



# Digital Development Training Landscape and Needs Assessment

Phase 2 Report

## Acknowledgments

### Principles for Digital Development Landscapes & Needs Assessment

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## Executive Summary

Working closely with DIAL and Clear Outcomes, TechChange conducted four ideation workshops in representative stakeholder geographies to develop audience personas based on the findings of the report from Phase 1: Discovery and Design. These personas and ideation activities were used to develop recommendations for what a Digital Principles training curriculum should include, models for delivery, and target audiences. TechChange recommends:

- 1 In-person workshops with international donors and government officials to develop certificate standards
- 2 Blended training of trainers with international nongovernmental organization (INGO) project managers to tailor the content by topic and audience and generate meaningful case studies
- 3 On-demand training for technologists and social entrepreneurs and internal advancement through recognized certification
- 4 Mentorship and peer networks to connect learners of all levels and influence future certification standards

Taken together, these recommendations represent a sustainable approach, wherein certificate standards align with donor expectations and government regulations; champions are empowered to update and deliver training for their specific organizational needs, as well as to generate case studies for future learning; eLearning certification content is made available to the general public for internal advancement and recognition; and in-person and online networks of mentorship are built throughout the process to influence certification.

More work is needed to include additional stakeholders, regional partners and, particularly, government officials in developing valued courses on the Digital Principles. The intention of this landscape assessment is to provide initial insights for the development of a series of learning resources and experiences that advance the Digital Principles and support technology-enabled programs across all personas provided.

## Summary of Findings

This summary of findings presents initial conclusions based on a series of four ideation workshops led by TechChange to capture best practices in supporting the knowledge and adoption of the Digital Principles. Initial **high-level insights include:**



### Recognized certificates are critical.

In alignment with [current trends](#), affordable online credentials are important for incentivizing learners. The key, however, is to build demand for the credentials and the course, not just for the course itself.



### Target audiences vary in how they value certification.

U.S.-based learners valued certificates less, while in Medellin and Nairobi, this was seen as central to upward mobility. A lower value on certification should be addressed through superior learning experiences.



### Time and attention are the greatest constraints.

While U.S.-based donors and INGO project managers were least constrained by financial resources, time usage and competing priorities were consistently the greatest constraints across all target audiences.



### Blended training bridges “old” and “new” training.

Organizations disagree regarding the value of online learning (even internal versus users) and what the best training models are. Blended learning can be a good compromise, combining both online learning and more traditional models.



### More case studies are needed.

Learners and trainers represent a potential source of organizational case studies. This type of content is crucial for demonstrating the relevance of the Digital Principles within a community.

This report will summarize the different findings by activity and conclude with a set of insights and recommendations on next steps. It also includes proposed initial prototypes for the recommended

## Phase 1: Discovery and Design

Beginning on June 20, 2019, TechChange provided DIAL and Clear Outcomes with input and feedback regarding the discovery and design processes during weekly meetings, including recommending interviewees for further engagement and providing input for written reports. In addition, TechChange provided a [10-page written memo](#) to summarize existing knowledge of the ICT4D training ecosystem, as well as insights into platform partnerships, including [TechSoup](#) and other ICT4D partners currently scaling capacity building and online training solutions. This input was given up until September 25, 2019, which was when the final report was delivered.

During this initial discovery phase, TechChange worked closely with DIAL to develop a series of activities that were deployed in a series of workshops. Clear Outcomes also attended workshops in Medellin, Washington, D.C., and Seattle for the purpose of capturing feedback and updating the final deliverable. TechChange has incorporated insights from Phase 1 into Phase 2 activities and the final report but has prioritized input and insights from workshop participants in our findings.

## Phase 2: Workshop Activity Descriptions

In designing the one-day workshop, TechChange worked closely with DIAL to develop a series of modular activities to complement and extend the Clear Outcomes research findings and survey results. Locations were chosen to reflect diverse geographies. Workshops were delivered in cities with a critical mass of Digital Principles advocates to support workshop outreach and logistics. TechChange drew heavily from the design thinking discipline, using the following activities to solicit feedback in a variety of interactive and engaging formats. [See the workshop agenda here.](#)



### Paired Interviews [Link to Instructions](#)

This 45-minute activity was designed to stage as many structured, one-on-one conversations as possible in a short span of time and collect participant worksheets for transcription. The three interview questions focused on (1) the current state of training at your organization (2) the aspirational state of training at your organization and (3) the incentives that matter most.



### Personas [Link to Instructions](#)

Personas are a common and crucial aspect of designing for new audiences. In this hour-long activity, participants worked in groups to articulate goals, needs, and frustrations for one of five persona categories. The following persona categories were identified during the Clear Outcomes research: Donor, NGO, Technologist, Social Entrepreneur, and Government Official. Participants used a template for the exercise, which we were able to collect and transcribe easily.



### Creative Matrix [Link to Instructions](#)

The creative matrix exercise was designed to take the personas deeper by asking participants to reflect on the needs of their persona by activity type (such as conferences, applications, online trainings, and toolkits) and also to perform a basic ecosystem mapping of known resources already available by activity type. The end result of this activity is a large grid that helps participants better understand the balance between persona needs and existing resources.



### Design your ideal training [Link to Instructions](#)

Finally, participants were given one hour to design their ideal training in groups. Trainings had to explicitly incorporate the Digital Principles. This activity built successively off of the personas and creative matrix and surfaced a range of creative and innovative approaches.

## Workshop Locations and Dates

The following is a list of locations, dates, and photo archives from the workshops executed by TechChange in representative stakeholder geographies. A full list of confirmed workshop attendees can be found in Appendix 1.



[More Photos](#)



[More Photos](#)



## Icebreaker Data Viz Activities

Every workshop started with a series of activities to visualize relevant information for debrief and reference. Prompts included participant background experience with the Digital Principles, plotting your team/office on a spectrum of tech savviness and tech enthusiasm, and sharing the story of your summer using emoji stickers.

Initial conclusions were as follows:

- Sharing recent experiences helped connect participants on a personal level in all workshops (Figure 1).
- Each workshop contained participants with a range of experiences with the Digital Principles.
- Across the board, the U.S.-based workshop groups considered their organizations more “tech savvy” than those in Medellin and Nairobi did (Figure 2).
- Having participants write their own names for all to see helped them remember names and connect as peers, as well as engage directly with the facilitator.

Interestingly, data visualizations in U.S.-based groups were roughly similar, as were those in non-U.S. groups. For example, the question that asked participants to place their organization on a scale of tech “Savvy” and tech “Enthusiastic” showed all four locations to be excited about technology. But participants in non-U.S. locations were more likely to rate their own organization as less “Savvy” than their U.S.-based counterparts.



Figure 2: Data Viz results from all four workshops



## Paired Interviews

Participants interviewed one another using a worksheet to discuss training in their organization in its current state, aspirational state and in regard to incentives to reach learners. The following is a synthesis of high-level findings across workshops, with full links to paired interviews included in the archive.

The session started with participants asking in-depth questions about the challenges with the current state of training at their organizations, including:

### Lack of available resources.



Particularly in non-U.S. workshops, participants pointed to the need for external tech skills training outside of the organization. U.S.-based organizations were more likely to have budgets for professional development. Time remained the top constraint for both U.S. and non-U.S. participants.

### Organizational structure.



Junior staff valued self-directed skills training to advance their careers and often lacked resources, while more senior staff valued peer learning and real-time or blended-learning formats. This hampers leader-driven digital transformation for non-digital natives and reinforces the status quo.

### Language barrier and accessibility.



While this was identified as an issue mainly in the Medellin workshop, the fact is that many resources and forums are delivered in English. This means that resources and webinars provided by NetHope, TechSoup, Pact, and others are effectively inaccessible to many people.

One challenge cited was that staff members are often not aware of available organizational training or that internal champions are insufficiently empowered. Another challenge mentioned was that the training experiences are often bifurcated, where external-facing training developed by organizations for others is highly polished and effective, while internally mandated courses are repurposed and painful.

The goal of addressing challenges was to prompt learners to discuss an aspirational state for training and clearly portray what organizations could potentially achieve. A few key findings included:

### Social and blended training.



Applying lessons learned in a practical format helped participants learn from others, as well as network to build relationships and gain from others' unique experiences. Participants across all four workshops indicated that their aspirational training would include networking and peer-to-peer exchange.

