RESADE
Recherche pour la Santé et le Développement

This note stems from the initial data collection results for assessing the EDM, conducted between December 2023 and January 2024.

Summary of Minimal Digital Ecosystem (MDE) Tool Usage:

User profile and perspectives

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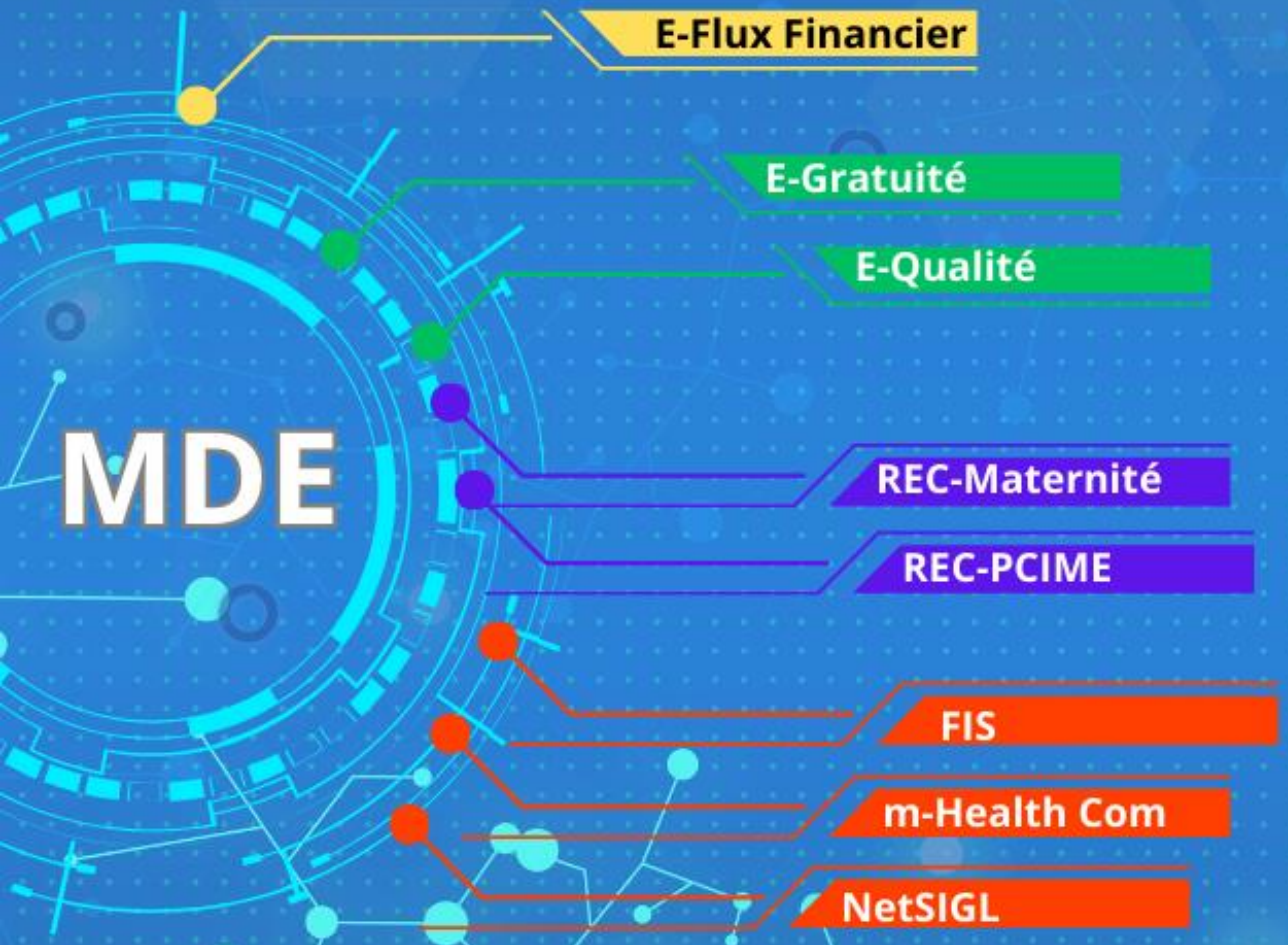


Burkina Faso, May 2024

INTRODUCTION

The Ministry of Health and Public Hygiene (MSHP) of Burkina Faso, with the support of the Bill and Melinda Gates Foundation (BMGF) and technical support from the Institute for Disease Modeling (IDM) and other partners, introduced the Minimal Digital Ecosystem (MDE) in July 2023 which integrates eight digital tools: *E-Flux Financier, E-Gratuité, E-Qualité, Facture Individuelle numérique de Soins gratuité (FIS), M-Health communautaire (e-Santé Com), NetSIGL 2.0, REC-maternité* and REC-PCIME. The MDE aims to improve the governance, efficiency, quality and equity of primary health care and the policy of free care for women and children under five.

RESADE was tasked with evaluating the MDE to ensure its effective implementation. The evaluation aims to understand the MDE deployment process, analyze its impact on the health system, and identify the factors that contribute to the results obtained.

As part of the evaluation, five field data collections were planned. The results presented in this document come from the first collection which took place in December 2023 and January 2024 and explore the factors that influence the functioning of the tools, in particular user profiles and their perceptions of the tools.

EVALUATION METHODOLOGY

TYPE OF EVALUATION

The EDM evaluation uses a hybrid method, combining qualitative, quasi-experimental, and mixed analyses, adapted to various stages of the implementation of digital health interventions.

FRAMEWORK OF THE EVALUATION

The MDE evaluation concerns four health districts: two intervention districts (TENADO and ZINIARE) and two control districts (MANGA and SAPOUY).

The collection took place as follows:

- from December 6 to 16, 2023 in ZINIARE in 20 out of 74 health facilities, and in TENADO in 16 out of 28 health facilities.
- from January 4 to 15, 2024 in MANGA in 20 out of 47 health facilities, and in SAPOUY in 16 out of 33 health facilities.

