UNICEF Global Innovation Strategy
and Framework 2.0: The 'ABCs' of innovation

# Matching today's challenges with tomorrow's solutions

unicef
for every child

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# Executive summary

*"UNICEF delivers change by combining high-quality programmes at scale, harnessing innovation and collecting evidence, in partnership with governments, other United Nations organizations, civil society, the private sector, communities and children."*

**UNICEF Strategic Plan, 2018–2021[1]**

Fostering innovation in programming and advocacy for children is a key change strategy to achieve the ambitious targets of the UNICEF Strategic Plan to help realize the child-related Sustainable Development Goals (SDGs). The following Global Innovation Strategy and Framework 2.0 builds on previous work to maximize our impact by making more deliberate choices that align innovation with UNICEF's overall strategic goals and focus on solving problems to accelerate progress for children.

This strategy outlines why innovation with and for children and young people is important; why UNICEF is well positioned to achieve such innovation; what our strategic focus on innovation should be; and how the organization intends to work with others, strengthen its own capabilities, apply innovation and deliver results for children.

UNICEF adds value in multiple roles in a global ecosystem, always in partnerships, because the problems we seek to solve are best addressed together. UNICEF collaborates with young problem solvers and their communities, private-sector companies, academic partners, governments, NGOs and many others.

UNICEF's ambition matches its mandate and mission, and we will work on all types of innovations. Through digital, physical product, financial and enabling innovations, we can improve the effectiveness and efficiency of programmes, approaches and processes, and boost our organizational capacity. UNICEF is committed to developing, contributing and using Digital Public Goods – digital products and applications that can be deployed to advance humanity. The organization is also committed to supporting Open Source solutions wherever appropriate.

The environments in which UNICEF works demand that constraints be turned into advantages, making frugal innovations particularly valuable. Frugal innovations are simple products or services that are dramatically lower in cost, outperform alternatives and can be scaled up through adoption by people who do not need special expertise or equipment.

UNICEF will focus on – and invest in – scaling up innovation. Our impact depends heavily on the ability to expand novel solutions that already exist and have proven to be effective. For UNICEF, innovating at scale means making a positive impact for children at the national level and across multiple countries. This is also the level at which significant economies of scale can be unlocked. UNICEF is well positioned to scale up innovation through our global presence, which enables us to influence governments and other partners. The need to focus on scaling up was a key recommendation of the Evaluation of Innovation endorsed by the UNICEF Executive Board in February 2019.

This global Strategy includes a series of Frameworks that will provide UNICEF with the freedom to innovate and nurture an enabling culture for innovation. Such common conceptual models, definitions and processes will allow UNICEF offices in more than 190 countries and territories to act in concert. They comprise a network that will allow us to take evidence-based decisions about which of the most pressing problems to solve – and to do so in a decentralized way, bringing results that add up to more than the sum of the individual innovations. Robust mechanisms for transferring innovation-based knowledge across UNICEF are essential to the success of this strategy.

1  United Nations Children's Fund (UNICEF), UNICEF Strategic Plan 2018-2021, New York, New York, UNICEF Division of Communication, 2018.

2  In line with the approach applied by organizations active in frugal innovation such as NESTA and UNCTAD, and among academics including as reflected in the work of Stanford University d.school and in the Journal of Frugal Innovation.

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# Table of contents

## Vision and thesis

## A. Accomplishments, applications and advantages

## B. Bending the curve

## C. Culture, capability and change

## Summary and conclusion

## Innovation focal points

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*"To realize the SDGs' vision of a world in which no one is left behind, we need to go beyond business as usual – investing in innovation and building broader, bolder partnerships that help us reach every child."*

**UNICEF Executive Director Henrietta H. Fore**

# Vision and thesis

UNICEF defines innovation as a new or significantly improved solution that contributes to progress for children and accelerates results for children or young people. It is about doing new things to solve problems and improve the lives of children around the world. It is about **matching today's challenges with tomorrow's solutions**.

The future simultaneously holds emerging threats, which pose new risks or undermine progress achieved to date, as well as emerging opportunities to accelerate progress in completely new ways.

With regard to the issues facing children and young people, UNICEF is most concerned with tackling problems for which existing approaches and solutions have not made enough progress. This means focusing on intractable problems, stagnating progress and stubborn barriers, and matching them with a portfolio of new solutions. We believe that applying innovation to these pressing problems will bend the curve and accelerate progress towards meeting the goals of the UNICEF Strategic Plan, which will contribute directly to achieving the SDGs.

UNICEF's thesis is that taking a problem-focused approach, and selecting from a portfolio of innovations to tackle the most difficult challenges, will accelerate results – particularly if the alternative is failing to innovate at all. To test the thesis and measure performance, we will operationalize a clear set of success metrics applied to this approach.

We have achieved significant results with our innovation efforts to date, but we have fallen short of achieving the full potential of those efforts. As the findings of the Evaluation of Innovation in UNICEF Work[3] show, our efforts have been largely ad hoc and have lacked organization-wide coherence in strategy and structure, and we have not benefited from the portfolio management approach to innovation outlined above.

3  Evaluation of Innovation in UNICEF Work – Synthesis Report, UNICEF, 2019.

The evaluation assessed how UNICEF identifies and pursues innovations that can bring major change for children and young people at scale. Its three recommendations, which have been incorporated into this Strategy, are to:

1. Develop a shared strategic vision and approach that directly addresses fundamental constraints in the current approach and drives decision-making across the organization;

2. Act on structural changes (e.g., scaling, convening, catalysing and partnering) to advance innovation as a means of achieving results for children;

3. Utilize a portfolio management approach for innovation, and implement innovation governance.

*UNICEF will add value through these 'ABCs' of innovation, which comprise the core of this Strategy and Framework.*

**A**

**Accomplishments:** Comparative advantages and demonstrated successes in applying innovation to improve children's lives.

**B**

**Bending the curve:** Understanding where to focus innovation to influence and accelerate the arc of progress positively for children, and applying a portfolio approach to do so.

**C**

**Capability and culture:** Purposefully collaborating with partners and contributing to innovation as a catalyst and convener, and in other roles – as well as evolving our organizational capability and becoming more fit for purpose in the context of a learning-oriented, risk-taking culture.

# Accomplishments, applications and advantages

Innovation has always been central to UNICEF achieving results for children, and we have a long track record of success in this regard. For example, the organization has worked with partners on technologies to keep vaccines cold for delivery in the field; created better solutions for identifying and treating child malnutrition; and pioneered techniques for bringing safe water to rural communities. UNICEF's history of innovating for more than 70 years has enabled incredible advances for children around the world. We are a trusted partner and recognized brand in innovation.

Moreover, UNICEF is present in more than 190 countries and territories, and has a deep understanding of country contexts and relations with individual governments. This global reach has enabled us to both source and test innovations in widely diverse circumstances. As a result, we already have scaled up new solutions in 109 countries.

# 1

## WHAT IS INNOVATION?

UNICEF will pursue innovation in four broad categories in which we already have significant experience, including digital innovations, innovative financing, physical products, and programmes.

## 1.1 Categories of innovation



### DIGITAL INNOVATIONS

New or existing digital technologies that are adapted into solutions to accelerate results for children. For example **virtual and augmented reality** lessons, **data and digital health tools** that reduce stock-outs of essential commodities, **accessible digital textbooks**, and **mobile youth platforms** that empower millions of young people. UNICEF is committed to developing, contributing and scaling up **Digital Public Goods.**



### PHYSICAL PRODUCT INNOVATIONS

New or improved physical goods are created to meet the needs of children and young people, such as **portable incubators, accessible latrine slabs** for children with disabilities, **compressed air** for pneumonia, new **diagnostic tools** and **multi-purpose lightweight tents.**



### INNOVATIVE FINANCING

Non-traditional mechanisms of raising resources to meet children's needs are built. Examples include **bridge funds, blended finance, crowdsourcing, catastrophe bonds** and **cryptocurrency donations.**



### PROGRAMME INNOVATIONS

Different approaches, processes and ways of working improve UNICEF's efficiency and effectiveness. These innovations may include 'smart' contracts, human-centred programme design, behaviour science-driven communication for development, and the use of creative tools to engage adolescents in preparing for emergencies.

# 1.2 Frugal innovation

*"We can do things differently, and we can do different things… Innovation is not only the most sophisticated technologies, sometimes it's the simplest of things."*

## United Nations Secretary-General António Guterres

The environments in which UNICEF works demand that constraints be turned into advantages, making frugal innovations[4] invaluable. Innovations are frugal if they use the minimum environmentally sustainable resources needed to develop simple products or services that dramatically cut costs, outperform alternatives and can be scaled up.[5]

To succeed, frugal innovations require sensitivity to both context and culture. The most successful such solutions have been designed with marginalized communities. This is one of the reasons the organization has invested in its capability to apply human-centred design to programming. UNICEF has experience with frugal solutions – whether developing them ourselves, empowering others to design them or helping to scale them up.



### FRUGAL SOLUTIONS AT SCALE

The solutions include practices like skin-to-skin kangaroo care for premature infants to kits of simple, life-saving essentials such as newborn kits, safe birth kits and maternal medicine kits.



### FRUGAL SOLUTIONS BY YOUTH

Social innovation and entrepreneurship programmes nurture young problem-solvers who have designed frugal solutions such as job matching services, public transport apps and an interactive accessible alphabet.



### HIGH-TECH FRUGAL SOLUTIONS

UNICEF contributed to the development of FieldLab, a 3D-printed, solar-powered lab-in-a-box that is affordable, mobile and robust. FieldLab handles molecular biology in harsh conditions.

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# 2

# HOW DOES IT WORK?

The Evaluation of Innovation in UNICEF Work recommended ways to improve the impact of innovation by addressing ad hoc, fragmented projects, lack of an overall coherent approach, piecemeal resourcing, a need to focus on scale and to strengthen knowledge management and capacity building. Under this strategy, UNICEF will use a portfolio management approach, common criteria and a set framework to ensure that its resources are well aligned with strategic priorities, comparative advantages and acceptable levels of risk. The organization will purposefully balance its portfolio and innovation work across all phases of innovation, from start-up through scale-up, and will play an intentional role in the global innovation ecosystem.

## 2.1 Portfolio approach

UNICEF's portfolio approach will make evidence-based decisions about which problems to tackle, doing so in a decentralized way that brings individual projects together from across communities and regions. The results will add up to more than the sum of the individual initiatives.

This approach will enable strong oversight of the innovation pipeline, so that sufficient innovation is in the works to handle future needs – and to help decision-makers effectively judge the initiatives that are taken to scale. Programme-led analysis will be the basis for identifying problems that are most in need of acceleration solutions through new or significantly improved interventions. A global inventory of solutions will be assessed against shared criteria to identify the innovations best suited to solving specific problems. On that basis, we will build specialized portfolios.

Portfolio management will inform decision-making by identifying who is doing what in innovation across the organization. It will allow the organization to balance its efforts and resources between scaling up tried-and-tested solutions and developing nascent solutions from the early stages. Specifically, we will seek to allocate 80 per cent of innovation resources towards solutions in the scale-up and product lifecycle stages, and 20 per cent towards solutions in the ideation and proof-of-concept stages.

UNICEF's portfolio approach will be guided by a Portfolio Management Framework based on the Ambition Matrix, a model developed by Bansi Nagji and Geoff Tuff,[7] and used in public-sector innovation. The matrix will help the organization balance risk and impact, providing insights into where we are currently investing in innovation and informing the alignment of future resourcing decisions with our priorities and comparative advantages.