### Sustainability-first considerations.



Every training workshop also noted that even if there were resources and time for ideal training, global and even regional travel can have negative impacts on environmental sustainability via the carbon footprint.

### Practical and solutions-based content.



Point-of-problem training (i.e., resources that can be accessed when specific problems arise) was repeatedly mentioned across all workshops. Participants want practical trainings that are light on theory, short, and able to adapt to specific challenges.

In the last section, learners were asked about incentives. The responses varied by organization, but one key finding was that when there is a direct link between training and career advancement, learners will overcome many challenges to participate. Organizations such as Chemonics require certification for promotions and raises. A debrief discussion focused on how to drive more intrinsic motivation for training around digital transformation as opposed to extrinsic motivation, such as compliance or certification. Trainings that help professionals solve immediate problems and reduce stress are needed and tie into intrinsic motivation.



Figure 3: Participants in Medellin engage in paired interview

## Target Audience Personas

Participants developed personas based on prototypes. All personas are available in the archive, and examples can be seen below.

Name: Peter Okonkwo (Dr.)

Goals

- Make agribusiness fun & attractive
- Bring more people to agribusiness & make it a sustainable source of livelihood
- Leave a legacy on the impact he has had on the agriculture space

Frustrations

- Behavior change - people can succeed but they need to look at things differently
- Diffusion in generational expectations and how people obtain a living
- Lack of professionalisation and investment in Agriculture

Quote: "I am the master of my destiny but only through God's grace"

Age: 45

Job: Philanthropist

Organization: Okonkwo Foundation

Location: Lagos, Nigeria

Family: Wife, 5 children

Personality

Introvert	Extrovert
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	
Analytical	Creative
1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	
Conservative	Liberal
1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	
Passive	Active
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	

Motivations

Wants Stories	Wants Numbers
1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Motivated by Passion	Motivated by Money
1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Act Based on Feelings	Act Based on Data
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Resilient Problem Solver	Frustrated Bureaucrat
1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>

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Name: WINDA LINDOLE

Goals

- Use the arts to promote social justice for youth leaders
- Designing tools with youth to lead
- Run for president

Frustrations

- World, we just don't see it yet
- People looking at Africa as not having potential
- Art not being appreciated as a medium of expression and struggle in
- Understanding the power of art

Age: 35

Job: International Consultant

Organization: Mepya Travel

Location: Zambia (Lusaka)

Family: No children

Personality

Introvert	Extrovert
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	
Analytical	Creative
1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	
Conservative	Liberal
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	
Passive	Active
1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input checked="" type="radio"/>	

Motivations

Wants Stories	Wants Numbers
1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Motivated by Passion	Motivated by Money
1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Act Based on Feelings	Act Based on Data
1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>
Resilient Problem Solver	Frustrated Bureaucrat
1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/>

TechChange

Figure 4: Examples of completed persona worksheets from Medellin

Rather than listing all personas, we created “meta personas” based on average scores (see Appendix) and captured elements of individual stories aggregated to tell shared experiences. For each persona, we also added a composite of highlights from the creative matrix activity.



## Fatima - International Donor

52 years old, married, three children

- Very Extroverted (5)
- Analytical (2)
- Moderate (3)
- Very Active (5)
- Prefers Numbers (3.5)
- Very Driven by Passion (1)
- Very Reliant on Data (5)
- Both a Problem Solver and a Bureaucrat (4)

### Goals

Leverage funds to generate impact through long-term, sustainable capacity building, with an eye toward the donor's legacy.

### Frustrations

Existing perceptions and norms, as well as government inertia, are constant sources of frustration for sustainable programming. Lack of reporting and sufficient data metrics from grantees is a frustration. Lack of coordination with other donors is also a challenge.

### Events / Training

Wants to attend more sector-specific events, which could include agriculture shows and fairs, and participate in networks such as Africa Angels investment networking events. These could be paired with large-scale events such as the NetHope Conference, or smaller groups of influencers such as Donors Anonymous.

### Online Training

Has access to on-demand courses hosted internally, but the quality is not strong. Wants to take the Digital Principles 101 online training. Just joined the Digital Health Working Group.

### Resources

Primarily seeking platforms to track investors and investments. These may include Bloomberg Analytics Tool, World Bank Data Platform, Tawimu. Africa, IFC Data Platform, and MSCI Tool (Public Equity).

### Ideal Course

Blends bi-directional learning with peer groups, which allows donors to align with the recipients, suppliers, and other donors.



## Maria Helena - Government Official

48 years old, married, two children

- Extroverted (4)
- Analytical (2)
- Moderate (3)
- Active (4)
- Prefers Numbers (4)
- Driven by Passion (2)
- Trusts Both Feelings and Data (3)
- Both a Problem Solver and a Bureaucrat (3)

### Goals

Improve availability of training and upskilling of the workforce, while also seizing opportunities to advance own career and achieve recognition through training programs.

### Frustrations

Lack of agency due to bureaucracy and lack of buy-in from target communities, compounded by an unregulated training space that produces uneven quality and results. English is not her first language, and many of the existing training opportunities are in English.

### Events / Training

Wants to attend project management trainings and trainings/conferences on how to manage gangs and violent youth; HRH conference for training; or maybe in-person regional trainings for government officials.

### Online Training

Needs courses on how to communicate with local communities, as well as courses on YouTube and other online providers. Wants more courses in her

### Resources

Has access to some toolkits prepared by UNICEF, UNFPA, IADB, and other multilateral organizations. Needs a training dashboard to put all the resources at her fingertips.

### Ideal Course

Blended course that combines on-demand content for skills along with opportunities for peer exchange inside government institutions and with peers in other countries. Course can set standards, help spread positive norms, and co-create the learning experience along with participant scoring



## Gajiji - INGO Project Manager

34 years old, married, one child

- Extroverted (4)
- Analytical (2)
- Liberal (4)
- Prefers numbers (4)
- Driven by Passion (2)
- Relies on Data (4)
- Problem Solver (2)

### Goals

Always looking to improve himself by gaining broadened knowledge and skills that result in greater professional recognition and impact in country programming. Cares deeply about his carbon footprint and doesn't want to travel to take courses and participate in training if he can help it.

### Frustrations

Limited resources and a lack of work-life balance are exacerbated by a lack of peers with whom he can share knowledge on complex technical issues. Has limited funding (\$300/year) to invest in professional development. Feels unsupported by senior leadership on digital transformation and wants them to be more data literate so they can make more informed decisions.

### Events / Training

Needs coordination with others and access to user groups, which could be served by existing opportunities such as the CRS ICT4D Conference, Tech Salons, and MERLTech. Community engagement is central to convening opportunity value.

### Online Training

Needs peer-learning opportunities on a budget, which could include Coursera, TechChange, Humentum, or others. If this can be leveraged for onboarding new staff or providing capacity in areas such as procurement/duty of care, so much the better. Internal resources such as the internal LMS course catalog and external sites like K4Health have proven to be decent options. Needs access to more case studies from similar organizations. Wants more people across the organization to have access to digital transformation and Digital Principles courses so that they can have positive effects on the overall organizational culture.

### Resources

Has found Devex, Relief Web, Product Registry (DIAL), and toolkits developed by USAID and implementers to be useful. Looking for a WhatsApp group for coordination and communication that could be combined with a knowledge portal/intranet for relevant case studies.

### Ideal Course

Creating relevant case studies and patterning solutions after what worked is the way to go and, ideally, being able to share and learn from peers. Wants a choose-your-own-adventure type of course with the ability to select a recommended learning journey based on specific topics.



## Priscilla Jane - Social Entrepreneur

38 years old, single

- Very Extroverted (5)
- Creative (4)
- Liberal (4)
- Very Active (5)
- Prefers Stories and Numbers (3)
- Driven by Passion (2)
- Relies on Both Feelings and Data (3)
- Problem solver (2)

### Goals

Having a positive social impact, as well as becoming a recognized leader in this space, drive everything. Wants to tie work directly to Sustainable Development Goals. Cares deeply about feeling connected to communities of practice of likeminded entrepreneurs.

