## **United Nations Development Programme**



# Project Initiation Plan (PIP)

# UNDP Regional Bureau for Africa

Project Title:	Africa Leading 4IR				
Expected RP Outcome(s):	Strategic Plan OUTCOME (2018-2021): Accelerate structural transformations for sustainable development (Strategic Plan Outcome 2)				
	REGIONAL PROGRAMME OUTCOME 1: African Union and RECs deliver on their mandate, especially cross-cutting issues related to resilience-building				
Initiation Plan Start Date:	December 1 2020				
Initiation Plan End Date:	December 31, 2021				
Implementing Partner:	UNDP				
Programme Period: 2020-2021	Total resources required: 1.55m USD				
Regional Programme Outcome:					
Atlas Award ID:					
Agreed by UNDP:	03-Dec-2020				

#### **Brief Description**

Africa and the world is experiencing a digital revolution where the Fourth Industrial Revolution and advancements in artificial intelligence (AI), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, quantum computing, and other technologies, are rapidly transforming how we live, lean and work. These technologies are enabling unprecedented societal transformation, but also accentuating already existing inequalities (digital and real-world), as their benefits and opportunities flow disproportionately to early adopters. Their rapid advancements and change are creating disruptions, accentuating poverty, massive unemployment and a widening knowledge and information gap (especially between Governments and Private Companies), that is necessary for the achievement of the Sustainable Development Goals and Agenda 2063. Such disparities will impact the *future of power*, economic development, peace, security and Stability in Africa.

In order to address these grand challenges, UNDP will need co-create an inclusive mechanism that will harness the responsible adoption and use of 4IR technologies in building capable and resilient institutions in the Continent that accelerates the delivery of *Africa's Promise*.

The purpose this Project Initiation Plan (PIP) is to develop RBA's Programmatic Offer building on the <u>UNDP Digital Strategy</u>. The PIP aims to deliver *an agile regional project that is supported by a robust multi-stakeholder digital collaborative*.

#### Purpose

This 4<sup>th</sup> Industrial Revolution (4IR) driven by a range of powerful technologies including artificial intelligence, distributed ledgers, the internet of things, drones, 3D printing, quantum computing, gene editing and more, individually and interactively, offer *unprecedented opportunities as well as significant risks* to Africa's development.

Given the rapid advances in the power and uptake of new technologies, there is a huge potential to steer 4IR to accelerate the breadth and depth of actions to meet the full range of the Sustainable Development Goals (SDGs) and Africa's Agenda2063. While we may be in earlier days of 4IR, Africa stands at a critical juncture in leading the world by putting in place an <u>agile policy and governance architecture</u> that ensures emerging technologies are harnessed responsibly for Transformation and Growth.

In all previous revolutions, whether precipitated by STEAM, ELECTRICITY, or Information and Communication Technologies (ICT), the African Continent has not had the ability to harness their potential for development and inclusive growth. These previous revolutions have been *resource-intensive*, requiring *sustained* investments in specialized industries, knowledge, infrastructure and mass production capabilities. It is also apparent that majority of African countries are still grappling with the 2<sup>nd</sup> and 3<sup>rd</sup> Industrial Revolutions: with inadequate or unreliable energy necessary to drive technology, lack of investment in internet infrastructure or devices and high cost of connectivity.

While the Fourth Industrial Revolution undoubtedly builds on the last three, it offers a unique opportunity for countries in Africa to leap-frog substantial capital investments, rapidly acquire knowledge, and deploy smart-solutions to its enduring challenges of rapid population growth, climate change, weak governance, stalled industrialization and rising violence as envisioned in Africa's Promise. Being prepared for the 4IR means that African countries and peoples need to position their institutions in a way that harness the capabilities of these technologies for the benefit development and wellbeing, and in support of national and regional social and economic objectives.

There is an emerging consensus that while digital technologies are enabling unprecedented advancements in societal transformation, they are also accentuating already existing digital divide, creating new threats to the

very fabric of democracy and sustainable development. It has the potential of exasperating existing conflicts and create new terrain of contestation as evidenced with increase in cyber-threats and diplomatic rows around 5G.

