Robo Co-op

Confidential

Digital Inclusion of Refugees

DX with Truly Diverse Internationals

March 2023

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Jintae KIM USCPA - inactive

Founder | Robo Co-op

CEO of Shared Digital Center | Chief Sustainability Officer of Eukarya

Representative Director of Welcome Japan | Executive Advisor of Grameen Japan

Visiting Researcher of Ritsumeikan University

- ✓ Support refugees by teaching digital skills at Robo Co-op.
- ✓ Used to work at Deloitte Consulting.
  - Consulted corporates and governments on DX strategy and execution.
  - Top evaluation as “exceptional” for five consecutive years.

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Background

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Many corporates need to consider more for sustainability and inclusion now.

More Conscious on Sustainability and Inclusion

SUSTAINABLE DEVELOPMENT GOALS

BlackRock CEO
Larry Fink

"We focus on sustainability… because we are capitalists and fiduciaries to our clients."

"Access to capital is not a right. It is a privilege. And the duty to attract that capital in a responsible and sustainable way lies with you."

Source: BlackRock, "LARRY FINK'S 2022 LETTER TO CEOS: The Power of Capitalism", 2022

Goldman Sachs CEO
David Solomon

"Goldman Sachs wouldn't take companies public unless the company had at least one "diverse" board member."

Source: Forbes, "Goldman Sachs Won't Take Companies Public If They Have All-Male Corporate Boards", Jan 23, 2022.

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The impact hiring of refugees is the hot issue now.

THE WALL STREET JOURNAL.

Home World U.S. **Politics** Economy Business Tech Markets Opinion Books & Arts Real Estate Life & Work Style Sports

POLITICS

Amazon, Pfizer Among Companies Pledging to Hire 20,000 Refugees

Major U.S. companies will help integrate recent wave of Afghans and Ukrainians

NEW YORK—Major U.S. companies pledged to hire more than 20,000 refugees over the next three years, a number that refugee advocates say will help integrate the wave of Afghans and Ukrainians who arrived over the last year.

The hiring commitments were announced Monday at an event in New York organized by the Tent Partnership for Refugees, which is pressing corporations to hire refugees. The group said that the pledges reflect a growing awareness by U.S. companies that hiring refugees benefits their business. It said research shows that consumers value ethical behavior and refugees make more loyal employees.

"Every single number that is announced is a life. It has its own story and has an impact for generations and generations to come," said Hamdi Ulukaya, the Chobani chief executive and founder of Tent, at the conclusion of the event.

More than 100 major U.S. companies have signed up to join the Tent Partnership network.

Member Companies

Microsoft, SAP, Cisco, hp, IBM, accenture, EY (Building a better working world), Google, Deloitte., pwc, amazon, FACEBOOK, AUTODESK., AT&T, Goldman Sachs, JPMorgan Chase & Co.

Source: The Wall Street Journal, "Amazon, Pfizer Among Companies Pledging to Hire 20,000 Refugees", Sept, 19, 2022.

Tent.org, "Members", Sept, 28, 2022.

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Due to conflicts and climate crisis, now over 100 million refugees are on global.

UNHCR's Global Trends Report: 100 Million Displaced

Source: UNHCR “Global Trends: Forced Displacement” (2021), https://youtu.be/vl8gYm4nNDQ

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At the same time, about 100 million digital workers are in short on global.

Global Digital Trend

Global competition for a limited pool of technology workers is heating up

Global shortage

Technology and science jobs in the United States outnumbered qualified workers by roughly 3 million as of 2016, according to data from Netherlands-based human resources consulting firm Randstad NV. By 2030, there will be a global shortage of more than 85 million tech workers, representing $8.5 trillion in lost annual revenue, according to management consulting firm Korn Ferry, based in Los Angeles.

Among the economies expected to be hit hardest are Brazil, Indonesia, and Japan, which could face shortages of up to 18 million workers apiece, according to Korn Ferry's projections. The United States and Russia are expected to be short 6 million workers each, while China could face a deficit of 12 million.

Source: IMF "Global competition for a limited pool of technology workers is heating up" (Apricl, 2019).

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About Robo Co-op

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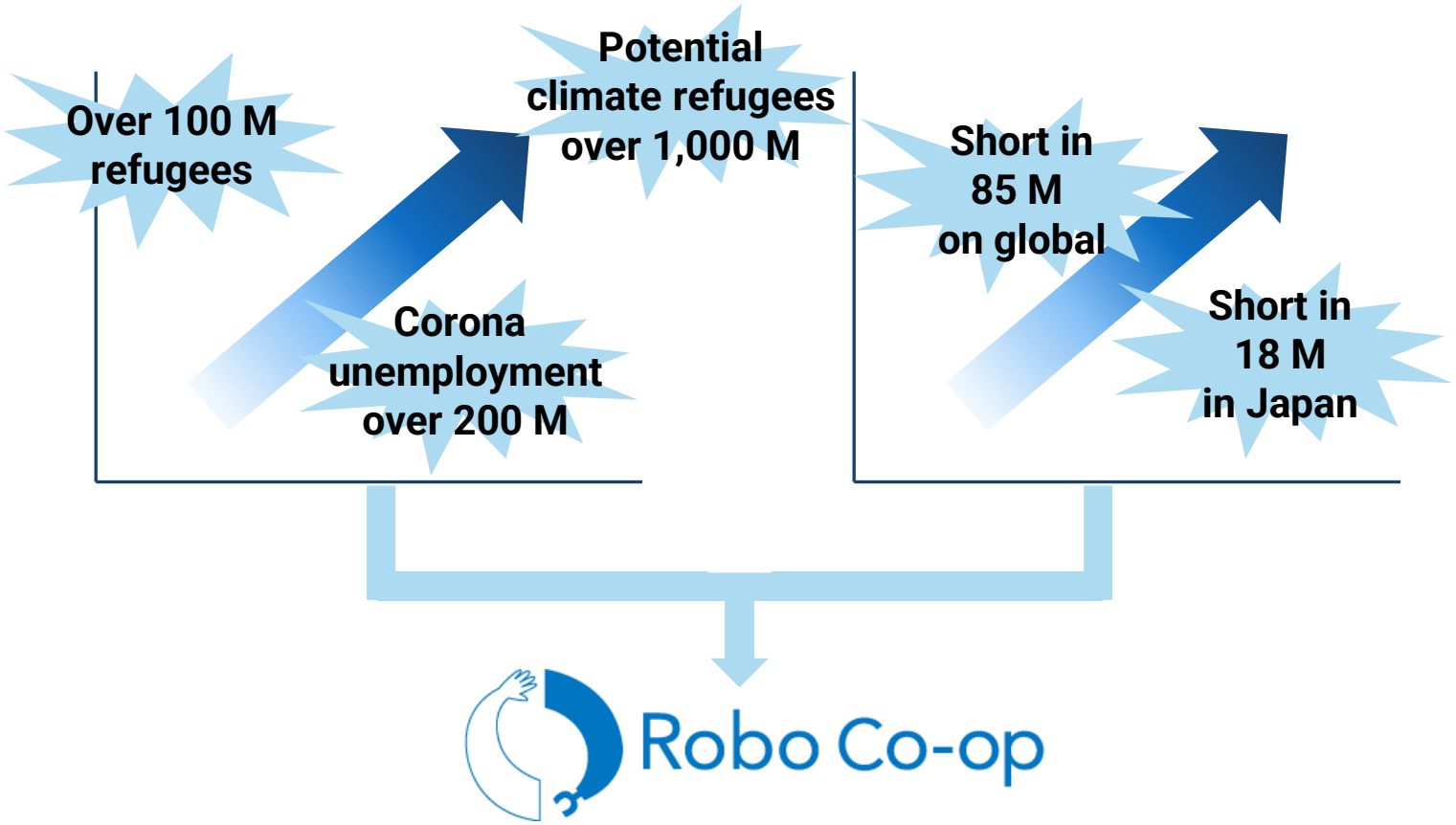
More Refugees and Poverty

More Needs for Digital Workers



Online community to support each other with digital skills

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Everyone Can Shine as They Are

About Robo Co-op

UNHCR supports Robo Co-op's digital inclusion of refugee

HP : https://roboco-op.org/?page_id=1713

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Everyone helps each other with digital skills in Robo Co-op.