### Frustrations

Balancing social impact with a sustainable business model, as well as finding a measure between dreams of growth and hard realities of current capacity. Has limited time and energy to devote to training given the amount of responsibility she is juggling. Has participated in too many one-off trainings and communities that fizzled out.

### Events / Training

Attends ICT4D conferences, dreams of participating in Y Combinator. Takes the freemium Microsoft courses on TechSoup to keep credentials fresh, as well as free courses on Kaya. Wants to participate in fellowship programs like Vital Voices VVLead.

### Online Training

Needs flexible online courses on sales and customer success. Training must be tied to the bottom line or networking. Must be practical and short. Interested in courses on how Digital Principles can help her and her small organization save time and money and connect with more people.

### Resources

Has access to Wired and TechCrunch articles, as well as SDG materials and implementation toolkits. Wants more materials that link the SDGs and Digital Principles.

### Ideal Course

Wants matchmaking and mentorship opportunities that provide both relevant skills and insights, as well as access to influential leadership. Already has access to a handful of mentors but is in search of more. Also eager for more peer-to-peer support groups.



## Marra - Technologist

30 years old, single

- Extroverted (4)
- Both Analytical and Creative (3)
- Liberal (4)
- Active (4)
- Prefers Stories (2)
- Driven by Money (4)
- Trusts Both Feelings and Data (3)
- Problem solver (2)

### Goals

Training is a means of gaining credentials and skills, which is important for signaling expertise and achieving upward mobility, as well as earning a place on a good team with an excellent reputation.

### Frustrations

Impatient with unclear learning objectives and paths for advancement, which result in wasted time.

### Events / Training

Anything from Meetups to structured, in-person courses with General Assembly. Does substantial learning via in-person meetings with partners and clients. Wants a conference on the Digital Principles built around an "ask and offers" model, where members share needs and offers of help with the community.

### Online Training

Wants relevant and, ideally, social online training to understand users and use cases. Training should come with a recognized certificate, such as from Treehouse or TechChange. Eager to do courses on virtual reality, but probably best to focus on courses to co-create experiences with internal team members.

### Resources

Needs more ways to share knowledge and reports, or potentially to make a business case. Available case studies are a good start, but difficult to navigate. Wants answers at her fingertips now.

### Ideal Course

A combination of effective webinars and conferencing tools with a relevant topic, such as agile methodology for non-tech teams or human-centered design. Should have a recognized certificate and a curriculum for IT and innovation teams to leverage internally to push forward their goals.

## Proposed Training Curriculum

In reviewing the Creative Matrix and Ideal Training activities during workshop execution, it became clear that no one curriculum would satisfy all desired learning objectives and ideal learning experiences across all personas.

However, insights and proposed courses can be grouped according to target audience, models for delivery, intended outcome, and anticipated tradeoffs in effort versus scale.

Set Standards	Principles 101 (In-Person)	Principles 101 (On Demand)	Principles 201 (Blended)	Mentorship
<ul style="list-style-type: none"> <li>» Donors</li> <li>» Government</li> </ul>	<ul style="list-style-type: none"> <li>» Everyone</li> <li>» Technologists</li> </ul>	<ul style="list-style-type: none"> <li>» Everyone</li> </ul>	<ul style="list-style-type: none"> <li>» INGO Project Managers</li> </ul>	<ul style="list-style-type: none"> <li>» Entrepreneurs</li> </ul>
<ul style="list-style-type: none"> <li>» Workshops</li> <li>» Donors</li> <li>» Anonymous</li> </ul>	<ul style="list-style-type: none"> <li>» Regional</li> <li>» Training of Trainers (ToT)</li> </ul>	<ul style="list-style-type: none"> <li>» Online</li> <li>» On Demand</li> </ul>	<ul style="list-style-type: none"> <li>» Blended</li> <li>» Facilitated</li> </ul>	<ul style="list-style-type: none"> <li>» Blended</li> <li>» 1 on 1</li> </ul>
<ul style="list-style-type: none"> <li>» Shared Certification</li> </ul>	<ul style="list-style-type: none"> <li>» Champion Empowerment</li> </ul>	<ul style="list-style-type: none"> <li>» Mass Market</li> <li>» Entry Point</li> </ul>	<ul style="list-style-type: none"> <li>» Modular</li> <li>» Sectoral Delivery</li> </ul>	<ul style="list-style-type: none"> <li>» Personal Networks</li> </ul>
<ul style="list-style-type: none"> <li>» High Effort</li> <li>» Low Scale</li> </ul>	<ul style="list-style-type: none"> <li>» Medium Effort</li> <li>» Medium Scale</li> </ul>	<ul style="list-style-type: none"> <li>» High Scale</li> </ul>	<ul style="list-style-type: none"> <li>» Medium Effort</li> <li>» Medium Scale</li> </ul>	<ul style="list-style-type: none"> <li>» High Effort</li> <li>» Low Scale</li> </ul>



## Set Standards

There is currently not a shared, agreed-upon standard for familiarity with the Digital Principles, much less expertise on application and use. This is a crucial consideration, as there are already many competing training options for professional development in ICT4D, a diverse categorization of digital development specialization (such as GIZ “Pioneers” and DFID “Digital Ninjas”), and an extremely high barrier to entry for training solutions designed to be offered during non-work hours. For that reason, governments that set the regulations and standards, as well as the donors that determine funding priorities, must be included in the process early on in order to align on the highest priorities, set learning objectives for curricula, and incorporate expertise on desired models for delivery.

It’s not likely that all endorsers of the Digital Principles will be in the same room, and it’s impossible to guarantee that government representatives with varying use cases will share the same experience. For that reason, DIAL can create a standard-setting, in-person workshop to be applied regionally. These workshops can occur at regular intervals, incorporate existing feedback on courses from learners and DIAL partners, and potentially endorse certifications to ensure that the certificates have a higher level of value in organizations.

Certification should not be restricted to paper-based or static PDF recognition, but also be available for display on LinkedIn or other digital platforms. For that reason, training platform options such as Credly or Badgr should be considered, or even a blockchain-based credentialing solution such as Learning Machine. If fully incorporated into existing LMS and forum solutions (including the Digital Principles Forum), certification will also serve to create a shared recognition of value and expertise in social network and professional settings.

While donors and government representatives should not be charged for this workshop, they should endorse the final product and distribute it to their networks as an in-kind contribution for their inclusion in the process. Donors can also integrate these efforts for internal training of trainers to empower internal champions.

## Principles 101 (In Person)

Once a sense of shared value exists for certification, the next step is to directly engage internal champions within organizations to build out

the in-person learning experience for additional audiences. The existing Digital Principles 101 donor-facing, in-person training is a great starting point, but additional modular exercises should be developed and tailored for implementers, government officials, technologists/private sector, and social entrepreneurs. In-person and blended training of trainers should also be developed and delivered locally and regionally to help scale the in-person workshop experiences.

## Principles 101 (Online)

As the Principles 101 in-person training is enhanced for additional audiences and scaled through training-the-trainer workshops, introducing or building a Digital Principles 101 on-demand course for the field as a whole would add tremendous value. One way to achieve this is to draw from the TechSoup model on Microsoft skills for nonprofits. Start with a “freemium” model, in which learners can take a 101 course for free, and then institute a marginal fee for higher-level courses. There can be a broad curriculum of 100-level courses that dive deeper into specific Digital Principles or use cases or connect to specific events or organizational needs. However, each course should be as practical as possible and no longer than two hours, with roughly comparable requirements as set out during the certification process.

As the goal of these 100-level courses is to provide an entry point to the Digital Principles, knowledge checks and a final quiz should be sufficient for completion. However, a final project that requires original writing to reflect on and unpack course topics could be included. These could be submitted to the Digital Principles Forum for posting.

For example, a learner completing a 100-level course who passes a knowledge check could be prompted to write a 500-word memo to their organization on how to better incorporate the Digital Principles or offer reflections on their own projects. This would then be shared with the class and community for feedback, further raising awareness and adding to the perceived value of the courses. In order to respond to repeated requests for organizational case studies, learners could submit an organizational case study as part of a course or for a certificate.