DEPLOYMENT SITUATION

The pace of tool deployment is determined by the MSHP and tool sponsors and is not guided by research or evaluation considerations. Of the four districts, seven tools were deployed in TENADO, five in ZINIARE, five in SAPOUY and one in MANGA at the time of collection.

The components of the Minimal Digital Ecosystem (MDE)

Promoters, descriptions, and target audience

Altogether, MDE comprises eight tools. Three of these tools were developed by the Ministry of Health and Public Hygiene (MSHP), two were promoted by the NGO Terre des Hommes, two by the NGO ThinkWell, and one by the NGO CHAI. Each tool has been uniquely crafted to cater to the requirements of its intended users.

		Facture Individuelle numérique de Soins gratuité (FIS)	NetSIGL 2.0	M-Health Comm (e-Santé Com)	E-Flux Financier
Description		Prescription tracking reporting tool: • medication, • Additional examinations and procedures are covered at no extra cost. • Provides billing support.	Tool for Inventory Management Support: • Medications (e.g., orders, expiry anticipation, dispensing) • Other pharmaceuticals at health facility and district levels.	Tool utilized at the community level to: • Diagnostic and therapeutic protocols • Health promotion (awareness, patient education) • Searching for individuals lost to follow-up. • Methodical data collection	Financial management tool for healthcare facilities
Users	Main	• Manager of DMEG • cashier	• Manager of DMEG • Health Facility Manager • Pharmacist	• Community health worker (ASBC)	• Health Facility Manager • Treasurer of COGES
	Secondary	• All healthcare professionals			• Manager • Administrator

	E-Gratuité	E-Qualité	REC-maternité	REC PCIME
Description	Data collection on the implementation of free access: • Issuance and payment of FS invoices • Control effectiveness • Management of medications and medical supplies • Healthcare workers' workload • Enhances the transparency and accountability of the complimentary policy.	Self-assessment tool utilizing a quality assessment score and quality improvement measures.	Diagnostic, prescription, and treatment support tool designed for maternal and child health. The accessible modules encompass: • Antenatal care • childbirth • Postpartum care • Reproductive planning • Aftercare for abortion	Tool for diagnosing, prescribing, and treating children under five years of age following the IMCI protocol.
Users – Main	• Health Facility Manager • ECD	• Health Facility Manager • ECD	• All healthcare professionals	• All healthcare professionals
Users – Secondary	• Another agent as per ICP management.	• Another agent as per ICP management.		

A dashboard is intended to display the key indicators of the tools and streamline decision-making based on evidence; however, this dashboard had not been developed at the time of data collection.

List of Abbreviations: ASBC: Community Health Agent; COGES: Management Committee; DMEG: Depot of Essential and Generic Medicines; ECD: District Executive Team; ICP: Head Nurse

Fiche Individuelle numérique de Soins gratuité

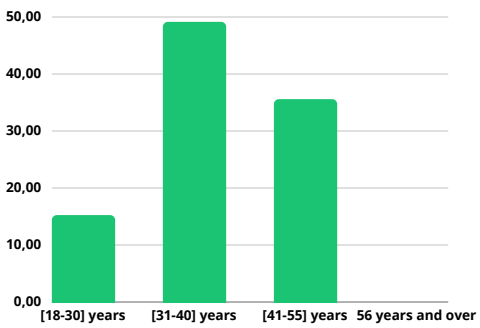
- Women represented almost half of FIS users. Users aged 31 to 40 were the most numerous and the majority of users had a level of education equivalent to secondary school.
- The vast majority of users received formal training on the use of the tool, but almost a third of users said that using the application was complex. One in five users still did not master the tool. However, the majority, while displaying a positive attitude, said they were satisfied with the FIS.

USER PROFILE

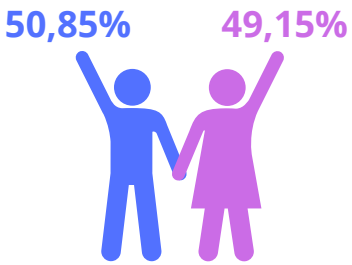
Among the 59 FIS users in our sample, we noted:

- **Health training manager: 38.98%**
- **Manager 28.81%**
- **Health worker other than health facility manager: 27.12%**
- **Manager 5.09%**

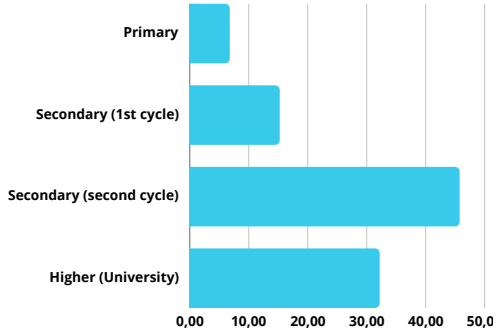
AGE



SEX



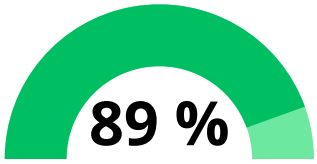
EDUCATIONAL LEVEL



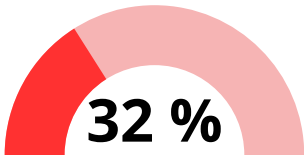
Men were a slight majority among FIS users in our sample. Nearly 50% were aged 31 to 40 and more than 75% had an education level of upper secondary or university level.