What is Robo Co-op?

Learn Together

Digital learning community

- ✓ Group of five
- ✓ Anyone – Anywhere –Anytime

Work Together

Diverse digital projects

- ✓ Help corporates and government DX
- ✓ RPA design, development, training, maintenance, etc.

Expand Together

Spread the care

- ✓ Members train new members
- ✓ Sustain and expand the cooperative community

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We learng together in digital community.

Learn Together

Learn Together

Preparation → **Learning** → **Practice**

Make group and learning environment

- ✓ Make a group of five for learning
- ✓ Can use a microfinance to prepare PC (/ rental PC) and wi-fi

Learning with group of five

- ✓ e-learning for anyone, anytime, anywhere
- ✓ Group learning for peer pressure and peer support
- ✓ Ask question as many as you want through online

Tryout and OJT

- ✓ Take an exam as a tryout
- ✓ If passed, take the-job-training in a group

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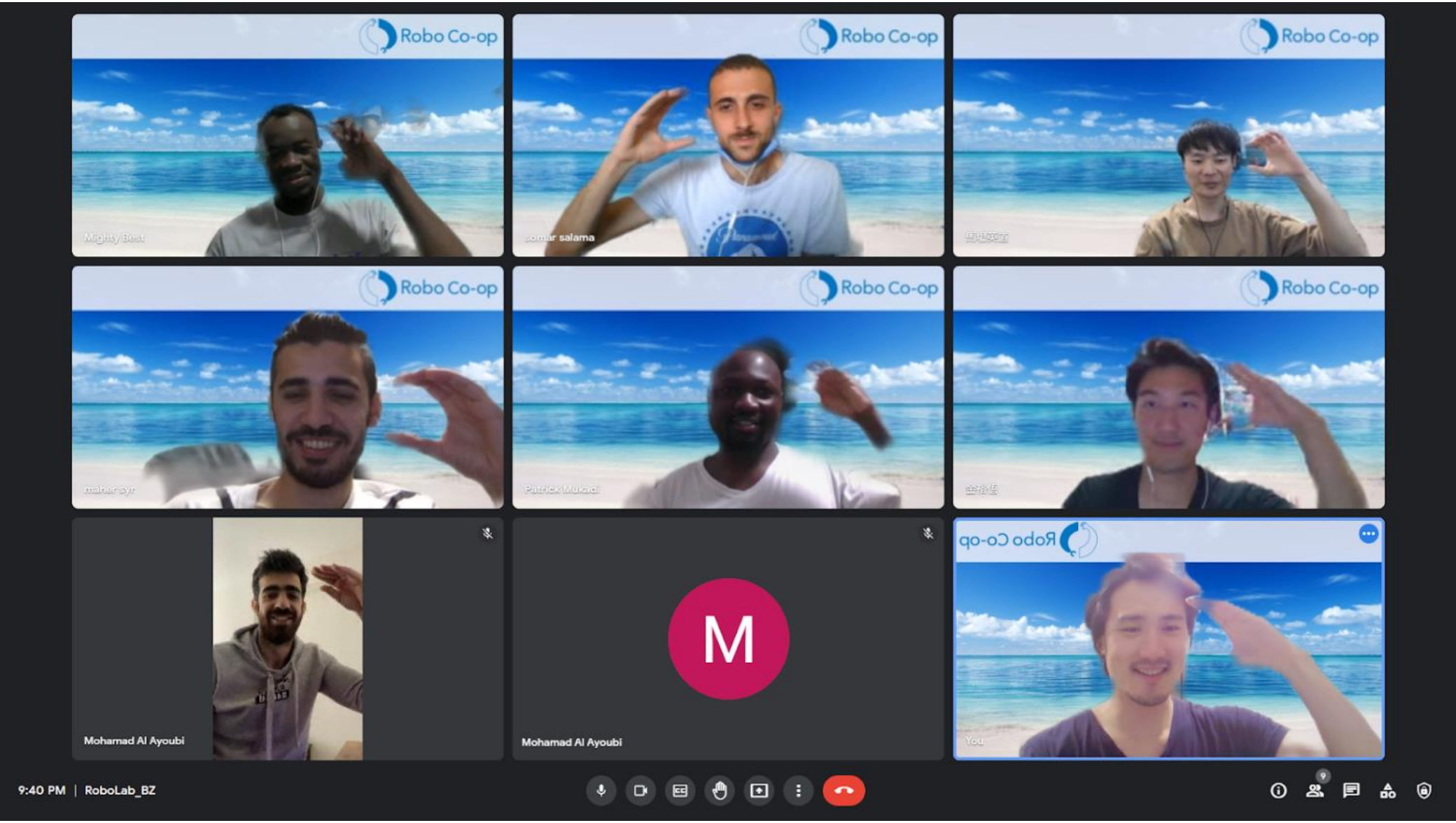

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What is RPA?

The Story of Work
https://www.youtube.com/watch?v=dJ9c2xq6mas
What is a UiPath Software Robot?
https://www.youtube.com/watch?v=3R67RGjZoOM

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RPA is a digital tool which is easy to learn and earn!

What is RPA?

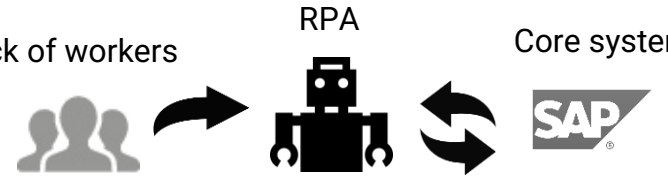
- Robotic Process Automation (RPA) is a **software to automate computing tasks.**
- You develop and operate robots on computer.
- **Robots execute tasks** such as entering data, checking numerical values, etc.

Why RPA?

✓ **Easy to learn**

RPA is a no code or low code that can learn in several months

✓ **High demand**



Demand for RPA talents is high, due to high productivity, high affinity with core systems, lack of personnel in society etc.

✓ **High income**

RPA talents can earn more than the average income, like normal programmers

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Together with SDC, Robo Co-op provides oursource and automation opportunity for everyone.

Partners for DX

Outsource the pain of solvers…

✓ Let SPOs outsource non – core or routine works to stay focus on social impact.

Convert it as decent work for everyone!

✓ Great opportunity to learn both back office operations like accounting or human resource, and digital skill.

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Shared Digital Center and Robo Co-op have been supporting many client including NPO.

Track Records

Client			Services
Shared Digital Center	NPO / NGO	Intermediary Org for Refugee Inclusion	✓Outsource back office including accounting, and other admin operations ✓Donation management ✓Scholarship management ✓Event management
		Largest NPO in Japan for Child Education	✓Outsource back office including accounting, human resource management, and other admin operations ✓Grant management
		Large NPO against Child Prostitution in Asia	✓Outsource back office including accounting, human resource management, and other admin operations ✓Donation management
		International NGO for Education	✓Outsource back office including accounting, and other admin operations.
	Social Enterprise	IT Startup for Smart City	✓Outsource back office including accounting, and other admin operations.
Robo Co-op	Social Sector	Large NPO against Child Prostitution in Asia	✓Operational analysis ✓RPA development and maintenance ✓RPA training ✓Financial dashboard implementation
		Largest NPO in Japan for Child Education	✓RPA training ✓Financial dashboard implementation
	Business Sector	Largest Retail in Japan	✓RPA development ✓RPA x OCR implementation
		Medium Size Enterprise in Tokyo	✓Operational analysis ✓RPA development and maintenance ✓RPA training ✓Automation CoE establishment ✓Financial dashboard implementation
		Social Venture for Education of People with Disabilities	✓Operational analysis ✓RPA development ✓Digitalization of interviews with iPad
		Solar Panel MGMT Company in Tokyo	✓Operational analysis ✓RPA development ✓RPA maintenance
	Government Sector	Municipality in Ibaraki Prefecture	✓Operational analysis ✓RPA development
		Municipality in Osaka Prefecture	✓Data creation of open source software for smart city

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Diverse partners and achievements

Achievements

Partners

- ✓ Officially supports digital inclusion of refugees
- ✓ Partnership to provide microfinance to refugees
- ✓ Partner for RPA
- ✓ Partner for outsource
- ✓ Partner for RPA × AI
- ✓ Partner for RPA × Smart City