Because these courses are designed to be on demand and offered at scale, they should be considered for localization and translation into other languages. The high upfront cost would be defrayed at scale, as there is marginal to no additional cost per successful learner. Production value, in the form of simulations, animations

or videos, can be added to curricula as they are refined and grow in distribution. Recommended price points for on-demand courses should be free for 100 and 101-level courses, and US \$49 for higher-level courses. In addition, free webinars leading up to major events such as NetHope or ICT4D Conference could be offered, thus trading publicity for events for increased exposure to Digital Principles.

## Principles 201

Implementers do not share the same challenges, but they do have a shared need to understand how the Digital Principles can be applied to their work. Therefore, a blended, time-specific course could be customized by organizations to fit their specific needs. This provides an obvious entry point for organizations wishing to offer their own courses. And they could easily adopt shared standards, clone existing on-demand courses and offer customized 201-level courses.

For eight years, TechChange has offered a variety of courses in this format. Currently, it offers a four-week facilitated course capped at 150 learners with gated content published every week and up to five webinars delivered per week. Techsoup has adopted this model for its 301 level courses. Although other models may be better suited to specific needs, this offers one initial model for DIAL to replicate and includes a network of experts and facilitators for leveraging later training opportunities.

These courses are also an opportunity to build deeper sector-specific engagements on topics such as health, agriculture and open-source communities. DIAL could make these courses available to endorsers for licensing and customization, thus defraying the cost of entirely bespoke development. Ideally, partner organizations and guest speakers could also be asked to contribute as mentors for later additions.

The recommended price point for facilitated, blended courses is \$495 to \$2,000, depending on estimated value and duration. One solution is to package multiple courses at a discount to create “pathways” or in-depth familiarization and expertise.

## Mentorship

A consistent request from social entrepreneurs and upwardly mobile personas in general was providing close mentorship opportunities with established and prominent figures in the space. Following completion of a bundled track or sufficient

exposure to earlier courses, a mentorship option for structured engagement could be a major incentive for learners to advance their training in the Digital Principles.

More research is needed, but one-on-one or small-group mentoring delivered over video conversations on the platform could serve as a capstone of the Digital Principles learning experience, resulting in recommendations on LinkedIn and certification at the completion of the course.

## Designing With the Digital Principles



### Design With the User

The fastest way to discover what learners want from their online courses is to begin teaching them in a flexible and responsive format. Only then does optimizing SMART (Specific, Measurable, Achievable, Realistic, and Timebound) learning objectives and delivery modalities in alignment with donor and government priorities achieve productive results. DIAL should seek to leverage the Digital Principles Advisory Council to include the voices of intended learners and potentially make course reviews available to the public by default as a method for shared accountability.

### Be Data Driven

Feedback via evaluations isn't the only means of gathering insights from learners. Data regarding what time they watch webinars, how long they take on course modules and which group scored highest all provide useful insights into the types of content and events that should be invested in. Releasing monthly anonymized reports on learner behavior can also serve the field as a whole. TechChange currently provides summary reports on learning behavior to TechSoup and is exploring integration with DIS for USAID, as well as IATI standards.

### Address Privacy and Security

Storing and sharing learner data and evaluations has risks. For example, UNICEF accidentally leaked the personal information of 8,253 users in courses on immunization, which included names, email addresses, gender, and contract type. For learners to voluntarily share their information, even for free courses, addressing privacy and security for all parties is integral to getting useful information throughout the process.

## Use Open Standards, Open Data, Open Source and Open Innovation

Developing course content as Open Educational Resources (OERs), as well as publishing case studies and final projects under Creative Commons, not only serve to improve credentialing, but also generate content and insights for the field as a whole.

### Be Collaborative

In the absence of an objective standard that is developed in a university setting, for example, a collaborative approach to agreeing on shared value is critical to setting the tone.

### Design for Scale

Design not just for scale, but effective scale. Free educational resources that nobody uses are not of value to the field as a whole. Furthermore, a large investment in static graphics, long reports or highly produced videos is unlikely to yield the desired results if the training-of-trainers model does not successfully adapt the content and training experiences to the target learners.

### Build for Sustainability

By engaging stakeholders and building for scale, sustainability remains key. If content, courses, and platforms are properly maintained, training in the sector will continue to improve. The suggested pricing, partnership models, and considerations on shared buy-in for certification help ensure that costs are offset through shared value and sustainable pricing. Wherever possible, donors and implementers can buy their own course seats for desired end users and partners, as well as designate these trainings as standard requirements in proposals. In this way, institutionalization is achieved by developing a business model that has sustainable revenue generation.

### Reuse and Improve

Lastly, reusing and improving doesn't have to strictly be from the existing supply of resources and events of other organizations or agencies. DIAL has already produced deep learning for donors, and it is available to leverage for future courses in a format that could be used for blended training.

## Additional Findings

The findings of the ideation workshop build on findings from Phase 1 conducted by Clear Outcomes, with additional insights added across multiple workshops.

### Seniority Matters More Than Role

Across all personas, the status of the persona was more important than their given role, with junior learners generally seeking self-paced, external certification to signal skill acquisition, and senior learners (including donors and government officials) preferring social, co-created learning experiences delivered in real time. Social entrepreneurs generally sought mentorship and access, which could fit into either category.

### Bosses Are the Gatekeepers

Because learners seek Digital Principles training during work hours, their supervisors determine how their time should be spent.

### Type of Training Is Based on Position

In areas where supervisors understand the value of Digital Principles training, an on-demand certificate course distributed to staff could quickly reach the widest number of learners. However, it is unlikely that the supervisors would seek such training themselves if unprompted. Therefore, it may be best to focus social learning on higher ranking supervisors to achieve buy-in and potentially include a mentoring component.

### Important to Disaggregate Online Training

It's important to disaggregate what goes into an online training experience in order to gather data that is useful to evaluate the utility/desirability of the courses. Rather than going through every permutation, it helps to think of an online learning experience as divided into: 1) online learning platform (university/classroom); 2) course development and content (textbook/syllabus); and 3) learning experience (lecture/workshop). These are all important for understanding success at scale.

# Appendix I: ICT4D Training Ecosystem Discussion Memo: July 26, 2019

## Executive Summary

This memo provides a brief summary of the Information and Communication Technology for Development (ICT4D) training ecosystem for the purpose of supporting research-driven insights on what stakeholders want to see in Digital Principles trainings, and the most useful method in which these trainings are delivered, particularly to those working at field-level.

However, the field of ICT4D is vaguely defined, and the research-driven insights on stakeholder preferences have yet to be articulated in Phase 1. As such, this memo draws from 10 years of experience in executing and implementing ICT4D training solutions to describe different types of platforms and tools, point to larger trends in the elearning space as a whole, as well as propose initial recommendations for approach.

### Specific insights include:

- » The ICT4D training ecosystem currently reflects “development” part of the acronym, in that it is primarily served by PDF reports, in-person workshops, and convening events.
- » Individual ICT4D learners are seeking out learning experiences via social media, explainer videos, and online certifications.
- » Organizations are slow to embrace scalable training solutions that require resources, create potential risks, and threaten established training models.
- » These responses are rational in adjusting to a volatile environment from a funding and technology perspective, as the costs of being wrong are still high.
- » Shifting the balance of training approach to “ICT” could result in a compromise of small bets, optionality, and positioning ICT4D organizations for higher growth potential.
- » In embracing this perspective, Digital Principles trainings can leverage existing solutions through adding digital components to reach key audiences
- » Small additional costs can dramatically increase scale: Printed reports can become ePDFs, limited in-person conferences can embrace global online audiences, etc.
- » Training on the Digital Principles can not only succeed in scaling effective training in ICT4D, but also model a path forward for the organizational change.