The benefits and opportunities created by technology flows disproportionately to early adopters and countries with robust digital infrastructure.

This will impact the future of power.

These advancements ushered in by emerging technologies must therefore be mediated to benefit *everyone*, with deliberate efforts to include those who are often in the margins of development progress and are being disrupted by technological advancements, notably women, youth, persons with disabilities and minorities. Africa's ability to harness these capabilities, therefore, requires a <u>whole of society approach and leadership</u> to leverage on Science, Technology, and Innovation for its development. Technologies though ubiquitous, are by themselves <u>not neutral</u> and therefore require leadership that is infused with values of inclusivity and equity for a responsive and responsible deployment.

Professor Klaus Schwab, founder and executive chairman of the World Economic Forum recognizes that "The changes accelerated by the 4<sup>th</sup> Industrial Revolution are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril. *Decision-makers* face the challenge of traditional, linear (and non-disruptive) thinking or too absorbed by immediate concerns to think strategically about the forces of disruption and innovation shaping our future (Schwab, 2019)<sup>1</sup>." This linearity means that the sector or silo approach to solving human developmental challenges by the current policy praxis, requires a different approach; one that is tempered by deliberate collaboration and co-creation between the private sector, governments, civil society, and citizens.

The recently published UN High Level Report on Digital Cooperation<sup>2</sup> however notes that "mechanisms for cooperation and governance of technological landscape have failed to keep pace. Divergent approaches and ad hoc responses threaten to fragment the interconnectedness that defines the digital age, leading to competing standards and approaches, lessening trust, and discouraging cooperation." Similarly, UNDP's Digital Strategy support the achievement of the Strategic Plan (2018-2021) by fostering new ways of collaborating with partners, creating environments and systems that drive and support innovation and building new capabilities to develop and apply digital solutions that will enhance the quality, efficiency and effectiveness of UNDP's work.

In the current context, COVID-19 pandemic has created an unprecedented challenge to the worlds development trajectory, impacting global health, wellbeing and the economy. It has impacted how we live, learn and work, with populations in most countries under a form of stay at home order or differentiated lockdown. The pandemic has reinforced the need for investing in digital transformation, as many countries have to rely on digital tools and platforms as the new normal.

Africa countries have been thrown, almost instantaneously, into a technologically enhanced world amidst a context of uneven access to electricity, inadequate infrastructures (internet), prohibitive costs of connectivity and hardware (smart phones and computers), high maintenance costs of systems (software etc) and human capacity challenges to derive value out of technological use or creation. The current technology adoption in times of crisis, in most cases, is being done without planning, citizen engagement, policy enablers and oversight. With such legacy and new challenges, a transformative and inclusive process of harnessing digital

<sup>1</sup> Schwab, C. (2019). Fourth Industrial Revolution. [online] World Economic Forum. Available at https://www.weforum.org/focus/fourth-industrial-revolution [Accessed 15 Nov. 2019]

<sup>&</sup>lt;sup>2</sup> UN High Level Panel Report on Digital Cooperation - "The Age of Digital Interdependence [online] Un.org. Available at: https://www.un.org/en/pdfs/DigitalCooperation-report-for%20web.pdf [Accessed 15 Nov. 2019].

transformation as a tool for development process is required and led by the public sector. This process needs to be underpinned by principles of collaboration between state and non-state policymakers, as institutions and individuals, to be *agile*, *adaptive*, *and prepared to respond to the positive and negative effects* of the technologically driven disruption of critical economic, political and social sectors. Africa leading 4IR creates a response mechanism for action to undertake deliberate strategic measures to prepare the continent for impending disruptions, whether through, building innovation capability, developing policy and agile governance frameworks to establish legislation and regulations, joining-up multilateral and international agreements that support equitable digital transformation and debating ethics of creation and use of emerging technologies.