Awards

- ✓ Top three social entrepreneur in 2022
- ✓ Candidate for Cartier Women's Initiative

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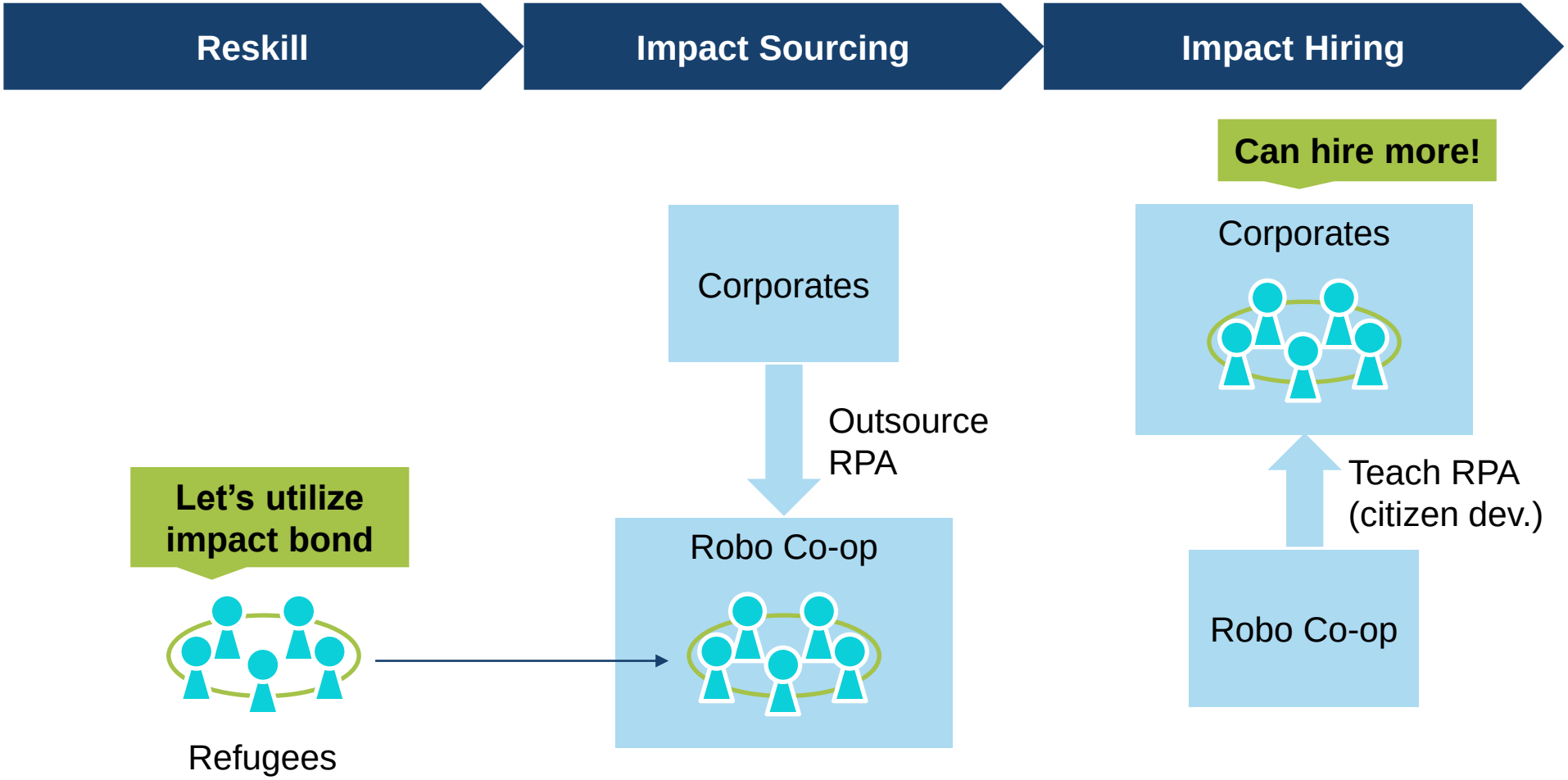
Corporates can see the power of refugees for DX through impact sourcing first. Then, refugees in Robo Co-op can teach refugees in corporates to accelerate more impact hiring.

Roadmap for Social Impact



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The world's first impact bond will be formed to train refugees as digital workers with pay it forward mechanism for more sustainable and scalable impact.

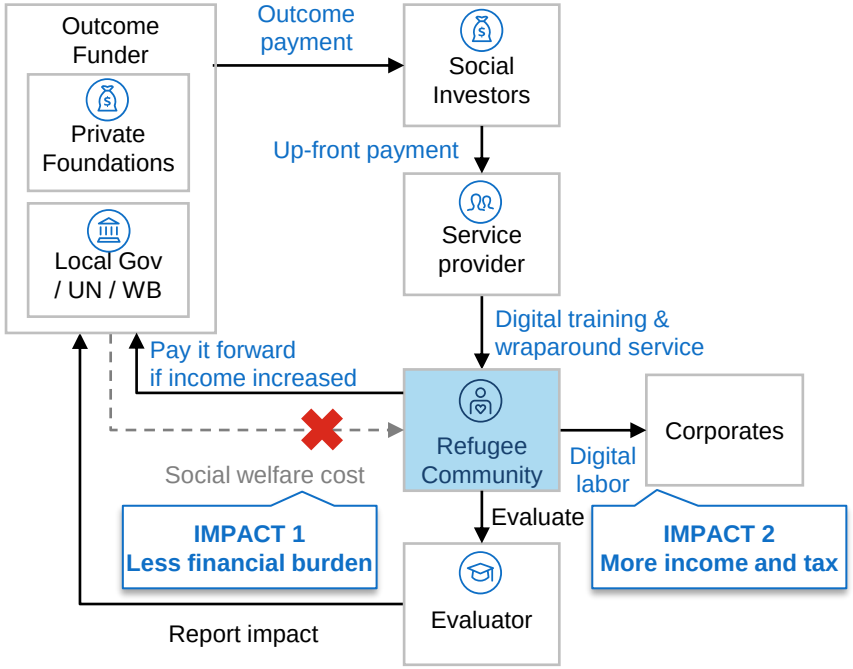
New Development Impact Bond for DX of Refugees

- ✓ **Teach refugees easy-to-learn-and-earn digital skill.** (low code tech for high growth mrkt like RPA*1)
- ✓ **Online community learning for more inclusive and scalable impact.**
- ✓ **Impact bond with outcome payment for a better training with minimized risk.**
- ✓ **Pay it forward by successful refugees for sustainable free training with wraparound services.**

Innovative Intervention

Online Community

- ✓ Anyone can learn anytime and anywhere.
- ✓ A group of five for peer pressure & support.
- ✓ Skilled refugees train new refugees as meaningful participation.
  EX: Skilled Ukrainians can teach Ukrainian refugees in Poland, Romania and Finland via online.
- ✓ Easy to involve corporates to secure employability.
  EX: e-learning for 3 mts, and OJT for 3 mts to digitalize corporates' actual operation flow.



Innovative Finance

Impact Bond

- ✓ Pay by outcome for true impact with minimized risk.
- ✓ Return at market rate if successful.
- ✓ Mixed finance to invite new types of investors.
  EX: private foundations for outcome payment, and others to guarantee the principal payment.

Pay It Forward

- ✓ Successful refugees repay the cost for future students.
  EX: Repay 10% of income over 3 ~ 5 years if exceeded min. wage.

*1: RPA = Robotic Process Automation (a high-demand process automation technology based on low code).

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Impact bond can be applied to increase the employability of refugees with outcome payment to improve the quality of job training with minimized risk.

