

# 10

Year Impact Report

 **WE**  
ROBOTICS  
CELEBRATING **10** YEARS

## The Power of Local

A Decade of Impact, 2015–2025

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01

**Foreword**

Dear reader,

Welcome to our 10 year impact report.

Celebrating 10 years of our organization is a unique moment. Being able to celebrate this milestone by saying, “We have achieved what we set out to do 10 years ago,” is even more unique.

What was a bold idea then has now become not only reality, but also normality. The best way to summarize what achieving our Theory of Change looks like is: we have made the exception the rule. And we have created a blueprint to support the rewriting of more rules.

Ten years ago, the rule in the “Drones for Good” space, and the Tech4Good space, was:

- International organizations, international drone and the technology companies decide, lead and implement.
- Local communities and experts follow.
- In exceptional cases, local drone experts are given the opportunity to support.

Today, thanks to the collective and tireless efforts of hundreds of local experts, local partners, and global supporters, we have collectively made the exception the new rule:

Local drone experts, together with their communities, decide, lead and implement drone applications across the full range of the Sustainable Development Goals. International organizations and experts deciding and leading are still present, but they have become the exception, often asked to justify their presence.

This report backs up our bold statement with evidence. It shows how we got here. It shares the stories behind the impact we have created along the way. And it offers the invaluable insights and learnings we have gathered on a journey full of bends, peaks, and valleys — the journey of the Power of Local.

This report is also a tribute to the “Power of the Collective”, an ode to our mantra: Alone we go fast; together we go far. Rewriting rules requires collective intelligence, radical collaboration, broad inclusion, co-creation between all actors, openness, and trust. It’s fueled by collective storytelling and advocacy — to shift mindsets and change narratives. It asks for collective support to nourish the grit, perseverance, patience, and courage needed to transform traditional and established systems.

I wish you joy and curiosity as you discover what “going far together” has looked like for WeRobotics and the Flying Labs Network so far — and where the journey takes us next.



Sonja Betschart

Co-Founder and Co-Pilot

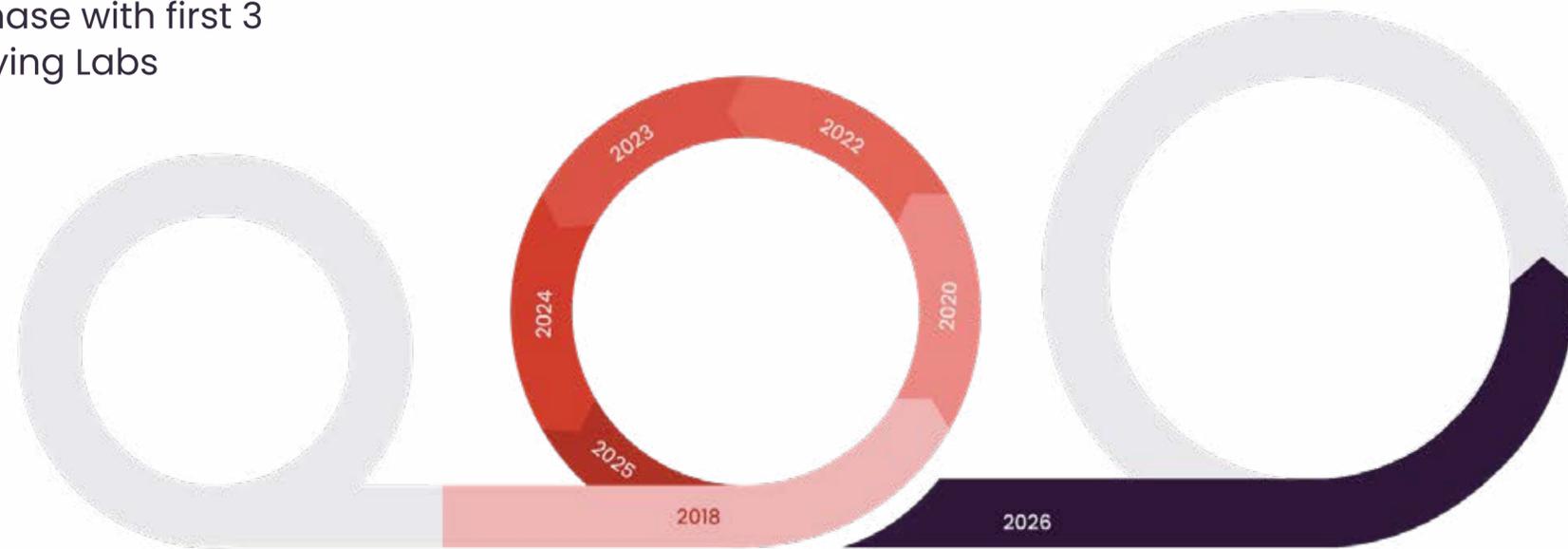
02

**History**

# Timeline

2016 -2017

Proof of Concept  
Phase with first 3  
Flying Labs



- Implementation of social franchise for wider Flying Labs Network
- 30 Flying Labs / Implementation of Network governance model
- 1st Glocalization model adoption / Continued Network growth
- Introduction of storytelling for mindset shift / Co-creation of framework for locally informed drone regulations
- Creation of Flying Labs Network Council / Launch of sector expertise hubs/ Regulation framework replication / 2nd and 3rd Glocalization model adoption
- Testing of solutions and collaboration spaces with Flying labs / 4th Glocalization model adoption
- Achieving our initial Theory of Change / Repositioning with updated vision, mission and TOC

## In the Beginning

In September 2015, four people made a decision based on a shared conviction: if drones and robotics were to serve social good at scale, they could not remain concentrated in the Global North. They had to also be in the hands of local experts in Global South who understood their own contexts intimately. Scaling impact meant scaling local ownership.

The rest, as they say, is history.

But today, let us not just say it. It is good to look back — with a gratitude that sharpens our seeing as we step forward. What we stand on today was once only an idea spoken in hope.

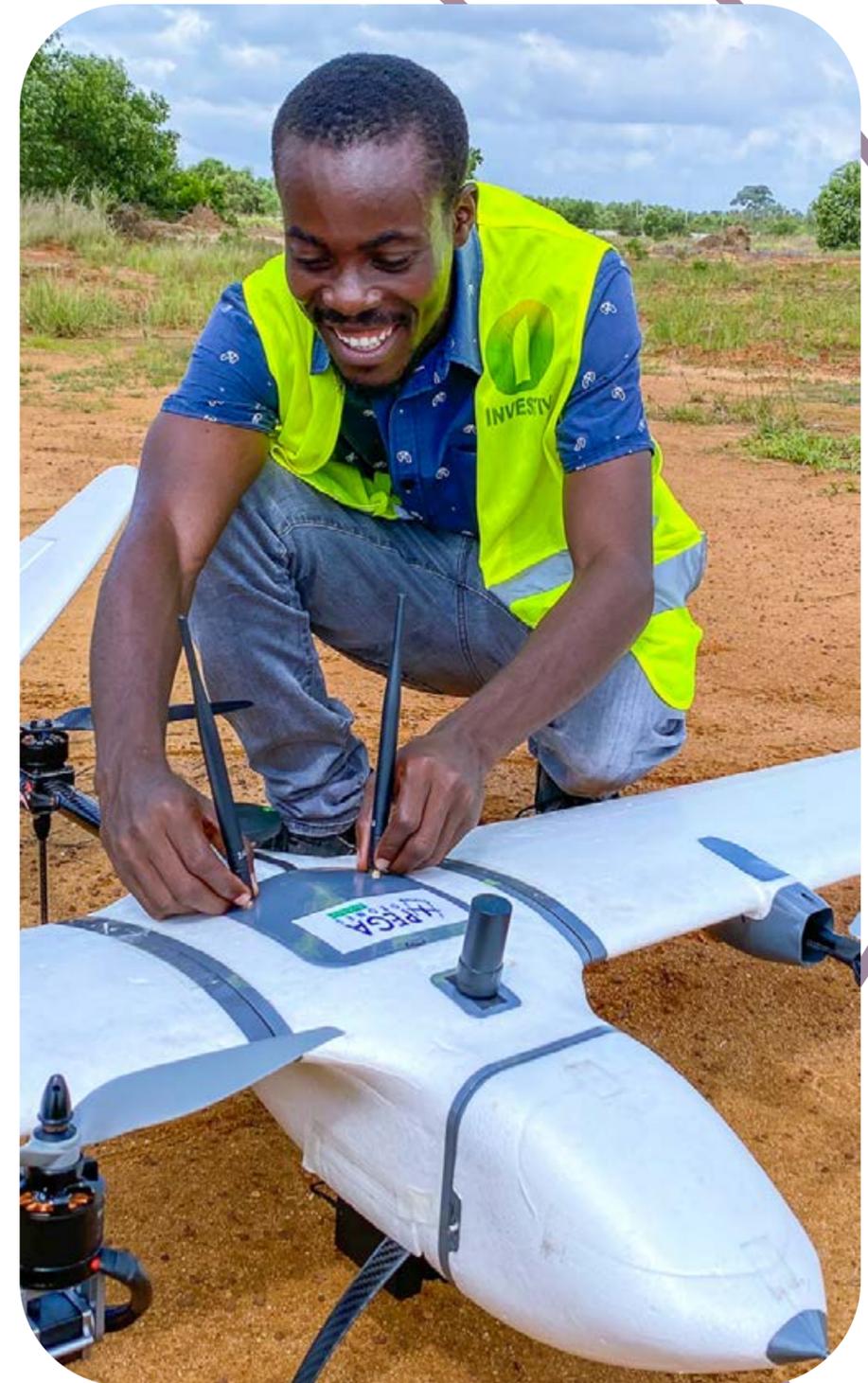
In 2016 — initial paperwork done and website live — a grant from The Rockefeller Foundation made it possible to test an idea that would define the decade: local knowledge hubs for drone applications in Nepal, Tanzania, and Peru. The proof-of-concept phase lasted 18 months. It asked difficult questions. Out of our search for answers emerged what would become the Flying Labs Network.