To this end, UNDP is uniquely placed to drive the 4IR agenda forward, based on its ability to convene as a neutral development agency, with presence at the Pan African level with a supportive role to the African Union, on-ground presence at Country Level, unrivaled capacity and trusted technical and implementation partner of Member States in delivering national, regional and international development priorities. UNDP through this initiative can begin to work with member states in creating a coherence and convergence of previous investments such as e-governance, Smart-Africa, Africa-Moonshot or the Africa Digital Blueprint. UNDP is the integrator of the UN System and a premier knowledge driven organization is well placed to assist member states bridge the widening of knowledge and awareness gap among state and non-state policymakers of digital and non-digital technology and digitization and its disruptive impact.

UNDP based on this vantage, can Convene, Connect and Catalyze the responsible adoption and use of 4IR for Africa's inclusive development.

The UNDP's Africa's Promise recognizes that effective delivery of the Sustainable Development Goals does not only require new solutions, it also requires radical new ways of identifying solutions, speeding up the solving of complex problems, and scale-up initiatives that work. Africa Leading 4IR creates a unique value proposition for this new strategic offer with the aim of "Building capable and resilient institutions, responsibly adopting and utilizing 4<sup>th</sup> Industrial Revolution technologies towards people-centered transformation and growth of Africa by 2030.

This Project Initiation Plan (PIP) outlines ways in which the Africa Leading 4IR will seek to transform Governments, AU, RECs, Civil Society, Private Sector and partners cooperate on digitalization to deliver human and environmental well-being. More specifically the initiative will deliver the following results:

- 1. <u>Increased access to 4IR innovative policies and solutions</u> for citizens, civil society, innovators (including access to jobs, opportunities and ) and governments (including parliament and judiciary), where New strategies, plans, and tools that are accessible, affordable and usable for African Governments, Academia, Private Sector, and Innovators, to enable new opportunities for transformation and growth.
- 2. UNDP, Governments, civil society, private sector and Citizens in Africa are <u>proactively and</u> <u>responsibly using emerging technologies for economic and social transformation</u> at scale/down-scale, where more innovative goods, products, and services are developed, creating more options that are relevant for the African Development Ecosystem.
- 3. <u>Evidence and learning</u> generated is taken up internally by UNDP-RBA/Country Offices/Labs/Accelerators and by AU-RECs, government agencies, SMEs and non-governmental organizations ensuring resilient capacity that leverages on data and insights for decision making/action.
- 4. <u>Increased sub-regional and regional network of investors</u>, funders, experts co-creating, and supporting responsible use of 4IR technologies in Africa in the form of a vibrant multi-stakeholder

network of (experts, public sector, private sector leaders and influencers, investors, VCs) actively investing and nurturing responsible 4IR innovations.

#### II. EXPECTED OUTPUT

The PIP's implementation aims at ensuring a future-ready, 4IR enabled UNDP is catalyzing actions that leads to transforming how Governments, AU, RECs, Civil Society, Private Sector and partners cooperate on responsible adoption and use of 4IR technologies to delivers human and environmental well-being.

This PIP will contribute to the priorities of the UNDP Regional Programme for Africa and the RBA's renewed Strategic Offer on Africa (Africa's Promise) as a strategic leverage in addressing the Development Context on the Future Promise (AfCFTA, Youth Dynamism, 4IR and Stronger Citizens Voice). It will also be instrumental in accelerating the achievement of the impact areas especially on (youth and women employment and empowerment, affordable and sustainable energy and structural transformation).

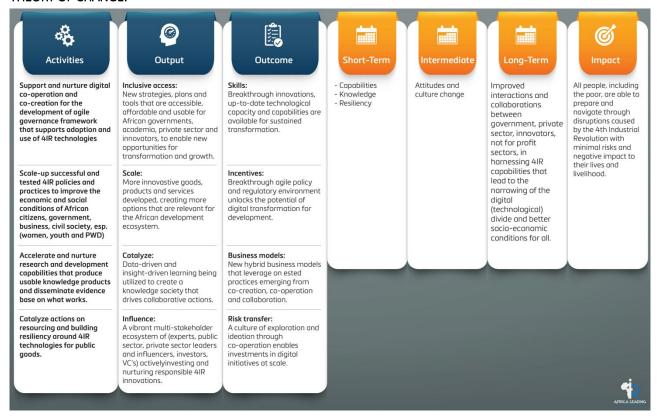
At the end of the project period, the PIP will deliver *an agile regional project that is supported by a robust multi-stakeholder digital collaborative*.

