



Internal Evaluation Report

DIAL 1.0 Endline Evaluation

Prepared for: Digital Impact Alliance
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Authors & Acknowledgements

Limestone Analytics LLC

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Acronyms

A4AI	Alliance for Affordable Internet
AFI	Alliance for Financial Inclusion
API	Application Programming Interface
ARECOM	<i>Autoridade Reguladora das Comunicações de Moçambique</i>
AU	African Union
BMFG	Bill & Melinda Gates Foundation
BTCA	Better Than Cash Alliance
CBA	Cost-Benefit Analysis
CEA	Cost-Effectiveness Analysis
CGAP	Consultative Group to Assist the Poor
CQA	Collaborative Qualitative Analysis
CSO	Civil Society Organization
CUA	Cost-Utility Analysis
DAC	Development Assistance Committee
DDA	Digital Donors Anonymous
DE4A	Digital Economy 4 Africa
DFID	Department for International Development (now FCDO)
D4D	Data for Development
DIAL	Digital Impact Alliance
DN	Digital Nation
DSP	Digital Service Provider
EIU	The Economist Economic Intelligence Unit
FCDO	Foreign, Commonwealth and Development Office (formerly DFID)
FGD	Focus Group Discussion
Fintech	Financial Technology Provider
FSDA	Financial Sector Deepening Africa
GSM	Global System for Mobile Communications
GSMA	Global System for Mobile Communications Alliance
ICT	Information and Communications Technology
ICT4D	Information and Communications Technology for Development
ID4Africa	Identity for All in Africa
ID4D	Identification for Development
IFC	International Finance Corporation
INCM	<i>Instituto Nacional das Comunicações de Moçambique</i>
IO	Intermediate Outcome
IoT	Internet of Things
ITU	International Telecommunication Union
KI	Key Informant

KII	Key Informant Interview
LMIC	Low- or Medium-Income Country
M4D	Mobile for Development
MEL	Monitoring, Evaluation and Learning
MNO	Mobile Network Operator
MSA	Market Systems Analysis
NDA	Non-Disclosure Agreement
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
OSC	Open Source Centre
OSS	Open Source Software
PDD	Principles for Digital Development
PO	Primary Outcome
RF	Results Framework
ROI	Return on Investment
SDGs	Sustainable Development Goals
SIDA	Swedish International Development Cooperation Agency
SIM	Subscriber Identification Module
SME	Subject Matter Expert
SMS	Short Message Service
SROI	Social Return on Investment
SSA	Sub-Saharan Africa
STK	SIM Application Toolkits
ToC	Theory of Change
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
UNICEF	United Nations Children's Fund
UPI	Unified Payments Interface
USAID	United States Agency for International Development
USSD	Unstructured Supplementary Service Data
VAS	Value-Added Service
VC	Venture Capital
VfM	Value for Money
WDR	World Development Report
WTP	Willingness to Pay

Executive summary

The Digital Impact Alliance (DIAL) was established in 2016 by three founding donors (the Bill and Melinda Gates Foundation, Sida and USAID) to advance digital inclusion by fostering a more efficient and effective digital ecosystem. This endline evaluation of DIAL's 1.0 Strategy was conducted by a team of external consultants from Limestone Analytics between September 2020 and February 2021, based on desk review of 237 documents and the insights of 70 key informant interviews (KIIs) and focus group participants. The evaluation also assesses DIAL's work against the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) [evaluation criteria](#) of relevance, coherence, impact, effectiveness, efficiency, and sustainability. The summary findings of the evaluation in response to these questions are laid out below, with more detail provided in the main document. The purpose of the evaluation is to understand the impact and effectiveness of DIAL throughout the course of its first several years of implementation and provide recommendations for the new [Digital Beacons](#) strategy.

The evaluation team's findings are structured around the four key evaluation questions (EQs):

- **EQ 1: What changes have occurred in the digital ecosystem since October 2016 and since the start of the 2020 COVID-19 pandemic?**
- **EQ 2: Which of these changes are a direct or indirect result of DIAL's work?**
- **EQ3: Which of DIAL's interventions have been most effective in creating these changes?**
- **EQ 4: What can DIAL learn or adopt from these experiences as it moves into a new strategy?**

The new strategy places countries and their digital transformation at the center of DIAL's work. These shifts received overwhelming support from our key informants. As DIAL shifts to its new strategy, the evaluation has surfaced a number of issues that DIAL should consider as it moves forward.

Strategy and operations

Remain sector-neutral but incorporate market perspectives and enhance relationships with organizations that are extending the basic building blocks of digital inclusion, including digital financial services and digital ID. As DIAL shifts to its Digital Beacons strategy, it should continue to advocate for a sector-neutral, building-block approach to its work. This will be particularly important as it advances a whole of government approach to digitization. Those players would likely benefit from a deeper understanding of the [Principles for Digital Development](#) (the Principles) and DIAL's other programs.

Take a more explicit market facilitation approach to programming. Understanding the drivers of change for expanding access to digital services and developing interventions to shift those drivers will be critical as DIAL moves to implement its new strategy.

Strengthen Theories of Change and results framework. The new theories of change and results frameworks should be examined through the [Financial Sector Deepening Africa \(FSDA\) framework](#) to assess for evaluability. As DIAL moves to country-specific programming, it will be easier to define specific digital inclusion and digital transformation targets for inclusion in the framework.

Continue to address the challenges in the digital ecosystem that have been exacerbated by the COVID-19 pandemic, including the digital divide and data security and privacy.

Stakeholder engagement

Continue to engage donors and offer a platform for greater exchange beyond the Digital Donors Anonymous (DDA). Donors appreciate the role that DIAL plays in helping them to think through opportunities for enhanced digital development. DIAL should consider expanding this role through a greater engagement beyond the regular calls, including facilitating learning events.

Further clarify DIAL's role and unique selling proposition (USP) in the ecosystem globally and in-country, particularly as it relates to the digital marketplace. Given DIAL's size and scale and that of others in the sector, DIAL could benefit from specifying its role in an increasingly crowded digital ecosystem. This could include building capacity of governments to develop digital strategies and roadmaps, advancing user centric approaches or advocating for responsible data usage. It should also clarify what it will not do and how it will partner with others in the ecosystem.

Develop an influencing strategy to target messaging and communications to specific audiences. For DIAL's advocacy and demonstration work, DIAL should do a deeper analysis of the ecosystem, including the digital marketplace to ensure that communications products speak directly to the needs of the target audience. It should also continue to publish on the theme of responsible data use as it drives traffic to DIAL's website. DIAL has indicated that they wish to continue their approach of supporting from behind through a white-labeled approach. DIAL and its funders should be aware that such an approach may make a future evaluation of DIAL's influence challenging.

Examine DIAL's operating model for in-country work: For DIAL to truly be effective in advancing whole of government digital solutions, it will need to think about how best to deliver this support. Respondents in Malawi noted the benefit of having strong, neutral, technical staff based in-country with effective working relationships with key stakeholders. This requires time, on the ground presence, and trust, which is hard to build remotely.

Advance donor coordination in-country. Informants noted the need for greater coordination and coherence in-country as the number of players in the digital ecosystem continues to grow, including technology firms that are setting up their own charitable programs. DIAL's deep technical expertise and trusted relationships can play a critical role in helping countries make effective choices as they embark on their digital transformations.

Thought leadership

Consider an effective balance between demonstration projects and research. Many informants highlighted the importance of practical, on the ground examples of projects that can help to drive advocacy and policy dialogue.

1. Background and context

1.1 Introduction

The Digital Impact Alliance (DIAL) was established in 2015 by the Bill & Melinda Gates Foundation (BMFG) and the international aid departments of the US (USAID), UK (formerly DFID, now FCDO) and Sweden (SIDA). The founding donors established DIAL based on the hypothesis that a more efficient and effective digital ecosystem leads to more inclusive digital societies. The **roles** DIAL has played, **stakeholders** it has engaged with, **ways of working**, and **goals** are outlined in its Theory of Change (ToC) shown in **Figure 1.1**.

Of particular interest for this evaluation is the **diversity of stakeholders** and the **underlying assumptions about how change happens in the ecosystem**. These are themes that emerge throughout the evaluation. DIAL’s ToC and results framework serve as the framework for analysis in this evaluation,¹ particularly when examining the effectiveness of DIAL’s work and whether DIAL achieved its goals.

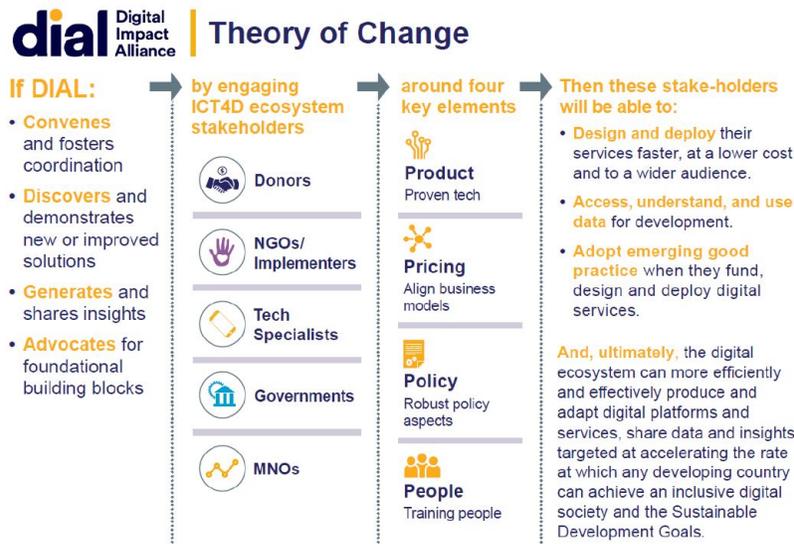


Figure 1.1: DIAL 1.0 re-framed Theory of Change² (DIAL 2020-1)

1.2 Establishment of the Digital Impact Alliance

When DIAL was created, it was envisioned as a vehicle for its funders to pool technical expertise and strategic funding. The original founding documents highlight a need to overcome the siloed nature of the digital for development space. This would be achieved by

¹ Refer to Annex 1 for assessments of DIAL’s ToC and results framework indicators.

² The ToC was re-framed in FY19 to align with the SDG agenda.

addressing cross-sectoral needs and repurposing digital for development products and services across different development sectors (UN Foundation, 2014).

The four major donors that funded DIAL from 2015 through 2020 were BMGF, UK’s Department for International Development (DFID),³ SIDA, and USAID. **Figure 1.2** shows the level of funding that was committed and obligated to DIAL by each of these donors over the course of DIAL’s 1.0 strategy.

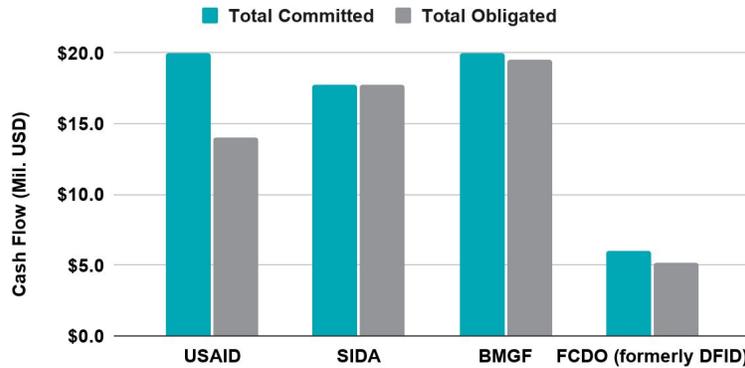


Figure 1.2: Breakdown of funding commitments and obligations from DIAL’s donor⁴

1.3 Defining the ‘digital ecosystem’

The 2018 Baseline study defined the digital ecosystem as “an interconnected web of actors working cross-functionally toward digital inclusion” (Genesis Analytics and DIAL, 2018). For this analysis, the evaluation team has taken a broad perspective of the digital ecosystem and views it as existing in two separate yet linked realms. First, the wider **digital marketplace** where commercial competition between mobile operators has driven mobile access, usage and value-added services such as digital financial services. The second realm is the **digital for development ecosystem** that has sought to encourage effective use of mobile channels and data to deliver services or support policy and planning by development actors such as NGOs. These two realms overlap but have different forces driving their evolution. The digital marketplace is mostly driven by competition, whereas the digital for development ecosystem is driven by external donor funding. Of note is that DIAL’s stakeholders noted above occupy different parts of the ecosystem, with some organizations overlapping in both, most notably MNOs. Also of note is that both parts of the ecosystem have a critical role to play in achieving the SDGs through digitization.

³ DFID has since been replaced by the Foreign, Commonwealth and Development Office (FCDO).

⁴ FCDO has committed \$20M but its pledge goes through 2024 so what was actually committed through 2020 was only \$6M.



Figure 1.3 : The digital for development ecosystem and the digital marketplace

1.4 Evaluation scope

The purpose of this evaluation was to assess the overall impact of DIAL's first strategy, covering October 2016 through December 2020, and its programs on the digital ecosystem. DIAL's first strategy is referred to as 1.0. During the course of the evaluation DIAL developed its new strategy, *Digital Beacons*, also referred to as 2.0. Findings and recommendations have been developed with the new strategy in mind. The evaluation and its instruments were crafted to answer four main evaluation questions:

1. What changes have occurred in the digital ecosystem since October 2016, and since the start of the 2020 COVID-19 pandemic?
2. Which of these are as a direct or indirect result of DIAL's work?
3. Which of DIAL's interventions have been most effective in creating these changes?
4. What can DIAL learn or adopt from these experiences as it moves into a new strategy?

The audience for this evaluation report is primarily the DIAL team and its funders. The evaluation team recognizes that other organizations focusing on digital for development, including DIAL's current and future partners may be interested in the findings, thus a public facing version of this report will be made available in February 2021.

1.5 Evaluation methodology

Evaluating an organization's impact on an ever changing ecosystem and attributing that change to the organizations' activities is complex, particularly if the ecosystem is filled with a variety of public, private, not-for-profit and donor organizations. Shifting ecosystems through programming takes time and makes evaluating those shifts challenging. DIAL is still a young organization, with only five years of experience since it first became operational, when the CEO was hired in February 2016.

To address the challenges of complexity, divergent stakeholders and influencers and the short time to produce impact, the evaluation used a mixed-methods *theory-based* approach. The approach relied heavily on key informant interviews of DIAL's partners and digital thought leaders and secondary data to answer the evaluation questions.

The evaluation team conducted 70 structured key informant interviews,⁵ held 2 focus group discussions with DIAL staff and stakeholders, and reviewed over 200 documents shared by DIAL. The evaluation examined changes in the digital ecosystem by speaking with both DIAL’s funders, partners, and staff, as well as a variety of thought leaders in the digital inclusion space who were not DIAL’s partners. Responses were coded and analyzed against the evaluation framework agreed with DIAL. The evaluation also examined DIAL’s financial records and website analytics data to complement the interviews.

1.3.1 Alignment with OECD DAC criteria

To answer the evaluation questions, the team considered the alignments in between each of the evaluation questions and the OECD DAC evaluation criteria (OECD, 2019), summarized in **Table 1.1**. This relationship helped the team in framing the analysis and results when conducting the evaluation.

Table 1.1: Alignment of Evaluation Question and OECD DAC Criteria

Evaluation Question	Relevant OECD DAC Evaluation Criteria
What changes have occurred in the digital ecosystem since October 2016, and since the start of the 2020 COVID-19 pandemic?	Context and Ecosystem
Which of these are as a direct or indirect result of DIAL’s work?	Coherence, Relevance, and Impact
Which of DIAL’s interventions have been most effective in creating these changes?	Effectiveness and Efficiency
What can DIAL learn or adopt from these experiences as it moves into a new strategy?	Sustainability

1.3.2 Limitations with the methodology

There are two limitations with the methodology. First, the mixed methods approach relied heavily on qualitative interviews covering a range of perspectives. Sometimes viewpoints were not aligned, but the team has made an effort to identify key points both of consensus and disagreement. Second, in analyzing program and financial data, the team was limited by the level of disaggregation available in the financial reports to assess the effectiveness of different interventions. The team has noted these limitations in the appropriate sections.

⁵ Detailed breakdowns of interview participants by stakeholder group and relationship to DIAL are shown in Figures A.3 and A.4 in Annex 7. Table A.10 provides definitions of each type of relationship to DIAL that was defined.

2. Evaluation findings

2.1 Context and ecosystem: What changes have occurred in the digital ecosystem since October 2016 and since the start of the COVID-19 pandemic?

The findings presented here describe the digital ecosystem from the period before 2016, from 2016-2019, and since the COVID-19 pandemic in 2020. These descriptions are based on a literature review and interviews with key informants, including global thought leaders and technology specialists. The purpose of this section is to understand the evolution of the digital ecosystem before and during DIAL’s existence and to understand key drivers that contributed to these changes. This analysis is used as a basis for framing DIAL’s influence in the ecosystem, which is explored in greater detail in sections 2.2.- 2.4.

Table 2.1: High-level key findings - the good and the bad in the digital ecosystem

Pre-DIAL	Progress (2016-19)	Pandemic	Challenges
<ul style="list-style-type: none"> ➤ Subscribers ✗ Poor policy ✗ Misaligned funding ✗ Software immaturity 	<ul style="list-style-type: none"> ➤ Mobile Money ➤ Mobile Internet ➤ Governance ➤ Players ➤ Donor support and alignment 	<ul style="list-style-type: none"> ✓ Clear value ✓ How, not why ✓ Utilization ✗ Not ready 	<ul style="list-style-type: none"> ➔ Subscribers ✗ Digital divide ✗ Privacy ✗ Security

2.1.1 Digital ecosystem pre-2016

Pre-2016, DIAL’s founders recognized the potential for leveraging mobile phones to deliver various services, but believed that barriers prevented this potential from being realized. As noted in the original Mobile Hub (the Mobile Hub was re-named Digital Impact Alliance in 2015) proposal:

“Few technologies have diffused as fast and as far as the mobile phone – especially amongst the poor. Whereas ten years ago few in the emerging world had access to mobile devices and service, now over 70% of individuals either own or have access to a mobile phone in a majority of African and South Asian countries. The rapid spread of mobile phones in the developing world creates novel opportunities for people to participate in a digital economy but also can transform how governments, donors, and the private sector serve the needs of the poor.” (UN Foundation, 2014, 2)

DIAL's 2016 strategy noted a variety of barriers in the ecosystem that prevented the rapid growth and adoption of mobile-enabled digital for development tools. These included:⁶

- fragmentation in the ecosystem;
- misaligned funding approaches and financial incentives;
- poor economic incentives and policy frameworks;
- limited capacity for valuation of digital services to support decision making;
- limited reach of technical infrastructure; and
- software immaturity.

2.1.2 The digital ecosystem from 2016 - 2019

During the period between 2016 and early 2019, the digital marketplace saw an increased focus by large mobile players on emerging markets, largely driven by mobile money.

After nearly a decade of rapid growth, mobile subscriptions' year-on-year growth rates fell for the first time, from 5.6% to 4% in 2016 (GSMA 2017). This fall led the entire mobile industry to focus on growth opportunities in developing markets, especially parts of Africa and Southeast Asia, by capitalizing on the growing popularity of mobile money.

The State of the Sector Report by the GSMA notes that in 2019, 40 mobile money deployments had over 1 million active users, an increase from 15 deployments in 2014. Six deployments had reached 5 million active users. Tech specialists, MNOs, and global thought leaders agreed that the private sector (particularly the financial sector) and increased end-user demand were two important drivers of change in the digital ecosystem over this period. These two drivers were seen as mutually and positively reinforcing. Four of the tech specialists interviewed believed that the private sector is more adept at bringing innovations, tools, and software to scale than the public and aid sectors. As one global tech specialist and DIAL boundary partner⁷ put it, "the tech companies are the vanguard of things."

⁶ DIAL 2016

⁷ Refer to Table A.10 in Annex 5 for a full definition of 'boundary partner.'

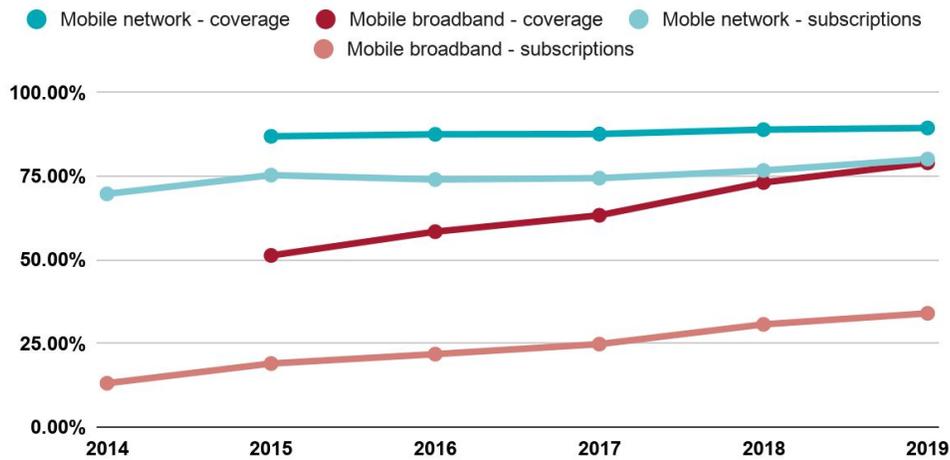


Figure 2.1: Mobile access trends in Sub-Saharan Africa, 2014-19 (ITU 2019)

Global mobile-broadband subscriptions globally went from 4% in 2007 to nearly 70% in 2018 (ITU 2020). By the end of 2018, there were over 465 million unique subscribers in Sub-Saharan Africa, with 23% regularly using mobile Internet (ITU 2020). This trend resulted from a combination of factors, including falling technology prices, increased investment by MNOs to improve network capacity, and governments prioritizing access to remote areas and under-represented segments.

In the digital for development ecosystem, there was an increasing realization, strongly influenced by the [2016 World Development Report \(WDR\) on Digital Dividends](#) and exemplars such as Aadhar in India, of the opportunity afforded by mobile and a growing recognition of the importance and centrality of national governments in driving socially responsible digital transformation and data use. Seeking broader collaboration, coordination with national efforts, and market intelligence on available digital for development solutions, a growing digital for development community of practice emerged among donors, NGOs, technology companies. Several informants view the 2016 WDR as an important influence in changing the narrative on digital for development to focus on holistic, government-led programming. Among KII informants, 2016 is widely cited as a critical juncture where the ecosystem began to converge around this recognition for the need to cooperate.

“I think the [2016 World Development] report was great because it ... touched on their analog compliments and how those underpinned the broader development benefits and talked about strengthening regulations and digital skills and inclusion, and ensuring institutions are accountable.”

- KII with Direct Funder

The expansion of government-led digital initiatives such as Aadhar in India increased the focus on national digital transformation strategies and the important role that the digital marketplace and collaboration amongst stakeholders can play in delivering government services such as social assistance payments. As Aadhaar in India reached scale, followed by the unified payments interface (UPI), it demonstrated the effectiveness of open architecture and unified investment into digital public goods (the “tech stack”). Increasingly, governments are delivering social programs, including employment insurance and other transfers through mobile money channels.

There was more attention on digital for development during the period of DIAL 1.0.

Throughout the period of DIAL’s strategy, numerous development actors emerged to foster and guide digital development efforts, focusing on specific issue areas, typically with a global or regional remit. These actors introduced support to policymakers and regulators in arenas that were previously dominated by strong private sector voices, including those of MNOs, telecom equipment providers, and technology companies (e.g. Facebook, Google, Microsoft, Cisco). The Broadband Commission and the Alliance for Affordable Internet (A4AI) set out to advance digital inclusion, often bringing the private sector to the table as partners. GSMA’s Mobile for Development (M4D) program and UN Global Pulse started to advocate for how data and innovation could better serve low-income people (UN Global Pulse 2017). The Better than Cash Alliance (BTCA) was set up to drive digital payments. The World Bank’s Identification for Development (ID4D) was established to address a key barrier to accessing all digital services - digital identity. Other initiatives were in their infancy, such as Digital Nation (DN) 5 and Smart Africa, which were established to demonstrate how governments could achieve digital transformation by learning from trailblazers in the area. Finally, in 2017 Digital Square was established which encouraged more efficient investment in digital health technology solutions co-investment. In particular, UNCTAD eTrade4All and the African Union (AU) have promoted trade as an important enabler of digital transformation through data sovereignty and cross-border flows of data. Smart Africa, AU, ITU, the World Bank, DE4A and the e-Governance Academy have also focused on national digital economies and transformation strategies through whole-of-government approaches to digital transformation. An overview of actors and their area of operations is summarized in **Figure 2.2** below.

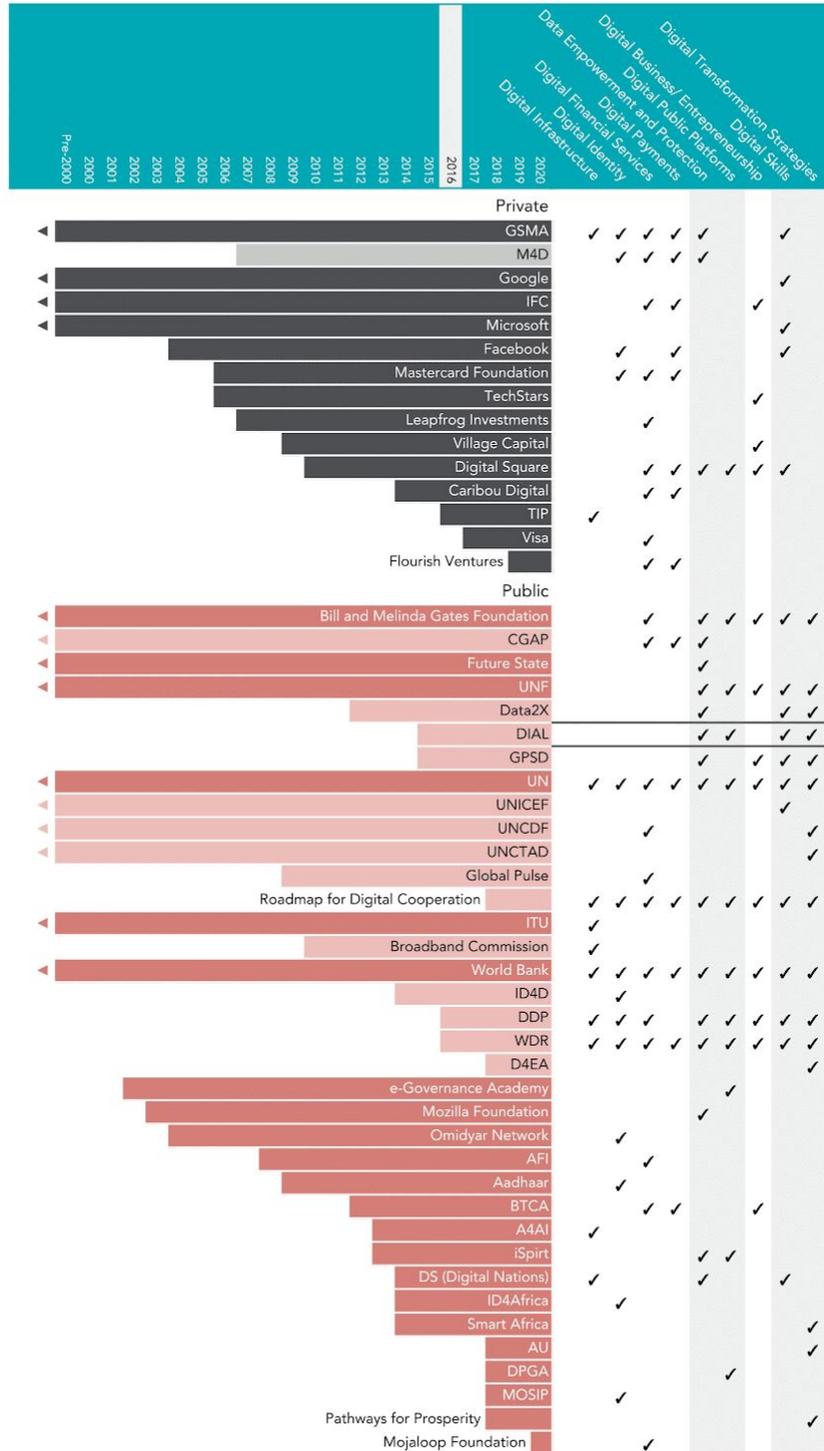


Figure 2.2: Major players working on different pillars of the Digital Economy over time

The cumulation of these initiatives was the UN Secretary General's High Level Panel of Experts on Digital Cooperation 2019 report proposing modalities for working cooperatively across sectors, disciplines and borders to address challenges in the digital age. The [United Nations' \(UN\) recent Roadmap for Digital Cooperation](#) now clearly makes the case to “strengthen cooperation in the digital space among governments, the private sector, civil society, international organizations, academic institutions, the technical community and other relevant stakeholders.” Throughout the KIIs, there was considerable support for multi-stakeholder collaboration and cooperation between MNOs, donors, NGOs and technology companies. This was cited as a significant behavioural shift compared to previous years.

Amidst these trends, there has been a growing interest in and capacity to support digital for development amongst donors. DIAL was originally founded by donors, and in some perspectives, to help coordinate donors. The list of new initiatives highlighted above shows the increasing importance of digital initiatives amongst donors. Three of DIAL's bilateral donors and another five donors that DIAL has supported refreshed their strategies during the period of DIAL 1.0 and some of the donors interviewed indicated that the sector is growing and becoming more sophisticated. Several donors have established cross-sector digital units that help to ensure that digital initiatives in different programming sectors are advancing the same standards and overcoming the sectoral silos that often plague digital for development initiatives.

These shifts are relevant to DIAL's new strategy in that it highlights the need to support partner governments to help coordinate the various interventions and to advise on the best choices for a whole of government digital transformation in the face of competing pressures, partners and approaches.

2.1.3 COVID-19 pandemic and digitization

The pandemic demonstrated very clear value for digital tools, channels, and data in both the digital marketplace and the digital for development space. The speed at which programs, such as emergency response cash transfers, have taken place has clearly demonstrated the potential of digital solutions, positioning digital transformation to ‘sell itself.’ A tech specialist confirmed this perspective, saying “COVID has allowed us to amplify our advocacy points ... and we have been able to get more interest and sustained movement from ministers and policymakers in our space.” Another technology specialist described the impact as “six years of transformation happening in six months... really across all aspects of the way societies and economies work, not just in transactions.”

"So we actually have seen... more people being more intentional about data, wanting to collect it and then wanting to use it to help manage... decision-making and prioritization of their response"

- KII with Global Thought Leader, DIAL Boundary Partner

"We're always pushing [governments] to adopt [digital solutions], so now it's much easier, but now there is more to do because the demand is picking up, for support, assistance, easier to reach out to communities. Now with ICT you see more positive responses to programs. Accelerating digital in all ways."

- KII with Tech Specialist, Direct Partner

On the other hand, conversations with government informants may suggest a more limited impact from the pandemic than what global digital ecosystem actors have anticipated. When asked about how COVID has affected implementation and operations, government informants' most common example was simply the use of Zoom for virtual meetings. All four government informants in Malawi and two in Mozambique cited this as the biggest change. Undoubtedly, the COVID-19 pandemic will have impacts on the digital ecosystem and how actors operate within it. The most tangible short term impact cited was loss of funding, especially for open source projects. However, governments, NGO and tech practitioners, as well as DIAL staff noted that the changes were not as great as expected. A staff member stated, "I saw a massive expectation that we would need to pivot everything to COVID and that digital would be having to do lots and lots of things," but that it has not occurred. Rather, "in many of the host countries where we work, COVID has not had the sort of catastrophic effects in a known way that it has here." It is currently too early to see how this will play out over time.