## Learning to Walk

With additional resources from the Hewlett Foundation, the Autodesk Foundation, IDB's Bid-Lab, and other funders came exciting growth. In 2017 we carried out our first locally led medical cargo drone projects and strengthened drone and data capacity. Our team expanded. New Flying Labs opened in Fiji and Panama, exploring drone applications in the South Pacific and Central America.

More importantly, demand grew organically. Expressions of interest flowed in from 10 additional countries — local experts wanted to know how they could start their own Flying Labs. This was our cue to find a way to scale local expertise, and in March 2018, the Flying Labs Network was born, based on a social franchise model. The same year, 12 Flying Labs joined the Network. One of the early highlights was our first in-person meeting at our first Global Flying Labs retreat in early 2019 in New York.

As the Network grew, so did our partner ecosystem as well as the WeRobotics team, which by then included drone and data technical support, finance, communications, Human Resources, and, crucially, Network coordination and facilitation. Growth brought



new questions: How do you scale without centralizing power? How do you maintain high standards without imposing control?

## The Courage to Realign

In 2020, the world became smaller in a way none of us had chosen, and even as a team already used to working through screens and across time zones, we felt the moment keenly. The wisdom of localization became undeniable: Flying Labs did not need to wait for international deployments; they were already embedded in their communities. We saw the resilience of our model. We saw

also that the time was ripe to reflect on the challenging questions.

What does equity look like when it is not a sentence on a website but a structure you must live inside? If we believed that local experts should lead, were we willing to reorganize ourselves accordingly?

Together with Flying Labs, we co-created a governance model for the Network that would cultivate growth not only in size but also in strength, allowing Flying Labs to become stronger both independently and interdependently. We set up a knowledge-

sharing platform to enable expertise to flow quicker among Flying Labs. We launched a first version of a council to help us learn with Flying Labs how to improve governance and joint decision making.

We turned the mirror on ourselves. We reviewed our Board of Directors to ensure it reflected the geographies of our work. We made the deliberate decision to hire new team members exclusively from the continents where Flying Labs operate. We adopted a Holacracy-inspired organizational model – imperfect perhaps but intentional and evolving – to create more openness, shared authority, and closer collaboration within our own organization. We wanted our internal structure to resemble the world we were advocating for: less hierarchical, more participatory, more honest about power.

And then we made one of the most difficult decisions in our organizational history.

Our engineering department in Switzerland had grown to represent nearly half of our team. It was strong, capable, and deeply committed. Still, if we were serious about localization, we could not continue to centralize technical power in Europe. It costs something to shift power. It asks for courage,



for coherence between what you say and what you do. Closing this department, and essentially reducing our team by 50%, was walking the talk, being true to the power of local.

By 2022, six years into the Flying Labs experiment and two years into this deeper organizational transition, we were ready to pause and take stock. We gathered our tensions, missteps, and breakthroughs and published our first localization report, offering our learnings to other international organizations grappling with similar questions. We followed up with a more detailed report in 2023.

But reflection is best done together. With the Network now comprising more than 30 Flying Labs, we convened in Nairobi, Kenya, for our second global retreat. It was the first time many of us had been in the same physical space. We looked back at what we had built. What had worked? What needed revision? What kind of Network did we want to become? There was honesty. There was debate. There was laughter. But we all understood that this journey was still unfolding and that we were going far together.

## Further Together

Based on the collective wisdom shared by Flying Labs on what direction to take, 2023 was a year for new beginnings. We refined and streamlined our internal processes, not just for greater efficiency but also so that we could show up more fully for Flying Labs. We grew our team intentionally, strengthening coordination, M&E, and communication. And we asked ourselves another question: how can we make collaboration — among Flying Labs, between WeRobotics and the Network, and with our partners become even more meaningful?

Our focus lay in creating more spaces for the connections that allow people to think and build together. Regional retreats made space for more geographically contextual conversations. Sector expertise hubs facilitated closer collaboration across knowledge clusters and geographies. We started co-organizing conferences with Flying Labs, joined forces for larger projects between Flying Labs, partners of our global partner ecosystem and us, to learn how together, we can create stronger solutions, including for regulations and policies, that can scale across all geographies of the Flying Labs Network.

And building on what we had learned from the first Council, we launched the Flying Labs Network Council to formalize shared strategic stewardship of the Network.

In 2023, we also offered our Glocalization model for the first time for “adoption” to other organizations. To date, 4 organizations have adopted our approach to (g)localization, including for the education and health sectors.

Over the past few years, the milestones we have celebrated have not been ours alone. They have been shared with Flying Labs and with the wide ecosystem of funders and partners who believe, as we do, in the Power of Local. And a pattern has become unmistakable. As our capacity to facilitate collaboration deepened, so did the impact of our work. Much more than the tech, what mattered was the relationships.

As we look back on what we have achieved and the impact we have created, we know this much: it has been possible only because we chose, from the very beginning, to go further together.

