The Future of Knowledge Management for Family Planning and Reproductive Health Programs

NOVEMBER 2020

Insights From Four Regional Co-Creation Workshops

Knowledge SUCCESS

Acknowledgements

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Acronyms

BE	behavioral economics
FP	family planning
HMW	how might we
KM	knowledge management
Knowledge SUCCESS	Knowledge Strengthening Use, Capacity, Collaboration, Exchange, Synthesis, and Sharing
NGO	nongovernmental organization
RH	reproductive health
USAID	U.S. Agency for International Development

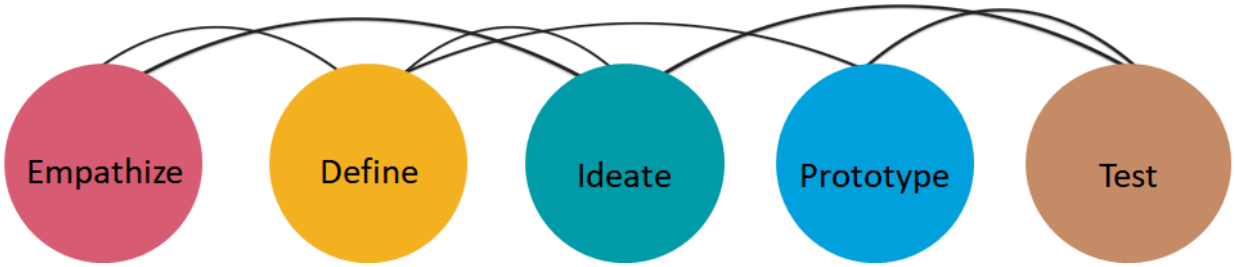
Contents

Executive Summary

Following initial research and scoping activities, the Knowledge SUCCESS (Strengthening Use, Capacity, Collaboration, Exchange, Synthesis, and Sharing) project designed a series of four regional, virtual workshops, convening 69 family planning and reproductive health (FP/RH) professionals from 21 countries in Anglophone Africa, Francophone Africa, Asia, and the United States, between April 1 and June 30, 2020, to *reimagine the ways FP/RH professionals (in their region) access and use evidence and best practices to optimize FP/RH programs*.

Participants were recruited from government health offices, private entities, large and small nongovernmental organizations, and the U.S. Agency for International Development. In each workshop, the participants were grouped into smaller multidisciplinary teams of four to eight professionals—composed of program managers, technical advisors, decision makers, conveners, and other FP/RH influencers—and were guided through a co-creation process based on design thinking.

Design thinking is a hands-on, iterative approach to problem solving rooted in empathy with user needs and perspectives. By putting those for whom you are designing at the core of the process, design thinking generates ideas and solutions that are not only novel but also useful and feasible. The design thinking process was augmented with behavioral economics (BE), the application of psychological insights to human behavior in order to better explain decision making.



Participants were guided through the five stages of the design thinking process:

1. Empathize: Think deeply about their own knowledge management (KM) experiences in FP/RH programs, empathize with other participants' experiences, and learn how to apply BE to better understand factors that may impact how they find, share, and use information
2. Define: Analyze the current landscape of the workshop challenge and prioritize a specific problem to address
3. Ideate: Brainstorm and prioritize ideas to address the defined problem
4. Prototype: Bring to life the solutions that would make accessing, sharing, and using knowledge easier for themselves and other FP/RH professionals
5. Test: Receive feedback on the prototypes and discuss ways to improve the prototypes

To allow for flexibility with participants' schedules and the COVID-19 pandemic, the virtual workshops were structured to occur over the course of four weeks, with two to three sessions per week. Participants spent about four to six hours each week on workshop activities. The U.S.-based workshop occurred over two half-days to accommodate participants' schedules.

The four workshops generated rich insights into the KM experiences of FP/RH professionals and produced a total of 14 early-stage prototypes to improve the way that FP/RH professionals use knowledge to optimize programs.

This report details the workshop methodology and provides a cross-cutting analysis of trends and findings across all four workshops by each step in the design thinking process. Descriptive reports summarizing the detailed findings for each regional workshop are also available separately.

Empathize

During the first design stage—Empathize—participants learned more about themselves and learned from other FP/RH professionals in their teams to better understand how they access, share, and use information. Depending on the workshop, they did this by individually creating either a personal journey map or a KM profile, modeled after the design thinking tool of personas. We analyzed these outputs by job role, region, and gender to better understand similarities and differences in FP/RH professionals' experiences when seeking, sharing, and using information to improve their programs. No significant differences were identified by gender; similarities and differences by job role and region are presented below.

SEEKING INFORMATION

Participants across all Knowledge SUCCESS-focused job roles (program managers, technical advisors, decision makers, and conveners) and regions reported that they searched for and found information in similar ways, such as from online sources and from their professional networks and colleagues.

Strong differences appeared by job role and region with the types of information they searched for. Conveners tended to look for information for advocacy purposes, technical advisors and decision makers for global and national trends in FP/RH, and program managers for information specific to managing the programs they run. By region, Africa and Asia-based participants were more likely to report wanting demographic data and information on the current situation in their countries to inform program design and evaluation, as well as information on what other organizations in their region were doing. U.S.-based participants, however, were more likely to seek information on program results and on what partners had done after program implementation, including lessons learned.

Barriers associated with finding information were common across job roles, such as issues with poor data quality and lack of access to desired information. By region, participants from Francophone Africa and Asia reported a lack of information, whereas U.S.-based participants reported too much information and not enough time to engage with it. Francophone Africa participants particularly stressed the lack of FP/RH information in French and the absence of FP/RH data for their region. Anglophone Africa and Asia-based participants also reported that there was not enough *relevant* information because information was outdated or not specific enough for their particular context. Participants from Anglophone Africa also reported that information on lessons from other projects is often not practical or detailed enough and is biased due to reporting only the successes.

The levers (benefits or opportunities) associated with finding information were also common across job roles and included improving partnerships and collaborations.

SHARING AND USING INFORMATION

Across regions, participants reported that they shared information with different groups. Participants in Francophone Africa typically shared information with communities, whereas those from Asia and Anglophone Africa typically reported more sharing within their organizations or with the health facilities in their implementation area. Meanwhile, U.S.-based participants reported they were most commonly sharing information with other partners and their professional networks. There were also differences by job role in how they shared information, with technical advisors more likely to report that they needed to curate the information for different audiences.

All professionals reported that they use information for advocacy, awareness, and program management but there were regional differences in how they used that information. Participants from Francophone Africa were most likely to report using it for community-based education and improving program design. Anglophone Africa and Asia-based participants were most likely to report using it for developing and designing campaigns and for monitoring and improving programs. The primary use of information by participants based in the United States was to share it with others, sometimes by repackaging it before sharing. By job role, technical advisors, conveners, and program managers noted that they use information to increase buy-in of relevant stakeholders.

In general, participants reported that a common challenge to using information was lack of time and that the way information was presented made it difficult to mentally process and use it to inform their FP/RH programs. Common levers associated with using information across all job roles were increased collaboration across multiple levels of organizations and projects.

BEHAVIORAL ECONOMIC FACTORS THAT INFLUENCE FP/RH PROFESSIONALS' KM BEHAVIORS

Participants in all regions highlighted that cognitive overload—when too much information is presented in a way that makes it hard to understand and process the information—manifested itself when either accessing relevant information or processing and applying the information to programs. Participants in all regions also reported that learning styles played a role in accessing and using information, with information not currently being disseminated in ways that address multiple learning styles.

Define

During the second design stage—Define—participants identified specific positives (roses),

opportunities (buds), and negatives (thorns) related to the design challenge. Each team then clustered the roses, buds, and thorns according to common themes (referred to as affinity clusters). The following five key themes related to strengths and challenges with accessing and using evidence and best practices in FP/RH programs emerged across all four workshops:

1. Information availability and accessibility. Participants in all regions except Francophone Africa reported that FP/RH information has become increasingly accessible, and with increasing amounts of information available. Many opportunities were cited to improve information availability and accessibility even further, such as conducting additional research, simplifying synthesis of data, and making information more contextually appropriate. Africa- and Asia-based teams also highlighted many existing challenges with accessibility, such as data being behind paywalls, being too dense, not being disaggregated enough, or not having key details such as behavioral factors. Francophone Africa and U.S.-based teams also highlighted the lack of information and resources available in French as a challenge.

2. Collaborations and partnerships. Each of the regions acknowledged that sharing and collaborations are currently taking place at various levels, including among professionals in formal and informal networks, or at higher levels among organizations. Some also highlighted significant opportunities to expand collaborations through, for example, virtual means such as Zoom. However, the Francophone Africa and Asia teams mentioned difficulties with harmonizing partner approaches (e.g., different frameworks and strategies used in the work they do) and challenges with current collaborations, including not sharing enough information. U.S.-based teams also mentioned a reluctance to share information and cited competition for limited resources between organizations as a potential reason.

3. Human resources and FP/RH professionals' capacity in KM. Participants acknowledged an increase in KM capacity and opportunities for more capacity strengthening. However, challenges related to human resources remain, with Francophone Africa teams highlighting a lack of technical KM capacity in the field. Asia-based teams noted challenges related to high attrition rates and lack of long-term capacity within organizations.

4. FP/RH work environment. Workshop participants pointed to an increased willingness among donors and organizations to adopt new and innovative approaches to improve programs as a strength, in addition to increased awareness of the importance of KM, translating to more readily available resources for KM within organizations. FP/RH programs overall, however, still struggle with a lack of sufficient funding.

5. Financing, policies, and programmatic issues with implementing and managing programs. In terms of policies, teams highlighted an increasing recognition of FP/RH at the global level through several international commitments that have translated to more conducive national-level policies. Teams also mentioned challenges related to the lack of sufficient funding and lack of priority of FP/RH projects at national and local levels. They also discussed potential opportunities to increase collaboration with the private sector that may open up a new avenue for resource mobilization.

Ideate

During the third design stage—Ideate—each team created "How Might We" (HMW) statements, which frame the specific problem being addressed and suggest that solutions are possible without predefining a particular solution. As part of the Ideate stage, participants also

brainstormed (ideated) solutions to their team's HMW statement and then prioritized their solutions to select one to prototype.

Across the workshops, teams generated similar HMW statements, which focused on making it easier to get the information they needed and to use that information to support and improve decision making about programs.

- Information access: HMW statements focused mostly on gaining access to key resources and in real time, through improved sharing and better institutional documentation.
- Information use: HMW statements sought to enhance use of evidence and best practices by making it a priority for FP/RH professionals and revitalizing collaboration between them.
- Decision making: HMW statements sought to enhance both informed and timely decision making by increasing access to relevant information that is accurate and reliable.

Source: Adapted from Barnes & Milton, 2015

Most teams generated more than 50 ideas, or potential solutions, to address their HMW statements, amounting to more than 600 ideas in total across the four workshops, although some were similar or overlapped in nature. The solutions that teams ranked highly during their prioritization activities had common themes. These themes are aligned with the Matrix of Knowledge Management Tools and Techniques, which groups KM approaches into those that collect and curate knowledge ("publishing" and "searching" approaches) and those that connect people to knowledge ("asking" and "telling" approaches). The solutions also included strengthening of KM culture and capacity, both of which are essential elements for the success of KM activities.

Connecting People to Knowledge: Asking and Telling Approaches		
Knowledge exchange among groups	Knowledge exchange between individuals	Coordination
• Communities of practice or virtual networks for sharing, including new mediums such as WhatsApp or LinkedIn • Country or regional learning forums, sessions, or workshops including with a KM expert • FP solutions advisors or multidisciplinary experts to help new implementers start projects	• Virtual reality interactions to network, connect, and interact • Exchange visits or regional fellowships to assist or learn from other programs • Mentoring between senior and junior professionals	• National KM focal point to identify, collect, and share local knowledge • Development of programs in coordination with governments, donors, and civil society • Framework for collaboration among researchers, professionals, and policy makers • Steering committee on using data • Mapping existing regional data exchanges and sharing

Collecting and Curating Knowledge: Publishing and Searching Approaches		
Creating easier-to-digest or simplified information	Creating or improving knowledge and data repositories	Increasing the knowledge base
• TED Talks • Audio, video, and graphic formats • Best practice magazines or certified/branded best practices in FP/RH programs • Synthesized data tailored to learning style, country, or other needs • Adjust documentation/sharing based on assessment of needs and preferences	• Best practice toolkits or training on how to document, share, and use practical information • Innovation Hub • Country, regional, or global repository • Open or free access to information/data • Improved or simplified data repository (e.g., Alexa or Siri-like search functions, machine learning to suggest new data/information, or autotranslation)	• Anonymous or incentivized stories of failure • Highlighting rarely heard community voices • Best practice toolkits or training and tools to document, share, and use practical information • Template for documentation/reporting

Strengthening Knowledge Management Culture and Capacity
• KM modules for real-time learning or training for students and professionals on using KM tools • Online skills-strengthening platform • Capacity strengthening in innovative data approaches • KM budget allocation in grants • Live KM support desk • Regional fund to learn about creation and use of evidence in region

Prototype and Test

During the fourth design stage—Prototype—teams built out and brought their solution to life, including considering how to promote gender equity in their prototypes. The final stage—Test—occurred when teams presented their prototypes to at least one other team, received feedback on their prototype, and discussed ways to improve their prototype based on the feedback received. Across the four workshops, the teams created the following 14 prototypes.

Anglophone Africa:

- AutoKBank: a regional knowledge bank with chat features and information dissemination algorithms, enabling users to share information and connect others to that information
- FP Connect: a virtual reality interaction platform with online information and resources that provides users with a space to find mentors, network, and collaborate to solve challenges
- In Their Shoes: an in-person mentoring/exchange program that encourages knowledge transfer and capacity strengthening
- Interactive WhatsApp Groups: moderated country-specific and regional/global WhatsApp groups to provide a space for networking, information exchange, and improved collaboration
- Country-level Knowledge Repository: a repository with chat functionality hosted by ministries of health, coordinated by dedicated staff, and tailored to each country's needs to improve the quality and contextual relevance of data and information

Francophone Africa:

- Virtual Evidence Platform: a user-driven repository of evidence and best practices that tailors

information to multiple learning preferences and increases the quality and relevance of information available
- Singular Information Collection Application: a single-entry point for multiple sources of information, evidence, and best practices that increases the efficiency of finding information
- Regional Platform for Meetings and Communities of Practice: a Francophone Africa-specific group that will serve as an entry point into communities of practice in the region, identify gaps in knowledge generation, and strengthen KM skills among FP/RH professionals in the region

Asia:
- A-Devi: an alliance of key organizations to share knowledge through in-person meetings and an artificial intelligence-enhanced platform to simplify information seeking and improve information exchange
- Knowledge Information Sharing.org or KIS.org: a knowledge learning and sharing platform with virtual and experiential learning to improve the ways that FP/RH professionals learn and apply knowledge to programs
- FPedia: a comprehensive interactive platform for FP/RH data and resources, including information on failures, TED Talks showcasing best practices, real-time quantitative and qualitative data synthesized and tailored to individual learning preferences, a calendar of global, national, and local events, and opportunities for meaningful dialogue between FP/RH professionals and high-level experts

United States:
- Community Voices: a platform highlighting rarely heard community voices to diversify the types of voices, challenge the status quo, and expand the knowledge base that can be incorporated into program design
- Reimagining Sharing: an approach to identify gaps in supply and demand of KM resources then adjust resources to fill those gaps to increase the usability and relevance of resources
- Pinterception: a Pinterest-like, user-driven platform for storing and sharing information that will also connect users to more diverse and relevant information

All of the prototypes incorporated elements of collecting and curating key information as well as facilitating interactive knowledge exchange among FP/RH professionals. While most participants indicated that gender was an important consideration in the development of KM solutions, only six prototypes explicitly addressed gender.

Collecting and curating key information: Teams wanted to create new and improved dynamic hubs that would collect and curate key information needed to improve FP/RH programs. They overwhelmingly suggested prototypes that would create information repositories or improve the way that existing information is stored or accessed. Repositories could:
- Include information from new or underrepresented FP/RH professionals, such as field-based staff
- Include regionally focused or user-driven content to ensure contextually relevant information
- Have the ability to analyze and synthesize information in ways that make it easier for users to digest, such as by creating data outputs based on learning preferences
- Have information in digestible formats, such as TED Talks
- Have advanced search capabilities, such as machine learning algorithms that make finding applicable information faster and easier

Facilitating interaction among FP/RH professionals: Teams also incorporated interactive components in their prototypes to enable FP/RH professionals to connect with each other, ask

questions, and share tacit knowledge. These interactions, both virtual and in-person, would improve knowledge transfer of the wealth of tacit FP/RH information and provide opportunities to learn from other professionals. Interactive components include:

- In-person exchange visits or annual regional or global meetings.
- Online or virtual opportunities such as WhatsApp groups to share information, virtual reality to "observe" other programs, and the ability to directly ask questions of authors and speakers.
- Detailed management or oversight structures for communities of practice to ensure adequate funding and sustainability.

The Way Forward: From Prototypes to Solutions

The four Knowledge SUCCESS virtual co-creation workshops produced 14 early-stage prototypes to improve the way FP/RH professionals access and use knowledge to optimize programs. The prototypes ranged from those that focused on dynamic ways to collect and curate relevant FP/RH knowledge on best practices, lessons learned from failures, and overall programmatic experiences to prototypes that focused on facilitating interactive exchanges among FP/RH professionals to share knowledge in transparent and timely ways.

Following the regional workshops, the Knowledge SUCCESS team held internal ideation and prioritization sessions to synthesize and refine not only the prototypes but also the longer list of potential solutions generated by the co-creation teams. We incorporated this important step in our design thinking process to ensure that we considered all of the innovative ideas generated from the workshops and that the final solutions selected for development by the project for the global FP/RH community were cutting edge, would expand the FP/RH knowledge base by including a more diverse range of voices, and would ultimately help drive evidence-informed decision making in FP/RH programs.

Through this process, we decided to move forward with developing three new KM solutions for the FP/RH community: (1) the Pinterception prototype, a user-driven curation platform inspired by Pinterest; (2) a new interactive learning series focused on What Works and What Doesn't Work in FP/RH; and (3) a competition to develop context-driven KM innovations for FP/RH programs. These three solutions address the most prominent needs expressed across the regional workshops—the need for easy-to-find resources from different projects or organizations curated in one place, the need for opportunities to learn from other FP/RH professionals on best practices and lessons that are packaged with enough detail and in a way that is easy to use, and the need to improve technical capacity and funding in KM for FP/RH at the country or regional level. We plan to develop and launch these solutions over the course of the 2020–2021 fiscal year.

This design thinking work has produced many rich insights and potential solutions to the KM challenges that FP/RH professionals face. These insights and solutions can benefit and inform the work of not only Knowledge SUCCESS, but also other FP/RH projects and organizations, to support FP/RH professionals to access and use evidence and best practices to optimize their programs. Ultimately, our vision is that findings from these seminal co-creation workshops will fundamentally change how FP/RH projects approach and practice KM.

Introduction

Knowledge SUCCESS (Strengthening Use, Capacity, Collaboration, Exchange, Synthesis, and Sharing) is a five-year global project led by a consortium of partners and funded by the U.S. Agency for International Development (USAID) Office of Population and Reproductive Health to support learning and create opportunities for collaboration and knowledge exchange within the family planning and reproductive health (FP/RH) community. Knowledge SUCCESS uses an intentional and systematic approach called knowledge management (KM) to help programs and organizations working in FP/RH collect knowledge and information, organize it, connect others to it, and make it easier for people to use. The project's approach is guided by behavioral science and design thinking principles to make these activities relevant, easy, attractive, and timely. A pivotal component of this approach is the co-creation of knowledge solutions *with* the project's audiences of FP/RH professionals, not *for* them, to ensure the solutions are relevant and useful, and therefore widely used to optimize FP/RH programs.