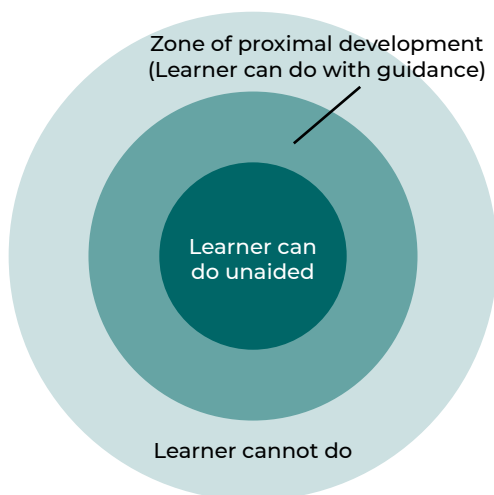
### Current State of ICT4D Training

Putting aside questions of effectiveness and cost, the current state of ICT4D training can be broadly understood in terms of scale and interactivity. Viewed in this manner, activities currently being deployed at scale typically represent incremental innovations (“everything the same, but nicer”) in that they represent small improvements or upgrades to existing products and services offered by development organizations rather than a fundamental rethinking of training approach.

<b>2 - Low Scale / High Interaction</b> <ul style="list-style-type: none"><li>» Blended Workshops (Digital Principles)</li><li>» Curated Meetings (Tech Salons)</li><li>» Meetups (GeoDC Meetups)</li><li>» Happy Hours (ICT4Drinks)</li></ul>	<b>4 - High Scale / High Interaction</b> <ul style="list-style-type: none"><li>» Facilitated Online Training (TechChange)</li><li>» Global Conferences (ICT4D)</li><li>» Interactive Reports (SDG ICT Guide)</li><li>» Customizable Tools (Alidade)</li></ul>
<b>1 - Low Scale / Low Interaction</b> <ul style="list-style-type: none"><li>» In-Person Technology Demo</li><li>» Printed Reports</li><li>» One-Off Memos</li></ul>	<b>1 - Low Scale / Low Interaction</b> <ul style="list-style-type: none"><li>» Self-Paced eLearning (RapidPro)</li><li>» Digital Reports (ICT4SDG)</li><li>» Mass Webinars (DH Working Group)</li><li>» Training Videos (Data Day)</li><li>» In-Person Lectures (ICT4D Plenary)</li></ul>

What's also clear is how hard it is to create interactive training experiences at scale in a social setting. For that reason, organizational ICT4D training typically seeks to extend and improve existing learning experiences rather than replacing them altogether. For example, a workshop facilitator may take a flipped classroom approach to deliver instructional content in advance of a workshop (e.g. sending a recorded lecture) in order to maximize hands-on activities in a limited window, leverage a blended classroom to encourage learners to bring laptops and use mobile devices during the lesson, and then extend the learning experience with follow-on forum activities and quizzes to deepen learning outcomes.

But there are countless ways to leverage technology to improve training outcomes, and those depend heavily on the intended learner, training material, and the zone of proximal development (ZPD), which determines what a learner can do unaided versus executing with guidance.



The current ICT4D training ecosystem is thus currently optimized to better serve existing learners through technology training solutions, which enable organizations to provide better trainings at lower cost and to larger audiences, but are still largely fragmented by organizational approach (sometimes intentionally) and on top of existing training activities. Which makes sense. New technology is expensive and unproven, and small bets on investing in serving existing audiences is still more likely to improve training outcomes than large bets on unproven audiences with limited international development resources.

Creating and scaling any training solution will have to work within this existing institutional approach for key partners, optimize at scale for how learners are willing to approach online training, and

leverage different platforms and tools to achieve those results sustainably.

## Understanding the ICT4D Learner

While Phase 1 of this project is still underway to better understand ICT4D training solutions and stakeholder experiences, large trends are currently shaping not only training solutions but also how learners are engaging with training options. There are many learning experiences available (and needed!), but only so much time and resources to dedicate in a given week. The average employee has only 1% of the typical workweek to focus on training and development, and they typically are turning to online courses and search engines (and often on mobile devices) rather than traditional methods of learning and training to do their jobs.

A brief review of how modern learners operate reveals disconnects from training solutions that are typically provided in the ICT4D space, which is still largely defined by poor design, long videos and reports, and training content optimized for the organization delivering the training rather than what the learner is prepared to experience.

### But why?

One key reason is that ICT4D organizations often treat online training as an internal solution for saving costs rather than as an external-facing training opportunity to scale capacity building mandates. This means that while the learner at an ICT4D organization may be turning to organizations like TechSoup to brush up on their skills with highly polished content, they associate their own organization training solutions with mandatory compliance videos, typically licensed for the purposes of lower marginal costs of training.

Internal Training	External Facing
<ul style="list-style-type: none"> <li>» Focus on organizational capacity</li> <li>» Organization dedicates time</li> <li>» License existing courses</li> </ul>	<ul style="list-style-type: none"> <li>» Focus on learner experience</li> <li>» Learner devotes time</li> <li>» Build bespoke experiences</li> </ul>

And for good reason. Private sector trainers place great emphasis on leveraging training for their own purposes to encourage users to adopt products (and pay for them), as well as offloading their own support costs to educated users and an informed community of practice. For example, educating a global user base of every possible paying customer for using Microsoft products has a much greater upside than a nonprofit internal training focused on technology and social change. ICT4D organizations looking to make major training investments often do not capture the upside, inasmuch as they run the risk of making major investments to compete for attention against private actors only to learn that they could have used those same resources to better serve existing in-person learners.

To avoid wasted time and effort, ICT4D organizations must make four key decisions: 1) What platform best suits existing learners and intended audiences?; 2) What courses achieve the intended learning outcomes?; 3) What content is required to serve and execute those learning experiences?; And 4) Who will support learners in their journey?

### What Are Different Platforms?

Broadly speaking, an online learning experience requires a platform to host and track courses (LMS), courses structured to achieve learning objectives, and content and experiences that make up the course experience. Most organizations combine approaches across a variety of formats to achieve the desired results, but it all starts with the learning management system (LMS) to administer and track delivery of educational courses.

The first decision point is which audience you are trying to reach. As mentioned earlier, when conducting internal trainings, organizations can mandate certification or compliance, forcing learners to meet standards and dedicate time. This is an advantage for administering courses, as the overall experience and production value is of less importance than the ability to control in time and space the actions of the learner. However, it also explains why so many courses are so bad, and why online learning meets high levels of skepticism for possibilities.

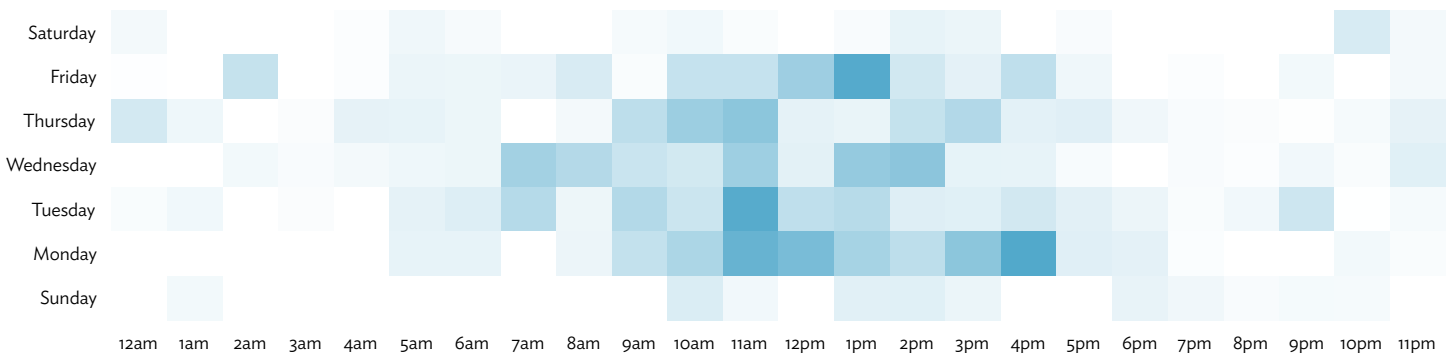
Many organizations leverage different platforms to solve these solutions. So they may have an internal-facing system such as Cornerstone On Demand to license and make available courses to internal audiences, while leveraging a more user-friendly platform to represent the organization's brand for external learners or partner communities. But the platform is only part of the decision, as the type of

courses hosted and executed are just as critical. Generally, these can be divided as self-paced "on demand" courses, and those that are social and facilitated experiences.