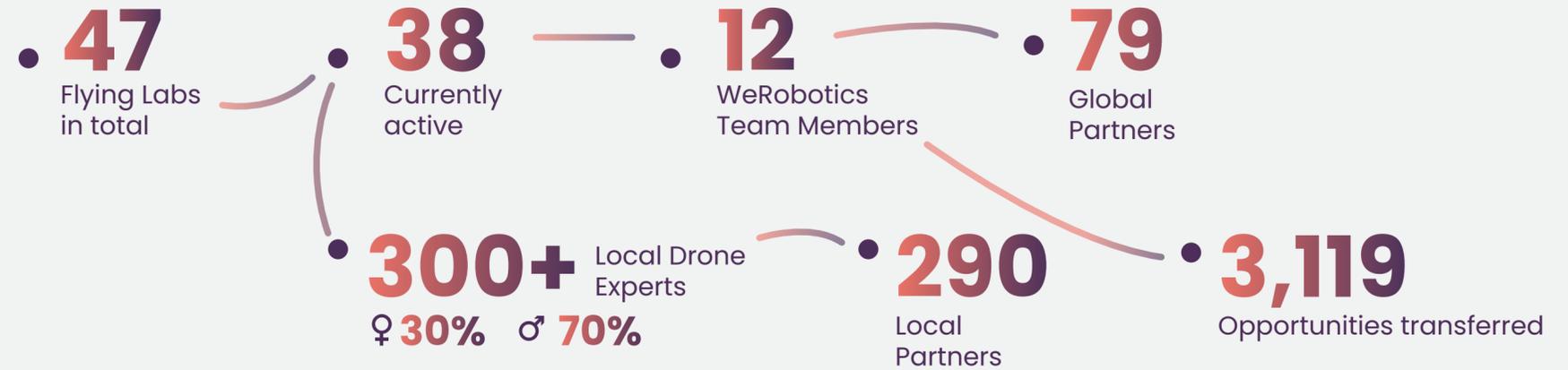


**03**

**Achieving our  
Initial 10-Year  
Theory of Change**

# 10 Years of Impact at a Glance

## Network & Ecosystem



## Activities & Capacity



## Knowledge Shared

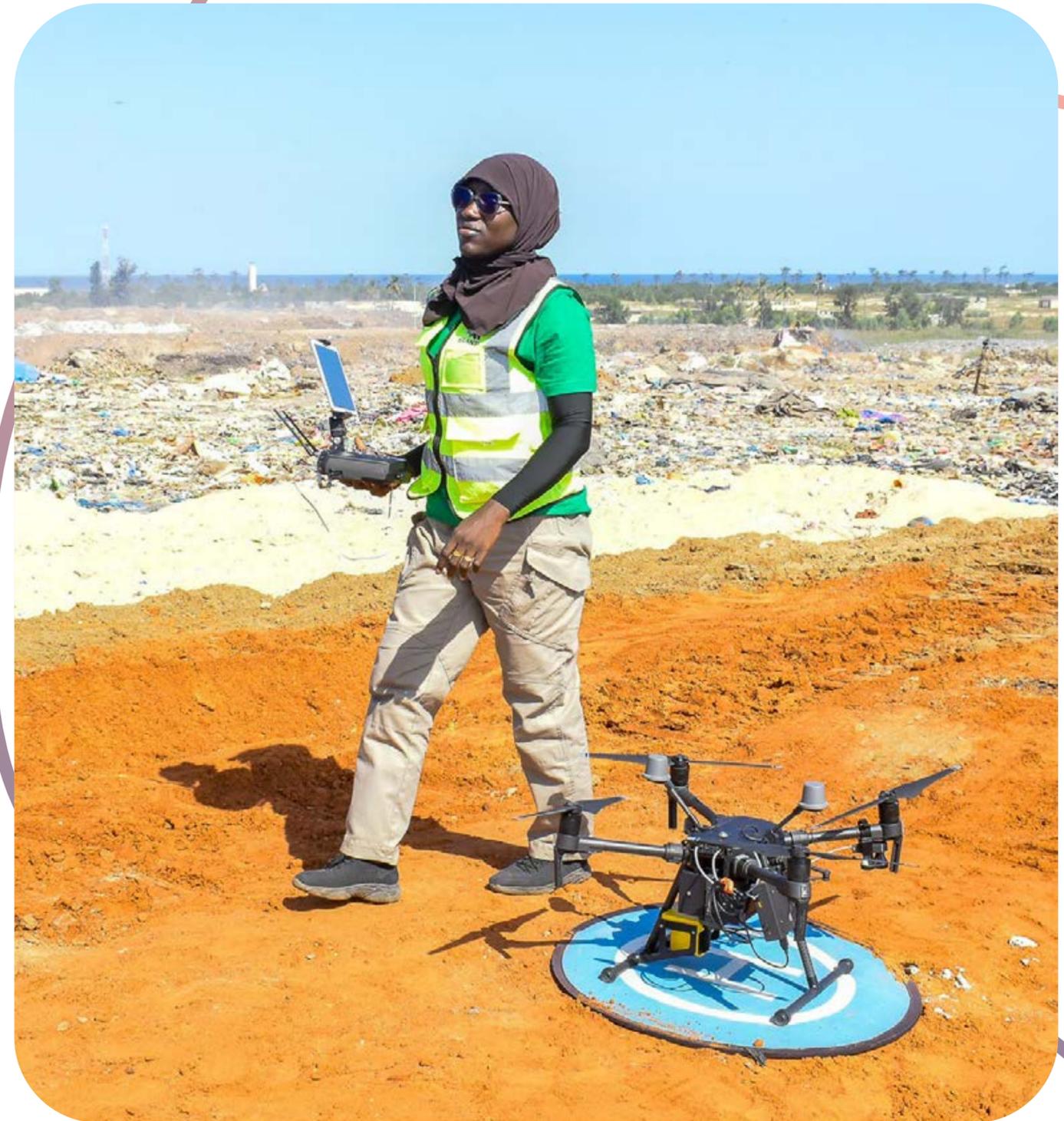


# Overall Impact

In 2015, when we began this work, drones were emerging as a new technology. Funders and technologists saw them as exciting but unproven, especially in the contexts where many social and environmental problems were most acute. Like with any emerging technology, there was a lot of hype. What most people assumed was that technology had to be brought to communities from the outside, driven by external experts and then applied locally. We set out to test a different idea: that local experts, when trusted and supported, could not only adopt technology but lead it, adapt it, and sustain it in service of their own priorities.

The decade has been a living proof-of-concept for that hypothesis. With drones, data, and AI as our starting point, technologies that allow communities to generate their own evidence and inform decisions, we deliberately focused on building practice rather than rhetoric. We wanted facts, not slogans; actions, not speeches. The goal was to show that the “Power of Local” can drive the responsible and sustainable use of drone technology, and that from that work, a replicable model for localization could emerge to inspire others, in this and other technology domains.

This work did not remain abstract or theoretical. Over time, it translated into real shifts in who leads, how technology is applied, and how ecosystems organize around emerging tools and data. What follows are the core areas in which that change is most visible.



## **Proving that local leadership works.**

The work began with a handful of curiosity-driven pilots and has grown into a +40 Flying Labs Network spanning Africa, Asia-Pacific, Latin America, and the Caribbean. Local practitioners are not just implementing projects. They are shaping priorities, convening multi-actor partnerships, and defining how these technologies are used within regulatory and institutional systems. That shift from externally delivered projects to locally driven practice is one of the deepest changes of the last decade.

## **From disparate pilots to shared knowledge.**

Hundreds of locally led projects have been implemented across sectors, from disaster resilience to agriculture, from climate action to health. These are not one-off experiments. Their existence and spread show that technology adoption is durable when owned locally. We've tested methods, documented lessons, and shared use cases that others can adapt, allowing learning to travel across contexts rather than remaining siloed in isolated activities.

## **Capacity that sticks.**

Over this period, the Network has supported more than 290 professional trainings, engaged over 51,000 practitioners across workshops and ecosystem spaces, and connected nearly 15,000 young people with STEM opportunities. These numbers are not outputs alone. They signal that technical capacity is spreading across ecosystems and generations, not concentrated in a few specialists or limited to short-lived interventions.

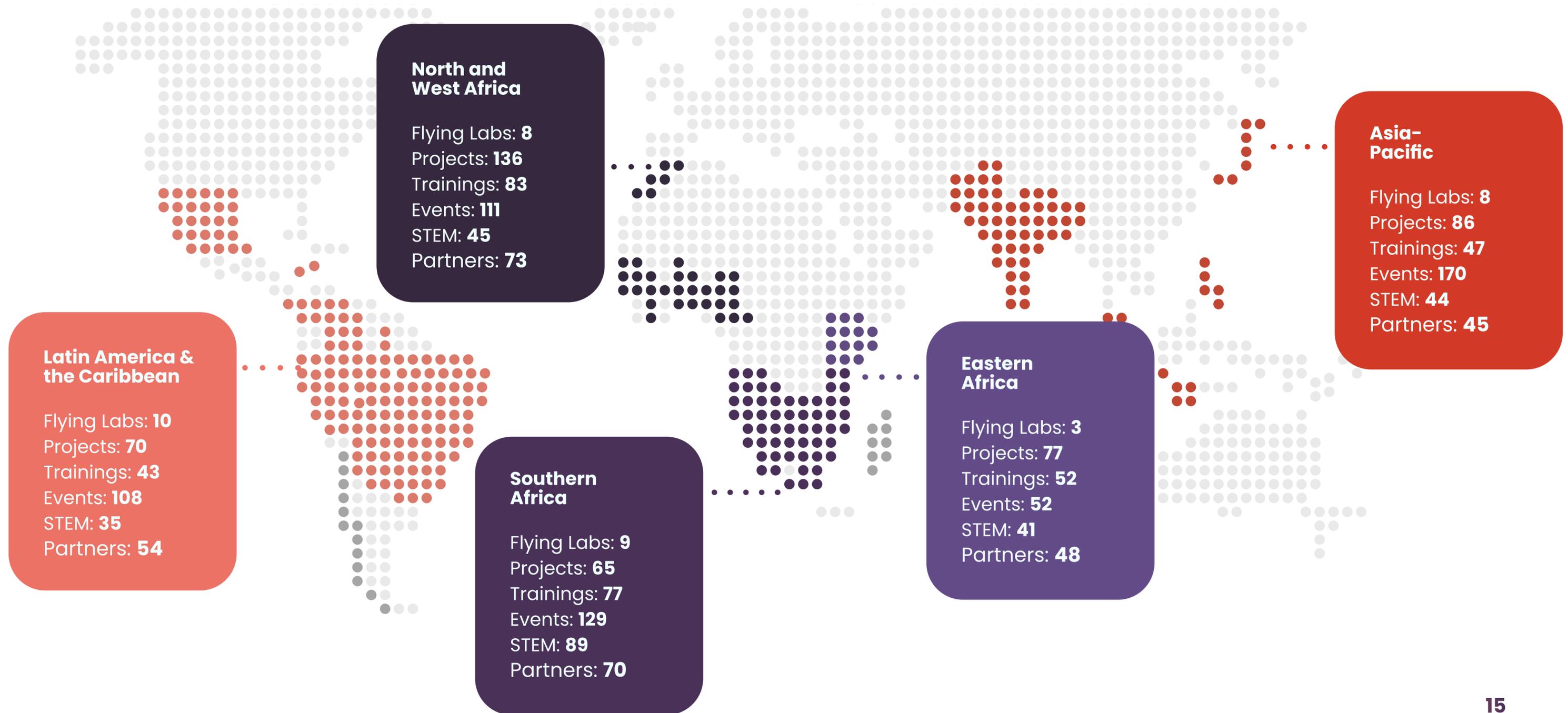
## **Narrative and systems influence:**

Local experts are increasingly present in policy, regulatory, and global dialogues. Frameworks for responsible drone regulation, shared governance processes, and collaborative platforms like the Drones, AI and GIS for DRM Conference series show that local practice can influence the systems that shape how technology is governed. These shifts reflect an expanded view of impact – from solving isolated problems to contributing to how systems operate and evolve.