The PIP leverages on a <u>Theory of CHANGE</u> which contends that UNDP, AU, Governments, academia, innovators and other partners based on the disruptions precipitated by 4IR need improved: 1) Human and 4IR capabilities; 2) knowledge of technologies, means of engagement and policy issues; 3) attitudes toward efficacy of adoption and responsible use of 4IR technologies in everyday challenges a 4) Build resilience in sustaining and scaling up 4IR capabilities, in a rapidly changing environment human and technological environment.

With this in mind, the envisioned activities are designed to activities to: 1) increase access, skills and reach of 4IR technologies; 2) Extend and scale-up utilization of innovations within an enabling policy environment; 3) Catalyze adoption and action through the generation of analysis ready insights and knowledge base of what works; and 4) catalyze action that build resilience through mobilized resources (human and financial) to improve capabilities, knowledge, and attitudes for responsible use of 4IR technologies and innovations for public goods (both within UNDP and its constituency).

To ensure the achievement of these broad activities, the PIPs outlines that it will require direct inputs in the form of (1) seed grant to connect, convene and catalyze actions towards the development of a digital strategy, including early win initiatives, products (2) institutional and technical capacity development (3) Forums for creating political momentum, thought leadership, and unusual collaborations.

#### THEORY OF CHANGE:



This will be done through the following structure:

- High Level Group: comprised of high-level champions from the private sector, academia, and government: Co-convened by UNDP and High-Level personality. There is already a network access to President Jakaya Kikwete of Tanzania (who is a leader in Open Government) and how technology can enhance service delivery; 2030Vision Initiative of the World Economic Forum and the Affiliate Centre for the 4<sup>th</sup> Industrial Revolution in South Africa, potential stewardship of the President of South Africa and current Chair of the Africa Union as an avid champion of the fourth Industrial Revolution, Prime Minister of Uganda as a champion for Artificial Intelligence, Central Bank Governor of Kenya as a Fintech champion and financial inclusion, a member of the AUDA/NEPAD High Level Panel on Emerging Technologies.
- Technical Advisory Group: consist of thought leaders and practice leads in the 4<sup>th</sup> Industrial Revolution: UNDP can convene and co-opt into the technical group, leading organizations such as Facebook, Microsoft, World Wide Web Foundation, and Covington & Burling LLP (as leading policy and legal experts on 4IR), AfriLABs, UNDP Accelerator Networks, Global Partnership on Sustainable Development Data, Women in TECH.
- Multi-stakeholder task-teams and collaborations with existing ecosystems for example UNDP Sahel and Border Labs, UNDPAcceleratorLabs, (World Economic Forum- Global Future Council on Global Public Goods for the 4<sup>th</sup> Industrial Revolution, Affiliate Centre for the 4<sup>th</sup> Industrial Revolution-South Africa, Africa Business Council), Global Partnerships on (Effective Financing for Development, Sustainable Development Data, Education), National Committee/Taskforces on AI, BlockChain and 4<sup>th</sup> Industrial Revolution Technologies (Kenya, Uganda & South Africa). The priority will be to begin with Vanguard Countries then expand as necessary.
- Programme Support Unit: comprised of agile and nimble teams populated by consultants and UNDP's
  Digital Advisor in Africa (and other UNDP-RBA teams with a potential connection to the digital strategy)
  to ensure development of knowledge products, communication and network coordination

#### Activity 1:

Support building of capacities and capabilities that enable continuous adoption and use of 4IR technologies.

Africa has been immersed into a technological enhanced world, and will therefore require governments, organizations, businesses and individuals to collaborate in digitalization, where people will have to be skilled, reskilled and upskilled to take part in the digital economy. Industries within the informal sector, that form a majority of Africa's employment base, will be required to quickly join the digital revolution to enable customers digitally access their services. Most of the software and hardware used in Africa are not manufactured, developed or designed to the realities of the continent. The education systems are not tailor-made to adapt to the rapid change of technological development. Conversely, Citizens in Africa are more technologically survy than their governments, creating a mismatch on how services are delivered and how citizens engage with their governments on issues that matter to them. The continent will also require capabilities to acquire digital skills, develop platforms with internationally recognized standards (data protection) for better access and interoperability to reduce the digital divide and create equal opportunities for all.