USER PERCEPTION

TRAINED AGENTS



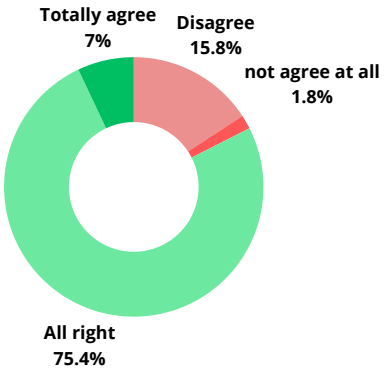
LEVEL OF COMPLEXITY



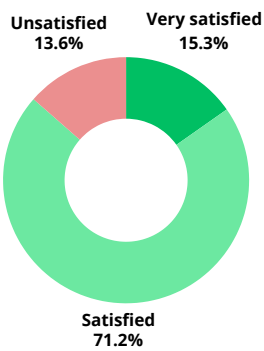
ATTITUDE TOWARDS THE TOOL

At least 89% of FIS users in our sample received formal training. Despite this, 32% found the tool complex. However, at least 95% of users had a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



More than 80% of users indicated that they mastered the tool and more than 86% were satisfied with the FIS.

NetSIGL 2.0

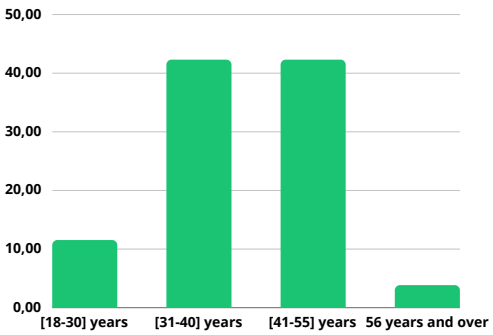
- NetSIGL 2.0 users were predominantly male. Users were mostly between 31 and 55 years old and the majority of users had at least a secondary education level.
- The vast majority of users had received formal training on the use of the tool but two thirds of users declared that using the application was complex while one user in three still did not master the tool. However, the majority displayed a positive attitude and said they were satisfied with the tool.

USER PROFILE

Among the 26 NetSIGL 2.0 users in our sample, we noted:

- **Health training manager: 50.00%**
- **Manager: 46.15%**
- **Health worker other than health facility manager: 3.85%**

AGE



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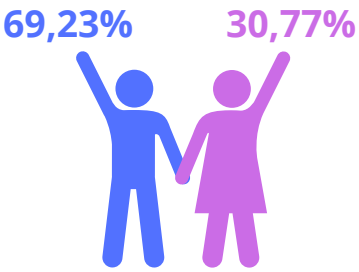
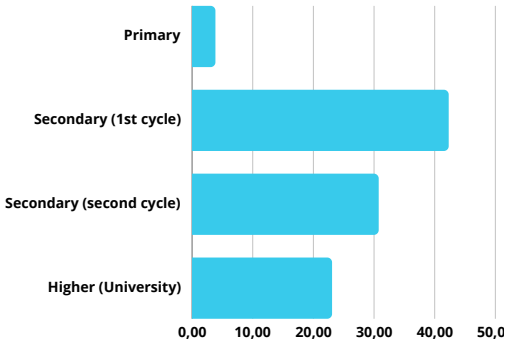


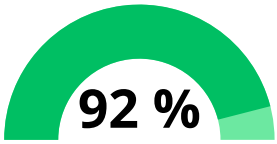
EDUCATIONAL LEVEL



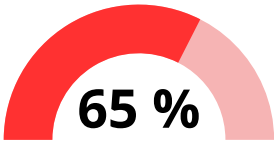
In our sample, more than two-thirds of NetSIGL 2.0 users were men. The age groups 31 to 40 and 41 to 55 each represented 40% of users. At least 42% of users had a secondary school level (first cycle) and 30% had a secondary school level (second cycle).

USER PERCEPTION

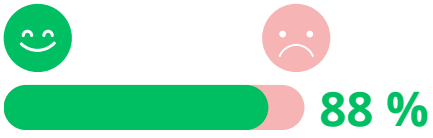
TRAINED AGENTS



LEVEL OF COMPLEXITY

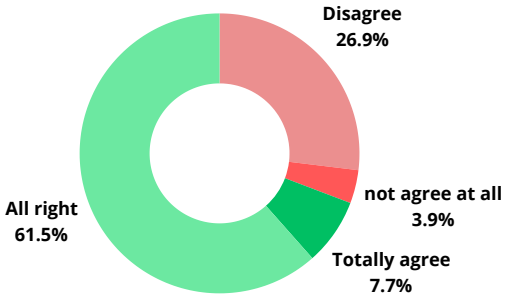


ATTITUDE TOWARDS THE TOOL

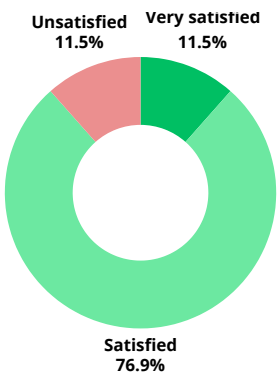


At least 92% of NetSIGL 2.0 users in our sample have received formal training. Despite this, 65% of users found the tool complex. However, 88% of users displayed a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



Nearly 70% of users indicated that they mastered the tool and more than 88% were satisfied with NetSIGL 2.0.

m-Health Communitaire

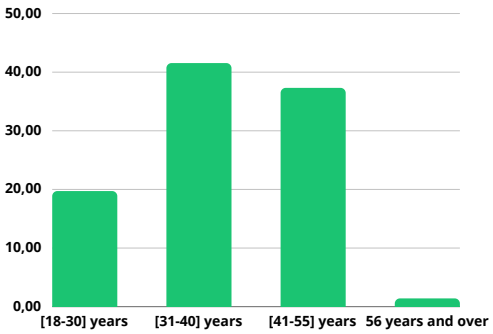
- More than half of m-Health Communitaire users were female. Users aged 31 to 40 were the most numerous and the majority of users had a level of study less than or equal to lower secondary level.
- The vast majority of users received formal training on the use of the tool and very few users declared its use complex. Less than one user in ten still did not master the tool. Users reported near or equal 100% satisfaction and positive attitude.

