical infrastructures for movement. It is crucial that digital twin data is made available under open data licenses, allowing relevant information to reach consumers through various distribution channels and touchpoints.

International learning and exchange:

A first proof that the concept that was developed and applied in Munich can be successfully transferred to other regions in the world and is scheduled for Durban, South Africa in 2023.

Recommendations to the world:

The importance of physical activity for the urban population may be acknowledged by integrating the idea into Smart City initiatives, turning Smart Cities into Smart Active Cities.

Outdoor Judo

Stakeholder:

Judo Club Kijukan / Wetekam Group / Kyushu University / Innovationsmanufaktur

Judo is a national sport in Japan. Although it being a very traditional sport, today it is only practiced indoors on rather hard judo mats that are neither suitable for outdoor use nor for elderly people. By developing and providing a softer outdoor canvas, opportunities can be provided for judo but also for yoga, fitness or other activities. In a cooperation between the judo club Kijukan, the Wetekam Group and Innovationsmanufaktur prototypes of outdoor judo mats were developed, tested and improved step-by-step. In parallel, suitable judo-inspired activity programs for elderly people were designed and put to practice.



For the development of an outdoor judo mat experimentation and the use of prototypes is highly valuable, especially in distant settings.

Core objectives:

1. By developing and providing a soft outdoor judo mat, opportunities for judo, yoga, fitness or other outdoor activities are created.
2. Elderly people should be able to do sports together in a self-organized fashion without being dependent on gym availability.
3. Judo as a national cultural treasure should become accessible to elderly people, through the combination of a suitable mat, specific innovative training and play regimes.

Measures / Methods / Approaches:

Together, industry partners and judo experts from Japan and Germany develop an optimal outdoor judo mat by choosing the right materials, manufacturing methods and permanent feedback loops. The mats are being tested continuously by judo experts of all proficiencies in Japan and Germany and subsequently optimized. At the same time new judo practices suitable for elderly are being developed in Japan.

Outdoor Judo

Challenges:

- The first challenge was to develop a mat that meets the requirements of traditional tatami, has more damping and less weight and can be used outside at the same time.
- The second challenge was to develop suitable judo practices for elderly that are motivational, fun, safe and embody traditional Japanese judo culture.

Lessons learnt:

Intercultural communication becomes much easier after discovering common experiences and building up trust. This effect is amplified if a diverse team with different expertise is testing the prototypes, offering synergies in experience and interpretation.

International learning and exchange:

- During several zoom meetings Wetekam and Judoclub Kijukan defined the fundamental design criteria for the judo / exercise mat.
- 3 different mats that differ in hardness and size were developed and extensively tested in Japan and in Germany.
- Testing was done in traditional Judo indoor environments, but also outdoor activities. The main result was that you can speed up the development cycle by collecting feedback from different environments and cultures, which strengthens the understanding of the product requirements.

Recommendations to the world:

Intercultural synergies work. Neither Japanese nor German partners alone would have been able to achieve the actual results, maybe would not even have defined the topic as we did together. This is true especially if it includes experimentation: By having the same prototypes and experiences even video conferences become more fruitful, as there are real shared objects and shared experimentation as the basis of productive discussion.

Furthermore, while improving movement related products additional use applications should be considered. E.g. the developed mat can serve emergency sleeper, improvised seating furniture and rehab running floor.

Experimentation Scenario – Munich, Germany

City Challenge – kreuz & quer

Stakeholder:

Technical University of Munich / City of Munich

As the capital of Bavaria, Munich is the third largest city in Germany with a population of almost 1.5 million, and is known as a sports city having hosted many top sporting events in the past decades.

Open spaces (OS), especially urban green spaces (UGS), provide great opportunities to be used, restructured and upgraded to promote the general population's physical activity. TUM worked together with the City of Munich to 1) identify suitable OS in Munich, to 2) identify population's needs and barriers with respect to physical activity in OS, and to 3) develop and evaluate a physical activity program that fosters accessibility and attractiveness of OS for various subpopulations.



Creating a game involving many competitors is a good approach to motivate individuals to engage in low-threshold PA within their neighborhood.