The evidence of the last decade shows that the original hypothesis, that local actors can lead technology adoption in credible, responsible, and sustainable ways, was not just an aspiration. It was attainable in practice. More importantly, the lessons and models that emerged are not unique to drones and data; they point to how local leadership can be central to technology adoption more broadly. Our model being used by a first cohort of 4 other non-profit organizations as their “organizational operating and localization model”, is strong proof of the potential that this approach can scale.

This report documents that journey: the proof, the learning, and the limits. It does not conclude that the work is finished. Rather, it shows that the hypothesis has been tested, confirmed in many contexts – geographically and across sectors— and evolved into a foundation for what comes next: deeper institutionalization, stronger enabling systems, and broader replication across technologies and sectors.

# Flying Labs Network at a Glance



## Longterm Outcome 1 – Shifting Power and Ownership to Local Experts

Local experts, together with national and global actors of different contexts and sectors, are conceiving and implementing more sustainable localization and #ShiftThePower approaches, based on and inspired by our lessons learned and network model.

### What We Set Out to Test

When this work began a decade ago, the common pattern in technology for social good was familiar: drone applications were designed and decided outside the contexts where they would be applied. Implementation was mainly done by international actors and drone pilots temporarily sent to countries for flights, and data was extracted. Data products were sometimes shared back; raw data was not shared. Local drone actors were not responsible for implementation, setting priorities, choosing methods, or shaping the strategic agenda. It was widely assumed that expertise flowed from the “global” to the “local,” and that the latter was primarily a recipient of innovation.

We set out with a different hypothesis: if local drone actors were trusted with authority, resourced appropriately, and connected with peers across contexts, they could not only adopt emerging technologies but lead and sustain them, shaping priorities and outcomes from within their own systems.

This was a hypothesis grounded in experience and conviction, but it was also testable. Over the ensuing decade, we saw this hypothesis tested and refined in practice.

### Evolving from Pilots to Locally Led Hubs

The Flying Labs Network began in 2016 with three early pilots in Nepal, Tanzania, and Peru. These were exploratory efforts, each navigating uncharted terrain in its own context. Over time, as local teams demonstrated experience and capacity, demand within countries grew organically, and the Network expanded across Africa, Asia-Pacific, Latin

America, and the Caribbean, reaching 41 active Flying Labs at its peak in 2023.

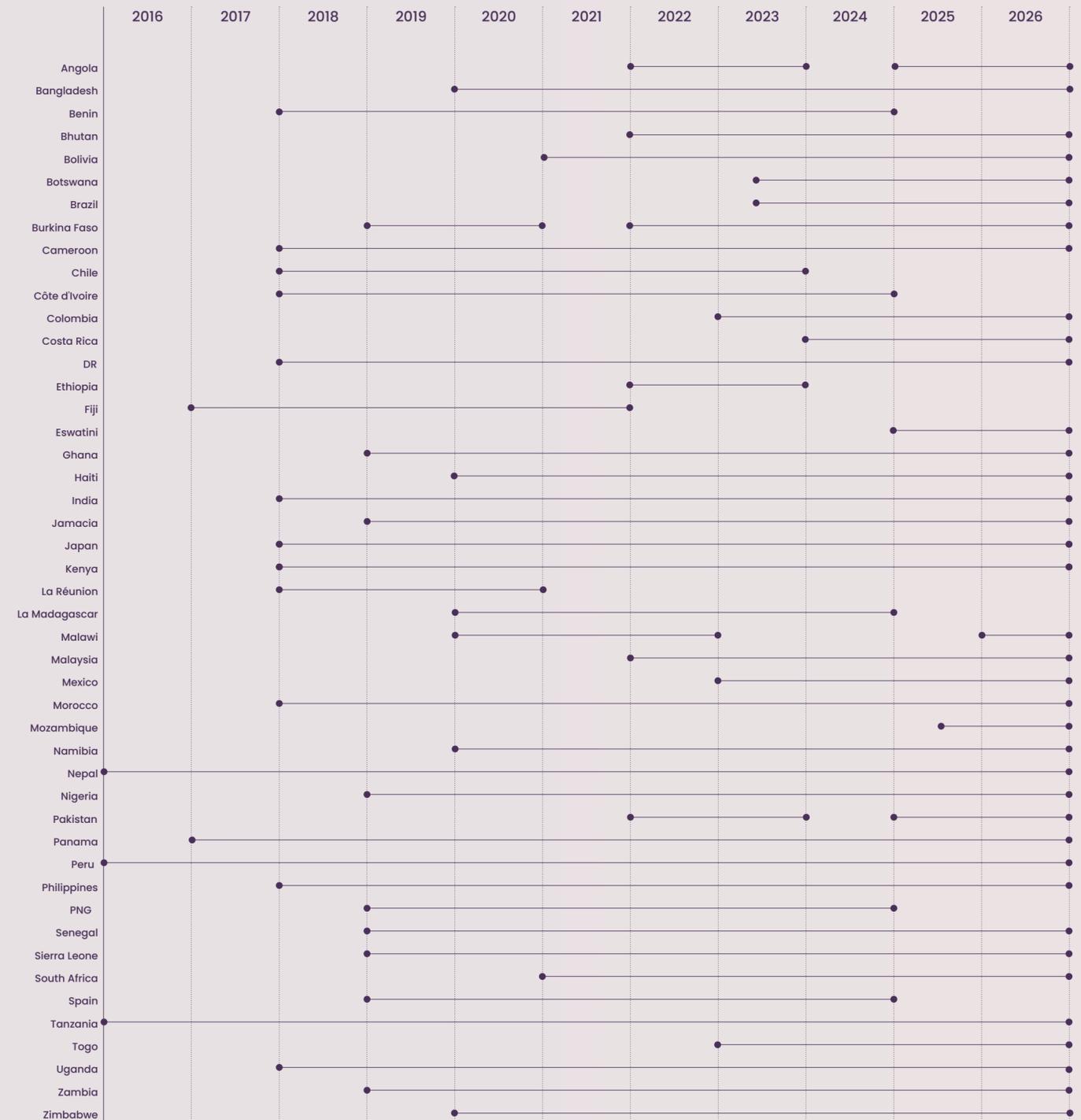
This expansion has never been about hitting numerical targets. The Network itself is designed to be dynamic and demand-driven, meaning Flying Labs join when local demand, alignment, and readiness are present, and they can also exit when sustainability or strategic alignment is no longer present. Over the decade, 47 different country Flying Labs have been part of the Network at some point, reflecting both the reach of the model and its adaptive nature; supporting expansion where conditions are right and stewarding quality where long-term strength matters most. Today, WeRobotics and the Flying Labs Network include around 300 local experts working with 70 global and 290 local partners and supporters. Together, they have engaged nearly 8,000 stakeholders across government, academia, NGOs, and the private sector. These figures are not just numbers; they reflect a shift in who holds expertise and influence in technology ecosystems.

### Embedded in Local Ecosystems

A key decision early on was to embed Flying Labs within existing institutions (private companies, universities, research institutions...) rather than create standalone project silos. This social franchise approach gave local teams legitimacy and resilience from the start. It required a more purposeful onboarding process and deeper engagement in each context, but it meant that Flying Labs were not temporary experiments; they were part of established ecosystems.

As Flying Labs matured, collaboration with local authorities and ecosystem partners became normal rather than exceptional. Multi-actor workshops, policy dialogues, and co-creation sessions are now

Time spent in the Network by each Flying Lab



## Partners and Supporters of Flying Labs Network by Category



routine elements of Flying Labs' work, signalling that local teams are not just technical operators, but active partners in problem definition, solution design, and institutional integration.

### Sharing Governance, Not Just Tools

In the early years, coordination among Flying Labs was informal and facilitated primarily by WeRobotics. As the network grew, it became clear that centralized coordination alone could not sustain the diversity and agency emerging across contexts. The answer was to create shared governance mechanisms, the Flying Labs governance framework and the Flying Labs Network Council, where local actors co-design participation criteria, shape collective priorities, and make strategic decisions together.

Alongside this governance shift, the Network also needed a structured way to understand its own performance. The Flying Labs Global Model was created to serve that purpose. It is a network-wide benchmarking tool co-designed with Flying Labs to assess core dimensions of quality and leadership across contexts. Each year, Flying Labs review their work against shared criteria such as professionalism, expertise, impact, ethics, collaboration, partnerships, sharing, and sustainability in a self-evaluation. The aim is not oversight from the center, but collective sharing of strengths and gaps. By using the same framework across countries, the network can compare progress over time, identify areas for peer support, and ensure that growth does not dilute standards.



The results show why this matters. Between 2020–21 and 2025, network averages increased across nearly every dimension. Expertise rose from 54% to 87%. Ethics strengthened from 44% to 84%. Impact grew from 40% to 71%. Sharing and collaboration improved steadily, while

sustainability and partnerships became more consistent. These improvements point to a maturing community of practice, and Flying Labs Global provides a structured way to capture that evolution. It allows the network to see patterns across countries, acknowledge progress, and address gaps without defaulting to top-down control.