USER PROFILE

Among the 142 m-Health Communitaire users in our sample, we noted:

- **ASBC : 97,89 %**
- **Health worker responsible for health facility: 2.11% (**)**

AGE



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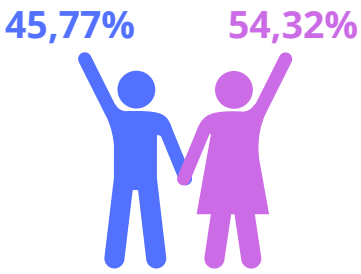
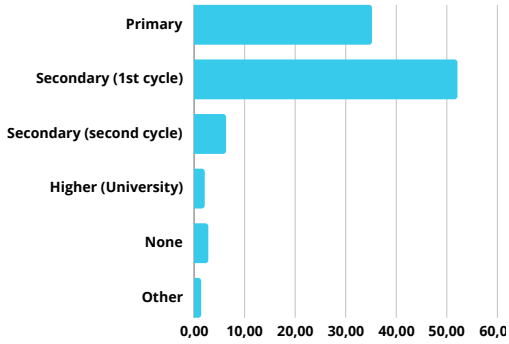


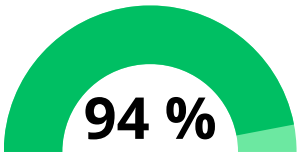
EDUCATIONAL LEVEL



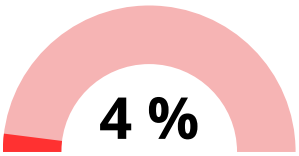
In our sample, approximately 55% of m-Health Communitaire users were women. Most users were aged 31-40 (over 40%) and 41-55 (over 35%). More than 52% of users had an education level of secondary level (first cycle) and more than 35% of primary level.

USER PERCEPTION

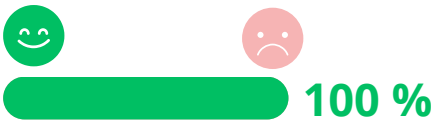
TRAINED AGENTS



LEVEL OF COMPLEXITY

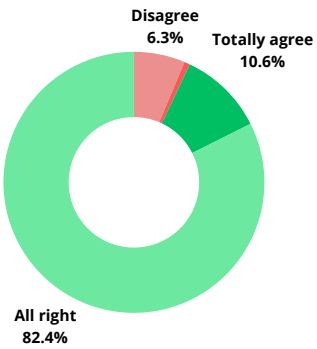


ATTITUDE TOWARDS THE TOOL

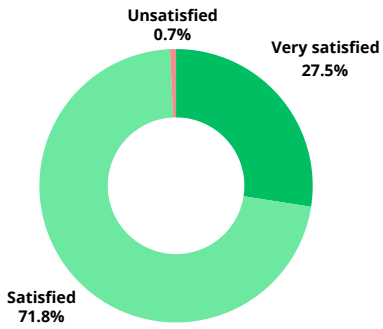


At least 94% of m-Health Communitaire users in our sample received formal training. Only 4% found the tool complex. However, all users (100%) displayed a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



More than 92% of users indicated that they mastered the tool and almost 100% were satisfied with m-Health Communitaire.

(**) Users other than ASBCs indicated using the m-Health Communitaire tool, which seems very unlikely to us. A more in-depth investigation during our second visit will allow us to better understand whether this is an error of understanding.

E-Flux Financier

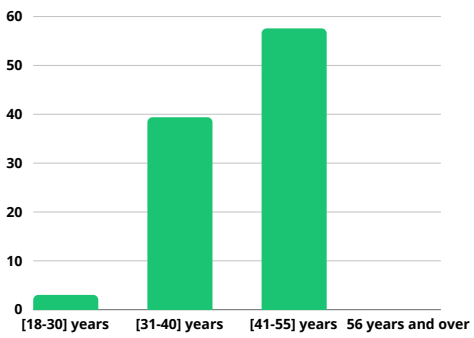
- E-Flux Financier users were predominantly male. Users aged 41 to 55 were the most numerous and the majority of users had a secondary education level (second cycle). However, one in five users had a primary school level.
- The training reached a large proportion of users and few of them found the application complex. Almost all users had mastery of the tool. All users displayed a positive attitude and were satisfied with E-Flux Financier

USER PROFILE

Among the 33 users of E-Flux Financier in our sample, we noted:

- **Treasurer: 45.45%**
- **Health training manager: 42.42%**
- **Health worker other than health facility manager: 9.10%**
- **Manager: 3.03%**

AGE



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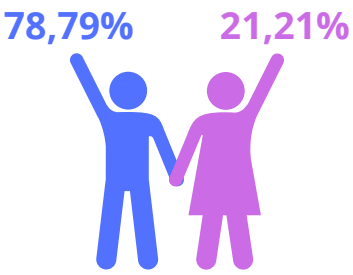
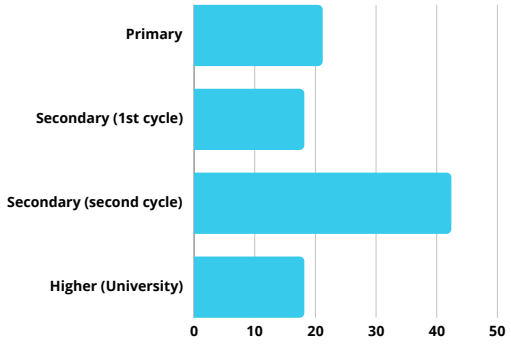


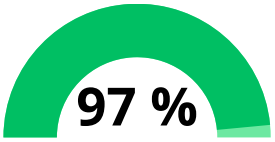
EDUCATIONAL LEVEL



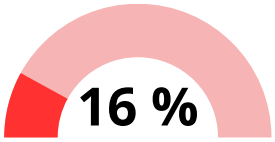
Nearly 80% of E-Flux Financier users in our sample were men. At least 58% of users were between 41 and 55 years old. Regarding the level of school education, 42% had a secondary level (second cycle) and 21% had a primary level.

