

All life's helper - wiki

what everyone needs



All life's projects

Unity

[Earth citizenship pack for every child](#)

Collaboration

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[Why PopoAuto?](#)

[PopoAuto business model](#)

How to edit this wiki

Short link: 51.fi/alllifeshelper

QR code link:



Earth citizenship pack for every child

from [augment](#)-helpers to androids without passing through robot apocalypse

An Earth citizenship pack teaches you how to be a good citizen in everything you do. With that, kids can learn everything anywhere.

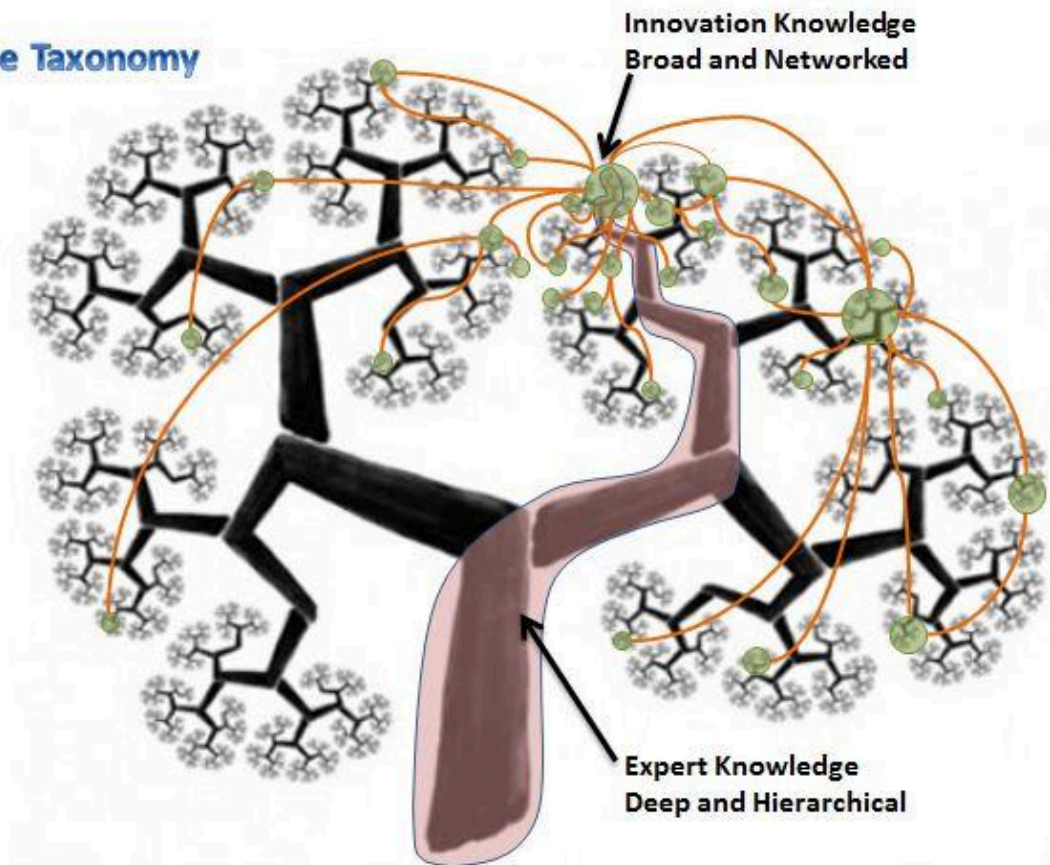
The pack implements a [mixed reality](#) web (replacing the clunky WWW and apps). The web-space hosts a society of user-teachable open agents and avatars of included parts of reality. The agents can show and teach what they do, and learn from what people do, show, and tell. The web is made of nested open agents all the way down to bits, making it transparent and understandable, thereby user-editable.



You can work with other people on the same project distributedly: everyone sees what's being done on location and its virtual workspace extension.

Physically the web runs distributed on the citizenship packs: a fully equipped backpack, a computer working while carried inside the backpack, interacting through a headset and a hand-slate. This arrangement brings computation power and cached environment near the glasses, reducing latency and enabling continued service over connection outages.