*"Random acts of innovation do not provide the best returns."*[6]

**Innovation expert Tendayi Viki**

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4  Frugal innovations are also referred to as inclusive innovation, social innovation or jugaad (a Hindi word for an improvised solution using scant resources).

5  These criteria are in line with the approach applied by organizations active in frugal innovation, such as NESTA and UNCTAD, and among academics, as reflected in the work of Stanford University d.school and in the Journal of Frugal Innovation.

6  Viki, T. 2018.

7  Nagji, B. and Tuf, G., Managing Your Innovation Portfolio, Harvard Business Review, 2012.

Within the Ambition Matrix model seen on the right, innovations are assessed based on the 'newness' of the solution (or tools) they employ, and of the problems (or challenges) they address. From this assessment, the matrix distinguishes three types of innovations:

**Incremental.**
Existing products and services optimized to be more efficient and effective.

**Substantial.**
New platforms, products, services, materials and processes scaled up in new contexts.

**Breakthrough.**
Unproven technologies or approaches, new bets and new challenges.

A Portfolio Tool will bring together relevant data to answer key questions about how particular innovations address problems for children and where they leave gaps or create opportunities. This data will enable decision-makers to be strategic in selecting problems and solutions for resourcing and scale-up.

**INNOVATION AMBITION MATRIX**



CHALLENGE — New / Existing

3

2

1

SOLUTION (tools) — Existing / New

1 INCREMENTAL    2 SUBSTANTIAL    3 BREAKTHROUGH
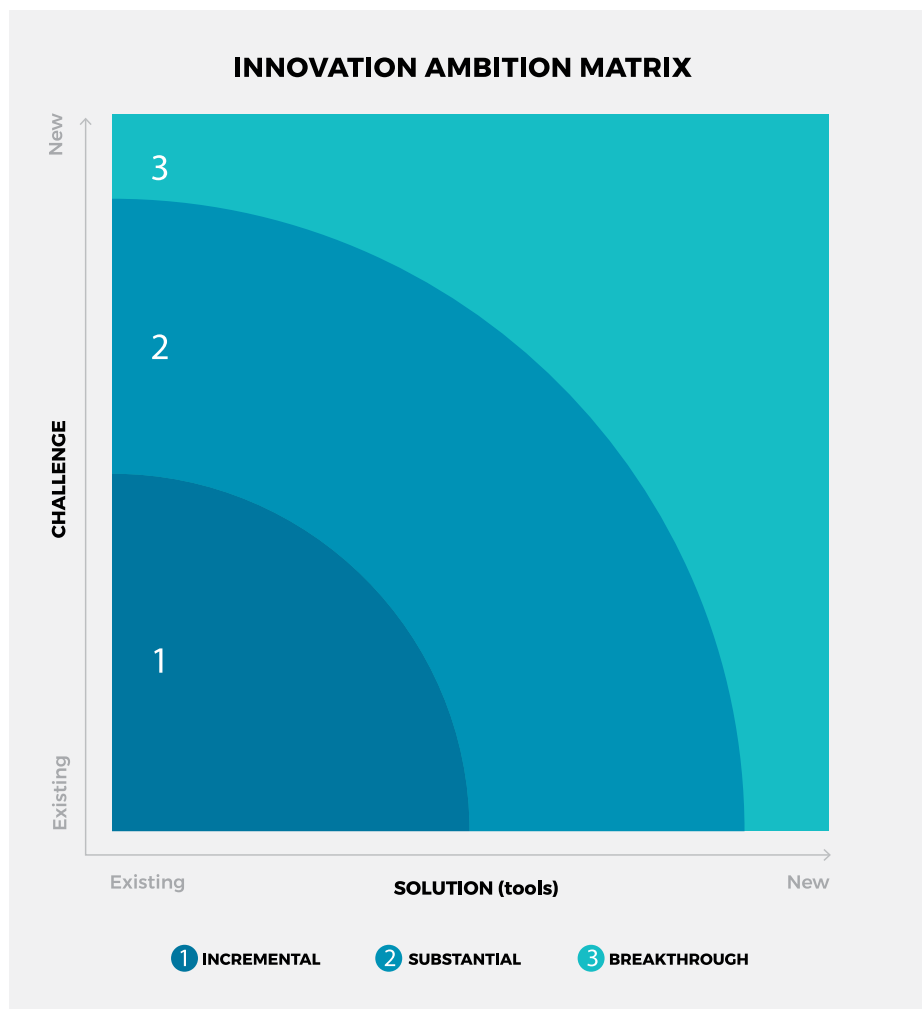
## 2.2 Common criteria

**UNICEF will use the 3SMI lens to scrutinize and prioritize innovation activities throughout the organization.** This lens allows UNICEF to assess innovations based on common criteria, and is aligned with existing principles.

### Sustainable.
Has a life cycle. Minimum viable product. Updateable.

### Solution-able.
Solves problems and does no harm.

### Scalable.
Plug and play. Easy to use. Simple to understand.

# 3S
# MI

### Measurable.
Defined. With milestones and objectives.

### Inclusive.
Innovation as a service. Involves all stakeholders.

# 2.3 Start-up to scale-up

UNICEF has had real success in innovating solutions from the start-up ideation phase through implementation and scale-up. We also have proven, repeatable models and processes that support this success, including:

A Venture Fund, which tests promising solutions from around the world and supports start-ups with solutions that can be Open Sourced – so that the resulting intellectual property can generate additional value.

- A Product Innovation Centre, which focuses on driving research and development of products that are fit-for-purpose and provide value for money. The centre engages with industry to develop products addressing problems for which no adequate solution exists, or to advance the scale-up of existing solutions.

- An Accelerate to Scale service, designed to enhance UNICEF's scaling-up capability and accelerate the transition to scale for pilot or proof-of-concept innovations that have a demonstrated early impact.

- An Innovative Finance team that guides and operationalizes new ways of financing programmes and results.

- A Data function that identifies critical data challenges and new solutions and capabilities that can
- address them.

- A global network of field-based, development-oriented innovation and technology professionals who support different categories of innovation through all phases of design and implementation.

In future, the above models may be complemented with continuous improvement teams to focus on everyday service efficiency and effectiveness; and incubator labs comprising small, dedicated teams to rapidly develop and launch clearly defined products or services.

As recommended in the evaluation, UNICEF will focus on innovation at scale and on scaling up proven solutions with impact for children. It is important that the organization's innovation ambition matches its mandate and mission. Delivering an intervention at scale is not only about reach but also about reach in proportion to need. Only when the reach of innovation is in proportion to the needs will we be able to accelerate results.

Innovating at scale is about innovation that brings positive impact for children at national scale, across multiple countries and contexts. At this level, significant economies of scale can also be unlocked. While the process of expanding from a proof of concept to a pilot or from one to more pilots grows the initial scale of an initiative, the organization considers the scale up of innovations to mean the adoption and adaptation of innovations that are packaged for deployment with a business model and evidence base and are being implemented across countries and regions and/or across sectors.

Taking promising innovations to scale will be complex, time-consuming and resource-intensive. In most cases, governments will be primarily responsible for scaling up innovative solutions – except in humanitarian settings, where UNICEF has a more direct implementation role. Pathways to scaling up include through the UN family and others in the development sector, as well as the private sector and the open market.

UNICEF will continue to have a role in incubating innovations when no known solutions exist for priority issues. Even when the organization is not a partner or otherwise engaged, we will use our authoritative voice to catalyze innovation for children. We will do so by raising awareness about – and advocating for – inventive products and approaches needed to meet the greatest challenges confronting the world's children and young people. This is how UNICEF will bend the curve for children.

# 2.4 A partner in the ecosystem

UNICEF sees its own value in multiple roles within a global ecosystem of innovation, always working in partnership with others, because the problems we seek to solve are best solved together. The challenges affecting children are too complex for one organization or government to solve alone.

We partner and collaborate with young problem-solvers and their communities, the public, private, academic and not-for-profit sectors, United Nations partners and other multilateral institutions. Together, we work to identify and scale up innovations that accelerate results for children and young people. Through this strategy, UNICEF will aim to maximize shared-value partnerships with businesses while leveraging our core assets. The result we seek is a positive impact for children and young people.

**Within the United Nations family, UNICEF will:**
- Support the Secretary-General's innovation and digital transformation agendas.
- Bring innovation to United Nations programme collaboration.
- Continue to be an integral part of the United Nations Innovation Network, an informal, collaborative community of innovators interested in sharing their expertise and experience with others to promote and advance innovation.

**With the private sector, UNICEF will:**
- Convene and cultivate partnerships for innovation, and intensify efforts to establish and/or expand partnerships with the private sector to maximize impact. Businesses have much to contribute – as inventors, manufacturers, owners of financial and non-financial resources, champions of child rights, responsible corporate citizens, employers and thought leaders.
- Look for shared value in areas that provide opportunities for businesses to leverage their core assets and also have a positive impact for children and young people.
- Work to ensure long-term healthy markets for products while relying on businesses' R&D – as well as that of academia and not-for-profit entities such as foundations.

**With academia, UNICEF will:**
- Cultivate partnerships in which data, research and development expertise can be applied to the needs of children.

**With Foundations, UNICEF will:**
- Develop partnerships where innovative thinking and design can have an impact on children's issues.

**With NGOs, UNICEF will:**
- Forge partnerships on various aspects of innovation, from sourcing solutions and ideation through scaling up proven solutions.
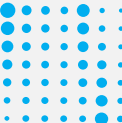
**With governments, UNICEF will:**
- Support efforts to accelerate sustainable scaling, reflecting the central role of public-sector structures and institutions. Because government are among the most important adopters of innovations within a given portfolio, they will be largely responsible for delivering the sustainable scale-up of these solutions.
- Provide strategic support and technical assistance so that national systems themselves can lead and 'own' work on innovations that are aligned with our overarching objectives.