USER PERCEPTION

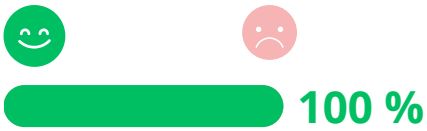
TRAINED AGENTS



LEVEL OF COMPLEXITY

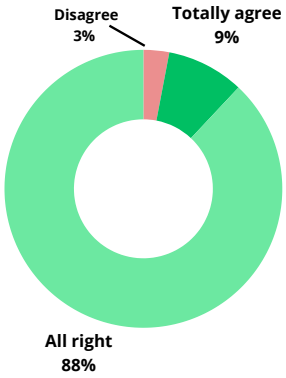


ATTITUDE TOWARDS THE TOOL

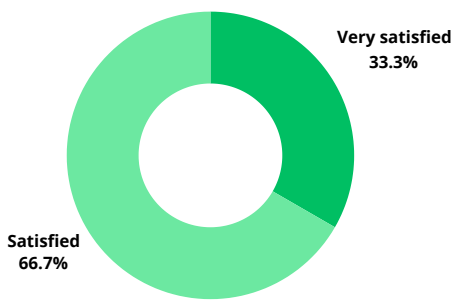


At least 97% of E-Flux Financier users in our sample had received formal training. Despite this, 16% found the tool complex. However, all users (100%) displayed a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



More than 97% of users indicated that they mastered the tool and all were satisfied with E-Flux Financier.

E-Gratuité

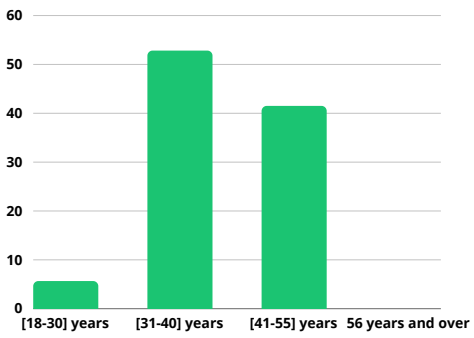
- E-Gratuité users were predominantly men. The age group from 31 to 55 was the most represented and the majority of users had at least a secondary level of education (second cycle).
- The vast majority of users had received formal training on the use of the tool and few of them found its use complex. However, just over a fifth of users still did not master the tool. The vast majority displayed a positive attitude and were satisfied with the tool.

USER PROFILE

Among the 53 E-Gratuité users in our sample, we noted:

- **Health training manager: 67.92%**
- **Manager: 16.38%**
- **Health worker other than health facility manager: 15.10%**

AGE



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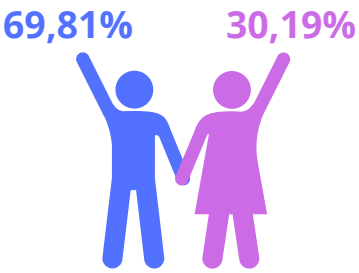
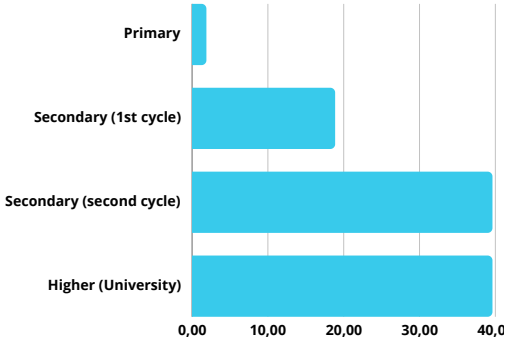


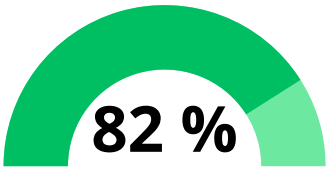
EDUCATIONAL LEVEL



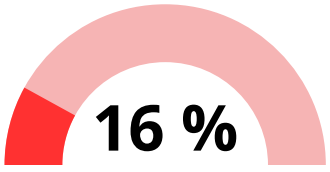
More than two-thirds of the users in our sample were men. More than 50% were aged between 31 and 40 and secondary (second cycle) and higher (university) education levels each represented 40% of users.

USER PERCEPTION

TRAINED AGENTS



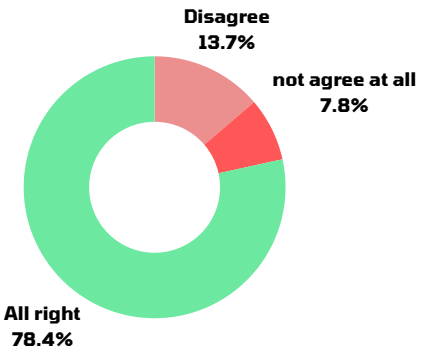
LEVEL OF COMPLEXITY



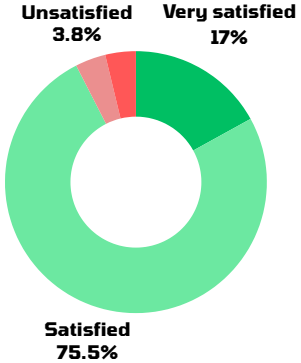
ATTITUDE TOWARDS THE TOOL

At least 82% of E-Gratuité users in our sample had received formal training. Despite this, 16% found the tool complex. However, 94% of users had a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



More than 78% of users indicated that they mastered the tool and more than 92% were satisfied with E-gratuité.

E-Qualité

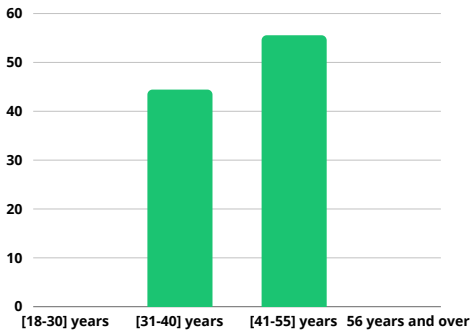
- The majority of E-Qualité users were men. Users aged 41 to 55 were the most numerous and all had a secondary (second cycle) and higher (university) education level.
- The majority of users had received formal training on the use of the tool. Despite this, the majority of users found the E-qualité tool complex. Nearly one in four users have not yet mastered the tool. More than a quarter of users did not have a positive attitude and almost one in four users were not satisfied with E-qualité.