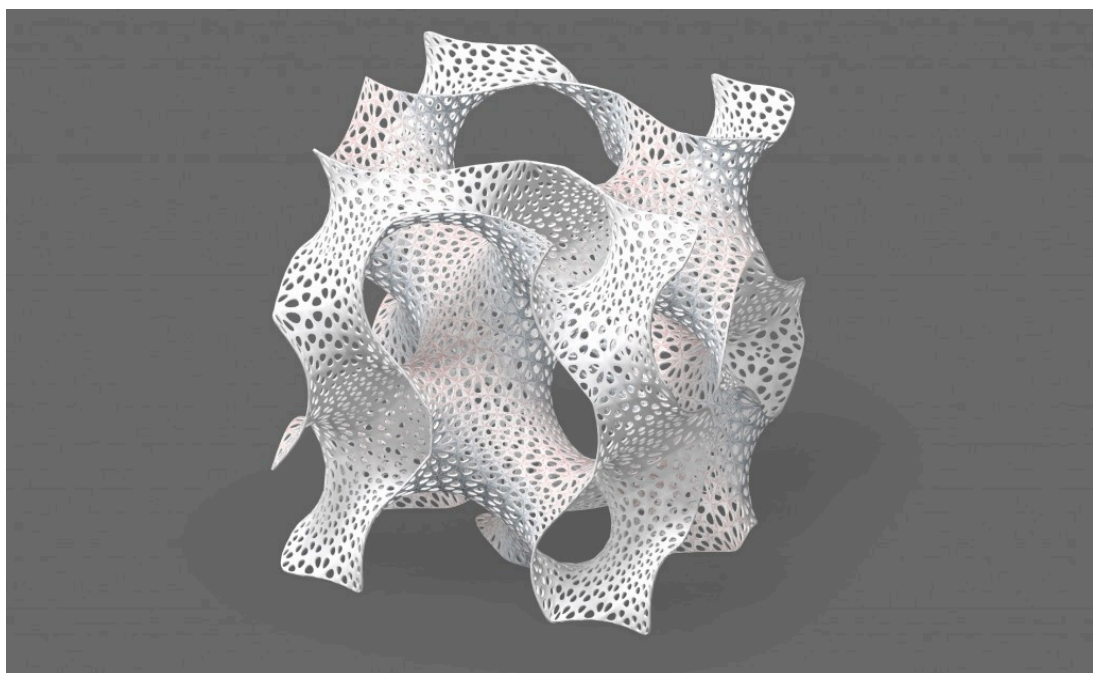
Knowledge Taxonomy



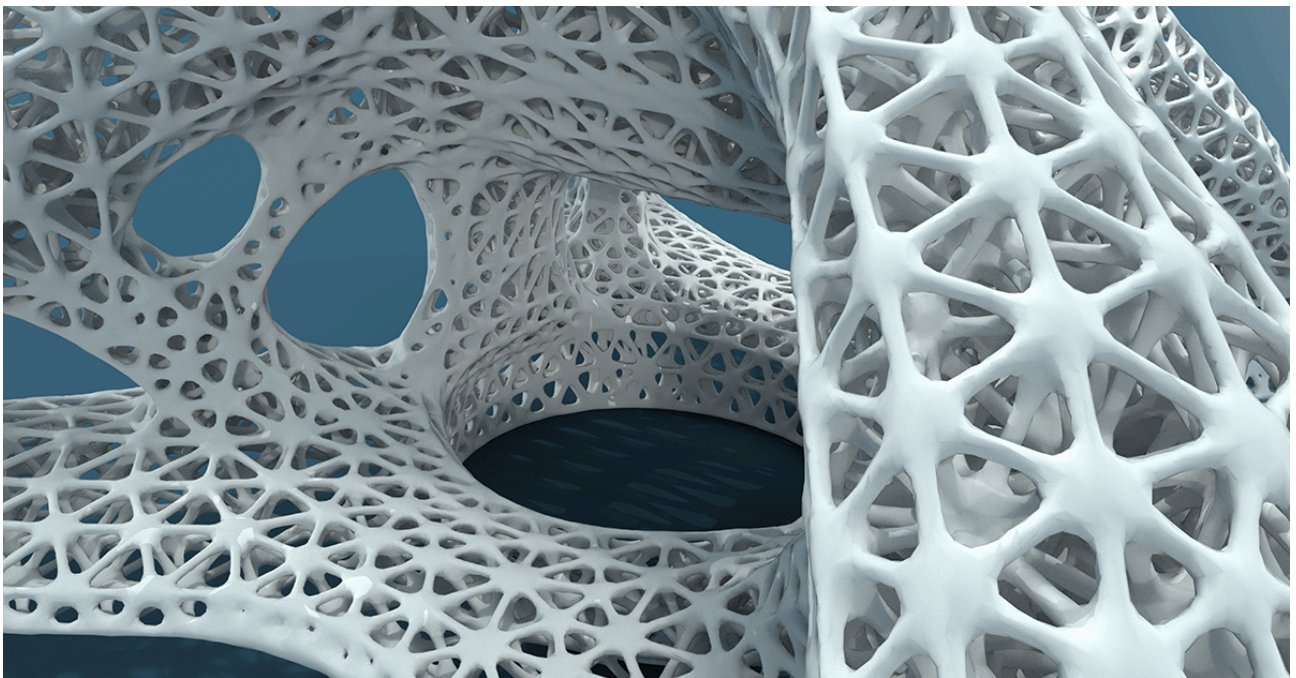
Knowledge tree.