Knowledge SUCCESS aimed to co-create knowledge solutions *with* its audiences of FP/RH professionals, *not for* them, so the solutions would be relevant, useful, and widely used.

Following initial research and scoping activities, Knowledge SUCCESS designed a series of four regional virtual co-creation workshops, between April 1 and June 30, 2020, to bring FP/RH professionals together to reimagine the future of KM for FP/RH programs. The workshops in Anglophone Africa, Francophone Africa, Asia, and the United States were envisioned to collaboratively design early-stage solutions to some of the ongoing KM challenges surrounding accessing, sharing, and using evidence and best practices to optimize FP/RH programs. The workshops grouped a total of 69 participants into multidisciplinary teams of 4 to 8 professionals composed of program managers, technical advisors, decision makers, conveners, and other FP/RH influencers. The teams were guided through a co-creation process based on design thinking, starting with thinking deeply about their own KM experiences and empathizing with other participants' experiences, followed by learning how to apply behavioral economics (BE), analyzing the current landscape of the workshop challenge, creating ideas to address the challenges they face, and finally bringing to life solutions that would make accessing, sharing, and using knowledge easier for themselves and other FP/RH professionals.

The workshops generated rich insights into the KM experiences of FP/RH professionals and produced 14 early-stage prototypes to improve the way FP/RH professionals access and use knowledge to optimize programs. The workshops had four objectives:

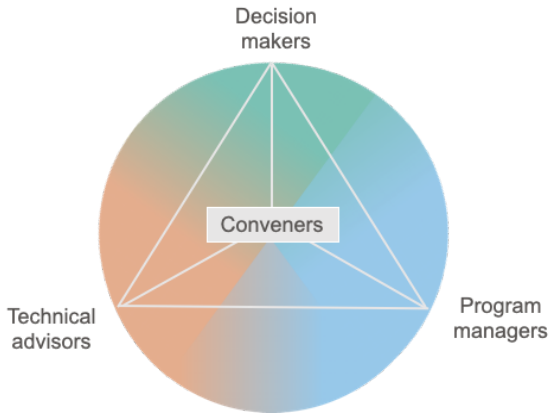
- Validate formative research on how FP/RH professionals' find, use, and share information
- Deepen the project's understanding of KM-related challenges and opportunities that FP/RH professionals face
- Understand user perspectives on key BE mechanisms that may manifest as they are finding, using, and sharing knowledge
- Co-create and generate early-stage prototypes to make it easier, more attractive, and timely for FP/RH professionals to access, share, and use critical knowledge

69 FP/RH professionals from Asia, sub-Saharan Africa, and the United States participated in 4 regional virtual co-creation workshops and produced 14 prototypes to improve access to and use of knowledge to optimize programs.

This report provides a cross-cutting analysis of trends and findings across all workshops and provides additional insights into trends by region and when possible by job role.

Cross-Cutting Components of the Workshops

Knowledge Management
The systematic process of collecting knowledge and connecting people to it so they can work more effectively and efficiently. KM is based on people, processes, and technology but is inherently a social science that focuses most on people and the way they interact and share knowledge with each other.



Design Thinking
An iterative, hands-on creative approach to problem solving rooted in empathy. Design thinking deepens understanding of users and their behaviors, challenges traditional assumptions about users, and redefines the problems that users face. By putting those for whom you are designing at the core of the process, design thinking generates ideas and solutions that are novel, useful, and feasible.

Behavioral Economics
The application of psychological insights to human behavior to better explain decision making.

Multidisciplinary Teams

Program managers, technical advisors, decision makers, conveners, and others who influence or support these stakeholders in FP/RH were invited to the workshops to ensure a wide range of experiences and expertise.

- Program managers are individuals involved in the management of FP/RH projects.
- Technical advisors provide strategic guidance to FP/RH programs.
- Decision makers make or influence decisions about FP/RH programs.
- Conveners foster partnerships and collaborations.
- Other influencers are those who influence or support others working in FP/RH programs, such as IT professionals, KM professionals, communications staff, or researchers.

Participants were recruited from government health offices, private entities, large and small nongovernmental organizations (NGOs), and donor organizations (namely, USAID).

Regional Representation

In total, 21 countries were represented across the four regional workshops.

Anglophone Africa
(April 1–29, 2020)
Regional report

- Ghana
- Kenya
- Malawi
- Nigeria
- Tanzania
- Uganda
- Zambia

Francophone Africa
(May 18–June 12, 2020)
Regional report:
English, French

- Benin
- Burkina Faso
- Cameroon
- Côte d'Ivoire
- Mali
- Mauritania
- Niger
- Senegal
- Togo

Asia
(June 1–25, 2020)
Regional report

- Bangladesh
- India
- Pakistan
- Philippines

United States
(June 29–30, 2020)
Regional report

- Different states from across the country

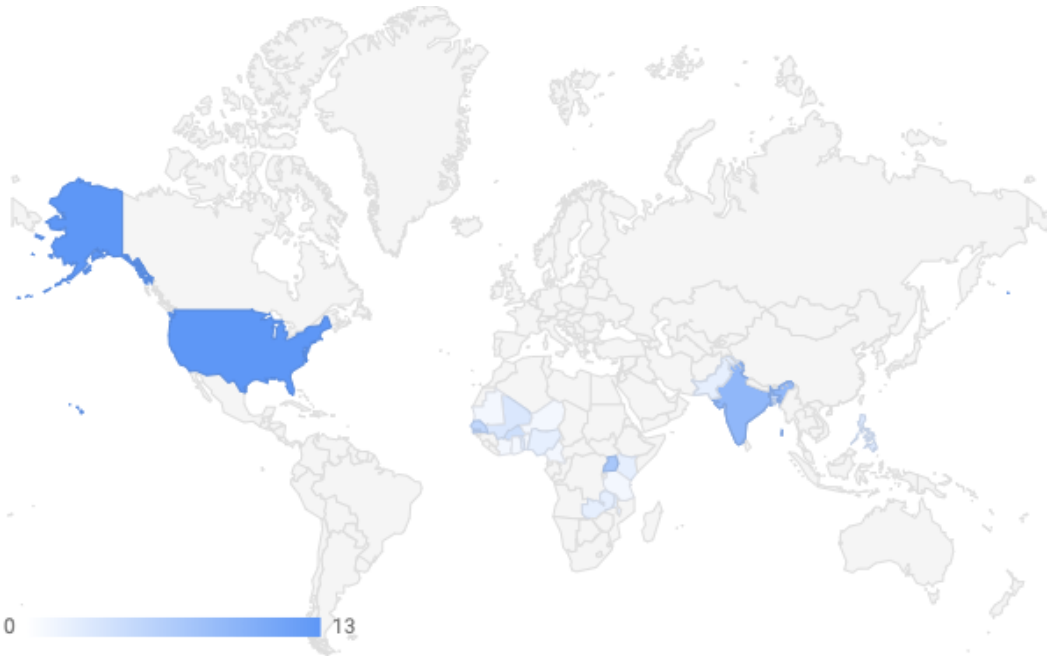


TABLE 1. BREAKDOWN OF PARTICIPANTS BY REGION, GENDER, AND JOB ROLE

	Anglophone Africa		Francophone Africa		Asia			United States		Total		
	Men	Women	Men	Women	Men	Women	Non-binary	Men	Women	Men	Women	Non-binary
Program manager	4	2	2	1	7	2	0	0	1	13	6	0
Technical advisor	2	3	3	3	2	2	0	0	5	7	13	0
Decision maker	1	0	1	1	2	2	0	0	2	4	5	0
Convener	2	0	2	2	0	0	0	1	0	5	2	0
Other influencer	1	2	3	1	1	1	1	1	3	6	7	1
Total	10	7	11	8	12	7	1	2	11	35	33	1
	17		19		20			13		69		

Note: Participants were asked at recruitment which job title best describes their role in FP/RH programs. In this report, we classified 14 participants with a different job role than how they self-identified at recruitment, based on the project's job role definitions and the participants' specific job titles and organizations with which they were affiliated. For example, some participants who work in advocacy self-identified as program managers but were classified in this report as decision makers because the project includes both individuals who make decisions (e.g., donors and policy makers) or influence decisions (e.g., advocates and civil society organizations) about FP/RH programs in the decision maker category.

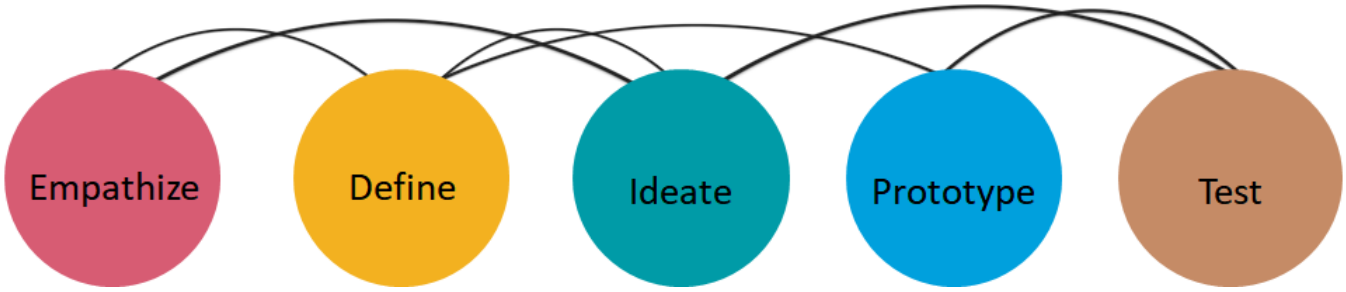
Workshop Overview

Design Challenge
Reimagining the ways FP/RH professionals access and use evidence and best practices to optimize FP/RH programs

Each workshop focused the overall design challenge on FP/RH professionals within that region. For example, the Asia regional workshop design challenge was to reimagine the ways FP/RH professionals in Asia access and use evidence and best practices to optimize FP/RH programs

The Five-Stage Design Thinking Process

Facilitators led each team through the five stages of the design thinking process: empathize, define, ideate, prototype, and test.

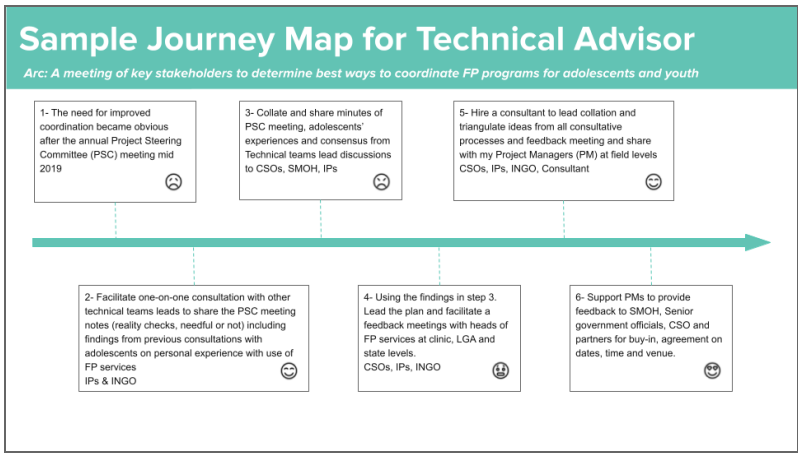


Empathize	Define	Ideate	Prototype	Test
Learn about and from the FP/RH professionals for whom we are designing to better understand how they access, share, and use information	Refocus the challenge based on learnings from the empathize stage and identify key themes through analysis of the workshop design challenge	Brainstorm and devise creative solutions for the identified challenge and generate ideas to address the challenge	Build a representation of one or more of the proposed solutions and create rough drafts of the highest-priority solutions	Test the prototype(s)—the rough draft solutions—with other teams of FP/RH professionals

Empathize

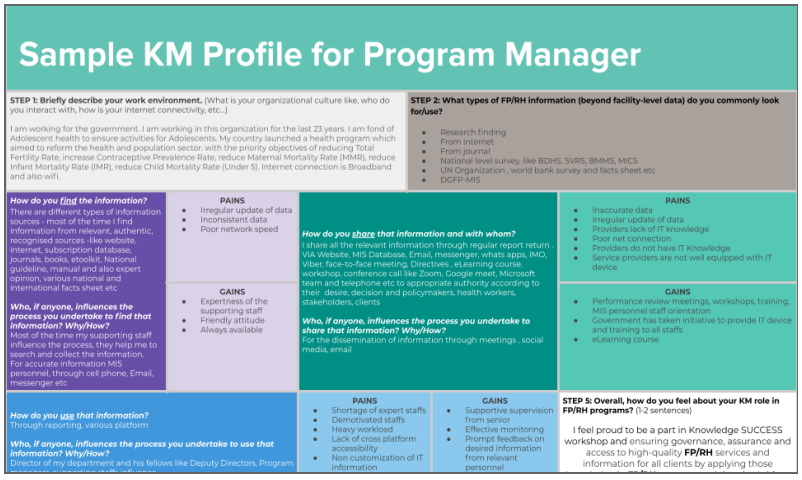
Stage 1. Empathize: Learn about and from the FP/RH professionals for whom we are designing to better understand how they access, share, and use information

We used four types of empathy-strengthening activities to encourage the workshop participants to think deeply about the positives and challenges they face when accessing and using evidence and best practices to optimize FP/RH programs:



1. Journey maps, used during the first workshop, enabled participants to visualize the steps they undertook to access, share, and use FP/RH information. They considered how they felt during each step, the stakeholders (if any) they interacted with, and how various BE mechanisms manifested (if at all) in that step. Participants were provided with three different possible "journey arcs"—brief descriptions of their overall journeys—to help them create their journey maps: seeking innovations in FP programming, sharing the latest service delivery guidelines, and coordinating FP activities among key stakeholders.

2. KM profiles, modeled after the design thinking tool of personas, gave participants in the subsequent three workshops an opportunity to identify and document how they find, share, and use specific types of FP/RH information they commonly look for, plus the pains and gains associated with each of these KM behaviors. The Knowledge SUCCESS team shifted from journey maps to KM profiles because it was easier for participants to provide details of their individual experiences in the KM profiles, whereas journey maps summarized the overall experience with fewer details. Knowledge SUCCESS then used the details described in the KM profiles to create detailed journey maps of their overall experience.



3. Participants also learned about select BE mechanisms that can manifest and influence their process for finding, sharing, and using information. These BE mechanisms, such as choice overload (too many choices can be mentally difficult to process or mentally paralyzing) or learning preferences (an individual's preferred method of receiving and processing information), were selected to help them better understand their own KM experiences and build empathy for each other (Table 2).

4. To further strengthen empathy for themselves and other FP/RH professionals, participants were encouraged to complete a quick learning styles survey and learn what their own

preferred learning styles were. The survey was completed anonymously and included demographic questions such as the country where they are based, gender, and job role. The survey looked at learning preferences across seven dimensions:

Aural: preference for information that is heard or spoken, such as lectures, conversations, and discussions

Logical: preference for logic, reasoning, and systems

Physical: preference to learn information through the body and sense of touch (e.g, hands-on activities)

Social: preference to learn in groups or with other people

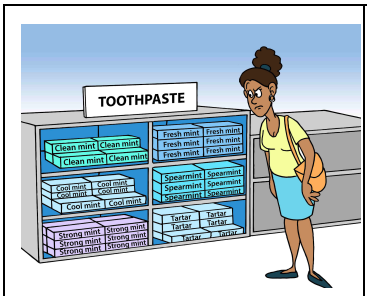
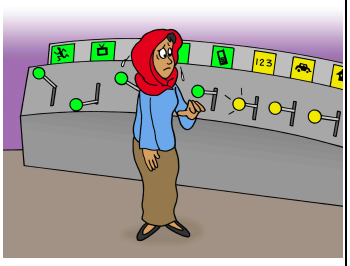
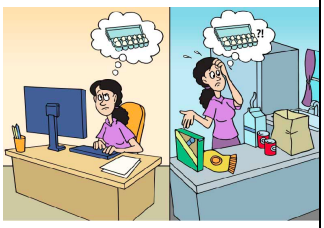
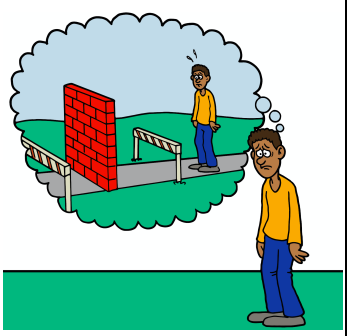
Solitary: preference to work alone through self-study

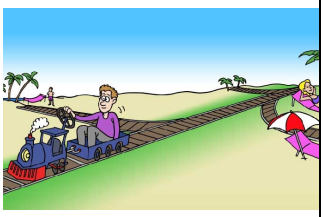
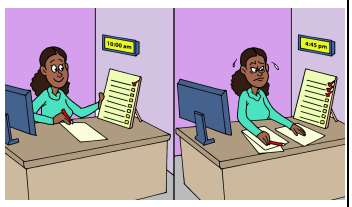
Verbal: preference to take in information displayed as words and text

Visual: preference for images, pictures, diagrams, and charts to represent what could have been presented in words

Participants were asked to respond to different learning style scenarios and identify, on a three-point scale, the extent to which a scenario resonated with them. The survey calculated and shared with the respondent a breakdown of the extent to which they identified with each learning preference. The respondent's scores were presented as percentages for each of the seven dimensions, and participants were informed that their preferred learning styles were the dimensions with the highest percentages.

TABLE 2. INFLUENCE OF BEHAVIORAL ECONOMICS ON KNOWLEDGE MANAGEMENT BEHAVIORS

	Choice overload: Too many choices can be mentally difficult to process. When confronted with too many choices, people tend to go with the default option or to defer (put off) making a choice—even not buying a product or doing an action. Too many choices has also been associated with unhappiness and decision fatigue.		Primacy bias: People are most likely to remember information that is presented first. This includes being more likely to remember information at the top of a list or information they hear first.
	Cognitive overload: Too much information presented in a way that is hard to understand and apply requires too much cognitive engagement—meaning it is too hard for people to process and apply.		Procrastination: The present is more attractive than the future, especially when rewards are in the present. People therefore procrastinate—or put off doing an action—when that action will cause them discomfort. The discomfort can be either physical or mental in nature.
	Decision fatigue: Making decisions requires thinking and effort, which tires the brain. After continuously making decision after decision, the brain wants a break, so people may start making less accurate or less beneficial decisions.		Prospective memory failure: When people make plans to do something and put themselves in a situation to start that plan, but then get distracted or overwhelmed by other things. In these situations, they may never end up doing what they originally intended to do.
	Hassle factors: Hassles—even small ones—can get in the way of completing an action. Facing a hassle might make a person put off continuing the action until fewer hassles are expected or stop doing the action altogether. Just knowing there will be hassles might make a person defer the action.		Social norms: Spoken or unspoken rules that create behavioral expectations for members of a group of people. They can cover a wide range of behaviors such as who should give up seats on crowded buses to how people should treat their children. Different groups of people have different social

			norms, depending on where they live and with whom they are interacting.
	Learning preference/style: Everyone learns differently—some people like to see information, some like to hear information, and some like to read information; this preference is called a learning style. Learning styles may affect how people internalize, understand, and even act on the information they receive.		Status quo bias: Making a decision, especially a decision about a new course of action, requires thinking and mental effort, and our brains want to be as efficient as possible. When confronted with choosing between (1) a new course of action or (2) the same course of action (i.e., a decision that has already been made), people usually continue with the same thing—their status quo.
	Planning fallacy: Making a list of items to do can be very helpful, but we consistently underestimate the amount of time it will take to do something. Plans made in the morning may not be fully completed because each task is pushed back to later in the day or deferred until another day.		