Digital transformation has risen to the top of the agenda for several informants and the focus of discussion is on the "how" of digital transformation rather than the "why." A donor informant stated that the sense of urgency from COVID "has driven more collective action, investment, and more attention to digital," but that this shift has been "driven by necessity rather than opportunity." Despite the optimism that many stakeholders felt about growing government interest in digital transformation, there were also many reminders about the need to "do it right," in ways that are locally owned and led.

"The whole conversation has changed. It is now exceedingly clear that digital preparedness is essential."

- KII with MNO informant

2.2 Which of the changes in the digital ecosystem are a direct or indirect result of DIAL’s work?

With the broader context of the digital ecosystem in mind, the evaluation sought to understand which changes in the ecosystem directly or indirectly result from DIAL’s work. This section explores how well DIAL’s work fits into the ecosystem, using the characterization of the digital marketplace and the digital for development ecosystems noted above in Section 1.2. Furthermore, this section discusses whether DIAL’s work met the needs of its clients and partners, and what difference it made. This section considers the lenses of coherence, relevance and impact as defined by the OECD DAC.

Table 2.2: OECD definitions of coherence, relevance and impact

Criteria	Description (OECD, 2019)
Coherence	Effective development programs should fit into their context by demonstrating both internal and external coherence. Internal coherence indicates the synergies and interlinkages between the program and other interventions carried out by the same institution / government, as well as the consistency of the program with the relevant international norms and standards. External coherence considers the consistency of the intervention with other actors’ interventions in the same context. This includes complementarity, harmonization and coordination with others, and the extent to which the intervention adds value while avoiding duplication of effort.
Relevance	The extent to which the intervention objectives and design respond to beneficiaries’, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.
Impact	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects

As noted above, DIAL entered the ecosystem at a time when there was an increasing focus on the opportunities afforded by digital technologies and a proliferation of donor-funded initiatives. **Through KIIs with a wide variety of stakeholders, including several senior digital ecosystem players, we found two distinct groups of informants with different perceptions of DIAL’s coherence, relevance and impact.**

- **DIAL-Connected Partners:** Key informants who have worked directly with DIAL had a very positive perspective on DIAL’s work and their engagement with DIAL. However, DIAL Connected Partners were generally only aware of the work related to their partnership. Several informants also noted DIAL’s thought leadership and contribution to research, standards, best practices, and frameworks.
- **DIAL-Disconnected Thought Leaders:** Key informants who had not worked with DIAL but were senior thought leaders in the digital ecosystem, particularly in the area of digital finance. They were generally unclear of DIAL’s mandate and were less

familiar with DIAL’s influence and work. The majority had heard of DIAL or presented alongside them at conferences. Still, most found it difficult to articulate DIAL’s unique role and DIAL’s activity on particular issues in the digital ecosystem.

Table 2.3 summarizes the findings for EQ2 color-coded based on the nature of the finding with the more positive findings in blue and the more negative ones in red.

Table 2.3: Summary of findings for EQ2

Category	Finding
Overall impressions of DIAL	DIAL is slowly establishing itself as both an advisor and practitioner in the digital for development ecosystem, which will help it achieve greater authority and influence in the future.
	DIAL was perceived as creating efficiencies for multiple stakeholders, both NGO and government, in both Malawi and Mozambique.
	DIAL had limited engagement and impact with the digital marketplace and the growing dynamics of rapidly expanding digital payment channels.
	DIAL advanced donor cooperation and best practices on supporting digital for development initiatives, and is well positioned to take the lead in encouraging pooled funding to support digital transformation.
	DIAL’s programming did not have known negative impacts but DIAL needs to be mindful of the risks and downsides of digital transformation.
Proven Software and Technology	DIAL’s advocacy for the adoption of sector-agnostic ICT4SDG building blocks was lauded by some, but critiqued by others as impractical.
	Informants that engaged with DIAL on Open Source Software (OSS) noted that DIAL has effectively positioned itself as a thought leader in this space, with more focus on humanitarian costs and sustainable development than other actors in the ecosystem.
	The sustainability and efficacy of open source in digital for development projects is disputed.
Mobile distribution channels	DIAL could have expanded its mobile distribution channels research to include government demand and the growing opportunities of mobile money products as a channel for related information services.
Responsible use of network data	Despite DIAL’s efforts, MNO’s are not incentivized to make network data available for external D4D initiatives.
Insights and Impact	DIAL’s role as steward of the Principles for Digital Development advanced best practices in the digital for development sector.
Sustainability	Some of the impacts of DIAL’s initial strategy will last as it moves into its new Digital Beacons strategy.
	The sustainability of the Open Source Center grantees remains a concern amongst informants in the sector.
	DIAL’s shift to country-focused programming helped to drive impact in its first

strategy and will likely continue to do so in the new strategy.

2.2.1 Overall Impressions of DIAL

Digital for development ecosystem

Finding 1: DIAL is slowly establishing itself as both an advisor and practitioner in the digital for development ecosystem, which will help it achieve greater authority and influence in the future.

Overall, and particularly for the DIAL Direct Partners, the Principles and the ICT4SDG framework were the most frequently cited examples of impactful contributions to the digital ecosystem.

DIAL was also perceived as providing very valuable guidance that helped accelerate the learning process in both Mozambique and with the health M4D project in Malawi. In Malawi, where DIAL took an opportunistic approach to programming that was able to respond to clients' needs, this was seen as particularly helpful. Informants in Malawi cited the relevance of DIAL's workshops and publications, with one informant noting that they use DIAL reports to understand digital ecosystems and used their data as a reference for the proposals they write. They noted that DIAL's reports are robust and credible. **However, some informants noted that there is a growing sense of fatigue with externally facilitated digital transformation strategy processes that duplicate national efforts.**

“Actually DIAL is in kind of a unique position, you can't really compare what DIAL is doing with NGOs on the ground; they can take the long view, and they can really invest in research because otherwise the risk is that you have many development players with rapid assessments. That's you know, in the end, you don't really get a very clear answer. While, DIAL is in the position to connect the DAS assessments, a key answer...and that's something that NGOs cannot really do...”

- KII with Tech Specialist

Finding 2: DIAL was perceived as creating efficiencies for multiple stakeholders, both NGO and government, in both Malawi and Mozambique.

An NGO working in Malawi cited DIAL as instrumental in helping them establish a competitive procurement process to ensure that MNOs did not replicate inefficient banking systems as they switched to a new digital service delivery platform for

humanitarian aid transfers. DIAL was also able to help the NGO understand the range of solutions and players that were present so that implementers had a full array of options.

Since the start of DIAL, there has been growing interest and use of mobile data to support development interventions. DIAL's experience in Malawi in brokering a partnership between Cooper-Smith, the Ministry of Health and Airtel is held up as an example of effective use of embedded data for development. In KIIs and the focus group, some of the informants highlighted the critical role of DIAL in purchasing the data and brokering the partnerships that made the project a success.

“Close observers of DIAL suggest that DIAL has to try many things to arrive at the new 2.0 strategy, to iterate, learn and move on. Their openness and learning have shown the larger development community where opportunities for digital development exist.”

- KII with MNO

Digital marketplace

Finding 3: DIAL had limited engagement and impact with the digital marketplace and the growing dynamics of rapidly expanding digital payment channels.

Several Disconnected Thought Leaders were unable to identify the impact of DIAL's work and communications products in the digital space. Several were also unable to articulate DIAL's role in the digital ecosystem.

“I am not familiar with their work, and neither are my colleagues - not a good sign.”

- KII with Thought Leader

The polarization in views held by Connected Partners and Disconnected Thought Leaders is a byproduct of the thinking that guided DIAL's strategy and early directions, which in many ways was cast through a supply driven development lens. At the time of writing this evaluation, DIAL's website states that DIAL is 'committed to identifying the most effective and efficient digital solutions to help achieve the Sustainable Development Goals.' Although best practice dictates that national digital transformation initiatives should be led by governments, the implementation of specific digitization efforts does not necessarily need to be implemented directly by governments to achieve the SDGs in the most effective or

efficient manner. **'Global development' and the SDG agenda are not to be implemented solely by government and NGOs - the private sector plays an equally critical role in these processes.** By excluding private sector actors in the wider digital marketplace from its conceptualization of the 'development community,' DIAL inadvertently limited its own ability to drive progress towards the SDGs through digitization.⁸ Many thought leaders and donors felt that DIAL's unique status as a neutral third party in the digital ecosystem allows them to bridge the public-private sector divide. Furthermore, they consistently stated that this type of cooperation, including models or use cases for what such cooperation looks like practically, is necessary for greater digital transformation.

Even if the government *was* always the most effective and efficient channel through which to achieve the SDGs, DIAL's work would still have benefited from a **greater analysis of the role of markets, why the digital markets are not working, and more importantly, the role that a market facilitator can play in addressing those challenges.** Private sector interests and 'development' sector interests are not mutually exclusive. Within the context of DIAL's Data for Development work, a greater focus on the underlying incentives of MNOs, building MNOs' capacity to engage with the digital for development sector, and identifying overlaps in public and private sector mobile data use cases could have led to greater lasting impact and partnerships. This gap was noted in the 2018 Baseline report and continues in DIAL's current programming. As a result of this gap, DIAL seems to have had limited engagement with the digital marketplace and has not engaged significantly with key mobile money players. This may represent missed opportunities to drive change and scale.

DIAL evolved over time, but not in a way that strategically connected its work with the most pressing needs of the digital marketplace. In the countries in which DIAL was working, the digital economy needs a lot more 'digital plumbing' in place before DIAL's work can reach its full potential. One tech specialist noted, "The demand is increasing - everybody now admits, I think, like health delivery and delivery of government services in general is going to be powered by digital tools, but how to do that is still a really immature space." Numerous respondents also emphasized that funding is increasingly being provided for digital solutions, but they are not aligned with building the underlying interoperable systems. There has been an increased emphasis on digital building blocks such as digital financial services and identity required for digital transformation of all sectors. A greater focus on these building blocks by DIAL earlier on, may have allowed it to take advantage of the growing dynamism of the digital marketplace.

⁸ It is worth noting here that this limited view of who contributes to global development has carried forward into the Digital Beacons strategy, where 'global development actors' are defined as: 'Individuals, groups, and agencies that exist and carry out specific functions in every society. In any given society or country, there are people who are responsible for the development of the society by reason of their activities. They are institutions and/or organizations like civil society, government, and community-based groups.' This definition excludes the private sector.

I think we're at the level now with digital programming in a donor world where it's like roads...And we really realized that we just got to make the roads better. We just got to get the core assets there and make them also more broadly available. So digital public goods is the recognition that we need some level of common playing field in that architecture for it to really make sense. That's not to say we need to go and lay loads of fiber. That's probably still a job for the private sector, but some of those assets, the architectures that support currencies and identity and data need at some level to have public good framing around them. And that means that they are open and accessible, but also that they're subject to regulation, which is a fundamental thing.

- KII with Donor

The expansion of digital finance and associated services during the period of DIAL's 1.0 strategy did not appear to shift DIAL's programming or strategy based on the evaluation team's review of DIAL's documents. However, as discussed above, digital finance and associated services have a fundamental role to play in achieving the SDGs by advancing ways of delivering resources and support through digital channels. This has become even more stark as a result of COVID. As such, **while DIAL was evolving to meet the needs of the digital for development sector, many other players in the digital ecosystem were figuring out how to influence the digital marketplace more broadly. This placed other actors in a stronger position to drive systemic progress towards the SDGs through digitization.** This is evidenced by the limited awareness about DIAL (discussed above under Finding 6), despite being engaged directly in the digital ecosystem.

Finding 4: DIAL advanced donor cooperation and best practices for supporting digital for development initiatives, and is well positioned to take the lead in encouraging pooled funding to support digital transformation.

DIAL has played a critical role in helping donors to learn and share best practices about what works in digital for development. All four donors included in the key informant interviews referenced DIAL's support in expanding their knowledge of best practices around digital development, including the Principles and importance of sector agnostic approaches. One donor informant was particularly complementary about the role that DIAL had played to help their organization's senior management learn about digital transformation. The Digital Donors Anonymous (DDA) calls have also received positive feedback from informants. However, some donor informants suggested that DIAL's board may need to evolve further in order to function as a true governing body.

However, while donors appreciated DIAL’s coordinating and information sharing role, they highlighted challenges of donor coordination in practice. The founding donors recognized how difficult it was to coordinate around digital for development initiatives and how the incompatibility between donor funding cycles and technology funding cycles led to inefficiencies in the digital for development sector. This issue also surfaced in the digital ecosystem baseline assessment DIAL commissioned in 2018. One donor argued that trying to coordinate donors is next to impossible, particularly at the global level, stating that “DIAL cannot hope to achieve donor harmonization; there are too many political interests to contend with.” Donors, by their very nature, have different program and funding cycles and accountabilities that continue to affect their programming despite DIAL’s, and its founding donors, best efforts to overcome these challenges. No evidence of joint donor funding emerged from the data. Several informants noted that donor coordination would be easier in-country as there are a limited number of programs and other key stakeholders can be part of the coordination conversation.

Informants also stressed that it is equally important to develop capacity within governments to coordinate donors for themselves in order to ensure they have the choice to make informed decisions. As DIAL takes a new country-focused approach, they suggested that DIAL could act as a neutral third party that African governments go to when negotiating contracts or developing/implementing digital transformation strategies. One donor described the model as equivalent to the African legal support facility, which helps governments negotiate contracts with mining companies and other private actors when they don't have capacity. This challenge has been recognized by DIAL and its founders and was one of the reasons behind DIAL’s neutral structure.

“I think it’s important to have these conversations at a global level, to pursue policy change at a global level. But, the rubber does meet the road on the ground and I think you can motivate a greater set of actors and partners when you’re doing it within a national boundary as opposed to trying to do it regionally, or within a great number of communities here and there.”

- KII with Direct Funder in response to 2.0 Strategy

“You have many NGOs who tend to reach specific beneficiaries, that are more likely to be in the thousands, than the millions. So yes, it's, it's still, it's still very fragmented.

- KII with Tech Specialist

“The team was always very much persuaded that we needed that type of vehicle. So even then there was the recognition of the value of a neutral convener... which would be similar to... some of the positives that you get out of a multi-donor trust fund and not a multi-donor trust fund and another multi-donor collaboration vehicle where you can partner and discuss, and look at convening and bending yourself towards reducing that fragmentation and the ecosystem really. So we were always bought into that idea.”

- KII with Direct Funder

DIAL has had a complex but overall positive relationship with its own funding partners.

DIAL has managed to balance the needs, interests and funding cycles of a variety of organizations, although it was clear that despite the desire to establish DIAL as a means of pooling funding and forcing coordination, practical realities and donor accountabilities and interests made that difficult.

Finding 5: DIAL’s programming did not have known negative impacts but DIAL needs to be mindful of the risks and downsides of digital transformation.

The evaluation team was unable to find any negative unintended consequences of DIAL’s programming, however there was concern for the unintended consequences from digital transformation more broadly. Numerous thought leaders interviewed indicated that it can be easy to assume that governments desire to use data for public good, but there remains a huge potential that data can be weaponized or used to surveil citizens without proper governance. One informant cited the government of an LMIC using foreign technology to suppress political dissent. Other less exploitative examples of unintended consequences that arose among respondents centered around increased access and use of social media. When increasing digital literacy and access, the primary use of mobile is for social media, rather than accessing services. The increased exposure to social media creates vulnerabilities for users, particularly to the recent troubling wave of fake content that has played a prominent role in global geopolitics in recent years.

“So if you're looking at social media, if you're looking at online misinformation and disinformation, if you're looking at different approaches to personal data, privacy and security and using digital services and tools, I think we've really had it laid out in front of us - how actions can contribute to an erosion of trust and an erosion of security and safety on digital systems as well. So yeah, [digital transformation] amplified both the positives and negatives.”

- KII with Direct Funder

2.2.2 Portfolios

The following subsections explore DIAL’s impact through its work in specific portfolios. In addition to highlighting DIAL’s impacts, these sections focus more heavily on assessing the *potential* for impact from a theoretical perspective, drawing from key informants’ perceptions and the hypotheses underlying DIAL’s work in each portfolio.

2.2.2.1 Proven software and technology

DIAL expedites the deployment of proven technology through investments in software platforms and capacity development. This involves the:

- Identification of cross-sector Information and Communication Technology for the SDGs (ICT4SDG) software and to address existing platform gaps
- Support for the maturation of open source software platforms used in humanitarian and development programs through the Open Source Center (OSC)
- Increased capacity through stewardship of the Principles for Digital Development (the Principles) and easy-to-use “how-to” guidance

Underlying this work was a hypothesis that if governments, donors, and digital service providers (DSPs) are aware of the targeted investments needed to facilitate the cross-sector use of Information and Communication Technology for Development (ICT4D), and the barriers to interoperability impeding the use and scaling of standard development tech stacks are removed, then a less fragmented ecosystem—in terms of funding and platform development—will expedite the use of digital technology by DSPs and accelerate progress toward the SDGs outcomes.

Finding 6: DIAL’s advocacy for the adoption of sector-agnostic ICT4SDG building blocks was lauded by some but critiqued by others as impractical.

Many key informants highlighted how they appreciated the need for an organization to focus on digital building blocks and overcome the siloed nature of international development cooperation and focus on function rather than sector. However, a few informants thought it was impractical. DIAL has elevated the importance of digital technologies as a cross-cutting tool that can drive change to address all of the SDGs and reminded stakeholders that this should be approached through well-informed deep technical knowledge and proper planning. DIAL’s role in promoting this message was highlighted by several global thought leaders as an important addition to the ecosystem because it adds to the growing narrative around systems-level approaches as opposed to developing single sector-specific solutions. One boundary partner stated, “I think [DIAL is] also very good in advocacy. Again, because we are echoing more or less along the same lines. So it really enforces the message, or what type of behaviour change we would like to see.” The introduction of centralized digital units within FCDO reflects this shift.

Oposing opinions on the sector-agnostic approach centered on the critique that it was not practical, especially when trying to develop policies and systems that are generic enough to work across sectors. In addition, being sector agnostic creates a tall order for DIAL; it limits its ability to get in-country stakeholders on board because they are used to working on high-priority issue areas through a sectoral lens. It also limits their ability to demonstrate impact. Some funders noted a need to more explicitly clarify the intersections between DIAL’s sector neutral approach and sectoral digital for development programming needs.

“I think that the challenge from where I’m sitting is if you have... the ministry of ICT, their work works to develop these very detailed policies - they’re doing it from a very generic perspective, because they have to consider data from all the sectors. And so particularly health because there was so much data and it’s so nuanced, there’s various sensitive data, it can change people’s lives if it’s released. And then there’s other types of data that are not as sensitive and need to be able to flow between different actors for decision-making. And just tons of systems and partners and things to wrangle together. I worry a little bit if it’s one ministry, that’s not a... program specialist, if you will lay out policies that are overly detailed, because I think they may not be informed of the realities on the ground in terms of how these data need to be used and managed.”

- KII with NGO in Malawi

“DIAL presented to a group of government officials on the idea of the public stack and all the components that would really transform or modernize an economy and someone raised their hand and said, well, which do we prioritize? And there was no answer... So the conceptual model was so compelling, but then helping bridge that gap between reality and that kind of ambition you’re presenting just wasn’t there.”

- KII with Boundary Partner

Finding 7: Informants that engaged with DIAL on Open Source Software (OSS) noted that DIAL has positioned itself as a thought leader in this space, with more focus on humanitarian costs and sustainable development than other actors in the ecosystem.

For DIAL Direct Partners, particularly those that worked in the sector, there was a strong appreciation of the work that the OSC has done to bridge the “Valley of Death” and develop maturity for products through grant support. One of the informants praised DIAL’s grant system for allowing recipients to define their own priorities, which provided the flexibility to address issues that otherwise would not be possible through regular donor funding. There is also appreciation for DIAL’s strategic work on strengthening the developer community around OSS platforms and providing excellent quality of technical expertise.

“The demand is increasing - everybody now admits, I think like health delivery and delivery of government services in general is going to be powered by digital tools. But how to do that is still a really immature space, I would say, with lots of different, competing tools - commercial off-the-shelf tools or the open source tools, but those don't have a sustainability roadmap. All of the above don't really have standards to interoperate and so everything that's out there, or too much of what's out there is in its own silo. And not interoperating with other systems and in little silos by funder or by partner or by project.”

- KII with Tech Specialist

Thought leaders and technology specialists expressed that open source is becoming more widely known, but there is limited evidence that this is due to DIAL’s work, or that it is being done in a way that promotes interoperability and sustainability.

“Open source I think has entered into the public discourse and people are starting to understand what that looks like. Not even, I think at the level of your average person - could you pull them off the street and ask them what open source is, but it's a term people know. And I think right now, we're at a really interesting moment where it's experiencing a kind of much broader, superficial understanding of what it is and excitement around it. Versus when [previously] you had a small number of people who understood it and participated in a super deep way. Obviously there are still large, healthy, very traditional looking open source projects, but I think open-source is in of itself going through an evolution.”

- KII with Tech Specialist

“Open source is seen as a development model now, not just a hobby, though governments and regulators are afraid of it.”

- KII with Tech Specialist

Finding 8: The sustainability and efficacy of open source in digital for development projects is disputed.

Although open source is gaining recognition, it is still not widely understood or supported. Almost every informant with experience in open source projects said that current funding patterns harm their sustainability and that it is difficult to get users to contribute back to the code. Moreover, the inclusion of Open Source in the Principles for Digital Development was also cited as an area where not all the signatories are in agreement. This school of thought derives from the multitude of issues with open source that were highlighted by informants.

Open source products face many of the same issues as digital development programs more generally; there is little coordination and a tendency to develop new things from scratch, and so duplicate efforts. One tech specialist noted, “there's lots of these open source tools out there, but I think they all struggle with a problem that they were created by donor philanthropic, some grant funding... but how do you then keep that open source code base alive and sustained is really tricky when it was just built, built to work in a sort of donor funded, aid ecosystem.” This context creates an environment in which it is difficult to assure quality and ongoing maintenance of open source software, resulting in a tendency to constantly reinvent the wheel or develop new tangents for software without sustained support for the core open source code.

And, so I feel like there are not a lot of incentives to consolidate, but more so incentives to either fracture and things fork off into more and more different projects, but none of which is sustainable, none of which has a business model and none of which has enough critical mass to really survive. And so then also, the ecosystem where things just die off and keep getting replaced with other. A lot of one off solutions. It's easy to just say, let's just build a new, the software for this need rather than using one of the reusable global goods and rather than benefiting from what exists already. Programmers often like to just start from scratch and create something new. And so I think without any leadership in this space, those sort of tendencies for things to just fracture. or for code to fork or for programmers to just keep reinventing the wheel and not building long-term value.

- KII with Tech Specialist

Although DIAL's grant support for open source projects have helped bridge some critical capacity gaps, they do not resolve the fundamental issue of creating sustainability through long term business models - they key issue that most open source software projects are facing.

2.2.2.2 Mobile distribution channels

DIAL's focus on mobile distribution channels (MDCs) is to address the lack of awareness of the potential impact of mobile channels and platforms as well as an inability of digital for development players to work together effectively to leverage economies of scale. To address these challenges, DIAL builds awareness for distribution channels and capabilities and tests mechanisms for aggregate demand and pooled procurement.

DIAL's hypothesis was that market breakdowns (fragmentation of demand, fragmentation of supply, implementer inability to use or provide new channels effectively for service delivery) hinder the delivery of SDG-related services via mobile devices. If DIAL addresses those market breakdowns, then governments, international development and humanitarian organizations will better reach underserved populations in both emergency and non-emergency settings.

Finding 9: DIAL could have expanded its mobile distribution channels research to include government demand and the growing opportunities of mobile money products as a channel for related information services.

One specific example of missed opportunity for impact was the *Pooling Aid Sector Demand for Digital Public Goods* study. The stated goal of this study was to "To evaluate the

opportunity to aggregate demand for core mobile channels, in order to secure better pricing and improve service quality.” DIAL defined ‘aggregate demand for core mobile channels’ as “current and potential spend on mobile communication channels by NGOs and multilateral organizations,” which revealed “a smaller-than-expected total estimated market value generated by NGOs and international organizations in 2018,” (DIAL 2019).

Although the estimated market value may have been smaller than DIAL expected, informants noted that NGOs have played a peripheral role in the digital ecosystem for years. DIAL could have expanded its focus to include aggregation of services amongst governments.

DIAL could have also explored the growing use of mobile money channels for NGO information services in sectors such as agriculture, or health care where the information is provided as part of an overall service package such as crop financing or health insurance.

2.2.2.3 Responsible use of network data

The goal of DIAL’s work in this area is to improve access to network data, empower the digital development ecosystem to use this data to inform its decisions and promote responsible and transparent data use. In this area, DIAL has sought to demonstrate D4D analytics and data models, developing and deploying a common data architecture and strengthening the ecosystem’s ability to deploy D4D programs.

Portfolio 3 has been working to discover and help scale commercially viable approaches that respect data privacy and security. DIAL has designed cross sector and geographical experiments to test how multiple groups can build secure models:

- Working directly with MNOs, program partners, and governments in select markets;
- Investing in existing open source mobile data analytics platforms;
- Working with intermediaries, such as analytics firms and data aggregators/brokers;
- Partnering to develop developing a common data vocabulary across MNOs;
- Examining innovative funding and procurement models and estimating market demand;
- Conducting market pricing and demand research;
- Testing open algorithm-based approaches; and
- Investigating digital platforms (e.g., Facebook) and geospatial analytics providers.

Finding 10: Despite DIAL’s efforts, MNO’s are not incentivized to make network data available for external D4D initiatives.

In its 2018 publication *Leveraging Data for Development to Achieve Your Triple Bottom Line*, DIAL documented a fairly comprehensive overview of the barriers that prevent MNOs from engaging in D4D projects. The paper rightly identifies that ‘Regulations around data sharing and privacy are unclear, poorly understood and sometimes highly restrictive, leading to uncertainty about the legality and practicalities of sharing data in many of the African,

Asian and other developing markets where the need is greatest.’ An interviewee from DIAL’s 2018 report is quoted saying:

“The introduction of new rules for data sharing will create additional constraints during transition periods to adapt to the new regulatory environment, but over the long run, they might generate more interest from users, enticing them to share their data while taking more control over the use of their data requiring feedback on value generated.”

The paper goes on to outline guidance on how MNOs can leverage D4D opportunities. Most of this guidance is practical, but the guidance related to ‘navigating the regulatory environment’ is vague and doesn’t reflect a strong understanding of MNOs’ **short-term** incentives. DIAL recommended that ‘MNOs should take an active role in shaping D4D partnerships and helping establish common frameworks for regulations and methodologies that will define how data can and will be shared and used.’ This demonstrates a limited understanding of the incentives and challenges faced by MNOs. It is likely that the relative opportunity cost of participating in regulatory framework development efforts is greater than the opportunity cost of other strategic initiatives in which MNOs could invest.

In its eagerness to demonstrate the value of D4D, DIAL may have missed the opportunity to more broadly help MNOs navigate the aforementioned ‘additional constraints during transition periods.’ Many MNO informants cited the same challenges identified in the *Leveraging Data for Development to Achieve Your Triple Bottom Line* report. Informants noted that MNOs are not willing to risk their core business model to support D4D activities. Informants from both MNOs and NGOs also noted that government counterparts were also sometimes unaware of what MNOs could bring to the table or how to create shared value, even if they were willing to take the risks. Key informants from MNOs and government self-reported that they lack sufficient capacity to use the data effectively. Finally, several MNOs highlighted issues around the need for effective regulatory standards and operating procedures to be in place to ensure that data privacy and security are upheld. DIAL’s attempts to coordinate the multiple stakeholders in-country were a helpful first step but informants noted that further engagement and follow up is needed.

“So it's a very interesting conversation, in the sense that mobile network operators are like a gold mine when it comes to data and the information which we have, but now this gold mine is heavily regulated in the sense that a small mistake on it could mean a lot to the business - could really damage that reputation of the organization. And then anybody complaining about the information being shared with the government, with a non-governmental organization, can really cost us a lot. And as you may be aware, our net promoter score for a mobile network operator is everything.”

- KII with MNO informant

It is important to note that there are many MNOs that are advancing the SDGs through commercial service provision in health, education and agriculture. Most MNOs expressed interest in working with NGOs and governments more meaningfully to promote social good, but are rarely approached with a win-win value proposition, or understanding of the risks involved. One MNO informant described this dynamic, saying “[NGOs/governments] don’t come with a commercial or shared value approach. They come and say we are helping society and we want this information for these purposes. But you have to look at it this way - [we] help you achieve program objectives while you are also helping us achieve our business objectives.”

2.2.2.4 Insights and impact

The Insights and Impact team works across programs to identify key learnings, evidence, good practice, and guidance for use in the digital development ecosystem. This portfolio encompasses the Return on Investment program, which aims to demonstrate the impact of digital investments and innovative financing mechanisms, as well as the Evidence Synthesis program, whose objective is to identify learnings from DIAL’s previous products and develop usable knowledge products targeted at key stakeholders.

One of the key messages from all stakeholders was that DIAL has added a lot of value shaping the direction and best practices of the digital for development ecosystem through their thought leadership, reports and technical expertise, but that it was now time to engage more with how to implement these ideas on the ground. The trial-and-error of 1.0 was recognized as necessary for growth and part of the learning process; the next phase of learning is best undertaken through “getting their hands dirty.”

DIAL staff recognized that the organization’s publications were typically rigorous, but disconnected and lacked proper sequencing. One staff informant noted that significant progress had been made in synthesizing disparate publications and ensuring they evoke a

continuous message. These efforts are expected to support DIAL in communicating externally in a more coherent, cumulative way.

DIAL's work on the Return on Investment program was only directly referenced once, by the program's partner who helped develop the social return on investment toolkit. The partner noted that DIAL was very effective at assembling a steering group comprising important and influential stakeholders in the digital ecosystem, which helped generate interest in the product. Other thought leaders who knew DIAL also expressed interest in the toolkit and how it would be applied. However, the toolkit is still a prototype, so it is too early to assess impact.

“We had a steering group ... that was a collection of organizations such as World Bank, USAID, CARE, various different groups like that, but also government officials, some other people who would make use of this toolkit in terms of applying it's information in their context, that is to show the wider social impact value of digital inclusion projects... So then we had an audience which was very engaged with the questions on Zoom.. ”

- KII with Technology Specialist

Finding 11: DIAL's role as steward of the Principles for Digital Development advanced best practices in the digital for development sector.

The Principles for Digital Development (the Principles) were cited by informants as an initiative that helped to promote a sector agnostic perspective. Donor informants also mentioned that they were able to achieve greater alignment in programming by requiring grantees to employ the Principles.

DIAL took stewardship of the Principles for Digital Development in 2016. The Baseline Report found that there was high awareness of the Principles. At Endline, the Principles was the most widely cited work amongst informants who were familiar with DIAL and there is evidence that it is a familiar standard of best practices for a wide variety of stakeholders, from private tech companies to NGOs. In one organization, newly developed technologies are being tested against the Principles and more organizations (private and public) are embedding them into their platforms.