On Demand	Facilitated
» Learn anytime	» Time limited
» Invididual discovery	» Peer learning
» Easy to scale	» Hard to scale

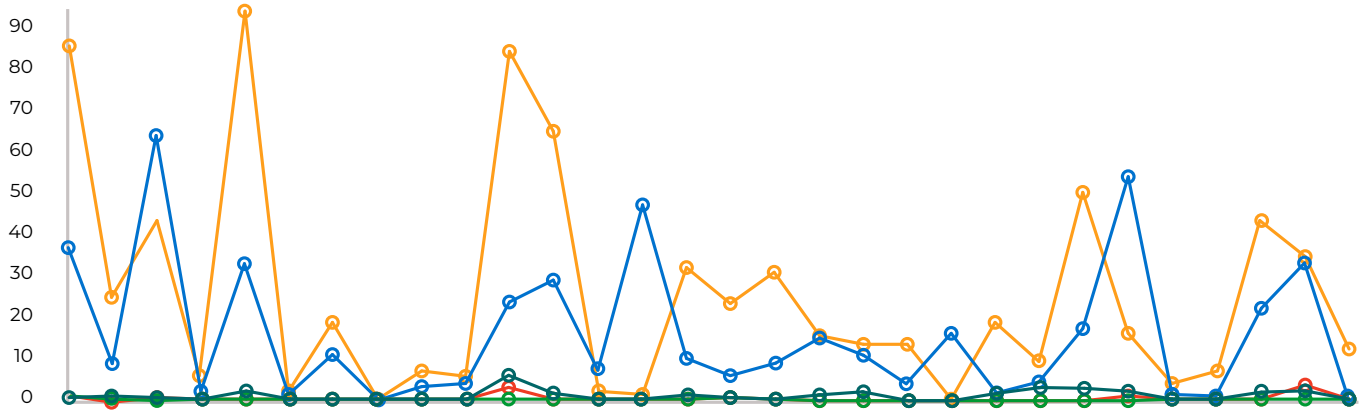
Deciding which experience to prioritize is key, as it determines learning outcomes that you want to track. In addition to completion and scoring certificates, you may be more curious about engaging content for on demand courses, and how learners interact in facilitated experiences. This means that the types of data you track and courses you build are directly related to those initial decisions.

### Activities by Time of Day



For example, if you are optimizing for shared, facilitated learning experiences, that time and format are your primary constraint. In those circumstances, you would want to know “when” your learners are active -- and want to be active -- as much as how they would like to learn.

### Activities by Type



On the other hand, if you are optimizing for on-demand courses, then the types of activities, individual learner journeys, and overall content-facing metrics take on greater importance. When you lose learners, and what they do while online, are often the only means by which you can direct them towards intended learning outcomes.

### What Are Different Course Approaches?

There are many theories and approaches to building courses once a platform has been selected, and there is no one right answer.

As described above, on-demand training is typically associated with online learning as it is easy to scale, costs next to nothing for additional learners, and can be “fire-and-forget” which is convenient for funding realities and project concerns. However, there are substantial hidden challenges with effective on-demand training solutions in that it can be expensive to build at sufficiently high production values to interest external learners, difficult to scaffold according to learner ZPD across courses, and while it has low marginal cost per learner it can be extremely expensive to maintain effectively over time.

In contrast, facilitated experiences can adjust to learner input, incentivize a co-created learning experience, and better meet learners where they are to optimize activities and progress for scaffolding purposes. However, they are also time intensive and require skilled facilitation, which can be expensive and



problematic to scale. And while real-time video can be consumed by millions of viewers, the reality is that there will be very little exposure to one another or feedback from the facilitator or subject matter expert.

This is largely the difference between “sage on a stage” versus a “guide by your side” approach to learning. In the “sage” model, a lecturer can deliver information in real time to a massive room in a one-way communication of information, with the idea that learners are passive recipients of information. This model translates well to recorded online videos and long report content that require self-directed learner consumption. In contrast, the “guide” model is one in which the learner is directed through the experience, which would translate better to deeply interactive on-demand learning (say, with cartoon guides and simulations) or a facilitated, small-group experience.

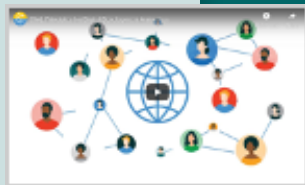
Realistically, the “sage” model is the one learners usually want to provide, but the “guide” one is more interesting to learners. AI and other attempts are getting better at customizing content, but for most organizations this is still a human requirement for the immediate future.

### What Content Approach Works?

There are many, many options available for content consumption (see Appendix I), which range from free YouTube videos to instructor-led accredited degrees. In entering this crowded space, organizations have to weigh the value add, existing resources, and degree of investment. Fortunately, it’s not an all-or-nothing approach, and organizations can make a series of small tests using content formats that are integrated into an LMS or course to assess their value and make decisions accordingly. These can be self-paced, facilitated, or any combination of options. For example on the Digital Principles, a learner might:



Follow DIAL online and have their attention captured through a short GIF about a Digital Principle relevant to their needs. This bite-sized, polished gif leads them to discover the #digitalprinciples hashtag and an opportunity to learn more about the concepts.



Watch the Digital Principles video, which teaches them about the other 9 Principles, as well as guiding them to the Digital Principles



Browse the Digital Principles forum to connect with others in the space and realize there’s an ICT4Drinks happy hour coming up in DC.



Connect with peers and try out the SDG Card Game PDF, which interests them in Digital Principles 101.



Watch the course content on Digital Principles 101 and see that it’s possible to request an in-person workshop at their organization.



Simulate the Maturity Matrix as an exercise in the Digital Principles 101 training and realize their organization is not an endorser

## Appendix 2: Ideation Workshop Agenda



### Workshop Overview:

The Principles for Digital Development provide a framework for members of the international development community to deploy more effective, sustainable, and transparent digital solutions across their programs at headquarters and field-level operations. The Principles were formed to galvanize the community around using digital technologies successfully across different sectors and organizations.

#### This workshop will:

- Present a series of exercises designed to solicit feedback from participants on what training topics and modalities related to the Digital Principles are most needed across different organizations and what constraints exist.

The workshop will feature a dynamic facilitation environment with interactive discussions, ideation activities, and immersive group work.

#### Workshop Agenda:

Tuesday September 10th 2019

Session	Description	Time
IceBreaker: Group Data Visualizations	Facilitator places four flip charts around the room with various questions/graphs. Participants use stickers to plot answers to the questions. After stickers are placed, facilitator asks participants to tour the various charts and infer insights based on answers.	9:00-9:30am
The Digital Principles	Facilitator gives an overview of updates related to the Principles for Digital Development and shares a variety of relevant resources. Facilitator reports on findings from phase one of landscape review.	9:30-10:15am
How I like to learn? Four corners	Facilitator stages an interactive discussion by reading provocative statements and inviting participants to stand in the corner that best reflects their views and experiences on learning. Facilitator leads debrief and asks participants to share their positions.	10:15-11:00am
<b>Break</b>		11:00-11:15am
Paired Interviews	Participants engage in a paired interview activity with structured questions to learn more about training gaps and challenges related to Digital Principles themes.	11:15-12:00pm
<b>Lunch</b>		12:00-1:00pm
Personas	Facilitator invites participants to develop personas for learners in small groups. Participants create personas and present to large group.	1:00-2:00pm
<b>Break</b>		2:00-2:15pm
Creative Matrix & Ecosystem Mapping	In groups of four, participants engage in a creative matrix exercise. Personas created in previous activity are placed on one side of a giant grid, and suggested activities (training and learning, events, social media engagement, etc) are listed on the other axis.	2:15-3:15pm
Design your Ideal Training	In groups, participants start to design what their ideal training might look like and how to deliver it in the form of a course description. Consider starting with pick one persona and one activity from the creative matrix exercise if useful. Be sure to make the link explicit to a specific digital principle or set of digital principles.	3:15-4:15pm
Closing Discussion	Facilitator leads a final debrief, collects insights and reflections on workshop activities, and reviews next steps for engagement.	4:15-4:30pm

## Appendix 3: Workshop Activity Instructions

### Paired Interview Activity (40 mins)

**Instructions:** In pairs, participants take turns interviewing each other by asking a series of structured questions about the Digital Principles and writing their partners' response in the spaces provided below. Participants have 3 minutes to ask and answer a question. Participants reverse roles after each question.