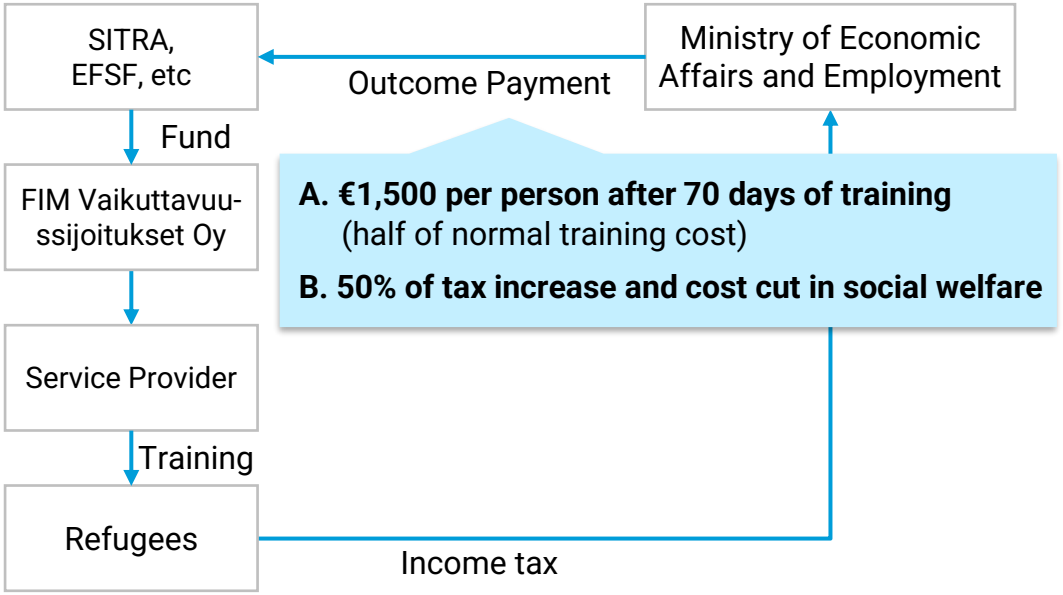
Social Impact Bond for Refugees in Finland: Koto

Background

- Over 30 K asylum seekers in 2015
  (five times higher than usual)
- Ministry of Economic Affairs and Employment proposed to form a Social Impact Bond (SIB).

Impact

- **Fund size: € 14.2M**
- **Over 2,200 ppl participated, and 1,000 ppl employed in 2020**



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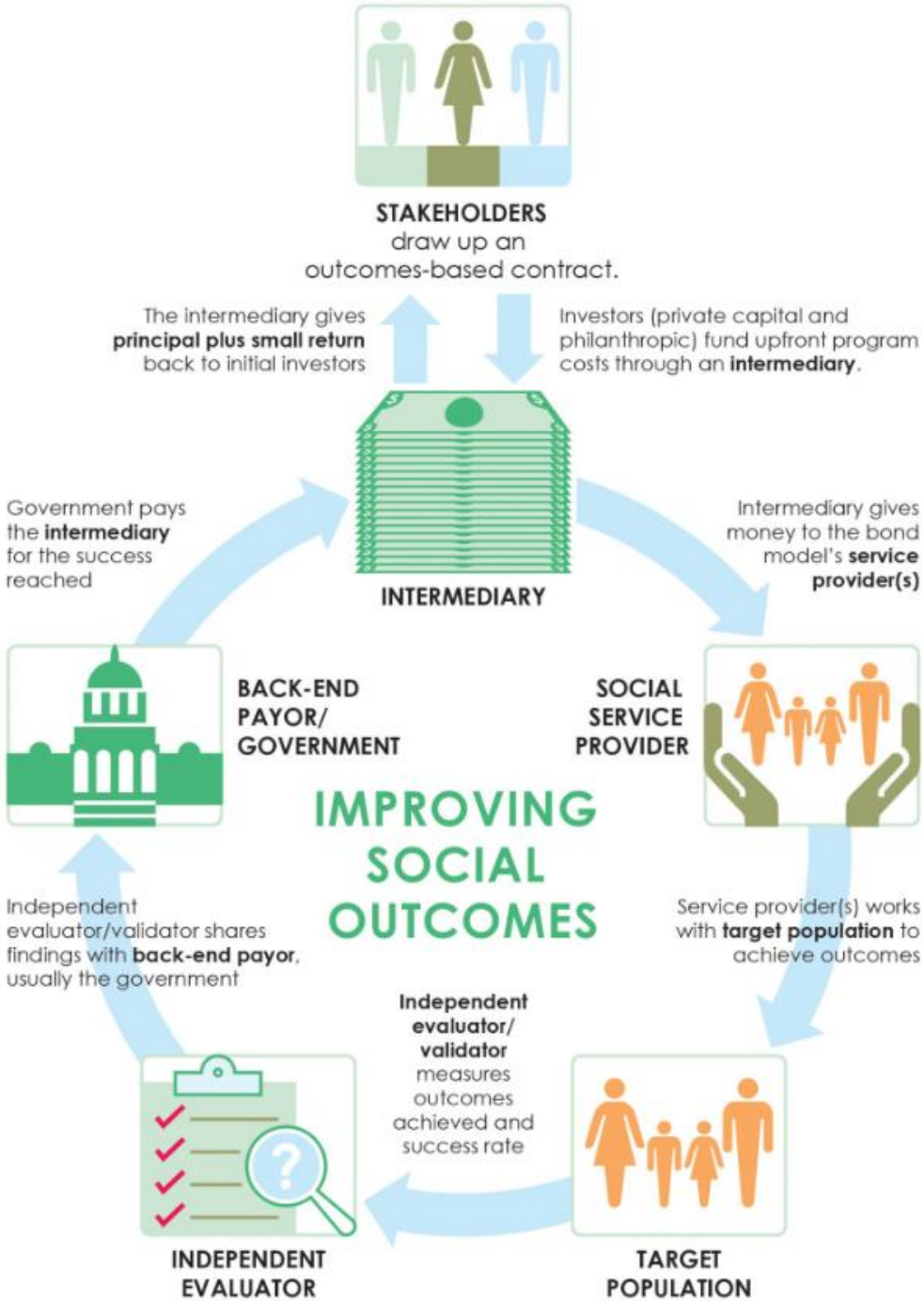
HOW THE SOCIAL IMPACT BOND WORKS



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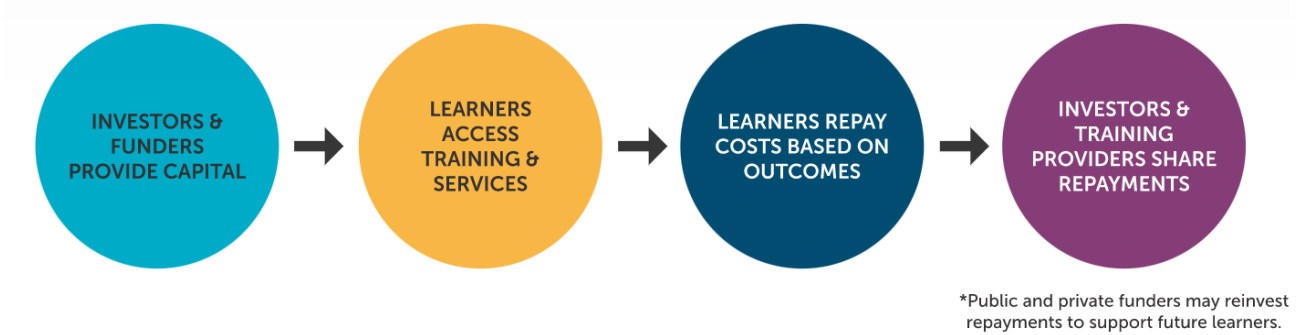
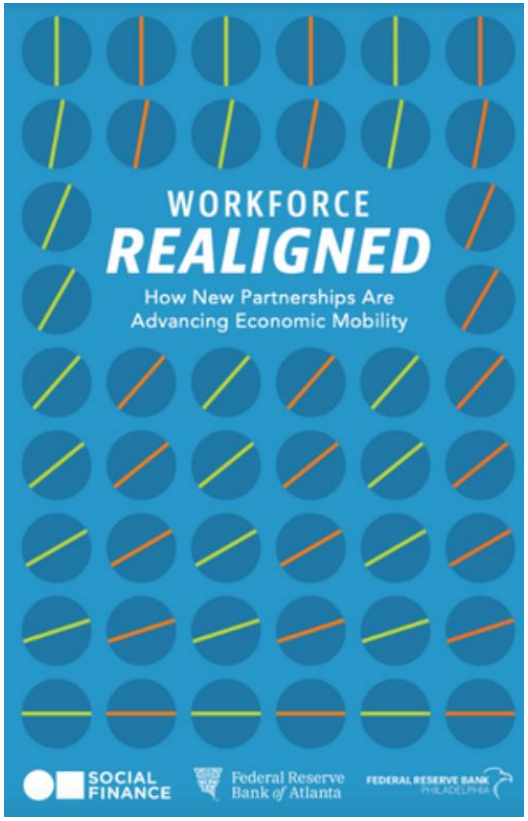
Career Impact Bond with pay forward system has lots of potential for reskilling.