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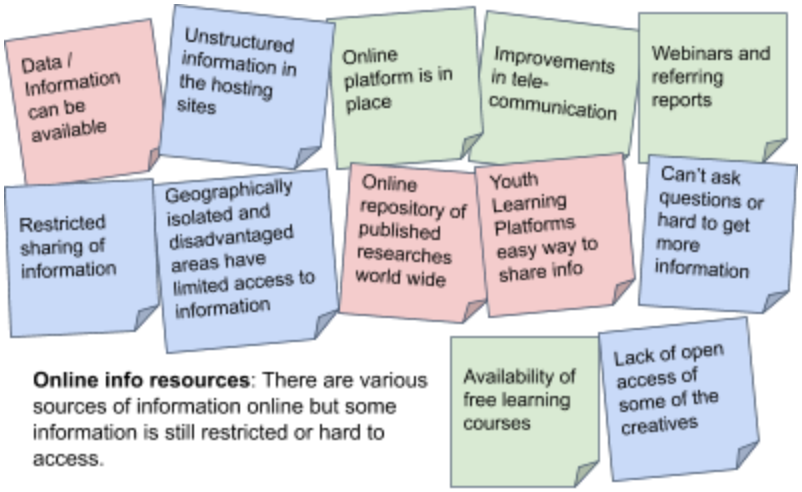
Define

Stage 2. Define: Refocus the challenge based on learnings from the Empathize stage and identify key themes through analysis of the workshop design challenge

Following the Empathize stage, participants used the deeper understanding they gained about themselves and other FP/RH professionals to inform the Define stage. They completed two main activities in this stage:

1. Rose, bud, thorn activity to identify specific positives (roses), opportunities (buds), and challenges (thorns) in regard to the workshop design challenge of accessing and using evidence and best practices to optimize RP/FH programs. Each participant highlighted all of their individual roses, buds, and thorns.
2. Affinity clusters, or groupings of roses, buds, and thorns into logical categories or themes. Once the participants completed their individual roses, buds, and thorns, each team discussed them as a group and then clustered them with a common focus or theme, also referred to as affinity clusters.



For example, one team created a theme focused on online resources and how there are various online sources of information but some information is restricted or hard to access. The team therefore identified "restricted sharing of information" as a thorn, "can't ask questions or hard to get more information" as another thorn, and "online platform is in place" as a bud, along with other roses, buds, and thorns.

Ideate

Stage 3. Ideate: Brainstorm and devise creative solutions for the identified challenge and generate ideas to address those challenges

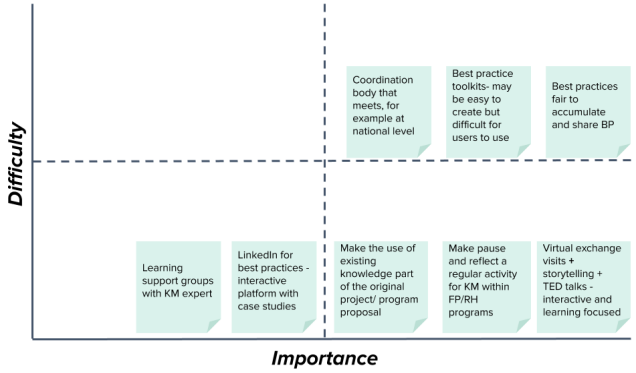
Teams used insights generated during the Define stage as the basis for ideation. This stage included three key activities:

1. Creating "How Might We" (HMW) statements, which define problem statements that focus the workshop challenge on key issues and themes generated during the Empathize and Define stage. HMW statements frame the problem being addressed and suggest that solutions are possible ("how" instead of "if" something can be accomplished) without predefining a particular solution. Participants each generated multiple HMW statements and then teams discussed them. Most teams selected a single HMW statement for their team to move forward with, with one group in the Anglophone Africa workshop selecting two HMW statements. An example HMW statement was, "How might we reinvigorate/catalyze/activate collaboration and coordination among FP professionals to enhance use of evidence and best practices for innovative FP programming?"

2. Ideation brainstorming activities, based on the HMW statements. In the first brainstorming activity, Crazy Eights, participants individually and rapidly brainstormed eight ideas to address the HMW in eight minutes. During multiple rounds of ideation, participants generated numerous ideas—referred to as potential solutions—to their HMW statement(s) and discussed additional solutions. Most teams generated more than 50 potential solutions to their HMW statement.

Most teams generated more than 50 potential solutions to improve access to and use of knowledge in their FP/RH programs.

3. Prioritizing the long list of potential solutions to select a single solution to move forward to prototyping. Teams prioritized solutions based on importance and difficulty, using a prioritization matrix (sample shown). They also assessed whether the solution addressed the design challenge, was targeted to FP/RH professionals, promoted (or could promote) gender equity, and was (or if they could make it) novel or innovative.



Prototype

Stage 4. Prototype: Build a representation of one or more of the proposed solutions and create rough drafts of the highest-priority solutions

During the Prototype stage, teams built out the different components of their selected solutions and created virtual representations, or prototypes, to make them as real as possible to present to potential users (i.e., FP/RH professionals on other teams) during the closing plenary. During prototyping, teams considered how to ensure their prototypes promoted gender equity in KM across five gender domains: (1) access to and control over resources; (2) cultural norms and beliefs; (3) gender roles, responsibilities, and time use; (4) laws, policies, and regulations; and (5) institutional practices, patterns of power, and decision making (see Appendix 1).

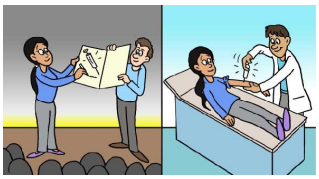
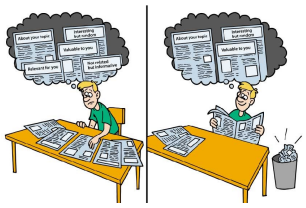
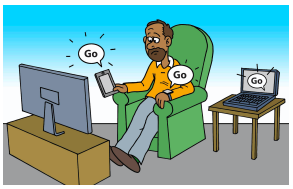
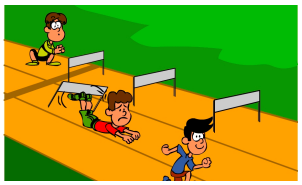
Stage 5. Test: Test the prototypes—rough draft solutions—with other teams of FP/RH professionals

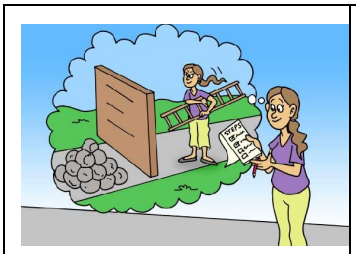
During the closing plenary session, teams presented their prototypes to each other, received feedback, and discussed how they could incorporate that feedback to improve their prototypes. For example, teams commonly asked questions about or provided suggestions for how to improve user engagement with the prototypes.

+ What worked *(what was liked or notable)*	Δ What could be improved *(constructive criticism)*
? Questions *(questions that were raised)*	! Ideas *(ideas that the experience or presentation spurred)*

Teams also learned about additional BE mechanisms to improve prototype designs and discussed how they could be incorporated (Table 3). During the Empathize stage, learning about BE mechanisms helped explain certain barriers that FP/RH professionals experienced in their KM journeys, for example, choice overload or cognitive overload. During the Prototype and Test stages, teams learned about a second set of BE mechanisms that could be used to improve prototype designs to facilitate positive KM behaviors. For example, one BE mechanism that can improve prototypes is strategic reminders, which can cut through the noise of busy life and draw attention to a deadline or a necessary step to access or use knowledge.

TABLE 3. USING BEHAVIORAL ECONOMICS TO IMPROVE KNOWLEDGE MANAGEMENT SOLUTIONS

	Commitment device: Commitment devices are tools that try to cement future behavior, or ways for an eager "present self" to control the behavior of a "future self" who may not want to do the behavior. Commitment devices can have varying strengths. On the stronger side, some financial tools lock money and impose fines on accessing the money. On the weaker side, an individual could say they intend to do something, but there are no penalties if they do not.		Relevance and value: People have to process a lot of information on a daily basis, so they are most likely to interact with information that is relevant and clearly of value to them.
	Extrinsic and intrinsic incentives: Just as small hassles can get in the way of doing something, small rewards can encourage someone to do something. Everyone likes a reward for doing something positive! These small rewards, such as recognition for a job well done, a letter of appreciation, or a small prize, are called non-monetary incentives (when the reward is not tied to money) and micro-incentives (when the reward is very small).		Reminders: People's lives can be busy and they juggle multiple responsibilities and tasks. Reminders cut through the noise of daily life and help focus an individual on a specific action they should take. While reminders are helpful, too many can be annoying. Finding a balance with the frequency and number of reminders is essential.
	Learning preference/style: Some people like to see information, some like to hear information, and some like to read information. These different preferences are called learning styles. Learning styles may affect how people internalize, understand, and even act on information they receive.		Simplify: Simplifying entails removing hassles and steps to an action. The more hassles and steps involved, the more mental and physical energy it takes to complete an action. Actions that are mentally easy are more likely to be completed..

	Planning: Detailed planning helps people follow steps to complete a process and achieve a goal. The more concrete a plan, the better. One type of planning is called mental contrasting implementation intention—when someone plans what could go wrong, hurdles they could face, and ways to overcome them, in addition to planning steps to achieve a goal.		Social coordination and social proof: We are strongly influenced by other people—we consciously and unconsciously mimic each other. We might do this because we do not know which option is best in a situation, so we let others' behavior guide us, or because we think people will look more favorably on us. Social coordination occurs when we can see others' behavior, whereas social proof is actively providing people with clear information on what other people are doing.

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Iterative Virtual Structure

The workshops were initially planned as three-day in-person workshops to be held in each region: Nairobi, Kenya (Anglophone Africa); Marrakech, Morocco (Francophone Africa); Delhi, India (Asia); and Washington, D.C. (United States). However, the workshops were shifted to a virtual format due to COVID-19 restrictions on travel and meetings. The virtual workshop structure mirrored the original structure with similar sessions and session objectives. To allow for flexibility with participants' schedules during the pandemic, virtual workshops were structured to occur over the course of four weeks, with two to three sessions per week, taking four to six hours per week (see Appendix 2 for the workshop agenda).

Google Drive, Google Docs, and Google Slides were used throughout the virtual workshop as the main platforms for facilitation and collaboration. Participants accessed resources from a hyperlinked agenda and during team sessions they worked in the same slide deck simultaneously. All meetings were convened through Zoom and each team also had a facilitated WhatsApp group and one-on-one chats to answer questions and provide reminders on scheduling and deadlines.

Because this was the first virtual co-creation workshop held in the KM and FP/RH community, the workshop team built in rapid feedback mechanisms and planned for the potential to adapt the structure. Additionally, workshop start dates were sequenced to allow for modifications as needed. Participants in the first three workshops were asked to complete a short survey each week to provide feedback on the time they spent completing workshop activities, if they understood and followed along with the activities, any challenges they faced, and any other feedback. Feedback from the first workshop, Anglophone Africa, was overall very positive but led to multiple changes in the structure of that workshop and

This was the first time a virtual co-creation workshop was held in the KM and FP/RH space.

subsequent workshops. Feedback from the second and third workshops was also very positive and did not reveal a need for additional major changes. Modifications are detailed below:

- A key change based on feedback from at least one team in the first workshop revealed that group sessions guided by the facilitators were preferred, so non-guided group sessions were dropped for the remainder of the workshops, with the exception of a session for teams to work on building their prototypes near the end of the workshop.
- Feedback from the first workshop also indicated that pre-scheduled sessions that met at the same time each week and for the same duration were preferred. For example, Monday and Thursday sessions for two hours were preferred to a more flexible schedule that could change each week.
- The workshop team determined that the initial journey map activity did not provide rich enough data on how participants were finding, using, and sharing information. Therefore, the KM profile activity was created. After a successful pilot toward the end of the first workshop, the KM profile activity was used in subsequent workshops.
- Based on observations that the Anglophone Africa participants were not fully comfortable with the workshop platforms of Google Docs, Google Slides, and Zoom, a pre-workshop session was added to the Francophone Africa and Asia workshops to guide participants through activities to become more comfortable with the platforms. The session also covered administrative topics, freeing up time in the plenary and first team sessions to delve deeper into workshop content.

The fourth workshop, for U.S.-based professionals, was limited to two half-days because participants indicated during the invitation process they did not have the flexibility and time to devote four to six hours per week over a four-week period to a virtual workshop. Additionally, because many U.S.-based participants were familiar with design thinking and in some cases with BE, the workshop was envisioned and referred to as a "design sprint." It focused less on introducing the principles and background of design thinking and instead focused on guiding participants through the co-creation process faster than the other workshops, but with many of the sessions covering the same activities. Appendix 2 summarizes the sessions from each regional workshop, their structure and duration, and how they varied between workshops.

Key Findings

Empathize

KNOWLEDGE MANAGEMENT PROFILES

Both KM profiles and journey maps aimed to understand the participants' daily experiences in key areas of KM, with the KM profiles seeking information in a more structured way than the journey maps. The journey maps varied significantly between individuals, were more project-oriented than KM-oriented, and provided summary information about overall experiences rather than detailed information. These differences made comparisons between findings from the Anglophone Africa region and other regions more difficult. As a result, the journey maps produced in the Anglophone Africa workshop are not included in our analysis.

Insights from the KM profiles developed in the three subsequent workshops were, however, used to develop summary journey maps to synthesize the experiences of FP/RH professionals with seeking, sharing, and using information, and major trends by job role and region.

The KM profiles were analyzed using qualitative stripping grids, whereby information was entered in a spreadsheet and compared by gender, region, and job role. The KM profiles completed in French were translated before analysis. From this analysis, several key insights were found, summarized below by job role and region. No clear gender differences in FP/RH professionals' KM experiences emerged from the analysis.

The proportion of people in assigned job roles varied by region. For example, 9 of 20 participants (45%) from the Asia workshop were program managers, whereas only 3 of 19 participants (16%) from the Francophone Africa workshop were program managers. It was therefore difficult to conclusively assign any similarities or differences from the KM profiles to factors related to region or job role.

ANALYSIS BY JOB ROLE

The journey maps summarize KM behaviors, barriers, and levers faced by program managers, technical advisors, decision makers, and conveners—the four primary audience groups. Appendix 3 includes summaries of the main similarities and differences in KM behaviors and barriers among the professional groups.

Program Managers

- Seeking information. Program managers often search for information containing monitoring and evaluation data from national surveys, evaluations, and learnings from other programs.

Similar to the other job roles, program managers search for this information on the internet but also through WhatsApp, literature reviews, and specialized data sources such as information management systems. They are often able to find the information they need and noted that there are more ways to access information through the internet and other technologies now than in the past. Challenges include difficulties finding high-quality information and a lack of funding to collect routine information.

- Sharing information. Similar to other job roles, they also primarily share information digitally through email and in-person events. However, they also face several challenges when sharing information including limited financing, availability and quality of sources, and a lack of prioritization and ownership for FP/RH.
- Using information. Program managers primarily use information to raise awareness, for advocacy, and to inform project design and monitoring. However, they face challenges related to using information including lack of resources, institutional reluctance to implement findings, and cultural challenges regarding family planning.

Program managers noted that there are more ways to access information through the internet and other technologies now than in the past.

Technical Advisors

- Seeking information. Technical advisors often search for contextualized global or national information to inform and improve FP/RH programs and practices. Similar to the other job roles, technical advisors search for this information on the internet and through their social networks, but they also seek information from research. Technical advisors find that the type of information they seek is often available, but challenges include lack of time, poor-quality data, connectivity issues, and access barriers such as language constraints and paywalls.
- Sharing information. They primarily share information digitally through email or electronic mailing lists but also through in-person meetings and social media. Collaborations with others allow them to stay up to date and share relevant information, but challenges to sharing information include lack of time and not knowing if the information shared will be used.
- Using information. Technical advisors primarily use information to inform decision making among donors and internal program management and design. They use information to gain new perspectives regarding effective practices but face challenges in applying lessons due to low-quality or uncontextualized data.

Conveners

- Seeking information. Conveners often search for advocacy information, program design information, and implementation information to inform policy. Similar to the other job roles, conveners search for this information on the internet and through their social networks. Coordination among partners makes seeking information easier, but access to quality data poses a barrier.
- Sharing information. Conveners tend to curate information for different audiences but they often do not have time, financial resources, or adequate connectivity to share information.
- Using information. They primarily use information for advocacy and awareness raising. Conveners noted that decision makers have the political will to use evidence and that these collaborations lead to opportunities to learn from others. However, challenges in measuring

how information is used, lack of completeness of information, and social norms on family planning can pose barriers to using information.

Decision Makers

- Seeking information. Decision makers often search for information to inform program design and implementation and to stay up to date on trends and new developments in the field. Similar to the other job roles, decision makers search for this information on the internet but also through experts and internal program sources. They noted having access to a wealth of high-quality information and that partnerships with others support them to find the information they need. However, they often have to spend a significant amount of time sifting through old or poor-quality information before finding what they are looking for and often lack information regarding behaviors.
- Sharing information. Decision makers primarily share information with colleagues, partners, and other stakeholders through email and in-person events. They also noted there are strong platforms to disseminate findings that can help support the development of better output indicators; however, they face challenges when sharing information such as cognitive and choice overload, connectivity issues, cultural considerations, and quality concerns.
- Using information. Decision makers primarily use information for decision making, program planning, and advocacy to strengthen capacity and uphold FP/RH commitments. However, challenges to using information include poor-quality data, lack of relevant "how to" information, and lack of human and financial resources.

Decision makers indicated several challenges to using information in their programs including poor-quality data and lack of relevant "how to" information.