Core objectives:

1. Getting children, adolescents and also adults to be more active in their local community: kreuz & quer is a competition-based running game in residential areas where teams (e.g. school classes) try to collect as many points as possible. The collection of points is done by the children holding their chip cards with RFID-chips at boxes distributed in the neighborhood. They are credited with certain points and an algorithm can calculate and approximately sum up the distance they covered.
2. Gain insights into how structural aspects in urban space can contribute to more movement or how they prevent it by looking at heat-maps (application in urban planning)
3. Scientific starting points are to be gained via the underlying psychological mechanisms and motivational aspects

Measures / Methods / Approaches:

- Existing (game) system of an external company was used
- Recruitment and organization was carried out by the City of Munich
- Evaluation of the results: several tested, valid and reliable instruments (questionnaires), movement data and scores (recorded by chip cards, boxes, and digital backend), further information from the participants such as age, school, feeling of safety on the way to school, preferred form of transport to school

City Challenge – kreuz & quer

Opportunities:

- Large potential target group: As the organizer, the City of Munich has access to the registration data and contact information of schools and can therefore theoretically reach (almost) all children of the respective district. Adult relatives of the children are also allowed to participate in the intervention. Participants are approached in their natural living environment, not in a constructed setting
- Various age groups
- Theoretical applicability to countless cities

Challenges:

- Financing of equipment needs to be ensured in future applications



Lessons learnt:

1. It is essential to ensure that the appropriate technological support is in place: does the technology work as expected or does this possibly lead to problems in the evaluation of the data or restrictions in the fun of playing? (repeated checking of the equipment is necessary to ensure smooth operation)
2. Cooperation with supposedly heavy-handed local or national institutions can be very fruitful and beneficial

Recommendations to the world:

With a competition-based game involving a large number of people, it is possible to encourage them to engage in low-threshold physical activity directly in their local environment. This can also help residents to get to know their own neighborhood better and to draw conclusions for health-oriented urban planning from their movement patterns.

Sheffield – The Outdoor City

Stakeholder:

Sheffield Hallam University / City of Sheffield

Sheffield is a city in South Yorkshire, England, with a population of about 550,000. The city has a long sporting heritage and is home both to the world's oldest football club, Sheffield F.C., and the world's oldest football ground, Sandygate.



Although cities itself often do not have a lot of green spaces, in the vicinity there is often an abundance of space suitable for outdoor activities. The objective in this experimentation scenario was to develop ways to attract people to these outdoor areas. Sheffield as the core example has an urban landscape next to a national park. The project "Sheffield – The Outdoor City" promotes activity and leisure in and around the city by offering recommendations for running, walking or cycling tours as well as for climbing routes.

For the success of the project an authentic approach is crucial, and it is essential to involve enough individuals who are passionate about the project and will drive it forward.

Core objectives:

1. Develop ways to attract people to areas suitable for outdoor activities by promoting these areas and making them more attractive.
2. Reduce barriers of physical activity and make sport offerings more accessible.
3. Create a green and activity friendly environment.

Measures / Methods / Approaches:

- Promoting activity and leisure in and around the city by offering recommendations for running, walking or cycling tours as well as for climbing routes
 - Sheffield has the greatest number of trees
 - 1/3 of Sheffield lies within the Peak District National Park
- Research: Defining all the outdoor activities/businesses and looking at the participation rates across different kinds of sports to put a financial value on what the outdoor sector is worth for Sheffield
- Get stakeholders and important people
- Promotion through Website, "Outdoor City Month", cooperations (Visit Britain), Events, ...