The main objective of this activity is to bring the **power of new technologies and innovations to some of Africa's perennial problems** by leveraging on technological change (AI, IOT, genetic modification, robotics, and 3D printing) **through digital cooperation**, provide new tools, skills, standards for action in the era of the 4th Industrial Revolution.

The specific actions under this activity are:

- 1. Build & test <u>minimum viable Marketplace Products</u> (collaboration, innovation, tools) that UNDP-RBA, partners can interact and use.
- 2. Develop a <u>set of 4IR Playbooks</u> for guidance and familiarization at the following levels 1) UNDP Corporate 2) Citizens for broader awareness.
- 3. Design a <u>fellowship program</u> that leverages on professionals in successful start-ups and corporates (including the Africa Influencers Initiative) to accelerate adoption of 4IR into AU/RECs and Governments.

The envisioned results is: New strategies, training, toolkits and standards are accessible, affordable and usable by UNDP cooperate, African Governments, Academia, Private Sector, and Innovators. With an expected OUTPUT 1 of: Breakthrough innovations, up-to-date technological capacity and capabilities are available for sustained transformation.

#### Activity 2:

Develop and test model agile governance frameworks that enable adoption and use of 4IR for development.

The rapid pace of developments of the 4<sup>th</sup> Industrial Revolution and its technologies render current policy making processes and practice inadequate. These emerging technologies are rapidly evolving, making policy making play catch-up and therefore, difficult to regulate or manage. Furthermore, africa's policy and decision makers do not possess the requisite skills to navigate this ever-changing terrain of technology governance.

This activity is aimed at **fostering digital corporation** by leveraging on significant commitments in the area of policy making that strengthens Africa's adaptive capability (**agile governance**, **data**, **infrastructure**, **capacity**) in the use of emerging technologies by Governments, academia, private sector, and Development Partners.

The specific actions under this activity are:

- 1. Undertake a series of <u>policy labs to develop, test and iterate</u> agile policy-making tools (regulatory sandboxes, model legislations, public-private data sharing agreements) and mediate collaborations between regulators and innovators/tech-companies, on key priority sectors.
- 2. Constitute a <u>High-Level Group</u> of champions at the political, academia and industry level to advocate for adoption of 4IR and provide 'air-cover' or 'over-cover' for early wins, and host at least (1) inperson meeting.
- 3. Develop a policy maker 4IR playbook.

Under this activity, the envisioned **OUTPUT 2** are increased access to innovative 4IR policies that anchor an innovation culture that sustains development of solutions for citizens, innovators and governments leading to a desired result of a favourable policy and regulatory environment that unlock the full potential of digital transformation for development.

#### Activity 3:

Accelerate and nurture research and development capabilities that produce usable knowledge, products and disseminate evidence base on 4IR application.

The 4<sup>th</sup> Industrial Revolution and its disruptive effects is drastically transforming business operations within academia, public and private sector. Due its relative newness and rapid acceleration of 4IR, there is insufficient knowledge regarding its potential use, adoption and application, especially in the catalyzing development priorities such as SDGs and Agenda2063. The initiative through research, evidence and learning will seek to explore and understand the 4IR readiness, efficacy of current 4IR processes and innovations, potential opportunities to harness its various technologies, investments in data, energy etc required (including financial, human resource etc).

The 4<sup>th</sup> Industrial Revolution also requires the capability to predict and respond, almost in near real time to mulitiple challenges facing the African continent. This required the of a **Development Intelligence Platform to** create the arena for honest data driven conversations. Development intelligence is about harnessing the power of data from multiple sources, including citizen generated data, official data and big data for better decision making. The initiative however challenges the easy assumption that good data leads to better decisions, noting that right application of data depends largely on access to the evidence, objective analysis, insightful interpretation, development context and the political will for change. The forthcoming industrial revolution is being ushered in by powerful corporations, institutions and individuals, many with vested interests and this creates the scene for new contestations in Africa, that may hinder or accelerate development visions.