- 1 Current state: What tools, resources, and trainings are available at your organization for you and your colleagues to develop new knowledge, skills, and attitudes related to technology? Are there any existing trainings related directly or indirectly to the Digital Principles?
- 2 Aspirational state: How do people on your team or in your broader organization prefer to learn? On-line? In-person? Blended? Any trends you're seeing? What's working?
- 3 Incentives: What incentives seem to matter most for people in your organization to engage in new training & learning? Compliance? Certification? Technical skills-building?

### Learner Personas (60 minutes)

**Overview:** In this activity you will develop personas for Digital Principles learners in groups and present your personas in groups.

#### Instructions:

- Divide into groups of 3
- Reflect as a group on the general persona type you want to develop:
- Donor Program Officer
- INGO Program Manager (Field Staff Team Member or Senior-Level Decision Maker)
- Local Social Entrepreneur
- Local Government Official
- Techie/Technologist
- After you choose a persona type, start to build out basic data for the persona (Name, Age, Job, Organization, Location, Family). Use the printed template to enter the info. You may also wish to draw the person on a post-it note.
- Next, list 3-4 goals this person has for themselves professionally. What do they want to achieve in their role? What constitutes success for them?
- Then start to list challenges/frustrations that this person has in their work. What's holding them back?
- Finally, rank them on the personality and motivation scales provided.
- After 45 minutes, return to large group and be prepared to share your personas.

### Creative Matrix (60 minutes)

**Overview:** In groups of 3-4, participants use post-it notes to rapidly and comprehensively source ideas for the types of activities that are best suited for each persona.

Personas created in previous activity compromise one side of a grid, and suggested activities (training and learning, events, social media engagement, etc) constitute the other axis.

Different color post it notes are then used to map existing known trainings and resources in an attempt to identify gaps.

### Instructions:

- Divide into groups of 4
- Use yellow post-it notes to source ideas for your persona. What specific activities in each box does he/she need to be more effective at his/her job?
- Use blue post-it notes to share specific existing activities that he/she could be served by.
- Optional: Use digital principles stickers to identify where specific principles might relate to specific existing activities.
- Tips:
- The goal is to move quickly and source as many ideas as you can but also write legibly.
- As your group starts to fill up the boxes, pay attention to underserved ones
- After 45 minutes of sourcing ideas, return to seats for debrief.

### Design Your Ideal Training (75 minutes)

- In groups of 3-4, design what an ideal training might look like and how you might deliver it.
- Consider framing in the form of a course description or rough lesson plan.
- If scope feels too broad, feel free to take one persona and one activity from the creative matrix exercise and go deeper.
- Be sure to make the link explicit to specific Digital Principles
- Feel free to think beyond training as well if you feel there is an activity or resource that you want to develop.
- After 60 minutes return for a debrief of the activity.

# Appendix I: List of Attendees

## Nairobi

The following is a list of Nairobi workshop attendees, including their organization. They are listed in order of signing into the workshop.



Name	Organization	Role
Derek Matere	Innojoco	
Ndyta Karanja	Digital Hands Africa	
Carolyn Footitt	Health Solutions Lead, Ona	Technologist
Tanvir Singh	Tech Lead, DIAL	
Mabinty A. Koroma-Moore	Live Africa	
Petronila Ogola	DOT Kenya	
Carolyne Njuguna	PATH	Implementer
Priscilla Chomba-Kinywa	ActionAid International	Implementer
Peter Njuguna	Plan International Kenya	
Kennedy Kioui	Director, iHub Consulting	
Boris Maguire	CEO, Echo Mobile	Technologist
Lilian Kathoki	Community Manager, DIAL	
Sandra Simbiri	UNHCR-RBA	Implementer
Gitonga Moses	ICT4D SCI	Technologist

## Seattle

The following is a list of Seattle workshop attendees, including their role and organization. They are listed in order of signing into the workshop.



Name	Organization	Role
Kirsten Gagnaire	Kati Collective	Implementer
Jacqueline Deestra	PATH	Implementer
Jennifer Antilla	OpenMRS	Technologist
Eva Adler	USAID	Donor
Craig Appl	Ona	Technologist
James Bernard	Resonance	Implementer
Sonja Torseth	Kalles Group	Educator
Scott Reid	iRespond	Implementer
Mark Horoszowski	Moving Worlds	Social Entrepreneur
Helen Olsen	Medic Mobile	Implementer
Drew Arenth	Macro-Eyes	Social Entrepreneur
Jane Mareth	Microsoft	Private Sector
Meg Gray	Salesforce.org	Technologist
Allana Nelson	DIAL	
Mary Jo Korchendorfer	DIAL	
Jake Watson	DIAL	
Breese McIlvain	DIAL	
Kerry Bruce	Clear Outcomes	Implementer
Nick Martin	TechChange	Facilitator
Perri Sutton	Gates Foundation	Donor

## Washington, D.C.

The following is a list of Washington, D.C., workshop attendees, including their role and organization. They are listed in order of signing into the workshop.



Name	Organization	Role
Hillary L. Eason	Chemonics	Implementer
John O'Bryan	USAID	Donor
Mike Klein	IMC Worldwide	Implementer
Daryn Cambridge	TRG	Implementer
Stacey Labatos	Peace Corps	Implementer
Sara Shirzad	Eurasia Foundation	Implementer
Gretchen Regehr	Conservation International	Educator
Erica Troncoso	Jhpiego	Implementer
Adele Waugaman	USAID	Donor
Clement Jaidzeka	Chemonics	Implementer
Andrea Ulrich	Development Gateway	Private Sector
Holly Wise	Georgetown University	Academic
Josh Powell	Development Gateway	Implementer
Karen Phillips	IYF	Implementer
Katherine Kinzer	IYF	Implementer
Kerry Bruce	Clear Outcomes	Implementer
Josh Mandell	IBM	Private Sector
Allana Nelson	DIAL	Facilitator
Claudine Lim	DIAL	Donor
Meaghan Murphy	Bixal/Feed the Future	Implementer
Nick Martin	TechChange	Facilitator
Allison Prell	TechChange	Facilitator

## Medellin

The following is a list of Medellin workshop attendees, including their role and organization. They are listed in order of signing into the workshop.



Name	Organization	Role
Diana Suarez	GLOT	Social Entrepreneur
Nataly Hernández	Indeleble Social	Social Entrepreneur
Maria Camila Chaparro Rodriguez	PACT	Implementer
Diana Patricia Morales	PACT	Implementer
Marcela Ochoa	Antioquia Presente	Community Development
Felipe Chaparro	PACT	Implementer
Wilder Bastidas	PACT Colombia	Implementer
Juan Monsalve	PACT	Implementer
Jose Gaviria	Organizacion Rutanio	Technologist
Oriana Ballesteros	Low Carbon City	Social Entrepreneur
Catalina Echavarria	Corporación DanDlion	Community Development
Ricardo Rojas	Banco Colombia	Technologist
Sebastián Zapata	Alegria	Social Entrepreneur
Marily Giraldo	Impact Hub Medellín	Technologist
Maria Camila Galvis	TechSoup/ Makaia	Implementer
Carlos Andres Bernal Perez	Eidos gestion de marcas	
Catalina Rojas	Peace and Collaborative Development Network	Social Entrepreneur
Craig Zelizer	Peace and Collaborative Development Network	Social Entrepreneur
Barbara Willet	Clear Outcomes	Implementer