Experimentation Scenario – Sheffield, England

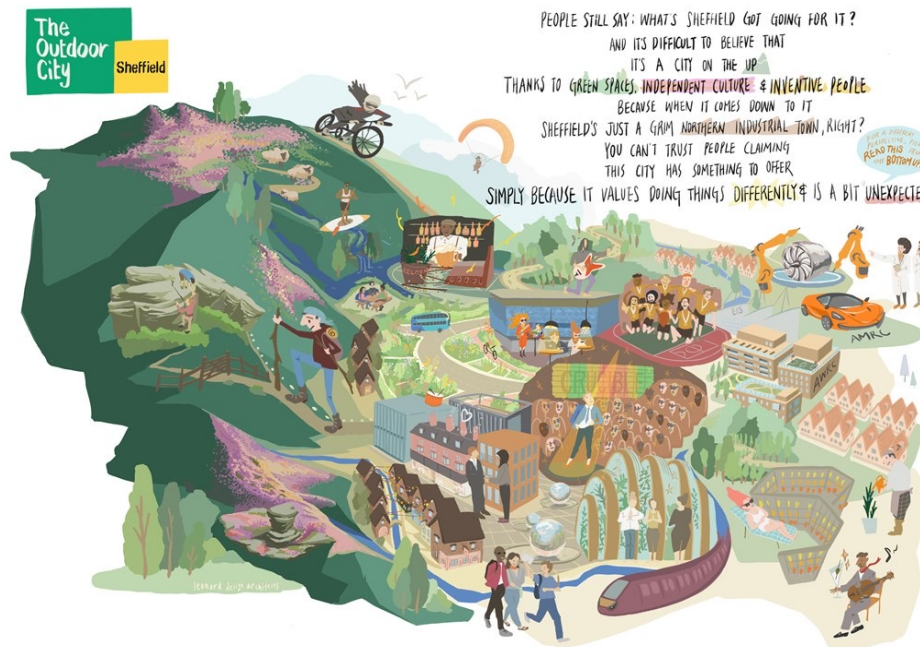
Sheffield – The Outdoor City

Opportunities:

- Connect people
- Build an active and healthy environment
- Reach people with all kinds of interest due to the wide range of offerings.
- Lower barriers as you don't have to travel out of the city to participate in outdoor adventures and activities
- The improvements in health and wellbeing, fostered by OGS, are an important social return on investment
- More jobs (outdoor sector)
- More interest in outdoor activities during COVID-19

Challenges:

- Not only reach people who are already active but also the deprived communities



Lessons learnt:

To ensure success, it is important to identify the appropriate approach for a specific area and engage all stakeholders in the process. While there is often a focus on tourism, it is important to remember the value of a community approach.

Recommendations to the world:

Stakeholders should apply a social return on investment/social value approach. This will help to better understand necessary financial investments. In the realization of projects, economic and social stakeholders need to be brought together.

Active Living Environments – Waverly’s Masterplan

Stakeholder:

Sheffield Hallam University / Harworth Group

Along with the increasing urbanization, more and more buildings for housing and industry are needed and built. Unfortunately, this development usually results in a reduction of green spaces and other activity promoting areas. This project tried to find ways to integrate physical activity into the industry and housing sites while they are being developed.



Highlighting the social aspect of environmental social governance is the first step to making healthy profits and building a community like Waverly.

Core objectives:

1. Finding ways to integrate physical activity into the industry and housing sites while they are being developed.
2. Overall goal: start to consider physical activity as a requirement for city developments.

Measures / Methods / Approaches:

- Combining residential and commercial development with public space
- Co-creating opportunities with the habitants: finding out what they want/need/excites them, to design and plan activities
- Survey: characteristics like age, number children, how long do they live there, physical activity (what and where, barriers), social measures, ...)
- Baseline from which change can be measured (e.g. social benefits, health, mental wellbeing, ...)
- Connect Waverly with the surrounding communities and the other way around
- Workshops about physical activity.
- Providing information about places supporting physical activity etc.
- Creating an (inter)active environment.
- Healthy Profits: Master developers make profits and the community profits from being more active.