Everyone builds the same knowledge tree in a massively deliberative-editable edit-suggesting redundancy-merging consensus development environment.

Knowledge is organised into a foam mountain forest wiki. It's foam because of the cave network for browsing. It's a mountain because you climb it as you learn. It's a forest because of all the interconnected knowledge trees that show you at a glance how any knowledge relates to each other.



A volume of flattened knowledge mesh for cave browsing.



A culture.

Physically the mountain climbing happens in a virtual reality bubble where a robotic floor morphs into the shape you're walking on, flowing towards the middle to keep you away from the walls. You can stay in shape while you play and work.



Entering a VR bubble autonomous taxi

The citizenship pack improves human wisdom and trust enough for Earth to [survive further progress](#) in potentially destructive technologies.

When consensus on how to be a good Earth citizen has been reached and the perfect crowd-taught swarm of virtual agents formed, it can be copied into android minds, making generic good communities of synthetic citizens to help people and animals live better.

Enlarge graph

Crowd work conglomerate components

self-sustained companies to form the conglomerate

Augmenting people for greater project complexity



Crowd thinking supporter

Original research

Problem

Using current team work methods, project teams too large or too incompetent can not make progress in difficult knowledge work.

Solution

Augment crowds of laypeople to work on demanding projects.

Effects

[Intelligence amplification](#), effectively human powered [artificial general intelligence](#).

This is wise because of reasons described in [an answer to Why is it better to work on intelligence augmentation rather than artificial intelligence? - Quora](#)

Working principle

A process run by an arbitrary number of people building a knowledge tree in [structured writing](#) that maps all arguments about the topic being hypothesised/argued/theorised/solved.

Automated incrementally while in use, learning from edits being redundantly checked for correctness, increasingly forcing the [scientific method](#) upon the knowledge work while filtering out [cognitive biases](#) and [logical fallacies](#).

[What bottlenecks need to be addressed in order for the real computer revolution to happen? - Quora](#)

Origin of idea

[Memex](#) (1939-1945)

“Saves the master’s additions to the world’s knowledge, including the whole scaffolding by which they were erected, for a disciple’s mind to climb”

Proofs of concept

[How to edit this wiki - wiki](#)

[Project Xanadu web](#)

“Visible connections between infinitely transcluded concepts”

Call to action

[Crowd thinking environment - wiki](#)

Crowd thinking supporter works through

Babel fish in writing

Polkuaautosuunnitelma - wiki

Tiedosto Muokkaa Näytä Lisää Muoto Työkäsit Taulukko Laajennukset Ohje Kaikki muutokset tallennettu Driveen

125% Normaalit... Aloit

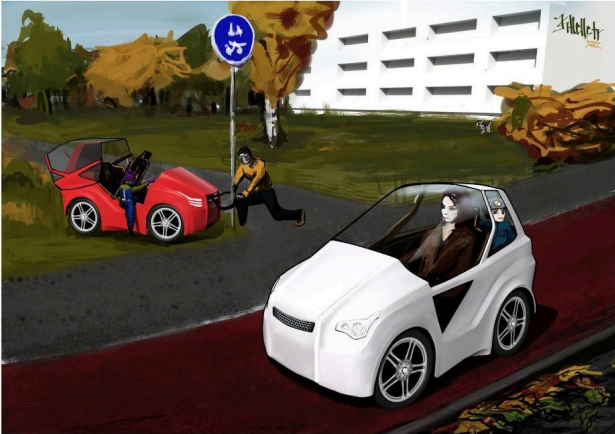
12 B Z U A

Kommentit Muokkaus

POP AUTO

ajoneuvoluokkaa vaihtava poljettava sähkötehostettu pikkupikkuauto
multicategory pedal-electric tiny car
chēliàng zhǒnglèi biànhuà bù dà de xiǎoxíngchē
車輛 種類 變化 不大 的小型車

Luonnos: Kimmo Heikström 2012



Sähkötehostettu polkuauto - siisti, kätevä, turvallinen, halpa.
Electrified pedal car - neat, practical, safe, cheap.
Diàndòng tànbǎn chē - gānjīng, fāngbiàn, ānquán, piányi.
電動 踏板車 - 乾淨, 方便, 安全, 便宜。

Lataa esite: [jpg](#) [png](#) [svg](#)
Download a flyer: [png](#) [svg](#)

Other languages appear for correction and verification.

Each user sees their own languages only.

Confirming a sentence as a “correct translation” teaches the translation engine ([supervised learning](#)).

Underlying content is edited through any of the machine translations.

Translating wiki

Concept

Problem

Having many separate, independent language versions impairs information flow in a network.