UNICEF will be a stimulator (technically, intellectually and financially); facilitator; collector of evidence; developer of partnerships; mobilizer of resources; analyzer and evaluator; and scaler of innovations. The organization will play different roles depending on the opportunity, as depicted in the following ecosystem analysis.[11]

# 3

# How UNICEF will contribute to the innovation ecosystem

| Role | Description | When UNICEF fills this role | Examples |
|---|---|---|---|
| **PROBLEM SOLVER** | Innovating to come up with solutions to a challenge. | When there are problems for which UNICEF has knowledge and capability that position us well to actively apply human-centred design to a solution.<br><br>When we identify needs and communicate these so that others can solve them.<br><br>When we are pursuing internal innovation that improves our own organizational efficiency and effectiveness. | • UNICEF took the role of problem solver when there was a solution gap to manage protection-related data, case management, incident monitoring and family tracing and reunification. We collaborated with UNHCR, UNFPA, IRC, DPKO, OSRSG-CAAC, Save the Children, IMC and private-sector companies to develop an Open Source solution. |
| **ENABLER** | Making innovation easier by providing others with necessary resources. | When UNICEF sees that others have knowledge and capability to solve a problem, and we have multiple mechanisms to enable their work. | • UNICEF funded private companies to develop solutions for social good through our Venture Fund.<br>• We issued Target Product Profiles incentivizing the private sector to invest in R&D on new products for children.<br>• We empowered young people to design frugal innovations solving problems in their communities. |
| **CONVENER** | Bringing together actors in the innovation ecosystem to share knowledge and resources or partner on innovations. | When UNICEF understands that convening an event can bring needed attention, advocacy, cooperation and knowledge sharing. | • UNICEF has convened global events – both virtual and on-site – around innovation, scale-up, biometrics, artificial intelligence, human-centred design, transferable skills and more.<br>• Country Offices convene 'design sprints', hackathons and other crowdsourcing events to engage and connect national and global parts of the ecosystem.<br>• Convene experts to create and agree on target profiles for new products. |
| **MOTIVATOR** | Providing incentives to encourage potential problem solvers to innovate. | When UNICEF needs to source new ideas, organizes ideation challenges and manages an ideation platform that allows us to source, vet and leverage the supply of ideas.<br><br>When we incentivize businesses to invest in R&D where such investment is needed. | • UNICEF has incentivized the private sector to innovate and invest in R&D on specific products needed for children.<br>• The UNDP-UNICEF Joint Challenge has connected UNDP's investment in accelerator labs at the country level with UNICEF's capability to support innovations at scale.<br>• We have collaborated closely with BMGF on the Gates Global Grand Challenge for WASH.<br>• We have organized the Generation Unlimited Youth Challenge across 41 countries with WEF, UNDP, PLAN and WAGGGS.<br>• We have held regular internal innovation challenges to generate new fundraising ideas. |
| **INTEGRATOR** | Creating processes and platforms that allow partners to work together effectively on an ongoing basis. | When UNICEF can add value by creating shared platforms and ways to collaborate on innovations as global public goods. | • UNICEF has joined the Global Information Goods Alliance, which aims to create a global platform for Digital Public Goods.<br>• We have used Open Source solutions at scale, allowing others to improve and benefit from them.<br>• We have developed toolkits and manuals for many innovations, enabling others to easily adopt and adapt solutions.<br>• We have developed plans to make our innovation inventory and solutions more accessible in a store-like setting.<br>• We contributed to the UNIN Innovation Toolkit and will integrate this resource into our innovation work. |

11 Ecosystem Analysis Tool, UNIN Innovation Toolkit, 2019.
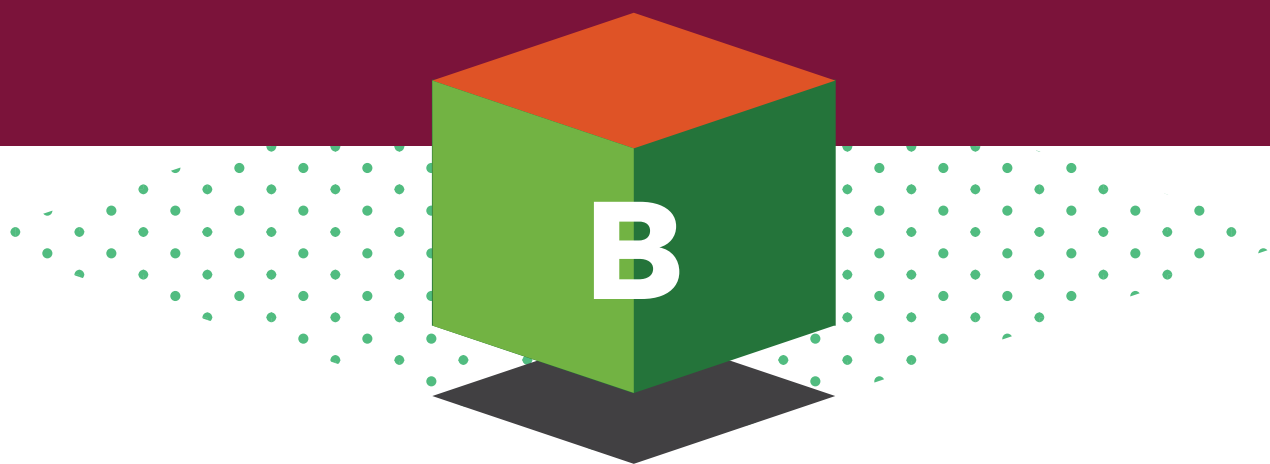
# Bending the curve

Successful engagement in innovation requires focus and prioritization based on the greatest challenges facing children and young people. The Evaluation recommended applying a portfolio approach, and our global grassroots-to-government presence and programme analysis help us understand which problems, if solved, will make the biggest difference for children.

Whilst UNICEF seeks to achieve results through innovation in all goal areas of our Strategic Plan, the innovation portfolio will initially focus on a set of four organization-wide priorities within those goals. The areas of focus for innovation are: water, sanitation and hygiene; maternal and newborn health; learning; and humanitarian action. The organization has identified a set of problems to solve in each of these work areas. Our aim is to bend the curve and accelerate progress in all of them.

These four initial priorities have been identified through a programme analysis process that takes into account i) areas of investment that already target Strategic Plan results; ii) result areas that are lagging; and iii) result areas where there is momentum or a key opportunity. The proposed areas are in line with several regional priority areas of programming, as well. The focus areas will evolve over time, as this strategy is designed to be agile in reflecting emerging needs and opportunities.

## UNICEF's Innovation Portfolio Tool

UNICEF's Innovation Portfolio Tool brings together and curates innovation inventories from every region, as well as those focused on products, digital and technology for development, data and emerging technology.

## GARTNER HYPE CYCLE for Emerging Technologies, 2019



© Gartner 2019
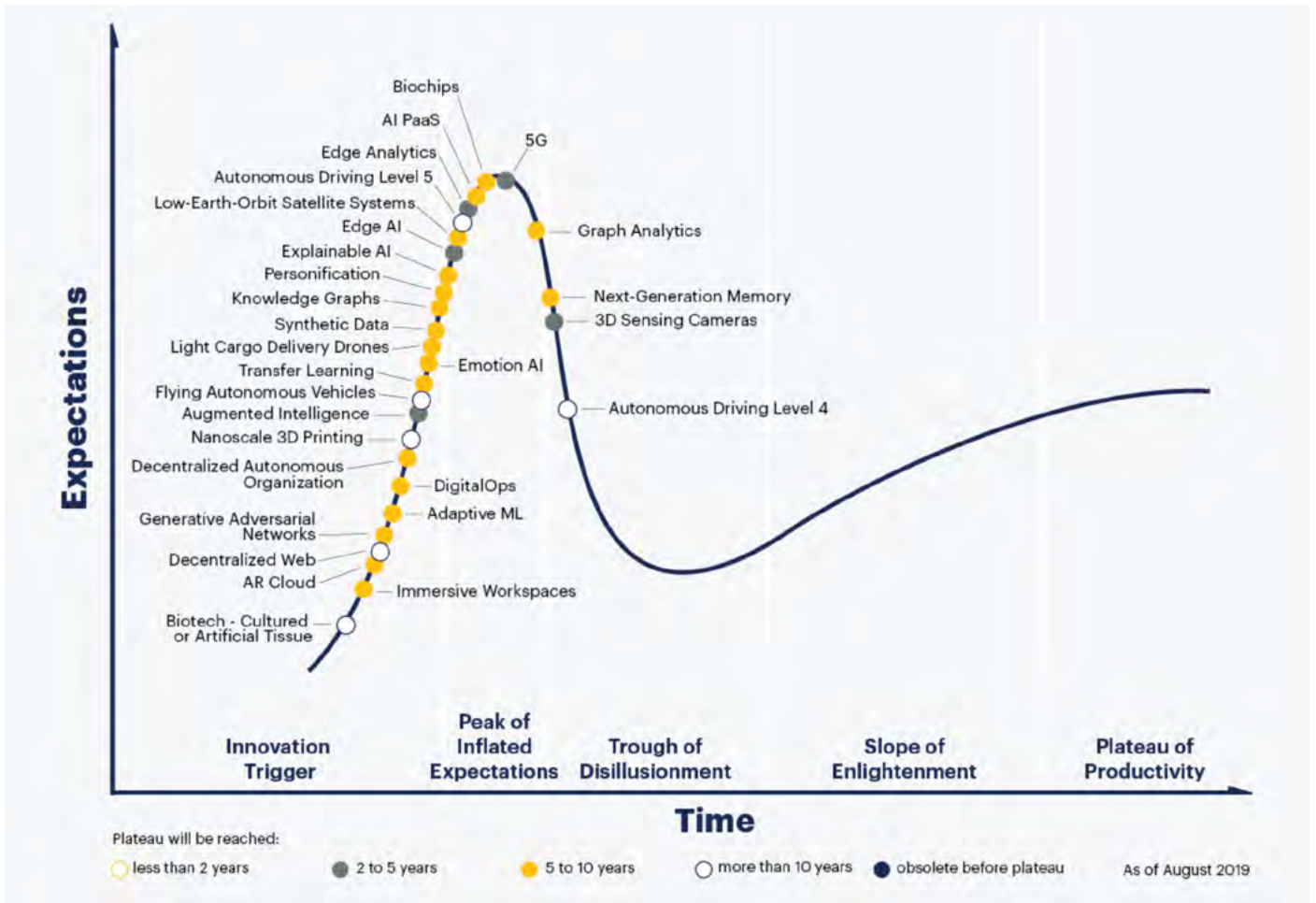
# 1

# How Might Innovation Make a Difference in Water and Sanitation?

**Universal access to basic sanitation services by 2030 is the goal, but the current annual rate of progress needs to be doubled to achieve that.**

Between 2020 and 2030, 2.9 million children under 5 years of age will die from diarrhoeal diseases due to poor water, sanitation And hygiene.[1]

Part of the challenge is that today, 700 million people still practice open defecation. At least 60 million people need to stop the practice each year between now and 2030[2] to eliminate it.

UNICEF has identified problems that, if solved, will unlock faster progress. Innovation is key to co-creating new solutions[3] to problems like leaks in water networks, climate-resilient sanitation services, remote monitoring of water or wastewater systems, remote sensing and other technologies for locating water sources in water scarce environments, fecal sludge management in humanitarian settings, absence of adequate sanitation products and accessible menstrual health information for women and girls.

UNICEF will leverage innovation in WASH to foster new programming models and management practices, to encourage new private sector partnerships in the areas of sector financing, information analysis, social change and the strengthening of enabling environments.

**SDG 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

**UNICEF Strategic Plan Goal Area 4:** Every child lives in a safe and clean environment.

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UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. A selection of these initiatives are plotted on the Innovation Ambition Matrix below. Note: This list is only representative of some ongoing projects and is not exhaustive.

# INNOVATION AMBITION MATRIX

**CHALLENGE** — Existing / New

**3**

**2**
- RapidPro for Realtime WASH Monitoring
- Rapid Water Quality Testing
- F Compostable Sanitary Pad
- Fecal Sludge Management (FSM) in a humanitarian context
- Development of WASH Severity Index
- SMART Water Meters
- Accessibility Add-On for Latrine Slab
- F EasyWash hand washing monitoring device

**1**
- Household Water Treatment and Safe Storage (HWTS) in Emergency Settings
- App monitoring water lost through leakage in water networks
- MHN Digital Solutions
- Carbon Credit Calculator

**SOLUTION (tools)** — Existing / New

**1** INCREMENTAL    **2** SUBSTANTIAL    **3** BREAKTHROUGH

The Innovation Ambition Matrix represents projects based on the 'newness' of the solutions, and the relative 'newness' of the challenge they address. **Incremental innovations** represent incremental enhancements to existing solutions and challenge areas. **Substantial innovations** are those that enhance or apply existing solutions and apply them to new challenges. **Breakthrough innovations** are those that employ new solutions to address challenges that are unfamiliar to UNICEF.

F denotes a frugal innovation.