Active Living Environments – Waverly’s Masterplan

Opportunities:

- Create a series of routes around Waverley that are suitable for everybody to use, beginner to experienced, which are augmented by technology to enhance engagement and experience.
- An interactive environment that encourages movement through gamification, competition and cooperation.
- A defined area for multi-sports and exercise utilizing the existing hard surfaces around the Advanced Manufacturing Park (AMP). -A distributed community garden which is digitally enabled to manage work and record progress
- Healthy later life and active aging.
- Alternative Exercise: Parkour/climbing, Skating/BMX, Obstacle course,
- More interest in outdoor activities during Covid-19

Challenges:

- Understanding how developers make money, how they spend that money and how can you get them to spend it differently.
- Difficult to prove the connection between the increase of the high quality of living environment and the increased value and pricing to the developers to invest.
- Bring developers to create communities that are more functional than good looking.
- Need partners that fit that mindset.
- Change the stakeholders’ way of thinking that it costs more to do these things.



Lessons learnt:

It is important that shareholders deliver on the social aspect of environmental social governance (ESG) in order to get investments.

Recommendations to the world:

Creative and innovative approaches in real-estate housing developments can make a difference. It is important to involve your local communities and populations and invest in co-creation processes.

High Performance Centre – Opening up for the Public

Stakeholder:

CAR Sant Cugat – Centro de Alto Rendimiento

Sports venues like High-Performance-Centers provide a wide range of opportunities for physical activity. These venues are often only accessible for top athletes or clubs despite not being used frequently.

In this experimentation scenario we learnt how High-Performance-Centers could contribute to a healthier population in general.



Making sports venues accessible for everyone represents an opportunity to improve their use and increase the possibilities for physical activities in cities.

Core objectives:

1. Using high performance sports venues for day-to-day activities for the broad population (because usually the population doesn't have access to those venues at all, even when they are not in use).
2. Giving the people a chance to use those sports venues at times when they are available (as a better resource management to enhance movement and fitness within the society), giving them a glimpse of the scientific and technical environment in which elite athletes work out and also giving them access to tools which are not always available to everyone.

Measures / Methods / Approaches:

- Defining specific time slots and venues that can be used
- Providing for organizational & legal preconditions
- Interaction and communication with local communities
- Internal evaluation

High Performance Centre – Opening up for the Public

Opportunities and Challenges:

- Showing social responsibility and sustainability of elite sports and connecting “both worlds” (elite athletes and mass sports population)
- Change during COVID; Center was closed, and afterwards the potential for letting people in was not re-established. So the strategy was split:
 - Strat1: As for social exchange and relevance, instead of letting people in expertise is being brought to the community, via experts, coaches, events, ...also via the hospital that also caters to non-athletes, but uses all the elite sports knowledge
 - Strat2: Institutions that do pay still get access to the facilities, e.g. companies for testing and events. Also, consultation is being done to sports centers
- Finally, further approaches are being sought to contribute to sustainable development,, e.g. via workshops, conferences, initiatives, ...



Lessons learnt:

- The entry into elite sport revenues is easier if mediated by professional institutions – after the COVID-19 pandemic, the first activity beyond elite sports was an event with a police sports group. This assured a professional handling of access and use and served as a learning for later public use.
- Elite sports expertise may help people move more not only in elite sports venues, but also through bringing that expertise to communities

Recommendations to the world:

Elite sport provides multiple ways to make everyday people move more and contribute to sustainable development. One option is to open up elite sports centers at certain times to the general public, but this is not resilient and may fall to pandemic or a change in economic focus. Other ways include bringing elite sports expertise to communities via consultations, events, and by using elite athletes as role models for movement, health, value-based living etc. The engagement of elite sports is not charity, but also the obligation to contribute to society; so, constantly new ways to contribute should be pursued.

fittoken and fittokenMove

Stakeholder:

Atlas Sport Consulting

As the capital of Catalonia, Barcelona is the second largest city in Spain and has 5.62 million inhabitants. This makes it the fifth largest city in Europe. In terms of sports the city is best known for soccer.



The linkage of digital elements with actual real physical activity is a major growth area.