USER PROFILE

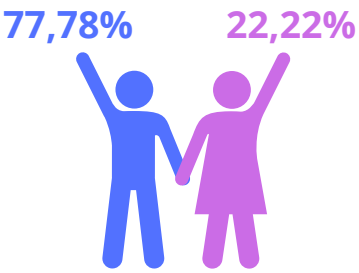
Among the 18 E-Qualité users in our sample, we noted:

- **Health training manager: 83.38%**
- **Health worker other than health facility manager: 11.45%**
- **Manager: 5.56%**

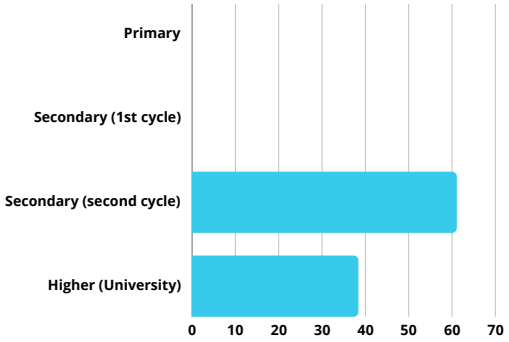
AGE



SEX



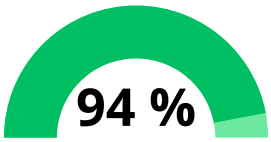
EDUCATIONAL LEVEL



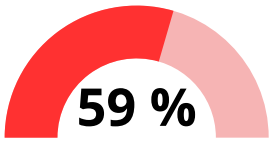
More than 77% of E-Qualité users in our sample were men. More than 50% were aged between 41 and 55 and all users had an education level of secondary school (second cycle) or higher (university).

USER PERCEPTION

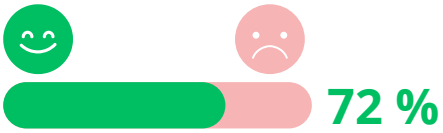
TRAINED AGENTS



LEVEL OF COMPLEXITY

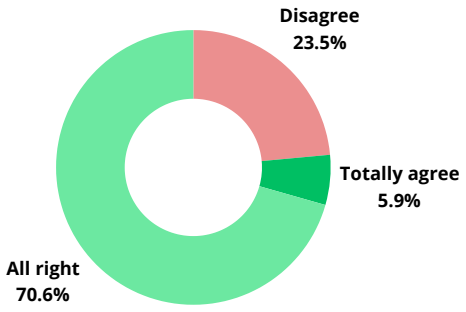


ATTITUDE TOWARDS THE TOOL

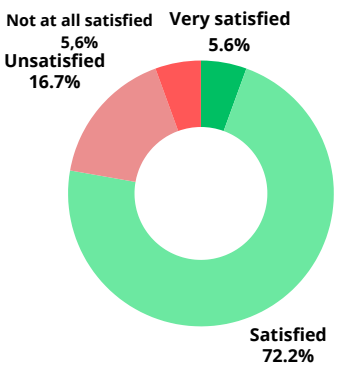


At least 94% of E-Qualité users in our sample had received formal training. Despite this, 59% of users found the tool complex. However, 72% of users had a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



More than 75% of users indicated that they mastered the tool and more than 77% were satisfied with E-qualité.

REC-Maternité

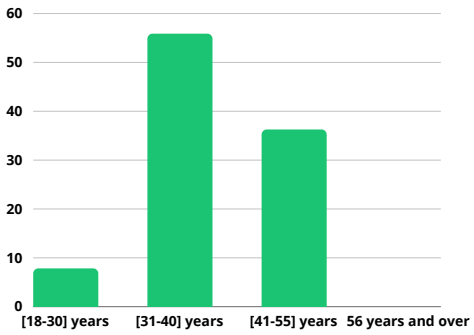
- **Women were a slight majority among REC-maternité users. The majority were between 31 and 40 years old and the secondary education level (second cycle) was the most common.**
- **Formal training only concerned half of the users. Nearly a quarter of users found the tool complex and had not yet mastered the tool. However, the vast majority displayed a positive attitude and were satisfied with REC-maternité.**

USER PROFILE

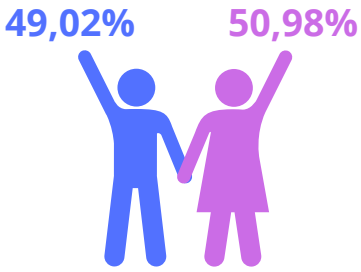
Among the 102 REC-maternité users in our sample, we noted:

- **Health worker other than health facility manager: 77.45%**
- **Health training manager: 22.55%**

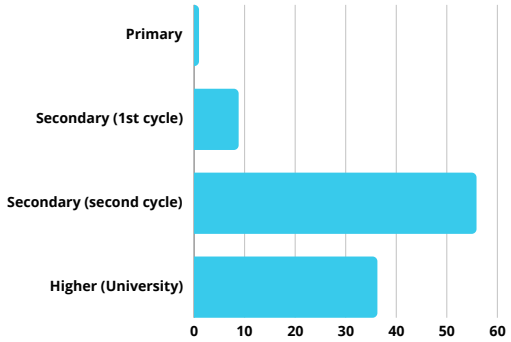
AGE



SEX



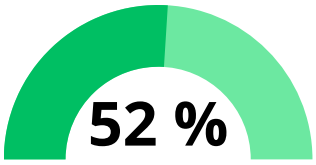
EDUCATIONAL LEVEL



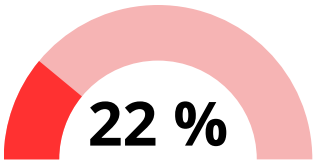
In our sample of REC-maternité users, women were a slight majority. Most users (56%) were aged 31 to 40. Concerning their level of education, 56% of users had a secondary level of education (second cycle) and 36% had a higher level (university).