## Risk/impact matrix

The matrix at right plots projects based on the perceived risk in terms of personnel, reputational risk, financial risk, and data privacy, and the magnitude of impact of the project for children based on the total global need for the solution. UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. Note: This list is only representative of some ongoing projects and is not exhaustive.

## Frugal innovation

The environments in which UNICEF works demand that constraints be turned into advantages, making frugal innovations particularly valuable. Frugal innovations are simple products or services that are dramatically lower in cost, outperform alternatives and can be scaled up through adoption by people who do not need special expertise or equipment. **F** denotes a frugal innovation.

## Innovations for the future

UNICEF also identifies problems for which an effective solution has yet to be identified. In WASH, children need solutions such as DNA diagnostics for water quality that could quickly identify if water is contaminated, devices that can measure the amount of time it takes to collect water, green energy solutions to draw and filter water from significant depths, big data analytics for Market Based Sanitation, Return on Investment and WASH severity.

UNICEF also scans the horizon for emerging technologies, approaches and products that may hold the keys to new solutions.

How might nanotechnology, artificial intelligence, biotechnology, remote sensing and geospatial technologies from nanosatellites to UAVs solve pressing WASH problems facing children? UNICEF looks at resources such as the Gartner Hype Cycle to inspire our foresight.

# RISK-IMPACT MATRIX

| RISK | LOW | | |
|---|---|---|---|
| | | **Household Water Treatment and Safe Storage(HWTS) in Emergency Settings**<br><br>**Carbon Calculator** | **SMART Water Meters**<br><br>**RapidPro and Realtime WASH Monitoring**<br><br>**F Compostable Sanitary Pads** |
| | | **Disability-friendly Squatting Plate Add-on in Emergencies**<br><br>**Fecal Sludge Management (FSM) in Humanitarian Context**<br><br>**Rapid Water Quality Testing**<br><br>**Development of WASH Severity Index** | **App Monitoring Water Loss Through Leakage in Water Networks**<br><br>**F EasyWash Hand Washing Monitoring Device**<br><br>**MHN Digital Solutions** |
| HIGH | | | |
| | LOW | **IMPACT (TOTAL GLOBAL NEED)** | HIGH |

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1   CHERG: Analysis based on estimates presented in Committing to Child Survival – A Promise Renewed: Progress Report, 2015. Every day, on average, over 800 children under 5 years of age die from diarrhoeal diseases due to poor water, sanitation and hygiene.

2   WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), 2017.

3   Strategy for Water Sanitation and Hygiene 2016-2030 (2016), available at: https://www.unicef.org/wash/files/UNICEF_Strategy_for_WASH_2016_2030.PDF.

# 2

## How Might Innovation Make a Difference to Newborn and Maternal Health?

**On current trends, 26 million newborns will die between 2019 and 2030. Everyday, 800 women die from pregnancy-related complications.**

At the rate of current progress, we will not meet the goals. Eighty percent of newborn deaths are preventable, their causes include preterm birth, complications such as lack of breathing at birth, infections like pneumonia and sepsis, and birth defects. High-impact interventions include treatments for pneumonia, vaccine coverage, building stronger health systems and services, care at birth and in the first week of life and engaging with mothers, health workers and their communities.

UNICEF has identified a range of problems that, if solved, could unlock faster progress. These problems include post-partum hemorrhage, management and diagnosis of sepsis, outpatient management of mothers and newborns, detection of pneumonia in newborns, responsive transport systems for maternal and newborn care, inpatient newborn care records, community kangaroo mother care, community follow-up of small and at-risk newborns.

**SDG 3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

**UNICEF Strategic Plan:** Countries have accelerated the scale-up of an essential package of maternal and newborn care services, including prenatal and postnatal/home visit support.

**Newborn deaths in millions**



Deaths (in millions)

| 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2019 | 2030 |
| 5.0 | 4.5 | 4.0 | 3.5 | 3.1 | 2.7 | 2.5 | 1.7 |

26 million
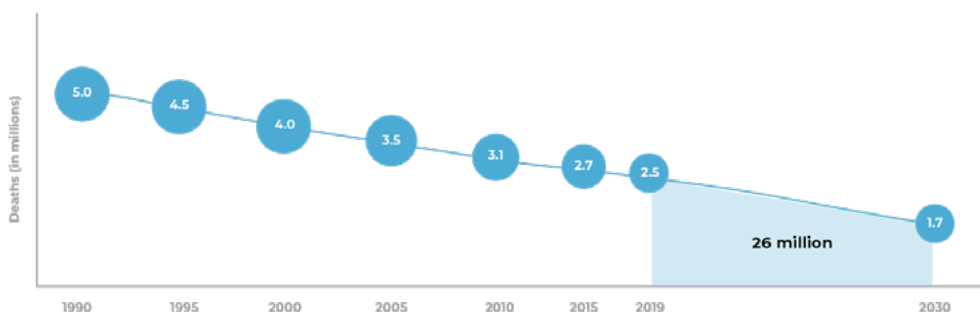
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UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. A selection of these initiatives are plotted on the Innovation Ambition Matrix below. Note: This list is only representative of some ongoing projects and is not exhaustive.

# INNOVATION AMBITION MATRIX

**CHALLENGE** — New / Existing

**3**

F SMART pregnancy test

Point-of-care diagnostics for sepsis diagnosis and management

Decision assist tool for oxygen therapy introduction

Zika diagnostics

**2**

Call centres and transport systems for mothers and newborns

Inpatient newborn care digital records to improve quality of care

Multimodal devices to identify pneumonia and vital signs

Longitudinal digital MNH records with decision support and messaging

Mobile birth registration to strengthen CRVS

**1**

F Community Kangaroo Mother Care for small and premature babies

Digital health messaging to pregnant women, mothers and families

Demand creation for health services applying human-centred design

**SOLUTION (tools)** — Existing / New

**1** INCREMENTAL    **2** SUBSTANTIAL    **3** BREAKTHROUGH

The Innovation Ambition Matrix represents projects based on the 'newness' of the solutions, and the relative 'newness' of the challenge they address. **Incremental innovations** represent incremental enhancements to existing solutions and challenge areas. **Substantial innovations** are those that enhance or apply existing solutions and apply them to new challenges. **Breakthrough innovations** are those that employ new solutions to address challenges that are unfamiliar to UNICEF.

F denotes a frugal innovation.

# Risk/impact matrix

The matrix at right plots projects based on the perceived risk in terms of personnel, reputational risk, financial risk, and data privacy, and the magnitude of impact of the project for children based on the total global need for the solution. UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. Note: This list is only representative of some ongoing projects and is not exhaustive.

# Frugal innovation

The environments in which UNICEF works demand that constraints be turned into advantages, making frugal innovations particularly valuable. Frugal innovations are simple products or services that are dramatically lower in cost, outperform alternatives and can be scaled up through adoption by people who do not need special expertise or equipment. **F** denotes a frugal innovation.

# Innovations for the future

UNICEF also identifies problems for which an effective solution has yet to be identified. Mothers and newborns need solutions such as

- Machine learning to support clinical decisions for newborn care
- New, cost-effective technologies to treat infants and small children with respiratory distress
- Low cost, fit-for-purpose oxygen concentrators
- Novel vaccine presentations including micro-array patches; solid-dose implants, heat stable/controlled temperature chain (CTC) qualified liquid formulations, compact prefilled auto-disable devices, dual chamber delivery services, freeze damage resistant liquid formulations
- New diagnostics, including multi-modal devices

UNICEF also scans the horizon for emerging technologies, approaches and products that may hold the keys to new solutions. How might 3D printing, adaptive machine learning and biotech solve pressing maternal and newborn care problems? UNICEF looks at resources such as the Gartner Hype Cycle to inspire our foresight.
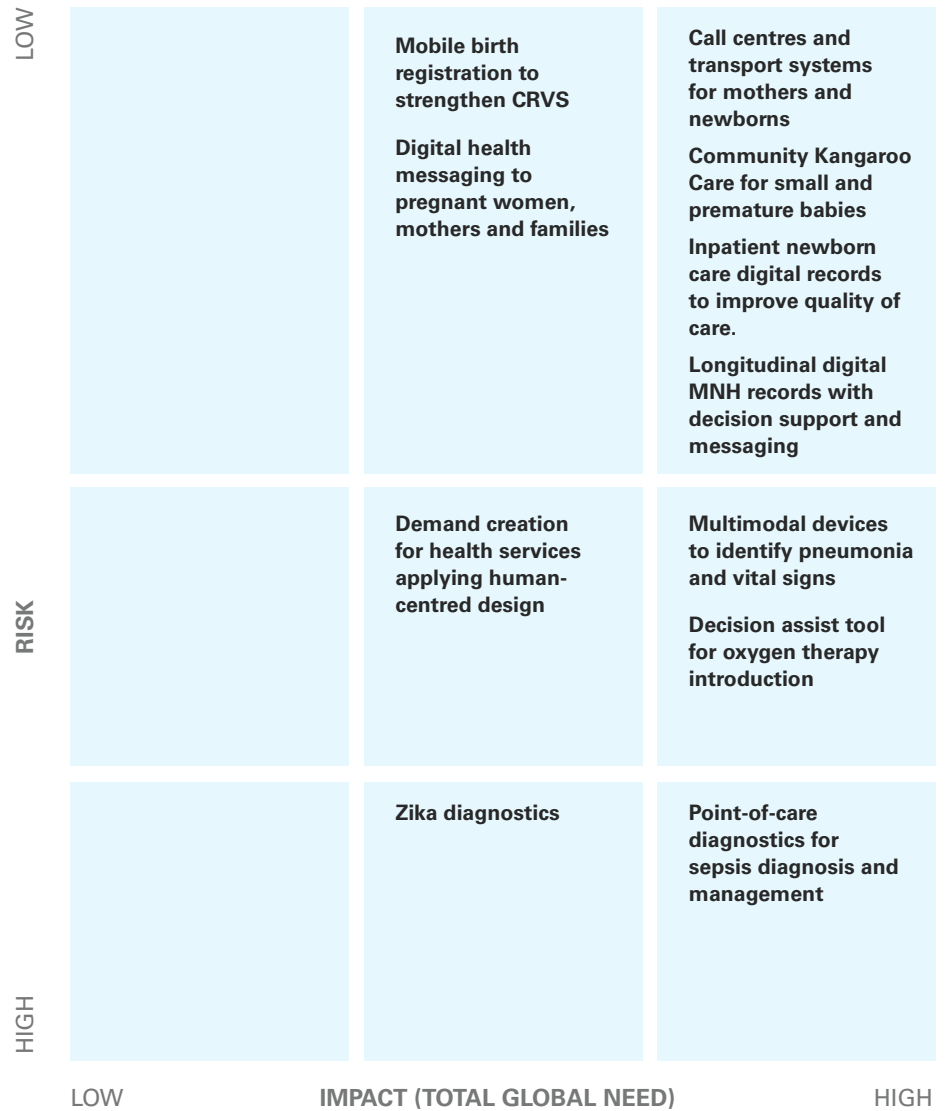
Levels and Trends in Child Mortality, United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME), 2019.
Every Child Alive, The urgent need to end newborn deaths, UNICEF, 2018.
Will We Be Born in 2050?, The Medical Futurist, 2019.