Core objectives:

1. Development of a new system of rewards for physical activity based on gamification and external or introjected motivation
2. Explore new ways of implementing this reward system in businesses and communities

Measures / Methods / Approaches:

- o Leading motto: "Move to earn"
- o 10 million "fittoken" (new cryptocurrency, but one that follows the normal laws of cryptocurrencies)
- o Gyms can buy "fittoken" and use it as a reward for their members, e.g. for recruiting new members or specific activity goals
- o Current further development "fittokenMove": Application with which groups (e.g. companies, brands, municipalities, employers) can create their own challenges and rewards

Experimentation Scenario – Barcelona, Spain

fittoken and fittokenMove

Opportunities:

- o Result: greater loyalty in gyms that are part of "fittoken"
- o Further development of the concept and of fields, where it could be implemented; e.g. use for companies/brands or municipalities

Challenges:

- o Fundamental scepticism (and lack of knowledge) of cryptocurrencies widespread among individuals, but also organizations
- o People have to have an E-Wallet first, in order to be able to participate
- o In current concept: People have to be member of a participating gym

Lessons learnt:

Basic digital requirements are crucial for a gym to be suitable for similar approaches (in "fittoken" many gyms were not eligible).

Recommendations to the world:

New digital technologies can be used to reward an active lifestyle! "fittoken" and "fittokenMove" are ready to be transferred and implemented.



fittoken

THE TOKEN THAT INCENTIVIZES YOU TO TRAIN

TOKENIZE YOUR SPORTS CENTER

Blockchain Technology

FIToken allows to tokenize health and sports centers, providing them with tools and technology that increase interaction, retention and attraction of new customers.

INCORPORATING CRYPTO-MARKETING

Innovation and gamification

Reward your customer and reduce traditional advertising and/or digital marketing expenses. Crypto-marketing improves both retention (thanks to increased loyalty and gamification) and sales (referral marketing).

MAKE YOUR CUSTOMER AN AMBASSADOR

Your customer is your best asset

FIToken takes a step forward from the traditional rewards system thanks to the greater utility of a token on the blockchain, rewarding your customers' behaviors that favor retention and boosting referral marketing.

BOOSTS LOYALTY

It is cheaper to retain than to sell

It is always said that it is cheaper to retain customers than to attract them, although until now we did not have such a powerful marketing tool to help optimize customer loyalty and boost your sports company's turnover through customer retention.

EASY AND CHEAP

Tokenization within your reach

Tokenizing your sports business with FIToken is much simpler and cheaper than you think. In addition, it assures you a good return on investment.

fittoken

WWW.FITOKEN.IO

Public Dancing

Stakeholder:

University of Siegen / Senior Citizens' Association ALTER Aktiv e.V. / Stellenbosch Enterprise and Entrepreneurial Development Trust (SEED)

Streets, houses, rails, buses.... All these aspects in cities usually do not promote the enjoyment of physical activity. Therefore, there is a need to create opportunities that promote physical activity in a sustainable way. Sociotechnical systems can help to support and motivate people in their physical activity. One approach is to use live streaming systems to bring people or whole places together over long distances and let them move together to music. But also interactive, game-based and body-controlled floor and wall projections can help people to move more through low-threshold concepts.



For the development and implementation of public, digitally supported and sustainable movement concepts, participation with local stakeholders is essential.

Core objectives:

1. Through interactive music installations, citizens and tourists of the city are to be motivated to dance and move together in public places.
2. The use of sociotechnical systems should allow children, young people and the older adults to dance with each other, against each other or internationally.
3. People from different cultures/countries will be brought together through non-verbal movement sessions through the use of sociotechnical systems.

Measures / Methods / Approaches:

- Establishment of a local urban movement laboratory (LUMB) consisting of people from the fields of dance, movement and event planning.
- Cooperation with the city of Siegen, a regional sports federation and the senior citizens' association AlterAktiv e.V.
- Conducting qualitative semi-structured interview studies with the LUMB and other experts in the field of dance and performance.
- Use of participatory design methods for the development of socio-technical systems.

Public Dancing



SIEGEN BEWEGT SICH SMART!