What is Career Impact Bond?





Even FRB is studying CIB.

https://socialfinance.org/product/career-impact-bonds/

https://socialfinance.org/work/workforce-realigned/

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Google created $100 M fund for reskilling program with a pay it forward system

Google's Pay Forward Fund

Tech giant Google on Thursday announced the launch of the $100m Google Career Certificates Fund that will enable more than 20,000 Americans to gain job-ready skills to improve their employment opportunities.

Social Finance, a US impact finance and advisory nonprofit, will deploy investment from Google and grants from Google.org – the firm's philanthropic arm – to several nonprofit training providers including Merit America and Year Up.

The finance will enable learners to access the existing Google Career Certificates training with no upfront cost. The Certificates were developed by Google employees to train workers with skills in high-demand fields, with no previous experience or degree needed.

Learners benefiting from the new fund will not have to pay any money upfront to take part in the Certificates training. Instead, they will receive a loan that they will only start repaying via no-interest, low monthly payments when they secure a job making at least $40,000 per year. Repayments will be reinvested in the fund to continue supporting further learners.

> *"We hope it will be transformative for people, their families, and their communities - Sundar Pichai, Google*

https://www.pioneerspost.com/news-views/20220218/google-launches-100m-careers-fund-targets-1bn-impact-through-higher-wages

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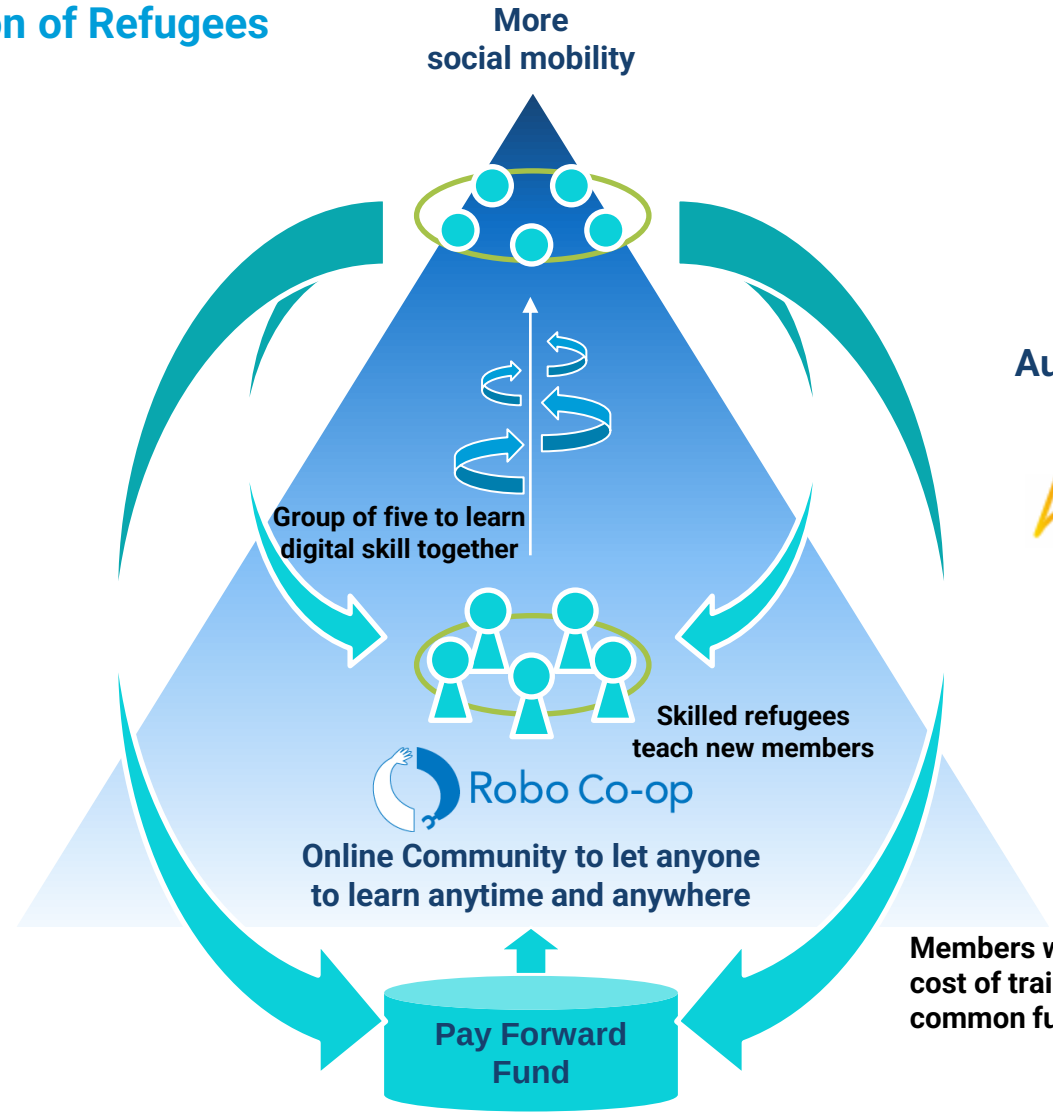
Robo Co-op co-creates online community where refugees teach digital skill to each other, creating sustainable cycles through pay it forward to accelerate social mobility.

Digital Transformation of Refugees



Partner of Automation Anywhere

AUTOMATION ANYWHERE
Go be great.

Members with increased income repay the cost of training, paying it forward into a common fund to support future members.

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Osaka Expo

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2025年日本国際博覧会（略称「大阪・関西万博」）の概要

テーマ	いのち輝く未来社会のデザイン Designing Future Society for Our Lives
サブテーマ	（1）Saving Lives（いのちを救う） （2）Empowering Lives（いのちに力を与える） （3）Connecting Lives（いのちをつなぐ）
コンセプト	People's Living Lab（未来社会の実験場）
開催期間	2025年4月13日(日)～10月13日(月) 184日間
想定来場者数	約2,820万人
開催場所	大阪 夢洲（ゆめしま）

11

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UN Pavilion at SDG Expo in 2025

Digital Inclusion of Refugees

For the SDG Expo, the “digital inclusion of refugees” can be a great concept at the UN pavilion to advocate solidarity for “none left behind”.

Concept of UN Pavilion at Osaka Expo

The Osaka Expo is called “SDG Expo”. What should we advocate at the UN pavilion? Considering the progress of SDGs, the key question would be “how can we really achieve none left behind”? The answer can be the “digital inclusion of refugees”.

Osaka Expo

Designing Future Society for Our Lives.

(1) Saving Lives (2) Empowering Lives (3) Connecting Lives

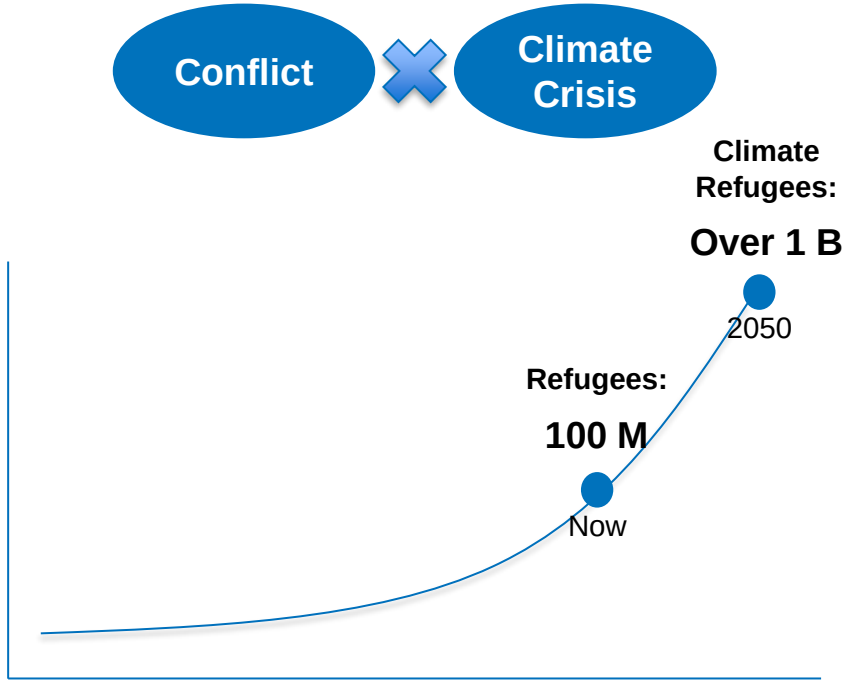
SDG Expo

None left behind.