Thought leaders in the ecosystem recognized that DIAL made the right choice by becoming the primary steward of the Principles and believe DIAL has promoted the Principles very effectively. However, there were differing opinions about how much impact this has had in the ecosystem. Although many informants were familiar with the Principles, only a few

were able to explain how they were practically implemented in their organization, suggesting a disconnect between theory and practice. Others were able to list many of the Principles and describe how they were important, but said that in practice the bureaucratic nature of programming or funding prevent them from fully adopting all of the best practices. One donor described the problem as such:

“It's easier to use the Digital Principles when you are developing a new approach by yourself. But if you do funding of, let's say infrastructure project in an energy sector, for example, and a part of the concept is also to use, let's say new technologies for payments, or I don't know what, or to control the network grid, then of course, we don't know yet how to make sure that our partner from the partner side, the Digital Principles are also respected.”

A subset of stakeholders either were not aware of the Principles, and so had not adopted them formally, or knew of the Principles, but had not endorsed them. People who were not aware of the Principles recognized their importance when the interviewer described them, and claimed to follow the spirit of their guidance. When asked if they knew or used the Principles, one technology specialist responded, “No. I have never heard of them until I saw your email, but I definitely could endorse him. And I think we're pretty good at using these principles, just naturally.”

The latter group of stakeholders said that they knew of the Principles, but had not endorsed them because they didn't think it was feasible, or didn't understand how they would be applied. However, they were still using other standards and best practices. Amongst respondents who were unaware of DIAL, or had limited interaction with DIAL, support for the Principles varied. Informants who work extensively with the private sector noted that they were not seeing adaptation or adoption of the principles among customers that they work with. As discussed above in Finding 8, divergent opinions on OSS could also be hindering adoption of the Principles.

Finally, one stakeholder noted that the Principles were predominantly applied to actors working in developing markets, but that there could be more opportunity, and even obligation to ensure it was being promoted universally, as a standard for developed countries as well and to reframe the discourse to take a less paternalistic perspective of digital for development and recognize the primacy of emerging market stakeholders including governments, MNOs and local NGOs.

“So for example, when they had the chance to be the stewards for the Principles for Digital Development, it made sense and I'm glad they did it. It needed a home and I think they're well-positioned that wasn't part of the original strategy. And so they saw an opening and took it, and I think it's been one of their bigger successes.”

- KII with Direct Funder

“I think the Digital Principles have been... a really successful piece of work that's had a lot of uptake and... has clearly had impact... So I guess, yeah, the ones that I think DIAL is quite well known for [are] these kinds of global public good sort of digital principles, open sourcing things.”

- KII with Global Thought Leader

“You know what I am heartened by is that we finally got our act together, but to be frank, around realizing as a big technology company, ‘We have to bake in these Principles, into everything we do. We have that duty.’ It's almost getting to the stage of saying, ‘It's not whether the client wants to pay for it or not - this is how we roll.’”

- KII with Tech Specialist (Boundary Partner)

“We haven't endorsed them, as a non-entity. I don't think we know what... endorsing something like that would look like at this point, but it's somewhat part of the standards where - I don't know if you've seen the nine indicators standard. One of them is that you have to use best practices and standards... So we don't require.. explicitly... the Principles for Digital Deployment. We don't require that people have fully used the Principles for Digital Deployment because unlike the standard, the Principles are much like ‘here's what we suggest the standard is, here's what you must do.’ And we really try and get down to black and white. Yes or no.”

- KII with Boundary Partner

“We haven't adopted them... don't have a statement of ‘we live the Digital Principles’, but I would say that we use them. Look, thinking about our digital data work that we've done, it definitely is using parts of these... that's a bit different than saying ‘Oh yeah, we've adopted the Principles.’”

- KII with Boundary Partner NGO

2.2.3 Sustainability

Finding 12: Some of the impacts of DIAL’s initial strategy will last as it moves into its new Digital Beacons strategy.

DIAL 1.0’s strategy played an important role in helping to highlight the need for a cross-sectoral approach to leveraging the opportunities afforded by digital technologies to achieve the SDGs. The recent global pandemic has accelerated the interest in digitization, and donors and developing country governments are increasing their focus on these areas.

It seems clear that some of the impacts from 1.0 will last as DIAL evolves into 2.0. In particular the importance of responsible digital development as shown in the Principles for Digital Development, the demonstration of opportunities afforded by MNO data and the experiences of partners who have been supported by DIAL in Malawi and Mozambique, the progress that has been made in educating stakeholders on the importance of establishing proper strategies and frameworks for digital development, and the dissemination of best practices.

Finding 13: The sustainability of the Open Source Center grantees remains a concern amongst informants in the sector.

Despite the support received by DIAL, OSS face on-going challenges securing funding and contribution to code. One of the root causes of this (and the other OSS issues discussed in Section 3.3) is that open source projects are often developed with donor funding. Such funding is provided in ways that does not allow for on-going maintenance and code updates. This in turn leads to incentives to create tangents in the software, for customization to local contexts, for example, or turning it into software as a service, in order to generate interest for further funding.

One informant stated that sustainability for open source software comes from a continuous source of revenue, combined with having a few companies to buy in and showcase it. However, very few of these companies contribute back to the code. This was confirmed by other DIAL grant recipients and cited as an area where DIAL could continue to focus advocacy efforts. Lastly, much of the increased funding into the open source space is focused on use cases for NGOs rather than governments, which contradicts best practice of government-led digital transformation.

“And I think one of the challenges with open sources is also how much you fund the core projects versus funding local implementations. If someone wants to set up like DHIS 2 in Kenya, they'll often get support. The government will get support for a Kenyan implementation of DHIS 2 and no one by the end of the day - no one's giving any money to the core project.”

- KII with Tech Specialist

“Then even if we have enough data, sometimes technologies need to be maintained. And we can fund, through our programming, some solutions, but then once the funds stop, if there is no capacity, if there or funds, or resources in general, then it won't be used anymore.”

- KII with NGO

Finding 14: DIAL's shift to country-focused programming helped to drive impact in its first strategy and will likely continue to do so in the new strategy.

The shift to country-focused programming was highlighted by many informants as a key driver of DIAL's impact, it also helps to align DIAL's work with international best practice. Shifting country ecosystems is more feasible and tangible at the country level, as it is easier to get the right organizations, including governments, donors, NGOs and the private sector, together to advocate for change and encourage alignment and coordination. Every informant responded positively about DIAL's shift to a country-focused approach in the new strategy. Some informants indicated a lack of country orientation amongst DIAL staff as a weakness.

DIAL's lack of focus was cited as a challenge in influencing the ecosystem. There were some informants that indicated that by trying to do too much, they were diffusing their potential for impact and confusing the marketplace. This was also a theme in the conversations with DIAL staff in the focus group.

2.3 Which of DIAL's interventions have been most effective in contributing to these changes?

DIAL began with a very broad mandate and a wide range of partners. It experienced difficulties scaling up its operations, and thus underwent a process of ‘learning to fly the plane while building it.’ At the same time, DIAL was given remit by its donors to ‘fail fast and fail forward’ through rapid experimentation. This section explores the extent to which DIAL was effective and efficient in its work, both at an organization-wide and portfolio level.

Table 2.4: OECD definitions of effectiveness and efficiency

Criteria	Description (OECD, 2019)
Effectiveness	The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups
Efficiency	The extent to which the intervention delivers, or is likely to deliver, results in an economic (meaning an effective translation of inputs into outputs) and timely way

Table 2.5: Summary of findings for EQ3

Category	Finding
Cross-cutting	Among DIAL-connected partners, key informants from tech specialists, governments officials, and NGOs within the digital for development ecosystem all appreciated DIAL’s effective ways of working and technically strong staff.
	DIAL’s broad mandate made it difficult to program for divergent stakeholders and clearly communicate its role in the ecosystem.
	DIAL missed opportunities to link across its different programmatic areas.
Value for Money	Weaknesses in DIAL’s ToC and results framework had tangible effects on DIAL’s effectiveness and ability to influence change in the digital ecosystem.
	DIAL has not consistently set targets for the indicators it tracks in its results framework database, but was moderately successful in achieving output targets where they were set.
	DIAL’s need to establish itself as an organization delayed the time to impact as shown in expenditure delays.
	Trends in, and constraints on DIAL’s resource allocation could negatively impact DIAL’s ability to deliver optimal value.
	Traffic to DIAL’s website was relatively low relative to similar organizations in the digital ecosystem, and wasn’t optimally aligned with public demand.

2.3.1 Cross-cutting

Finding 15: Among DIAL-connected partners, key informants from tech specialists, governments officials, and NGOs within the digital for development ecosystem all appreciated DIAL’s effective ways of working and technically strong staff.

A positive theme emerged from the data around DIAL’s unique position as a neutral broker that does both research and implementation. Unlike NGOs, DIAL is able to take a longer view, invest in research, and advocate for the broader systems-level approach to digital development.

“The challenge is it's hard to make sure, when something has not worked, to have the right lesson for this and to make sure that those lessons can be shared because... there are thousands and thousands of pilots every year... there is a clear risk that many people are trying the same things and not aware of the lessons learned by others. That's an area where an organization like DIAL can have a lot of value.”

- KII with Tech Specialist

Informants noted that DIAL was able to leverage its key strengths including an end-to-end digital approach and deep technical capabilities compared with other organizations. DIAL’s ability to commit to longer term implementation of programs from concept to conclusion and deep technical capabilities were praised by informants. Informants also noted that the digital ecosystem is increasingly crowded, but that it is important to have a multiplicity of voices advocating the same message around digital in order for it to gain legitimacy and influence. Within this crowded space, the ability to convene private and public spheres was frequently cited as one of DIAL’s key strengths. In Mozambique, the government partner that DIAL is working with praised DIAL’s ability to bring together a diverse set of stakeholders in the country and communicate clearly about the value of the project.

“I definitely think an accurate use of the steering group attendees, as an example... I was certainly impressed with the diversity of key players and stakeholders they seem to have in their sphere of contacts, networks, which is indicative of being relevant in this space. And certainly, the fact that people wanted to partake in this steering group and showed interest, certainly showed... at least to myself that they were... a leader in this space.”

- KII with Direct Partner

“They've got nice contacts. Wow. Or whatever you need DIAL knows somebody who knows how to do it and can tell you how to do it. I would say that DIAL has the knowledge about what is being implemented. That you can actually look at it and try to see what are the mistakes. And they can actually advise you on what not to do.”

- KII with Government Official, Mozambique

Finding 16: DIAL’s broad mandate made it difficult to program for divergent stakeholders and clearly communicate its role in the ecosystem.

As shown in its ToC, one of the challenges that DIAL faced was managing such a wide variety of stakeholders, which made communications difficult. Several informants noted that they were unclear of DIAL’s mandate and were unable to articulate DIAL’s role in the ecosystem.

Respondents were excited to see an example of data for development and how partnering with MNOs can support government planning efforts. However, although DIAL strove to generate sector-agnostic value, the outputs of its in-country work were sector-specific. The outputs of this work were most relevant to the sectors in which the projects were implemented.

“I think trying to do too many things means that it's very difficult to do any of them particularly effectively, and it's better to focus down, and get results and get acknowledged as being good at understanding and delivering stuff in one space and then trying to expand from there.”

- KII with Direct Partner

DIAL’s broad initial mandate made it difficult to communicate its role in the digital ecosystem and how it complemented the work of others. The lack of clear communication and branding of DIAL’s work, in addition to the organization’s earlier broad focus reduced its ability to position itself as a key player in the ecosystem, as seen through the distribution of key informants’ opinion on the most influential players in the ecosystem shown in Figure 2.3 below. Ten out of 60 informants (excluding DIAL staff) had no knowledge of DIAL, while 13 informants had “a little” knowledge, meaning they had heard of DIAL and could name at least one piece of work.

“We probably should engage them more. I guess I've always slightly struggled - DIAL has had a very broad remit and it's the sort of thing when I'm sitting down and actually talking to [DIAL staff], then I think, oh yes, now I understand what you do. And then, I walk away and five minutes later, I'm like, what was that again? So... sometimes it's not immediately obvious to me exactly what collaboration would mean.”

- KII with Global Boundary Partner

DIAL was not regularly cited as a key influencer in the digital for development space amongst key informants. As noted above, there was major growth in digital for development actors during DIAL’s first strategy. The responses from KIIs across stakeholder groups reflected the importance of these digital for development actors and their dominance in the ecosystem during this period. When asked who the most important actors in the digital ecosystem were, the most common organization referenced was the World Bank. The most frequently referenced actors are summarized in **Figure 2.3**.

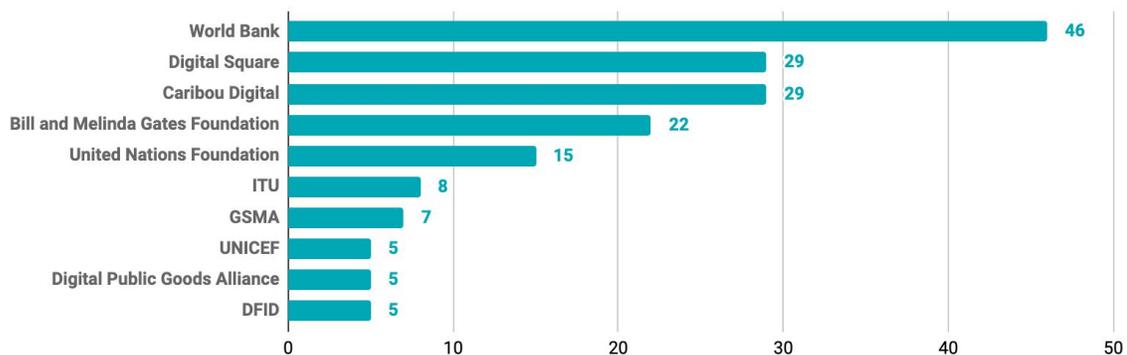


Figure 2.3: References made in interviews about influencers in the digital development space

Other organizations mentioned included NORAD, Data 2X, CEPEI, BFA, FSD Network, MCF, ODI, OECD, Oxford Digital Pathways, Public Digital, FSDA, IDEO, iSpirt.

Multilaterals are still seen as the biggest funders, with the most influence. This is likely due to their ability to set broad agendas and strategies, as well as their ability to fund large projects, which smaller NGOs are not able to do. This would also explain why large funders such as DFID (now FCDO) and BMGF are also included on most people's list.

DIAL as an individual organization was not included in the list of top digital players, even for organizations that were familiar with DIAL's work or had direct partnerships. It may be that some informants thought that DIAL was part of the UN Foundation, but it should be noted that Data 2X was also called out separately.

Although DIAL has taken important steps to address these challenges with their new strategy, additional work is required to enhance communication efforts and clarify their role in the wider digital ecosystem.

Finding 17: DIAL missed opportunities to link across its different programmatic areas.

One of the issues that arose in the interviews is that individuals' engagement with DIAL was limited to the specific program area they were working with. OSC partners interviewed generally weren't aware of the D4D work and vice versa, for example.

The lack of synergies between the different programs was recognized by DIAL staff in the KIIs, FGDs, and more broadly as an organization, resulting in the OneDIAL program that sought to integrate country programming.

“I don't think DIAL was ever able to fully realize the synergy across, the Open Source Center and the other initiatives.”

- KII with Technology Specialist

“What I found was an organization that was very, I felt, disconnected and [sic] its projects from one another. It seems like lots of different pieces.”

- KII with DIAL Staff

Although DIAL has taken important steps to address this lack of internal coherence, the disconnect between programs throughout DIAL 1.0 undoubtedly had negative impacts on how DIAL was able to communicate its work, and therefore influence the digital ecosystem.

2.3.2 Value for Money

This section considers the evidence collected during the evaluation through the lens of Value of Money (VfM). **Annex 3** outlines the framework we applied to evaluate the VfM of DIAL's work under the 1.0 strategy.

Finding 18: Weaknesses in DIAL's ToC and results framework had tangible effects on DIAL's effectiveness and ability to influence change in the digital ecosystem.

One important issue that stemmed from the breadth of DIAL's strategic mandate (as described in Finding 6 above) was that DIAL made the explicit decision to adopt an 'adaptive evaluation' approach. As a consequence, there was an overall lack of sharpness of focus in DIAL's organizational Theory of Change and Results Framework. The evaluation team considered two perspectives assessing DIAL's ToC and Results Framework:

- **Operational effectiveness:** answers 'did DIAL hit its targets?'
- **Programming effectiveness:** answers 'did DIAL choose the right targets?'

The analysis considered the questions at each level of the Results Framework for which evidence was available from the KIIs and desk review materials. A more detailed summary of the analysis was shared with DIAL as a separate memo.

As with many of the output indicators, DIAL's primary and intermediary outcomes and organizational ToC lack certain details that are required for 'evaluability' and which also ensure effective and focused implementation. Financial Sector Deepening Africa (FSDA) published a framework in 2017 for assessing the strength of a ToC and a checklist for developing results framework indicators (FSDA 2017). KIIs with DIAL staff support these conclusions. One staff member stated that when they joined DIAL, "it was a disconnected team doing many things with no through line" and that it was "hard to see how it added up to real impact." Another staff member described DIAL's 1.0 Strategy as "very ambiguous and confusing," which prevented teams from operating and communicating clearly. **Annex 1** provides an assessment of DIAL's results framework indicators against FSDA's Impact-oriented measurement (IOM) framework for developing indicators. We replicate the assessment for DIAL's country-specific ToC in **Annex 2**.

Careful scrutiny of the DIAL's results framework database and annual Results Tracker data raises several significant data quality concerns. These concerns include:

- Logical disconnect between indicator value and evidence
- Potentially biased evidence supporting recorded value of indicator
- Mis-attribution of impact to DIAL
- Lack of clarity in indicator scale
- Confusing mixed-use of cumulative and incremental indicators
- Data integrity constraints are not enforced

Furthermore, the logic that connects the levels of DIAL's results framework is often weak or absent.

In theory, the outputs associated with an objective should contribute evidence to determine whether the outcome was fulfilled. If the outputs aren't intended to provide evidence about the fulfillment of outcomes, then the outputs don't actually need to be associated with outcomes or included in the results framework at all. However, the Results Framework intentionally lacks any explicit logic linking the outputs to the intermediate outcomes. A note in the Results Framework states:

Outputs are not included in this framework, because the Founding Partner Group stated it is important to maintain flexibility in shaping responsive and emergent implementation in service of these outcomes. But we have included a table of outputs achieved in Section 2 of the Results Framework Narrative.

DIAL decided not to define a link between outputs and outcomes, which is a requirement for determining whether an outcome was fulfilled (item #2 above). This decision presents practical challenges from an evaluation standpoint.

It is important to note that DIAL has already worked to address these issues, and is not alone in this measurement challenge. According to one direct funder, with more attention being placed on digital transformation and its accompanying infrastructure and systems, more attention is also being drawn to the question: How can we measure digital transformation and digital progress in a meaningful way?

Finding 19: DIAL has not consistently set targets for the indicators it tracks in its results framework database, but was moderately successful in achieving output targets where they were set.

Another downstream issue of DIAL's broad mandate is that it is difficult to comprehensively assess DIAL's operational effectiveness with regards to its key outputs for several reasons. DIAL tracks outputs in its Results Framework indicator database, and a selection of these indicators are reported in annual Results Framework tracking spreadsheets. However, very few targets are assigned to indicators in the database.

The Results Trackers show a slightly more positive story than the results framework database. Very few targets were set in FY17, which was due to the fact that the Results Tracker was submitted before the Baseline Evaluation was complete. The most recent Results Tracker (FY19) only reports Actual results up to Period 3, and since Targets have only been set for Periods 3 - 5, this means that based on available data, we are only able to evaluate DIAL's progress against its Results Tracker output targets in Period 3. Of the 26 indicators with targets set in Period 3 (87% of indicators), DIAL reached or surpassed its target in 17 cases (65% achievement of targets).

Given that at most 31 indicators have been reported in the annual Results Trackers, it's unclear why the results framework database includes 98 unique indicators - particularly given how few have associated targets.

Finding 20: DIAL's need to establish itself as an organization delayed the time to impact, as shown in expenditure delays.

A unique, neutral, technically sound, stand-alone organization which pools resources from various funders was seen as the optimal model for improving the coordination of donor funding for digital development initiatives. While this may have made sense from a donor perspective, establishing a new entity takes time and requires hiring staff, aligning on strategy, creating systems and processes, and other organizational challenges. Delays in hiring were highlighted by some of the key informants as an issue that prevented DIAL from 'hitting the ground running'. Interestingly, early DIAL documentation also points to an exit period for DIAL once digital inclusion has advanced sufficiently, which is more challenging to do in an organization than with a time-bound project.

While reviewing DIAL's financial and operational overview documents, one of the simplest and most apparent observations is that DIAL navigated a dynamic funding environment. The funding allocation for FY18 in particular changed drastically between initial budget projections in 2016 and the final budget allocation in 2018 as shown in **Figure 2.4**. According to staff interviews, being situated in the UN Foundation made it difficult to have oversight and management of budgets. The issue was exacerbated by poor visibility and communication between programs, which led to significant spending inefficiencies.

In addition, staff informants expressed that each of DIAL's funders want their own unique impact story around the funding they provided, suggesting that is not a true "pool" of resources. This directly contradicts the efforts that DIAL has made to try to coordinate and harmonize donor funding for digital development and may be a key limitation to DIAL's ability to have impact. However, it reflects the consensus among informants that funding remains siloed by sector. Donors themselves recognized that funding oversight is typically nested within specific sectors and topic areas and confirmed that this is the structure behind DIAL's funding as well.



Figure 2.4: Change in DIAL budget allocation for FY18 over time

Figure 2.5 compares the final budget allocation for each reporting period against the actual expenditure or (for reporting periods for which actual expenditure data was unavailable) projected expenditure. The trends suggest that it took DIAL longer than anticipated to scale up its operations, which may have limited DIAL’s impact from FY15 through FY17. The challenges of getting DIAL up and running were also highlighted in some of the KIIs.

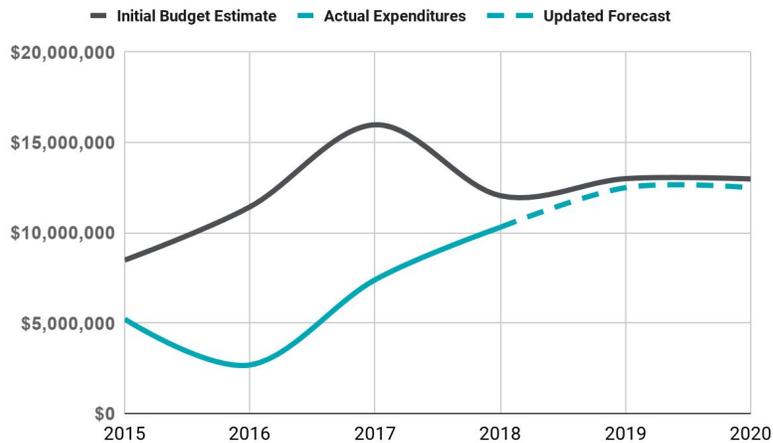


Figure 2.5: DIAL budget allocations compared against actual and projected expenditure

Finding 21: Trends and constraints on DIAL’s resource allocation could negatively impact DIAL’s ability to deliver optimal value.

Figure 2.6 shows that over the years, DIAL’s budget shifted to allocate more funding internally and less money externally (i.e. to *Contracts and Grants*). This reflects DIAL’s growing maturity as an organization and the hiring of more full-time staff. However, two issues should be highlighted:

- As shown in **Figure 2.7**, as the share of DIAL’s budget allocated internally increased, so did the share of the budget going to overhead costs associated with *Cross Cutting Integrated Work and Central Teams*.
- Informants mentioned that UN Foundation rules make it challenging to hire staff outside of the US. This constraint may be particularly problematic given DIAL’s shift to prioritise in-country work moving forward under *Digital Beacons*.

Figure 2.7 also shows that the share of DIAL’s budget allocated to the *Responsible Use of Network Data* portfolio decreased between FY18 and FY20. The implications of this trend are discussed further below in the analysis of DIAL’s website data.

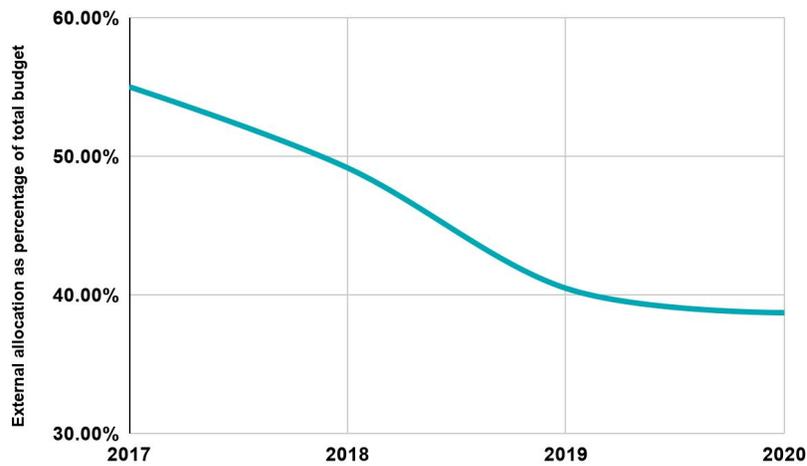


Figure 2.6: External budget allocations as percentage of total budget

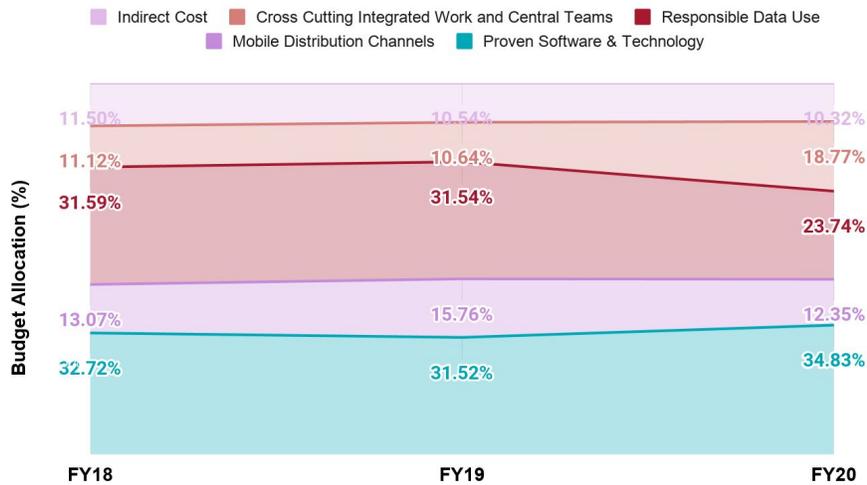


Figure 2.7: Annual budget percent allocations by focus area and portfolio

DIAL’s annual financial and operational overview reports do not provide comprehensive breakdowns of actual and projected expenditures by focus area or portfolio. The FY18 and FY19 reports do, however, provide breakdowns of the *Contracts and Grants* category by portfolio and project. **Figure 2.8** below presents the total actual expenditures on contracts and grants in FY18 and FY19 at the project level, which is the most granular level at which the data is available. *Demonstrating D4D analytics and data models* received the largest share of DIAL resources by far during these two years, and *Supporting Technology for Development/OSS platforms* also received more than double the resources of the next closest project. Together, these two projects account for 58% of DIAL’s spending on contracts and grants during these two years. These are also the most recognized projects among informants when asked what they knew about DIAL’s work.

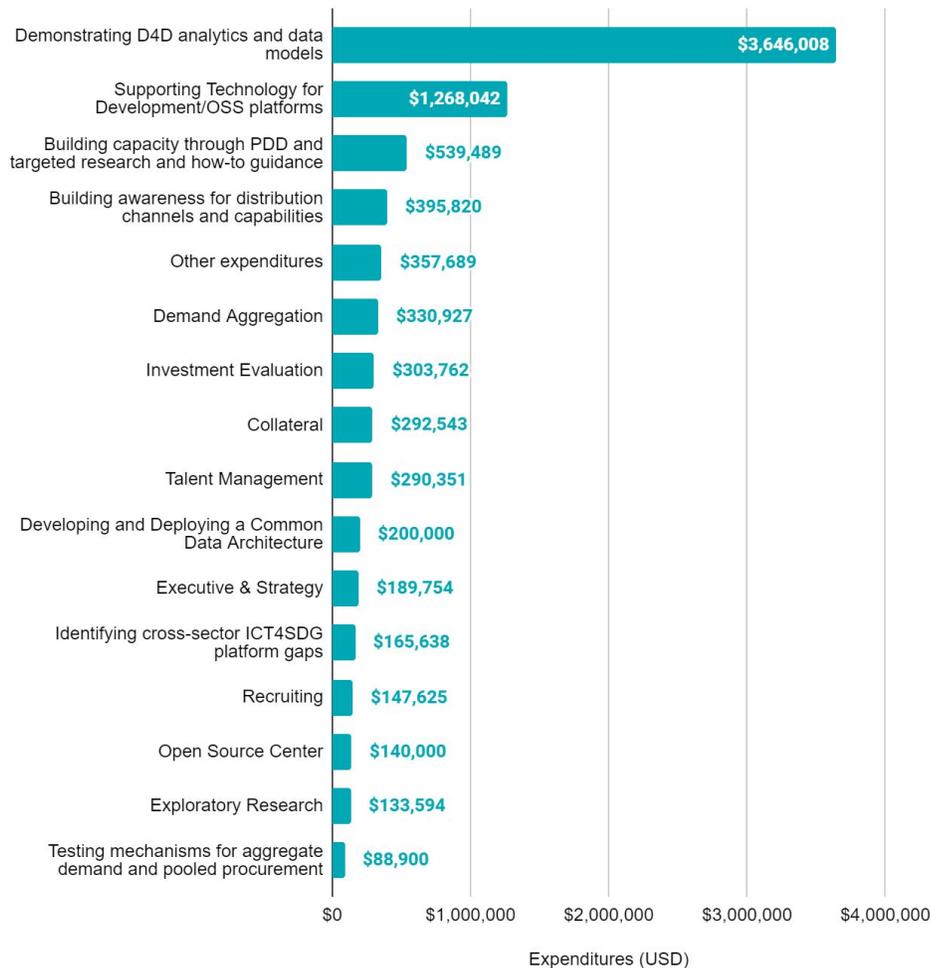


Figure 2.8: FY18 and FY19 total expenditures on contracts and grants by project

Finding 23: Traffic to DIAL’s website was low relative to similar organizations in the digital ecosystem and wasn’t optimally aligned with public demand.

Figure 2.9 presents the distribution of the number of unique clicks to resources published on DIAL’s *What We’re Learning* page grouped by media type and content stream.