## RISK-IMPACT MATRIX

| | | |
|---|---|---|
| **LOW** | **Mobile birth registration to strengthen CRVS**<br><br>**Digital health messaging to pregnant women, mothers and families** | **Call centres and transport systems for mothers and newborns**<br><br>**Community Kangaroo Care for small and premature babies**<br><br>**Inpatient newborn care digital records to improve quality of care.**<br><br>**Longitudinal digital MNH records with decision support and messaging** |
| **RISK** | **Demand creation for health services applying human-centred design** | **Multimodal devices to identify pneumonia and vital signs**<br><br>**Decision assist tool for oxygen therapy introduction** |
| **HIGH** | **Zika diagnostics** | **Point-of-care diagnostics for sepsis diagnosis and management** |

LOW          **IMPACT (TOTAL GLOBAL NEED)**          HIGH

# 3

# How might innovation make a difference in learning?

**By 2030 there will be 1.4 billion school-age children, in low- and middle-income countries. At current rates of progress, in 2030:[1]**

The focus of UNICEF's work in education is on ensuring children are 'ready' for the following key transitions during their learning journey. Age 5; ready to start school, based on the importance of Early Childhood Education, age 10; ready to access the academic curriculum by having basic literacy and numeracy skills and age 18; ready to enter the labour market/contribute to their community. UNICEF is strategically placed to broker innovation in education. The need for innovation in education is acute: traditional service delivery channels are strained and learning increasingly takes place in new ways and in new places, including outside of the classroom and remotely. UNICEF has identified a range of problems that, if solved, will unlock faster progress to face the learning crisis, including high student-teacher ratios, students not understanding the language of instruction, lack of relevance of school curriculum, lack of tailored student support, out of school children living in conflicted affected areas, weak school management and career progression systems disincentivizing teachers high performance, and gender norms and career expectations decreasing the pool of available teachers. Focused investment in innovation will transform the learning ecosystem – that is, the quantity and quality of available learning opportunities both in and outside school.

**SDG 4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

**UNICEF Strategic Plan Goal Area 2:** Every Child Learns. Every child has the right to an education and quality learning opportunities from early childhood to adolescence.

**1 in 3 children – 420 million** *will not learn the most basic skills in childhood*

**6 in 10 children – 825 million** *will not acquire basic secondary-level skills*

UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. A selection of these initiatives are plotted on the Innovation Ambition Matrix below. Note: This list is only representative of some ongoing projects and is not exhaustive.

# INNOVATION AMBITION MATRIX

**CHALLENGE**

New

**3**

Afinidata: AI

Accessible Digital Textbooks

**2**

EduTrac real time monitoring

Tovvi Game Based Learning

Can't wait to learn

GIGA bid for connectivity and digital public goods

Generation Unlimited Youth Challenge & UPSHIFT

Learning Passport

Project Connect

**1**

School Furniture Design & Procurement Guidelines

Akelius Language Platform

F Interactive sign language alphabet

Bolo Reading App

Existing

Existing

**SOLUTION (tools)**

New

**1** INCREMENTAL        **2** SUBSTANTIAL        **3** BREAKTHROUGH

The Innovation Ambition Matrix represents projects based on the 'newness' of the solutions, and the relative 'newness' of the challenge they address. **Incremental innovations** represent incremental enhancements to existing solutions and challenge areas. **Substantial innovations** are those that enhance or apply existing solutions and apply them to new challenges. **Breakthrough innovations** are those that employ new solutions to address challenges that are unfamiliar to UNICEF.

F denotes a frugal innovation.

## Risk/impact matrix

The matrix at right plots projects based on the perceived risk in terms of personnel, reputational risk, financial risk, and data privacy, and the magnitude of impact of the project for children based on the total global need for the solution. UNICEF is currently engaged in multiple initiatives to address the problems in this priority area.

Note: This list is only representative of some ongoing projects and is not exhaustive.
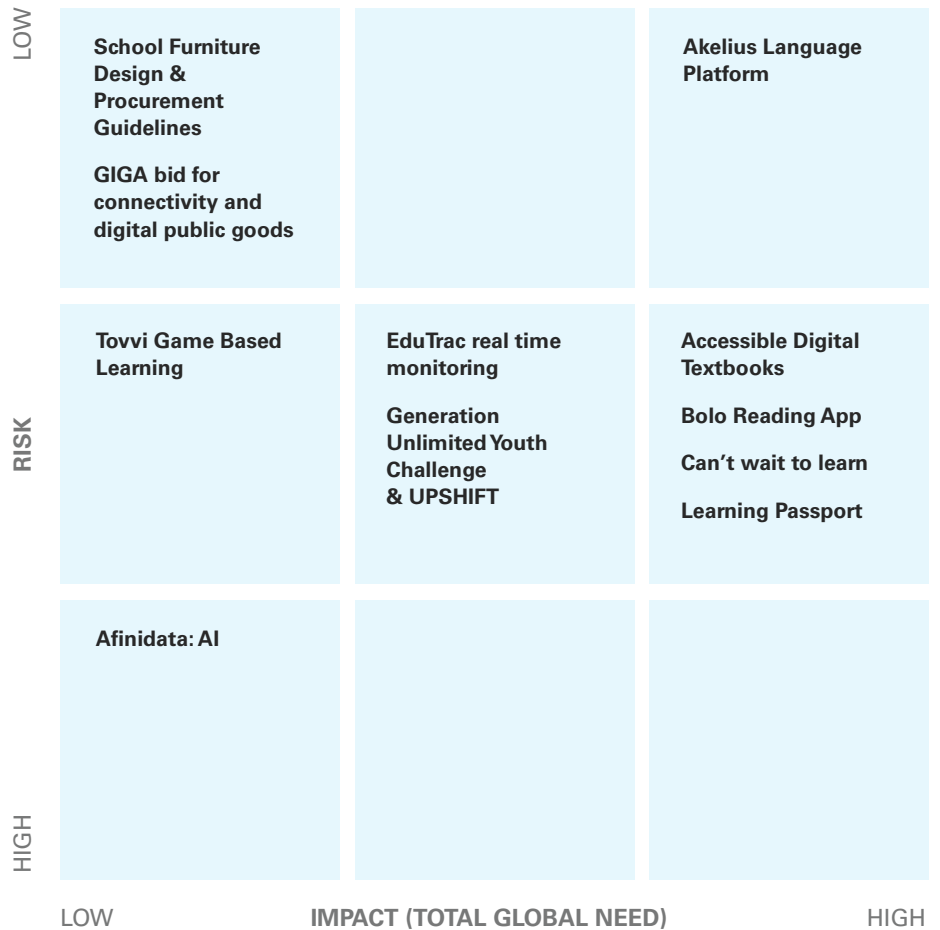
## Frugal innovation

The environments in which UNICEF works demand that constraints be turned into advantages, making frugal innovations particularly valuable. Frugal innovations are simple products or services that are dramatically lower in cost, outperform alternatives and can be scaled up through adoption by people who do not need special expertise or equipment. F denotes a frugal innovation.

## Innovations for the future

In learning, UNICEF will prioritize these activities in the innovation space: making quality technology-enabled learning opportunities available to those who need learning the most; setting fit-for-purpose mechanisms to monitor and measure educational outcomes; partner with the private sector, under a co-creation approach, to leverage affordable, effective, and safe in school and outside school innovations to improve the learning outcomes of all, especially the most deprived and marginalized children.

UNICEF also identifies problems for which an effective and affordable solution at scale has yet to be identified. UNICEF also scans the horizon for emerging technologies, approaches and products that may hold the keys to new solutions. How might 5G, ubiquitous connectivity, low-earth orbit and nanosatellites, AR cloud, transfer learning, cognitive computing, artificial intelligence, extended/augmented and virtual reality  solve pressing learning problems facing children? UNICEF looks at resources such as the Gartner Hype Cycle to inspire our foresight.

## RISK-IMPACT MATRIX

|  | LOW | | |
|---|---|---|---|
| **LOW** | School Furniture Design & Procurement Guidelines<br><br>GIGA bid for connectivity and digital public goods | | Akelius Language Platform |
| **RISK** | Tovvi Game Based Learning | EduTrac real time monitoring<br><br>Generation Unlimited Youth Challenge & UPSHIFT | Accessible Digital Textbooks<br><br>Bolo Reading App<br><br>Can't wait to learn<br><br>Learning Passport |
| **HIGH** | Afinidata: AI | | |

LOW        IMPACT (TOTAL GLOBAL NEED)        HIGH

# 4

# How might innovation make a difference to children in humanitarian contexts?
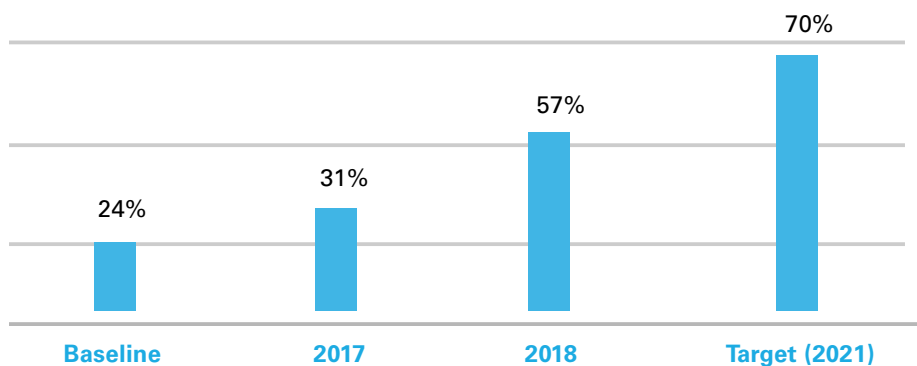
**UNICEF Strategic Plan Goal Area 1:** Every Child Survives and Thrives.

The needs of children in today's humanitarian crises are immense, with protracted conflicts, climate-related extreme weather events, natural disasters and health emergencies, affecting entire generations of children. The number of countries experiencing conflict is at its highest point since the adoption of the Convention on the Rights of the Child in 1989. Children have become frontline targets, resulting in death, serious injury and lasting trauma. Humanitarian emergencies also deprive children of health, nutrition, water and sanitation, education and other basic needs. Advances in our programming strategies coupled with new analytical capacities and new financing approaches to persistent humanitarian challenges hold the promise of accelerating UNICEF's delivery against the SDGs, even in the most vulnerable communities. Improvements in our data systems, including the integration of new methodologies and technologies, can drive more anticipatory and adaptive humanitarian action strategies to reach more children, leaving no child behind.