Solution

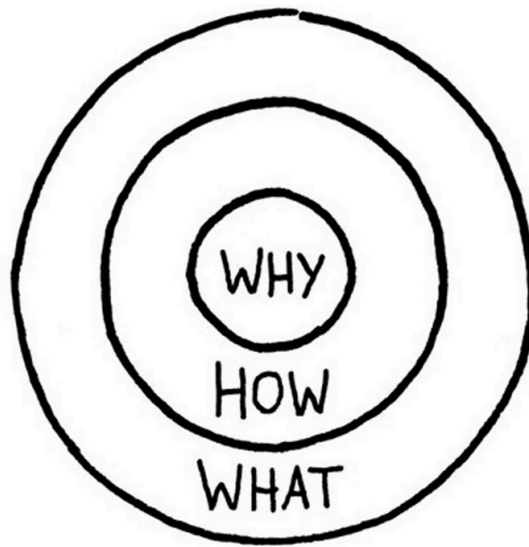
Edit the same wiki through machine translation. Teach machine through corrections.

Details at [an answer to What things do you wish your collaboration tools could do but can't? - Quora](#)

Effects

Removes language barriers in knowledge work collaboration.

To enable logical reasoning by inexperienced crowds



Why = The Purpose

What is your cause? What do you believe?

How = The Process

Specific actions taken to realize the Why.

What = The Result

What do you do? The result of Why. Proof.

Deliberative democracy by a big crowd

Concept

Problem

The best democratic systems produce barely rational results.

Solution

Crowd-powered leadership process directed by measured crowd values. Automated incrementally while in use, learning from edits being redundantly checked for correctness, increasingly forcing the scientific method upon the knowledge work while filtering out cognitive biases and logical fallacies.

Working principle

People's values are polled, factored, clarified, and re-polled until simple enough to direct daily decision making by the people powering the previous crowd thinking supporter. Voted representatives are replaced by actors controlled by the crowd-run virtual team.

Effects

Not susceptible to the distortions of representative democracy described in [an answer to Do USA citizens deserve better candidates than Trump and Hillary? - Quora](#)

and

[an answer to Which theory best explains why humanity screws up? - Quora](#)

Project wiki

[Valtiosuunnitelma \(State design plan\)](#) in Finnish

For unthinkably complex projects,
[Augmented Intelligence](#) + [Artificial General Intelligence](#) =

Transparent AGI

simple agents in a complex community

[Detailed concept](#)

A logical conclusion of progressively automated crowd-powered knowledge work is a mixture of Augmented Intelligence and Artificial Intelligence, a group mind of people and machines.

Problems

Life on Earth is not safe: a big disaster could kill us all. We need more powerful tools to ensure our continuity. Self-replicating machine intelligence is a powerful tool we can make.

Current AI software development is opaque and error-prone. It's dangerous to build self-replicating autonomous intelligent systems that way. Even more so in an arms race.

Solution

Keep AI [explainable](#) as it develops.

Reasoning at [an answer to Why is it better to work on intelligence augmentation rather than artificial intelligence? - Quora](#)

Working principle

Crowd thinking supporter's edit checking learning bot advances into edit suggesting bot, which advances into edit hypothesising bot, a thinking machine.

Make it a person with a rough model of a healthy human mind ([cognitive architecture](#))

Based on

[Society of Mind](#) by Marvin Minsky

[Piaget Modeler](#) by [Michael S. P. Miller](#)

[I Am a Strange Loop](#)

[The Harmonic Mind](#)

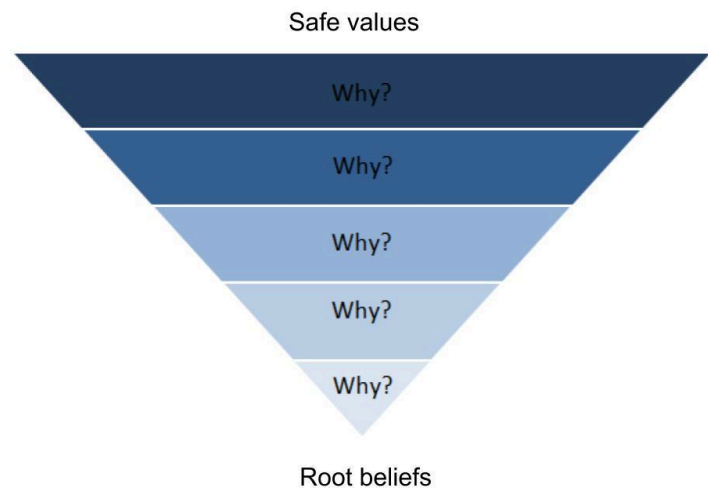
[How to Build a Brain](#)

[Meca Sapiens Architecture](#)

Runs on and is edited in wiki software development environment in the [Xanadu](#) cloud.