Digital Inclusion of Refugee

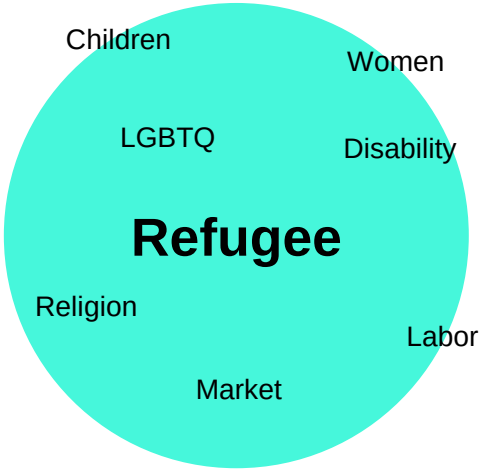
Refugees are large and complex issue linked with all of SDGs. If we could include refugees, the true diversity itself, there would be none left behind.

Severity



# of refugees hit 100 M in 2022, and over 1 B climate refugees are expected in 2050. Refugee is both environmental and social issue complexly linked with all of SDGs.

Possibility

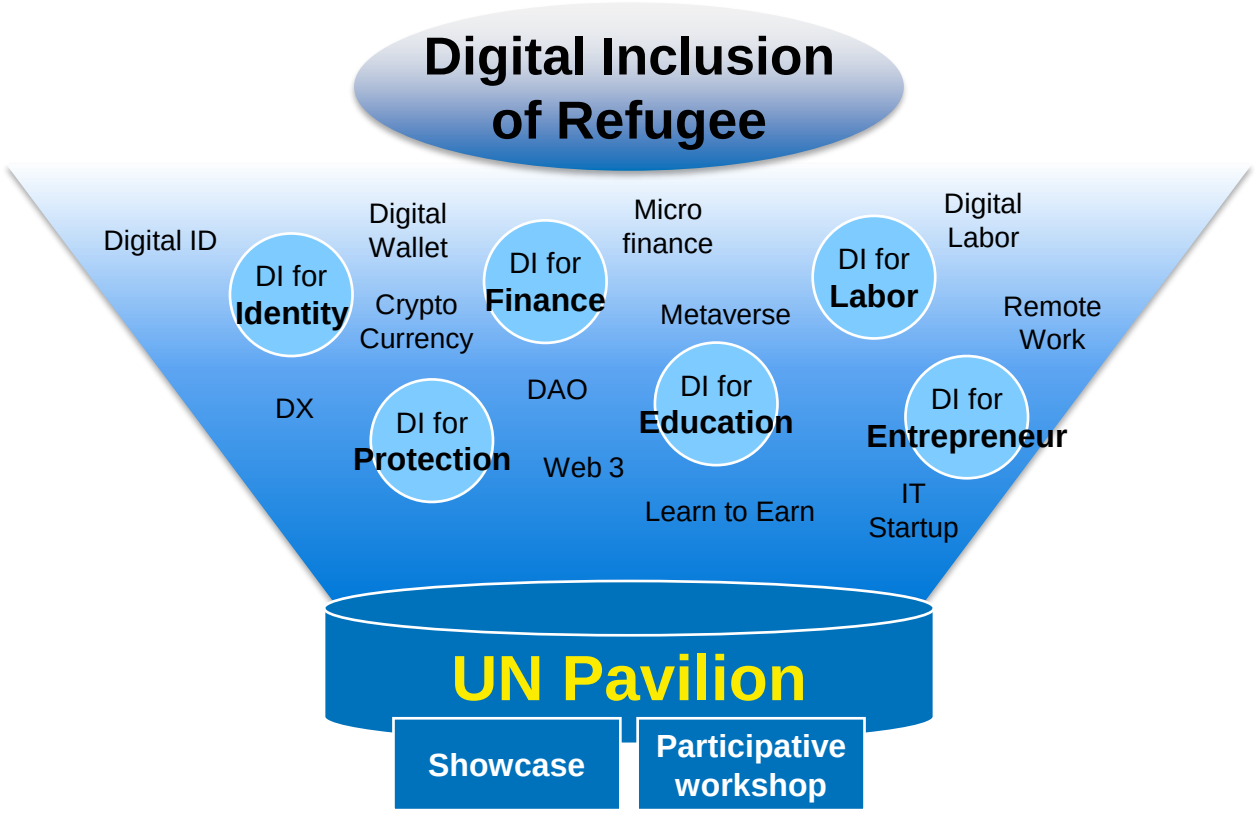


Refugee is a true diversity itself. Corona deepened social division and unemployment. But if we can materialize the refugee inclusion, we could include anyone not to be left behind.

Source: The Global Report 2020 UNHCR, IEP “Ecological Threat Report” (September, 2020).

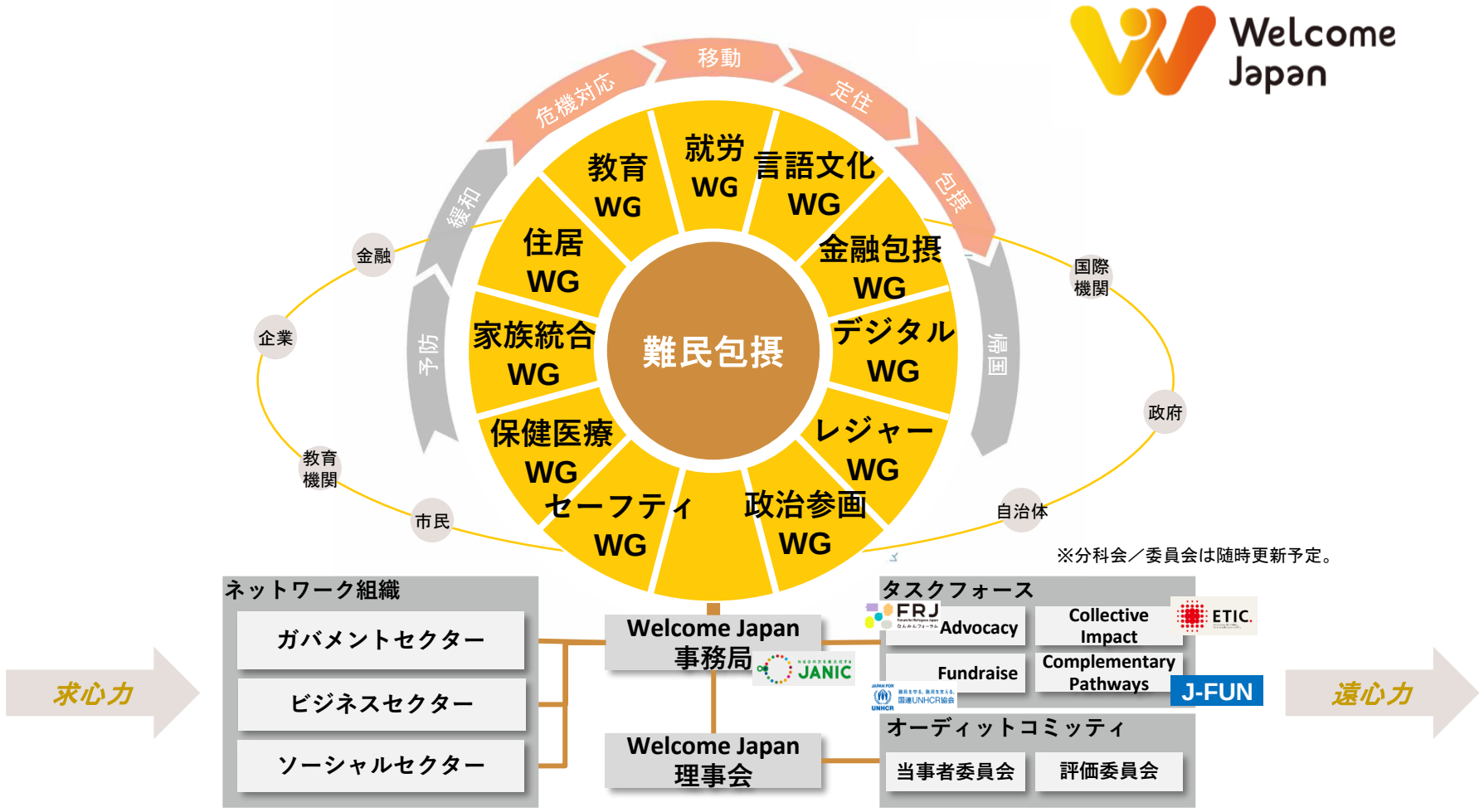
We could exhibit showcases to highlight the digital inclusion of refugees, as well as participative workshops to invite refugees and participants.