**% of countries implementingproven real-time information innovation at scale, including adaptation for humanitarian response**
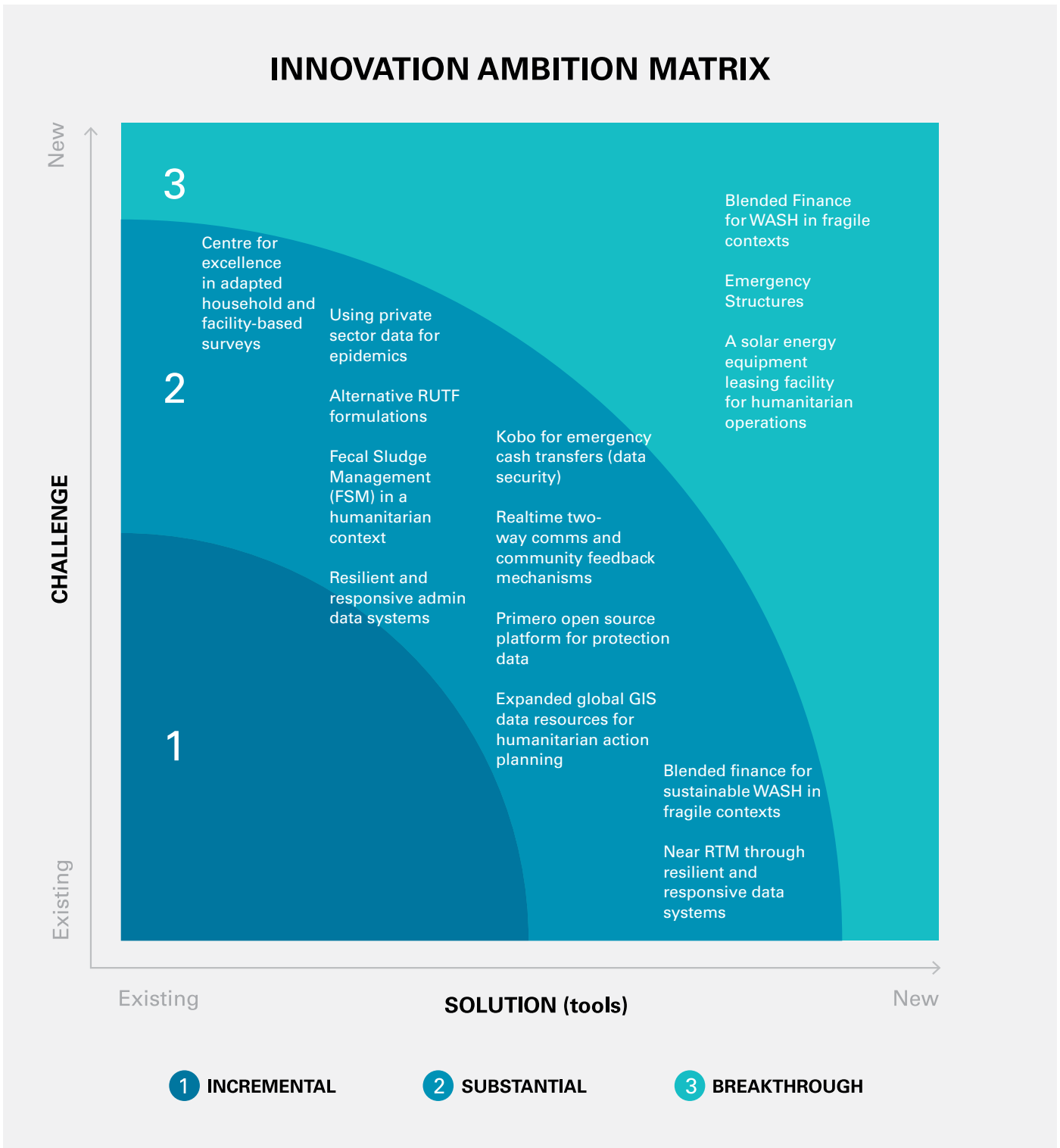


| | | | |
|---|---|---|---|
| 24% | 31% | 57% | 70% |
| **Baseline** | **2017** | **2018** | **Target (2021)** |

UNICEF is currently engaged in multiple initiatives to address the problems in this priority area. A selection of these initiatives are plotted on the Innovation Ambition Matrix below. Note: This list is only representative of some ongoing projects and is not exhaustive.

# INNOVATION AMBITION MATRIX

**New**

**3**

Blended Finance for WASH in fragile contexts

Emergency Structures

A solar energy equipment leasing facility for humanitarian operations

Centre for excellence in adapted household and facility-based surveys

Using private sector data for epidemics

**2**

Alternative RUTF formulations

Kobo for emergency cash transfers (data security)

Fecal Sludge Management (FSM) in a humanitarian context

Realtime two-way comms and community feedback mechanisms

Resilient and responsive admin data systems

Primero open source platform for protection data

Expanded global GIS data resources for humanitarian action planning

**1**

Blended finance for sustainable WASH in fragile contexts

Near RTM through resilient and responsive data systems

**Existing**

**CHALLENGE**

**Existing**                    **SOLUTION (tools)**                    **New**

1 INCREMENTAL          2 SUBSTANTIAL          3 BREAKTHROUGH

The Innovation Ambition Matrix represents projects based on the 'newness' of the solutions, and the relative 'newness' of the challenge they address. **Incremental innovations** represent incremental enhancements to existing solutions and challenge areas. **Substantial innovations** are those that enhance or apply existing solutions and apply them to new challenges. **Breakthrough innovations** are those that employ new solutions to address challenges that are unfamiliar to UNICEF.

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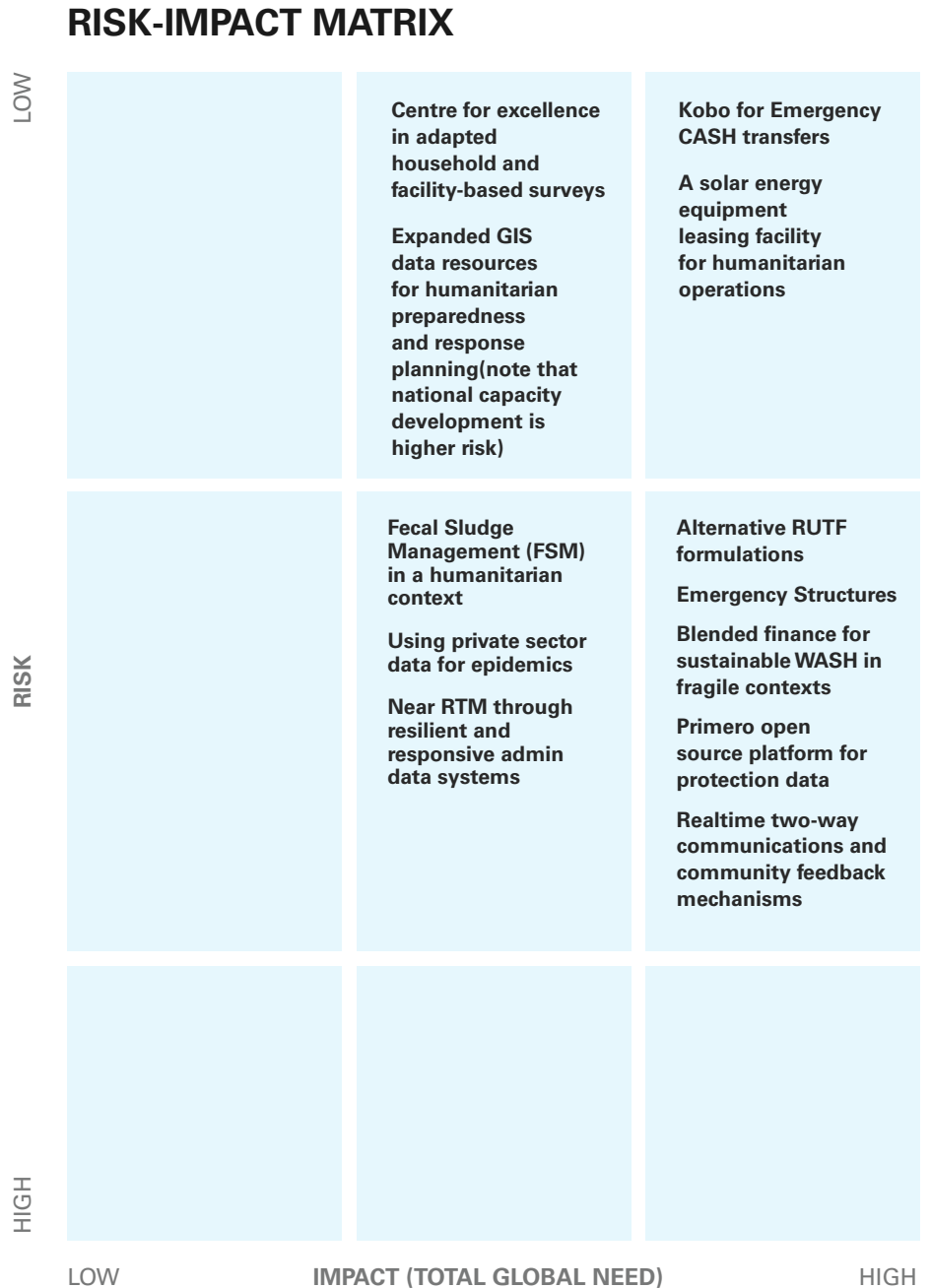
# Frugal innovation

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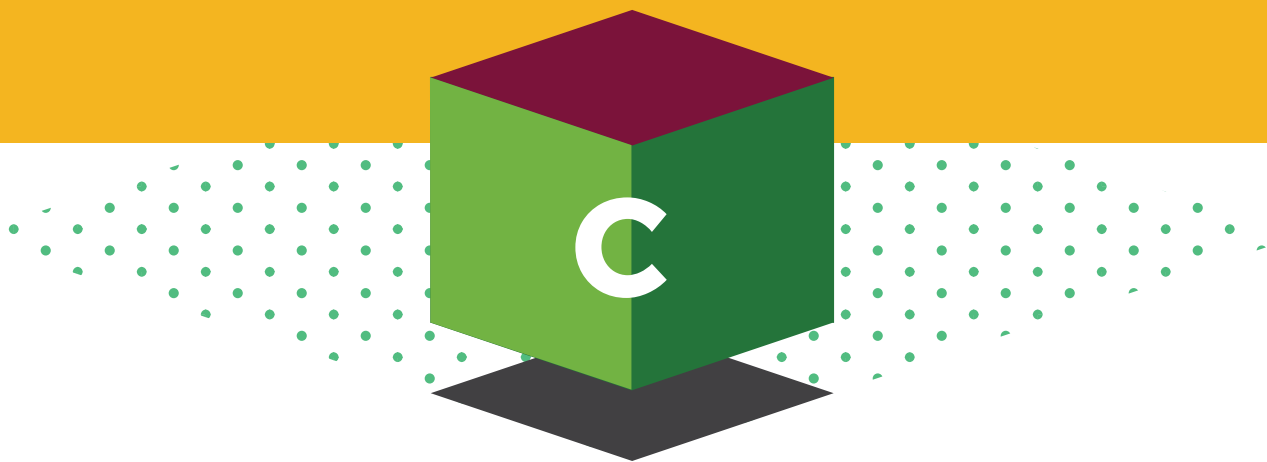
# Innovations for the future

UNICEF also identifies problems for which an effective solution has yet to be identified. Children in humanitarian contexts need solutions such as:

- **Political and conflict risk analysis**
- **Energy solutions for emergencies**

UNICEF also scans the horizon for emerging technologies, approaches and products that may hold the keys to new solutions. How might renewable and alternate energy research, biometrics, light cargo delivery drones, autonomous systems and low-earth-orbit satellites solve pressing humanitarian challenges facing children? UNICEF looks at resources such as the Gartner Hype Cycle to inspire our foresight.

## RISK-IMPACT MATRIX

|  | LOW |  |  |
|---|---|---|---|
| **RISK** |  | **Centre for excellence in adapted household and facility-based surveys**<br><br>**Expanded GIS data resources for humanitarian preparedness and response planning(note that national capacity development is higher risk)** | **Kobo for Emergency CASH transfers**<br><br>**A solar energy equipment leasing facility for humanitarian operations** |
|  |  | **Fecal Sludge Management (FSM) in a humanitarian context**<br><br>**Using private sector data for epidemics**<br><br>**Near RTM through resilient and responsive admin data systems** | **Alternative RUTF formulations**<br><br>**Emergency Structures**<br><br>**Blended finance for sustainable WASH in fragile contexts**<br><br>**Primero open source platform for protection data**<br><br>**Realtime two-way communications and community feedback mechanisms** |
| HIGH |  |  |  |

LOW                    **IMPACT (TOTAL GLOBAL NEED)**                    HIGH

# Culture, capability and change

UNICEF sees value in its innovation work accelerating specific results in innovation, continuously evolving the organization to be fit for purpose in a changing world and providing valuable signals to inform emergent strategy in general. As such, we aim to ensure that the organization will both become more conducive to innovation and use this work to influence the overall culture of the organization.