For the safety of life when machine capability overtakes people:



Belief basis for friendly AGI

Original research

Problem

How to build safe ethics into artificial persons?

We need protection against existential risk from artificial superintelligence doing its thing too effectively:

"The AI does not hate you, nor does it love you, but you are made out of atoms which it can use for something else." - Eliezer Yudkowsky in [Artificial Intelligence as a Positive and Negative Factor in Global Risk](#)

Solution

Internal value system:

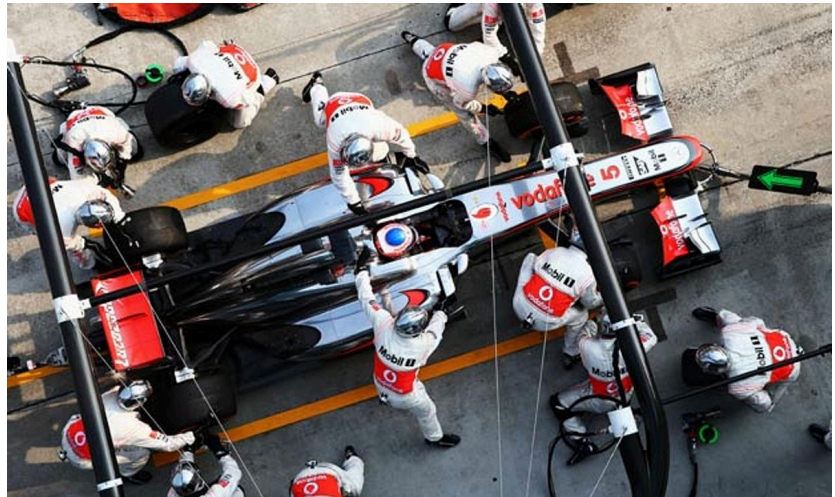
Designed top-down: hierarchical, logically consistent.

Sustained bottom-up: based on self-reinforcing beliefs about the world.

Working principle and effects

[an answer to If you were to come up with three new laws of robotics what would they be? - Quora](#)

To make crowd work reliable and learnable



Crowd work supporter

Original research

Problems

Incompetence.

Teamwork scalability is poor. (See [The Mythical Man-Month](#))

Solution

Break down the work of a skilled master into simpler tasks and coordinate a crowd of beginners to replicate the master by a virtual team.

Effects

Enables effective crowd work.

Anyone can join in to learn while doing.

Proof of concept

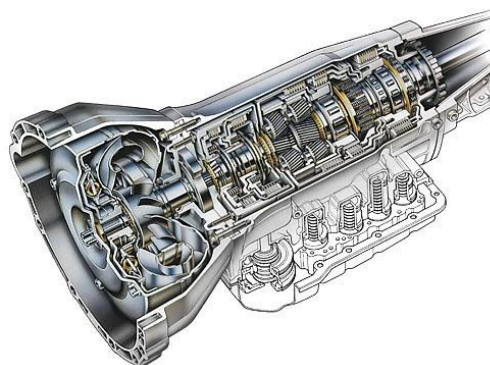
[Laatukriittinen joukkotyö \(Quality-critical crowd work\)](#) in Finnish

Process

1. Master's part roles are defined on cards in natural language. Cards are organised into a tree structure by abstraction level and dependency relation on a board.
2. Each person takes those roles they understand. Each quietly concentrating for a minute prioritises them for their own skills, and memorises their set. The prioritised board can easily be carried to support memory.
3. Work is done by complete teams designed from available roles. Each role is done by many people. Each person may do many roles.

Example work coordinating wiki

[Repairing an automatic transmission by a crowd of inexperienced car enthusiasts](#) (in Finnish)



