

LEARNING EXCHANGE

LEARNING FROM THE WORLD'S LARGEST
NEXUS CVA PROGRAMME - THE ESSN

DATA DRIVEN CVA PROGRAMMING

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Speakers



Agenda



Funded by
the European Union



Hosted by IFRC & Türk Kızılay and supported by **CashHub**

ESSN Unique Data Needs:

- **Large Caseload: ~1.6 million**
 - **Demographic Targeting**
- **Pre-existing programme structure**
 - **National Society with very high capacity**
 - **IFRC Role providing assurance as grant holder**
- **Multiple stakeholder expectations**
 - **Caseload anxiety - few budget constraints**
 - **Reduced inclusion/exclusion errors**
 - **Alignment of transfer amounts with national social assistance programmes**
- **Multiple Shocks: Covid – 19, Inflation Crisis, EQ**

Roles: Information Management & Data Analysis – ESSN



Cash Program Cycle – Results Assurance

Verification: Who will receive payments? Are they eligible?

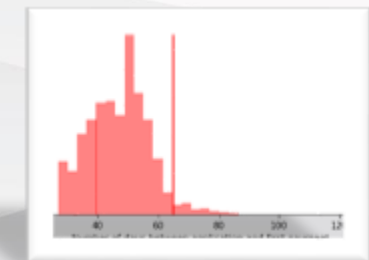
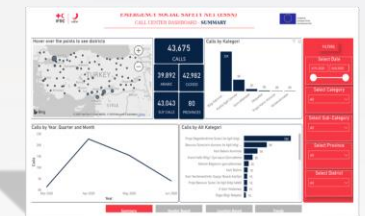
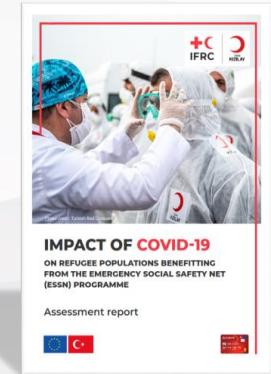
Reconciliation: Were the payments processed correctly?

Sweepbacks: Funds recovered from dormant accounts and uncollected cards

Projections: Forecast of how many recipients there will be in the future

Support Services

- Support for Mobile data
- Static Infographics
- Interactive dashboards
- Thematic Maps
- Thematic Data Analysis
- Secondary Data Analysis
- Answering Programme Questions



Profiles:

- **Via Skills Based Hiring Platform:**

- Coding test sent to *all* long-listed candidates – Unconventional candidates selected

- **Data analysis and Data Science:**

- skills related to data analysis, including the use of Python, Power-BI, and Tableau, creation of advanced statistical models and use of machine learning.

- **Data Engineering:**

- data integration, data transformation, database administration, ensuring data quality and availability, optimizing data workflows, and making data readily accessible for analysis.

- **Mapping and Visualization:**

- Skills in creating visual information products, such as interactive dashboards, static infographics, and maps (including GIS) for presenting data in a user-friendly and informative manner.