The specific actions under this activity are:

- 1. Development of a <u>4IR readiness index</u>
- 2. Development of a framework for the <u>State of the 4IR in Africa</u> Report.
- 3. Development of <u>Policy brief and advisories on investments</u> required to catalyze adoption and use of 4IR.
- 4. Document 5 use-cases of successful deployment of 4IR for Development.
- 5. Curate a development intelligence platform.
- 6. Communication and dissemination of these knowledge products.

Under this activity, the envisioned **OUTPUT 3 will be in the form of scaling up initiatives and business models** that leverage on tested evidence leading to utilization of data/insights as the basis for decision-making and action on investments, infrastructure, capacity etc that assures resiliency in the adoption and use of 4IR. For instance, Africa Leading 4IR will work with lead countries (Uganda, Kenya, South Africa) on their National 4IR Taskforce processes.

#### Activity 4:

Catalyze actions on resourcing and building resiliency around 4IR Technologies for public goods.

The rapid pace of change characterizing 4IR requires a whole of society approach; ensuring that no sector is left behind. The initiative will invest in strategic communications work to promote the objectives of Africa leading 4IR, build a community of people working to identify/share more solutions, evidence and opportunities for collaboration. UNDP will use a lifecycle approach to anchor a network, driven by African experts and organization at the cutting edge of 4IR.

This will be supported by robust communication strategy, leveraging on UNDP-RBA online presence and social media channels. The project will set up virtual communities of practice (COPs), creating a learning community and actively sharing knowledge on 4IR. It will host <u>catalyzing workshops</u>, <u>Partner (donor & investor) roundtable discussion</u> to showcase areas of support and investments (in UNDP and across member states). As a strategy, UNDP will identify leading experts within the 4IR space in Africa and diaspora and co-opt them into a Technical Advisory Group, helping to shape the 4IR agenda and eventually the Digital Strategy. UNDP will seek to ensure presence in other important spaces (World Economic Forum on Africa), AU Summit, REC's convenings, Global Partnership on Sustainable Development Data Festival.

The action under this activity include:

- 1. Development of marketing collateral and brand for Africa 4IR
- 2. Host 3 virtual high-level group meeting and at least one physically.
- 3. Host innovation challenges collaboratively with Governments and Innovators
- 4. Organize quarterly Technical Advisory Group meetings
- 5. Co-create a <u>Digital regional project</u> for UNDP-RBA and partners.

Under this activity, the envisioned OUTPUT 4 will be in the form of renewed urgency and agency in building resiliency around 4IR adoption in Africa through mobilized resources (human and financial) to improve capabilities, knowledge, and attitudes for responsible use of 4IR technologies and innovations for public goods (both within UNDP and its constituency).

#### 4 MANAGEMENT ARRANGEMENTS

This PIP will be implemented by UNDP under Direct Implementation Modality and it will be managed by the UNDP-RBA using the existing management structure of the UNDP Regional Programme for Africa, under the guidance of the UNDP Africa Regional Programme Coordinator. The implementation of activities and day-to-day management of the project will be operationalized by the Digital Advisor based in Nairobi and supported by the Digital Consultant. UNDP RSCA/Nairobi Hub will lead operational aspects of programme implementation and will have the overall responsibility for all contracting, procurement and recruitment of consultants where necessary under the PIP.

During the PIP, the Project Board function will be performed by the Advisory Board of the Regional Programme for Africa. As suggested in the PIP, a Technical Advisory Group (TAG) will be formed from leading experts to guide the technical aspects of the initiative.