USER PERCEPTION

TRAINED AGENTS



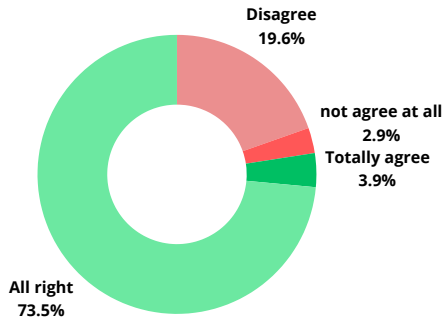
LEVEL OF COMPLEXITY



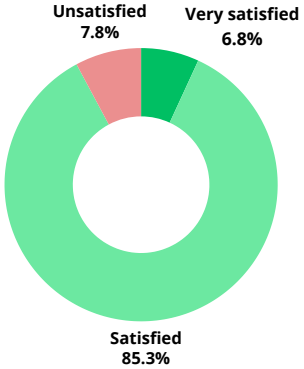
ATTITUDE TOWARDS THE TOOL

At least 52% of REC-maternité users in our sample have received formal training. Despite this, 22% found the tool complex. However, nearly 94% of users displayed a positive attitude towards the tool.

MASTERY OF THE TOOL



SATISFACTION WITH THE TOOL



Nearly 78% of users indicated that they had mastered the tool and more than 92% were satisfied with REC-maternité.

REC-PCIME

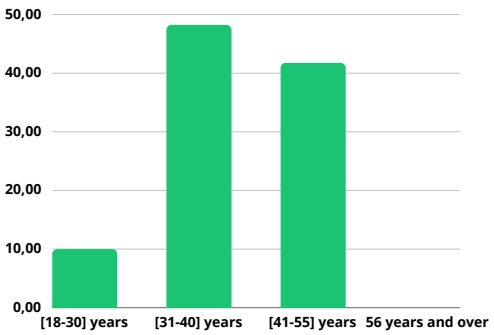
- REC-PCIME users were predominantly men and aged between 31 and 55 years old. The majority of users had a secondar education level (secondary cycle).
- Nearly half of the users had received formal training and few users found the tool complex. Around nine out of ten user mastered the tool. Almost everyone had a positive attitude and a large majority were satisfied with REC-PCIME.

USER PROFILE

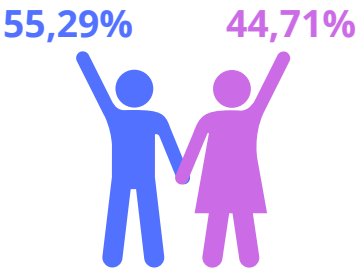
Among the 170 REC-PCIME users in our sample, we noted

- **Health worker other than health facility manager: 73.53%**
- **Health training manager: 26.47%**

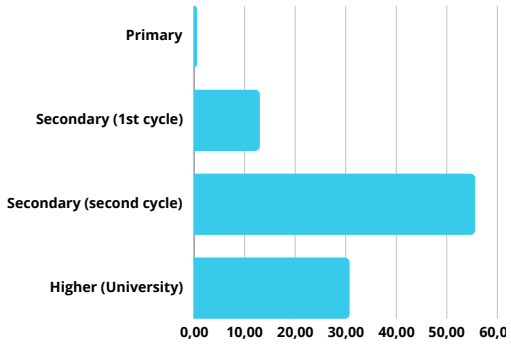
AGE



SEX



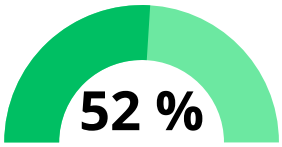
EDUCATIONAL LEVEL



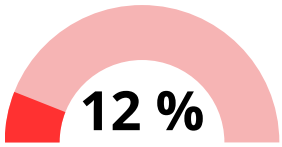
In our sample, more than 55% of REC-PCIME users were men. The age groups between 31 and 40 and between 41 and 55 were the most represented. More than 55% of users had an education level of secondary level (second cycle) and more than 30% of higher level (university).

USER PERCEPTION

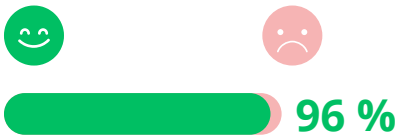
TRAINED AGENTS



LEVEL OF COMPLEXITY

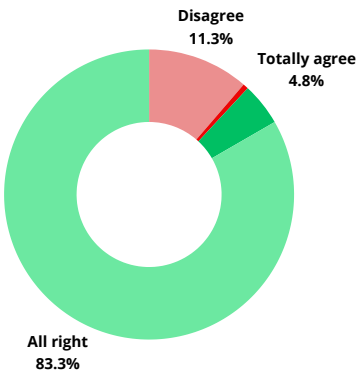


ATTITUDE TOWARDS THE TOOL

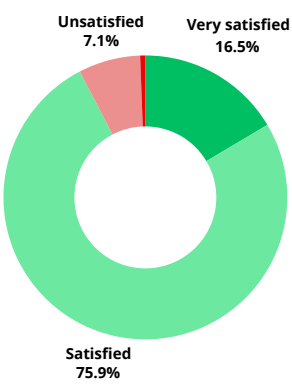


At least 52% of REC-PCIME users in our sample had received formal training. However, 12% found the tool complex. However, more than 96% of users displayed a positive attitude towards the tool.