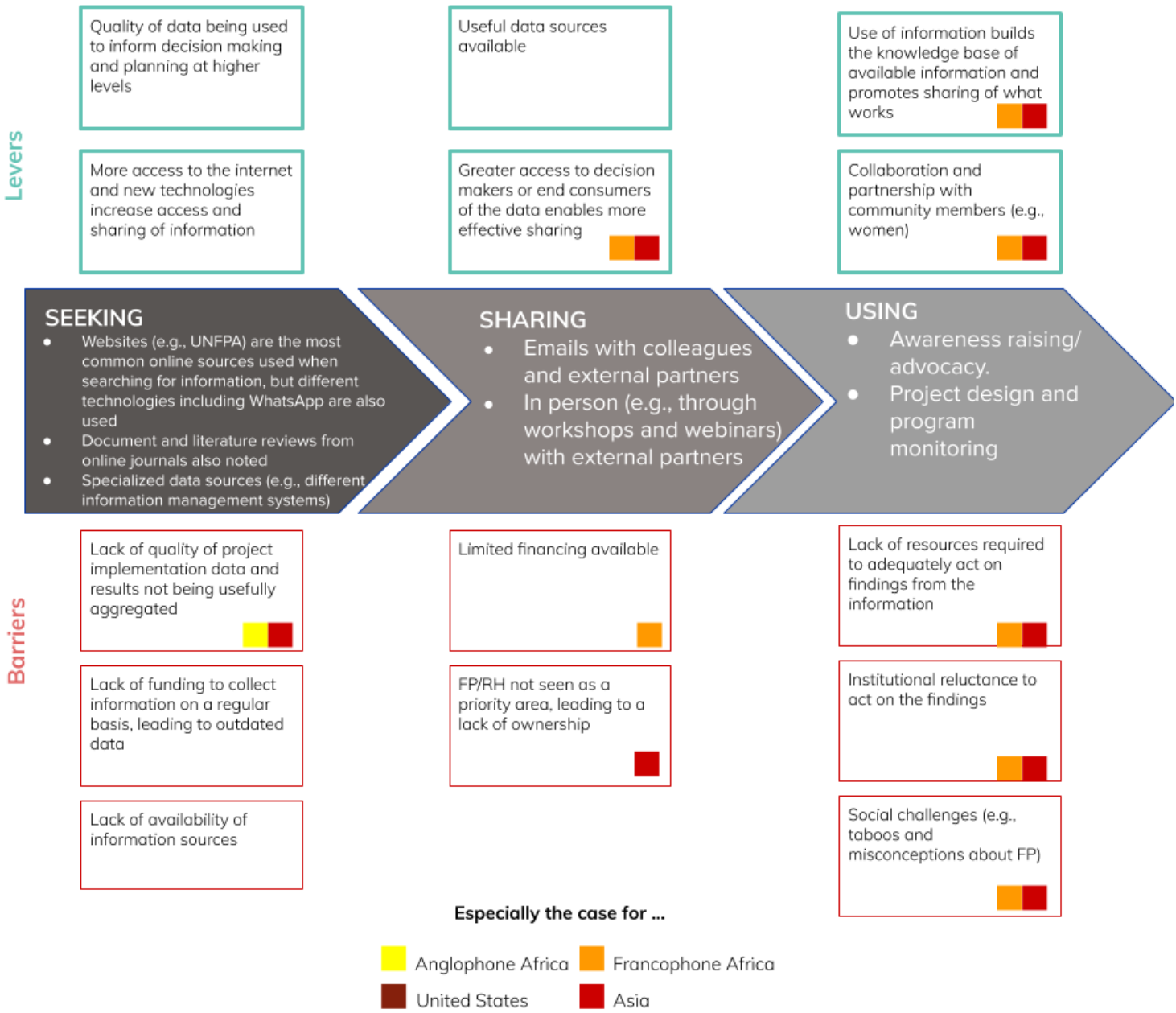
Program Managers

Manage FP/RH programs

Types of information they seek:

- Monitoring and evaluation data
- Evaluations of other programs
- National quantitative surveys

n=16



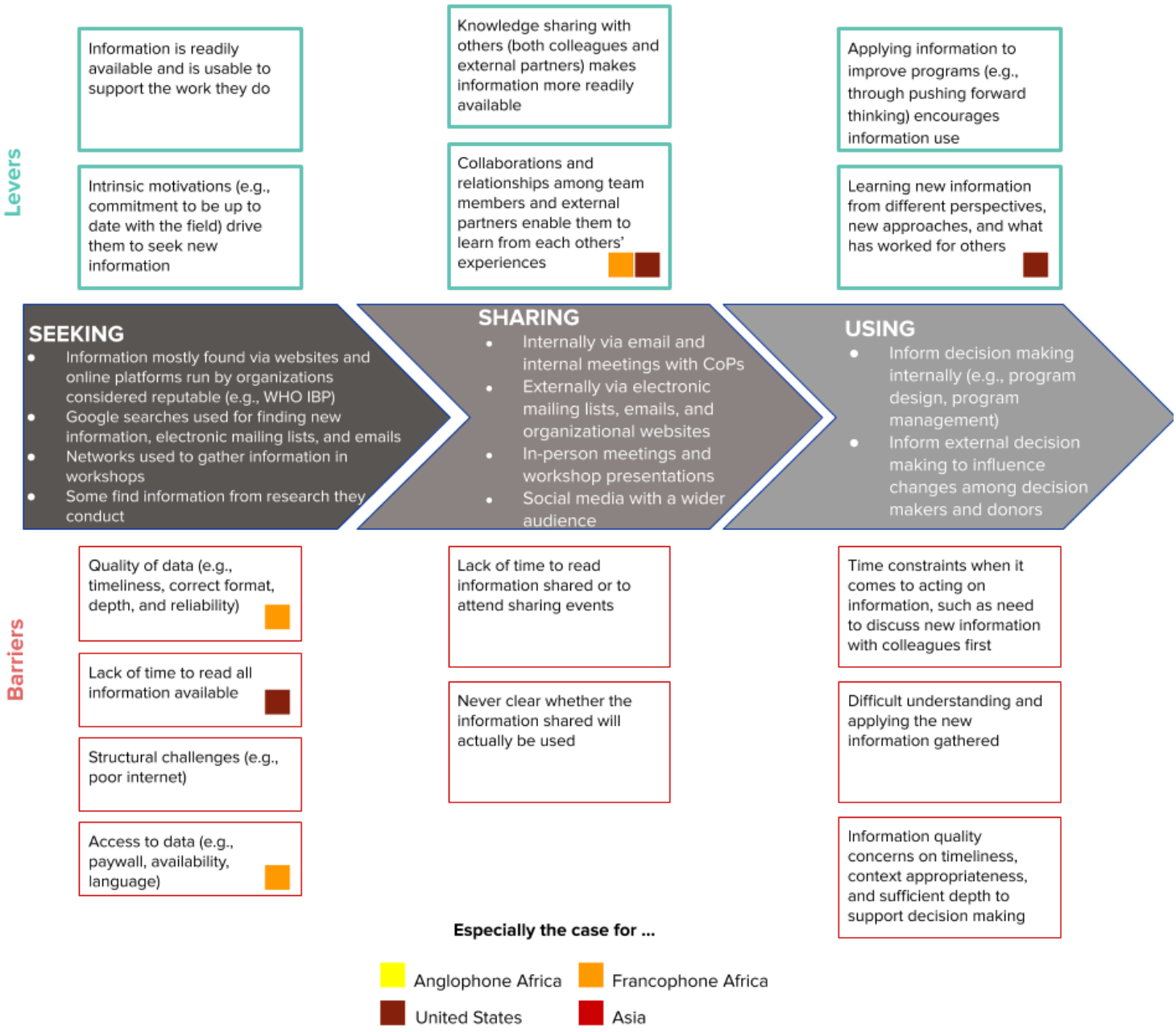
Technical Advisors

Provide strategic guidance to FP/RH programs

Types of information they seek:

- Global and national-level information on context.
- Program design information (e.g., best practices).
- Information on sector practices (e.g., guidelines and handbooks).

n=17



Conveners

Foster partnerships and collaboration among FP/RH stakeholders

Types of information they seek:
- Advocacy information (e.g., best practices and case studies)
- Program design information (e.g., access to contraceptives and perceptions in target areas)
- Implementation information (e.g., policies and high-impact practices)

n=5

Levers

- Coordination among different partners increases access and availability of information
- Desire to better inform policy formulation
- Coordination allows for the prioritization of information sharing across different platforms
- Willingness of partners to support organizations encourages them to share information
- Better curation of information makes it relevant for different audiences
- Political will among decision makers to use evidence
- Using information creates collaboration and is an opportunity to learn from the success of others

SEEKING
- Websites are most popular places they seek information (e.g., FP2020), followed by their social networks, which interact through different digital platforms

SHARING
- Digital mediums (e.g., email, social media, organizational platforms)
- In person through events and conferences

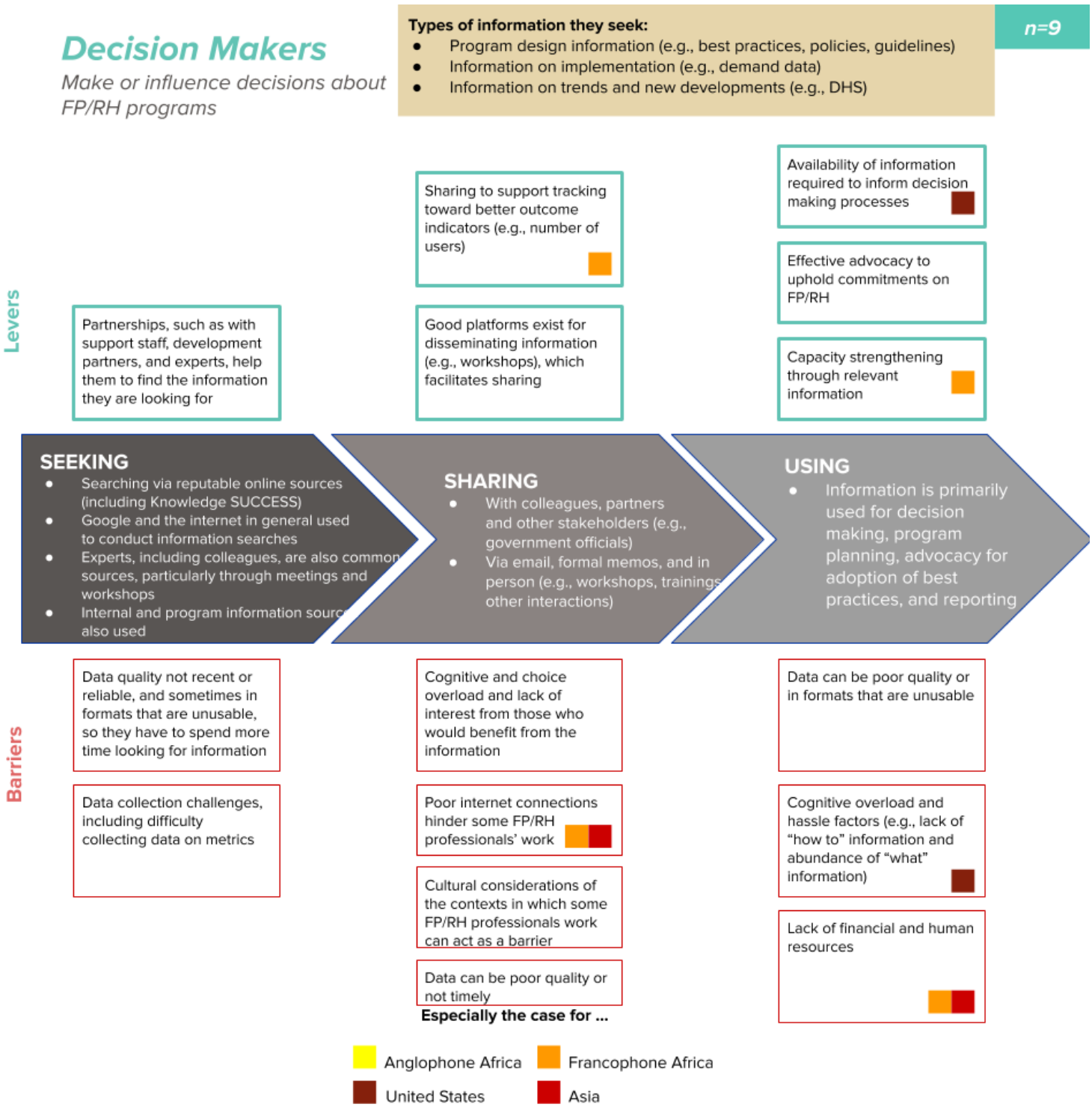
USING
- External communications for advocacy targeting decision makers
- Awareness raising, behavior change communication, and sharing success stories

Barriers

- Poor data quality, out-of-date data, incomplete data, or insufficient data
- Inaccessible data at time (not all stakeholders given access to important data)
- Lack of resources (both financial and time)
- Lack of connectivity and access to electronic platforms
- Difficulty measuring both uptake of information shared and the success of adaptive learning from information shared
- Lack of completeness of information (particularly data) makes it difficult to use information as desired
- FP/RH remains a taboo subject in some contexts

Especially the case for ...

Anglophone Africa
Francophone Africa
United States
Asia



ANALYSIS BY REGION

In addition to analyzing similarities and differences between job roles, we sought to understand how KM behaviors, barriers, and levers differed by geographic region. Appendix 4 includes summaries of the main similarities and differences in KM behaviors and barriers among the different regions.

Anglophone Africa

- Seeking information. Participants from Anglophone Africa primarily seek information related to the national FP/RH context, the work of other organizations, and implementation data through the internet, phone, conferences, ministry protocols, national databases, or literature searches. Fortunately, online and offline information is available and there are resource persons that serve as sources of information. However, limited resources to conduct detailed searches, paywalls, lack of specific data/lessons learned, and positive bias in project reports pose barriers.
- Sharing information. Anglophone Africa participants tend to share project updates and new guidelines with health care workers, project staff, senior management, government, and donors through reports, presentations, and meetings. Increased internet access and collaborations have made it easier to share information; however, poor attendance at sharing meetings, poor internet connectivity, and lack of time and financial resources for KM pose barriers.
- Using information. Anglophone Africa participants use information to assess progress, inform and refine programming, and advocate and report to donors and the government. Buy-in from partners, accurate information for decision making, and information on project progress support the use of information, but limited funding, lack of digital culture, lack of packaged information, and the need to justify one's existence as an organization pose barriers to using information.

Asia

- Seeking information. Participants from Asia primarily seek information on the national FP/RH context and programs through primary data collection or quantitative data, and technical guidelines found via the web, national networks, and personal contacts. Internet and technology have improved their access to data and information; however, barriers to seeking information include information being old, inaccurate or not specific enough, data sets require doing individual analysis, a lack of skilled personnel able to use existing technologies, and paywalls.
- Sharing information. Participants from Asia tend to share project updates and new guidelines internally with their teams, regional offices, and senior management through meetings, informal conversations, and emails. Collaborations support information sharing, but lack of internet connection, siloed work streams, and lack of financial resources for KM pose barriers to sharing.
- Using information. Participants from Asia use information for program design and improvement to review program progress and inform strategy development. A strong desire to learn and the availability of FP/RH indicators support the use of information. However, cultural barriers and reluctance to try something new pose barriers to using information.

Francophone Africa

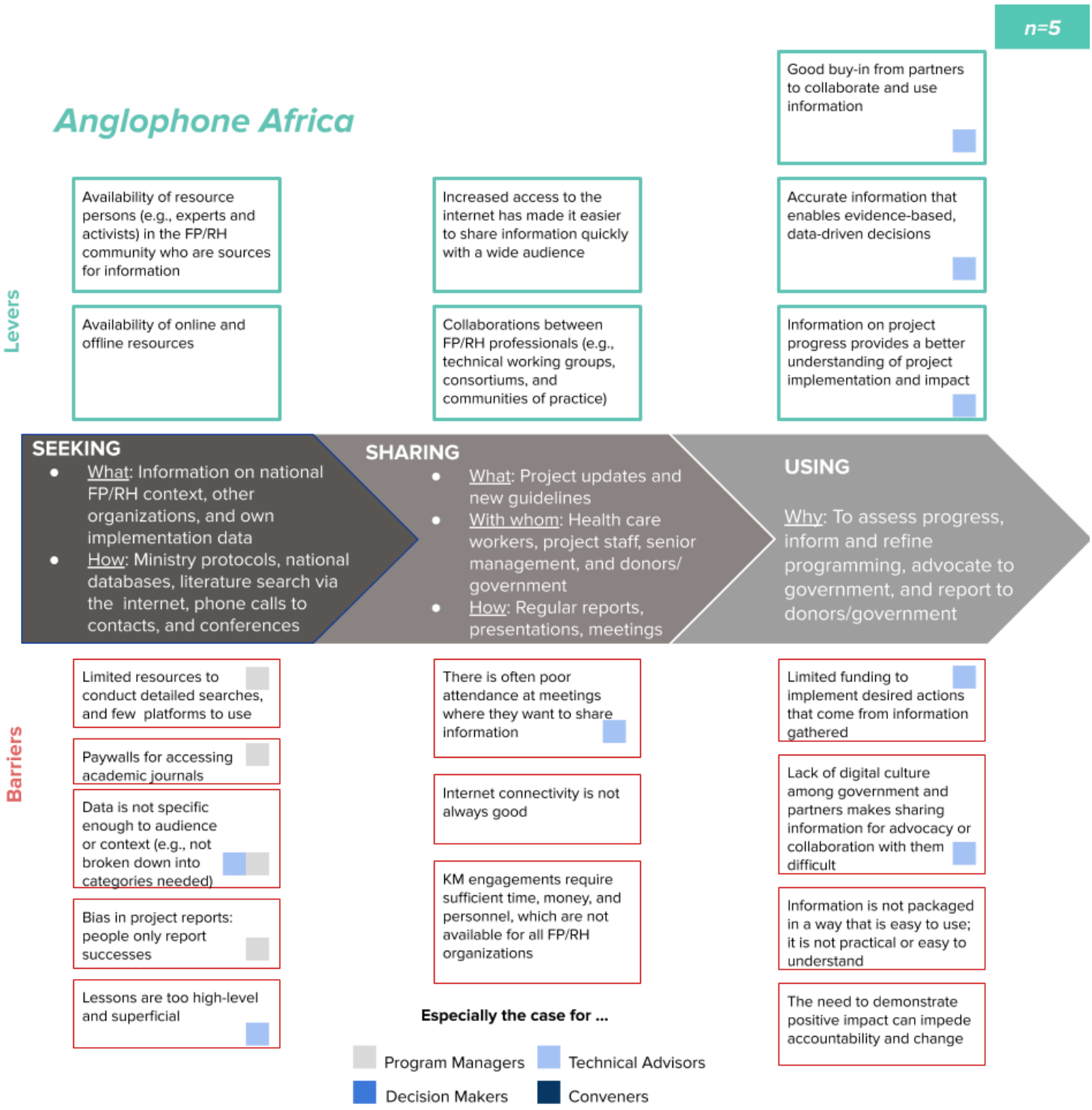
- Seeking information. Participants from Francophone Africa primarily seek information on the FP/RH context in their country through quantitative data and national strategies found via the internet, personal contacts, or other informal channels. Fortunately, this type of information is accessible online; however, data are often incomplete, old or not specific enough, information is not available in French, and many people do not have internet outside of the office, which makes seeking information a challenge.
- Sharing information. Participants from Francophone Africa often share information on

needs and solutions with policy makers and community members through word of mouth. Coordination between partners/experts, recognition for sharing information, and awareness of the importance of documentation support sharing behaviors. However, social norms regarding FP/RH, sharing in non-technical formats, lack of funding for dissemination, and lack of incentives to share what does not work are challenges.

- Using information. Participants from Francophone Africa often use information for advocacy and to design, improve, and evaluate programs. Using international standards to develop programs, the prospect of being published, and using information to resolve problems all support the use of information. However, barriers include not knowing if the knowledge shared will be used, lack of priority to use evidence to inform programs, and a reluctance to change among traditional leaders and decision makers.