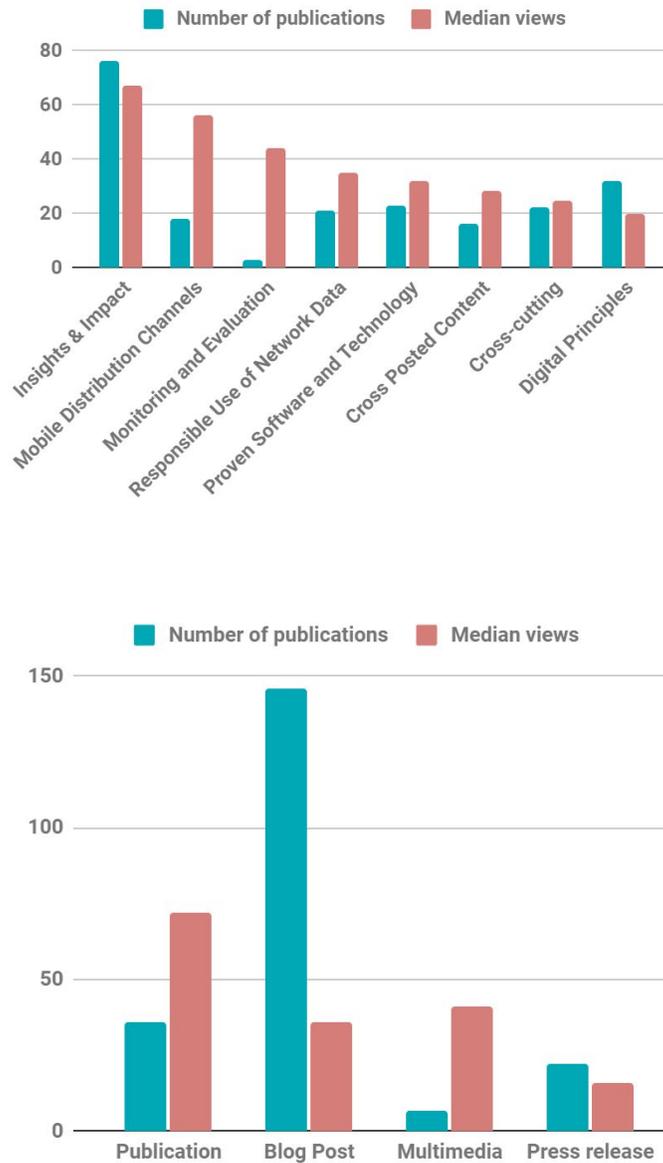


Figure 2.9: Distribution of clicks on DIAL published content by content stream and media

These figures are useful in quickly identifying which types and categories of content DIAL has prioritized producing, and which have been most-accessed by the public. Publications

are the most popular type of media (with 72 visits from distinct users on average), while *Insights & Impact* is the most popular content category (with 67 visits from distinct users on average).

Another metric to consider is the total time spent by visitors on DIAL’s website, which is an indication of the value they obtain from the output of DIAL’s work published on the website. In aggregate, visitors spent over 2,600 hours on DIAL’s website between August 2018 and September 2020.

On average, the number of views of DIAL knowledge products is quite low relative to comparable organizations. As a comparison, CGAP’s top 10 most-viewed publications between January and September 2020 received just under 2000 views on average.⁹ DIAL’s top publication was the ICT4SDG Investment framework, which received over 1500 page views, but was only downloaded 315 times between August 2018 and September 2019. The Mobile Capability Model received the second-highest number of page views (823) and downloads (254) over the same time period. After these two, viewership and downloads of DIAL’s resources drops off sharply as shown in **Table 2.6**.

Table 2.6 Downloads of DIAL publications, August 2018 - September 2020

Publication	Downloads
ICT4SDG Investment Framework	315
Mobile Capability Model	254
Beyond Scale eBook	139
Telecommunication Services Supplier Mapping for the Digital Impact Alliance	121
Leveraging Data for Development to Achieve Your Triple Bottom Line	118
Unlocking MNO Data to Enhance Public Services and Humanitarian Efforts	96
FlowKit: Unlocking the Power of Mobile Data for Humanitarian and Development Purposes	86
Using Mobile Phone Data to Make Policy Decisions	72
Pooling Aid Sector Demand for Digital Public Goods	49
Messaging Apps for Development	42
A Guide To Using Mobile Aggregators To Deliver NGO Services At National Scale	12
Promoting Mobile Sector Engagement in Malawi	11

⁹ CGAP. 2020 Annual Report. Available online: https://www.cgap.org/sites/default/files/minisites/annualReport_2020/index.html

While the summary statistics presented above are very useful in understanding the appeal of DIAL’s various knowledge products, they don’t say anything about what brings visitors to DIAL’s website in the first place. Are people most attracted by *Insights & Impact* content, or are they initially attracted by *Mobile Distribution Channel* content and then redirect their attention to *Insights & Impact* content once they have landed on DIAL’s website? These types of questions can be answered by taking a more nuanced look at when and why the public chooses to visit DIAL’s website, using statistical methods to account for interactions between the publication of different pieces of content.

We conducted a multivariate dynamic regression using two alternative models to explore whether the publication of certain types of content leads to spikes in the number of daily visitors to DIAL’s website. Full specifications of the models and results are included in **Annex 4. Table 2.7** shows the statistically significant effects that the publication of specific types of content had on viewership of DIAL’s website on the day of, day after and two days after content publication.

Table 2.7: Increment in traffic to DIAL’s website that is attributable to specific content¹⁰

Content type	Effect on DIAL website traffic (# of visitors)		
	Day of publication	Day after publication	Two days after publication
Type of publication			
Blog post	▲ 32	--	--
Publication	▲ 14	▲ 16	--
Content stream			
Insights & Impact	▲ 27	--	--
Cross-cutting	▲ 31	--	--
Responsible Data Use	▲ 46	▲ 50	▲ 40
Digital Principles	▲ 31	--	--

It is interesting to note that content in the *Responsible Data Use* content stream generated not only the highest average increase in traffic to DIAL’s website, but also the most sustained increase in traffic over the course of three days. This finding aligns well with the findings outlined earlier in Section 3 that speak to key informants’ concerns about responsible data use, data privacy, and legal frameworks around data sharing in the digital ecosystem. The finding affirms that the areas where key informants see value in DIAL’s work aligns with the subject matter that generated the greatest increases in traffic to DIAL’s website. However, *Responsible Data Use* content ranked fifth out of the eight

¹⁰ For the other content types and categories, the absence of a statistically significant effect does not mean an effect does not exist, but rather that there was insufficient statistical power in the dataset to isolate the effect.

content streams in terms of number of publications published by DIAL, suggesting that DIAL might want to prioritize this content more highly moving forward.

At a larger scale, the share of DIAL's budget allocated to the *Responsible Use of Network Data* portfolio decreased substantially between FY19 and FY20 as shown in **Figure 2.6** above. This resource allocation decision seems ill-advised given the evidence presented in this evaluation which suggests stakeholders are hungry for more contributions from DIAL's *Responsible Use of Network Data* portfolio.

3. Conclusions and recommendations

This section answers EQ #4: **What can DIAL learn or adopt from these experiences as it moves to a new strategy?**

Launched during the period of this evaluation, the new *Digital Beacons* strategy shifts DIAL focus to place countries and their digital transformation at the center of DIAL's work. The strategy builds upon the lessons learned from 1.0 including:

- A recognition that **digital transformation occurs at the country level** and that should be the organizing frame for DIAL's support (as it is for many of its funders). A country focus also allows barriers such as regulatory issues or poor intra-government coordination to be sized and addressed. It also focuses DIAL's work on one audience.
- The need for a **clearer focus and theme**. DIAL's own assessment was that "DIAL's founding strategy tackled too many challenges without a unifying theme. Our new strategy centers on digital transformation and responsible data use, with the primary aim of serving country customers," although DIAL will maintain its broad mandate.
- To prioritize **country-level gatherings and discussions of best practices** through ongoing communities of practice such as the Principles and Digital Donors Anonymous (DDA).
- To prioritize **partnerships and support from behind** by providing dedicated time and resources to support others' work, building meaningful relationships and producing white-label solutions that can be rebranded and adopted by others.

This section begins by exploring the sustainability of DIAL's work under the 1.0 strategy. It then highlights some of the persistent challenges that remain in the digital ecosystem which DIAL should continue to be mindful of moving forward. Finally, in the *Recommendations* section of the report the evaluation team offers overall recommendations for DIAL as it continues under *Digital Beacons*.

OECD definition of sustainability: The extent to which the net benefits of the intervention continue, or are likely to continue.

3.1 Conclusions

DIAL was born from a need identified by funders to overcome challenges in the Digital for Development space, including uncoordinated and sector focused donor funding and a need for better engagement between funders, NGOs, governments and technology specialists. Its founders believed that it could best meet these challenges through an organization that

could be staffed with technology specialists and have flexible funding to fill gaps in the ecosystem. This evaluation has found that DIAL contributed to the digital ecosystem through its portfolio of programs and partnerships, although it contributed mostly to the digital for development ecosystem and had little engagement with the digital marketplace more broadly. DIAL made great advances in establishing and staffing an organization to advance thinking and provide targeted support. The evaluation also found that DIAL entered into a dynamic and evolving digital ecosystem and the proliferation of digital for development projects has been accompanied by a rapid growth of mobile phone penetration and the expansion of commercial digital development initiatives. This evolution was also accompanied by shifts in thinking about how best to leverage donor funds to support the growth of inclusive digital ecosystems with an increasing appreciation of the critical role that governments must play in stewarding responsible digital inclusion.

Through our structured interviews of over 70 key informants, the team explored the impact of DIAL on the digital ecosystem and found two different perspectives. Ecosystem actors who engaged with DIAL benefitted from their partnership. Some of DIAL's thought leadership and advocacy work was praised and hailed as important in advancing the goal of digital inclusion. We also spoke with another group of digital thought leaders who were less familiar with DIAL and its work, and these participants felt that DIAL did not have a significant influence in the ecosystem. These differences were driven by differing understandings of the digital ecosystem with those engaged in the digital for development ecosystem praising DIAL's work and those who were in the digital marketplace, unaware of DIAL's work.

As DIAL moves to its new strategy, it has already taken on board many of the lessons and challenges identified in its first strategy in terms of its focus and approach. These shifts were validated and confirmed by the key informants and will help to set DIAL up for success as it ventures into its 2.0 strategy.

3.2 Summary of answers to EQs 1 - 3

EQ 1: What changes have occurred in the digital ecosystem since October 2016 and since the start of the 2020 COVID-19 pandemic?

Before answering EQ 1, it is important to note that this evaluation distinguishes between two major components of the digital ecosystem. First, the wider **digital marketplace** where commercial competition, especially between mobile operators, has driven mobile access, usage, and services such as digital financial services. The second realm is the **digital for development ecosystem** that has sought to encourage effective use of mobile channels and data to deliver services or support policy and planning by development actors such as NGOs. These two realms overlap but have different forces driving their evolution. DIAL intentionally focused its efforts within the digital for development ecosystem, and as such had limited engagement with key players in the broader digital marketplace.

Evolution of the Digital Ecosystem

DIAL entered an evolving and dynamic digital ecosystem. The digital marketplace saw global mobile broadband users grow from 33% of the world's population in 2016 to 51% in 2019 (ITU, 2020). Over a similar period, there has been a significant increase in the use of mobile phones and the internet to conduct financial transactions. Between 2014 and 2017, this has contributed to a rise in the share of financial account owners sending or receiving payments digitally from 57 percent to 70 percent in developing economies (World Bank, 2017). In the digital for development ecosystem, there was an increasing realization, influenced by the 2016 World Development Report on Digital Dividends and exemplars such as Aadhar in India, of the possibilities of mobile technology for development services. There was significant growth in digital for development actors, including private companies and donor-funded initiatives that supported different digital economy components, including infrastructure, identification, financial services, data empowerment and protection, platforms, and skills.

The 2020 COVID-19 pandemic demonstrated value for digital tools, channels, and stimulated demand for digitization support from governments and the private sector particularly related to the transfer of support payments. While the digital ecosystem has evolved significantly over time, several underlying challenges have been worsened by the COVID-19 pandemic, including the continued exclusion of women and marginalized groups and data security and privacy considerations.

EQ 2 Which of these changes are as a direct or indirect result of DIAL's work?

Summary Finding: DIAL's programs were coherent, relevant, and impactful for its partners in the digital for development ecosystem but had little impact on the wider digital marketplace.

Based on the key informant interviews, the evaluation team found that DIAL's work was highly valued and beneficial for its partners and for some in the donor community.

However, digital thought leaders who did not work with DIAL directly (as a direct partner, client, grantee or sub-contractor) nor indirectly (as a boundary partner) did not believe that DIAL had a significant influence in the digital marketplace. In some cases they were unaware of DIAL's work and mandate, in other cases, they were aware but did not believe they had a significant influence. Through our review of DIAL program documents, the team found that DIAL did not engage significantly with the wider digital marketplace or with mobile money, which was becoming an important driver of digital inclusion, particularly in Africa. In places where DIAL did engage with the private sector, there did not appear to be

a programmatic framework, such as a market systems development approach, to guide programmatic choices.

EQ3: Which of DIAL's interventions have been most effective in creating these changes?

Summary Finding: DIAL's stewardship of the Principles for Digital Development, the country focused work on innovative uses of network data, the [SDG Digital Investment Framework](#), and donor engagement through the Digital Donors Anonymous were all cited as effective partnerships that responded to the needs of the digital for development ecosystem.

Proven software and technology portfolio: The SDG investment framework and Principles for Digital Development were cited by many informants as important contributions to the digital for development ecosystem. The work of the Open Source Centre was valued by its partners, but many informants questioned the long-term financial viability of open source products.

Mobile distribution channels portfolio: This area of DIAL's work did not receive significant feedback from informants, reflecting the shift in DIAL's program priorities. In general, MNO informants noted the significant privacy and liability concerns that limit engagement with digital for development initiatives. Some informants also noted the limited market size of digital for development initiatives, particularly those implemented by NGOs as well as the need to prioritize user-centered approaches for implementation to be successful.

Responsible use of network data portfolio: This portfolio was also highly praised by informants. DIAL advanced the use of mobile data for planning purposes through its work in Malawi and Mozambique, but challenges remain, particularly for MNOs. Partners in-country felt that the work was coherent and responsive to their needs and spoke highly of DIAL's staff and their collaborative approach to partnerships. partnership style. MNO respondents highlighted the continued challenges of data partnerships. Responsible use of network data was also the content that generated the greatest amount of traffic to DIAL's website, Although it was not amongst the most frequent publication categories and has received fewer resources, DIAL's *Responsible use of network data* knowledge products are associated with the greatest and most sustained short-term spikes in traffic to DIAL's website out of all of DIAL's knowledge product content streams.¹¹ This suggests that the public sees the greatest amount of value in *Responsible use of network data content*.

¹¹ The content streams are Responsible Data Use, Mobile Distribution Channels, Digital Principles, Insights & Impact, Monitoring & Evaluation, Proven Software & Technology, Cross-Posted Content, and Cross-Cutting Content.

3.3 Persistent challenges in the digital ecosystem

DIAL should ensure it is mindful of the persistent challenges remaining in the digital ecosystem that have been exacerbated by COVID-19.

3.3.1 The digital divide

The Digital Divide remained a persistent challenge, despite the rapid growth of mobile penetration and digital development programs in developing markets. Mobile coverage and subscriptions increased overall, but there were wide disparities across regions and socioeconomic strata (GSMA 2017; Findex). KIIs with government, NGO, and technology specialist stakeholders with experience working on the ground with vulnerable populations in Malawi, Rwanda, and Mozambique highlighted persistent gaps in access for women, rural poor, and other vulnerable groups as a central challenge in digital development.

“You know, 60% of Africa is subsistence farmers if I have my data right. That's an area I don't see too many people getting it. So, for example, we put women in one big group. But a woman in the city is very different from rural women. A bit more focus on the rural African population - they are still a population that is under the radar.”

- KII with Technology Specialist, Direct Partner

Another one of DIAL's direct partners echoed this statement, adding that the development community needs to ensure they are not just building infrastructure on the supply side.

“In general, I would say that there has been an improvement [in access to digital technology] in Mozambique. [But], I believe that the increase or the improvement hasn't been proportional for women in girls, in accessing technologies, especially in rural areas.”

- KII with Direct Partner

Global thought leaders noted the increasing focus by donors on digital inclusion for women and underserved groups but the challenge remains significant. The COVID-19 pandemic has highlighted the challenges facing women and girls. Efforts are underway under the auspices of the G20 and other organizations to highlight the need to leverage digital channels to support female focused social protection payment systems and support

female entrepreneurs. The recently released G20 paper on advancing women's digital inclusion is an example of this (GPFI, 2020).

Although several stakeholders acknowledged the digital gender gap¹² as a serious issue, knowledge of gender-specific barriers and gender-sensitive approaches was limited; as a result, few stakeholders had formally incorporated gender perspectives in their work, and some didn't even consider the digital gender gap to be an issue. There was a general sentiment that an organization needed a specialist or a dedicated division to include such perspectives. This suggests that many organizations feel that their capacity to integrate gender-sensitive perspectives is limited.

Among the organizations that had a gender mandate, some directly implemented gender-specific programs (typically health or education-focused), others had programs with a gender component or used data to produce insights around gender for policy making. Only four informants in the study were able to describe current gender-sensitive programs that their organizations were implementing.¹³ There was limited evidence from KIIs that gender is included as an overarching consideration in ICT4SDG or in cross-sectoral digital initiatives. Some of the major challenges to addressing gender barriers to digital inclusion cited by NGOs and a government official in Mozambique included the lack of access to gender-disaggregated data, a lack of research around gender and digitization, limiting cultural norms and beliefs, and limitations around women's economic empowerment, combined with high cost of data/access to devices.

Perhaps more concerning is that **half of the government officials interviewed in Malawi did not see gender as a significant barrier to digital inclusion.** When asked about the types of barriers to digital inclusion that may exist for women or girls, a government official in Malawi replied, "No, I don't think other than maybe the cost of access? And they are aware of the availability of those solutions. I don't see any other barrier." Another official replied, "Not to my knowledge, no. I don't think there should be any [barriers]."

"We have done a study and we tried to understand what type of devices girls are using. It [says] the devices they're using do not have proper access to digital information - only those running on USSD. One specific time we found that 60% of girls that had devices, they had their teachers phones. This is dangerous."

¹² GSMA reported a 13% gender gap in mobile access in the SSA region in 2017 (GSMA 2017).

¹³ One focused on maternal health, one on girls' ICT education, and two were research studies on gender barriers. Gender-sensitive approaches to programming are often a priority for NGOs, but are typically limited to maternal and child health applications, employing digital tools as a part of service delivery.

- KII with Government Official, Mozambique

“When everyone says build back better and we have to do better for women as we come through this, what do we even know now? So it's been an opportunity to really highlight all the things that, all the data we never had, we still don't have.”

- KII with NGO

The COVID-19 pandemic has intensified the urgency of the need to address digital inclusion gaps. It is unclear how poor and marginalized segments will be affected by sudden digitization, especially as governments are making rapid fire decisions to accelerate this process. As education, social safety nets, and health services increasingly get delivered online or through smart devices, some informants expressed concern about what happens to communities or groups of people without access to technology. One NGO informant stated that if gender considerations are not incorporated in digital development and the recovery plans being accelerated by COVID-19, digital inclusion will face wider gaps. In fact, the current lack of gender-specific data means that it will be difficult to measure if we have achieved “better” in the future. Another NGO informant stated, “women’s lack of digital inclusion is just going to make the gender problems even worse as we go through long term recovery.”

3.3.2 Privacy and security of personal data

The rapid shift to digital has also raised concerns around the security and privacy of digital systems being adopted. As countries' appetite for digital data and digital solutions grows, it is very important to ensure the proper frameworks are in place for data governance to ensure data privacy and security. The rapid digitization brought about by COVID-19 has highlighted these challenges. A number of organizations including CGAP and the Better Than Cash Alliance are incorporating a greater focus on responsible digitization into their work.

“I feel more strongly now that the future of how data and technology is going to be governed and used either to... surveil and control people or to really empower people is one of the biggest issues we're facing.”

- KII with Global Boundary Partner

The pandemic has also exposed underlying issues around digital harms. As governments, NGOs, and service providers rapidly moved to digital channels and tools, many critical gaps have been exposed or exacerbated. Many informants expressed concern about the unintended consequences of such a rapid move towards digitization. The pressure to do things quickly may lead to the duplication of efforts, instituting new solutions without establishing the necessary policies, security measures, frameworks, or infrastructure to ensure sustainability and wider gaps in access.

“What I'm really, really concerned about is too many novices... with our hearts in the right place, jumping on technology [without] the right data safeguards, without, you know, security provisions as they're moving into this space with limited budgets, but I've got to deliver it yesterday.

But I do feel... there is going to be that second wave of impacts of this, around the cost of such a rapid move.”

- KII with DIAL Thought Leader

There was a general consensus that to respond to these gaps, it is critical to adopt user-centered approaches. Without this approach, digitization may actually result in further exclusion for certain groups. An external actor described this sentiment as follows, “there is a tremendous level of inequality that can come about through marketplaces that get distorted by a single owner having too much access to that common infrastructure.”

Adopting user centered approaches was also mentioned as an effective way to address the gap in digital literacy that creates disadvantages for rural poor. A tech specialist involved in D4D stated, “it is very difficult to go digital directly” because there are barriers that must be addressed before digital tools can be utilized. They continued, “I remember a project we did a few years ago on digital insurance. On paper, the service was amazing. And at the beginning it was offered for free to farmers. In practice, no one subscribed. When we went into the field, we realized that if you have never seen insurance and you don't know what it is, it is far from intuitive.”

In particular, having simple user-friendly tools disseminated through strong local partnerships on the ground who are able to work with and educate communities was highlighted as necessary for success. A tech specialist describes the necessity “to have the right partners on the ground... who can meet people face-to-face, explain how [a tool] works, and build trust with a service. The partnership will always be key.”

3.4 Recommendations for DIAL's new strategy

The new strategy places countries and their digital transformation at the center of DIAL's work. These shifts received overwhelming support from our key informants. As DIAL shifts to its new strategy, the evaluation has surfaced a number of issues that DIAL should consider as it moves forward.

3.4.1 Strategy and operations

Remain sector-neutral but incorporate market perspectives and enhance relationships with organizations that are extending the basic building blocks of digital inclusion, including digital financial services and digital ID. As DIAL shifts to its 2.0 strategy, it should continue to advocate for a sector-neutral, building-block approach to its work. This will be particularly important as it advances a whole of government approach to digitization. Those players would likely benefit from a deeper understanding of the Principles and DIAL's other programs.

Take a more explicit market facilitation approach to its programming. Understanding the drivers of change for expanding access to digital services and developing interventions to shift those drivers will be critical as DIAL moves to implement its new strategy.

Strengthen Theories of Change and results frameworks. The new theories of change and results frameworks should be examined through the FSDA framework to assess for evaluability. As DIAL moves to country-specific programming, it will be easier to define specific digital inclusion and digital transformation targets for inclusion in the framework.

Continue to address the challenges in the digital ecosystem that have been exacerbated by the COVID-19 pandemic, including the digital divide and data security and privacy.

3.4.2 Stakeholder engagement

Continue to engage donors and offer a platform for greater exchange beyond the digital donors anonymous. Donors appreciate the role that DIAL plays in helping them to think through opportunities for enhanced digital development. DIAL should consider expanding this role through a greater engagement beyond the regular calls, including facilitating learning events. Donors also noted the continued need to advance coordinated funding approaches to support digital transformation.

Further clarify DIAL's role and unique selling proposition (USP) in the ecosystem globally and in-country, particularly as it relates to the digital marketplace and key sectors. Given DIAL's size and scale compared to that of others in the sector, DIAL could benefit from specifying its role in an increasingly crowded digital ecosystem. This could include building capacity of governments to develop digital strategies and roadmaps,

advancing user centric approaches, or advocating for responsible data usage. It should also clarify what it will not do and how it will partner with others in the ecosystem.

Develop an influencing strategy to target messaging and communications to specific audiences. For DIAL's advocacy and demonstration work, DIAL should do a deeper analysis of the ecosystem, including the digital marketplace, to ensure that communications products speak directly to the needs of the target audience. It should also continue to publish on the theme of responsible data use as it drives traffic to DIAL's website. DIAL has indicated that they wish to continue their approach of supporting from behind through a white-labeled approach. DIAL and its funders should be aware that such an approach may make a future evaluation of DIAL's influence challenging.

Examine DIAL's operating model for in-country work. For DIAL to truly be effective in advancing whole of government digital solutions, it will need to think about how best to deliver this support. DIAL's in-country work requires time, on the ground presence, and trust, which is hard to build remotely.

Advance donor coordination in-country. Informants noted the need for greater coordination and coherence in-country as the number of players in the digital ecosystem grows to include new players, such as technology firms that are setting up their own charitable programs. DIAL's deep technical expertise and trusted relationships can play a critical role in helping countries make effective choices as they embark on their digital transformations.

3.4.3 Thought leadership

Consider an effective balance between demonstration projects and research. Many informants highlighted the importance of practical, on the ground examples of projects that can help to drive advocacy and policy dialogue.

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Annex 1 - Assessment of DIAL's Theory of Change and Results Framework

Table A.1: Testing DIAL 1.0 ToC against the FSDA framework (FSDA 2017)

<p>Clear ✓</p> <p>Are the final impact, the digital ecosystem outcomes and the outputs clearly identified?</p> <p>Are the proposed steps towards achieving these clearly identified?</p>	<p>The final impact and digital ecosystem outcomes (in this case, enhanced stakeholder capabilities) are clearly defined. Key outputs are defined in the abstract (coordination, new and improved solutions, insights, building blocks). The proposed steps to achieve the outputs, outcomes and impact are also defined in an abstract sense.</p>
<p>Relevant --</p> <p>Are the programme objective(s) clearly relevant to the needs of the target group, as identified by any form of situation analysis, baseline study or other evidence (undertaken by DIAL or others)?</p> <p>Is the intended target group clearly identified?</p>	<p>Numerous studies and consultations informed the design of DIAL's strategy and ToC. However, while the ToC may be relevant to select stakeholders in the digital marketplace, it is not relevant to the broader digital marketplace. The ToC focuses capacity; although it highlights the need to 'align business' models the ToC doesn't provide enough detail on the incentives which dictate whether or not business models are aligned.</p>
<p>Plausible ✓</p> <p>Is there a continuous causal chain connecting DIAL's interventions with impacts at the outcome or final impact levels?</p> <p>Is it likely that the programme objective will be achieved, given the planned interventions, within the programme lifespan? Is there evidence from elsewhere that it can</p>	<p>DIAL's ToC lays out a very abstract causal chain which could plausibly lead to the envisioned outcomes and impact. However, the causal chain could have been laid out in greater detail. Given the nature of DIAL's work and the complexity of systems, the magnitude of DIAL's impact would not likely be very large after only five years, as it often takes years for systems change interventions to manifest in tangible impacts.</p>

<p>be achieved?</p>	
<p>Contextualised X</p> <p>Have assumptions about the roles of other actors outside the programme been made explicit?</p>	<p>Although DIAL considered both supply and demand in subsystems of the digital ecosystem, it did not consider the demand side of the digital marketplace (i.e. mobile end-users). The dynamics that are driven by mobile-end users have critical influence on the four key elements that DIAL identified. Failing to account for the role of mobile end-users in the digital marketplace was a critical gap in DIAL's ToC.</p>
<p>Testable X</p> <p>Is it possible to identify which linkages in the causal chain will be most critical to the success of the programme, and which should thus be the focus of evaluation questions?</p>	<p>Because DIAL's mandate was so broad, it is not possible to construct a single, clear counterfactual of a world without DIAL. Because it's ToC is so abstract, it is not possible to construct a single, clear counterfactual for any one of the causal chains the ToC lays out. Take the following example of a very specific counterfactual question: 'If DIAL hadn't convened donors around the Principles for Digital Development, how would donors' ability to adopt emerging good practice when funding digital services be different than it is today?' Even with very good data, answering this single question would be a very difficult, if not impossible task because of the myriad factors which influence donor decisions. And this is just one of many questions that would be needed to comprehensively test DIAL's Toc.</p>
<p>Complexity X</p> <p>Are there expected to be multiple interactions between different components, thus complicating the attribution of causes and identification of effects?</p> <p>How clearly are the expected interactions defined?</p>	<p>Following from 'Contextualised,' DIAL's ToC didn't adequately account for the complex interactions between the digital marketplace and the digital for development market. By focusing solely on the digital for development market, DIAL missed the opportunity to harness the private sector forces at work in the digital marketplace.</p>

Table A.2: Assessment of DIAL indicators against FSDA's IOM framework¹⁴ (FSDA, 2016)

IOM Criteria	Assessment
Indicators are aligned with the ToC and results chains, and the overall reporting is agreed with the funders	DIAL's results framework indicators are generally aligned with the ToC and results chains.
<p>Have you considered the different types of indicators suggested:</p> <ul style="list-style-type: none"> - progress indicators; - market system development indicators; - top down sector tracking; and - 'beyond indicators'? 	<p>Of the 30 indicators included in DIAL's FY19 Results Tracker, there are:</p> <ul style="list-style-type: none"> - 14 progress indicators - 13 market system development indicators - 3 top down sector tracking indicators - 0 'beyond indicators'
Ensure your indicators distinguish between indicators used for accountability and those indicators which will help track and test the impact measurement questions (some overlaps can be expected).	It isn't always clear why a particular indicator is being tracked, particularly in the majority of cases where no target has been set.
In the final selection of indicators prioritised, do you have clear indicators for systemic change and sector tracking?	Systemic change indicators are included.
Does the set of indicators adequately fill the gap between programme outputs and the final desired market change?	There are no explicit links between the different levels of the Results Framework. Notably, DIAL's results framework doesn't include a single indicator related to digital end-users, who are, after all, the intended ultimate beneficiaries of DIAL's work.
Indicators capture key quantitative and qualitative data (especially, in the case of the latter, for sector tracking). Are you capturing both at different steps of your ToC/results chains?	DIAL's Results Tracker relies exclusively on quantitative indicators. Given the complex, systemic nature of DIAL's work, the results framework would benefit from including qualitative indicators and a formal qualitative analytical review process on a regular basis.

¹⁴ 'Beyond indicators': '[Organizations] may also need to capture evidence that does not fit into regular monitoring; for example, stakeholder perceptions and views on particular (and unexpected) events, processes and outcomes in the [focus] sector.'

Have you prepared indicator profiles for each selected indicator – definition, rationale for use, the data source(s), frequency and method(s) for data collection, cost implications, and who will be responsible for data collection, analysis and reporting?

Although there are indicator profiles for each indicator in the Results Trackers, the data sources and collection methods are often not suitable for generating valid estimates of system-level metrics.

Have you collected baseline information where possible? Have you set realistic and transparent targets (i.e. based on evidence and explicit assumptions) for those indicators?

Data from the Baseline Evaluation is used throughout DIAL's Results Tracker despite the fact that the Baseline Evaluation drew from a very small sample of stakeholders. Targets were not consistently set and are not always properly anchored to the baseline estimates.

Have you established processes to:

- periodically check if the indicators being measured miss a focus on key drivers for expected change and create distortions in the behaviour of DIAL staff and/or implementers?
- Are there unintended and/or negative impacts happening? Do you have processes to measure these?

Our understanding is that DIAL has strong processes in place to regularly review results framework indicators and identify any unintended or negative impacts of indicator definitions. We learned from our conversations with DIAL staff that indicators related to knowledge products distorted staff behaviour to focus on producing outputs for the sake of hitting output targets. It's our understanding that this issue has been identified via DIAL's internal MEL processes.