Direction of UN Pavilion



As both “business and human rights” and “digital human rights” are becoming major issue, the digital inclusion of refugees have a huge potential for a sustainable and scalable impact, involving corporates engagements.

Welcome Japan is a platform for multisector to complement diverse pathways for refugee inclusion as a whole of society.



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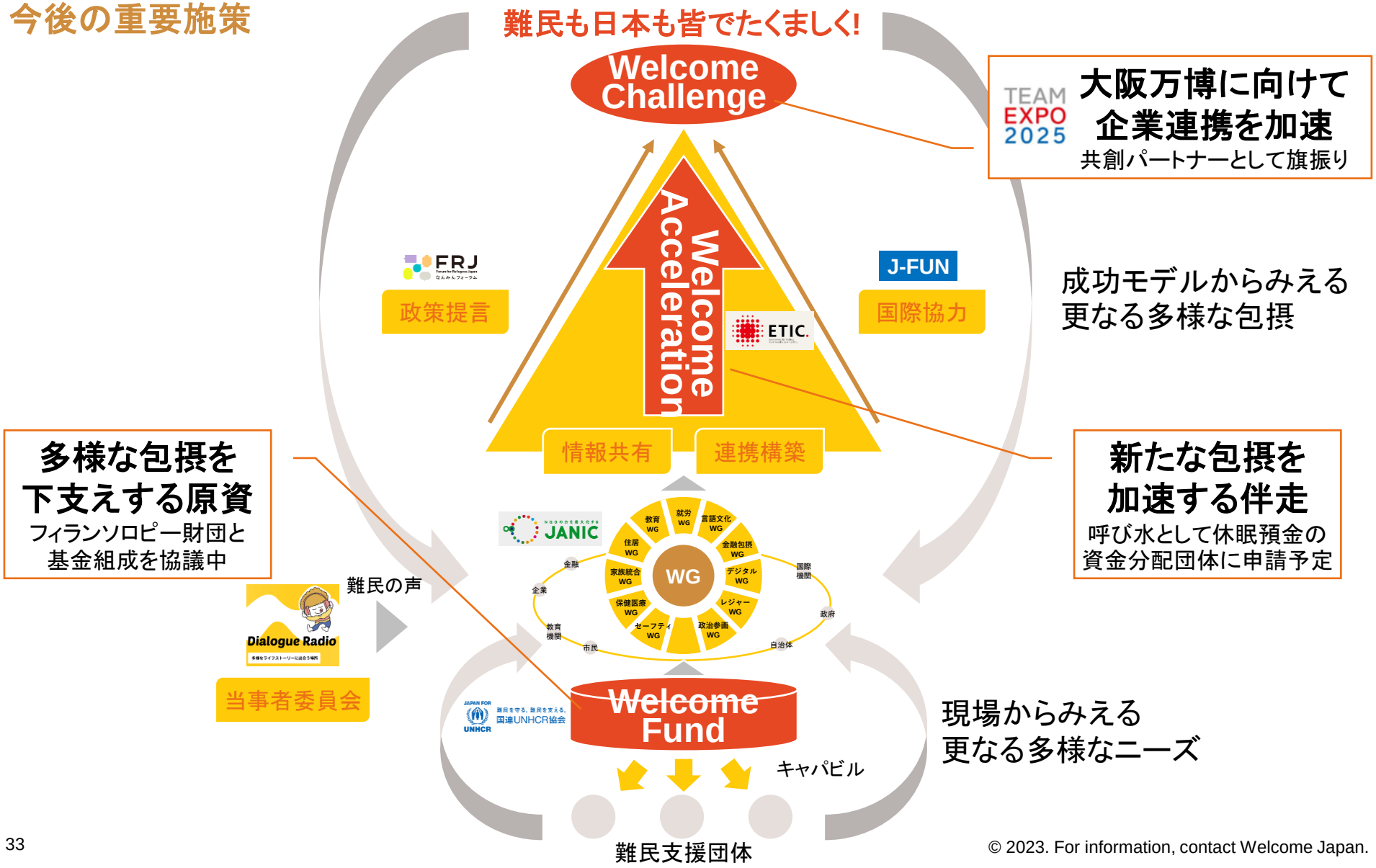
①キャパビルに向けたWelcome Fund、②新たな包摂を実験するWelcome Acceleration、③企業連携を加速させるWelcome Challengeを展開していく

今後の重要施策



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Welcome Japanが、大阪万博で「Welcome Challenge 」を展開！

Welcome Challenge@大阪万博

OSAKA, KANSAI, JAPAN EXPO2025

「いのち輝く未来社会のデザイン」”Designing Future Society for Our Lives”

①Saving Lives（いのちを救う）②Empowering Lives（いのちに力を与える）③Connecting Lives（いのちをつなぐ）

期間：2025/4/13 ~ 10/13（183日間） 想定来場者数：2,820万人

TEAM EXPO 2025

共創チャレンジ

- ✓ SDGs達成に向け、多様な参加者が主体となり、理想とする未来社会を共に創り上げることを目指すプログラム
  例）産官学が連携し持続可能な地域づくり、企業（ベンチャー、中小、大企業）がSDGs達成に貢献する新規事業
- ✓ 会期前から共創し、会期中はベストプラクティスを披露し、会期後はレガシーとして継承
- ✓ キーワード：SDGs、Society 5.0、共創（Co-Creation）、多様なセクターの参加

Welcomeサミット等で呼びかけ（コンソによるGRFへのHigh – Quality Pledge提出も促進）

Welcome Challenge

Welcome Japanが共創パートナーとして、日本社会全体による難民移民の多様な包摂の拡充に向け、多様な分科会や関連組織と共創チャレンジ！

【共創例】

- 空き家・古民家をシェルターとして100件リノベ！
- 国内難民をハーバード大学に10名合格！
- 難民移民向けリスキル奨学基金10億組成！
- 難民移民DX人財1,000人育成！
- 難民移民起業家育成100社創業！
- 難民移民包摂市場形成1兆円！

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難民移民のデジタル人材包摂

チーム名	Global DX Pioneers
共創メンバー	Welcome Japan、Robo Co-op、Eukarya、BonZuttner、国連ＵNHCR協会
主な活動地域	日本 / 世界
活動テーマ	リスキリング、教育、就労、DX人材育成、ダイバーシティ、インクルーシブ 、国際協力