### Evolution of the Flying Labs Network



Together, the governance framework, the Network Council, and the Flying Labs Global self-evaluation system reshaped how the network grows. They created shared expectations, clearer roles, and a common reference point for quality, while keeping decision-making distributed across contexts. Over time, renewal standards were strengthened, even when that meant fewer active Flying Labs. This was not a contraction, but a sign of consolidation. Growth became more intentional. Participation became more accountable. By combining representative governance with transparent self-assessment, the network strengthened its cohesion and credibility, laying a more durable foundation for long-term expansion.

### Lessons That Emerged

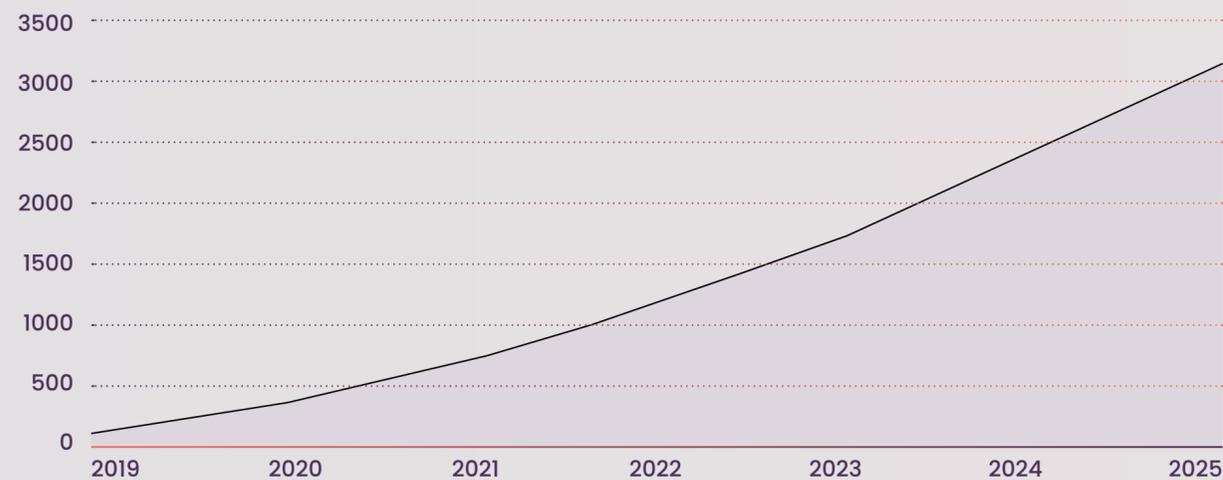
Over ten years, we learned that shifting power is not about replacing one set of experts with another. It is about creating conditions where local expertise is recognized, sustained, and institutionally valued. Some insights were expected; others were surprises.

We knew context mattered, but we underestimated just how deeply political and institutional realities shape how far local leadership can flourish. In some places, regulatory openness accelerated adoption; in others, institutions resisted change. We realized that organizational legitimacy isn't only earned through technical success. It is earned through long-term relationships and consistent engagement.

We also learned that organic growth (slow, uneven, adaptive) produces deeper roots than aggressive scaling ever could. When Flying Labs were invited in because they had demonstrated readiness and alignment, they were far more likely to stick and influence systems over time.

Finally, as the network matured, the role of WeRobotics shifted. In the early days, we saw ourselves as a contributor: training Flying Labs, introducing programs, creating guiding resources such as SOPs, use cases, etc. Over time, our role evolved. Not away from supporting Flying Labs, but toward stewarding a shared system of practice. This included actively opening doors. Since 2019, WeRobotics has shared more than 3,100 opportunities with Flying Labs, helping local teams access work, partnerships, and visibility. At the same time, we learned when to step in to unblock a challenge and when to step back so local leadership could flourish without being overshadowed. That balance was not obvious at the beginning. It is something we only understood by doing and reflecting.

### Opportunities shared with the Flying Labs Network (cumulative)



## Why This Outcome Is Largely Achieved

Looking back, the central question of the early years, “Can local experts lead?”, has been answered unequivocally. They can, and they do.

What this decade has shown is that leadership matters not only for implementation, but for shaping how problems are defined, how decisions are made, and how ecosystems evolve. This outcome isn’t about individual success stories. It is about a structural shift in how power is distributed in technology for social good.

Of course, not everything is solved. Financial sustainability varies across contexts, policy environments are still uneven, and debates about localization continue in broader sectors. But those are questions about systems, not about capability. The shift toward distributed leadership is real. It is durable. And because it is rooted in context, it is meaningful.

This outcome is not a “completed project,” but a structural shift in how technology for social good is practiced, governed, and sustained. The next decade will build on this foundation by strengthening the systems that allow local leadership to endure and expand.

## Longterm Outcome 2 – Embedding Drones, Data, and AI into Sustainable Local Practice

A dynamic and sustainable network of diverse local experts are designing, implementing and leading drones, data and AI tech solutions.

### Testing Whether Technology Could Take Root

A decade ago, emerging technologies like drones, geospatial data, and artificial intelligence to speed up data analysis were often treated as interesting experiments. Funders supported pilots. Teams proved concepts. Headlines were written. But once the project cycle ended, the tools and practices often disappeared with it. It was common to see drones used for a short burst of activity, and then fade back into the background, collecting dust in a corner.

We set out to test a different idea. We believed that when local experts lead technology adoption, it stops being a project and becomes part of how people solve problems locally. That means technology needs to move beyond being a demonstration to being something that local actors continuously use, adapt, and evolve.

The evidence over the last decade shows that this shift has happened in many contexts.

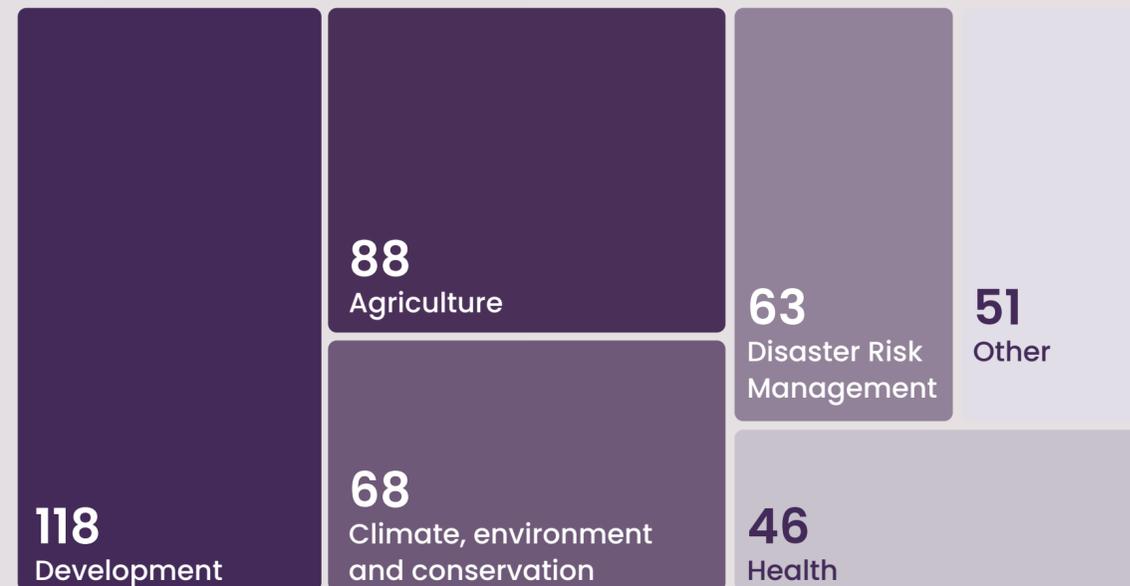
### From Novelty to Everyday Practice

Across the Flying Labs Network, local teams have implemented 434 locally decided/led projects across sectors as varied as agriculture, climate action, disaster resilience, health, conservation, urban planning, heritage conservation, renewable energies, and broader development priorities. This spread shows that drones and drone data are no longer a curiosity limited to one area. It has become meaningful in many arenas where people care about results.