Opportunities:

- Promote movement through intercultural, intergenerational concepts
- Fun with movement and dance in public spaces to promote health
- Fighting the loneliness of young and elderly people
- Revitalizing public places through participatory sociotechnical systems
- Bringing people together through (digital) dance/movement concepts

Challenges:

- Bureaucratic challenges can delay project progress
- Building sustainable movement concepts in public spaces are difficult
- Technologies are not always seen as a solution or are difficult to adopt
- Acceptance and awareness for movement can only be created through regular offers



Lessons learnt:

- The concept of combining “public” and “dance” must be well developed and clearly defined in communication with stakeholders
- People do not think about health and technology when they think about public dance; this is a large opportunity to access the WannaGo part to the population
- The organization of public dances depends on various factors such as regularity, acceptance, weather, safety and group dynamics.

Recommendations to the world:

Music and dancing are very strong stimulators for physical activity across all age groups. New digital technologies enable innovative approaches like virtual cross-cultural dancing, a combination of music and health exercise and complementing visual interfaces.

E-Cargo-Cycling

Stakeholder:

Innovationsmanufaktur GmbH / Stellenbosch Enterprise and Entrepreneurial Development Trust (SEED) / Lark Cycles / Stroom / Seepglad / Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH / ADFC e.V.

Stellenbosch is located in the fertile Eerste River Valley and is South Africa's second oldest town. Together with Pniel, Franschhoek and three townships it is home to about 192,000 inhabitants (Stellenbosch Urban Area: 90,000) and the renowned Stellenbosch University.



This Experimentation Scenario shows innovative approaches in which the city fosters more bicycle traffic. In South Africa cycling is a great way to make people move and, a more sustainable mean of transport and facilitates a better and more balanced participation in social life. Therefore, in this experimentation scenario a bike park will be installed and used. By this, young people are encouraged to cycle and have fun while doing so. Furthermore, cycling events will take place to boost the physical movement in cities. Another case will be introduced in Japan, Saitama Prefecture. Saitama Prefecture will also be implementing innovative approaches to foster cycling and other health-related movement opportunities and is eager to exchange ideas and experiences with other partners in the "Active City Innovation" project.

Core objectives:

Fostering the use of bicycles on a wide scale. Including:

- Establishing an e-cargo ecosystem in South Africa
- Supporting maintenance and repair of bicycles
- Establishing opportunities for kids and adults alike to learn cycling

Measures / Methods / Approaches:

- Supporting local productions of e-cargo bicycles
- Supporting microbusiness using e-cargo bicycles
- Setting up of bicycle parks to learn and foster the use of bicycles

E-Cargo-Cycling

Opportunities:

- Providing mobility and social inclusion (e.g. kids can go to school or at least drastically reduce times for their ways to school)
- Bicycles are a lot cheaper than cars and can even be fixed by the owners with low financial costs (with enough knowledge and spare parts)
- Active mobility is good for the health
- Provides great potentials for local micro businesses (rentals, tourist tours, delivery services, maintenance and repair...)

Challenges:

- Lack of money to buy bicycles in the first place
- Bicycles are not attractive (yet) and therefore people desire to drive cars
- High crime rate – it is partially dangerous to cycle or to leave the bicycle somewhere
- The infrastructure is poor. Higher needs for robust bikes and repairs because of bad roads and overloading of bikes
- Lack of knowledge, money and possibilities to fix bikes



Lessons learnt:

In places where the bicycle has no wide acceptance yet, different stakeholders have to combine efforts to enhance the cycling environment (public bodies, know-how, repair facilities...)

International learning and exchange:

International partners are very helpful, e.g. cycling federations, cyclists' communities, technology providers, innovative SME, pioneering communities

Recommendations to the world:

In E-Cargo-Cycling projects, it is vital to success to apply a holistic approach in the early stages. Especially the integration of township stakeholders, local bicycle companies and entrepreneurial representatives, city government and academia is crucial to ensure a strong head-start of such projects.

Activity Promoting Green Spaces – Durban Green Corridors

Stakeholder:

Durban Green Corridors

Durban is a major city on the Indian Ocean on the east coast of South Africa. A wide promenade provides access to beautiful beaches, the Golden Mile, and provides the best conditions for joggers, cyclists, surfers, body boarders and walkers to move and be active.