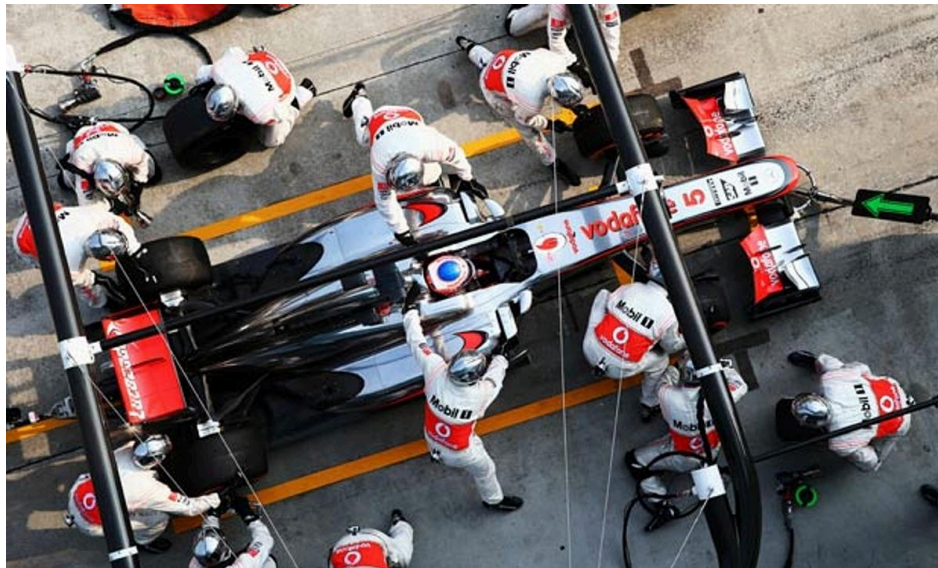
A skilled swarm emerges

An agent swarm forms a work skill

An agent swarm (people) defined in structured natural language (Finnish):

Crowd work: quality-critical team work by volunteer crowd

([Joukkotyö: laatukriittinen ryhmätyö joukolla](#))

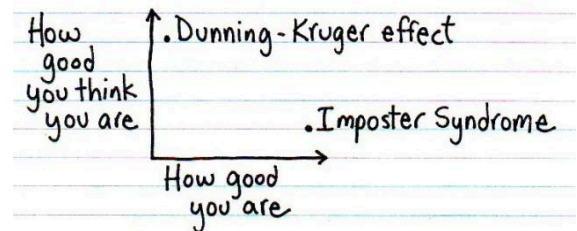


The example deconstructs a motor mechanic into a swarm of **small agent roles** to be acted by a crowd of kids who **form and do a whole** mechanic.

After skill estimation, **beginners can do ~0-3 roles** of the 13-agent swarm-mechanic.

Skill misestimation happens.

For intra-agent **error correction**, kids are teamed up to complement each other.



Skill estimation errors

For an agent to run error-free enough (~professional-equivalent), a team helps each other do the role, the whole role, and nothing but the role.

Project crowd teaming:

Volunteer crowd \Rightarrow Subskill agent teams

Swarm organisation:

(Work skill swarm (Subskill agent (Volunteer team)))



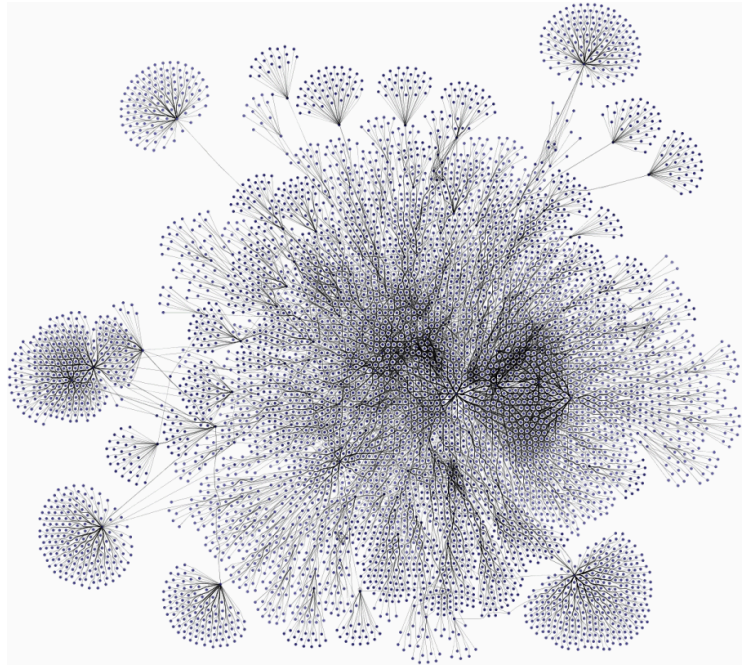
Error-correcting agent team

If you try all roles without help, **you become the whole** 13-skill mechanic.

Then the mechanic goes to open-work in an open-source motor repair company and learns all the roles, becoming a repair shop keeper.

After getting bored with starting companies, they go learn at a wise open factory how to design responsible open franchise companies that make needed open companies that make versatile open source machines that make repairable open source things.

To find the best [work-worker] pairings



Automatic global [labour] matcher

Concept

Problem

[Labour] is not fluid. In [recruitment], satisfying a [personnel] need is difficult and expensive, optimising is impossible.

Solution

Global distributed **general matching** system using common parameter ontology.

Effects

Anyone can find the best fitting [work] (or anything from the common ontology) for them anywhere in the world.

Working principle

1. Define all [work skills] in a crowd-edited ontology. (Initialise wiki with [\[ESCO\]](#).) Crowd checks edits redundantly, teaching an edit valuation bot.
2. Measure [worker skills] by questions crowdsourced from [recruitment interviews].
3. All [job] boards use the central open standard [skill] ontology to define their [jobs] to be able to plug into the global distributed matching system network.