Annex 2 - In-Depth Review of Country Level Work

DIAL outlined a central Theory of Change for all of its country-specific work:

IF

DIAL defines, implements, and documents a set of D4D delivery models;

THEN

- Development community sees benefit of integrating MNO data
- MNOs and supply side see business value in sharing data
- More MNOs and development community will share, access, and use data

BECAUSE

Sharing and integrating MNO data into development decision-making is:

- **Cost-effective:** leads to high ratio of social returns compared to low incremental cost of adding to existing datasets (compared to no MNO data)
- **Impactful:** actually leads to more accurate targeting of development interventions through data models that accurately reflect the population to be covered
- **Replicable/efficient:** there is a way to package learnings to have low fixed costs, address multiple use cases, and encourage quick uptake by supply, demand, and regulators
- **Relevant:** addresses root cases by creating incentives for both supply and demand to share and use data
- **Sustainable:** there are capacity and mechanisms (including regulatory environment) for both supply and demand to continue sharing and using data responsibly

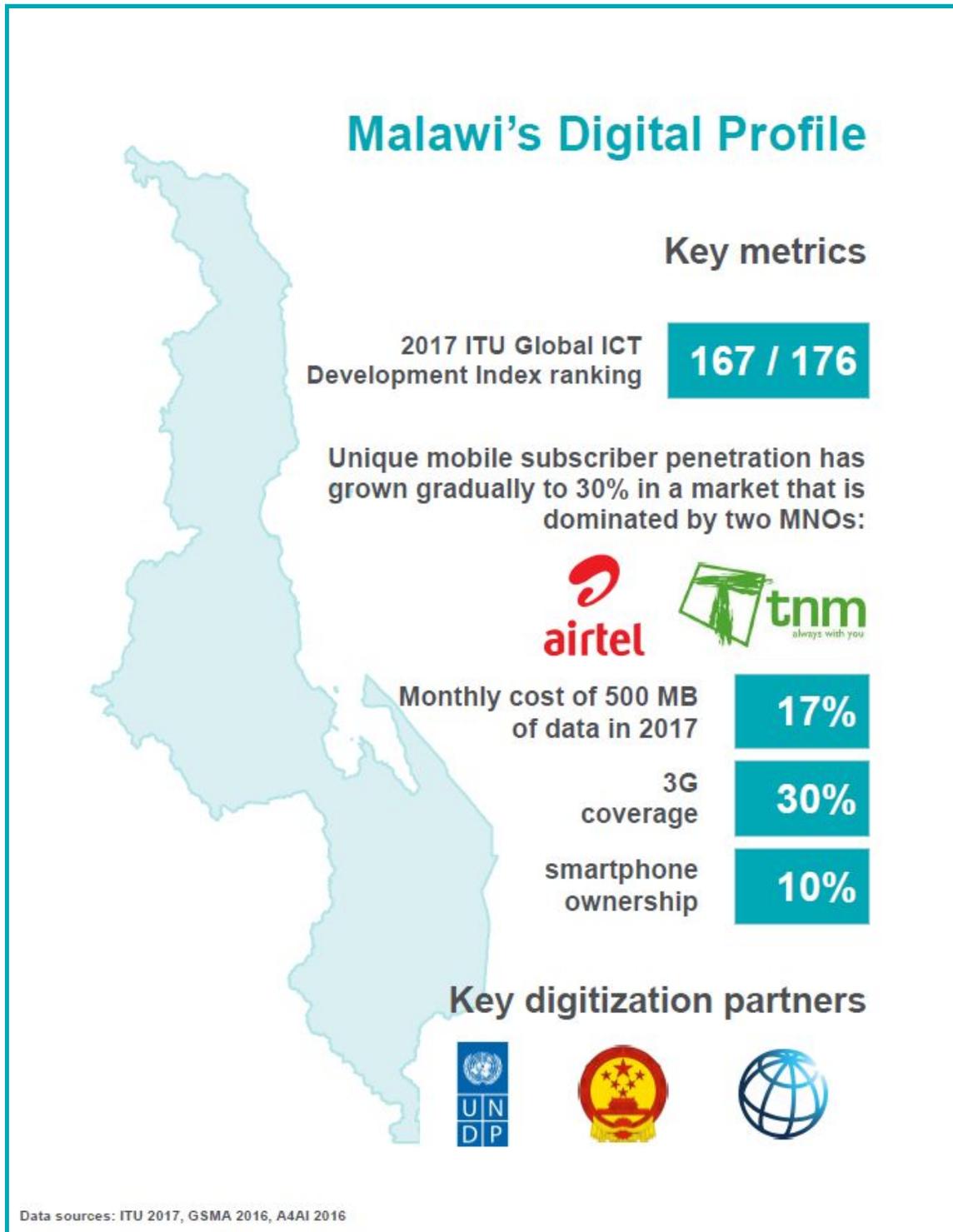
As done with DIAL's organizational ToC in Section 3.3, **Table A.3** assesses the country-level ToC against FSDA's ToC 'evaluability' framework.

Table A.3: Testing DIAL 1.0 country ToC against the FSDA framework (FSDA 2017)

<p>Clear ✓</p> <p>Are the final impact, the digital ecosystem outcomes and the outputs clearly identified?</p> <p>Are the proposed steps towards achieving these clearly identified?</p>	<p>The final impacts are clearly identified; the proposed steps to achieving those impacts are identified at a high-level (i.e. defining, implementing and documenting models)</p>
<p>Relevant ✗</p> <p>Are the programme objective(s) clearly relevant to the needs of the target group, as identified by any form of situation analysis, baseline study or other evidence (undertaken by DIAL or others)?</p> <p>Is the intended target group clearly identified?</p>	<p>The ToC assumes DIAL's work will be relevant because it will 'address root cases by creating incentives for both supply and demand to share and use data.' However, creating incentives is only half the story - it is also important to mitigate disincentives.</p> <p>Although DIAL mapped the key stakeholders in the digital for development space in-country, the program objectives don't reflect a deep understanding of the issues preventing MNOs from sharing mobile data. The goal outcome that 'MNOs and supply side see business value in sharing data' assumes that MNOs and supply side don't currently see the value that exists. Evidence from the KIIs suggests that the problem wasn't that MNOs didn't recognize the value, but rather that MNOs perceived the potential costs of participating in D4D projects as outweighing the potential benefits.</p>
<p>Plausible ✗</p> <p>Is there a continuous causal chain connecting DIAL's interventions with impacts at the outcome or final impact levels?</p> <p>Is it likely that the programme objective will be achieved, given the planned interventions, within the programme lifespan? Is there evidence from elsewhere that it can be achieved?</p>	<p>The ToC assumes that DIAL's work will result in sustainability by establishing the capacity and mechanisms (including regulatory environment) for both supply and demand to continue sharing and using data responsibly. Although DIAL is right to identify these as necessary elements for sustainability, neither the ToC nor the associated Theory of Action outline any work by DIAL to build up such capacity and mechanisms.</p>
<p>Contextualised ✗</p> <p>Have assumptions about the roles of other actors outside the programme been made explicit?</p>	<p>The ToC views MNOs as passive, naive sources of data incentivized only by the need to make money. It's assumed that MNOs simply need to be enlightened and capacitated in order to be induced to share mobile data. This conception of the role of MNOs both in the digital for development ecosystem and the wider digital marketplace doesn't properly contextualize the role of MNOs.</p>

<p>Testable ✓</p> <p>Is it possible to identify which linkages in the causal chain will be most critical to the success of the programme, and which should thus be the focus of evaluation questions?</p>	<p>The linkages are clear and testable with a theory-based approach. It would be challenging to test this ToC using quantitative methods of impact analysis given the systemic nature of the work.</p>
<p>Complexity ✗</p> <p>Are there expected to be multiple interactions between different components, thus complicating the attribution of causes and identification of effects?</p> <p>How clearly are the expected interactions defined?</p>	<p>Although the ToC identifies critical influential factors (private sector incentives, analytical capacity, regulatory environment), it does not clearly articulate how these factors are expected to interact with DIAL's work.</p>

Malawi



What changes have occurred in Malawi's digital ecosystem prior to DIAL's work and during the period of DIAL's engagement?

Malawi's market for telecommunications and other digital services lags behind that of its regional peers (World Bank 2017-1). Malawi was ranked 168 out of 176 countries in the 2017 edition of the International Telecommunication Union's (ITU) Global ICT Development Index (ITU 2017-1). Unique mobile subscriber penetration has grown gradually to 30% in a market that is dominated by two MNOs: TNM and Airtel (GSMA 2019). Continued growth is expected, at least to the regional average, however there is still a significant gender gap.

Mobile broadband internet is growing rapidly and there is increasing demand for digital services. Relatively few people access mobile broadband internet - only 30% are covered by 3G and only 10% of the population has a smartphone, however demand for these services is growing rapidly (GSMA 2019). One of the government informants in Malawi described this trend saying, "the demand for ICT has surpassed the demand for commodities like clothing or food. So there's no choice for the government. That's the route we have taken, the people are saying that ICT becomes in their life."

The increased demand is fuelling development applications as well as driving commercial applications, such as digital credit. In-country respondents, including MNOs, cite higher figures at 50% to 60% GSM penetration and 70% internet penetration, which suggests continued underreported growth fueled by recent investments in 4G capacity and falling data costs. Key informants referenced the World Bank, UNDP, and Chinese government as key sources of financing for improving connectivity, which has been supported by the local government. In 2016, the cost of 500 MB per month of data was 24.4% of GNI per capita and had fallen to 17% by 2017 (ITU 2017). Partly because of government pressure and increased demand during COVID, interviewees report that data costs have fallen further. One official stated, "Lately I have seen the demand for people to have the price of data reduced and as a government we moved in throughout it to make sure that gets done."

MNOs report increased demand for services among clients and businesses including demand for services via messaging platforms regularly used by Malawians in their daily lives, such as WhatsApp.

Additional services and building blocks are also expanding, including mobile money, digital ID and e-government. There are an estimated 6.2 million mobile money accounts in Malawi, a country with a total adult population of just over 10 million. There are over 50,000 registered cash-in, cash-out agents (GSMA 2020-2, UNCDF 2018). Malawi's ambitious national identity strategy has registered 9.2 million citizens and issued 8.7 million national identification cards since 2017 and other identity and registration databases are being implemented for health care and social protection (Universal Beneficiaries Register) (GSMA 2019). Partly due to initiatives such as the national ID, Malawi's e-Government Development Index has improved by almost 50% since 2016 (from 0.23 to 0.35 in 2020) (UN

2020). However, Malawi continues to lag behind its regional peers who are also improving on this measure.

Digitization in the health sector was nascent in 2017. A range of health information systems were in use, notably DHIS2, and supported by various donors, but they were fragmented and seldom focused on building capacity within the ministries. More broadly, 31 mHealth projects were active in Malawi in 2017, but smartphone applications were not scaling. Only three projects had more than 2000 users (Malawi MoH 2018), which were primarily SMS and phone-hotline based projects. Informants in Malawi most frequently cited free phone-in hotline programs, such as the one used to collect citizen input on the NPC's National Transformation 2063 report, as examples of successful digital projects, but also listed the Baobab health tool, the integrated financial management system.

COVID-19 has raised demand and the Government's awareness of digital solutions, especially in the health sector, but constraints remain from an MNO perspective. In response to COVID-19, existing digital solutions were effectively deployed, while remaining gaps attracted more attention and funding. Interviewees commented that, for example, the MoH was able to respond quickly because of previous work to harmonize health information systems, enabling tracing and better data analytics. A vision for enterprise architecture was already emerging, and the government was able to recognize where it needed help the most. The MoH Digital Health Division received funding from UNICEF, USAID, GIZ and DFID for the One Health Surveillance platform and an emergency operations center was established to facilitate improved data access. The MoH also increased its use and support for mobile health services, such as Chapital Cha Pa Phone.

However, critical capacity gaps and coordination issues still prevent the government from achieving greater digitization. When asked what type of digital tools the government uses, the most common example cited by officials was the adoption of Zoom for virtual meetings. This suggests a fairly low knowledge of digital solutions for government service delivery. Siloed solutions and poor coordination were also identified by government stakeholders as key challenges.

“I find that maybe lack of coordination, that's why you have sector institutions coming up with their own systems. What we call government silos. So everyone is doing their own things and it approves the data to do integration or interface. We find a lot of challenges.”

- KII with government official

Government interviewees also report increased awareness of the value of data analytics, but the need for capacity building to utilize them. Overall, COVID-19 has shifted the government's conversation from 'why digitize?' to how best to do it safely and responsibly.

MNOs contributed anonymized data, but were only able to do so because it was purchased by DIAL and viewed as a confidential CSR initiative. MNOs also said that more clarity on the legislation, policy requirements, and technical standards need to be in place before data sharing expands among MNOs, governments and NGOs. Without other clear use cases and demand, MNOs do not see a sustainable business case for investing in data analytics capabilities to provide ongoing services in this area.

Most of the past companies that I've connected to, most of them have died in natural death. Why? Because they did not put in the homework to understand the space of getting into, and then just lack of a drive and passion. We know exactly why, why are we doing this? So it shouldn't be okay, I've heard Kenya's dreams. Let's do this. I think we should fully understand our needs and where does technology come in and solve those needs? And do we have the right capability? Do we need to build the right capabilities? What are the gaps in their own capabilities? What is the problem in the mindset infrastructure-wise business model? What is it more, how I was going to ensure this is sustainable? The structures around managing that platform? I can keep going on and on, but what I've seen over the years, It's just a basic lack of people doing their homework.

- KII with MNO

Malawi is developing its Digital Transformation Strategy. COVID has also enhanced the awareness that digital transformation requires preparedness and coordination. Informants noted increased coordination efforts across ministries and the National Planning Commission has received support for the development of a national digital transformation strategy which provides an integrated vision and roadmap for digitization. Digitization is also a component of Malawi's recently released Vision 2063 document including using digital finance to increase credit for small businesses, and further digitizing government services to enhance transparency and domestic revenue mobilization.

Underlying challenges remain. The World Bank noted that the lack of affordability, availability and quality of broadband connectivity, coupled with low human and institutional capacity, constrained access to digital technologies and services (Malawi 2017-1). These challenges were echoed by government, MNO and NGO informants in-country.

One, I think it's the issue for the financial resources. Two is the issue of human capacity ... So at some point [the projects/funders] have to go back and we should be able to manage ourselves, but we need to come up with the capacity to manage that. Of course, infrastructure wise, as I mentioned, data in terms of networks is another challenge. So these are the key issues.

- KII with government official

Underlying these challenges were a lack of competition for critical telecom markets, inadequate investment, and high-cost international bandwidth. Other constraints include high levels of taxation and weak regulation.

DIAL's Work in Malawi

In October 2017, DIAL, in partnership with consultants Cooper/Smith and technology firm Infosys engaged stakeholders in a 6-month demonstration project that sought to highlight the value of analyzing and mapping data from Mobile Network Operators (MNOs), population census, settlements mapping, and geospatial data to patient or aggregate data collected through the Malawi health system. Data analytics was provided by Infosys. Cooper Smith focused on “programmatic use of MNO data”. A priority use case for the Ministry of Health in this project was to identify where and how to best deploy the 900 new health posts it had planned with an estimated budget of \$42 million (DIAL 2018-3), factoring in migration patterns and incidents of disease, which could be derived from a range of data, including geospatial and MNO call data records (CDRs).¹⁵ In engaging with wider stakeholders, including telecoms regulators, it was identified that data privacy and protection, in order to ensure anonymity, were critical to the success of the project.

Anonymized data from two MNOs (Airtel and TNM) was combined with geospatial data from WorldPop and UNICEF. The analysis was able to validate certain capital allocation decisions, while finding opportunities to double potential efficiency of certain health posts, in terms of people per health post. The analysis identified locations that could potentially place health posts within walking distance for 95% of the population. Findings from the analysis were disseminated through one-on-one meetings with government officials, presentations, and workshops. The implementing team has also made available a Business Intelligence dashboard for the Ministry of Health. DIAL reported that the Ministry of Health in Malawi is making investment plans based on their tools in 2019. In 2020, it then extended support to the Ministry of Health to adapt the dashboard to support their COVID response.

¹⁵ “To infer population movement patterns using anonymized, aggregated MNO data as a proxy to understand population densities, migration and urbanization patterns.”

DIAL and Cooper/Smith documented the project in a technical report published July 2019 titled *Using Mobile Phone Data to Make Policy Decisions*. As of September 2020, the page where the report is hosted on DIAL’s website had been visited 529 times, but had only been downloaded 72 times.

Table A.4: ToC for DIAL’s work in Malawi

If DIAL...	Then.... (by end of 2020)	Because...
Supports the MOH and partners to access MNO data and insights for decision-making and supports the MOH in messaging strategy for COVID-19 response.	The government of Malawi will routinely use MNO data to make evidence-based decisions to improve development outcomes.	<ul style="list-style-type: none"> • MNO and other data is available on time for the periods requested. • Integrating MNO data is a cost-effective solution to improving development outcomes. • Multiple uses can be derived from the same data set to increase ROI. • There is a sustainable way for MNOs and gov to continue to share and use data beyond FY20/without DIAL’s support. • MNO data can be shared and used responsibly, must be used with other datasets to avoid harm

Which of DIAL’s interventions have been most effective in creating change?

In-country informants indicated DIAL’s greatest impacts included their ability to establish relationships with a local MNO and bring a wide range of key stakeholders together at one table, demonstrate the value of data for development, and begin to generate interest from different ministries and sectors in the D4D use cases.

Global thought leaders and other participants in the digital ecosystem also recognized the importance of the D4D use case that DIAL demonstrated in Malawi. Many informants saw it as an excellent example of how public and private actors can work together and a practical prototype that moves beyond the typical academic theories for how digital can be applied.

“I think the other critical role that DIAL played was the sort of introduction and facilitator of relationships with the mobile network providers. So the extent to which they can continue to play that function for organizations like ours or governments who were interested in doing this will be really critical to continue to open up possibilities and be able to generate these use cases going forward. So I just think continual demonstration is probably the only way to really show people the value of this work, plus each of these demonstration projects has direct country impact and effect, which I think that DIAL should be proud of.”

- KII with NGO

There were many other activities occurring in the digital ecosystem in Malawi. One of DIAL’s key partners in Malawi, Cooper Smith, had already supported the Ministry of Health over the last 5 years, with funding from the Bill and Melinda Gates Foundation, to manage and use HIV and health data in decision-making under a project called “Kuunika,” the “Data for Action” project. They now have staff seconded into the Ministry of Health, where they support 28 technical staff and a new Digital Health division.

Informants highlighted the important role that DIAL played in advancing on-going work already underway by Cooper Smith by purchasing mobile data. Informants also noted that DIAL’s work building the Government of Malawi’s capacity to use MNO data to improve health and emergency response complemented the existing Kuunika project. In particular, the movement and point of interest data is being used to inform the design of HIV prevention studies.

What can DIAL learn or adopt from these experiences as it moves into a new strategy?

Respondents in Malawi noted the benefit of having staff based in-country with effective working relationships with certain key stakeholders. There was recognition that staff, especially the Country Director, brought technical strength and subject matter credibility. DIAL was perceived to be a neutral organization that could facilitate discussion between stakeholders. These types of relationships take time to nurture and build trust, requiring on the ground presence as it is hard to do this remotely.

To further advance D4D initiatives, more attention needs to be placed on responsible data use frameworks to open up MNO data for use cases in other sectors. Malawi lacks a consolidated data governance framework. Without this, MNOs will continue to be highly reluctant to share data in the face of potential liability and reputation issues. The requisite

capacity would need to be built within government ministries to ensure that frameworks are appropriately designed for the needs of specific sectors.

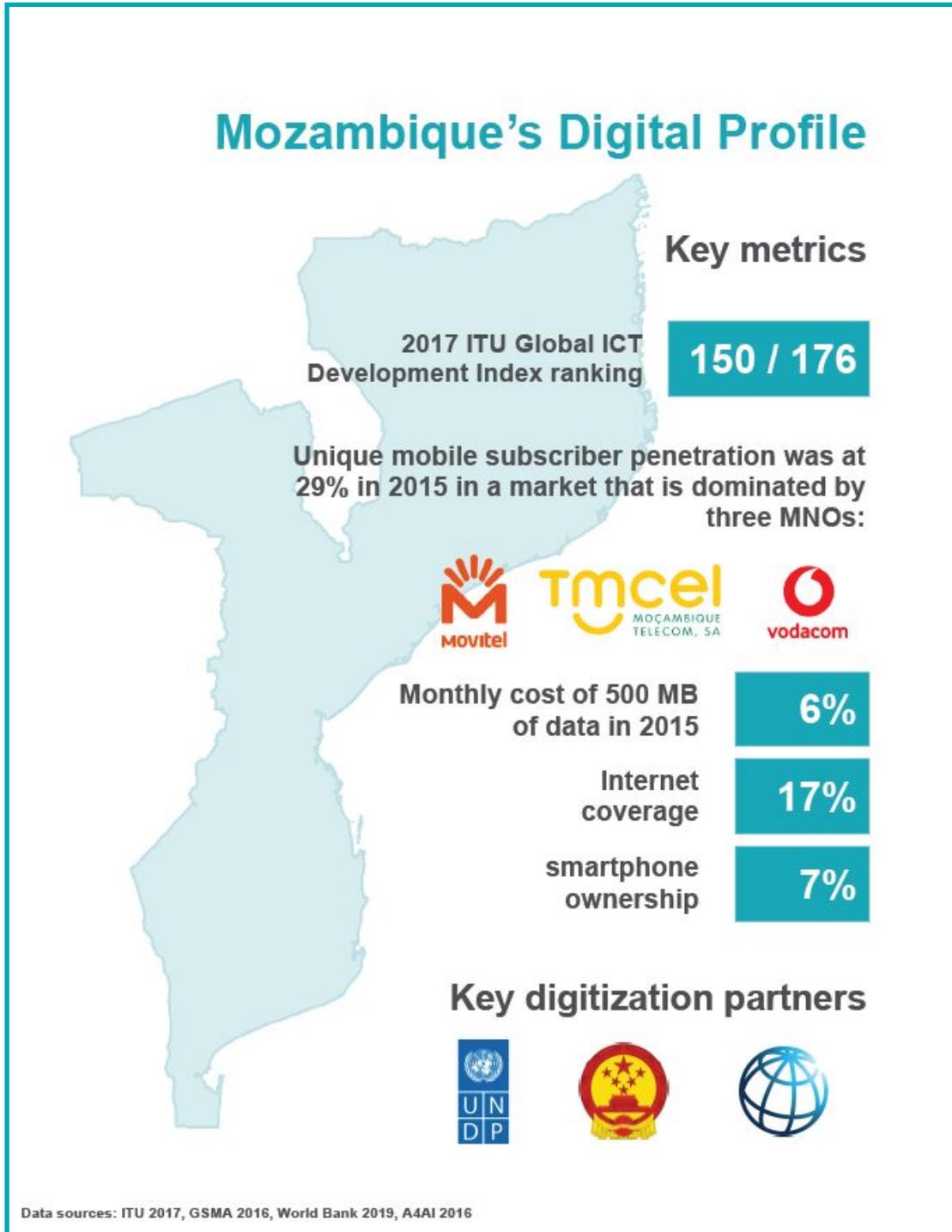
As part of its D4D programs, DIAL was encouraged to place greater emphasis on capacity building with partner staff for sustainability. DIAL was encouraged to work with the broader ecosystem to contribute to capacity building initiatives. Increased focus on capacity building for all stakeholders, especially government, will build towards greater understanding of digitalization strategies and sustainability of projects.

Many interviews and focus groups confirmed that whole-of-government digital transformation, in line with the ICT4SDG approach, is a high priority and that there are large gaps and unmet needs. Furthermore, the private sector expresses continued frustration with the lack of coordination within government resulting in duplication of initiatives and investment, which blocks collaboration. While DIAL has engaged with consultants to the NPC, respondents referenced the importance of DIAL engaging with NPC in a more direct and formal way, especially as the NPC moves to implement many of the recommendations in the 'Malawi in the Digital Age' (MADA) strategy once this is approved. This would necessitate that DIAL assess which of its activities align with the identified needs, which may require increased technical resources in-country to provide support. While the needs expressed in the MADA strategy focus on national implementation, there is also demand from stakeholders to learn from their peers elsewhere. If D4D were still a priority in the NPC's plans, some interviewees thought its application to disaster management and tracking digital transformation's progress more broadly would be relevant and be an opportunity for DIAL to engage beyond the health sector, in line with its sector agnostic mandate.

A greater emphasis on gender is needed in the design of DIAL's programs. The use of gender disaggregated data could be a powerful tool to drive focus and attention to the existing gendered digital divides.

Growth in digital services in Malawi has been driven by investment from the private sector. Despite DIAL's valuable efforts in the D4D area, MNOs do not report the incentive or ability to continue investment in their own D4D initiatives. MNOs commented that the business case for D4D has not yet been proven. With reliance on external technical experts for data analytics, MNOs did not develop this capacity internally throughout the course of the health D4D project. Without existing capacity and a business model, MNOs are unable to further expand investment in this area or likely to take on this work without subsidy. Moving forward, DIAL's work with the private sector should reflect a Theory of Change to encourage private sector investment into D4D services.

Mozambique



What changes have occurred in the digital ecosystem prior to DIAL's work and during the period of DIAL's engagement?

Mozambique faces many challenges which often impede efforts to expand, and benefit from, a digital economy. This includes poor telecommunications infrastructure and poor network coverage, especially in rural areas. Internet penetration is at 17.5%, which is below average for the region (World Bank, 2019-2). Broadband coverage is limited to urban centers, and main corridors of development, with rural areas lagging behind significantly. Ownership of internet-enabled devices, such as smartphones, is extremely low at 7% (vs 20% SSA average reported by GSMA).

There is also a significant digital literacy gap, which impedes the poorest in the country from benefiting from a digital economy. This was widely recognized by informants in the country.

“In general, I would say that there has been an improvement [in the digital ecosystem], but it is not enough at country level, especially in Mozambique. For example, especially for women and girls, I believe that the increase or the improvement hasn't been proportional for women and girls, in access technologies, especially in rural areas.”

- KII with Direct Funder

Mozambique's educational levels are among the lowest in the world, with only 4% of the population receiving some form of secondary education and the country has not yet holistically integrated digital skills training into the national curriculum (World Bank, 2019-2). Other infrastructure gaps also impede the growth and potential of the digital economy, with only 24% of the population having access to electricity (World Bank, 2019-2).

The growth of the digital economy in Mozambique has been a strategic priority for the government and ample effort has been made to effectively integrate digital technologies into national development strategies, with the aim of meeting a wide array of national developmental goals and objectives. A few key documents make clear government commitment to the expansion of the digital economy. This includes the National Strategy for Broadband and in 2018 with the updated Information Society Policy of Mozambique. A government informant in Mozambique echoed this sentiment, stating “I notice that today, with COVID, even our country, the government, the leadership see that it is increasingly crucial to embrace ICTs in order to develop the country.”

The National eGovernment Institute (INAGE) was created with a mandate to guide and coordinate the digital transformation of government. There is some concern that INAGE's

role overlaps with other existing government institutions such as the National Institute for ICT (INTIC) and Mozambique's National Institute of Communications (INCM). Already, there has been significant effort to digitize different processes within the government that support public service delivery. This includes:

- National System of Civil Registration
- Biometric Driving License and Motor Vehicle Registration Systems
- Biometric ID Card and Passport System
- Integrated System for Property Registration (SIRP)
- Electronic Licensing Systems (e-Bau)
- Digital Declaration System
- Digital Taxation System

According to the World Bank's Digital Economy for Africa (DE4A) assessment, a holistic approach to digital economy development is needed by Mozambique to overcome some of these key barriers. Currently, the country is characterized by several fragmented interventions from a multitude of donors, NGOs and private sector players. To move forward, a coordinated and high-level cross-boundary approach is needed that maximizes complementary investments and interventions and accelerates the development of the broader digital economy.

Mozambique has also faced several natural disasters over the past few years. In 2019, two cyclones created a humanitarian crisis in the country, and led to significant food insecurity. Even before the storms, almost 60% of the population was at risk of water related hazards, and the World Bank estimates that GDP growth decreases by 1.1% annually due to flooding, making Mozambique the third most vulnerable GDP to disasters in Africa (World Bank blog).

In response to such natural disasters, the government launched several disaster risk management programs and became interested in creating data driven solutions that can help the country predict and respond to natural disasters. The COVID-19 pandemic further drove interest in effective data usage, and expanded momentum with government and donors around data driven solutions that can support crisis response efforts.

It was the end of last year, when this started happening - this change in the government mindset about using data and how they can use the data. What was driving these changes was the fact that there were limitations in their disaster response, primarily in a very specific case. And they were more reactive than proactive. They were looking for how they could be now, proactive in responding to oncoming disasters and so on. So that's where the data for development caught their interest because we did this work in Malawi and they wanted to know how forecasting, and developing predictive models around weather patterns.

- KII with DIAL staff, Mozambique

DIAL's Work in Mozambique

In 2019, DIAL was invited by Mozambique's communications regulatory authority (ARECOM) to convene a workshop which discussed how data from de-identified and aggregated MNO datasets could be leveraged for disaster preparedness and humanitarian assistance. Participants included ARECOM; government authorities in charge of disaster preparedness, transportation, communication, and meteorology; and all three MNOs in the country. The attendees discussed promising disaster management use cases, and agreed to form a D4D technical working group.

The workshop eventually translated into a longer term data for development engagement in Mozambique, at the request of the government. The key goal of DIAL's engagement was to support the sustainable integration of insights from de-identified and aggregated mobile operator data into key aspects of national disaster preparedness and humanitarian assistance systems of the country. The end goal was to help the government anticipate, prepare for, and effectively respond to the next natural disaster. In the response efforts, there was a specific focus on increasing the effectiveness of government communication with populations at risk or displaced before, during, and after natural disasters.

To support the engagement, DIAL signed an agreement with ARECOM but the Institute of Disaster Management (INGC) was also involved to drive the actual response efforts. DIAL engaged an organization called Flowminder to support the analytics using its open source software, FlowKit. The de-identified mobile operator data is made available by network operators Mcel, Vodacom and Movitel, and hosted by ARECOM.

DIAL's Theory of Change for the project was incomplete when it was shared with the evaluation team, as shown in **Table A.5** below.

Table A.5: Incomplete ToC for DIAL's work in Mozambique

If DIAL...	Then.... (by end of 2020)	Because...
supports the government to develop a messaging system for COVID-19 response and coordinate partners	the government will...	MNO data can be shared and used responsibly, must be used with other datasets to avoid harm

Which of DIAL's interventions have been most effective in creating change?

Generally speaking, the organizations that had interacted directly with DIAL in Mozambique spoke very highly of the value of the engagement. Numerous organizations noted that they found DIAL's collaborative approach valuable and noted that DIAL was demand driven and worked to understand the challenges that their partners faced, and were willing to work with partners to co-create effective solutions. As one government official specifically mentioned, "DIAL does not impose projects."

This is the good thing about working with DIAL - is that DIAL is not an NGO, which comes to you with a project. It's an institution, which wants to understand your problems and it's eager and looking forward to supporting you in any way possible in terms of knowledge, expertise and so on.

- KII with Government Official, Mozambique

Several informants also noted that DIAL was effective at bringing together diverse partners to collaborate, and at aligning incentives. This was especially the case with the partnership between Flowminder and the government for the D4D engagement. Without DIAL playing a catalytic role in bringing these partners together, and providing the necessary funding to Flowminder, this project would not have moved forward.

DIAL was also well connected internationally within the D4D sphere, and many informants noted that DIAL could effectively connect them to several contacts that could support their own specific initiatives.

They have a very nice network. They're nice contacts. They know people. It's not about having resources. It's about having somebody who is looking around at everything which is going on and can actually tell you that this you're doing, you might be wasting some of your time because Joseph has done somewhere else and it happens so why is that? So it can give you the pitfalls of things that might go wrong on my go or the direction of what you're doing. It's a smart partnership, by the way.