Over this decade, locally led teams have moved drones, data, and AI for data analysis from novelty into sustained practice that drives real-world decisions. In 2025, Jamaica Flying Labs led a [locally driven](#)

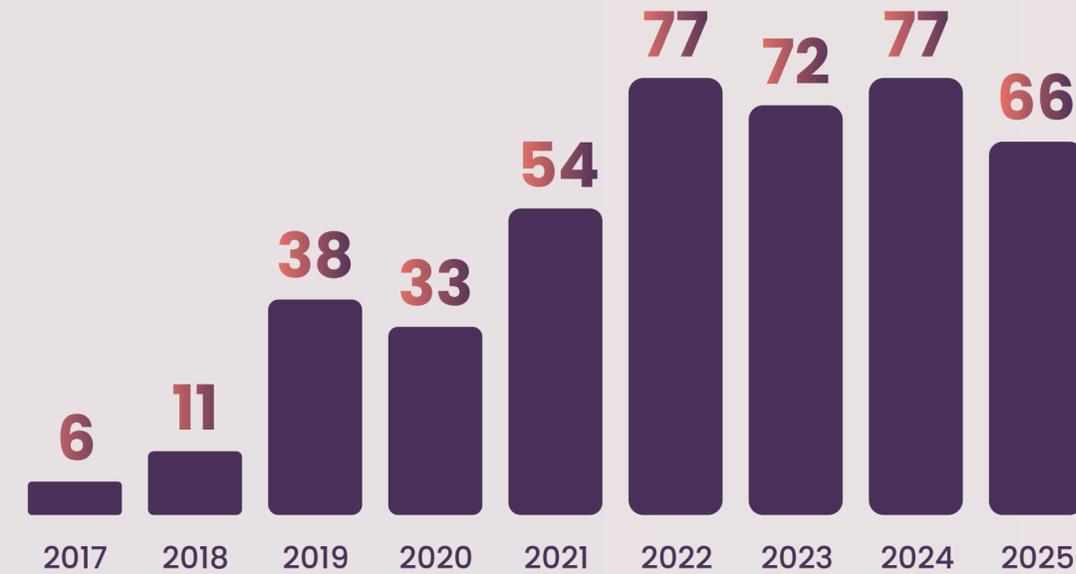
[aerial mapping and data coordination effort after Hurricane Melissa](#), working with government partners to produce high-resolution imagery that informed recovery planning and ongoing risk reduction. In climate and environmental stewardship, Flying Labs in Panama, Tanzania, and the Pacific collaborated on [mangrove conservation using drones](#) for monitoring and ecosystem data collection, equipping communities with insights to protect coastal forests that buffer against storms and store carbon. And in urban innovation, the [DAKFLOW project](#) in Dakar is currently bringing together local stakeholders, city planners, and researchers in a co-creation process to explore how drone imagery, geospatial data, and artificial intelligence can help policymakers understand and manage mobility challenges in the city's rapidly changing landscape.

### Number of projects by sector



\* Note: Across all sectors, projects addressed 16 of the 17 Sustainable Development Goals (SDGs)

### Number of projects by year



These examples, alongside a short selection representing the 400+ locally decided projects led by Flying Labs you can explore in the following section, show that when technology is shaped around local priorities and expertise, it becomes a tool for lasting, context-relevant solutions rather than short-lived pilots.

# Examples of Flying Labs Initiatives

- **Agriculture:** Agriculture is a key sector for the majority of Flying Labs countries, and drones can provide value in various ways to support agriculture. Burkina Faso Flying Labs makes a case for how drones can be adopted for irrigation schemes and land planning. Adopting drone tech in the management of irrigated schemes. Nigeria Flying Labs uses drones and AI to map soil, monitor crop health, and provide farm insights, helping farmers take data-informed actions. Uganda Flying Labs' aerial surveys have supported cassava farming insights and fish-farm water quality monitoring. Precision Agriculture for Fruit Ripeness Detection was used in Malaysia. Drones were used in Colombia for Regenerative Agriculture. And Ghana mapped palm plantations using drones and GIS technology.
- **Climate Action:** With more than 80 projects during this decade, Climate action is one of the main SDGs tackled by the Flying Labs Network. This includes both Conservation of Mangroves in Panama, Tanzania, or the Pacific and tropical forests in Togo, Mexico, and Brazil. The Network has also worked in reversing environmental degradation in Nigeria, Namibia, and Kenya, and protecting biodiversity in India, Costa Rica, Zimbabwe, and Senegal.
- **Disaster Risk Management:** Flying Labs play an active role in locally-led disaster risk and response work, with numerous DRM initiatives, from developing the Drones, Data, and AI Solutions Platform for Disaster and Climate Resilience, an open-source initiative designed to equip local stakeholders with the tools,

knowledge, and connections for disaster mitigation efforts, to publishing a guide to locally-led applications of Drones, Data, and AI for Flood Management in Africa, or designing a Multi-Hazard Risk Assessment training programs in Bhutan. The Network has also responded to several climate-related natural disasters, like Jamaica Flying Labs' response to Hurricane Melissa, the development of a Wildfire Assessment Tool in Brazil, or a wildfire prevention project in Bolivia, damage assessments after earthquakes conducted in Japan and the Philippines, landslide mitigation projects in Nepal and Cameroon, or several mapping initiatives after floods in Botswana, South Africa, Nigeria, Kenya.

- **Renewable energy and infrastructure:** Burkina Faso and Namibia Flying Labs collaborated on solar panel inspection, bridging technology with sustainable infrastructure maintenance, while Ghana performed an aerial survey to identify the optimal terrain for the construction of the nuclear power plant.
- **Urban Development:** Flying Labs address various urban development issues. For example, several waste management initiatives were developed in Bhutan, Senegal, and Zambia. Urban mobility has also been tackled, for example in Kenya and Senegal where drone imagery, geospatial data, and artificial intelligence is equipping local stakeholders and policymakers to manage how people and vehicles move through the city. Bhutan has developed an initiative to build a drone-based traffic management system.
- **Cargo/delivery drones:** Across multiple regions, Flying Labs have explored drone delivery pilots to improve logistics and access to critical supplies in remote areas, many related to delivering health and medical supplies, like the Philippines fighting tuberculosis, or the Dominican Republic and Peru delivering medicines to remote

communities. **Zambia** is developing affordable, high-performance fixed-wing cargo drones tailored to rural and Global South contexts.

- **STEM:** Flying Labs run a range of locally led STEM and youth engagement programs that introduce young people to emerging technology and build technical skills. In 2021, **Fondation Botnar** supported youth training, mentorship, and youth-led robotics projects across the Flying Labs Network to empower local young people. In addition, **Bangladesh** Flying Labs brought drone workshops directly to underserved girls' schools to expand access to drone tech and hands-on learning, **Haiti** Flying Labs trains youth in drone piloting and technical skills as a positive alternative to gang influence, **Sierra Leone** Flying Labs visited secondary schools in Freetown to demonstrate drones and career pathways in STEM, **Pakistan** Flying Labs sparked excitement and curiosity with a nighttime FPV drone racing league, **Mozambique** Flying Labs showcased student innovation at the International Rover Competition.
- **Development research and others:** Some Flying Labs are rooted in or closely linked with universities and research centres, advancing academic knowledge and applied research: **Brazil** Flying Labs hosts geoprocessing and applied AI courses that build skills in spatial data analysis; **Uganda** Flying Labs and Soroti University collaborate on drone and robotics training, research, and internships; **Dominican Republic** Flying Labs and the Drone Innovation Centre partner with Pedro Henríquez Ureña National University to expand specialized drone pilot training; **Panama** Flying Labs offers hands-on drone workshops that help scientists integrate UAV workflows into research; and **Morocco** Flying Labs has applied drone surveys to map challenging terrain for planning and development projects.



## Building Capacity That Sticks

Sustainable adoption does not happen because a technology works once. It happens when knowledge, confidence, and decision-making stay in place long after the project ends. One of the clearest signs of this over the past decade has been the growth of a broad, diverse community of local practitioners who now see drones, data, and AI for data analysis as part of their everyday work, not as external experiments.

Over this period, local capacity has grown deliberately and at scale. More than 290 professional trainings equipped over 4,500 professionals with practical tools and skills to apply emerging technologies within their own sectors and institutions. Beyond formal training, over 51,000 people participated in workshops, conferences, and ecosystem spaces that connected technical skills with real decision-making. Alongside this professional base, nearly 15,000 young people engaged in 260 STEM programs, helping build a pipeline of future professionals who do not see emerging technologies as distant interventions but as accessible tools for solving local challenges.

Together, these figures and stories reflect more than activity levels. They signal that expertise is no longer concentrated in a few individuals. It is distributed across institutions, sectors, and generations. This diffusion of knowledge (from formal professionals to emerging youth talent) is what allows technology adoption to endure well beyond any single project cycle.