Green spaces within cities are of great potential for an active lifestyle. The challenges are, however, not only to offer balanced opportunities for physical activity, but also to make them accessible, attractive and safe. Thus, this project will landscape the Durban Green Corridor to be used as a site for active recreation like hiking, mountain biking or canoeing, but also dancing and basic physical activities. First, opportunities for children were developed. Furthermore, we will focus on the improvement of possibilities for physical activity of adults.

To ensure the success of the project, all stakeholders have been involved and offers for physical activity shaped to their needs and interests, combined with educational modules.

Core objectives:

1. To promote developmental and lifespan needs for rural townships through occupation-based wilderness programmes
2. To encourage and promote environmental education within the township to reconnect individuals back to nature and to promote sustainable solutions
3. To encourage long lasting social cohesion and economic transformation, aligned with eThekweni's aim to be the most liveable city in Africa by 2030, through encouraging early childhood development

Measures / Methods / Approaches:

- o Ensuring proper record keeping through attendance registers and session evaluations to critically reflect effectiveness of programmes and adaptations if necessary. This ensures that developmental needs of the community are met.
- o Monthly student handovers and critical reflections regarding different programmes and projects implemented at the Inanda Wilderness Park
- o Continuous meetings with the university partners (UKZN) to ensure current programme and project planning based on needs of park and clients.

Activity Promoting Green Spaces – Durban Green Corridors

Opportunities:

- Promoting health and wellness in open spaces. This supports the implementation of physical activity in the home environment
- Working in a disadvantaged community where the population has a low income and can't access health services or attend appointments
- Working in a low cost township has encouraged us to solve problems and think of creative low cost sustainable solutions to combat intergenerational baggage of apartheid

Challenges:

- Limited funding to implement a broader vision of wilderness parks
- Vandalism and theft in freely accessible areas



Lessons learnt:

- Capacity building of decision makers and activators is very important in community settings to ensure effective carry over, for example in school settings
- Community engagement is crucial in community projects, especially in township settings

Recommendations to the world:

A holistic design of interventions is the key to success – always consider physical, cognitive, emotional and social "functions" of an individual when implementing programs. Also take into account how to adapt suitable activities for people with disabilities to ensure universal access. In this context, music can be a core movement stimulator, both for dancing and for creating additional sounds like clapping, stomping, etc.

Experimentation Scenario – Sheffield, England

Sheffield Olympic Legacy Park

Stakeholder:

Sheffield Hallam University / Sheffield Olympic Legacy Park

In order to make parks more attractive for physical activity within the local population, this project selected the Sheffield Olympic Legacy Park to be landscaped as a multi-purpose movement park. A participatory approach took place to develop, choose and bring the most innovative designs that incorporate physical activity into the park.



Using the creative power of sport is very helpful for the motivation of stakeholders and the success of the project.

Core objectives:

1. Bring physical activity especially to young people by using the whole Sheffield Olympic Legacy Park
2. Promote health and wellbeing for the nation, the city and the region
3. Technology transfer pipeline to bring everybody together, create innovation, involve academia

Measures / Methods / Approaches:

- Investment from Canon
- Core question: How physical activity can impact their own health and wellbeing
- 2 streams: Research about health and research about wellbeing
- Using the legacy of the Olympic Games 2012
- Involving National sport exercise and medicine
- Rejuvenating an existing sports stadium
- Connecting to one of the best elite sports centers in Europe

Experimentation Scenario – Sheffield, England

Sheffield Olympic Legacy Park

Opportunities:

- Technology transfer
- Method transfer
- Shared facilities, everybody can use them
- 7 partners put money into it
- A space dedicated to innovation and development in physical activity
- People are proud to get involved and participate
- 6 world champions interact with young kids (tennis, basketball) and give inspirations

Challenges:

- Social mobility in the wrong direction: improving opportunities in disadvantaged areas in order than prevent migration for educational purposes
- Bringing the private sector to invest
- Partly critical reactions from people



Lessons learnt:

- It is crucial to integrate the private sector more into the decision making
- A continuous development and flow of inspirations is important

International learning and exchange:

Important inspirations often derived from visitors from around the world (Japan, USA, Spain,...), who were interested in the project, eager to learn and innovate.