Persona	Workshop	Role	Age	Job	Organization	Location	Family	Introvert (1) Extrovert (5)	Analytical (1) Creative (5)	Conservative (1) Liberal (5)	Passive (1) Active (5)	Stories (1) Numbers (5)	Passion (1) Money (5)	Feelings (1) Data (5)	ProbleM Solver (1) Bureaucrat (5)	
John D.	Nairobi	INGO Project Manager	41	Project Manager	Non Profit	Kenya	Married 3 Kids	2	1	2	3	5	3	4	3	
Tatigana W.	Nairobi	Technologist	23	IT Staff Manager	Call Center	Nairobi	Single	5	5	5	5	1	5	1	5	
???	Nairobi	INGO Project Manager	32	Project Manager	NGO	Mombasa	Married Babies	4	3	3	3	3	3	5	1	
Peter O.	Nairobi	International Donor	45	Philanthropist	Okonkwo Foundation	Lagos, Nigeria	Wife 5 Kids	5	3	2	5	3	1	5	1	
Linda L.	Nairobi	INGO Project Manager	35	International Consultant	Helping Hands	Lusaka, Zambia	No Kids	5	3	5	5	2	1	3	1	
Sonia M.	Nairobi	Technologist	39	IT Director	Mercy Corps	Nairobi	Married 3 Kids	5	3	4	4.5	1	2.5	3	2.5	
Tucker S.	Nairobi	INGO Project Manager	35	Contract Manager	USAID	D.C.	Married 1 Kid	3	2	3	4	5	2.5	5	4	
James	Nairobi	International Donor	60	CEO	Donor	Nairobi	Married Adult Children	5	1	4	5	4	1	5	5	
Anne	Nairobi	INGO Project Manager	30	Field Officer	Development Org	Tulcana	Single 1 Kid	4	3	4	5	3	4	3	3	
Joseph	Seattle	International Donor	53	CEO	MNO	Lagos, Nigeria	6 Kids	5	3	3	5	2	3	2	2	
Dr. Henry M.	Seattle	Gov't Official	54	CIO	Ministry of ICT	Sierra Leone	Married 5 Kids	3	2	2	4	5	3	3	4	
Evanna M.	Seattle	Social Entrepreneur	46	VP Product	CatalImpact	Johannesburg	Yes	5	4	3	5	4	1	2	1	
Iris	Seattle	INGO Project Manager	31	Livelihoods Coordinator	Mercy Corps	Nigeria	Single	4	3	5	4	4	1	3	5	
Terrie	Seattle	Technologist	24	Software Engineer	INGO	Mexico City	Lives with Parents	2	1	3	3	2.5	4	4	1	
Priscilla	Nairobi	Social Entrepreneur	37	HQ Manager	For Profit	London	Single Mother	5	4	4	4	3	3	4	2	
Avery	D.C.	INGO Project Manager	28	Program Manager	World Peace 'R' Us	Zambia	Complicated	2	4	3	5	3	2	4	1	
Fatima	D.C.	International Donor	24	NGO Founder	Hope Foundation	Kurdistan	Single 7 Siblings	4	4	5	5	3	1	2	1	
Robert M.	D.C.	Gov't Official	43	HR Manager	Ministry of Health	Dodoma	Married 2 Kids	5	3	4	4	5	1	4	3	
Marra	D.C.	Technologist	29	ICT officer	Private Sector	D.C.	Single	4	4	4	5	3	2	3	4	
Gajiji	D.C.	INGO Project Manager	35	ICT Lead	NGO	Kigali	Married 2 Kids	4	3	4	4	2	1	3	2.5	
Laura J.	Medellin	Social Entrepreneur	30	CEO	Entrepreneur	Medellin	Single	5	3	4	5	2	1	3	2	
Maria HZR	Medellin	Gov't Official	49	Social Inclusion Secretary	Mayor of Medellin	Medellin	Married 1 Daughter	4	2	2	4	2	3	2	2	
Maria J.	Medellin	INGO	47	Dreamer	ODElovers	Medellin	Married 2 Kids; 1 Dog	4	2	2	4	2	3	2	2	
Simon S.	Medellin	Donor	35	Program Officer	CIDA	Bogota	Single	3	1	4	4	5	2	4	2	
Carlos	Medellin	Technologist	36	Director of Technology		Medellin	Married 1 Dog	3	2	4	4	3	4	4	2	
33	Workshop Data Summary - User Personas															34

Persona	Workshop	Goal 1	Goal 2	Frustration 1	Frustration 2
John D.	Nairobi	Verifiable data / data with integrity	Data-informed decision making	Lack of resources to invest in tech and talent	Lack of tech skills in his organization
Tatigana W.	Nairobi	Good life	Career growth	Entitlement	Impatience
???	Nairobi	The One Impact!	Career Growth, Skills	Budget	Work Priority / Teamwork
Peter O.	Nairobi	Make agribusiness fun and attractice	Bring more people to agribusiness and make it a sustainable source of livelihood	Behavior change - people can succeed but they need to look at things differently	Difference in generational expectations and how people earn a living
Linda L.	Nairobi	Use the arts to promote social justice for youth leaders	Designing tools with youth to lead	People looking at Africa as not having potential	Art not being appreciated as a medium of expression and source of income
Sonia M.	Nairobi	Active business partner	Bridge the gap between tech space and NGO World	IT being seen as operational as opposed to an enabler of ICT4D as a separate function	IT budgets always being cut
Tucker S.	Nairobi	Improve structures to enable greater project flexibilty and longevity	Move to Nairobi, get in the field	Wanted to be in the field as an implenter, thought contracts would open doors	Wanted to be in the field as an implementer. Thought contracts would be foot in the door. Now stuck, harder to move
James	Nairobi	Fundraising streams that are sustainable	Make impactful change	Less impactful change than expected	Less impactful change than expected
Anne	Nairobi	Improved livelihoods	Ensure retention	Limitation of resources	Behavior change around culture & livelihood patterns
Joseph	Seattle	Leverage funds and position to generate impact in country	Align with political actors in country + donors to execute vision	Wanting to execute their vision in country/region	Not being constrained by external development / funding entities
Dr. Henry M.	Seattle	Increase knowledge of best practices in e-governance	Maintain respect of peers / International recognition	Inadequate funding / limited talent	Not included in tech decision making across ministries
Evanna M.	Seattle	Generating revenue in a way to achieve the social mission	Secure long-term clients ty sustain revenue	Lack of personal & organizational focus	Getting others to adopt & understand our value proposition
Iris	Seattle	To do good work and have an impact	Adventurous & explore the world while being culturally aware	Bureaucracy / achieving stated outcomes	Lack of resources - support staff, technical support staff, systems, and funding restraints
Terrie	Seattle	To have a well-paying, stable job with mobility	Work somewhere where work aligns with personal values / Satisfaction of finishing project and being recognized for it	When scope of work isn't well defined	Wants to see impact of her work without actually talking to customers
Priscilla	Nairobi	To be a market leader / expansion	Talent retention and motivation of staff, right talents and skills	Government regulation & policies	Work-Life Balance
Avery	D.C.	Do a good job and be recognized	Promoted to leading a program -- staffing up quickly	High risk - high visibility, but low support	Slow-moving procurement / not being set up with appropriate skilling, resources, onboarding.
Fatima	D.C.	70 women of local villages attend middle school / support 10 graduates to University	Work with 3 middle schools and local villages to enance sanitary and safety conditions to improve attendance of young women	Funding, safety, sustainability, local and national government	Lack of Incentives to send youth, especially young women, to school vs. work
Robert M.	D.C.	Track workforce training availability/ location	Improve availability of training resources; upskilling of workforce / Understanding workforce retention & performance	Wanting to advance career/increase value	Fighting for resources but lacks clear insight into where highest impact investments could be made
Marra	D.C.	Working at a team with a good reputation	Signal expertise	Unclear future	Lack of recognition
Gajiji	D.C.	Professional recognition	Contributing to country development	Lack of project funding / bureaucracy	People who don't understand power of tech
Laura J.	Medellin	Positive social impact	Empowerment of youth through education	Paradigm related to NGOs or social orgs	Balance between social impact and money
Maria HZR	Medellin	Recognition and write a book about social change in the city	Establish a children program and adequate spaces for upbringing child and babies	Buy in from the communities	To be seen as a politician named for a small period of time with no independence or liberty to take decisions
Maria J.	Medellin	Ensure that my organization is recognized at a global level	Have Influence and make decisions related to public policy and politics	Not complying fully with the objectives of the organization	Lack of motivation of her team at work
Simon S.	Medellin	Have accurate measurements	Scale my professional pathway	People not always on time with reporting, attending meetings, and in general with accountabilities	Organizations don't follow the plan as agreed
Carlos	Medellin	Complete to satisfaction my projects for my clients	Help my clients improve their businesses	Don't have a lot of time to give directions to my team	Breaking promises to my clients