- KII with Government Official, Mozambique

DIAL also effectively supported partners to navigate the various issues that came up during project execution, especially those related to accessing data needed for effective analysis from the relevant MNOs. The success of DIAL effectively facilitating these diverse partnerships eventually resulted in requests for support from other branches of the government, such as the Ministry of Transportation, to support further D4D efforts.

However, there were numerous stakeholders from the government and MNOs who were not aware of DIAL. This is likely due to DIAL's limited presence in-country and subsequent reliance on partnerships to advance the project. Relying on partnerships limits visibility and contributes to misattribution of project results.

What can DIAL learn or adopt from these experiences as it moves into a new strategy?

It is still too early to tell whether DIAL's engagement in Mozambique will drive a broader set of D4D outcomes. One thing that could impede DIAL's progress in this area is the lack of understanding of DIAL's mandate and agenda amongst local stakeholders. A number of informants from government, and the development community working in the digital economy space explained that they either had never heard of DIAL or that they were unaware of DIAL's mandate. Clearer messaging, and more on-the-ground presence and engagement could help to resolve this challenge of visibility and understanding. It could also present additional opportunities for collaborative and complementary engagement, especially with other funders in the space who expressed a keen interest to learn more about what DIAL is doing.

Some informants noted an urgent need to strengthen relationships and align incentives particularly with private sector partners, especially with MNOs. Although DIAL has access to MNO data through its partnership with ARECOM, one informant strongly encouraged more direct engagement to accelerate access to, and analysis of, the relevant data. A number of challenges are also likely to come up on the side of the MNO when making this data available, and with stronger relationships to the MNO, DIAL can directly provide

support and quickly address some of these challenges. A strong staff member in-country who is effectively able to provide this type of support to MNOs could more effectively set the D4D programs up for impact and longer term sustainability.

Annex 3 - Approach to Value for Money Analysis

There are numerous Value for Money frameworks, most of which involve the three Es¹⁶:

- **Economy:** getting the best value inputs.
- **Efficiency:** maximising the outputs for a given level of inputs.
- **Effectiveness:** ensuring that the outputs deliver the desired outcome.

In addition to these components, more recent frameworks also incorporate a fourth E:

- **Equity:** ensuring that the benefits are distributed fairly.

Where possible, VfM often tries to assess the **cost-effectiveness** of alternative interventions. **Figure A.1** demonstrates how these components related to the results chain as defined by FCDO.¹⁷

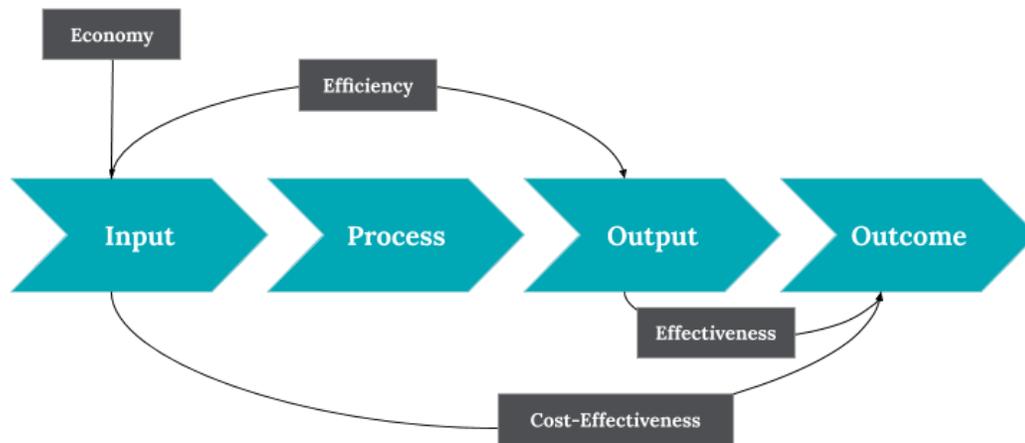


Figure A.1: FCDO's framework for VfM (DFID, 2011)

¹⁶

<https://www.bond.org.uk/sites/default/files/resource-documents/assessing-and-managing-vfm-summary-final.pdf>

¹⁷

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-value-money.pdf

Approach to assessing DIAL's value for money

In light of these issues, this evaluation has taken a multifaceted approach to assessing the Value for Money of DIAL's work under the 1.0 Strategy. Reflections are shared throughout these sections, based on the KIIs and desk review, to qualitatively discuss the possible broader value of DIAL's work throughout the digital ecosystem.

Economy and efficiency of DIAL's resource allocation

The evaluation team assessed the economy of DIAL's resource allocation since its inception. Operational efficiency is assessed by considering metrics such as the variance of expenditures from budget allocations, with supporting evidence from the KIIs.

Inferring 'value' from engagement with DIAL's website

Measuring the impact and, by extension, the value of systems change work is difficult. This final evaluation of DIAL's 1.0 Strategy is not an impact evaluation, meaning that it doesn't attempt to quantitatively isolate and assign sole attribute to DIAL for changes within the digital ecosystem. In the absence of a quantitative measure of impact which might provide the basis for a definition of 'value,' creativity is needed in determining what it is that stakeholders in the digital ecosystem value. One approach to this taken for this evaluation is simply asking key informants where they see the most value in DIAL's past and potential work. Another way of inferring what stakeholders value is by exploring how they have interacted with the knowledge outputs of DIAL's work.

DIAL is an organization that values knowledge generation and dissemination - in fact, this is one of the major roles it seeks to play in the digital ecosystem. DIAL has regularly published various types of media content to the *What We're Learning* page on its website. DIAL has also tracked various metrics of the ways in which the public has interacted with this content through the use of Google Analytics. DIAL conducted an analysis of this data in 2020 which focused on the reach of DIAL's publications, interest in publications, time decay of traffic and differences in sustained traffic of different publications (DIAL 2020-2).

To generate new insights for DIAL, the evaluation team used this data to explore and quantify differences in the demand for different types of content. The following four main metrics were used to proxy for demand:

- **Click events** - cumulative number of times that users have clicked on a certain page on DIAL's website over time
- **Users** - the number of visitors to DIAL's website each day
- **New users** - the number of visits to DIAL's website each day by first-time visitors
- **Session time** - the total amount of time all users spent on DIAL's website each day

Annex 4 - Specification of Dynamic Regression Models

We conducted a multivariate dynamic regression using two alternative models to explore whether the publication of certain types of content leads to spikes in the number of daily visitors to DIAL’s website.

Model 1 is specified as:

$$Visitors_t = a + \sum_{i=1}^4 (\beta_{1,i} \times Media\ type_{i,t} + \beta_{2,i} \times Media\ type_{i,t-1} + \beta_{3,i} \times Media\ type_{i,t-2}) + \beta_5 \times weekend$$

Where the four media types are blog, publication, press release and multimedia. Model 2 is specified as:

$$Visitors_t = a + \sum_{i=1}^8 (\beta_{1,i} \times Content\ stream_{i,t} + \beta_{2,i} \times Content\ stream_{i,t-1} + \beta_{3,i} \times Content\ stream_{i,t-2}) + \beta_9 \times weekend$$

Where the eight content streams are Insights & Impact, Monitoring & Evaluation, Cross-Cutting, Proven Software & Technology, Mobile Distribution Channels, Responsible Data Use, Cross-Posted Content, and the Digital Principles. Both models include a dummy variable to include for whether or not a particular day falls on a weekend, because DIAL’s website receives much less traffic on weekends than weekdays.

Model 1 yielded the following insights and results shown in **Table A.6**:

- Publishing a blog post was associated with a statistically significant average increase of 32 visitors to DIAL’s website on the day the blog post was published.
- Releasing a publication was associated with a statistically significant average increase of 14 visitors to DIAL’s website on the day the publication was released, and a statistically significant average increase of 16 users to DIAL’s website on the day after the publication was released.

Table A.6: Regression results from Model 1

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	174.3877	2.85E+00	61.1018	< 2.2E-16 ***
blog	32.0477	7.23E+00	4.4332	0.00001062 ***
L(blog)	5.4779	5.83E+00	0.9393	0.3478641
L(blog,2)	7.1560	4.73E+00	1.5119	0.1309711
publication	14.7477	6.53E+00	2.2596	2.41E-02 *
L(publication)	16.1859	4.76E+00	3.4024	7.02E-04 ***
L(publication,2)	5.4165	6.90E+00	0.7852	0.4325886
release	21.6513	2.09E+01	1.038	0.2996082
L(release)	13.5353	1.89E+01	0.7148	0.4749513
L(release,2)	-14.0618	2.93E+01	-0.4795	0.6317432
multimedia	23.0708	2.48E+01	0.9316	0.3518102
L(multimedia)	27.4199	37.7141	0.727	0.4674173
L(multimedia,2)	66.9509	72.0139	0.9297	0.3528192
weekend	-115.4859	3.3959	-34.007	< 2.2E-16 ***

. p<0.1 * p< 0.05 ** p< 0.01 *** p<0.001

Model 2 yielded the following insights and results shown in **Table A.7**:

- Publication of content in the *Insights & Impact* stream was associated with a statistically significant average increase of 27 visitors to DIAL’s website on the day the content was published.
- Publication of content in the *Cross-cutting* stream was associated with a statistically significant average increase of 31 visitors to DIAL’s website on the day the content was published.
- Publication of content in the *Responsible Data Use* stream was associated with a statistically significant average increase of 46 visitors to DIAL’s website on the day the content was published, a statistically significant average increase of 50 visitors to DIAL’s website on the day after the content was published, and a statistically significant average increase of 40 visitors to DIAL’s website two days after the content was published.

- Publication of content in the *Digital Principles* stream was associated with a statistically significant average increase of 31 visitors to DIAL’s website on the day the content was published.

Table A.7: Regression results from Model 2

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	174.1735	2.83E+00	61.638	< 2.2E-16 ***
cat_ii	26.9275	8.49E+00	3.1724	0.001572 **
L(cat_ii)	2.6449	7.00E+00	0.3781	0.705486
L(cat_ii,2)	2.0582	6.55E+00	0.3141	0.753513
cat_me	44.3265	2.81E+01	1.579	1.15E-01
L(cat_me)	16.6673	2.85E+01	0.5857	5.58E-01
L(cat_me,2)	16.0080	1.40E+01	1.1475	0.251554
cat_cc	31.0836	1.85E+01	1.6777	0.093817 .
L(cat_cc)	10.5664	1.54E+01	0.6875	0.491962
L(cat_cc,2)	6.9949	1.31E+01	0.5356	0.592401
cat_pst	1.8616	1.53E+01	0.1218	0.903109
L(cat_pst)	19.4583	1.60E+01	1.2137	0.225235
L(cat_pst,2)	-7.5011	9.05E+00	-0.829	0.407338
cat_mdc	-0.1484	1.87E+01	-0.008	0.993658
L(cat_mdc)	12.1281	1.17E+01	1.0345	0.301235
L(cat_mdc,2)	38.1400	2.17E+01	1.7538	0.07987 .
cat_rdu	46.1114	2.19E+01	2.1101	0.035172 *
L(cat_rdu)	50.6714	1.82E+01	2.7824	0.005528 **
L(cat_rdu,2)	40.1634	1.69E+01	2.3789	0.01761 *
cat_cp	61.5163	4.04E+01	1.5219	0.128457
L(cat_cp)	-4.6718	1.11E+01	-0.4193	0.67512
L(cat_cp,2)	10.7920	1.52E+01	0.709	0.478571
cat_dp	31.2381	1.05E+01	2.9883	0.002896 **

L(cat_dp)	-10.3708	1.30E+01	-0.7967	0.425865
L(cat_dp,2)	-7.8119	1.75E+01	-0.4469	0.6551
weekend	-114.6815	3.35E+00	-34.281	< 2.2E-16 ***

. p<0.1 * p< 0.05 ** p< 0.01 *** p<0.001

Annex 5 - Sources of Information

Representatives from the following organizations were interviewed through KIIs and FGDs.

- A4AI
- Accenture Development Partners
- Accountant General
- Africa Drone and Data Academy
- Airtel Malawi
- Altai
- Bill and Melinda Gates Foundation
- Caribou Digital
- Caribou Digital
- CENFRI i2i
- Centers for Disease Control and Prevention
- CGAP
- Chemonics
- CooperSmith
- Dalberg Group / Dalberg Digital Insights
- Data2X
- DIAL
- DIAL
- DIAL
- Digital Public Good Alliance
- EGovernment Department, Malawi
- Enketo
- FCDO
- Flowminder
- Future State
- GIZ
- Global Partnership for Sustainable Development and Data
- GSMA
- ICTAM
- INAGE (e-governance institute)
- INAM (Mozambique National Meteorology Institute)
- INCM (Telco Regulator)/ ARECOM
- INGC (natural disaster response)
- INTIC
- ITU
- KFW
- Malawi Communications Regulatory Authority (MACRA)
- Mercy Corps

- mHub Malawi
- Mifos
- Ministry of Health, Malawi
- MNO
- Mojaloop
- MOSIP.org
- Mozilla Foundation
- MTN Ghana
- Musoni
- NEF Consulting
- NORAD
- NPC
- OpenLMIS
- Pathways for Prosperity
- Public Lab
- Safaricom
- SIDA
- Skyband / INQ after rebranding
- Smart Africa
- Spatial Development Agency
- Tableau Foundation
- TNM
- UKAID
- UNCTAD
- UNF
- USAID Digital Strategy
- USAID Global Development Lab
- Village Reach
- Voto Mobile
- World Bank Group DE4A
- World Vision
- Zindi

Evidence from the KIIs and FGDs was supplemented with insights from the evaluation team's review of the documents DIAL shared via Google Drive.

Annex 6 - Evaluation Framework

Evaluation Matrix

No. 1 Context and Ecosystem - What changes have occurred in the digital ecosystem since October 2016 and since the pandemic?			
#	Evaluation Sub-Questions	Indicators (<i>italics are from DIAL's results framework</i>)	Data Collection Methods and Information Sources
1.1	Are we seeing signs that the ecosystem is operating more effectively and efficiently? (and faster)?	<ul style="list-style-type: none"> Degree of digital inclusion (penetration rates, subscriptions, digital transactions). Overall and DIAL focus countries Increased use of digital products and OSS components to deliver digital services Reduced time for development of new projects. Access to and use of mobile channels by DSPs. Access to and use of digital data by DSPs. Investment in sector-agnostic tech stacks. Prevalence of, and progress in implementing digital transformation and responsible data use strategies. Level of government engagement and action with digital service design and delivery. Level of support among funders for building on / scaling existing solutions. Greater coordinating amongst digital donors and implementing organizations. Demonstrated understanding of success factors in sustainably scaling digital goods/services. Effective coordination and collaboration between market actors focused on digital transformation efforts. 	<p>Document reviews</p> <ul style="list-style-type: none"> State of the sector reports. Industry reports Secondary datasets (e.g. ITU, EIU, UN) # collective investments from Results Framework <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including boundary and external partners and DIAL Staff.
1.2	Is the ecosystem better able to reach underserved populations? How can we know?	<ul style="list-style-type: none"> Mobile/broadband access and use by group. # of DSPs that demonstrate increased ability to use tech to reach underserved Perceptions of barriers to providing digital services to vulnerable groups. 	<p>Document reviews</p> <ul style="list-style-type: none"> State of the sector reports. Industry reports Secondary datasets (e.g. ITU, EIU, UN)

			<p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders, DIAL Staff and DIAL partners
1.3	Are products being designed with women, girls and other underserved groups in mind?	<ul style="list-style-type: none"> • # of DSPs incorporating gendered perspectives into programmatic and operational digital initiatives. • # of gender for development projects underway. • Prevalence of models with demonstrated evidence of increased access to services for women and girls. 	<p>Document reviews</p> <ul style="list-style-type: none"> • State of the sector reports. • Industry reports <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders, DIAL Staff and DIAL partners
1.4	How has the recent COVID pandemic affected the on-going shift to digital delivery by DIAL's partners and the wider ecosystem? And how has the ecosystem responded to these shifts?	<ul style="list-style-type: none"> • # of Digital projects accelerated • # of new projects started as a result of the pandemic. • # of new partnerships started as a result of the pandemic • # of stakeholders citing usefulness of DIAL's COVID-related offerings • Level of coordination amongst funders as a result of the pandemic. 	<p>Document reviews</p> <ul style="list-style-type: none"> • Industry reports <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders, DIAL Staff and DIAL partners

No. 2 Relevance and Impact - Which of these changes are a direct or indirect result of DIAL's work?			
#	Evaluation Sub-Questions	Indicators (<i>italics are from DIAL's results framework</i>)	Data Collection Methods and Information Sources
2.1	<p>Has the digital ecosystem found ways to conserve time or money? How did this take place? Ex. Adopting existing research, practices, or concepts</p>	<ul style="list-style-type: none"> • Perceptions of time savings from key stakeholders including boundary stakeholders. • # of DSPs <i>reducing turnaround time to deliver services</i> • # of DSPs <i>reducing overall cost of service delivery to underserved</i> • # of DSPs <i>with more customers</i> 	<p>Document reviews</p> <ul style="list-style-type: none"> • Program Documents • State of the Sector reports • Data Analysis • Analysis of research downloads. <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Program documents. • Perceptions of key stakeholders, DIAL Staff and DIAL partners.
2.2	<p>Are more organizations embracing open source software and digital data? If so which stakeholders and why? If not why?</p>	<ul style="list-style-type: none"> • # of individuals contributing to code of open source software listed on the T4D product registry • Changes over time. • # of OSS projects underway • Perception of OSS and ICT4SDG producers and users. • # of DSPs and funders engaging with digital data, as measured by known cases • # projects/policies launched using D4D • # of projects incorporating ICT4SDG building block components • # of DSPs and funders who report improved understanding of and acting on responsible data policies and practice • # of DSPs that have used DIAL resources to sign data-sharing agreements with MNOs or other data holders • # of DSPs who found digital data to be useful <ul style="list-style-type: none"> • Perceptions of digital data holders, funders and DSPs 	<p>Document reviews</p> <ul style="list-style-type: none"> • Program Documents <p>Data Analysis</p> <ul style="list-style-type: none"> • T4D product registry details <p>Key Informant Interviews</p> <ul style="list-style-type: none"> • Program documents. <ul style="list-style-type: none"> • Perceptions of key stakeholders, DIAL Staff and DIAL partners

<p>2.3</p>	<p>Are mobile network operators more likely to share/sell their data to LMIC country governments and NGOs than previously and are governments more likely to use this data?</p> <p>For some select cases</p> <ul style="list-style-type: none"> • Who are the parties of the DSA? • What prompted this partnership? Baseline situation? • What are the goals and benefits to both parties of the partnership? What type of data is being shared precisely? • What have been the short-term impacts, internally and externally? 	<ul style="list-style-type: none"> • # of partnerships formed between public sector/development agencies and MNOs/aggregators to share mobile network data • # of MNOs generating standard data insights or facilitating processing of data by 3rd parties (known use cases) • # of private sector (MNOs, aggregators, messenger app developers) that have made changes to business practices to encourage partnerships with development sector • Perceptions of digital data holders • # of governments using MNO data. 	<p>Do Document reviews</p> <ul style="list-style-type: none"> • State of the sector reports. • Industry reports <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders including boundary and external partners. • Particular focus on MNO and Government respondents.
<p>2.4</p>	<p>How are different organizations in the digital ecosystem “implementing” the Principles for Digital Development?</p>	<ul style="list-style-type: none"> • # of DSPs who have integrated the Principles into procurement and design processes • # of funders who have integrated the Principles into their funding processes • Perceptions of key stakeholders on the Principles and the motivation behind the use of the Principles • 	<p>Document reviews</p> <ul style="list-style-type: none"> • Program reports • Industry reports <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders including boundary and external partners. • Perceptions of key users. • Perceptions of DIAL staff

<p>2.5</p>	<p>Did DIAL's resources actually reach the desired stakeholders? How did stakeholders find DIAL's resources? Who else is using DIAL's resources?</p>	<ul style="list-style-type: none"> • # of new digital development 'collective investments' that are implemented, as a result of DIAL's work • # of people that are part of the Principles communities of practice • # of downloads • # of projects citing the Principles • # of interviewees citing using DIAL support or resources • # of interviewees who demonstrate a good understanding/awareness of the range of DIAL's offerings 	<p>Document reviews</p> <ul style="list-style-type: none"> • Citation of DIAL in industry reports <p>Data Analysis</p> <ul style="list-style-type: none"> • # of website visits/Google Analytics <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders including partners, boundary and external partners. • Perceptions of DIAL staff
<p>2.6</p>	<p>For those that accessed DIAL resources, were they relevant to their needs? Did the resources help them solve a problem or improve a way of working?</p>	<ul style="list-style-type: none"> • What tools stakeholders report as being most useful and how • # of DSPs reducing overall cost of service delivery to underserved, as a result of DIAL's work • # of DSPs reducing overall time of service delivery to underserved, as a result of DIAL's work • # of DSPs that report increased ability to use tech to reach underserved, as a result of DIAL's work • # of OSC supported OSS projects that report increased functionality as a result of DIAL's work • % of Open Source Center clients who are satisfied with services provided • # of DSPs whose digital strategies were supported or influenced by DIAL. 	<p>Document reviews</p> <ul style="list-style-type: none"> • Program documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders with a particular focus on key partners .
<p>2.7</p>	<p>What are the other explanations for the changes that may have occurred in the ecosystem? Globally and in selected countries?</p>	<ul style="list-style-type: none"> • % of ICT4D projects citing DIAL tools. • Perceptions from key stakeholders. 	<p>Document reviews</p> <ul style="list-style-type: none"> • Citation of DIAL in industry reports <p>Data Analysis</p> <ul style="list-style-type: none"> • # of website visits/Google Analytics <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> • Perceptions of key stakeholders including partners, boundary and external partners. • Perceptions of DIAL staff

No. 3 Effectiveness and Efficiency -Which of DIAL's interventions have been most effective in contributing to these changes?			
#	Evaluation Sub-Questions	Indicators (<i>italics are from DIAL's results framework</i>)	Data Collection Methods and Information Sources
3.1	How well did DIAL's interventions fit with other interventions in the ecosystem or in-country? Were they designed in a way that drove coherence and addressed the needs of stakeholders in- country or the wider ecosystem? Were they complementary to other interventions? Were DIAL's initial hypotheses correct?	<ul style="list-style-type: none"> Stakeholders perceive DIAL's design process as responsive to their and the ecosystem needs # of DIAL resources that stakeholders identify as unique in the ecosystem Clear progress against DIAL's results framework. 	<p>Document reviews</p> <ul style="list-style-type: none"> Project design documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff, partners, boundary and external partners.
3.2	Was DIAL effective? To what extent did DIAL achieve its program output targets, intermediary outcomes and impact? If targets were not met then why?	<ul style="list-style-type: none"> Progress against results framework. Perceptions of staff 	<p>Document reviews</p> <ul style="list-style-type: none"> Project documents Results frameworks <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff, partners, boundary and external partners.
3.3	Did DIAL's partners increase their capacity and impact as a result of the partnership?	<ul style="list-style-type: none"> Progress against results framework. Perceptions of staff and partners 	<p>Document reviews</p> <ul style="list-style-type: none"> Project documents Results framework Partner documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff, partners

3.4	How well did each of the programs achieve their targets and objectives?	<ul style="list-style-type: none"> Progress against results framework. Perceptions of staff and partners. 	<p>Document reviews</p> <ul style="list-style-type: none"> Project documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff, partners, boundary and external partners.
3.5	Were program activities designed and sequenced to drive impact? Were the underlying assumptions correct, particularly the need for open source?	<ul style="list-style-type: none"> Progress against results framework. Perceptions of staff and partners. 	<p>Document reviews</p> <ul style="list-style-type: none"> Results frameworks Project documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff, partners and boundary partners.
3.6	What were the relative costs and achievements of DIAL's different programs?	<ul style="list-style-type: none"> DIALs programs show value for money. 	<p>Document reviews</p> <ul style="list-style-type: none"> DIAL budgets Project documents <p>Key Informant Interviews</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners to determine impact
3.6	How did DIAL's different programs interact? Were they synergistic and complementary?	<ul style="list-style-type: none"> Perceptions of staff and stakeholders. 	<p>Document reviews</p> <ul style="list-style-type: none"> Results framework Project documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.
3.7	Were there any unintended consequences of DIAL's programming? Were these consequences understood and addressed?	<ul style="list-style-type: none"> Perceptions of staff and stakeholders. 	<p>Document reviews</p> <ul style="list-style-type: none"> Results framework Project documents <p>Key Informant Interviews and Focus Groups</p> <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.

No. 4 DIAL 1.0 Sustainability -What can DIAL learn or adopt from these experiences as it moves to a new strategy			
#	Evaluation Sub-Questions	<ul style="list-style-type: none"> Indicators (<i>italics are from DIAL's results framework</i>) 	Data Collection Methods and Information Sources
4.1	Will the benefits from DIAL 1.0 last beyond their funding life?	<ul style="list-style-type: none"> Perceptions of staff and partners show indicators of sustainability 	Key Informant Interviews and Focus Groups <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.
4.2	Did the shift to country focused programming drive impact?	<ul style="list-style-type: none"> Perceptions of staff and partners. 	Document reviews <ul style="list-style-type: none"> Results framework Project documents Key Informant Interviews and Focus Groups <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.
4.3	Did DIAL's operating model help to drive results?	<ul style="list-style-type: none"> Perceptions of staff 	Document reviews <ul style="list-style-type: none"> Results framework Project documents Key Informant Interviews and Focus Groups <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.
4.4	Did DIAL's approach to stakeholder engagement drive results? How should DIAL best work with government and MNO stakeholders?	<ul style="list-style-type: none"> Perceptions of staff and partners. 	Document reviews <ul style="list-style-type: none"> Results framework Project documents Key Informant Interviews and Focus Groups <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.
4.5	Did we see an increase in demand for DIAL's services over time? What drove this? What has become DIAL's brand differentiator?	<ul style="list-style-type: none"> Perceptions of staff and partners. Analysis of request for interviews 	Document reviews <ul style="list-style-type: none"> Results framework Project documents Key Informant Interviews and Focus Groups <ul style="list-style-type: none"> Perceptions of key stakeholders including DIAL staff and partners.

Data Sources and Collection

Data was gathered through qualitative methods, comprising key informant interviews and focus group discussions. This was complemented by document reviews including sector reports and DIAL internal documentation. Details of persons interviewed and documents reviewed can be found in Annex 6.

Due to the challenges that the baseline study faced in collecting a sufficient amount of high quality quantitative data through online surveys, replicating the survey is not likely to provide useful data for the endline study. The low response rate does not support comparison of results at endline and is greatly skewed by stakeholder group, limiting analysis even further. However, the endline qualitative data was supplemented by “quantitative” interview questions and secondary datasets. This was used to contextualize qualitative data and determine if some output targets have been met.

Table A.8: Summary of the key instruments used in the evaluation methodology

Tool	Description
Desk Review	<p>The team will begin the assessment with a thorough review of key documents including:</p> <ul style="list-style-type: none"> • DIAL project documents: evaluations, donor funding documents, monitoring reports, external facing publications, budgets and relevant value for money reports, DIAL website download data. • Sector Documents: recent external reports on the state of the sector including reports from UNCDF, UNCTAD, OECD, AU, WB and CGAP. • Donor documents: recent documents by key donors in the digital space to see how funding may have shifted over time.
Key Informant Interviews (KII)	<ul style="list-style-type: none"> • For the endline evaluation, we will aim for at least 75 KIIs. • Embed OECD DAC criteria • Interview guides and frameworks for coding the results • Deep dive in Malawi and Mozambique • Purposive snowball sampling strategy that covers DIAL’s clients and partners (75%) with the remaining 25% coming from the wider digital ecosystem as well as an appropriate gender/racial/geographic balance. • Include KIIs with DIAL team members across the various programs, which builds off the midline survey data. • Incorporate relevant quantitative questions from baseline and midline into KII interviews to enhance response rate.
Focus Groups and Sense Making	<ul style="list-style-type: none"> • Online focus groups focused on understanding the broad changes in the digital ecosystem, the actors and their roles in this arena, and DIAL’s strategic fit and value add in this space. • For the focus countries (Malawi and Mozambique), the focus groups aimed to understand alternative explanations of the reason for the systems change in order to determine DIAL’s contribution. • We also had several meetings with DIAL staff to help make sense of the findings to date.

Interviews were conducted with stakeholders across three spheres of influence; immediate network, boundary partners, and external actors.

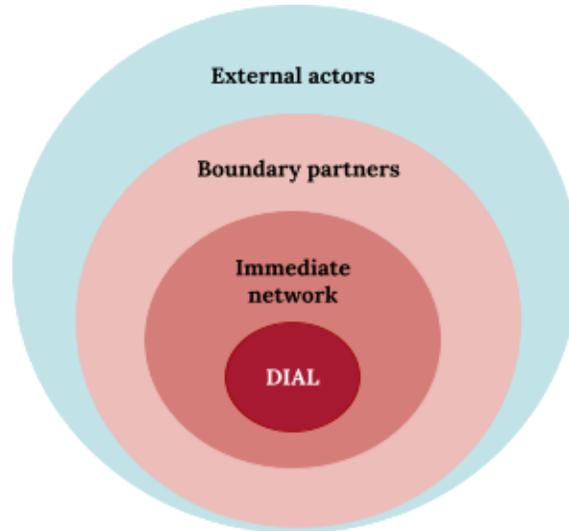


Figure A.2: Targeting method for DIAL's spheres of influence

In order to develop the instruments for the qualitative data collection, the research team mapped what baseline indicators and updated evaluation questions would be most relevant to address according to each stakeholder group. It is important to note that the indicators in the original baseline evaluation framework were designed for quantitative instruments. When updating the evaluation framework for endline qualitative data collection, the research team strove to maintain continuity and incorporate some of the indicators from baseline, but significant adjustments were necessary. Because the majority of indicators were quantitative, it was not relevant to build instruments from them directly. Therefore, the team used the indicators as a starting point to extrapolate relevant themes that the qualitative surveys should address. The themes and the evaluation questions then became the basis for developing the final qualitative instruments.

A full list of key informant interview and focus group guides is included as a separate document. The focus group discussion guide does not have a comprehensive list of questions at this time because it will primarily be used as an opportunity to make sense of the KII data. Therefore, some general questions are included, but others will be developed based on the initial KII results.