MASTERY OF THE TOOL

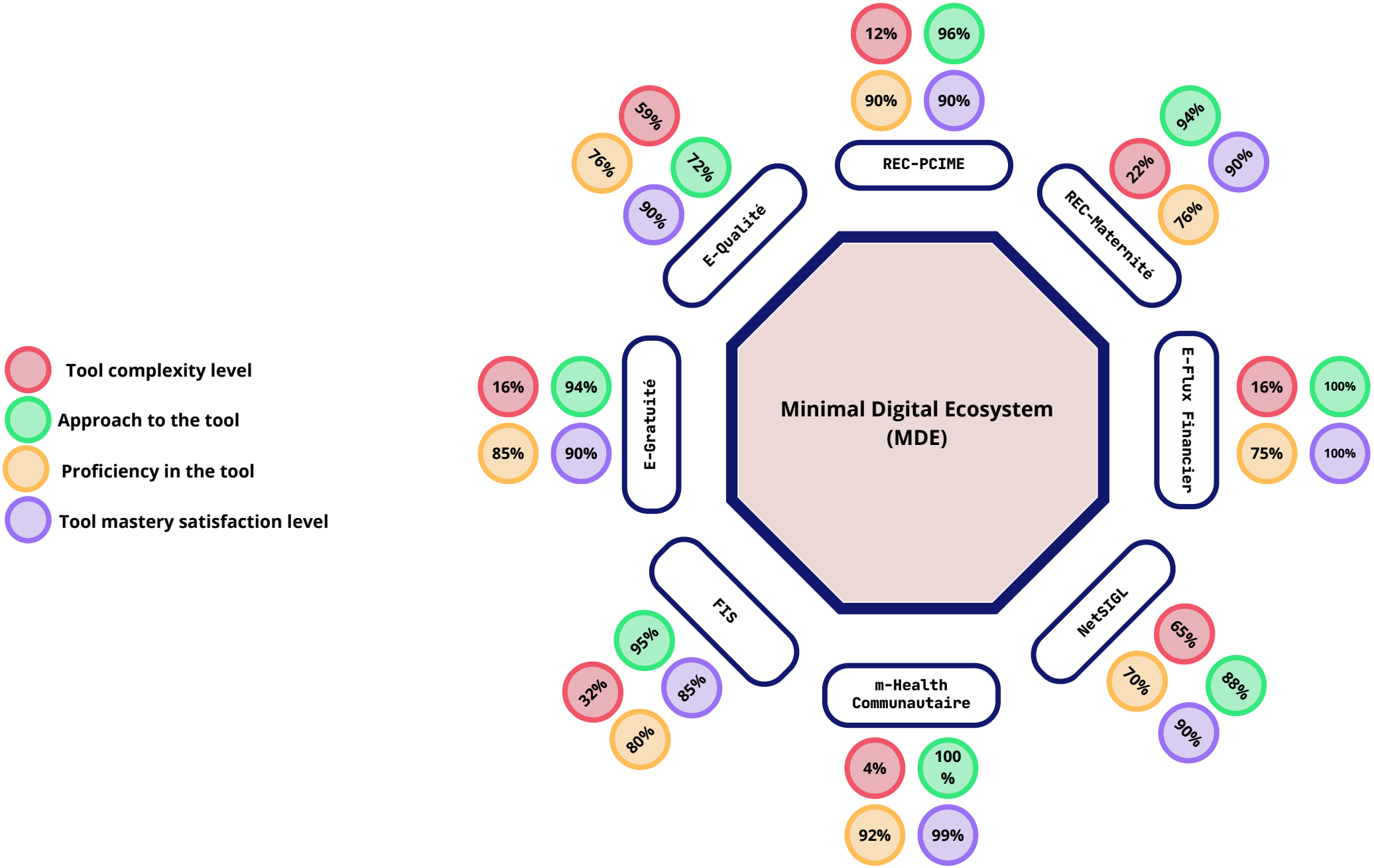


SATISFACTION WITH THE TOOL



Nearly 90% of users indicated that they mastered the tool and more than 95% were satisfied with REC-PCIME.

SUMMARY OF USER PERCEPTIONS RESULTS



Three tools, namely E-quality, NetSIGL 2.0, and FIS, were perceived as complex by over 30% of their users. Among five tools, including NetSIGL 2.0, E-quality, FIS, E-Financial Flow, and REC-maternity, a minimum of 20% of users lacked proficiency in the respective tool. Nevertheless, all tools exhibited a significant satisfaction rate, ranging from 90% to 100%.

Some operational definitions

We provide some operational definitions of perception indicators to facilitate understanding.

- **Tool complexity**

The tool is considered complex when the user considers its use difficult or very difficult.

- **Attitude towards the tool**

  - **Positive attitude: Intention to use the tool as part of the job. The user highlights the added value of the tool**
  - **Negative attitude: Intention not to use the tool as part of the job. The user adopts a pessimistic attitude towards the tool.**

- **Mastery of the**

Degree of ease of using the tool on the job.

- **Satisfaction**

Degree to which work has improved or expectations have been met as a result of using the tool.

The initial analysis of the MDE evaluation survey enabled the identification of user profiles for each tool and the description of their characteristics. The profiles exhibit diversity, with educational levels varying significantly across tools. Hence, promoters need to consider this diversity to provide tools tailored to each user group, thereby reducing the reported complexity level.

Apart from a few tools, the gender distribution among users was equitable. During the survey period, training for certain tools was either ongoing or planned, revealing an imbalance in the percentage of trained users.

Users have reported a lack of proficiency in utilizing the tools, possibly stemming from recent or inadequate training. This challenge could be mitigated through supervision sessions or additional skill development initiatives.

Despite these challenges, most users maintained a positive attitude and conveyed contentment with the tools, indicating an overall encouraging experience.

For inquiries related to the assessment, please reach out to us at association.resade@gmail.com. To explore further details about our services and activities, visit our website at https//resade.org. You can also contact us via phone at +226 70061335 or visit us at 04BP8398 Ouagadougou 04, Arrondissement 6, Sector 28, Ouagadougou, Burkina Faso.