#### 5 MONITORING

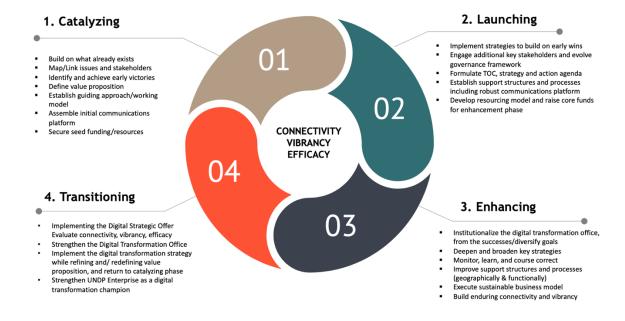
The monitoring functions will be fulfilled by the PIP management and implementation team following the UNDP regular monitoring procedures. Support and guidance will be provided by the RSCA (PMSU and RBM teams), as required. The PIP manager will oversee and review activities to ensure they are meeting the objectives and goals set in the PIP and report to the Regional Programme for Africa Coordinator.

Quarterly progress reports will be prepared for the Regional Programme, and inputs into Regional Programme Annual Progress reports and ROAR will be provided in line with UNDP Programme and Project Management Policy. More frequent informal written and oral briefings will be considered and agreed, including with prospective donors, once the project is launched. At the end of the PIP implementation period, a Final Report will be prepared.

A light M&E Framework will be developed, including a system for monitoring the implementation and results. The M&E system will establish baselines and monitor progress against the set indicators in the RRF, collect lessons learnt and provide the basis for adjusting programming. This will also inform the development of UNDP/RBA Digital Strategy and Programmatic Offer.

#AfricaLeading4IR is essentially an attempt to build UNDPs Influence by driving a vibrant Multi-Stakeholder Partnership, where the project will seek to evalute the network effectiveness in the following three broadoverlapping categories:<sup>3</sup>

- 1. **Network Vibrancy**: The Health of the #AfricaLeading4IR network along multiple dimensions (participation, network form, leadership, capacity, etc.)
- 2. **Network Connectivity**: Nature of relationships within the network, do we have everyone who needs to be included, the quality of these connections, effectiveness in bridging differences, level of interconnectedness and reach.
- 3. Network Effects: Progress of the network in identifying and achieving its outputs, outcomes and impact?<sup>4</sup>



<sup>&</sup>lt;sup>3</sup> Netgains Handbook.

<sup>&</sup>lt;sup>4</sup> Monitor Institute, 2009

#### ANNUAL WORK PLAN

## **Year: 1 DECEMBER 2020 – 31 DECEMBER 2021**

EXPECTED OUTPUTS	PLANNED ACTIVITIES* List activity results and associated actions	QUITDUT	TIMEFRAME				RESPONSIBLE	PLANNED BUDGET		
			2020/2021							
		OUTPUT INDICATORS	Q1	Q2	Q3	Q4	PARTY	Funding Source	Budget Descriptio n	Amount
Output 1: Breakthrough innovations, up-to- date technological capacity, toolkits and capabilities are available and sustained.	Activity 1:  Support building capacities and capabilities that enable continuous adoption and use of 4IR technologies.  1.1 Mapping of capacities and capabilities within targeted member states 1.2 Build & test minimum viable Marketplace Products 1.3 Develop a set of 4IR Playbooks for UNDP Corporate and Citizens. 1.4 Design a training curriculum with certification for Public Sector at middle and higher-level management 1.5 Design a fellowship program	<ul> <li>Number of toolkits and learning materials</li> <li>Number of products, materials shared in the marketplace (including connections made.</li> <li>Number of persons trained on 4IR</li> <li>Playbooks launch and aired through media channels</li> </ul>					UNDP RSCA		Product developme nt; Technology platform developme nt Research Costs (consultant s) Training Developme nt / Facilitators	\$450,000
Output 2: Increased access to innovative responsible 4IR policies that support development for citizens.	Activity 2:  Develop and test model agile governance frameworks that enable adoption and use of 4IR for development.  2.1 Undertake a series of policy labs to develop, test and iterate agile policymaking.  2.2 Constitute a High-Level Group of champions and host a workshop.  2.3 Produce a policy maker 4IR playbook.	<ul> <li>Number of virtual policy lab convenings</li> <li>Number of high-level champions advocating for responsible 4IR</li> <li>High level launch of the 4IR playbook</li> <li>Number of policymakers utilizing/making reference to 4IR playbook.</li> </ul>					UNDP RSCA		Convenings Research and Product Developme nt Communica tion and Design	\$500,000