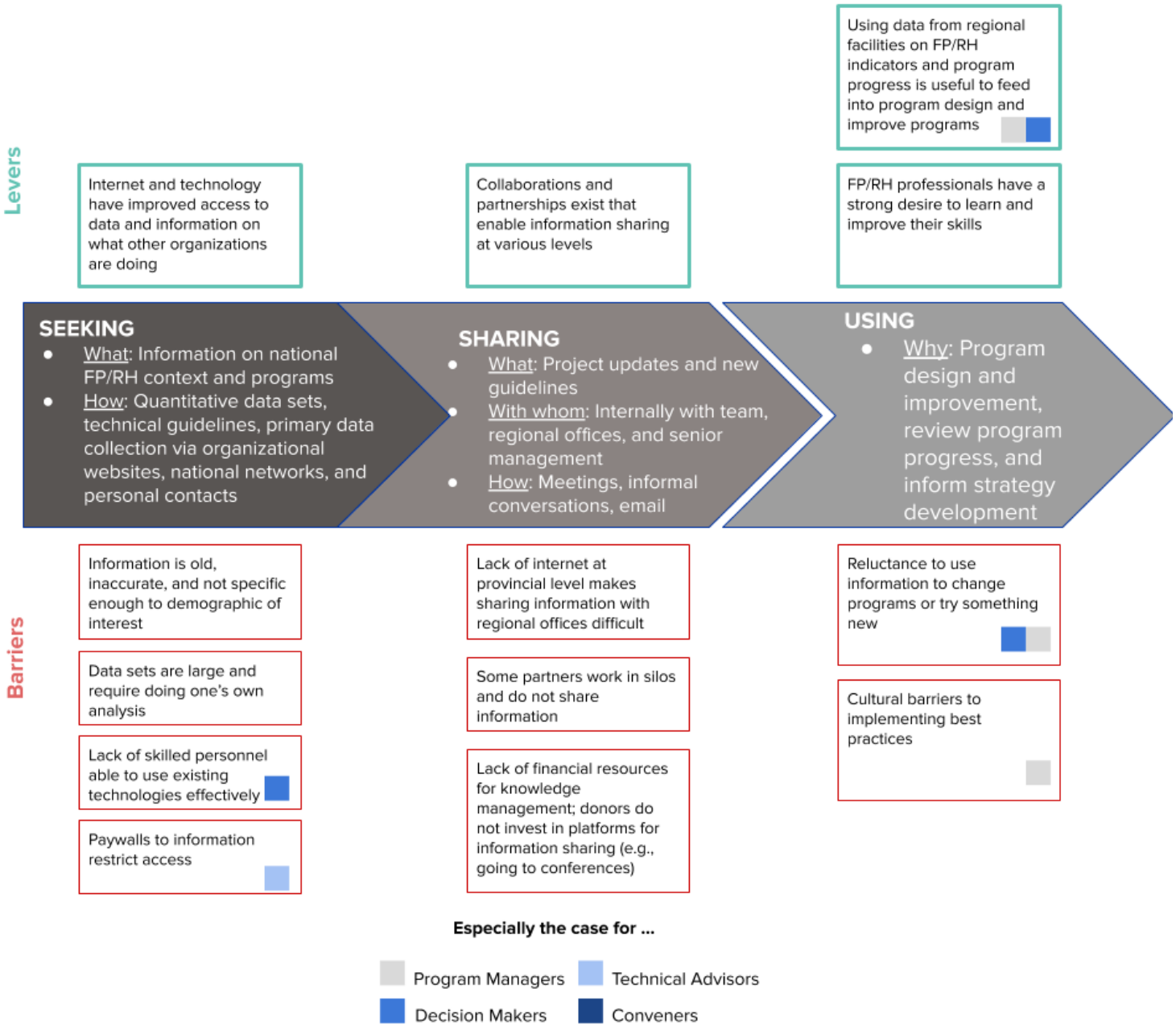
United States

- Seeking information. Participants from the United States often seek success stories, program data, best practices, and innovations from global partners through verbal or written updates, conferences, electronic mailing lists, and various websites. Fortunately, coalitions exist for information sharing, experts are often willing to collaborate and help, and there is a wealth of open-access information. However, challenges to seeking information include the overwhelming quantity of information, length of information, level of technicality, lack of practical use, dearth of information from smaller partners, lack of time, and the need to continuously search for information from the same sources.
- Sharing information. Participants from the United States primarily share information on program activities and lessons learned through meetings, social media, conferences, and email. Positive feedback from others, systems to vet information for accuracy, support for information sharing, and donor investments in KM all support the sharing of information. However, barriers include the quantity of webinars and reports, language, not knowing who is interested in the information, lack of time, and the need to ensure information is accurate before sharing.
- Using information. Participants from the United States use information for external communication, advocacy, fundraising, and promoting best practices through written and verbal formats. Working in a continuously evolving field, using evidence and data to improve programs, and opportunities to learn and partner encourage the use of information. However, language barriers, too much information, too little time, reluctance to incorporate new information, and trusting the validity of information pose barriers to the use of information.


n=5
Anglophone Africa
Levers
Availability of resource persons (e.g., experts and activists) in the FP/RH community who are sources for information
Availability of online and offline resources
Increased access to the internet has made it easier to share information quickly with a wide audience
Collaborations between FP/RH professionals (e.g., technical working groups, consortiums, and communities of practice)
Good buy-in from partners to collaborate and use information
Accurate information that enables evidence-based, data-driven decisions
Information on project progress provides a better understanding of project implementation and impact
SEEKING
What: Information on national FP/RH context, other organizations, and own implementation data
How: Ministry protocols, national databases, literature search via the internet, phone calls to contacts, and conferences
SHARING
What: Project updates and new guidelines
With whom: Health care workers, project staff, senior management, and donors/ government
How: Regular reports, presentations, meetings
USING
Why: To assess progress, inform and refine programming, advocate to government, and report to donors/government
Barriers
Limited resources to conduct detailed searches, and few platforms to use
Paywalls for accessing academic journals
Data is not specific enough to audience or context (e.g., not broken down into categories needed)
Bias in project reports: people only report successes
Lessons are too high-level and superficial
There is often poor attendance at meetings where they want to share information
Internet connectivity is not always good
KM engagements require sufficient time, money, and personnel, which are not available for all FP/RH organizations
Limited funding to implement desired actions that come from information gathered
Lack of digital culture among government and partners makes sharing information for advocacy or collaboration with them difficult
Information is not packaged in a way that is easy to use; it is not practical or easy to understand
The need to demonstrate positive impact can impede accountability and change
Especially the case for ...
Program Managers
Technical Advisors
Decision Makers
Conveners

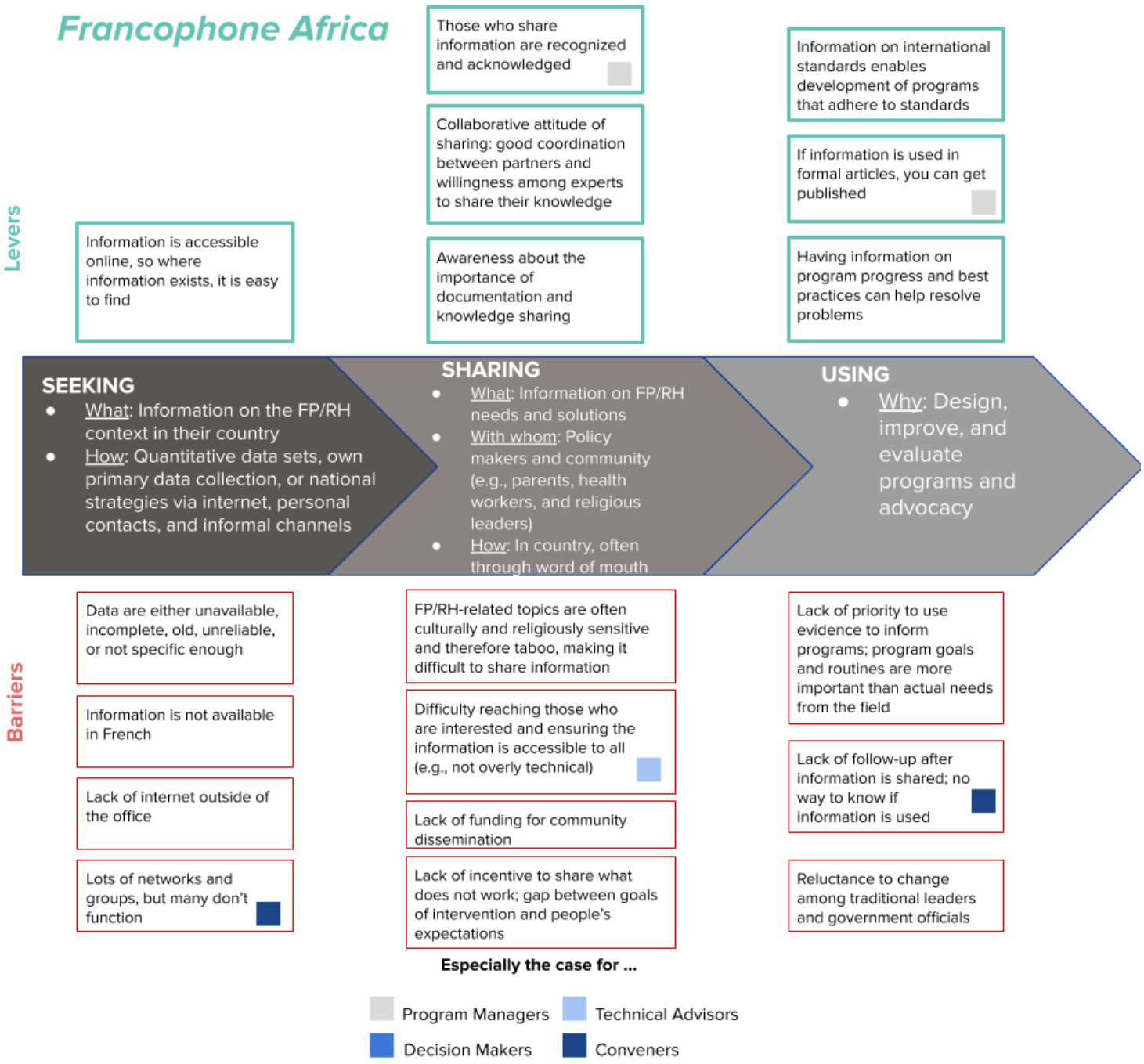
n=16

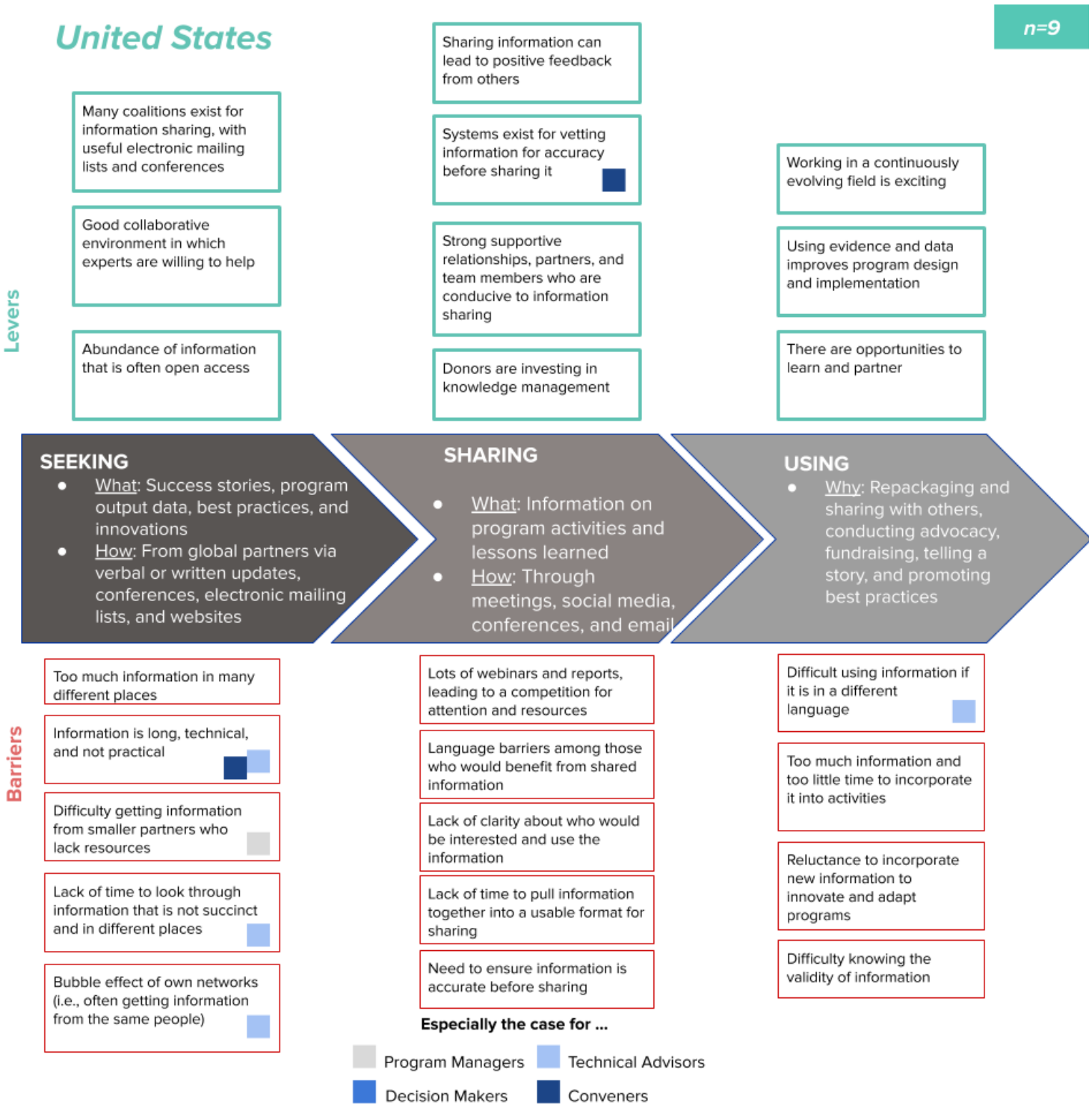
Asia


Levers
Internet and technology have improved access to data and information on what other organizations are doing
Collaborations and partnerships exist that enable information sharing at various levels
Using data from regional facilities on FP/RH indicators and program progress is useful to feed into program design and improve programs
FP/RH professionals have a strong desire to learn and improve their skills
SEEKING
What: Information on national FP/RH context and programs
How: Quantitative data sets, technical guidelines, primary data collection via organizational websites, national networks, and personal contacts
SHARING
What: Project updates and new guidelines
With whom: Internally with team, regional offices, and senior management
How: Meetings, informal conversations, email
USING
Why: Program design and improvement, review program progress, and inform strategy development
Barriers
Information is old, inaccurate, and not specific enough to demographic of interest
Data sets are large and require doing one's own analysis
Lack of skilled personnel able to use existing technologies effectively
Paywalls to information restrict access
Lack of internet at provincial level makes sharing information with regional offices difficult
Some partners work in silos and do not share information
Lack of financial resources for knowledge management; donors do not invest in platforms for information sharing (e.g., going to conferences)
Reluctance to use information to change programs or try something new
Cultural barriers to implementing best practices
Especially the case for ...
Program Managers
Technical Advisors
Decision Makers
Conveners

n=17

Francophone Africa





MANIFESTATIONS OF BEHAVIORAL ECONOMICS MECHANISMS BY REGION

Three BE mechanisms were identified as recurring themes that manifested in FP/RH professionals' work across Anglophone Africa, Francophone Africa, and Asia (Table 4). (Data from U.S.-based participants are not available due to the different design sprint format.)

Cognitive overload was the most common BE barrier that FP/RH professionals identified.

TABLE 4. COMMON BEHAVIORAL ECONOMICS MECHANISMS IDENTIFIED DURING WORKSHOPS BY REGION

Behavioral Economics Mechanism	Definition	Anglophone Africa	Asia	Francophone Africa
Cognitive overload	A situation where too much information is given simultaneously so that it exceeds the cognitive processing capability of the individual.	Too much dense information that is difficult to digest.	Too much dense information that is difficult to digest. Large amounts of quantitative data that needs one's own analysis.	Too much information in a language that is difficult to process.
Learning styles	How individuals prefer to receive information, which can influence how well they are able to internalize, understand, and even act on the information they receive.	Lack of information for oral or visual learners (e.g., infographics or visuals).	Lack of information for oral or visual learners.	Results in people all sharing information in different ways.
Status quo bias	A psychological preference for the current state of affairs.	N/A	Aversion to program and organization changes.	Aversion to program and organization changes.

LEARNING STYLE PREFERENCES

Combined learning style survey scores were calculated by summing the scores for each participant and calculating the distribution as a percentage. Findings from the survey were also used to draw comparisons between the preferred learning styles by region as shown in the following charts.

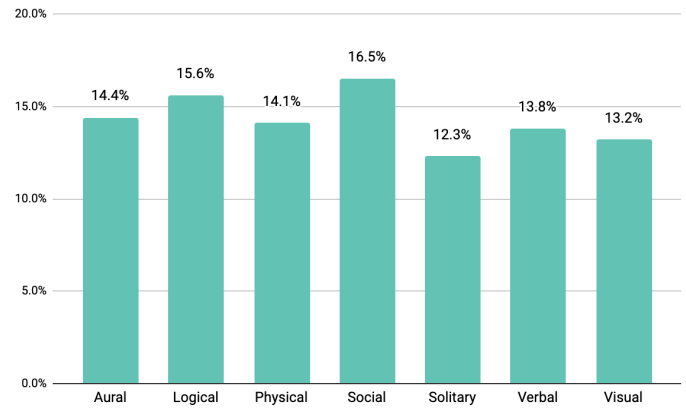
Some regional distinctions are of interest, although the differences are not large and therefore may not be significant. Regional differences in learning styles include the following:

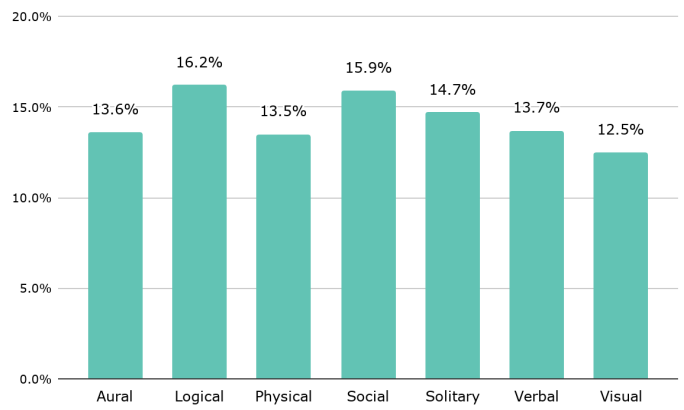
- African participants had a high preference for the social learning style (16.5% in Anglophone Africa and 15.9% in Francophone Africa), compared with U.S. participants who had a strong

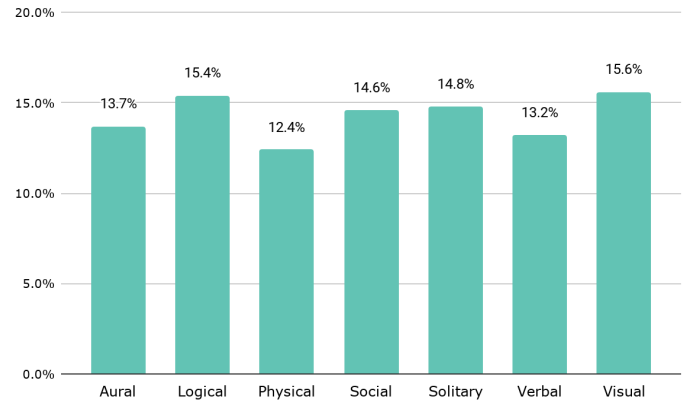
preference for the solitary learning style (17.5%).

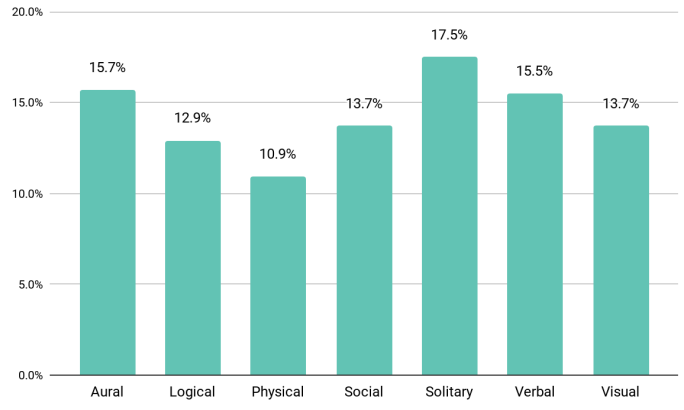
- The logical learning style, which ranked as either the first or second preferred learning style for participants from Asia, Anglophone Africa, and Francophone Africa, was ranked second lowest among U.S. participants.
- The visual learning style, which ranked highest for Asian participants (15.6%), ranked among the bottom three for all other regions.
- The physical learning style was the least preferred learning style among Asia and U.S. participants and the second least preferred among Francophone Africa participants.
- Verbal learning, a preference for information that is displayed as words and text, was among the least preferred learning styles for participants from Africa and Asia. However, it was the third most preferred learning style for U.S.-based participants.