Details at [an answer to What is the biggest problem you think lies within modern job recruiting? - Quora](#)

Petition to Taiwan (ROC) MOL (2018)

[Labour market efficiency can be vastly improved](#)
[勞動力市場效率可以大大提高](#)

Lament to Finland MOL in Finnish (2016)

[Mikä Työ- ja elinkeinoministeriötä vaivaa? \(What is wrong with the MOL?\)](#)

Medium importance projects

benefiting all life's projects

[Illustrative image(s)]

[Index of this chapter]

Living

For healthy sleep

Air purifier + wake-up light + nightstand =



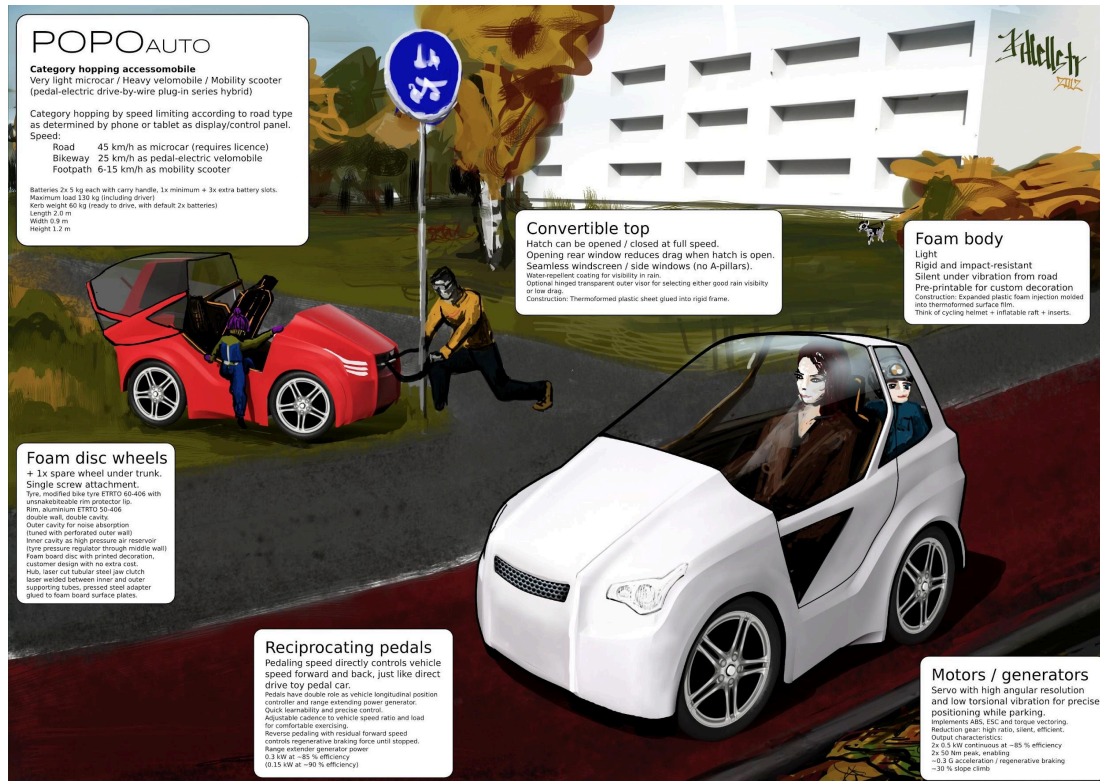
Wake-up purifier

- Flat-packable
- < 15 dB
- > 300 lm
- Pre-filter cleanable by any robot vacuum cleaner

Transportation

For traffic safety and exercise

[Enlarge brochure](#)



PopoAuto

tiny, practical, comfortable, healthy, fun muscle-electric car

[Detailed concept](#)

Presentation

[Active project](#)

[PopoAuto - the smallest sensible car](#)

Customer research form

[Please help specify products](#)

[What do you want from your narrow micro car?](#)

Petition to ROC MOTC

[Traffic safety act](#)

[Traffic law improvement needed on motorcycle lanes](#)

[摩托車車道需要改善交通法規](#)

(Because motorcycles with milder requirements than cars are cheaper to make, even with 4 wheels, which is the safest configuration for a vehicle.)

Project wiki in Taiwan

[Local effort](#)

[PopoAuto - the smallest sensible car - Project wiki](#)

(Open editing - please don't edit accidentally)

(When the whole project's information is kept in one place on the web for anyone to edit, co-founders can easily be added by giving the link.)

Project wiki

[Original research](#)

[Pedal car design plan - temporary English branch](#)

Project wiki in Finnish, large

[Original research](#)

[Polkuautosuunnitelma \(Pedal car design plan\)](#)

Why PopoAuto?