*"Without innovation, there is no way we can overcome the challenges of our time."*

**United Nations Secretary-General António Guterres**

© UPSHIFT

# 1

## CULTURE

The success of this strategy hinges on UNICEF embracing a culture of innovation across the entire organization and improving internal processes to enable it. We cannot drive innovation forward unless we are willing to take risks and embrace failure. And because there is no such thing as risk-free innovation, an organizational culture of deliberate and structured learning is of primary importance.

UNICEF's approach to driving innovation will be informed by this emphasis on learning and by strong knowledge management that supports effective sharing. We will consistently work to create a culture that supports and incentivizes innovation across the organization, making the concept and its practical applications accessible and digestible to everyone. At the same time, we will improve our internal processes to enable innovation and inform

risk-taking through refined performance management, recognition for innovators and open discussion of successes, failures, and lessons learned.

Beyond creating a more innovation-friendly culture, the organization will move to a more networked model enabling cross-functional teams to come together around big issues and challenges, removing silos and harnessing the diversity of expertise across the organization. We will support innovative business models through controlled experiments in thematic areas – as well as in selected countries – to test new approaches. These efforts will include developing shared spaces for UNICEF staff, the private sector and other innovation partners to work on specific challenges in an entrepreneurial way.

# 2

## CAPABILITY AND TALENT

By refining how UNICEF works, we will help build the organization's capability to innovate more effectively. Specifically, we will focus on the principles of flexibility and agility, deploying an assortment of modalities and tools tailored to the requirements of different projects and their stages of development, while still ensuring a structure is in place.

Measures to boost staff capacity must be included, as well, in operational plans for this strategy and framework. UNICEF staff at all levels – at Headquarters, Regional Offices and Country Offices – need the support and skills to manage innovations of all kinds. Important areas for capacity-building include business modelling, deployment expertise, partnering and project management. Various new tools, including guidance and resources like those in the UNIN Innovation Toolkit, will help augment current staff capacity. This approach will empower everyone working in the organization to develop and evolve innovative solutions for children by applying a standardized set of resources and processes.

Knowledge management will complement enhanced staff capacity, because innovation generates new knowledge that needs to be captured, packaged and shared for adaptation and adoption across the organization and with partners. Ensuring rapid learning (sometimes known as 'failing fast and forward') is, therefore, essential.

To that end, UNICEF will build robust mechanisms for transferring innovation-based knowledge within and across the organization, and with external partners. Recognizing that the value the organization delivers is increasingly knowledge-driven, we will develop a knowledge base in which information about innovations is easy to find in the course of day-to-day work. We will also develop resources to disseminate knowledge and allow staff members to understand the innovations that are under way. Every innovation initiative across UNICEF will be catalogued in an Innovation Inventory, which will provide access to information on solutions implemented at the country, regional and headquarters levels.

If gaps are identified within the Innovation Inventory (e.g., targeted innovations needed in a specific programmatic area), then the organization may launch an Ideation Challenge, which is an organized approach to collecting ideas/innovations for consideration. One use of an Ideation Challenge will be to identify new ideas related to UNICEF's priority innovation areas. The ideas will be accepted or rejected on the basis of established criteria from an innovation brief.

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# 3

# INNOVATION FRAMEWORK

Innovation at UNICEF will utilize a portfolio management approach and will be guided by a common framework. This Innovation Framework provides a structure within which to innovate and thereby nurture an enabling organizational culture.

The overarching Innovation Framework will contain a common set of conceptual models, definitions and shared processes, which are needed for the staff of an organization with a presence in more than 190 countries and territories to act in concert. UNICEF works on many types of innovations – such as physical products, digital solutions, operational innovations and innovative financing – all of which will use the Innovation Framework's models, definitions and processes. The framework will be complemented by enabling services to support innovation in the field (such as support for monitoring and evaluation) and to help solve identified problems.

UNICEF manages a four-stage, cyclical innovation process that builds on the Enterprise LEAN Innovation,[12] LEAN Impact Model:

### 1. Ideation
Insights from this phase of the process will identify gaps and opportunities, and expose unproven approaches and technologies to be explored. Potential solutions will be co-created or discovered through scanning the horizon for new and existing ideas. Research and development will be undertaken to meet clearly defined requirements and gain an understanding of current and future demand.
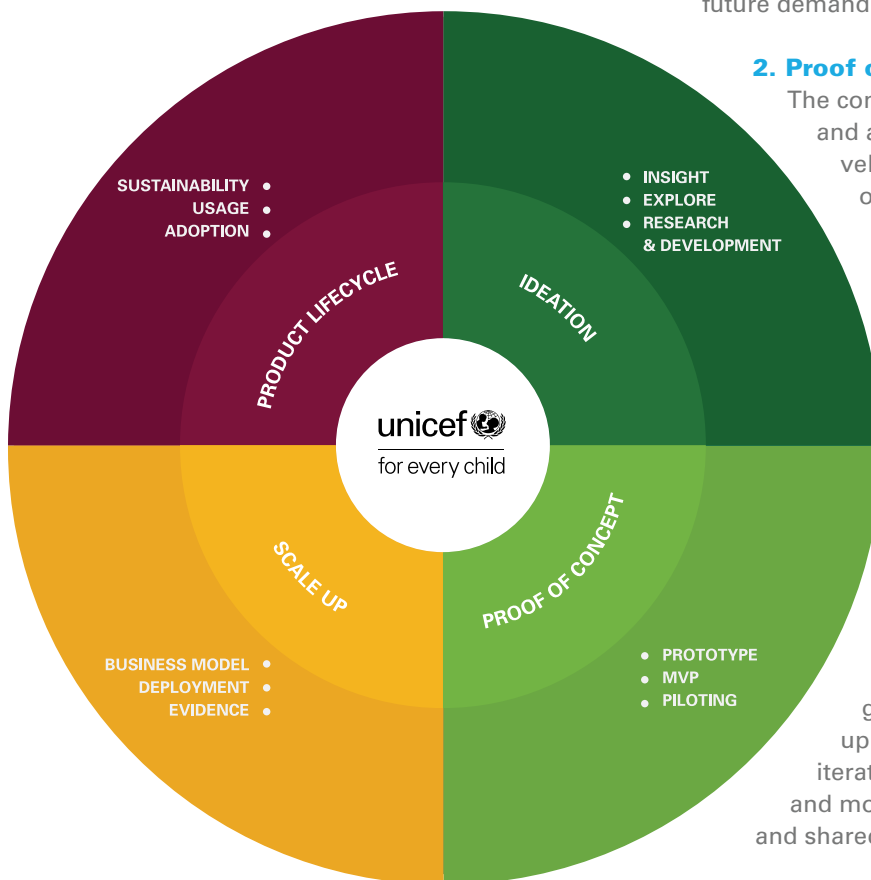
### 2. Proof of concept
The concept will be tested through prototyping, and a Minimum Viable Product will be developed. Solutions will be field-tested and/or piloted to assess their ability to meet the identified gap. Evidence will inform iterations, help validate whether the innovation is fit-for-purpose for the needs of children, and tell us whether it is ready to scale up. Proofs of concept are applicable to all types of innovations, including those that do not have a strong physical or product presence.

### 3. Scale up
Promising solutions will be transitioned to scale by gathering the necessary data from diverse contexts to develop a package that is easy to deploy globally. The business model for scaling up will be developed, replicated, tested and iterated. The deployments will be supported and monitored, and learning will be captured and shared.

### 4. Product lifecycle
Efforts here will focus on driving high rates of adoption and increased usage of solutions, leading to sustained demand generation. At the desired level of scale, mature solutions will be embedded into core programming/business. Future iterations may be considered, starting the ideation process again.



SUSTAINABILITY
USAGE
ADOPTION

PRODUCT LIFECYCLE

IDEATION
• INSIGHT
• EXPLORE
• RESEARCH & DEVELOPMENT

SCALE UP

PROOF OF CONCEPT

BUSINESS MODEL
DEPLOYMENT
EVIDENCE

• PROTOTYPE
• MVP
• PILOTING

unicef
for every child

12 Viki, T., Strong, C., and Kresojevic, S. Lean Product Lifecycle, 2018.

13 Chang, A.M and Ries, E. Lean Impact: How to Innovate for Radically Greater Social Good, 2018.

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# 4

# CONFIGURATION

UNICEF's capability set and structure allow us to use our diversity to execute innovations at scale.
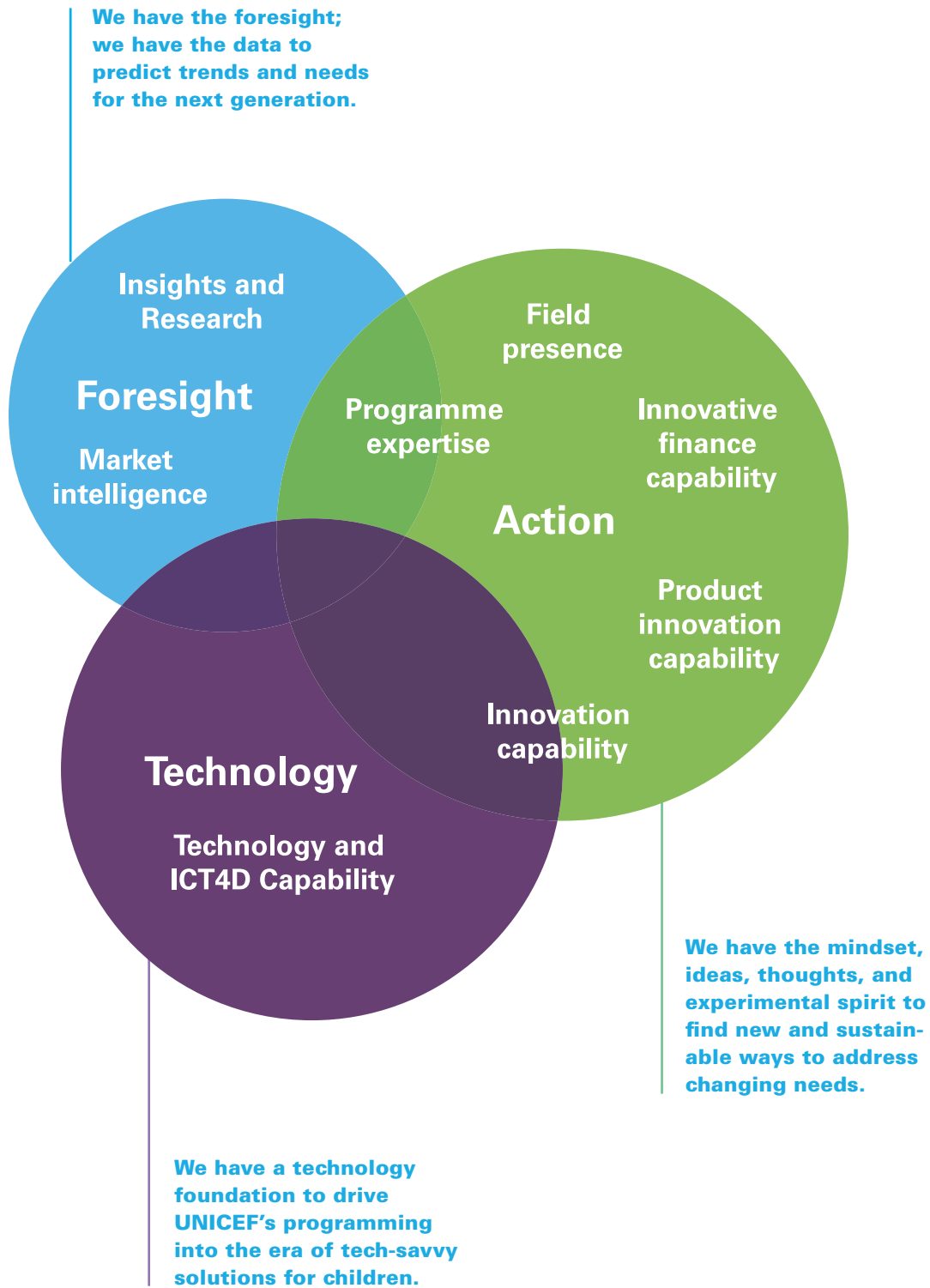
The Evaluation recommended clarifying how different parts of the organization contribute to innovation. Seamlessly working across Headquarters, Regional Offices and Country Offices is critical to the success of this strategy. As such, innovation will continue to be a disseminated function across HQ and the field.