Recommendations to the world:

A de-institutionalization of offers in physical activity (beyond hospital or university) will open space for innovative developments, adaptations and improvements. We need to get people to rethink the role of sport being more than physical activity. This will provide for opportunities for inclusion and bring movement into everyday life.

Move More Sheffield

Stakeholder:

Sheffield Hallam University / City of Sheffield

Creating a more active Sheffield is everyone's business and this strategy is relevant to everybody in Sheffield. Move More primarily aims to support individuals, groups and organisations that have a role in shaping the physical and social environment in Sheffield, and also partners who have the reach and relationships with the people and communities who will benefit from change.



Thousands of children, adolescents and adults have been engaged in various activities that focused on health, wellbeing and education. The key to reach population groups with the greatest needs was the voluntary engagement of several non-profit organisations with specific expertise.

Core objectives:

1. Determining and developing application cases of Move More that may provide information about motivation, use and effect of apps for more movement in city environments.
2. Create a culture of physical activity in Sheffield and improve the population's health.
3. Ensure that everyone (individuals, families and communities) living in Sheffield irrespective of age, gender, ethnicity, geography or social gradient has the opportunity, the environment and the human capital to be sufficiently physically active as part of everyday life to be of benefit to their health and wealth.
4. Orientate towards six specific goals:
 - Empowered communities
 - Active environments
 - Active people and families
 - Physical activity as medicine
 - Active schools and active pupils
 - Active workplaces and an active workforce



Move More Sheffield

Measures / Methods / Approaches:

- Using systems approaches: An approach that considers all age groups and socio-demographics within the city, that combines multilayer interventions concurrently and importantly considers an individual's values as well as their apparent need for physical activity.
- Social marketing through local mass media (television, radio, newspaper), plus other communication strategies to raise awareness and provide specific information to individuals in the community
- Individual counselling by health professionals (both publicly and privately funded), such as the use of physical activity prescriptions.
- Working with voluntary, government, and non-government organisations, including sporting clubs, to encourage participation in walking, cycling, other sporting activities, and events
- Working within specific settings such as schools, workplaces, aged care centers, community centers, homeless shelters, and shopping centers. This includes settings that provide an opportunity to reach disadvantaged groups.
- Environmental change strategies such as creation of walking trails and infrastructure with legislative, fiscal, policy requirements and planning (having ecological validity) for the broader population.

Opportunities:

- Reduce the inequality that exists in the city in terms of physical activity.

Challenges:

- Short-term changes in physical activity might be achievable, long-term change (represented by maintained physical activity participation) and at a population level is much more difficult to achieve, particularly in those considered least active.

Lessons learnt:

A lot of prep-work and building networks and relationships is necessary and the involvement of local communities and local people is very important.

Success can be built through 12 Principles:

Build from bottom up; Reduce inequality in participation; Develop an equal and inclusive approach; Connect people with physical activity; Whole System Approach; Make physical activity the easy choice; Create a physical activity habit; Make it fun; Consistent communication; Make it visible; Work together; Evidence and Evaluation

Recommendations to the world:

Not the overall budget of an initiative is relevant – the commitment of diverse stakeholders and a common goal have been the success factors in this initiative. Move More is open to share their thoughts, vast materials and experiences and invites to visit the campaign in Sheffield.

Initiator & Production Mastermind: Innovationsmanufaktur

Innovationsmanufaktur is a creative and effect-oriented innovation company dedicated to making innovation matter to the world as a whole. Its vision is to help create a future which we can all be looking forward to, its mission is to push innovation as a core means towards a desirable future, and to make innovation happen instead of just talking and planning.

In terms of methods, all of this is based on the idea of "Holistic Innovation", putting a different, more complex view on the nature of

innovation and what this means for innovation methodology and practical innovation work. This, combined with a wealth of expertise in initiating and putting forward innovation projects both nationally and internationally, and in setting up and moderating innovation networks, made Innovationsmanufaktur the natural inspirator for both the Active City Innovation project and for this workbook.




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