共創チャレンジ概要

2022年に紛争や迫害による強制移動が1億人を突破。2050年には気候変動により強制移動を余儀なくされる「気候難民」が10億人を超える試算も存在。どの国で戦争が起きてもおかしくない世の中で、英語で学びやすく柔軟な働き方で子育てとも両立がしやすく住む場所も選ばないデジタルスキルを活用し、誰がどこにいてもありのままに輝ける包摂的な多文化共生社会を創ります。日本は少子高齢化で人手不足な中、グローバルなDX人材が足りておらず、2025年には追加でデジタル人材が2,950万人必要となり（AWS、2021）、IT人材の国際経験は63か国中63位とデジタル競争力ランクで最下位の現状（IMD、2020）。円安が進みグローバル外資のアウトソース先となりつつある中、「選ばれる国、日本」となるためにも日本社会全体が「All Japan」として一丸となり、難民移民のDX人材としての包摂に取り組みます。具体的には、DX人材としての入口となる教育機会を広げるための①インパクト・ボンドと、出口としての就労機会を広げるための②インパクト・ソーシングやインパクト・ハイアリングを加速させます。①先ずCareer Impact Bond（CIB）と呼ばれる、「出世払い方式のペイフォワード基金」をDX人材不足の企業から法人協賛を募ります。無料でトレーニングを受けることができ、所得が向上した場合のみ受講者が返済する奨学金プログラムのため、入り口としての教育機会が拡大します（返済が将来更なる教育機会の拡充に繋がるため、ペイフォワード／恩送りと呼ばれます）。またSocial Impact Bond（SIB）と呼ばれる、就労支援が成功した場合に自治体がインパクト投資家や企業に成果報酬を支払うモデルも掛け合わせ、更なる持続可能性や拡張可能性を共創します（難民移民向けのCIB×SIBによるデジタル就労支援は世界初の試みに）。②また、卒業後にはインパクト・ソーシングと呼ばれる、英語でも開発に携われるグローバルで包摂的なITベンダーに難民移民が加わり、日本企業から受託するITプロジェクトの一翼を担う形で就労の出口を担保します。様々な企業や自治体からIT案件を「業務委託でできる社会貢献」として託していただき、難民移民がデジタル人材としてのキャリアを踏み出す機会を広げます。加えて、プロジェクトを通じて評価された人材が企業や自治体により直接雇用されるインパクト・ハイアリングも促進していきます。

未来への宣言

難民移民がデジタル人材として誰でもどこでもありのままに輝き経済的自立を実現するだけでなく、日本のグローバルなDX人材不足という２つの社会課題を解決していきます。そのために、企業や自治体、政府、NPO / NGO、社会起業家、金融機関といったマルチセクターと連携し、10億円のインパクト・ボンドを組成しリスキル機会を広げ、1億円分のIT案件を雇用機会として創出し、日本発・世界初の難民移民向けデジタル就労支援のモデルを共創することを目指します。

取組の展開

今後展開したい地域・方法	国内の関西地域にいる難民移民からパイロット。オンラインでも教育・就労ができるため、日本に来る前に教育を提供したり、 海外からリモートワークを行うモデルも展開
共創を希望する方々	包摂的な新しい日本に共感いただき、①インパクト・ボンド組成に協力いただける自治体や金融機関、財団、学校に加え、 ②インパクト・ソーシングやインパクト・ハイアリングに協力いただける企業、自治体、といった多様なアクターと共創したいです

SDGsとのかかわり

④ 誰もが、デジタルトレーニングといったリスキルに向けた教育機会を享受できるように

⑧ 誰もが、デジタルタレントとしての就労機会を享受できるように

⑩ 誰もが、いつでもどこでもありのままに社会の一翼を担い輝けるように

⑰ 政府や自治体、国連機関やNGO、企業に社会起業家、金融機関や学術機関が連携し、日本発・世界初の持続可能且つ拡張可能なコレクティブインパクトを共創

大阪・関西万博のテーマとの関わり　真の「誰一人取り残さない」、「いのち輝く未来社会」を「難民移民」と共に。

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Appendix
Offering by Robo Co-op:
“Offshore Automation to Global Refugees”

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Why don’t you outsource it to refugees?

Benefit of Empowering Global Refugees

Distributed

Our global refugees' team are located in many countries;

- ✓ Minimize the country risk or act of God
- ✓ Never be worried about time-zone difference or holidays for collaboration

Dependable

Our Refugees’ team trained in Japan offer;

- ✓ The best work ethics
- ✓ Great quality assurance as a team
- ✓ Backup and flexible resources

Diversity

Global refugees are truly the diversity itself;

- ✓ Many diverse bridge SE for any languages
- ✓ Understanding of variety of culture and backgrounds
- ✓ Refine your diversity and inclusion policy

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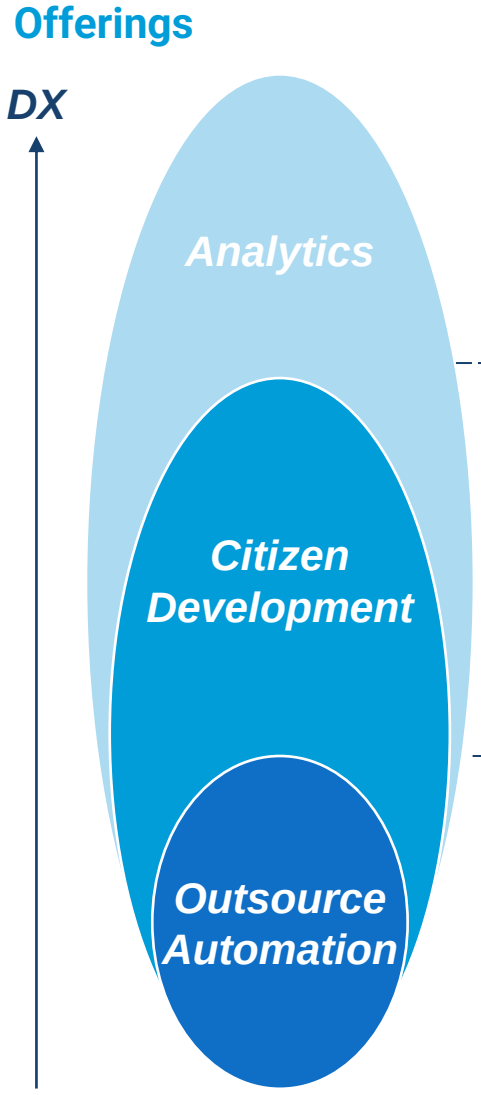
The first step is outsourcing automation, but we got more for you!



Automation x Analytics

- ✓ RPA digitalizes not only operation but also data.
- ✓ Data captured by RPA connected to AI enhances ROI further.
- ✓ Robo Co-op allies with AI startups to enable RPA x AI.

Training & supports

- ✓ Citizen development to train employees with RPA can expands DX.
- ✓ Our online group learning methodology can inclusively onboard anyone in your organization.
- ✓ Our members will not only teach RPA but also support day to day automation answering questions by your side.

Outsource development & maintenance

- ✓ Outsourced automation becomes decent work for refugees.
- ✓ Truly global and diverse refugees can accelerate your DX.
- ✓ If you are already implementing RPA, please let us know your current cost of development & maintenance so that we can offer you more scalable and sustainable price.

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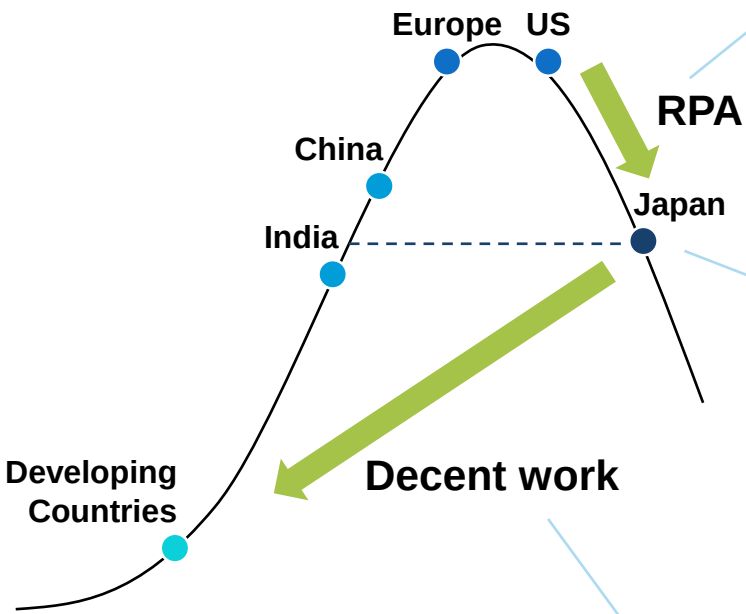
Japan as a global outsource hub is a new normal.

Why Robo Co-op



- ✓ Japan is a declining developed country with no risk of inflation.
  (no need to be worried about switching to a different outsource country)
- ✓ Plus, the weak yen gives you a natural discount!

- ✓ Professionals in Japan secures quality assurance.
  (e.g. ex Deloitte or accenture)

- ✓ Truly diverse talents support global automation including maintenance.
  (no need to be worried about language barrier, time difference or holiday for collaboration)
- ✓ Numerous members can be flexibly assigned for one robot or even over hundreds!

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