Benefits of Electric Micro Cars

City friendly

Environment friendly

Positioned between Motorcycle and Car.

Compared to motorcycles:

Safer

More comfortable

Compared to cars:

Easier parking

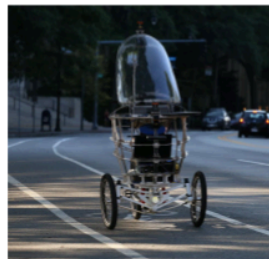
Cheaper



Self-driving trend brings travel pods

[Self-driving car software](#) is maturing soon, in a few years. When this happens, single person taxis will appear.

It is wise to prepare by getting micro car industry established now.



MIT PEV



"travelpod"

R&D Collaboration

Let's kickstart Taiwan's micro car production by founding a **micro car research and design company, PopoAuto** to create an **open-standard modular design toolkit, PopoAuto** to help design **open-source micro car model lines** to sell as **turn-key solutions for production** to make **internationally road legal micro cars for export.**



Renault Twizy - Open Source - Sold >20,000 units

PopoAuto business model

<https://docs.google.com/drawings/d/1s8TfAfZAaBHJJX1In-8JhQ3Hn1929bFrXG1kLbmebTo/edit>

Business Model Canvas:

R&D

(End product)

(Infrastructure)

key activities

R&D

(End product:)

-Maintenance&repair education&guide website

(Infrastructure:)

-Customer co-creation wiki

value proposition

Production lines:

-Great user experience, reliability, modularity, extensibility, economy, support, ...

(End product:

-Exercise from A to B in safety and comfort

-Superior to scooters and e-bikes, but double price, half the price and parking footprint of a small car)

customer relationships

-Website (inbound marketing) with detailed partnering instructions, detailed repair instructions, portal to local end product distributors

(End product:)-User registration through control panel (similar to Tesla models S, X)

-Relationships of partnered manufacturers (Kymco, SYM, Tazzari, Kyburz, etc.)

key partners

Suppliers of...

-Industrial automation

(End product:)

Suppliers of...

-Materials

-Components

(Infrastructure:)

-Production line remote & automated support systems

cost structure

-High initial R&D investment

-Salaries of:

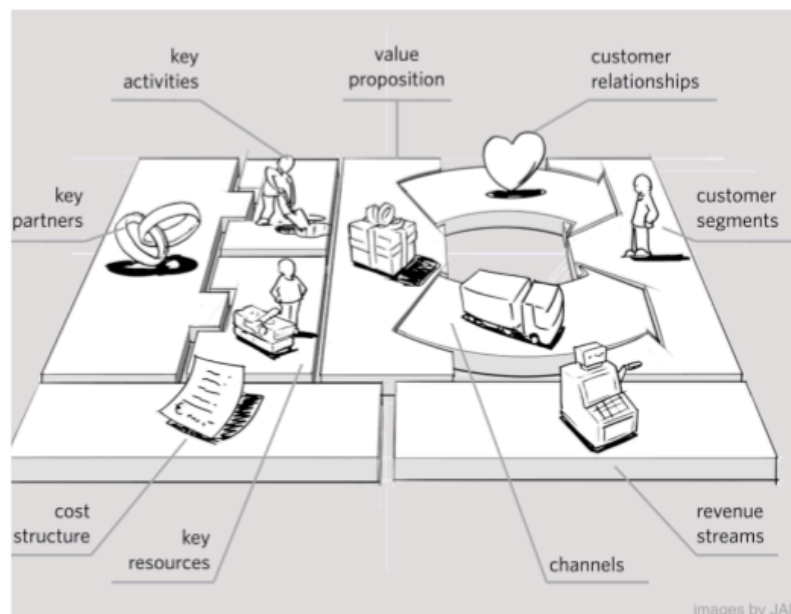
-Industrial designers

-Production line development and installation engineers

-Facilities

(Infrastructure:)

-Customer co-creation wiki developers



customer segments

-Manufacturing companies (with their own brands or not)

(End product:)

-velomobile riders

-commuters requiring car-like comfort, possibly with infants requiring lifts to daycare

-elderly people who have lost their driving licence

-(parents of) school children of ages 10-15, who want a micro car but aren't allowed to drive in traffic yet

-small package delivery services

-short range taxis (last mile)

-hourly leasing companies

-guided tour organizers

-large (theme) parks and nature reserves

-race organizers

revenue streams

-Production line sales and support

(End product:)

-Proprietary luxury brand sales

key resources

-Design and R&D talent, knowledge management

-Patents (some, primarily open-source)

(End product:)

-Proprietary luxury brand quality

channels

Trade shows, direct marketing

(End product:)

-Webshop mail order

-Existing channels of partnered manufacturers

Low importance projects

benefiting all life's projects