Preferred Learning Styles of Respondents by Region









Define

During the rose, bud, thorn (positives, opportunities, challenges) and affinity clustering activities, five key themes emerged across all four workshops: (1) information availability and accessibility; (2) collaboration and partnerships; (3) work environment; (4) human resources; and (5) financing, policies, and programmatic issues (Table 5).

FP/RH professionals across regions commonly cited challenges with finding detailed information on best practices, context, and lessons from failures.

TABLE 5. POSITIVES, OPPORTUNITIES, AND CHALLENGES IN KM FOR FP/RH PROGRAMS

Positives (Roses)	Opportunities (Buds)	Challenges (Thorns)
INFORMATION AVAILABILITY AND ACCESSIBILITY		
• Information on FP/RH has become increasingly accessible and available (Anglophone Africa, Asia, United States). • There is increased awareness of the importance of KM among FP/RH stakeholders (Francophone Africa). • There is a growing willingness among individuals and institutions to share best practices (Asia, United States).	• Research in FP/RH is creating a stronger evidence base (Anglophone Africa). • There is still potential to fully use and translate existing data into action (Anglophone Africa). • Simplifying or synthesizing data and information can make it more contextual and relevant and timely, and can ensure data quality helps promote use (Asia, United States). • Standardizing tools can help improve documentation of best practices and evidence (Francophone Africa).	• Best practices are not always comprehensively documented, contextualized, or packaged in a way that is easy to use (Anglophone Africa, Francophone Africa, United States). • Lack of information on what does not work (Anglophone Africa, Asia, United States) • Too many information sources (Anglophone Africa, Francophone Africa, Asia, United States). • Data/information is sometimes behind paywalls (Anglophone Africa, Francophone Africa, Asia). • Lack of timely and reliable information (Asia). • Lack of resources in French (Francophone Africa, United States). • Lack of Asia-specific information (Asia). • Some information “disappears” because it is not fully documented or shared (United States). • Concerns over the ethical use of data and preference by some for evidence from Western countries (Asia, United States). • Organizational practices that do not support the growth of KM in FP/RH,

		such as the fear of sharing failures (Asia, United States).
COLLABORATION AND PARTNERSHIPS		
• Sharing and collaborations are currently taking place among individuals and organizations, in formal and informal networks (all regions).	• Significant opportunities to expand collaborations, including through virtual mediums such as Zoom (all regions).	• Difficulties with harmonizing partner approaches (Francophone Africa, Asia). • Reluctance to share information due to competition for donor funding (United States).
WORK ENVIRONMENT		
• Increased awareness of the importance of KM has translated to more readily available resources in the field (Anglophone Africa). • Increased willingness from senior management and donors to adopt innovative approaches to improve programs (Asia and United States).	• Information sharing technology is now frequently available for professionals (all regions).	• Organizational culture hinders accountability and innovation, such as projects possibly perpetuating biased results for continued funding (Anglophone Africa). • Lack of sufficient funding for program design and implementation (Asia). • FP/RH is still considered taboo in some environments (Asia).
HUMAN RESOURCES		
• Increasing number of KM professionals in the FP/RH community who are helping to ensure documentation and dissemination of lessons learned (United States). • FP/RH professionals have strong intrinsic motivations to manage and learn how to improve programs (United States, Asia). • Data collection capacity is increasingly available (Francophone Africa).	• Opportunities for learning to strengthen capacity for KM, which can build upon intrinsic motivation (Francophone Africa). • The addition of new voices, such as youth, strengthens the resources available to the field and may change how knowledge is perceived and weighted (United States).	• Challenges still remain in regard to human resources, and there is still a lack of technical capacity in the field of KM (Francophone Africa). • High attrition rates in the field cause issues with human resources and long-term capacity within organizations (Asia).
FINANCING, POLICIES, AND PROGRAMMATIC ISSUES		

• Increasing commitment to FP/RH at the global level through several international commitments (e.g., Sustainable Development Goals, FP2020) that have translated to more conducive national-level policies (all regions).	• Opportunities to increase collaboration with the private sector, which may open up a new avenue for resource mobilization (Francophone Africa).	• Lack of sufficient funding for FP/RH and KM (Francophone Africa, Asia, United States).

Ideate

HOW MIGHT WE STATEMENTS

Similar HMW statements were generated across the workshops, which focused on making it easier for FP/RH professionals to access the information they needed and use that information to support informed and timely decision making to improve programs. HMW statements were grouped by theme:

- Access: Statements focused mostly on gaining access to key resources and in real time, especially through improved information sharing and better institutional documentation.
- Use: Statements focused on enhancing the use of evidence and best practices by making it a priority for FP/RH professionals and revitalizing collaboration among professionals.
- Decision making: Statements focused on enhancing both informed and timely decision making by increasing access to relevant information that is accurate and reliable.

How Might We Statements by Major Theme

		
ACCESS *to key resources, in real time* by: • Revolutionizing sharing practices • Reimagining documentation by institutions • Reimagining the user experience • Including diversity of voices, ideas, evidence, and learnings	**USE** *of evidence and best practices* by: • Prioritizing the use of best practices • Revitalizing collaborations/ coordination • Reimagining the user experience • Leveraging cultural and social norms	**DECISION MAKING** *that is informed and timely* by: • Revolutionizing the way we access information from different sources • Reimagining access to accurate and reliable information

	• Including diversity of voices, ideas, evidence, and learnings	

IDEATION

Most teams in each workshop generated more than 50 ideas, or potential solutions, to address their HMW statements. This amounts to about 650 ideas in total across the four workshops, although many of these ideas were similar in nature or overlapped with other ideas. At this stage in the design thinking process, the potential solutions are not very detailed because only prioritized solutions are developed during the next prototyping stage.

Table 6 shows all of the potential solutions that teams ranked highly during their prioritization activities, organized by three key themes that align with the Matrix of KM Tools and Techniques[1]: (1) collecting and curating knowledge, (2) connecting people to that knowledge, and (3) strengthening KM culture and capacity.

The hundreds of KM solutions generated by co-creation teams centered on curating knowledge, connecting people to that knowledge, or strengthening KM culture and capacity.

Collecting and curating knowledge: Teams wanted to create new and improved dynamic hubs that would collect and curate key information needed to improve FP/RH programs. These solutions included:

- Publishing approaches that share explicit knowledge with large groups of people.
- Searching approaches that enable people to pull the information they need, when they need it.

Connecting people to knowledge: Teams also incorporated interactive components to enable FP/RH professionals to connect with each other, ask questions, and share tacit knowledge. Teams from Africa and Asia focused heavily on these types of solutions. These solutions included:

- Asking approaches that elicit tacit knowledge.
- Telling approaches that convey knowledge to defined groups of people.

Source: Adapted from Barnes & Milton, 2015

Strengthening KM culture and capacity: Finally, teams also generated ideas related to capacity strengthening or mentorship opportunities in KM and nurturing a culture that encourages the

[1] Source: *Building Better Programs: A Step-by-Step Guide to Using Knowledge Management in Global Health* (https://www.kntraining.org/resoures/building-better-programs)

integration of KM into programs, both of which are essential elements for the success of any KM activity.

It is possible for solutions to fall into more than one category, depending on how they are used, but for the purposes of this report we have included each solution under the category with the best fit.

TABLE 6. HIGHLY RANKED KNOWLEDGE MANAGEMENT SOLUTIONS GENERATED BY CO-CREATION TEAMS

	Anglophone Africa	Francophone Africa	Asia	United States
Connecting People to Knowledge: Asking and Telling KM Approaches				
Knowledge Exchange Among Groups				
Virtual platform/network for sharing, such as LinkedIn for best practices, a membership network to access insights, or WhatsApp groups	✓	✓	✓	
FP solutions advisors or multidisciplinary experts to help new implementers start projects or review FP plans for latest evidence			✓	✓
Learning forums, sessions, or workshops at country/regional level	✓		✓	
Communities of practice	✓			
Community of practice management/coordination (ministry of health/regional secretariat)		✓		
Incentives for participation in communities of practice or for sharing data (such as submitting to a repository)		✓	✓	
Knowledge Exchange Between Individuals				
Virtual reality (simulated, computer-generated) interactions to network, connect, and interact	✓		✓	
Exchange visits or regional fellowships to assist or learn from other programs	✓		✓	
Mentoring between senior and junior professionals	✓	✓		
Coordination				
National KM focal point to identify, collect, and share local knowledge		✓		✓
Develop programs in coordination with governments, donors, and civil society			✓	
Framework for collaboration among researchers, professionals, and policymakers		✓		
Steering committee on using data effectively		✓		

Map existing regional data exchanges and sharing		✓		
Collecting and Curating Knowledge: Publishing and Searching Approaches				
Easier-to-Digest Formats				
TED-like talks	✓		✓	
Including audio or video options for evidence/documentation	✓			
Requiring graphics and illustrations in documentation	✓			
Synthesize data tailored to learning style, country, or other needs	✓		✓	✓
Reassess how information is shared and adjust documentation accordingly				✓
Increasing the Knowledge Base				
Highlighting rarely heard community voices to increase the range of knowledge shared				✓
Best practice toolkits or training and tools to document, share, and use practical information	✓	✓	✓	
Anonymous or incentivized stories of failure	✓		✓	✓
Best practice brochures/magazines/journals or certified/branded best practices	✓		✓	
Template for documentation/reporting	✓			
Create/Improve Knowledge and Data Repositories				
Improved or simplified data repository (e.g. Alexa/Siri-like search functions or machine learning to suggest data or autotranslation)		✓	✓	✓
Open or free access to information/data	✓	✓		✓
Innovation hub	✓			✓
Global repository			✓	✓
Country-level repository	✓			
Regional repository	✓			
Simplify existing sharing platforms		✓		
Strengthening KM Culture and Capacity				
KM modules for real-time learning or training for students and professionals on using KM tools	✓	✓	✓	

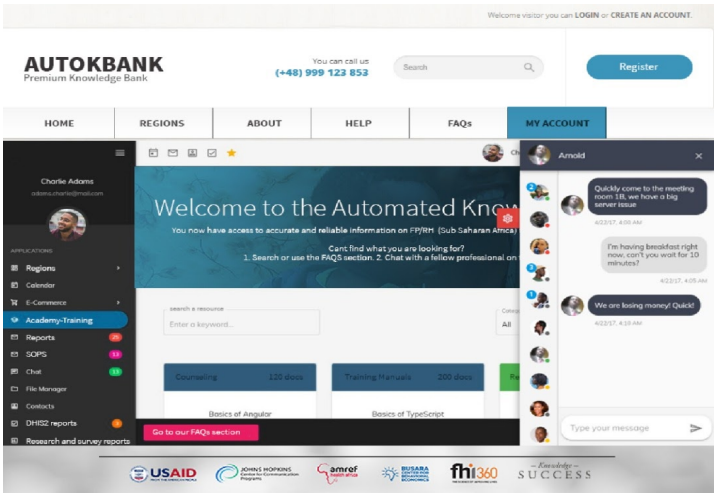
Online skills-strengthening platform		✓		
Capacity strengthening in innovative data approaches		✓		
Sensitization workshops on new KM tools/techniques for stakeholders			✓	
KM budget allocation in grants				✓
Live KM support desk				✓
Regional fund to learn about creation and use of evidence in region		✓		

Prototype and Test

PROTOTYPES

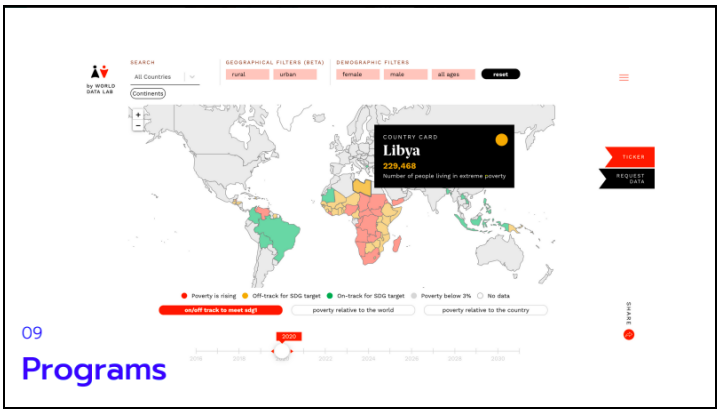
In total, 14 prototypes were created across the four regional workshops. The prototypes and their components discussed in this report are the updated versions of the prototypes, following the initial round of testing that occurred during the final plenary sessions of each workshop.

Anglophone Africa

AutoKBank: A regional web-based knowledge bank with chat features and information dissemination algorithms allowing users to share information and connect others to that information. • Simple design to facilitate quick access and avoid information overload • Focus on regional and country-level information (reports, research, manuals, funders) to ensure relevance • Ability to form networks with different groups of people; requires user registration • FAQs managed by artificial intelligence and machine learning to answer people's questions, supplemented by human interface	

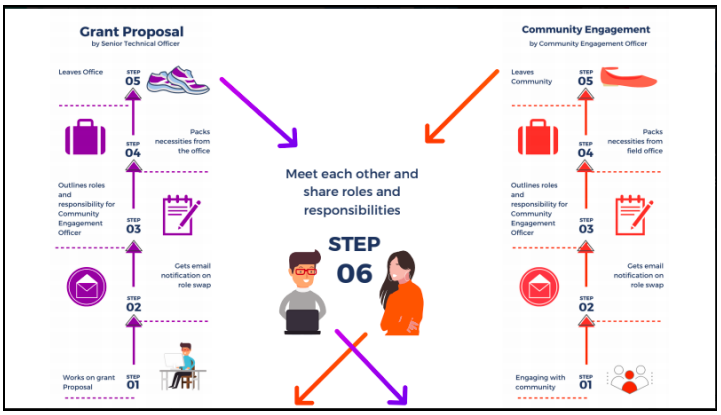
FP Connect: A virtual reality interaction platform.

- Connects users through a virtual space where they can create their own unique avatars, network and connect with each other, find mentors, and collaborate to solve challenges
- Also provides critical information, resources, and training opportunities using a "traffic light" feature to identify projects with similar characteristics (e.g., region, area of focus)
- Includes a map-based interface for users to explore data within specific areas and user information to facilitate collaboration (i.e., other implementing partners in a user's area)



In Their Shoes: An exchange program where two FP/RH individuals—at the senior and more junior level—exchange knowledge, information, and ideas.

- Leverages knowledge of cultural and social norms from FP/RH implementers working at the implementation and community levels to improve programs while strengthening the capacity of those at lower levels of the health system to consider higher-level strategic needs

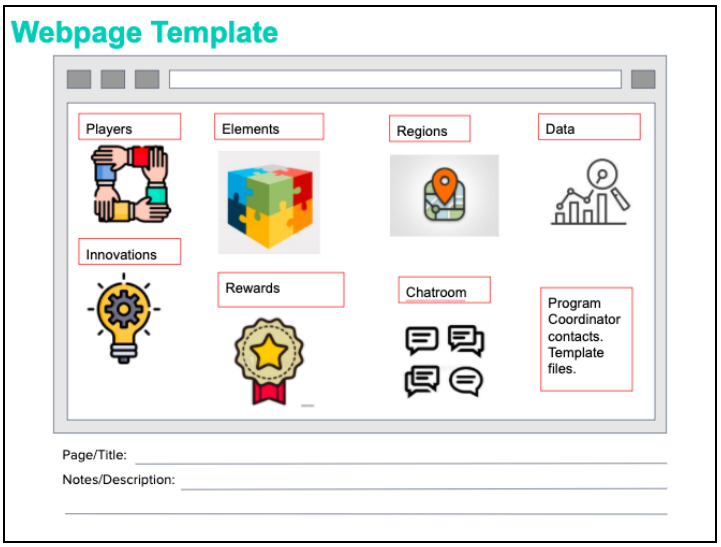


Interactive WhatsApp Groups: Interactive and moderated country-specific WhatsApp groups to provide a space for networking, information exchange, and improved collaboration, which would feed into regional/global WhatsApp groups.

- Includes multiple forms of engagement: "expertly moderated" discussions, discussions around FP/RH information according to a content calendar, sharing links, shared Google Docs, Zoom/Skype calls, webinars, and online conference opportunities
- To make the discussions as timely and relevant as possible, thematic areas will be sourced from online surveys of FP/RH professionals and contributions will be monitored to ensure they stay on topic

Country-level Knowledge Repository: A repository hosted by the ministry of health, coordinated by dedicated staff, and tailored to each country to improve the contextual relevance of information.

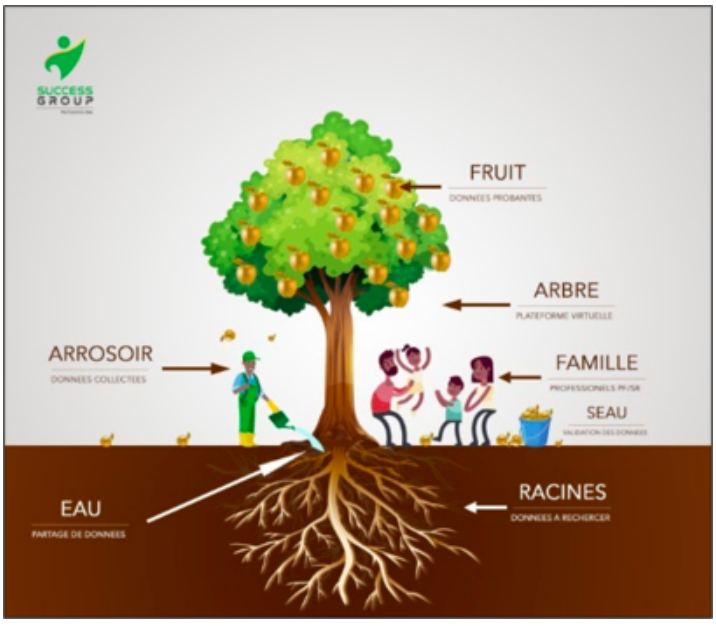
- Includes innovations, ongoing programs, and data presented using a common template, ensuring relevant information while avoiding cognitive overload; also uses visual formats to simplify complex/dense information
- Mapping exercise led by the ministry of health would identify all relevant FP/RH stakeholders in the country to facilitate collaboration and learning, avoid duplication, and solve common challenges
- Chat room, operating like WhatsApp, ensures conversations around current issues and development of partnerships
- "Unsung heroes" in FP/RH rewarded by publicizing their work in other venues such as the media

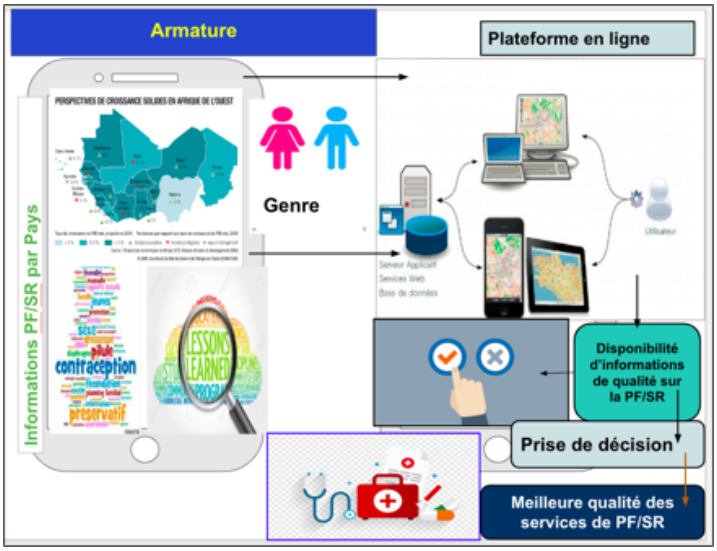


Francophone Africa

Virtual Evidence Platform: A user-driven repository of evidence and best practices that tailors information to multiple learning preferences and increases the quality and relevance of information available.