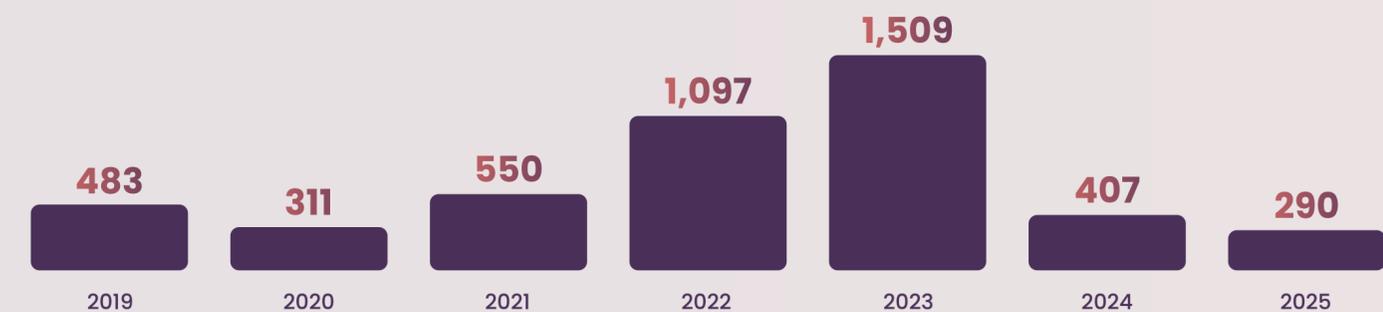
### Participants in advocacy conferences, workshops, seminars and other events organised



### Youth engaged in STEM/ Youth programs



### People who received professional training



\* Note: 2025 figures may be incomplete as data collection is still in progress

## Growing Together, Learning Together

As technology moved into everyday practice, our understanding of what it takes to embed it responsibly also evolved. We learned early on that technical capability alone is not enough. Sustainable adoption depends on financing, on institutional alignment, and on meaningful engagement with policy and regulatory environments. In many places, regulation shaped how fast or how deeply technology could be integrated into routine workflows. In others, institutions needed time and dialogue before fully embracing new ways of working.

These realities shaped how we supported local teams. Over time, we placed greater emphasis on regulatory engagement, helping local actors to take the stage in policy spaces. We invested in documentation and storytelling, so that peers and institutions could see how technology was used in practice, rather than just reading results in a report. We shifted focus from short pilots to methodologies that can be adapted and repeated, helping technology use thrive even as tools evolve.

We also learned that sustainable adoption does not come from one project alone. It emerges when technology, drones in our case, becomes part of the conversation across sectors and when it is linked to evidence-based decisionmaking, planning, and resource allocation in enduring ways.

## Why This Outcome Is Largely Achieved

Looking across the decade, the original hypothesis, that local actors could embed emerging drones into sustained practice, has been borne out in many places. Today, drone use in many contexts is locally led rather than externally imposed. Capacity is found across ecosystems, not concentrated in a limited technical elite. Local practice is documented and shared, not hidden in isolated projects. And the practical applications of drones, data, and AI for data analysis are generating real social value in areas that matter to communities.

The remaining challenges are not about technology itself. They are about how widely and deeply drones, data and AI for data analysis become part of institutional routines, budgetary priorities, and long-term planning. Embedding these technologies sustainably means shaping systems and policies that can use, update, and sustain these practices over time.

What this decade has shown is that sustainable, locally led adoption is possible. The next step is to deepen that integration so that technology becomes part of how systems work, not just what projects produce.

## Longterm Outcome 3 – Legitimacy, Narrative Change, and Systems Influence

Local expertise and locally led technology initiatives are recognized and respected among national and international decisionmakers and actors.

### From Proving Credibility to Shaping Conversations

Influence does not begin with recognition. It begins when practice is strong enough to stand on its own. Ten years ago, locally led drone innovation often struggled for visibility in global and policy conversations. Expertise from the Global South was frequently underrepresented in regulatory debates and funding narratives. Localization was discussed as an aspiration, but rarely structured as an operational practice. Over the past decade, that landscape has shifted.

Today, local experts are not invited into conversations as implementers or beneficiaries. They organize, lead and participate as peers in discussions about regulation, governance, and systems change. This evolution reflects not just improved visibility, but earned credibility built through sustained local practice.

### Collaboration Spaces as a Pathway to Influence

Across the decade, collaboration spaces such as conferences and other high-level convenings organized or co-led by Flying Labs and WeRobotics played a pivotal role in moving local practice into arenas where systems, policy, and institutional influence take shape. Rather than showcasing completed projects, many conferences were structured as working spaces where regulators, practitioners, researchers, and decision makers collaborated on real challenges. One strong example continues to be the [Southern African Drones, AI, and GIS for Disaster Risk Management Conference](#) – in its 5th edition in 2026 – where Flying Labs, local governments, technical partners, and regional stakeholders come together yearly to explore how drones, data and AI can strengthen disaster preparedness and resilience,

share operational tools, and build cross-sector trust and alignment at the regional scale.

This emphasis on co-creation and shared learning also fed into an initiative that grew directly out of collaborative practice and stakeholder feedback. In 2024, WeRobotics and Flying Labs developed a prototype of the [Drones, Data & AI Solutions Platform for Disaster and Climate Resilience](#), an open-source space designed to equip local stakeholders with tools, knowledge, and workflows that support data-informed mitigation and preparedness decision-making, grounded in locally relevant geospatial data and insights. After 2 iterations, the platform will be launched in mid 2026.

## From Dialogue to Regulatory Methodology

As local practice matured across the Network, a pattern stood out: drones were only as useful as the rules and regulations that enabled or constrained them. In the early years, Flying Labs teams regularly encountered regulatory uncertainty as they worked to operate legally and safely. This was never an expected focus when our work began, but it quickly became impossible to ignore. Motivated by Flying Labs, rather than sidestepping regulation or treating it as an external hurdle, we chose to engage with it directly, letting everyday practice guide sustained dialogue with national authorities.

This shift took shape in 2023 through a partnership between Deloitte D2i, Namibia Flying Labs, and WeRobotics to co-create a practical approach for proactive engagement with Civil Aviation Authorities (CAAs). That collaboration produced two outcomes: a set of tailored insights for Namibia's regulator, and a repeatable [Drone Regulations Engagement Framework](#) that other Flying Labs and stakeholders could

adopt. The framework helps local ecosystems map their regulatory landscapes, surface priority challenges, gather locally relevant data for regulations, and work constructively with authorities toward balanced solutions that reflect both safety and access.

With the experience of Namibia's proof of concept, this approach spread through the Network. To support shared learning and collaboration with regulators, the Network formalized a CAA Engagement Sector Expertise Hub, bringing together 11 Flying Labs as a space for exchange and strategy. In 2024, Kenya Flying Labs used the framework to host a series of co-creation workshops that gathered drone users, government agencies, industry groups, and the Kenya Civil Aviation Authority to jointly define regulatory priorities and recommendations. Similar engagements began in Togo and Sierra Leone, where local teams and ecosystem partners applied the same collaborative approach.

What this evolution shows is that drone regulations and policies engagement has moved from being an operational challenge to a [shared capability across the Network](#). Instead of working around rules and asking for exceptions – a preference of many international actors – Flying Labs help inform regulations, policies and technical guidance material for national authorities with ecosystem partners. This work reflects a deeper reality: credible technology practice and systems influence are inseparable, and expertise matters not just in the field but in shaping the environments that determine how technology is adopted and sustained.

## Shared knowledge as a core principle

Influence has also been built through knowledge production. Over the decade, WeRobotics and the Flying Labs Network have generated 1,000+ public resources, including frameworks, use cases, white papers, story maps, blog posts, and impact stories. This body of work treats knowledge as a shared asset rather than a private deliverable.

The articulation of the Glocalization Model made explicit the local–global–local dynamic that had emerged through practice. By documenting how locally led action connects to global collaboration and returns value to local systems, the model gave others language and structure to replicate or adapt similar approaches. Four organizations [have already made this operating model their own](#).

This growing legitimacy is reflected in how external actors perceive and reference the work. International actors such as the [World Bank](#), the [World Economic Forum](#), [UNDP](#), or [UN-OCHA](#), and corporate actors including [ESRI](#), [Deloitte](#), [GIM International](#), and [DJI](#) highlighted the Network’s work. Academic institutions and platforms such as [Columbia University](#), [University of Oxford’s Skoll Centre](#), [Devex](#), and [Europe PMC](#) evaluated or referenced the approach.

Alongside this sector engagement, the leadership driving this work has received independent recognition that reinforces its credibility within professional and innovation networks. [Sonja Betschart](#), Co-Founder and Co-CEO of WeRobotics, has been elected as an Ashoka Fellow, joined Forbes’ 50 over 50 EMEA list, and received the 2024 Women in Tech Europe Global Leadership Award for her work in advancing inclusive technology practice. In 2023, she was named one of the Top 100 Women in Social Enterprise and was recognised multiple times

Number of resources published by year



among Switzerland’s 100 Digital Shapers, including induction into that initiative’s Hall of Fame.

These recognitions, both institutional and personal, matter not as accolades in themselves but as external signals that the approach we have built, tested, and refined is being noticed, referenced, and engaged with by others across the global development, technology, and innovation ecosystems. They show that legitimacy is no longer something being sought; it is something being exercised through collaboration, influence, and shared practice.

## What We Learned About Systems Influence

Over time, several realities became clear. First, systems change moves more slowly than project implementation. Policy reform and institutional adoption require alignment of incentives, timing, and internal leadership. Second, narrative recognition does not automatically transform funding flows or structural power imbalances. Being cited or featured is valuable, but sustained influence requires ongoing engagement.

We also learned that influence demands a different skill set than implementation. Convening power carries responsibility. Publishing ideas invites scrutiny. Legitimacy brings expectations.

These lessons shifted how we approach systems engagement. Rather than focusing solely on technical excellence, we increasingly invest in relationship building, stewardship of shared platforms, and clarity about when to advocate and when to facilitate.