Table A.9: Map of evaluation question and theme by stakeholder group

Stakeholder Group	Evaluation Questions	Themes
Immediate network		
Government	<ul style="list-style-type: none"> 1.1, 1.2, 1.3 2.1, 2.3, 2.4, 2.5, 2.6, 2.7 3.1 	<ul style="list-style-type: none"> D4D, Digital policy frameworks Use, relevance, impact of DIAL resources/tools/programs Impact on vulnerable groups, women/girls Changes in service delivery Concerns around data security, privacy, etc.
Funders	<ul style="list-style-type: none"> 1.1 2.5, 2.6, 2.7 	<ul style="list-style-type: none"> Changes in funding strategies (away from seed) Co-investment by multiple donors Shifts in service delivery models
NGOs	<ul style="list-style-type: none"> 1.1, 1.2, 1.3 2.2, 2.3, 2.4, 2.5, 2.6, 2.7 3.1, 3.3, 3.7, 3.6 4.1, 4.2, 4.4, 	<ul style="list-style-type: none"> Output indicator verification Degree of interaction with DIAL Usefulness, relevance, impact of DIAL programs/products Change in service delivery, partnerships, operations
Tech specialists	<ul style="list-style-type: none"> 1.1, 1.2, 1.3 2.1, 2.2, 2.6, 2.7 	<ul style="list-style-type: none"> Use of ICT4SDG building blocks Use of OSS and OSC resources
DIAL Staff	<ul style="list-style-type: none"> 1.1, 1.2, 1.31, .4 2.1, 2.2, 2.4, 2.5, 2.7 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 4.1, 4.2, 4.3, 4.4, 	<ul style="list-style-type: none"> DIAL's design and implementation processes including for thematic and country strategies as well as individual partnerships
Boundary Partners		
Partners/Affiliates	<ul style="list-style-type: none"> 2.7 	<ul style="list-style-type: none"> Degree of interaction with DIAL, DIAL presence in digital ecosystem Usefulness, relevance, impact of DIAL programs/products compared to alternatives Change in service delivery, partnerships, operations Understanding factors driving change in digital ecosystem
MNOs	<ul style="list-style-type: none"> 1.1 2.1, 2.2, 2.3, 2.6, 2.7 	
External Actors		
Parallel Programs	<ul style="list-style-type: none"> 1.1, 1.2, 1.3 2.1, 2.7 	<ul style="list-style-type: none"> Degree of interaction with DIAL, DIAL presence in digital ecosystem Usefulness, relevance, impact of DIAL programs/products compared to alternatives Understanding factors driving change in digital ecosystem

Sampling Strategy

The sampling strategy for the qualitative data collection followed a purposive snowball sampling method. In this approach, the research team identified a key number of organizations, stakeholders, and individuals to interview, selected to represent the major stakeholder groups (MNO, government, funders, NGOs, partners, etc), as well as informants in the digital ecosystem that are not currently engaged with DIAL’s work. The initial participants then assisted in identifying other potential subjects to interview from their network of contacts and their relevance to the study. **Table A.10** provides definitions for the classes of relationship to DIAL that were defined. **Figures A.3** and **A.4** show the breakdown of key informants by relationship to DIAL and ecosystem stakeholder type.

Table A.10: Definitions of key informant relationship to DIAL

High-level relationship	Relationship to DIAL	Definition
	DIAL funder	An organization that has provided funding to DIAL since or during DIAL's inception.
	Client	An organization that has been the beneficiary of a solution facilitated by DIAL.
Direct	Contractor	An organization that DIAL funded to implement an initiative.
	Grantee	An organization to which DIAL provided a grant.
	Partner	An organization with which DIAL worked closely to deliver either a solution to a client or a digital public good.
Indirect	Boundary partner	An organization with which DIAL collaborated briefly or less formally, such as at a workshop, speaker panel, DDA, OR An organization that worked closely with or otherwise benefited from the work of one of DIAL's partners OR An affiliate organization or PDD adopter/promoter OR An organization with which DIAL explored but did not realise a partnership.
None	External actor	An organization with which DIAL had little to no interaction, but can nonetheless provide useful insights about the broader digital ecosystem.

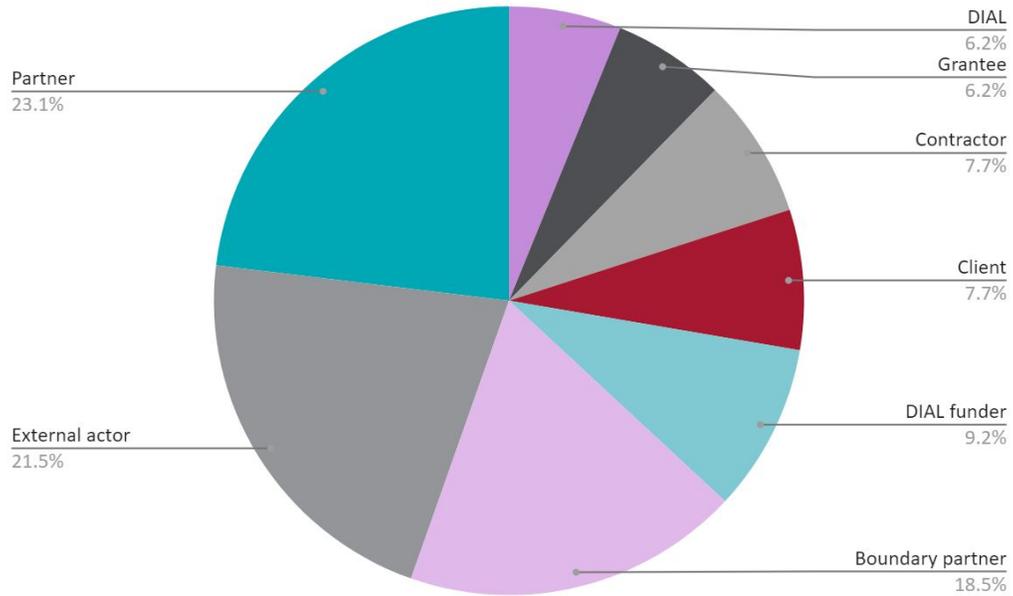


Figure A.3: Key informants grouped by relationship to DIAL

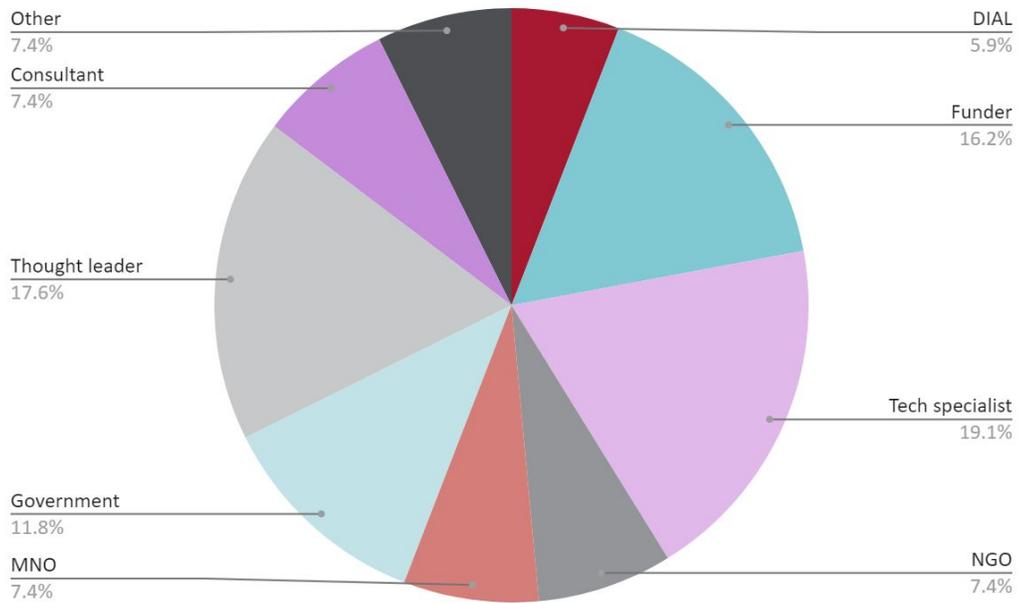


Figure A.4: Key informants by stakeholder group

Annex 7 - Detailed evaluation methodology

Evaluation Approach

It is complex to evaluate and attribute, with high certainty, the impact of one organization's activities in an ever changing ecosystem filled with a variety of private, public and not-for-profit organizations. DIAL, and the digital for development sector more broadly, is unique in that it operates within an ecosystem that is composed of private, public and not-for-profit actors whose actions may cause ripple effects throughout the system. The drivers of the ecosystem change can include policy and regulatory changes implemented by governments, market dynamics such as the introduction of new products by private sector players such as MNOs, and even a global health pandemic. Moreover, DIAL partners with many organizations who receive funding from other digital for development players making the challenge of assessing DIAL's unique contribution to ecosystem outcomes even more complex.

Shifting ecosystems through programming takes time and makes evaluating those shifts challenging. DIAL is still a young organization, with only four years of experience since its founding in 2016. The baseline evaluation for 1.0 was concluded in 2018 and this endline evaluation took place between October 2020 and February 2021. This is a very short period for any program to achieve measurable impact, especially for complex sector-agnostic program models in the digital ecosystem. Evaluators can address this issue using a variety of techniques to look for early signs of impact and change.

To address the challenges of complexity, divergent stakeholders and influencers and the time to impact, we undertook a *theory-based* approach that combines *outcome mapping* as well as *market systems analysis*.

Theory-Based Approach

Due to the nature of DIAL's work and the ecosystem approach it takes in its programming, it is not possible for us to assess the impact of DIAL through the use of a counterfactual. As a result, this evaluation was theory-based rather than experimental. A theory-based approach begins with the creation of a theory of change (ToC) and the articulation of key assumptions, risks, and context that either support or impede the goals of transformation. The team began by replicating the original DIAL 1.0 ToC in order to better understand the mechanisms underlying expected changes and map out how the ToC evolved during the project implementation process. Of particular interest was how program level ToCs nested into DIAL's overall ToC and to see how country-focused programming interacted with the wider ecosystem.

Outcome Mapping

Outcome mapping is an evaluation approach that allows practitioners to gather evidence on development outcomes, often defined as changes in the behaviour, relationships, activities, or actions of the people, groups, and organizations that a project works with directly. It also examines the influences that projects have on the broader community in which it works (IIRR 2012). The evaluation can then be used to assess the contributions that project activities had on the outcomes observed.

Unlike experimental impact evaluations, outcome mapping is best used where demonstrating causality is challenging. Outcome mapping allowed the evaluators to assess the influence of DIAL's partner-centered approaches, capacity-building initiatives, knowledge dissemination, and advocacy efforts within countries of focus, as well as at a global level.

A limitation of traditional outcome mapping is that the study only captures outcomes that participants are aware of. This creates two risks; first, that the study must engage a sufficient number of the right participants who can authoritatively speak to DIAL's influence; and second, that participants must be aware of all forms of influence that DIAL has had. For this reason, the endline evaluation included a wide range of participants in the key informant interviews to represent multiple stakeholders from within and without DIAL's network. This allowed us to assess DIAL's impact by seeking alternative explanations for the observed changes in the digital ecosystem through focus groups.

Market Systems Evaluation Approach

The outcome mapping approach was informed by approaches to evaluating market systems programs. Market systems programs start with an understanding of market dynamics and provide a practical understanding of how a market functions, how it addresses (or fails to address) the needs of specific target groups, and the underlying causes of such underperformance. Because much of the growth and dynamics in the digital ecosystem has been driven by the expansion of MNOs, market dynamics were included in our evaluation.

Approaches to evaluating market systems projects have many similarities with outcome mapping. Market systems analysis (MSA) can be used to understand the digital ecosystem more broadly and thus provide an important framework for the analysis. This includes considerations of how stakeholders relate to each other, the current supply and demand of digital solutions, points of underperformance within the market, and the processes underlying the market functions in the digital ecosystem. When evaluating the impact of market systems programs, it is important to examine alternative explanations for the market shift beyond the intervention and we have factored this into the evaluation approach.

Evaluation Methodology

Mixed Methods

The evaluation used a mixed methods data collection approach. Qualitative interview was used as the primary method for understanding the market dynamics through outcome mapping. Quantitative data supported the outcome mapping process and also provided the basis for the VfM study.

The qualitative methods consisted of document analysis, key informant interviews, focus groups, and sense-making sessions. The quantitative methods included posing select quantitative questions during the KIIs, as well as the analysis of program budget data and other secondary sources.¹⁸

Throughout the data analysis phase, the research team regularly held sensemaking meetings. This allowed the evaluators to triangulate and compare findings from qualitative and quantitative data.

Country Deep Dives

“Deepening implementation research and product support to... national stakeholders” was prioritized by DIAL in 2018, following consultation with the board (DIAL 2018-1). Several potential projects were highlighted in the 2018 Annual Report, including ‘support in-country implementations resulting from the ICT4SDG call to action (Niger),’ and ‘data for development (Malawi, Tanzania, and Uganda),’ where partners were interested in taking a whole-of-government approach to data. As part of this evaluation, DIAL had requested that the team engage with stakeholders in Malawi and Mozambique through country deep dives. In line with the evaluation approach, an outcome mapping approach was deployed, especially to establish how stakeholders and markets responded to DIAL’s work. For example, did government institutions incorporate the tools and practices introduced through DIAL’s work into their ongoing planning and operations? Did the projects influence policies or regulations? And if so, then how did the projects influence policy or regulations?

These country deep dives offered valuable opportunities to generate insights on outcomes achieved, how DIAL’s work has contributed to outcomes, and what interactions and other dynamics are contributing to sustainability and replicability of these outcomes. At a country level, the team could more clearly establish the circumstances, motivations and incentives of stakeholders to engage with DIAL, and outcomes of DIAL’s work. These types

¹⁸ The UN’s eGovernment Index, ITU’s annual statistics and the Economist Economic Intelligence Unit’s (EUI) Inclusive Internet Index can all be used to contextualize the evolution of the digital ecosystem at national and regional levels.

of insights are difficult to discern at a global level, where there are many more actors and levels of interactions.

DIAL's work in Malawi and Mozambique primarily focused on data for development interventions, which were the primary focus of the country deep-dives. The aim of these interventions was to develop, implement, and document projects that leveraged private sector data (e.g. MNO and geospatial) with traditional data sets for public policy decision-making. In Malawi, DIAL and its partners worked with the Ministry of Health to leverage new data sets and apply data analytics to enhance the ministry's plans to resource and open new clinics. In Mozambique, DIAL was invited by the government to support sustainably integrated analytics from de-identified and aggregated MNO data into its national disaster preparedness and humanitarian assistance systems. At the invitation of INCM (ARECOM), it convened a workshop with stakeholders, leading to the formation of a technical working group on data for development.

The evaluation team also engaged with other in-country stakeholders that were relevant to DIAL's other workstreams. This includes mobile aggregators in Malawi and Mozambique and providers of open source software that were operational in markets where DIAL had partnerships and programming.

The approach for the country deep dives included:

- **Desk research:** review of DIAL documentation and relevant digital economy reports (e.g. GSMA, World Bank, national policy documents), where applicable. As part of this research, the team reviewed how countries were scoped and selected, and how projects were designed at the outset.
- **Recruited local consultants** with a current and deep understanding of digital transformation initiatives underway and planned in each country. Consultants were selected for networks with local stakeholders to improve response rates in each country.
- **Key informant interviews:** between 10 - 15 interviews were conducted in each country, subject to stakeholder availability. Once local consultants were on board, country interview lists were reviewed and confirmed. Consultants used a standard interview guide for each KII. Stakeholders were selected to reflect:
 - DIAL staff, including country and thematic leads for the projects;
 - Government, NGO and private sector (e.g. MNOs) implementation partners;
 - Other organizations actively involved in the areas of development these initiatives touch on (e.g. humanitarian or health);
 - Organizations, such as ministries, funders and sector partners, involved in broader digital transformation initiatives in the country;
- **Virtual focus groups** were organized with a subset of key stakeholders interviewed to probe further on key themes that surfaced through the interviews. This was an opportunity to both identify how DIAL's work has advanced outcomes locally and to identify what kind of support is most needed by stakeholders going forward.

- **Sense making:** local consultants synthesized findings from country deep dives and worked with the evaluation team to ensure that implications were incorporated where relevant in the evaluation report. We focused on:
 - Understanding the level of coordination in the local digital ecosystems.
 - Identifying any modifications that might need to be made to DIAL's ToC and operational approaches in transitioning from a global-level to a national-level focus;
 - Assessing DIAL's country programming against each focus country's context within the framework of the DAC criteria (e.g. 'Coherence: were DIAL's efforts in Malawi additive and well coordinated with those of the World Bank and other players supporting local digital transformation efforts).
 - Commenting on differences in value for money (VfM) at different levels (i.e. global vs. national, for example, '*does market research offer greater VfM at a national level than at a global level?*').
 - Examining the sustainability of country programs.

The insights from the country deep dives also provided more context on what kind of global work can best support stakeholders in their digital transformation journeys.

Annex 8 - Evaluation Terms of Reference

Request for Proposals

Design and Implementation of DIAL 1.0 Endline Assessment
June 2020



This document summarizes the requirements for a proposed consultancy to plan and deliver an endline assessment on the Digital Impact Alliance's (DIAL's) impact on the digital ecosystem from launch of work (October 2016) through the end of the current strategy (October 2020), henceforth called "DIAL 1.0." It is expected that the selected applicant will serve as a consultant and thought partner in exploring changes in the digital ecosystem, developing a data collection methodology and implementing the endline assessment from July through December 2020. The consultant will analyze the data collected during the assessment and produce several products detailing DIAL's direct results and broader impact on the digital ecosystem, as well as recommendations for future directions.

DIAL Background Summary

Digital technology is having a profound impact on society, enhancing our ability to solve longstanding global development challenges. Creating an inclusive digital society would ease our ability to communicate with everyone and allow new opportunities for innovative services to flourish.

For the most vulnerable though, the digital divide exists and is growing. Persistent challenges that slow awareness and adoption of digital technology and services in the developing world include the limited reach of technical infrastructure and software maturity, the misalignment of financial incentives, uncertain policy environments, and scarce technical capacity. These factors impede the scale and speed of delivering digital services to millions of people, preventing them from realizing the full potential of better health, education, and economic opportunities. This imbalance must change. When we achieve a digital society that serves everyone, we have the potential to improve the lives of millions of people around the world and achieve the Sustainable Development Goals.

The Digital Impact Alliance (DIAL) was conceived of in 2015 by four donors¹ funding digital projects to bring the public and private sectors together to help realize an inclusive digital society that could connect everyone to life-enhancing and life-enabling technology. Based in Washington, DC, DIAL is staffed by a global team of technology researchers, developers, investors, negotiators, and policymakers. It is supported by world-class foundations and development agencies and guided by a board of leading emerging market entrepreneurs, technologists, and development experts. With this leadership, DIAL is uniquely positioned to serve as a neutral broker in this ecosystem, bringing together government, industry, and other development stakeholders to discover and promote new solutions to old problems.

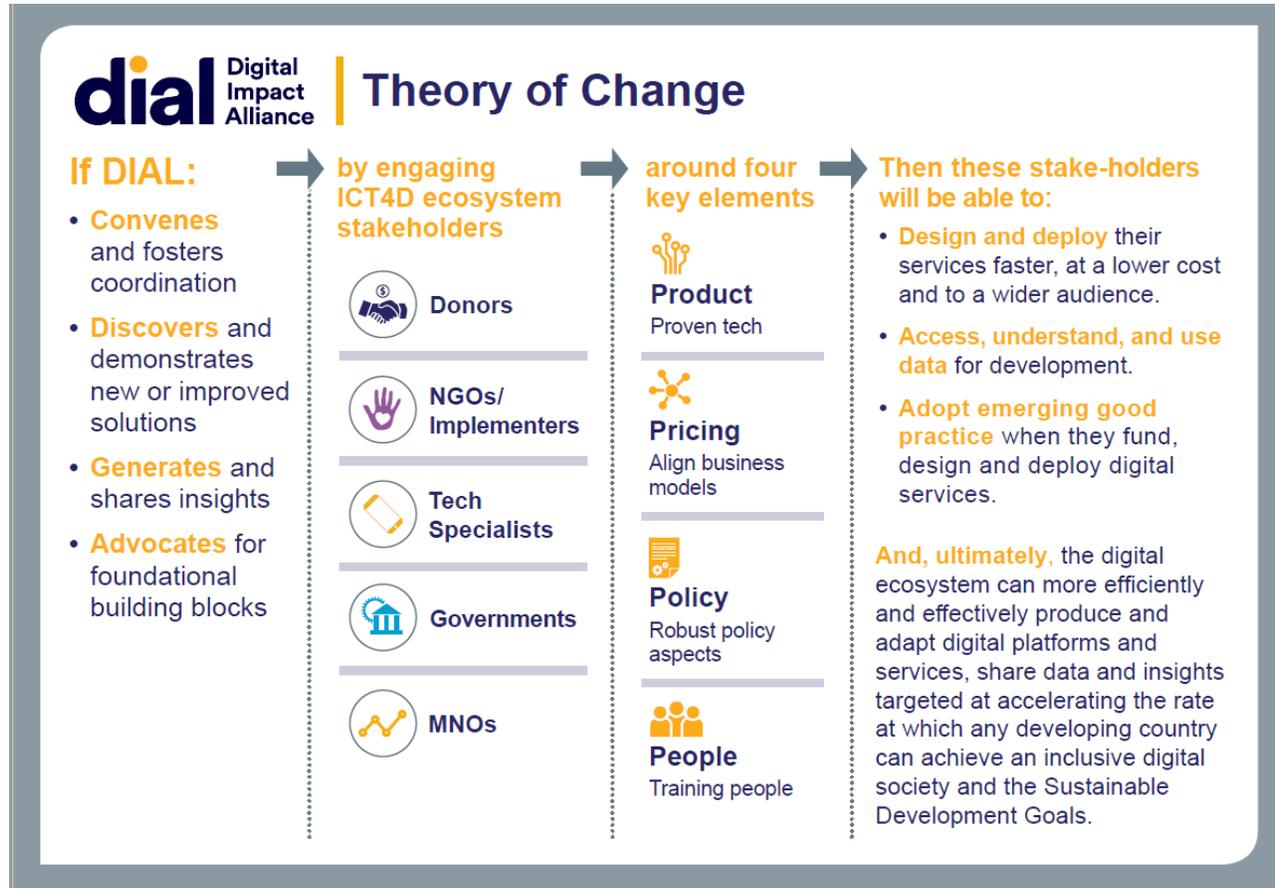
DIAL's hypothesis is that a *more efficient and effective digital ecosystem leads to more inclusive digital societies* and this hypothesis shapes DIAL's vision and mission, described below.

DIAL's vision is to realize a *more inclusive digital society* for the underserved in developing markets, in which all women, men and children, regardless of gender, geography, social or economic status, benefit from the life-enabling services available in an effective digital ecosystem.

¹ DFID, Sida, USAID, and the Bill & Melinda Gates Foundation. Actual program implementation did not begin until October 2016, when Strategic Plan and budget were approved by donors.

DIAL's mission is to overcome systemic barriers to enhance the collective efforts of donors, governments, industry and others in the digital ecosystem.

Our overall Theory of Change for DIAL 1.0 is below:



To strengthen these digital ecosystems, DIAL has focused its efforts since October 2016 on convening the digital ecosystem, generating insights in key gap areas, discovering what works through demonstration models and subsequently advocating for the adoption of proven practice. DIAL has three primary aims: to expedite the deployment of proven software and technology platforms, expand mobile distribution channels, and ensure responsible, widespread access and use of network data. We conduct research and demonstration projects across these areas.

DIAL's work to expedite the deployment of proven software and technology platforms has included:

- Information, Communications and Technology (ICT) platforms and gap analysis against the Sustainable development Goals (SDGs)
- The Open Source Center (OSC)

DIAL's work to expand mobile distribution channels has included:

- Messaging applications for international development
- Mobile network integration
- Innovative financing

DIAL's work to ensure responsible, widespread access and use of mobile network data has included:

- In-country data partnership and process models
- Data platforms
- Ecosystem support to leverage mobile data for development

Additionally, DIAL produces, curates, and disseminates evidence-based good practices packaged in easy to understand guidance so that governments, technology companies, the development community, and other implementers can quickly use it to inform ongoing efforts to fund, design, and deploy digital services to more people. DIAL stewards the Principles for Digital Development, which have become a recognized framework for how to design good digital projects and convenes several communities of practice, including Digital Donors Anonymous, both virtually and in country.

While much of DIAL's early work was at a "global" level, more recently DIAL has made targeted investments in several countries, namely Malawi, Tanzania, Mozambique, DRC, and Sierra Leone.

DIAL's Measurement Approach

DIAL's measurement focus is on behavior change and improvements within the **digital ecosystem**, which has been defined by DIAL to be comprised of organizations designing, funding, or using digital technology to deliver lifesaving services to people, including implementers (primarily NGOs/CSOs), funders, policymakers, and private sector technology developers and providers (including mobile network operators, data aggregators, software stack developers, etc.). Our hypothesis is that by focusing on behavior change of the ecosystem (our sphere of direct influence), we will be able support these individual organizations and the larger ecosystem to collectively improve outcomes for individual beneficiaries or end users (sphere of interest).

DIAL's founders have encouraged DIAL to take risks and continuously adapt its approach. This mandate has required a flexible approach to monitoring, evaluation and learning that allows DIAL to manage adaptively while still working toward consistent, long-term outcomes. DIAL's M&E approach is based on Developmental Evaluation principles² linking together three key components that combine a focused, rigorous framework with critical reflection and learning cycles. These key components are:

- **Results Framework:** logic model with clear outcomes and indicators through which DIAL is measuring its collective success. Reported against annually to all donors using the same framework.
- **Program-Level MEL:** designed to link programs to the Results Framework, while allowing for flexibility and adaptation around program-level theories of change, learning questions, and desired outcomes. The MEL team hosts quarterly Pause and Reflect sessions to prompt strategic discussion and capture these lessons.

² Patton, Michael Q. "Developmental Evaluation: Applying complexity concepts to enhance innovation and use." Guilford Press: London, 2011.

- **Learning Agenda:** to ensure periodic, critical reflection on hypotheses, context, and progress toward mission. This has led to cross-program research around uptake and replicability of our work.

Additionally, DIAL has conducted two assessments to date on the digital ecosystem. In 2018, DIAL worked with Genesis Analytics to conduct a [Global Digital Ecosystem Study](#) to serve as a baseline evaluation for DIAL’s measurement system. While the study was not able to provide quantitative measures against the Results Framework indicators to serve as a true “baseline” assessment, it was able to paint a clear qualitative picture of the challenges of different organizations within the digital ecosystem at that point in time. More recently, the MEL team led an internal “midline” process assessment to capture signs of progress against our Results Framework and uncover unexpected results of our work by interviewing our partners and direct program customers. The findings of this assessment have not yet been published but will be available for review by the selected consultants.

In this context, this endline assessment will not be a true “endline”; we expect that it will have a slightly different methodology and sample than the baseline and midline assessments (although ideally some overlap for continuity). However, it should provide an accurate portrayal of how DIAL’s actions and advocacy have resulted in changes in the digital ecosystem, particularly in addressing the barriers captured by the baseline study.

Finally, DIAL is currently developing a new five-year Strategic Plan (October 2020-September 2025) under the name of “DIAL 2.0.” We expect that the DIAL 1.0 endline assessment will help inform, validate, and/or update this strategy, allowing DIAL to understand key areas for improvement and opportunities to build on success. The DIAL 2.0 Strategic Plan and related pieces will be a key input into the 1.0 endline assessment.

Objectives

The primary focus of this assessment is to document the results and effectiveness of DIAL 1.0 work. Additionally, through this study DIAL hopes to examine what has changed in the digital ecosystem since the Baseline study, in order to identify any new or persistent barriers that we should address and pivot the DIAL 2.0 strategy accordingly. The assessment will identify changes both within the larger digital ecosystem and smaller segmented stakeholder groups over the past four years, drawing out if (and how) DIAL has contributed to that change.

Therefore, this study has three goals, listed in order of importance:

1. **DIAL 1.0 Final Assessment:** Document results of DIAL 1.0, including collecting data against the 1.0 Results Framework for Strategic Goal and Primary Outcomes. Evaluate and compare the effectiveness of different 1.0 interventions in terms of value for money. Capture lessons, best practices, and areas for improvement.
2. **Updated State of the Digital Ecosystem:** Document ongoing and new barriers to scaling digital and data tools, including blockers and opportunities for national digital transformation.
3. **DIAL 2.0 Partial Baseline Study:** Inform 2.0 strategy and Theory of Change. Capture data against select indicators under consideration to measure progress under DIAL 2.0 Results Framework (draft will be shared with consultants).³

³ We use the term “partial baseline” as we anticipate that certain indicators under the 2.0 Results Framework will need to be developed during Year 1 (2021) of 2.0 implementation and will not be ready for this study.

We expect that these goals can be met through a single assessment design with different analytical frameworks and focused sensemaking with DIAL and partners.

The key evaluation questions to be addressed by this study are:

- **What changes have occurred in the digital ecosystem since October 2016?**⁴
- **Which of these are as a direct or indirect result of DIAL's work?**
- **Which of DIAL's interventions have been most effective in creating these changes?**
- **What can DIAL learn or adopt from these experiences as it moves into a new strategy?**

The consultants will also analyze trends and disaggregate findings by key stakeholder group (NGOs, donors, policymakers, tech developers, and mobile network operators). For example, we are interested in understanding if/how donors have shifted their funding of digital programs and if/how mobile network operators are engaging with the development sector to create shared value.

In order to assess DIAL 1.0's effectiveness, the consultants will seek to tie identified changes to DIAL's Strategic Goals and Primary Outcomes from our Results Framework⁵. Within the larger context of changes within the digital ecosystem, the consultants will consider: **Did these changes in fact occur? In what ways did DIAL contribute to them? Which of DIAL's interventions were most effective in creating these changes?**

Suggested analytical questions are below each outcome but can be refined by the consultants in conjunction with DIAL:

- **Strategic Goal:** The digital ecosystem can more efficiently and effectively produce and adapt digital platforms and services, share data and insights targeted at accelerating the rate at which any developing country can achieve an inclusive digital society.
 - Are we seeing signs that the ecosystem is operating more effectively and efficiently?
 - Is the ecosystem better able to reach underserved populations? How can we know?
 - Are products being designed with women and girls in mind?
- **Primary Outcome 1:** Providers of digital development services can design and deploy their services faster, at a lower cost and to a wider audience in select countries⁶.
 - Did DIAL actually save the digital ecosystem time and money by testing concepts and publishing our research?
 - Are more organizations embracing open source software (compared to off-the-shelf/proprietary software)?
- **Primary Outcome 2:** In select countries, public service delivery and development programs have improved access to, and understanding of, and use of data for development.
 - Are mobile network operators more likely to share/sell their data to LMIC country governments and NGOs than previously? What incentivized this change?
- **Primary Outcome 3:** Digital service providers adopt emerging good practice when they fund, design and deploy digital services

⁴ The consultants will have access to DIAL founding documents (including original 2016 Strategic Plan) as well as the 2018 baseline report to and 1.0 Results Framework to use as a comparison point, in addition to independent desk research.

⁵ The full DIAL 1.0 Results Framework and indicator plan is in the appendix for reference. It is not expected that the consultants will need to capture data against specific RF indicators, but those indicators can be used to shape questions and analysis to understand whether the larger outcome was achieved.

⁶ "Select countries" will include the countries within which DIAL and partners invested longer term efforts, including Malawi, Tanzania, Mozambique, DRC, Colombia, and Senegal (potentially a few others).

- How are different organizations in the digital ecosystem “implementing” the Principles for Digital Development? How has that changed how they design their services?
- Did DIAL’s resources actually reach the desired stakeholders? How did people come across our resources?
- For those that accessed DIAL resources, were they relevant to their needs? Did the resources help them solve a problem or improve a way of working?

In terms of the appropriate methodology to address these questions, DIAL expects a mixed methods approach: heavily qualitative (surveys, interviews, anecdotes, desk research) plus some quantitative (e.g. DIAL budget actuals, donor spending data). Ideally, we would like to work with a firm that is experienced in quantifying qualitative data without losing the nuance or oversimplifying; for example, starting with an approach similar to Outcome Harvesting to gather changes and identify factors that drove these changes, aligning those changes to the outcomes within the 1.0 Results Framework, and then developing a basic model to determine which factors or interventions were most effective in bringing about the change and in turn, which yielded best value for money (considering budget spent).