- Data are collected from communities and processed to ensure they are good quality for FP/RH professionals to use
- A place for FP/RH professionals to find good solutions and take actions that account for community needs

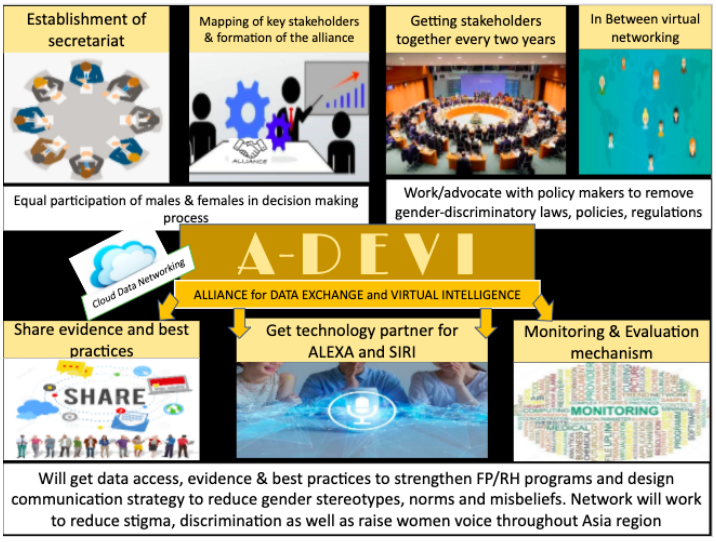


Singular Information Collection Application: A single-entry point to multiple sources of information, evidence, and best practices on all FP/RH interventions to facilitate improved decision making. • Includes information about the context in each country, success stories on programs targeting a range of end users, such as women, men, and youth, and lessons learned from the programs • Application components include monitoring, technical support, best practices, and data.	
Regional Platform for Meetings and Communities of Practice: A Francophone Africa-specific group that will serve as an entry point to communities of practice in the region, identify gaps in knowledge generation and sharing, and strengthen KM skills among FP/RH professionals in the region. • Will organize regular meetings with different communities of practice, including at the district level • Managed by a secretariat to include directors, coordinators, a communications manager, focal point individuals per country, technical advisors, and a monitoring and evaluation manager • Country focal points/champions will encourage the use of data for decision making, including hosting "Day for Data Use" • Dialogue frameworks between researchers and practitioners will improve data generation and use • Organize monthly webinars and educational trips to share best practices	

Asia

A-Devi: An alliance of key organizations to share knowledge through in-person meetings and an artificial intelligence-enhanced platform to simplify information seeking and improve information exchange.

- Managed by an Asia-focused secretariat to facilitate meetings between stakeholders and an annual conference, alternating between global and regional focus each year
- Between annual meetings, FP professionals will stay connected through virtual means
- FP professionals can get any FP data from Asia from this platform. Artificial intelligence and data analytics will simplify the data so it is easy for FP/RH professionals to access, understand, and to use.
- The search process will be simple, similar to using Siri or Alexa, so professionals can easily ask for data and get that data without having to search multiple sites or places

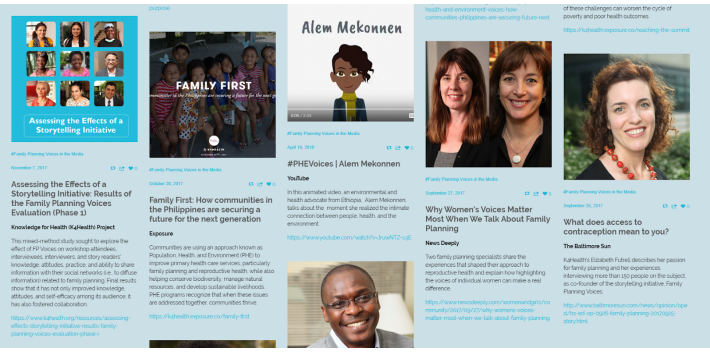


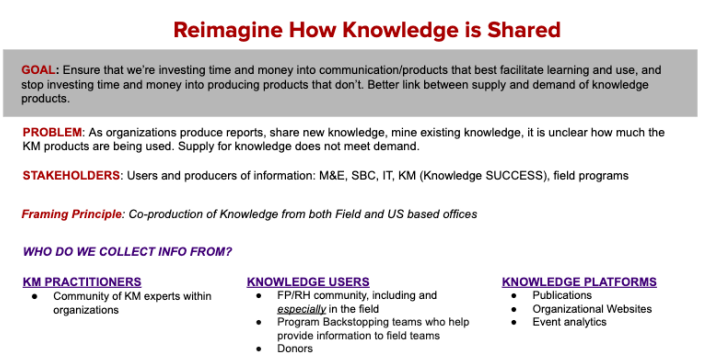
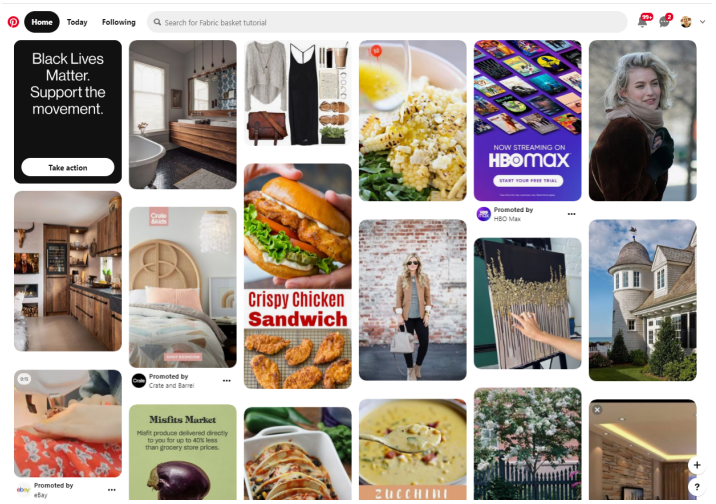
Knowledge Information Sharing.org or KIS.org: A knowledge learning and sharing platform with virtual and experiential learning to improve the ways FP/RH professionals learn and apply knowledge to programs.

- Those passionate about FP/RH can join for free, with details on membership
- The platform will have a calendar of upcoming events, including storytelling through TED-like talks
- People can reach out to the platform and share their own information and learnings
- Members can virtually observe a program, facility, how it is implemented, and see how it changes over time

FPedia: An interactive one-stop shop for all FP/RH-related data and resources, including information on failures, voices of field-based professionals, synthesized information to connect users to more relevant and higher-quality information, and opportunities for meaningful dialogue between FP/RH professionals and high-level experts. • It will be a data gold mine with real-time quantitative and qualitative data sets • The platform will synthesize information in easy-to-use formats to tailor the platform to individual learning preferences • It will include books, reports, blogs, talking content such as TED talks showcasing best ideas related to FP, and a calendar of global, national, and local events	

United States

Community Voices: A platform highlighting rarely heard community voices to diversify the types of voices, challenge the status quo, and expand the knowledge base. • Amplify the diversity of local experiences that are shared with the wider FP/RH community by giving a voice to local community organizations, village structures, and others • It will share information from communities about their needs related to current and ongoing programs to inform program design and implementation	

Reimagining Sharing: An approach to identify gaps in supply and demand of KM resources and adjust resources to fill those gaps to increase the usability and relevance of resources. • The prototype will identify gaps and create alternative forms of evidence and sharing to fill the gaps. One example is that a lot of time and money currently go into the creation of long reports, but there is not significant demand for those; therefore they will be reassessed and revised to create a product that provides actual value and meets demand	
Pinterception: A Pinterest-like storing and sharing platform with information from various sources that will provide recommendations for additional information and link users with common interests to connect them to more diverse and relevant information. • Users will be able to "pin" favorite content, such as best practice articles or a new blog post, similar to pinning Pinterest content to a virtual "board" • They will also be able to connect with content creators and other users who are viewing/pinning/using that same content	

PROTOTYPE THEMES

All of the prototypes incorporated elements of collecting and curating key information as well as facilitating interactive knowledge exchange among FP/RH professionals, with some emphasizing one element more than the other. Although the highly ranked ideas related to KM capacity strengthening did not get prioritized to the prototype stage as stand-alone solutions, some of the prototypes integrated KM capacity strengthening within their broader solution. For example, one Francophone African team envisioned their solution would identify gaps in knowledge generation and sharing and strengthen KM skills among FP/RH professionals in the region. Another team incorporated specific efforts to strengthen the capacity of women to use the KM solution that they developed.

Collecting and Curating Information

FP/RH professionals want effective ways to access information, through dynamic online or app-based repositories. The co-creation teams overwhelmingly suggested prototypes that would create information repositories or improve the way existing information is stored or accessed. Repositories would:

- Include information from new or underrepresented FP/RH professionals, such as field-based staff (e.g., Community Voices, United States)
- Have the ability to analyze and synthesize information in ways that make it easier for users to

digest, such as by presenting data based on learning preferences (e.g., Virtual Evidence Platform, Francophone Africa)
- Present information in digestible formats, such as TED-like talks (e.g., KIS.org, Asia)
- Have advanced search capabilities, such as machine learning algorithms that make it faster and easier to find applicable information (e.g., Pinterception, United States)

Interacting With Other FP/RH Professionals

FP/RH professionals need ways to interact with each other, whether virtually or in-person, to improve knowledge transfer of the wealth of tacit information in the FP/RH community and provide opportunities to learn from other professionals.

In-person interactions could include:
- Exchange visits (e.g., In Their Shoes, Anglophone Africa)
- Annual regional or global meetings (e.g., Regional Platform for Meetings and Communities of Practice, Francophone Africa)

Online or virtual interactions spanned a range from:
- WhatsApp groups to share information (e.g., WhatsApp Groups, Anglophone Africa)
- Virtual reality to "observe" other programs (e.g., AutoKBank, Anglophone Africa)
- The ability to ask direct questions of authors or speakers (e.g., FPedia, Asia)

Some of the prototypes also included detailed management or oversight structures for their communities of practice to ensure that they have adequate funding and sustainability (e.g., Regional Platform for Meetings and Communities of Practice, Francophone Africa).

DETAILED PROTOTYPE COMPONENTS

Each prototype contained detailed components or characteristics, such as a prototype being accessed via a website or a prototype relying on user-provided content. In total, 14 key components were identified across the 14 prototypes, and the prototypes shared numerous components in common (Table 7).

1. Websites or web-based components (11 prototypes). Sharing information through the web provides a cost-efficient way to reach a wide audience with important data and information.

2. Regional/country information (11 prototypes). Regionally focused information may make information more applicable to a specific context by being from an area that shares social and cultural norms.

3. Virtual knowledge exchange via interactive chats, discussion forums, social interaction, or networking with peers (10 prototypes). Virtual knowledge exchanges increase information transfer by enabling users to quickly share information, ensure they understand the information, and ask questions about information that may not be included in published documentation. Through this social interaction they also share tacit information and build stronger connections and networks.

4. User-provided and user-driven content (9 prototypes). User-driven or user-provided context increases the knowledge base for FP/RH professionals and may also provide more contextually relevant information.

5. App- or mobile-based interfaces (7 prototypes). Tailor-made applications or mobile interfaces may make it easier for users to access information in a user-friendly way.

6. Membership or sign-up process (7 prototypes). While registration or sign-up could create hassle factors (i.e., extra steps) for users, it also authenticates users and could allow for more honest and open sharing as well as the ability to tailor content to user preferences. Membership was free in all of the prototypes.

7. Incentives or rewards to encourage user contributions or engagement (7 prototypes). Well-designed incentives would increase engagement and activity between users of a specific platform, community of practice, or information repository, thus ensuring a higher level of usefulness for users and increasing the likelihood that users would get what they need from the tool (i.e., information, mentoring).

8. Global information (6 prototypes). Global information ensures that regions are not working within silos and that new practices have the chance to be applied across all FP/RH programs.

9. Amplify the voices of or sourcing information from junior and frontline workers (6 prototypes). Increasing the diversity of who provides information and how they engage with information could increase accountability in programs, improve exchanges between communities and donors, and increase inclusivity for field-based staff in activities.

10. Gender equity (6 prototypes). The reasons to create gender-equitable prototypes are numerous, including creating ripple effects for more gender-equitable workplaces and societies (see box).

Box. Integrating Gender Into the Design of KM Solutions

Although the majority (34 of 38) of participants responding to a post-workshop survey said they thought gender was an important consideration in the development of KM solutions, only six prototypes explicitly addressed gender:

- Integrating gender in community of practice charters to ensure equality in governance, recruitment, and participation (Regional Platform for Meetings and Communities of Practice, Francophone Africa)
- Collecting and reviewing gender information from platform participants to ensure a balanced gender mix (Interactive WhatsApp groups, Anglophone Africa)
- Developing KM tools on platforms that FP/RH professionals of all genders have access to (KIS.org, Asia)
- Ensuring equal gender participation in decision making (A-Devi, Asia)
- Instituting minimum data contributions to the platform from women and underrepresented groups (FPedia, Asia)
- Ensuring equal gender representation when building machine learning algorithms (Pinterception, United States)

During prototype development, many of the teams' discussions on gender focused on the assumption that there were few or no gender issues in KM in the professional community, which was also reflected in some of the survey respondents' comments that professionals are "mostly gender sensitive these days" and that "FP/RH professionals are already

empowered individuals." While this may be true, it is also plausible that there are implicit gender biases in KM that are not easily identifiable and that warrant further exploration.

11. Secretariats or oversight/management boards (5 prototypes). Management or oversight boards can increase the quality of information that is shared and improve the sustainability of the tool. However teams differed in their suggestions for the compositions of the secretariats and who should finance them.

12. Traditional components of standardized templates and best practices for dissemination (3 prototypes). These are incorporated to ensure that information is collected and disseminated in a common way to prevent cognitive overload and ensure the information is easily usable.

13. Innovative components such as predictive algorithms, machine learning, or artificial intelligence (3 prototypes). These can enable easy searching for information and tailoring information to meet individual user needs to overcome challenges of information overload.

14. In-person knowledge exchange (3 prototypes). These are key approaches to facilitate networking, sharing of tacit information, and the development of new collaborations.

TABLE 7. PROTOTYPE COMPONENTS

	Anglophone Africa					Francophone Africa			Asia			United States			
Component	AutoKBank	FPConnect	In Their Shoes	Interactive WhatsApp Groups	Country-level Repository	Virtual Evidence Platform	Singular Information Collection App	Regional Platform for Meetings	A-Devi	KIS.org	FPedia	Community Voices	Reimagining Sharing	Pinterception	Total Number
Website	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓	11
Regional/country information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				11
Virtual knowledge exchange	✓	✓		✓	✓		✓	✓	✓	✓	✓			✓	10
User-provided content		✓		✓	✓				✓	✓	✓	✓	✓	✓	9
App/mobile interface	✓	✓		✓			✓		✓	✓	✓				7
Membership requirement	✓	✓	✓	✓	✓					✓	✓				7
Incentives/rewards	✓	✓		✓	✓		✓	✓		✓					7
Global information		✓			✓				✓		✓	✓		✓	6

Voices of frontline workers			✓							✓	✓	✓	✓	✓	6
Gender considerations				✓				✓	✓	✓	✓			✓	6
Secretariat or oversight body					✓	✓	✓	✓	✓						5
Templates and best practices					✓					✓			✓		3
Predictive algorithms/artificial intelligence	✓								✓					✓	3
In-person knowledge exchange			✓					✓	✓						3

In addition to the identified components, many teams stressed the need to incorporate BE mechanisms into their designs. Commonly discussed mechanisms to improve the prototypes included:

- Accounting for learning preferences by having information presented in multiple formats, such as audio, infographics, and tables
- Highlighting the relevance and value of information when FP/RH professionals search for information
- Providing incentives, such as provision of gold/silver/bronze awards or research or innovation grants, to access and contribute to platforms
- Simplifying content to avoid cognitive overload, such as using visuals to present dense information or clear guidelines on how to write up program experiences
- Applying social coordination and proof to encourage use of platforms, such as enlisting the ministry of health to encourage partners to contribute program data and documentation

MAPPING PROTOTYPES TO KEY BARRIERS AND CHALLENGES

In the fourth stage, Prototype, each workshop team was asked to develop a prototype to address one specific problem related to the overall design challenge of accessing and using evidence and best practices in their FP/RH programs. In the first and second stages, Empathize and Define, however, teams identified a longer list of challenges and barriers. After the workshops, Knowledge SUCCESS analyzed the longer lists of challenges and barriers that teams identified but did not necessarily prioritize or include in subsequent prototypes. This analysis can help shed light on the broader scope of KM challenges and barriers in FP/RH programs that Knowledge SUCCESS and other organizations and FP/RH professionals can consider when developing future knowledge solutions. The analysis is organized by four of the key themes that arose from the Empathize and Define stages:

- Information availability and accessibility
- Collaborations and partnerships
- Human resources and capacity of FP/RH professionals
- FP/RH work environment

Information Availability and Accessibility

Challenge: Important information about program experiences is not fully documented, leaving FP/RH professionals to sometimes reinvent the wheel. At the same time, information may be available but lacks the level of specificity needed for FP/RH professionals to improve

programs (i.e., not disaggregated enough, excludes behavioral factors, poor quality, outdated, excludes data on possibly underrepresented populations). Discussions of prototypes included some components of this challenge, for example:

- Prototypes that included user-driven or user-provided content and the diverse voices may expand the knowledge base and fill gaps in information.
- Some of the prototypes included initial mapping exercises of partners and/or information, such as the Country-level Repository (Anglophone Africa), but they did not specify how gaps in information would be addressed or who should address them.
- Templates for capturing best practices (Country-level Repository, Anglophone Africa) can help ensure accurate and relevant information is collected and presented, but not all programs may have the scope, capacity, or funding to use those templates to document their best practices.
- Anonymized or incentivized stories of failure (FPedia, Asia) could also partially address some of the issues with data gaps.
- Encouraging a more diverse group of individuals working in or with FP/RH programs to submit information may help increase information on underrepresented populations (Community Voices, United States), but if information does not flow both ways, trust may be lost with those community members.
- Prototypes that share tacit information, such as through exchange visits (In Their Shoes, Anglophone Africa) or interactive chats (WhatsApp Groups, Anglophone Africa), may share relevant program experiences with additional people, but it might not result in documentation for a wider audience.
- Incentivizing submission of information (Country-level Repository, Anglophone Africa) may help increase the availability of information.

Additional considerations: It is important to note that the challenge of finding relevant data and information does not fall solely within the scope of the Knowledge SUCCESS project; rather, it falls to the entire field of FP/RH programs. To fully address this challenge, all FP/RH projects will need to document their programming experiences, lessons learned, and even failures in enough detail and in a timely way to allow others in the field to adapt their approaches, avoid duplication of effort, and maximize their effectiveness.

Challenge: Participants in Francophone Africa and the United States highlighted issues with data and information not being available in languages besides English. Autotranslation or simultaneous translation was mentioned by multiple teams as a solution, but it was not explicitly included in the prototypes.

Additional considerations: This challenge is long-standing and without an easy solution. As projects and organizations moved their events to virtual formats during the COVID-19 pandemic, simultaneous translation of webinars has started to become more common to ensure equal opportunities for all FP/RH professionals around the world to engage in conversation. As such, it may have prompted a change in behaviors and norms in the KM field that will likely continue even after the pandemic. Additional exploration of cost-efficient ways to ensure that high-quality knowledge is shared in multiple languages is warranted.