## Why This Outcome Is Largely Achieved

The original assumption behind this outcome was that sustained local practice, when documented, networked, and shared, would gradually reshape perceptions of credibility and influence governance discussions. After ten years, this assumption has largely held true.

Local drone practitioners are recognized organizers and participants in regulatory and global conversations. Engagement with authorities is more structured every day. Frameworks, blueprints, and models developed through practice are referenced and adopted beyond the Network itself. The Flying Labs Network operates as a legitimate actor within broader ecosystems of policy and innovation.

The remaining constraints are structural and political rather than reputational. The question is no longer whether locally led innovation is credible. It is how to ensure that policy, financing, and institutional systems evolve fast enough to match the capacity and leadership that now exist.

The first decade established legitimacy. The next decade must translate that legitimacy into deeper institutional alignment and systemic change.



0

4

**Additional  
Learning**

## 1. It's all about people.

This is an easy thing to say. But anyone who has worked with people, especially diverse groups of people, knows that very often, people can be the most frustrating part of any work. And yet they are also the only part that matters, ultimately. We are governed by our spirits, by our circumstances, by our loves and our fears. We will never be perfectly optimized systems. There will be conflicts, bottlenecks, mess. It is a heavy responsibility to always look for the humans in the work. But without it, then why are we walking together at all?

## 2. Relationships are infrastructure.

Strategy, processes, and efficiency matter — but relationships are the glue. Drones taught us this early: before you collect data, you engage people. Our Turning Data into Action methodology continues to show that data alone does not create action; intentional stakeholder engagement does. Technology depreciates. Relationships, when nurtured, compound in value. Trust, shared values, connection, coordination, and power-sharing practices form the invisible infrastructure that sustains everything else.

## 3. Diversity is a superpower.

The strength of the Flying Labs Network lies in its diversity — of cultures, skills, geographies, lived experiences. The same diversity defines our team and partner ecosystem. Working across difference requires openness and comfort with messiness. It demands patience. But it is precisely this diversity that makes our work and the Network resilient, adaptive, and sustainable.

**“I am because  
you are.”**

#### **4. Let go of control and learn to trust.**

People often ask how we control such a Network. We don't. We trust. Letting go of the urge to fix or direct allows collective intelligence to emerge. Clarity around roles, accountabilities, and governance offers us the freedom to co-create in new and interesting ways. Just as transparency is the base for trust, boundaries are the base for freedom. This sends the message: "Here is your space: now make the most of it." And you will be surprised what people can do when supported by trust and clarity.

#### **5. Independence is good. Interdependence is better.**

Local leadership is essential. But connection across borders multiplies impact. Each Flying Labs stands independently in its context, yet through the Network, they go even further — into interdependence. They exchange knowledge and collaborate beyond borders to create possibilities no single one could achieve alone. This balance of the power of the one and the power of the many echoes the spirit of ubuntu: "I am because you are." And this spirit echoes in the way we engage with our partner ecosystem to do more than we could ever do alone.

#### **6. Fail often, fail forward.**

For us, being a learning organization means that in determining our next steps, we say "Let's try it. Let's see if it works. If it doesn't, we'll learn, document, and then try something else." It means we see learning

experiences where we would have previously only seen things going wrong. This attitude towards failure gives us the freedom to try. If we do nothing else, we are going to learn! Failing forces reflection. It builds humility. It sharpens understanding. It makes the next thing better. Much of our growth as WeRobotics and the Flying Labs Network can be attributed directly to our willingness to test, adjust, and publicly learn from our missteps.

#### **7. Complex problems require complex solutions.**

Climate change, disasters, environmental degradation, public health crises — these are systemic challenges. There is no silver bullet. Effective responses require multiple perspectives, disciplines, and approaches working together. Change unfolds through ripple effects over time. We can make a better world, but to do it, we need systems thinking and the resilience to follow it through with the resources available to us.

#### **8. Learning together keeps us together.**

Shared knowledge is the lifeblood of the Network: it connects, nourishes, and creates possibilities that could not exist in a system where information is hoarded and used as power. Each documented project, each shared lesson, contributes to a collective story. Over time, these contributions accumulate into a living repository of locally generated knowledge. Learning together allows us to strengthen one another, and sharing what we learn invites others into our work. It says: we are here, we are working, and this is how.

## 9. Together we go far — and slow.

What we sometimes forget is that going far together almost always means moving slowly. A large group cannot be nimble. If we are truly committed to traveling together, then we must also commit to moving at the pace of the slowest among us, and to seeing their slower steps not as burdens, but as their own kind of gift. Speed is not the priority — shared ownership is. That means inviting participation repeatedly, extending grace, listening again and again, making room for disagreement, starting over. It may look like inefficiency but it is nurturing care and it is building trust.

## 10. Power is meant to be held in many hands.

It is easy to associate power with greed and hubris, and not without good reason. Historically, concentrated power has been used to reinforce hierarchical structures, elevating some, subjugating others, and bypassing our shared humanity. But rather than a weapon to wield over others, it can be a tool for creating change — and it belongs to everyone. When power is distributed intentionally and courageously, it becomes generative rather than extractive. It sends ripples of change out across our shared pond, and the impact is nothing short of remarkable. Shared power creates shared progress — and shared progress lasts.

**“Power can be a tool for creating change — and it belongs to everyone”**



05

**Funder & Partner  
Acknowledgment**

Achieving our initial Theory of Change, creating the impact and making the learnings described in sections 3 and 4, was a deeply collective and collaborative effort. It is a tribute to the “Power of the Collective”.

This collective includes our funding, technology and organizational partners, the organizations behind the Flying Labs and their local partners, and individuals.

We are deeply grateful to the following organizations – and the individuals and key contacts at these organizations – for their trust, support, contributions, and openness to innovate new approaches to localizing emerging technologies:

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Our success is their success, and their success is ours. We look forward to continuing our journey together!



06

**What's next?**

## Building on Our Track Record

Ten years in, we find ourselves in a familiar place: there is urgency to rewrite more rules in the Tech4Good sector. Yet we stand much more grounded, as we can now build on our experience and learnings. We can use the model we have created — already adopted by others — to replicate our approach. We also stand more confident as our track record and evidence positions us uniquely for what comes next.

Through the Flying Labs Network, we have tested — in real time and across diverse contexts — what it takes to sustainably localize emerging technologies for social good. We have documented what we learned. We have shared it openly, in this report and through numerous articles and learning reports. And we have seen, again and again, that investing in local experts, relationships, and collaborations unlocks the full value of technology for social good.

## Technology Is a Tool; People Build Solutions.

The world today has even more technology than 10 years ago, but it still does not have enough sustainable solutions. We tend to forget: technology is a tool; people build solutions.

The Tech4Good sector invests billions in the “visible” aspects of technology: the hardware, the software, the pilot projects, and the deployments. However, it heavily underinvests in people and community relationships. The consequence: the lead is given to technology. When technology leads instead of people, communities don't shape or own the solutions. Decisions flow top-down, projects run in silos, and when funding ends, the impact ends with it. We have seen communities receive technologies that improve their daily lives, only

to disappear when the project budget runs out. What was meant to help leaves them worse off than before because now they know what's possible but can no longer access it.

## Rethinking Investments to Unlock their Full Value

Technology investments are important, but they are only one part of a much larger picture. Hardware depreciates quickly; relationships, knowledge and experiences do not. While technology assets may become obsolete in a few years, trust, shared values, dedicated collaboration spaces, and power-sharing practices create compounding value over time, continuing long after the initial investment.

Imagine if, for every 10 dollars, euros, pesos, or shillings invested in technology, just 1 were intentionally invested in building the relationships, trust, and collaboration that allow technology to take root and endure. Imagine further what becomes possible if that investment is doubled. Imagine the return on investment these 1 or 2 dollars can generate, versus the return on the investment made in technology alone.

The infrastructure of relationships and collaboration may account for a maximum of 20% of the total cost of sustainable Tech4Good solutions. But it is this 20% that determines whether the remaining 80% delivers return on investment and lasting value or fades when the project cycle ends.

## What We Aim to Change in the Next 5 Years

We know through our work that it is possible for Tech4Good to shift towards a people-first, locally led and globally supported way of doing things. This is the future we intend to help create.

To this end, we will keep focusing on people, relationships, and the collaborations that make technology work — and last. Over the next 5 years, we want to expand our ecosystem-building practice to co-create trusted spaces where local and global actors can work together as equals, innovate safely, and co-create locally owned technology solutions.

We want to keep changing rules and to create for other technologies the same shift we created for drones for social good. A shift towards an ecosystem approach, where local leadership drives change, collaboration replaces fragmentation, and learning and solutions move across geographies rather than remaining isolated.

>>> Read more on our website [werobotics.org](https://werobotics.org)

**We do not expect the road ahead to be linear or tidy.  
And we do not expect to walk it alone.**

We invite local actors, global partners, and funders who share this conviction — who are open to unlocking the full value and impact of technology for social good — to walk with us towards our vision: a world where people lead and technology follows.





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