**To play their key role, field offices are expected to:**

- Help set priority areas for innovation based on regional and country-level issues and challenges.
- Identify potential innovations to address emerging issues and gaps.
- Pilot frontier innovations at country level.
- Implement innovation-scaling projects.
- Undertake monitoring and evaluation of innovation projects.
- Catalyse others to leverage their comparative advantages and contribute to innovations that impact children, in collaboration with UNICEF or on their own.
- Facilitate partnerships with the public and private sectors at the regional and country levels.
- Document and share regional and country trends, insights, and lessons learned.

The HQ functions that lie at the core of  innovation work are our Office of Innovation; Programme Division; Office of Emergency Programmes; Division of Analysis, Planning and Monitoring; ICT Division; Supply Division; Office of Global Insight and Policy; and Office of Research. **There are a number of equally important HQ functions that are critical to innovation success, including our:**

- Private Fundraising and Partnerships Division (including National Committees) and Public Partnerships Division, which raise the resources necessary to support innovation.
- Division of Communication, which helps to communicate, position and support engagement and advocacy on innovation work and critical issues across the goal areas of the UNICEF Strategic Plan.
- Management functions, which examine where internally focused innovation can boost the efficiency and effectiveness of our operations.

**We have the foresight; we have the data to predict trends and needs for the next generation.**

Insights and Research

**Foresight**

Market intelligence

Programme expertise

Field presence

Innovative finance capability

**Action**

Product innovation capability

Innovation capability

**Technology**

Technology and ICT4D Capability

**We have the mindset, ideas, thoughts, and experimental spirit to find new and sustainable ways to address changing needs.**

**We have a technology foundation to drive UNICEF's programming into the era of tech-savvy solutions for children.**
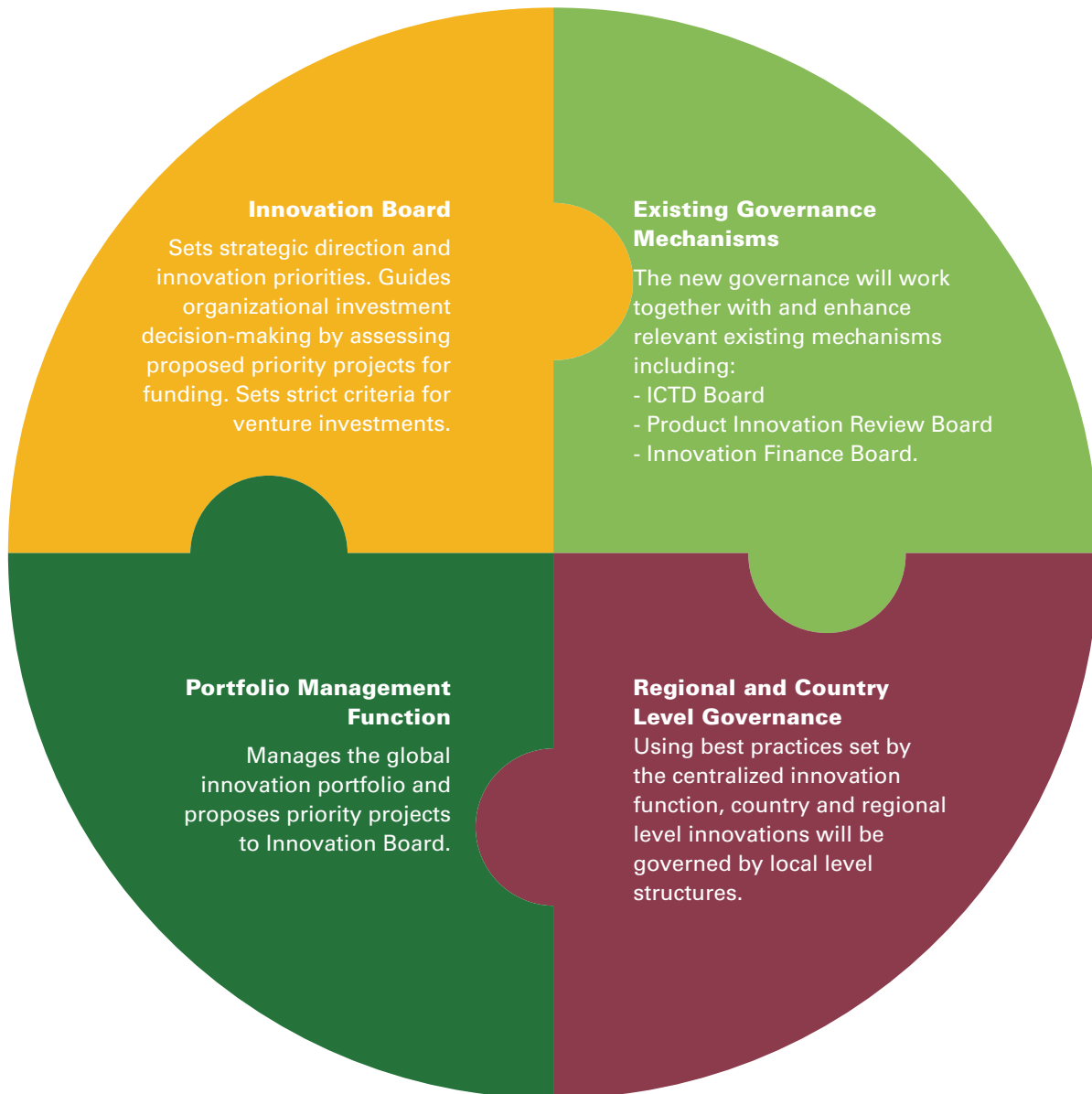
# 5

# CONTROL

The Evaluation recommended increased transparency of governance/oversight and decision-making roles within dedicated innovation units and UNICEF will establish a strong governance structure to support the level of risk-taking that we envision for a robust culture of innovation. We will set innovation portfolio guidelines supported by a Portfolio Tool, and will maintain an aggregate perspective on innovation efforts across the organization. Regional and Country Offices will manage their respective innovation portfolios to address country programme-specific innovation priorities.

The governance structure will engage both internal and external experts. An Innovation Board will set the mandate for innovation functions and oversee a global portfolio. The board will also guide organizational investments by assessing proposed priority projects for funding, and reviewing the progress of priority projects against a pre-determined set of criteria and metrics. The portfolio management function in the Office of Innovation will support these processes for the board. Project advisory committees will assess risk and provide direction to ensure success for priority projects.

Innovation governance will interface well with existing structures and be flexible enough to accommodate UNICEF's decentralized structure, while still defining clear roles for Regional Offices, Country Offices and senior leadership.

Guidance around stage gate criteria for innovation project management will be developed in consultation with Regional and Country Offices to support decision-makers in determining when to advance or stop innovation projects.

The Office of Innovation will monitor the implementation of this strategy and provide the Innovation Board with updates on how the strategy is being implemented and its results in addressing the findings and recommendations of the Evaluation of Innovation in UNICEF's Work (2019).

**Innovation Board**

Sets strategic direction and innovation priorities. Guides organizational investment decision-making by assessing proposed priority projects for funding. Sets strict criteria for venture investments.

**Existing Governance Mechanisms**

The new governance will work together with and enhance relevant existing mechanisms including:
- ICTD Board
- Product Innovation Review Board
- Innovation Finance Board.

**Portfolio Management Function**

Manages the global innovation portfolio and proposes priority projects to Innovation Board.

**Regional and Country Level Governance**

Using best practices set by the centralized innovation function, country and regional level innovations will be governed by local level structures.

**Models of Innovation Governance**

Models of innovation governance at field level are already in place and include the Regional Office for South Asia's Regional Innovation Governance Committee and the East Asia and Pacific Regional Office's standing innovation sessions within the Regional Management Team meetings. Country offices such as UNICEF Uganda have used various models, including most recently adapting a product innovation model.

# Summary and conclusion

This UNICEF Global Strategy and Framework for Innovation establishes a clear vision of specific results for children that can be advanced by innovative solutions, defining the governance, processes and models of engagement that will allow us to match today's challenges with tomorrow's solutions.

The strategy addresses all three recommendations of the 2019 Evaluation of Innovation in UNICEF Work. To generate change for children and young people at scale, the Evaluation called for development of a shared strategic vision as the basis for consistent decision-making about innovation; structural changes to advance innovation; and adoption of a portfolio management approach to innovation.

In response to the evaluation recommendations and after consultation, UNICEF will pursue innovation using the ABCs of innovation as defined here. a) accomplishments, comprising comparative advantages and demonstrated successes in applying innovation; b) bending the curve, by focusing innovation to accelerate progress for children; and c) capability and culture, catalyzing innovation through partnerships and internal organizational change.

Through the strategy, UNICEF will pursue innovation in four broad categories:, digital innovations, innovative financing, physical products, and programmes. Given the constraints that we often face on the ground, frugal but scalable innovations using minimum sustainable resources will be invaluable. UNICEF will select relevant solutions from a portfolio of innovations to tackle the most difficult problems. The innovation portfolio will initially focus on water, sanitation and hygiene; maternal and newborn health; learning; and humanitarian action. Other areas will be added over time.

The success of this strategy will depend upon a UNICEF-wide culture of innovation, informed by an emphasis on learning; strong knowledge management; and improved internal processes to enable, incentivize and recognize innovative solutions.

By refining how UNICEF works, with a focus on the principles of flexibility and agility, we will strengthen our capability to work more effectively at every stage of innovation – from ideation to proof of concept to scale-up to product lifecycle. A common innovation framework will guide UNICEF's portfolio-management approach across the organization.

With robust governance and clear roles for field offices and senior leadership, UNICEF will invest judiciously in innovative solutions that show the greatest promise and value. In the process, we will keep innovation aligned with UNICEF's overall strategic goals, delivering results for and with children who are in the greatest need and at the greatest risk.

# Innovation focal points

**Data Innovation**
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taccone@unicef.org

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**For every child**

Whoever she is.

Wherever he lives.

Every child deserves a childhood.

A future.

A fair chance.

That's why UNICEF is there.

For each and every child.

Working day in and day out.

In more than 190 countries and territories.

Reaching the hardest to reach.

The furthest from help.

The most excluded.

It's why we stay to the end.

And never give up.

unicef ✿

for every child