Challenge: Information is frequently presented in a way that is confusing or unclear, which makes finding relevant information or results in cognitive overload. Several prototypes addressed this challenge:

- The data synthesis components of some prototypes would simplify information and make it easier for users to process and apply (FPedia, Asia).
- Creating and sharing information in multiple formats to account for learning preferences

(A-Devi, Asia) could decrease cognitive overload.
- Templates for best practices (Country-level Repository, Anglophone Africa) help ensure accurate and relevant data and information are collected and presented in a clear way, but not all programs may have the scope, capacity, or funding to use those templates.
- Prototypes that include information filter options, for example by region or country (AutoKBank, Anglophone Africa), make it easy to search for targeted information.

Additional considerations: Because multiple new and untested solutions aim to address this challenge, one way to identify an effective solution could be to test the various solutions against one another to see which is most effective.

Collaborations and Partnerships

Challenge: Harmonizing partner approaches can be difficult, including not fully sharing information because of funding competition. Some workshop teams attempted to address this challenge through oversight bodies, such as ministries of health (Country-level Repository, Anglophone Africa) or secretariats (Regional Platform for Meetings and Communities of Practice, Francophone Africa). Such oversight could help harmonize elements of information sharing but would be voluntary on the part of organizations.

Additional considerations: Fully addressing this challenge would require a major shift in how donors fund projects. Donors are likely attempting to address these issues through new funding mechanisms such as USAID's New Partnerships Initiative that attempts to diversify the partner base. Donors and ministries are also often actively engaged in technical working groups or communities of practice that bring together different FP/RH projects and organizations to share knowledge and solve problems together. Continued engagement in these types of initiatives and activities and exploration of new solutions to this challenge are needed.

Human Resources and Capacity of FP/RH Professionals

Challenge: There is a lack of technical capacity in KM and high attrition rates of qualified staff in programs. A few of the prototypes addressed this challenge:
- Mentoring (In Their Shoes, Anglophone Africa) and virtual experiential learning (KIS.org, Asia) could strengthen technical capacity in KM, but FP/RH professionals need to be given the opportunity and bandwidth to engage in them.
- Communities of Practice (Country-level Repository, Anglophone Africa) or interactive chats (WhatsApp Groups, Anglophone Africa) may strengthen capacity through information sharing and informal mentoring, but without a dedicated focus on capacity strengthening, they may not be fully effective or sustainable.
- On-demand KM experts, access to regional FP/RH experts, and KM-focused training for professionals and students were generated as potential solutions, but none of the prototypes included them as key elements.

Additional considerations: While addressing attrition rates of FP/RH professionals is outside the scope of Knowledge SUCCESS, it is important for the project and others working in the FP/RH community to consider additional ways to strengthen KM capacity in future solutions.

This challenge can also be addressed by Knowledge SUCCESS more directly in countries through buy-in from USAID missions.

FP/RH Work Environment

Challenge: Organizational culture can hinder innovation and accurate sharing of information. The Country-level Repository prototype from Anglophone Africa included incentives to share accurate information, which could help increase accurate reporting by individuals, but only if their incentives are aligned with those of the larger organization and management structure. In addition, during the Ideate stage, a potential solution generated was for donors to require innovation in project proposals, but it was not included in the prototypes. Participants noted that innovation is already typically required by donors but with limited effectiveness.

Additional considerations: This challenge may be related to competition among projects for funding; organizations may intentionally or unintentionally create a culture that frowns upon sharing innovations with other organizations due to the competitive nature of funding. Additionally, inherent risks are associated with funding an innovation that has yet to be proven effective.

The Way Forward: From Prototypes to Solutions

The four Knowledge SUCCESS virtual workshops convened 69 FP/RH professionals from 21 countries in Anglophone Africa, Francophone Africa, Asia, and the United States to reimagine the ways FP/RH professionals access and use evidence and best practices to optimize FP/RH programs. The workshops were based on design thinking principles and generated rich insights into the KM experiences of these and other FP/RH professionals. Participants produced 14 early-stage prototypes to improve the way FP/RH professionals use knowledge to optimize programs. Prototypes ranged from those that focused on collecting and curating relevant FP/RH knowledge on best practices, lessons learned from failures, and overall programmatic experiences to those focused on facilitating interactive discussions among FP/RH professionals to share knowledge in transparent and timely ways.

Following the regional workshops, Knowledge SUCCESS held internal ideation and prioritization sessions to synthesize and refine not only the prototypes but also the longer list of potential solutions generated by teams. This refinement process helped to ensure that final solutions selected for development for the global FP/RH community are cutting edge, expand the FP/RH knowledge base by including a more diverse range of voices, and ultimately help drive evidence-informed decision making in FP/RH programs. Through this process, we decided to move forward with developing three new KM solutions for the FP/RH community: (1) the Pinterception prototype, a user-driven curation platform; (2) a new interactive series focused on What Works and What Doesn't Work in FP/RH; and (3) a competition to develop innovative, context-driven KM solutions for FP/RH programs.

Pinterception

The most prominent need expressed across all regional workshops was a need for easy-to-find resources from different projects or organizations curated in one place, while giving individual users the autonomy to choose the information that makes sense for their particular context and needs. We felt that of all the prototypes, Pinterception (United States), the user-driven curation and storage platform inspired by Pinterest, addressed this need best.

The Pinterception platform will:

- Give FP/RH professionals a personalized space to save, curate, and share FP/RH resources that are important and relevant to them
- Expose them to new and relevant sources of information and ideas
- Make it easy for them to come back to the information they need, when they need it
- Connect FP/RH professionals with each other and with the resources they use

What Works and What Doesn't Work in FP/RH

Another common challenge expressed in all four workshops was that FP/RH program best practices are not always comprehensively documented, contextualized, or packaged in a way that is easy to use. FP/RH professionals also indicated there is a lack of information on what does *not* work in FP/RH and specifically noted the importance of learning from such experiences to avoid repeating mistakes. At the same time, they acknowledged the opportunities that working groups and other interactive convenings afford in terms of facilitating transparent and timely dialogue between FP/RH professionals, projects, and organizations. Due to physical distancing requirements imposed by the COVID-19 pandemic, such interactive opportunities have become severely limited. Although the FP/RH community has adapted by moving many of its face-to-face events to online formats, the webinar style used by most lacks the ability to have interactive conversations, especially when the webinars are attended by large groups of people.

With these new constraints in mind, Knowledge SUCCESS will develop a solution that combines digital content on what works and does not work in FP/RH with interactive knowledge exchange and learning through virtual means, spanning KM tools and techniques that both collect and curate knowledge and connect people to that knowledge. This solution draws directly on highly ranked ideas generated among many regional co-creation workshop teams to "regularly produce best practices lists on FP/RH issues in the field," "create best practice brochures/magazines/journals," or otherwise develop best practice toolkits to document, share, and use practical information. It also draws on co-creation teams' more interactive ideas such as convening best practices fairs.

Competition to Drive Context-Relevant KM Innovations for FP/RH

One of the key themes that emerged among co-creation teams when defining strengths and challenges in KM for FP/RH focused on KM culture and capacity. FP/RH professionals indicated that there are increasing numbers of KM professionals in the FP/RH space who are helping to ensure documentation and dissemination of lessons learned and that FP/RH professionals generally have strong intrinsic motivations to learn how to improve their programs. However, they also noted that technical capacity in KM for FP/RH remains limited and that there is a lack of sufficient funding for KM in FP/RH programs.

We, therefore, felt it was important to develop a solution that places local systems and stakeholders in sub-Saharan Africa and Asia at the center of designing and implementing innovative KM solutions to local FP/RH challenges in order to achieve sustainable, resilient results in FP/RH programs. We plan to support this through regional competitions modeled after the popular TV series Shark Tank (known as Dragons' Den or Lions' Den in some countries). This solution draws on several categories of ideas generated during co-creation, such as holding a competition or "challenge for new ideas that are promising" and offering funding to expand those ideas, creating a mechanism by which organizations could design and implement new solutions while still being guaranteed funds to encourage experimentation and innovation, and strengthening capacity or creating mentorship opportunities in KM and nurturing a culture that encourages the integration of KM into FP/RH programs. The planned competition will crowdsource ideas by FP/RH organizational representatives and culminate in a select number of entrepreneurs making a pitch for their idea to a panel of judges in a live broadcast. The winners will receive a modest subaward to implement their innovative ideas as well as tools and resources from Knowledge SUCCESS during implementation to further strengthen their capacity in KM for FP/RH.

Conclusion

The Knowledge SUCCESS regional co-creation workshops have produced many rich insights and potential solutions to KM challenges faced by the FP/RH community. We are confident that the three solutions we are moving forward with—a user-driven curation platform inspired by Pinterest, an interactive learning series on What Works and What Doesn't in FP/RH, and regional competitions to drive KM innovations to local FP/RH challenges—will be game changers for the FP/RH community. We plan to continue engaging our co-creation participants throughout the development process to ensure the solutions meet their expressed needs. In addition, many other ideas and solutions inspired from our regional co-creation workshops will be integrated into current or future Knowledge SUCCESS activities.

These insights, ideas, and solutions from the co-creation workshops can benefit and inform the work of not only Knowledge SUCCESS but also other FP/RH projects and organizations. We will share these findings through a variety of ways to ensure we reach a broad audience so that stakeholders can support FP/RH professionals to access and use evidence and best practices to optimize programs. Ultimately, our vision is that findings from these workshops will fundamentally change how FP/RH projects approach and practice KM.

Appendices

Appendix 1: Gender Considerations During the Design of KM Solutions

- How can men and women have equal access to this solution?
- How can men and women have equal control over this solution?
- What are the gender stereotypes, norms, or beliefs in society that may affect the use of this solution? How can you design it to address that concern?
- How would an individual's gender role at home or in the community (which could have ripple effects into the workspace) limit their ability to use this solution? How can you design it to address that concern?
- What kinds of gender-discriminatory laws, policies, regulations, or institutional practices exist that may make it harder for someone to use this solution?
- How can this solution provide an opportunity for empowering women in knowledge management?
- How can men and women have equal opportunities to make decisions about this solution?

Appendix 2: Workshop Agenda by Region

Session Details	Anglophone Africa	Francophone Africa	Asia	United States
Welcome and Online Tool Review	N/A	1 hour, Group		N/A
Develop your journey map	1 hour, Individual	N/A	N/A	N/A^
Develop your KM profile	1 hour, Individual (optional)✣	1 hour, Individual		
Find out your learning style	10 minutes, Individual (optional)×	10 minutes, Individual		
Opening Plenary✦	1.5 hours, Plenary			45 minutes, Plenary
Discuss and elaborate on your journey map or KM profile, including BE mechanisms	1.5 hours, Group	2 hours, Group		30 minutes, Group^
Finalize journey map/KM profile	30 minutes, Individual			N/A
Brainstorm and organize challenges, successes, and opportunities	2 hours, Non-guided group	2 hours, Group		1.5 hours, Group
Develop "How Might We" statement	2 hours, Group			1 hour, Group
Ideate solutions	2 hours, Group*	2 hours, Group		45 minutes, Group
Prioritize and select solution to prototype	1.5 hours, Group✦	2 hours, Group		1 hour, Group
Prototype solution - determine details	2 hours, Group*	1 hour, Group✦		1 hour, Group
Prototype solution - finalize prototype		2 hours, Non-guided group		
Closing Plenary - present and test prototypes	2 hours, Plenary			1 hour, Plenary^

Notes: Coloring of rows corresponds to the design thinking stage for that specific activity. The majority of sessions were structured as group work guided by facilitators, but the format for each session is noted. N/A indicates that the activity was not completed for that workshop.
* These sessions in the Anglophone Africa workshop were originally planned as non-guided group work sessions but were adjusted to guided group work following participants' feedback at the end of week one.
‡ The KM profile was provided as an optional exercise during week three of the Anglophone Africa workshop as an opportunity for participants to think deeper about their KM experiences prior to the prototyping and as a way to pilot the activity for subsequent workshops.
× The learning styles survey was provided to Anglophone Africa participants following the completion of the workshop and was optional for them to complete.
✦ During the Anglophone Africa workshop, teams considered a checklist of gender considerations as part of the prioritization activity. However, for the Francophone Africa and Asia workshops, participants considered the gender considerations checklist during prototyping and building their solution, with the heaviest emphasis on the checklist during the Asia workshop.
^ The BE mechanisms to build empathy were presented to participants and discussed during the KM profile session for the Anglophone Africa, Francophone Africa, and Asia workshops. They were provided to participants in the U.S.-based workshop as part of the instructions for them to complete their KM profiles. Additional BE mechanisms to improve prototype designs were presented to participants and discussed during the final plenary, following the prototype presentations. These BE mechanisms were not presented to participants in the U.S.-based workshop.

Appendix 3: Similarities and Differences in FP/RH Professionals' KM Experiences by Job Role

Working Environment

Similarities	Differences
All professionals provided similar descriptions of their working environments, whether they worked in large or small organizations or government entities. • The values their organizations embody, such as respect, were common across many participants. • All job roles had similar descriptions of generally positive interactions with colleagues and external partners when it came to seeking, sharing, and using information, including providing support to find relevant information (e.g., directing to relevant resource persons) and providing guidance on tailoring information sharing to the needs of different audiences. • Most professionals reported that their working environments are mainly supportive and collaborative.	• N/A

Accessing Evidence and Best Practices

Similarities	Differences
KM Behaviors	
• All job roles primarily seek information from online sources (e.g., websites of trusted institutions) and from networks and colleagues through in-person interactions (e.g., meetings and workshops). • Colleagues, especially those at more senior levels, influence the kind of information they seek. • Technical advisors and decision makers search for information on global and national-level trends.	• Conveners look for information for advocacy efforts • Program managers search for information that is specific to the programs they are running, such as input data (e.g., data on the supply of contraceptive products) and disaggregated data in their project's area.

KM Barriers	
• Issues with data quality, such as information being out of date, information being incomplete, or information not having enough details. • There is a lack of access to information, either through restrictions like paywalls or language barriers.	• Technical advisors identified the lack of time as a major barrier to seeking information. • Program managers cite the lack of funding to collect information on a regular basis (resulting in outdated data) as a barrier. • Decision makers noted difficulty collecting data on metrics such as behavior, making it challenging to work with the available information.

Sharing and Using Evidence and Best Practices

Similarities	Differences
KM Behaviors	
• Sharing behaviors are influenced by the participants' organizational culture. • Participants across all job roles noted that sharing externally takes place digitally, through emails or electronic mailing lists, or in-person, through workshops, seminars, or trainings. • All job roles reported that when they share internally they need to be aware of others' time constraints and availability, especially the limited bandwidth of senior management. • All job roles identified advocacy and awareness raising as the primary purpose for which they use information collected. • All job roles used information for program management. • Technical advisors and conveners noted that to use new information for internal (e.g., developing training content) and external initiatives (e.g., influencing decision makers) they needed to gain the buy-in of their audience, typically government officials or department heads.	• Technical advisors need to curate information for different audiences and their sharing behaviors are influenced by their audience (i.e., who the information is shared with). • Decision makers noted their organizations impose restrictions on how and what they can share. This is particularly the case for decision makers who work with donor agencies. • Program managers noted the influence of community leaders, such as religious leaders, on an organization's ability to implement a program or make changes in a program. • Program managers collate information in information management systems, which are shared with decision makers who then inform project direction.
KM Barriers	

• All job roles noted a lack of time and bandwidth for sharing and using information. • All job roles noted that information can be poor quality, which makes it difficult to use for decision making. • All job roles noted a lack of funding for KM. • Conveners and program managers noted social norms related to FP/RH (e.g., taboos and misconceptions) posed a barrier to using information to inform behavior change among community members.	• Technical advisors identified the lack of time as a barrier to sharing and using information • Program managers noted the lack of financing when it comes to sharing information. • Program managers noted that FP/RH is not seen as a priority, which results in a lack of ownership. • Decision makers identified a lack of how-to information (which is optimal to inform decision making) and an abundance of descriptive information, which is less helpful. • Program managers identified institutional inertia in the form of reluctance to act on the findings from new research as a barrier. • Technical advisors are disincentivized to share information with colleagues and external stakeholders because they do not know if the information shared will be used. • Decision makers are more reluctant to share due to a perceived lack of interest from those who would benefit from the information.

Appendix 4: Similarities and Differences in FP/RH Professionals' KM Experiences by Region

Working Environment

Similarities	Differences
• Participants from all four regions reported their working environments were highly interactive and collaborative. • Participants from all regions typically mentioned they had supportive colleagues.	• Francophone Africa and Asia participants were more likely to report working more within their teams and within their country and that key stakeholders, such as civil society and government, are more likely to be in the same country. • U.S.-based participants were more likely to report working across multiple countries.

Accessing Evidence and Best Practices

Similarities	Differences
KM Behaviors	
• Participants from all regions primarily use the same general platforms to seek information including Google, social media, electronic mailing lists, or webinars, online literature reviews, and in-person methods such as personal connections or communities of practice. • Participants in Anglophone Africa, Francophone Africa, and Asia reported that they were more likely to: (1) do their own situational analysis or primary data collection, (2) report a reliance on national demographic health surveys (such as Demographic and Health Surveys) and WHO guidelines, and (3) report wanting data on the situation in their countries to design programs. • Asia and Anglophone Africa participants were more likely to report searching for information on programs that other organizations are doing to use as inspiration for their own interventions.	• U.S.-based participants (1) did not do primary data collection; (2) were more focused on anecdotes and learnings from partners after the fact, as well as on program outputs and reports from partners in-country; (3) reported relying on searching (and eventually sharing) through international communities of practice, electronic mailing lists, and emails among colleagues; and (4) reported wanting more reports from across countries about programs that are happening with information on outcomes and learnings. • Francophone Africa participants were more likely to report using additional national-level resources, such as national plans and strategies.

KM Barriers	
• Francophone Africa, Anglophone Africa, and Asia participants were more likely to report that there was not information available. For Francophone Africa participants this lack of information was due to data gaps, data not being specific enough, information not being in French, or topics being taboo, making it hard to find data on those topics. Anglophone Africa and Asia participants reported that information was older or not updated, that it was not relevant to the context they were looking for, or there was a lack of specificity to the information. • Anglophone Africa, Francophone Africa, and Asia participants reported inadequate internet connectivity as a significant barrier, especially if working in or working with provincial or district-level facilities.	• U.S.-based participants faced barriers associated with too much information and not having enough time and bandwidth to review and incorporate it into programs. They also felt they were working in a bubble and not getting diverse information. • Anglophone Africa participants also reported that information on lessons from other projects is often not practical or detailed enough and is biased by focusing mainly on successes.

Sharing and Using Evidence and Best Practices

Similarities	Differences
KM Behaviors	
• N/A	• Participants from each region shared different types of information with different stakeholders. They also all used information in different ways across the regions.
KM Barriers	
• Anglophone Africa, Francophone Africa, and Asia participants faced challenges related to sharing and using FP/RH information, as the topics are in many cases taboo in conservative or traditional cultures. • Asia, Francophone Africa and U.S.-based participants reported that there is a tendency to not use information to adapt programs because people do not always embrace innovation and program goals are fixed prior to getting information from the community on what is wanted or needed.	• Francophone Africa participants tended to report challenges related to funding (i.e., lack of funding for KM). They reported wanting funding for community engagement and sharing information with government entities, and found a lack of funding available for this kind of dissemination. • U.S.-based participants tended to report levers around funding (i.e., they had funding for KM). They reported wanting funding for developing reports or presentations to

	share with international networks and other partners, for which there may be more funding available.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