Data collection for this study is expected to take place at the same time as program work for the current phase of DIAL is wrapping up, and therefore this study is not meant to be an impact evaluation or capture all potential results of our work, but rather provide an early understanding of what has changed during (and resulting from) DIAL’s work to date and drawing conclusions from those observations. The consultants will have access to all program-level Theories of Change and will be able to meet with each program team to understand the current status of each program, and what types of changes are reasonable to expect at this point in the program’s lifecycle to inform methodology.

The sampling strategy will be a mix of the key stakeholder groups within the digital ecosystem, as well as a mix of known DIAL clients and partners (75%) and organizations in the larger digital ecosystem beyond DIAL’s known network (25%). DIAL will work with consultants to determine the right balance between country-specific vs global level sampling and analysis. However, for the purposes of the proposal, please consider the countries mentioned on page 3 of this RFP. The consultants should apply an equitable evaluation approach and seek to achieve when possible gender/racial/geographic balance within stakeholder groups.

Scope of Work

1. **Purpose.** The purpose of this request for proposals is to find a firm to help co-create and implement a methodology to collect and analyze ecosystem-level outcomes via an endline assessment. The consultant will be expected to build off DIAL’s prior work, including the baseline and midline assessments as well as the existing Results Framework, to define and implement this study and provide recommendations for further thinking for DIAL and the larger digital ecosystem around key findings.
2. **Goals and Deliverables.** We expect the work to entail the following key phases:
 - **Inception Report⁷:** The consultants, with guidance from the DIAL MEL team, will conduct a preliminary desk review to ensure a shared understanding of the digital ecosystem and DIAL’s role in the ecosystem. The review should include a review of DIAL’s data

⁷ See Better Evaluation’s definition and guidance for evaluation inception reports: https://www.betterevaluation.org/en/evaluation-option/inception_report

collection tools and existing data, a review of the baseline and midline reports, the Results Tracker and report for each year of DIAL’s operation, and all other materials that DIAL and the consultants agree are necessary to understand the full context of DIAL and its operating environment since DIAL’s inception. From this desk research and conversations with the DIAL MEL and program teams, the consultants should develop an inception report that includes a conceptual framework to be used in the assessment, the key evaluation questions and methodology, including information on data sources and collection, sampling frame and approach, and any key indicators. The inception report should also include a timeline for the evaluation project (to be refined from the timeline presented in this RFP) and drafts of data collection instruments, including informed consent and data protection protocols. This report should clearly define the digital ecosystem, key stakeholders, barriers, and any other additional background information that gives context to the proposed approach. Finally, the inception report should include plans for sensemaking and brief outlines of the final products, including ideas for potential graphics. The Director of MEL must approve this report before moving on to testing and data collection stage.

- **Data Collection and Analysis:** This will include refining, testing, and implementing all data collection instruments outlined in the methodology section of the Inception Report with the identified sample, analyzing qualitative and quantitative data, and presenting the findings to DIAL in ways that are interactive and useful and can be disaggregated by a range of possible criteria (organizational type, sector, function, geography, gender, etc.). This should also take advantage, where appropriate and useful, of state-of-the-art digital tools and evaluation innovations, including dashboards, visualizations, journey maps, and/or other creative and effective dissemination methods. The data should be analyzed as it is collected, so that early findings can be incorporated into end-of-year reporting.
- **Sensemaking and Reports:** The consultants will develop a final report on the results of the endline assessment that will be published and widely shared by DIAL. This report will include a summary of the findings and reflections on how changes that were identified can be maintained, as well as suggestions for additional interventions and research to fill any gaps in the digital ecosystem. DIAL and the consultants will test these findings with selected participants from the study through a series of sensemaking activities to ensure that they hold meaning for external audiences. This report will be approved by the Director of MEL before final payment can be made. Additionally, the consultants will produce a second report specifically for DIAL, highlighting where and how DIAL’s work has led to observable change and where it fell short, where DIAL could improve and how to tweak our 2.0 strategy to build on these findings. This report will be for an internal audience, so specific DIAL program teams will be involved in sensemaking, and potentially including members of DIAL’s board.

#	Deliverable/activity	Description	Deadlines (based on kick-off of July 16)
	Phase I – Inception Report		

#	Deliverable/activity	Description	Deadlines (based on kick-off of July 16)
1	Draft Inception report	From desk research and conversations with the DIAL MEL team, the consultants should develop an inception report that includes a conceptual framework to be used in the assessment, the key evaluation questions and methodology, including information on data sources and collection, sampling frame and approach, and any key indicators. The inception report should also include a timeline for the evaluation project (to be refined from the timeline presented in this RFP) and drafts of data collection instruments, including informed consent and data protection protocols. This report should clearly define the digital ecosystem, key stakeholders, barriers, and any other additional background information that gives context to the proposed approach. The inception report should include plans for sensemaking and brief outlines of the final products, including ideas for potential graphics.	August 6, 2020
2	Final Inception Report and approved evaluation methodology and sample	The consultants will revise the inception report following feedback from DIAL and inclusion of additional research. The Director of MEL must approve this report and the final methodology and sample (including testing group) before moving on to testing and data collection stage.	August 17, 2020
Phase II – Data Collection and Analysis			
3	Set of quantitative and qualitative data collection tools piloted	In accordance with the approved methodology, all required survey tools, interview guides, citation scraping, digital analytics tools, or other relevant tools for quantitative and qualitative data collection must be tested with pilot group and refined and then submitted to Director of MEL.	August 30, 2020
4	Initial process review and data analysis brief	After implementing the agreed upon set of quantitative and qualitative data collection tools with the first part of the sample, the consultants will develop a brief analysis of the data collected up to this point, highlight any challenges encountered, and suggest any	September 30, 2020

#	Deliverable/activity	Description	Deadlines (based on kick-off of July 16)
		recommendations for how to pivot and address challenges. As an annex to the brief, the consultant should share an initial raw data set and interview notes.	
5	Pre-read impact memo for board meeting	Under guidance of the Director of MEL, the consultants will use the findings of the assessment to develop a memo as a pre-read to DIAL's annual board meeting in October/November (exact date TBD). Estimated 5 pages.	September 15, 2020
6	Second process review and data analysis brief	Same as #4, with suggestions for how to address any gaps in data while keeping to the agreed upon timeframe.	October 30, 2020
Phase III – Sensemaking and Reports			
7	Presentations and Notes from Sensemaking sessions and presentation of findings	In-person and virtual presentations with study participants and key DIAL staff and potentially board members to generate discussion, ask additional questions, and refine final analysis. The consultants will share minutes following each session, with notes of how the conversations will affect findings and recommendations.	November 30, 2020
8	Internal report	This report will include findings specific to DIAL's contribution to the outcomes identified through the study. The report will highlight any surprising findings, including any critiques of DIAL's work, and provide recommendations for how DIAL can better serve the digital ecosystem, with DIAL 2.0 Strategy as a reference. This report should also include qualitative and quantitative analysis against DIAL's 1.0 and 2.0 Results Framework, as well as suggestions for future MEL activities in this space.	December 15, 2020
9	Final external report	This report should be written for an external audience, including donors, policymakers, and other researchers working in the digital ecosystem. The focus will be balanced between DIAL's impact and effectiveness and overall changes in the digital ecosystem. This report should feature case studies of	December 30, 2020

#	Deliverable/activity	Description	Deadlines (based on kick-off of July 16)
		organizations that have made significant change as a result of DIAL's support. DIAL will contract a graphic designer to develop sophisticated graphics; however, the consultants should suggest which findings should be visualized, as well as ideas of how to disseminate the report in innovative ways, based on conversations with the digital ecosystem. The acceptance of this report will signify the conclusion of the study.	
10	Final data set	It is expected that all data and meta data collected will be the property of DIAL and will be provided to the DIAL's MEL team at project closing.	December 30, 2020

3. **Project timeline.** DIAL is in its final full year of implementation in its current phase. This contract should take approximately six months, between July and December 2020. DIAL proposes one month for the initial review of DIAL materials, one month for research and development of survey methodology, three months for implementation of the survey and analysis, and one month for writing and editing the final reports. Start date will be contingent upon final contracting and availability.
4. **Role of Consultant.** The consultant will work in close coordination with DIAL's Director of Monitoring, Evaluation and Learning, as well as members of senior leadership to approve methods, sample, tools, and final products on a work for hire basis. The consultant shall provide written updates weekly and be available for update calls at the request of the Director of MEL.
5. **Performance Measurement.** The deliverables of this project are linked inextricably to DIAL's Results Framework. This project will be critical to DIAL's ability to understand and describe its success. 'Successful completion' includes the following criteria:
 - The overall evaluation has clear questions and methods of analysis that are approved by relevant DIAL staff to ensure shared understanding and buy-in around the goals of the evaluation.
 - Each deliverable has approval from relevant DIAL staff and will include a period of review and sign-off to indicate satisfaction with the work.
 - Response rate for any quantitative survey should meet or exceed industry norms.
 - Acceptable survey and interview dissemination plan is developed by the consultant, approved by DIAL, and tested before implementation.
 - Quality of the work (internal report and final external report) is determined to be credible by our peers, and publishable within the sector.
 - Final negotiated schedule is adhered to with a window of variance not to exceed two weeks total.

- Raw data is received in a format accessible to and readable by DIAL's Director of Monitoring, Evaluation and Learning, preferably in .xlsx.

6. Intellectual Property (IP) considerations

DIAL's mission is to create public goods that enable a more efficient digital economy for everyone's common benefit. To serve this goal in partnership with other organizations and individuals, DIAL funds the development of important hardware and software, databases, computer protocols, and useful industry standards.

Intellectual property ("IP") is at the heart of all things creative and inventive. DIAL's IP policy is shaped by our key funders' and the Swedish International Development Cooperation Agency (Sida) policies. DIAL's work products thus must comply with BMGF's "Open Access" policy. Further, any IP we fund should be licensed for free use worldwide. This is accomplished through open source and Creative Commons licensing and by open standards, unencumbered by restrictive copyrights and patents.

The scope of work for this project and deliverables will, as such, abide by DIAL's intellectual property (IP) policy and its donor' compliance requirements. If special considerations are required, we will consider those on a case by case basis with selected vendors.

As required by its donors, DIAL is committed to "Global Access". As such, DIAL will ensure that knowledge and information gained from any project and any deliverable produced will be promptly and broadly disseminated under a creative commons license, and any funded developments will be made available at an affordable price to:

1. People most in need within developing countries and /or
2. In support of the U.S. educational system and public libraries, as applicable

Proposal submission requirements

Proposal submissions, which may be created in Word, PowerPoint, or a combination of the two, must include the following components. Respondents may include additional elements as needed.

- Knowledge of digital ecosystem
 - Demonstrate understanding of DIAL's vision, mission, and objectives
 - Demonstrate background knowledge of the digital ecosystem landscape
 - Reference firm/team experience with other digital technology organizations and/or firms
 - Reference previous experience evaluating digital technology interventions, if possible
- Approach and methodologies
 - Describe proposed preliminary approach and methodologies to performing a study that will serve as an endline assessment of DIAL 1.0 strategy
 - Describe project management approach, including timeline and any recommended updates to timeline provided above, including level of effort on the part of the DIAL team, e.g. to participate in scoping and requirements workshops, iteration junctures, etc.

- Describe understanding of risks and a detailed mitigation plan, including how to conduct this assessment without travel in light of the current pandemic, but still produce a high-quality report
- Team experience and expertise
 - Staff and team structure
 - Identify key staff who are integral to the implementation of the evaluation
 - Identify the team structure, including roles, responsibilities, and level of effort of staff and any sub-contracted resources (note that partnerships or sub-contracting is acceptable)
 - Provide rationale and background on any sub-contracted firms or individuals
 - Relevant experience
 - Demonstrate firm(s) and key participants' experience relative to the scope of work (including partners/subcontractors)
 - Provide at least 3 examples of similar work
- Value
 - Provide a detailed budget, including assumptions, costs and level of effort for staff and any sub-contractors. The consultant may find it helpful to document assumptions per workstream as appropriate, for example:
 - Background Research
 - Quantitative Survey Implementation
 - Qualitative Interviews
 - Analysis and Reporting
 - Provide professional fees budget, including cost and level of effort per staff member
 - Provide separate line item for any sub-contractors
 - Provide expenses budget by type of expenses, e.g. travel, research, etc. Travel estimates should indicate the anticipated destination and duration of each trip
- References
 - Provide names and email addresses of at least two prior clients willing to discuss their experiences working with you.

Submission format and timeline

- All submissions are due on **July 10, 2020** by 6:00 pm EST. We expect the submissions to be in the 10-15 page range but will not penalize submissions that are above or below this range.
- The selected Respondents will be notified on **July 13, 2020** by 6:00pm EST.
- Please send all EOIs and email submissions to mel@digitalimpactalliance.org with the subject line "Digital Impact Alliance Endline Assessment – Company Name"
- In case Respondents encounter a problem submitting, please contact Laura O'Brien at lobrien@digitalimpactalliance.org.

Questions and answers

Please send any questions to mel@digitalimpactalliance.org by **June 25, 2020**. DIAL will make every effort to respond to questions within 24 hours. DIAL will also share the questions and answers from these bilateral discussions with all other Respondents in order to maintain fairness in the amount of information that all candidate organizations have access to.

Evaluation Process

DIAL will review all written proposals and may request a phone or in-person interview and/or updated submission to address questions or provide clarification. The evaluation committee will use the following criteria to evaluate candidates' response.

The selection decision will be based on the following criteria:

Criteria	Score
1. Knowledge of DIAL objectives (10 points)	
The proposed approach shows an understanding of DIAL, the digital ecosystem, and the endline objectives as well as a clear plan for achieving them.	
2. Subject Matter Expertise (35 points)	
Appropriate level of understanding of the key stakeholders and dynamics within the digital ecosystem	
Experience working with mixed methods approaches to conduct outcomes harvesting	
Experience with advanced data collection, analysis, and visualization tools for multicultural audiences	
3. Project Management (10 points)	
Clear description of team roles and interaction with DIAL	
Achievable action plan that will deliver the project on time and on budget	
Thoughtful risk identification and mitigation strategies	
4. Capabilities and Experience (25 points)	
Demonstrated firm experience with similar projects and in international development context	
Team members with demonstrated skills and experience with similar projects and activities	
High-quality sub-contractors and external advisors, if relevant, especially with knowledge and experience in global south/developing countries	
Demonstrates ability to access necessary resources and knowledge centers to be successful	
5. Value (20 points)	
The proposed pricing is within budget	
The proposed pricing demonstrates a competitive price and good value for the money	

Intent and disclaimer

This RFP is made with the intent to identify a consultant to deliver results as described in this RFP. DIAL will rely on Consultant's representations to be truthful and as described. DIAL assumes it can be confident in Consultant's ability to deliver the product(s) and/or service(s) proposed in response to this RFP. If DIAL amends the RFP, copies of any such amendments will be sent to all Respondents.

Contract terms

DIAL will negotiate contract terms upon selection. A copy of the contract terms and conditions will be provided to finalists. All contracts are subject to review by UN Foundation's Business Services Budget Reporting (BSBR) team. The project will start upon the execution of the contract. The contract will outline terms and conditions, scope, budget, and applicable flow-down terms.

Release

The consultant understands that DIAL has chosen to solicit an RFP for consulting services, and that the consultant's response does not guarantee that DIAL will enter into a new contract with the consultant or continue any current contract(s) with the consultant.

Consultant agrees that DIAL may, in its sole discretion:

- Amend or cancel the RFP, in whole or in part, at any time
- Extend the deadline for submitting responses
- Determine whether a response does or does not substantially comply with the requirements of the RFP
- Waive any minor irregularity, informality or nonconformance with the provisions or procedures of the RFP
- Negotiate with all consultants UNF deems acceptable
- Issue multiple awards

This RFP is not an offer to contract. DIAL assumes no responsibility for Consultant's cost to respond to this RFP. All responses become the property of DIAL.

The Consultant, by submitting a response to this RFP, waives all right to protest or seek any legal remedies whatsoever regarding any aspect of this RFP.

Consultant represents that it has responded to the RFP with complete honesty and accuracy. If facts provided in Consultant's response change, Consultant agrees to supplement its response in writing with any deletions, additions, or changes within ten (10) days of the changes. Consultant will do this, as necessary, throughout the selection process. Consultant understands that any material misrepresentation, including omissions, may disqualify it from consideration for a contract award.

Consultant understands it may receive proprietary and confidential information from DIAL during the RFP process ("Confidential Information"). Consultant agrees to not use Confidential Information for any purpose other than its participation in the RFP process and to not reveal Confidential Information directly or indirectly to any other person, entity, or organization without the prior written consent of DIAL. Consultant further agrees to exercise all reasonable precautions to maintain the proprietary and confidential nature of Confidential Information where it can best demonstrate its value and capacity to delivery ecosystem-wide, meaningful value.

Attachment A: DIAL's Results Framework

DIAL's Results Framework

Strategic Goal	The digital ecosystem can more efficiently and effectively produce and adapt digital platforms and services, share data and insights targeted at accelerating the rate at which any developing country can achieve an inclusive digital society.		
Primary Outcomes	Primary Outcome 1: By FY19, providers of digital development services can design and deploy their services faster, at a lower cost and to a wider audience in select countries.	Primary Outcome 2: By FY19, in select countries, public service delivery and development programs have improved access to, and understanding of, and use of data for development.	Primary Outcome 3: By FY19, governments, funders and implementers adopt emerging good practice when they fund, design and deploy digital services.
Intermediate Outcomes	<p>1.1 By FY19, developers of digital development services leverage standard digital development tech stacks for designing and deploying their services.</p> <p>1.2 By FY19, providers of digital development services have streamlined access to channels that allow them to reach more users.</p>	<p>2.1 By FY19, in select countries, MNOs, geospatial and digital data providers have access to incentives and tools to partner with public service providers for shared insights and data use.</p> <p>2.2 By FY19, in select countries, public sector actors and the development community have access to best practices, risks and rewards of D4D and are equipped with tools needed to participate in the data for development.</p>	<p>3.1 By FY19, target DSPs have access to emerging good practice for more efficient and effective design and deployment of digital services.</p> <p>3.2 By FY19, target funders have access to emerging good practice and increasingly collaborative approaches for impactful digital development investment.</p> <p>3.3 By FY19, target policy makers accelerate adoption of emerging good practice in policy and regulatory for digital development.</p>

Attachment B: Results Framework Indicator Plan

Level	Result Statement/Purpose	Indicator	Indicator Definition	Illustrative Data Sources
<p>Strategic Goal: The digital ecosystem can more efficiently and effectively produce and adapt digital platforms and services and share data and insights targeted at accelerating the rate at which any developing country can achieve an inclusive digital society.</p>	<p>Depth of System Change (impact on those we reach directly and how they apply and innovate with new services, as well as the 'crowding-in' of other providers who see this as a viable market opportunity)</p>	<p># of DSPs that report increased ability to use tech to reach underserved, as a result of DIAL's work</p>	<p>DSPs include tech companies, NGOs, funders, governments. Underserved populations can refer to the country (emerging markets, LMIC countries) or the specific target group (women, poor, disabled). "Increased ability to use tech to reach underserved" refers to either providing services to these groups via tech who were not being reached previously by that DSP or offering new services or products to these groups.</p>	<p>research on ecosystem and system mapping, surveys and interviews with DSPs</p>
	<p>Funder Behavior/Collaboration (enabling environment - investment)</p>	<p># of new digital development 'collective investments' that are implemented, as a result of DIAL's work</p>	<p>'Collective Investments' may include joint funding, shared investments, partnerships, or other examples of collaboration among actors. 'That are implemented' implies that funding should have changed hands and activities begun on the ground. If partnership already exists, can count if new funds are added to new scope of work/activities or if new partner joins for existing activity. "As a result of DIAL's work" excludes partnerships funded or led by DIAL.</p>	<p>Funder survey/interviews, surveys and interviews with DSPs</p>
	<p>Gendered Perspective - ensuring that DIAL's work enhances gendered perspectives within the ecosystem</p>	<p># of DSPs incorporating gendered perspectives into programmatic and operational digital initiatives, as a result of DIAL's work</p>	<p>'Incorporating gendered perspectives' can be reflected in a variety of ways, including improved inclusion of women and girls in digital services provided through specific policies, initiatives, or other activities that demonstrate a commitment to addressing gender in digital services (external/programmatic). Additionally, can capture changes that DSPs have made internally to better address needs of women (internal/operationally).</p>	<p>Surveys and interviews with DSPs, program records, etc. In the T4D projects, gender participation trends can be captured in both development and consumer communities.</p>
<p>Primary Outcome</p>	<p>PO 1 - By FY20, providers of digital development services can design and deploy their services faster, at a lower cost and to a wider audience</p>	<p># of DSPs reducing turn around time to deliver services to underserved, as a result of DIAL's work</p>	<p>'Reduced turn around time' refers to reduced time to deliver or improve ICT solutions to desired market, as compared to previous time before DIAL intervention or uptake of DIAL product. Underserved populations can refer to the country (emerging markets, LMIC countries) or the specific target group (women, poor, disabled).</p>	<p>DSP surveys, interviews, program records</p>

Level	Result Statement/Purpose	Indicator	Indicator Definition	Illustrative Data Sources
		<p># of DSPs reducing overall cost of service delivery to underserved, as a result of DIAL's work</p>	<p>Reduced overall cost of service delivery refers to reduced cost to deliver or improve ICT solutions to desired market, as compared to previous cost before DIAL intervention or uptake of DIAL product. Underserved populations can refer to the country (emerging markets, LMIC countries) or the specific target group (women, poor, disabled).</p>	<p>DSP surveys, interviews, program records</p>
Intermediate Outcome	IO 1.1 - By FY20, developers of digital development services leverage standard digital development software components for designing and deploying their services	<p># of OSC supported OSS projects that report increased functionality as a result of DIAL's work</p> <p>% of Open Source Center clients who are satisfied with services provided</p> <p># partners pledging/giving in-kind or monetary support to OSC</p>	<p>OSC supported OSS projects refers to an open source software project that received financial and/or technical assistance from the Open Source Center over the previous 12 months." "report increased functionality as a result of DIAL's work" refers to a self-reported metric whereby the OSS project claims that the open source software operates better in terms of speed, processing, user-interface, or some other measure that is indicative an increase in quality of the software.</p> <p>OSC clients refer to OSS projects that receive technical and/or financial assistance from the OSC</p> <p>% of somewhat satisfied or very satisfied responses from OSC satisfaction survey, in terms of overall score</p> <p>Partners are DSPs (reference SG1 for definition) "Pledging/giving" refers to either MOU, or grant or other legal document to reflect current or future transaction "In-kind support" could be legal, technical assistance, or human resource support "Monetary support" is cash donations</p>	<p>DSP surveys (responses disaggregated by type of standard tech stack/service). Funder surveys will also provide window into shifting investment trends as this takes root.</p> <p>Satisfaction surveys among clients. Will include looking at met and unmet needs.</p> <p>DSP surveys, program records</p>

Level	Result Statement/Purpose	Indicator	Indicator Definition	Illustrative Data Sources
Intermediate Outcome	IO 1.2 - By FY20, providers of digital development services have streamlined access to channels that allow them to reach more users in select countries	# of individuals contributing to code of open source software listed on the T4D registry	'Contributing code to building blocks' refers to writing code and uploading supporting documentation to Github or other platform that is associated with the building block software ; 'Individual' refers to a unique IP address, email, or name associated with the contributed code	Biergia and other scraping services
Primary Outcome	PO 2: By FY20, in select countries, public service delivery and development programs have improved access to, and understanding of, and use of data for development	# of markets served by standards-compliant-aggregators	Markets' refers largely to countries (or other market-based or geographic segments). 'Aggregators' are created to provide streamlined and standards-compliant access to channels for digital service providers, with appropriate standards in use. "DIAL-mapped" refers to the activity of mapping the coverage of predetermined suppliers across various countries. "Served" refers to covered by or having access to these aggregators	Program Records (will be working directly with them so will have access to that information)
		% of development partners that are more likely to use mobile channels/digital solutions to reach underserved pops, as a result of DIAL's work	'Development partners' refers to DSPs, policymakers and funders that DIAL directly interacts with through activities across our portfolios 'Likely to use mobile channels/digital solutions' refers to the self-reported instance of a development partner planning on procuring a mobile or digital method or platform based on either direct interaction with DIAL or guidance issued by DIAL	Program Records (will be working directly with them so will have access to that information)
		# of private sector (MNOs, aggregators, messenger app developers) that have made changes to business practices to encourage partnerships with development sector	'Changes' can refer to features, interface, support, policies, or business offerings 'Encourage partnerships with development sector' refers to the explicit goal of either making it easier for DSPs to communicate with end beneficiaries or for positive social outcomes for underserved populations	Program Records (will be working directly with them so will have access to that information)
		# of DSPs engaging with digital data, as measured by known cases	DSPs include tech companies, MNOs, donors, NGOs, governments, etc. 'Engaging' refers to using digital data, or sharing digital data, depending on which actor. "Digital data" refers to data from mobile or satellite technology. "Known" cases are those that DIAL supports directly or learns of indirectly through dedicated trainings, guidance, policy efforts, surveys, or other means.	
		# projects/policies launched using D4D	"Projects/policies" refers to new investments or actions taken by DSPs "Launched" refers to either start of activities for project or approved by decisionmakers for policies "Using D4D" refers to using lessons/insights from DIAL D4D demonstration projects or models	Various sources, including program records, surveys, key informant interviews, etc.
		# of DSPs who report improved understanding of and acting on responsible data policies and practice	DSPs include tech companies, MNOs, donors, NGOs, governments, etc "Improved understanding of" refers to self-reported knowledge gains "Acting on" refers to observable changes to responsible data policies and practices "Responsible data policies and practice" refers to legal or operational standards that protect user/customer data privacy All should be as a result of DIAL and partner's work	Various sources, including program records, surveys, key informant interviews, etc.

Level	Result Statement/Purpose	Indicator	Indicator Definition	Illustrative Data Sources
Intermediate Outcome	IO 2.1: By FY20, in select countries, MNOs, geospatial and digital data providers have access to incentives and tools to partner with public service providers for shared insights and data use	# of partnerships formed between public sector/development agencies and MNOs/aggregators to share mobile network data	"Partnerships" refers to signed Data Sharing Agreements Should be as a result of DIAL and partner's work	Program Records - M&E results from demonstration projects, including case studies for each project.
Intermediate Outcome	IO 2.2 - By FY20, in select countries, public sector actors and the development community have access to best practices, risks and rewards of D4D and are equipped with tools needed to participate in the data for development value chain.	# of MNOs generating standard data insights or facilitating processing of data by 3rd parties (known use cases)	"Generating standard data insights" refers to using mobile data to create analytics or findings "Facilitating processing of data by 3rd parties" refers to cleaning, packaging, and disseminating mobile data for DSPs to analyze	Program Records - M&E results from demonstration projects
		# of public sector and development community users of digital data platforms catalyzed by DIAL	"Public sector" refers to government or para-government agencies "Development community" refers to NGOs, multilaterals, funders "Users" can refer to those logging in to platforms catalyzed by DIAL "Digital data platforms" refer to any websites published by DIAL or partners	Program records, download rates, etc. We will monitor use across tools and topics to understand more about what is and isn't being used and how they are being received.
Primary Outcome	PO 3: By FY20, digital service providers adopt emerging good practice when they fund, design and deploy digital services	# of portfolios of public good assets for D4D packaged	"Portfolios" refer to a collection of public good assets that allows any DSP to access, use, and build upon "Public Good Assets" refers to APIs, codes, methodologies, etc. related to improved and publicly available assets for D4D. "Packaged" refers to the portfolio being available online	Program records, download rates, etc. We will monitor use across tools and topics to understand more about what is and isn't being used and how they are being received.
		# of DSPs who have integrated the PDD into procurement and design processes	"DSPs" see SG definition "Integrated PDD into procurement and design processes" refers to the inclusion/mention of at least one of the Digital Principles within internal processes/procedures for procurement and design of program/project/ICT solution	Funder survey, secondary research (websites, publications, RFPs, etc.)
		# Citations of DIAL's work by DSPs	"Citations" refers to mentions in blog posts, news articles, journals, websites (excluding social media) "Of DIAL's work" refers to any of DIAL's programs, resources, publications "By DSPs" refers to this media being created and shared by actors within the digital ecosystem and/or news outlets targeting the digital ecosystem (excluding general news outlets)	DSP surveys, interviews, feedback mechanisms
		# of individuals within the digital ecosystem that find at least one DIAL tool or resource useful	"Individuals within the digital ecosystem" refers to employees/representatives of DSPs DIAL tools refers to knowledge products such as trainings, papers, toolkits, videos, web resources, webinars, fora, etc. DIAL resources refers to technical assistance "Finding xxx Useful" refers to direct application of tools or lessons from tools/technical assistance in daily work	DSP surveys, interviews, feedback mechanisms

Level	Result Statement/Purpose	Indicator	Indicator Definition	Illustrative Data Sources
Intermediate Outcome	IO 3.1 - By FY20, target DSPs have access to emerging good practice for more efficient and effective design and deployment of digital services	# of guidance, documents, and learning products on more effective and efficient design and deployment of digital services generated and disseminated	"Guidance documents and learning products" refers to papers, toolkits, videos, events, curricula, blogs, etc. that enable DIAL to share learnings with the larger ecosystem "Generated" means created by DIAL/partners under contract "Disseminated" means shared online (DIAL Resource Library or a microsite) or in-person	Program records, download rates, etc. We will monitor use across tools and topics to understand more about what is and isn't being used and how they are being received.
		# of website visits to DIAL resources	"Website visits" refers to webpage views "DIAL resources" refers to DIAL's online presence	Google Analytics
		# of DSPs who have endorsed the PDD	DSPs: see SG "Endorsed" refers to signing on as an endorser of the PDD	Program records
Intermediate Outcome	IO 3.2 - By FY19, target funders have access to emerging good practice and increasingly collaborative approaches for impactful digital development investment	# funders engaged in DIAL programs	"Engaged in" refers to consulted, provided feedback, tested a tool, participated as a key informant for operational research, participated in donor convenings led by DIAL, served as a project partner, shared data, co-presented at event, (excludes simple communications, anecdotes, evaluative interviews for MEL purposes, nonsubstantive work)	Interviews with program leads, CRM tracking sheet
		# products developed for funders	DIAL tools refers to knowledge products such as trainings, papers, toolkits, videos, web resources, webinars, fora, etc. *NOTE* Each individual product of a multi-component product is considered to be a separate product	Publications list plus checking with teams
Intermediate Outcome	IO 3.3 - By FY19, target policy makers accelerate adoption of emerging good practice in policy and regulatory for digital development	# policymakers engaged in DIAL programs	"Policymakers" refers to governments either in LMICs, non-donor governmental agencies, and non-donor multilateral agencies "Engaged in" refers to consulted, provided feedback, tested a tool, participated as a key informant for operational research, participated in donor convenings led by DIAL, served as a project partner, shared data, co-presented at event, (excludes simple communications, anecdotes, evaluative interviews for MEL purposes, nonsubstantive work)	Interviews with program leads, CRM tracking sheet
		# products developed for policymakers	"Policymakers" refers to governments either in LMICs, non-donor governmental agencies, and non-donor multilateral agencies DIAL tools refers to knowledge products such as trainings, papers, toolkits, videos, web resources, webinars, fora, etc. *NOTE* Each individual product of a multi-component product is considered to be a separate product	Publications list plus checking with teams