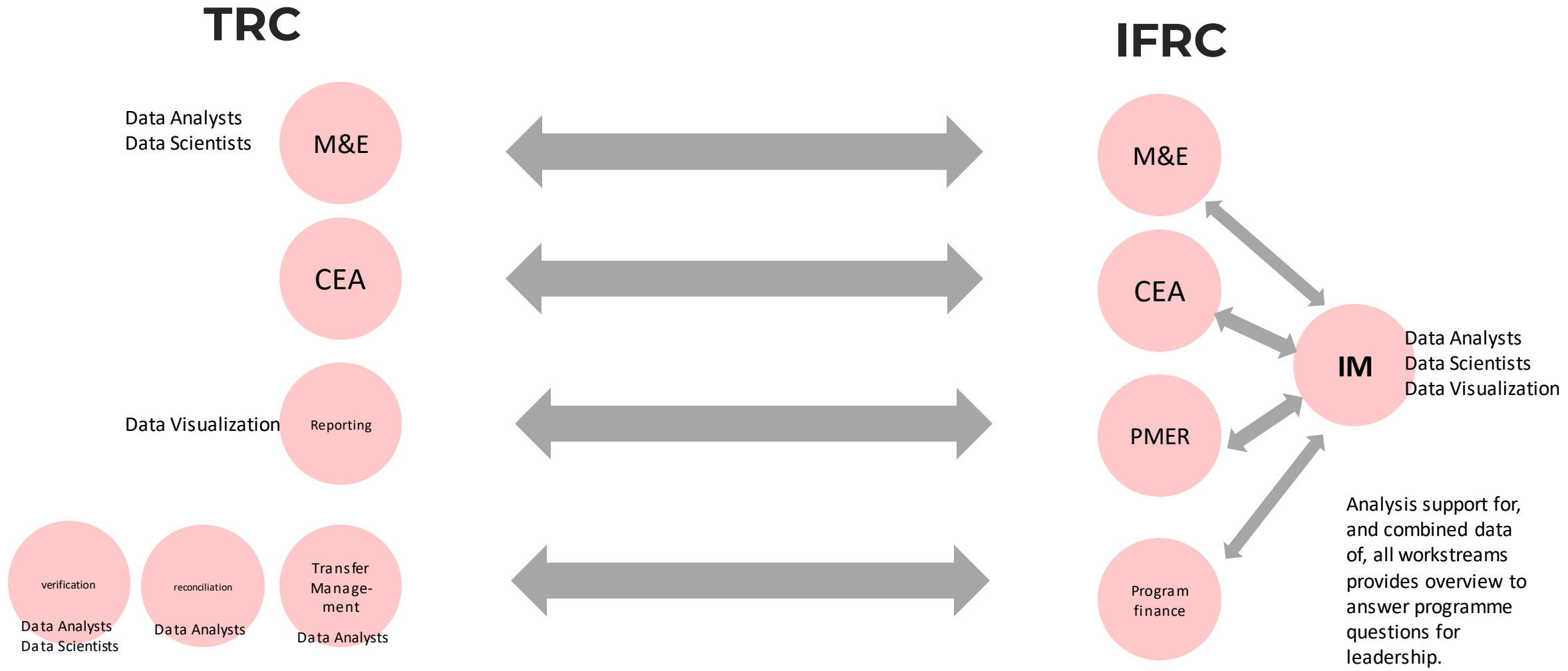
- **Humanitarian Data Analysis:**

- Combining information from primary and secondary data sources systematically via an analysis framework to provide humanitarian context



Holistic Data Driven Approach - Start:

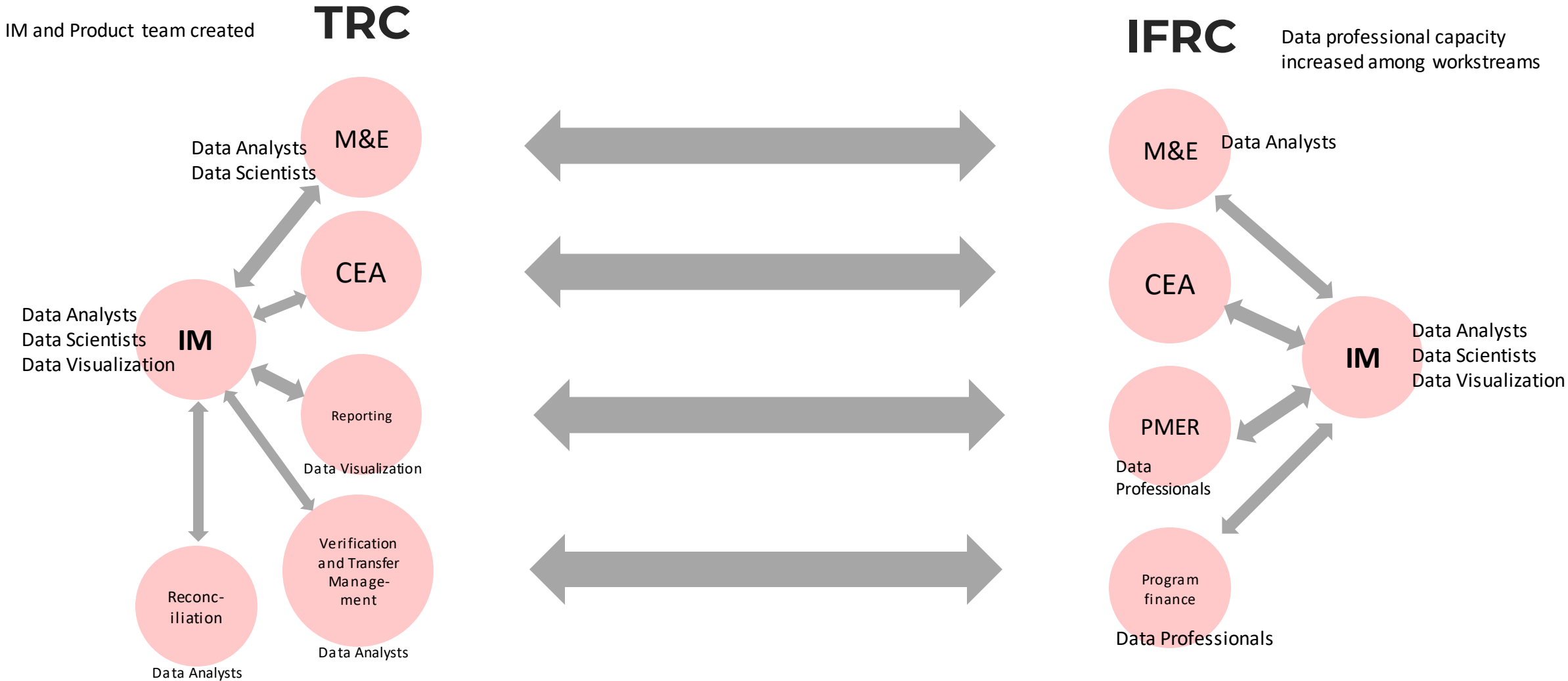
Data Professional Distribution:

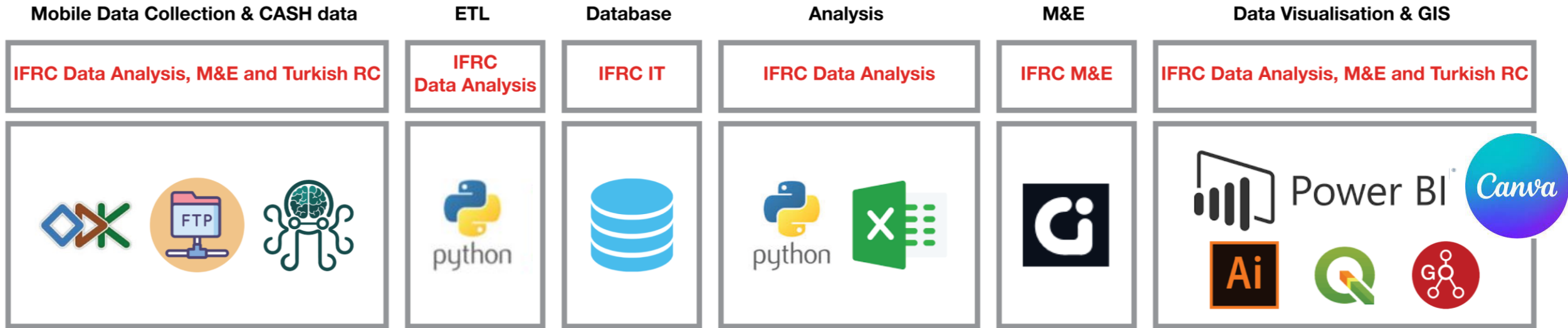


Holistic Data Driven Approach – Evolution:



Data Professional Distribution:





Data is made available via a Secured FTP of Turkish Red Crescent, then ingested into FME to ensure standard transformation and upload into the IFRC database. The analysis is ran using Python and excel before doing the reporting and visualisation using standard Business Intelligence and GIS softwares. All products will be available on IFRC GO.

Data related to surveys is collected with ODK Central, then ingested into FME. Qualitative data is ingested into DEEP to be analysed, using the IFRC Analytical Framework. The M&E activities are all monitored using Activity Info. Activity Info will have a live connector to Tableau for ensuring automated monthly reporting to the donor.

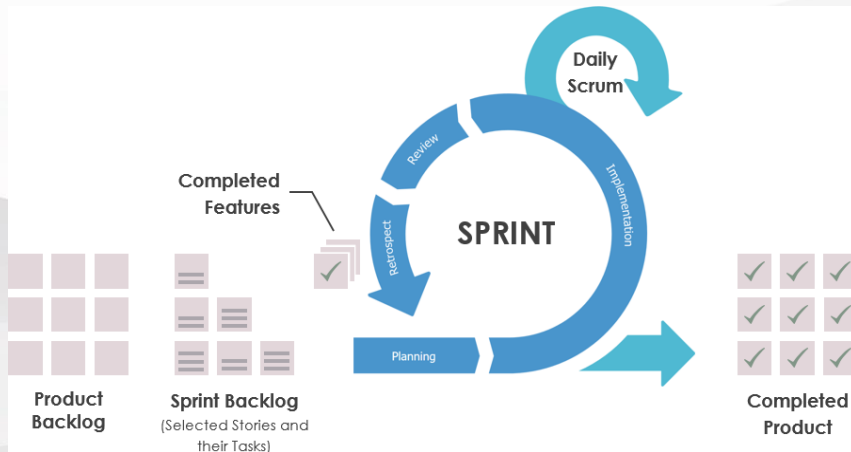
Agile Management:

Rituals:

Stand Up (Scrum) - every morning

Sprint Review - biweekly

Sprint Retrospective – after sprint review. Systematically reviewed process for further improvement



Agile Values:

Individuals and interactions
 over
 process and tools
 |
 Working data products
 over
 comprehensive documentation
 |
 Collaboration
 over
 contract negotiation
 |
 Responding to change
 over
 following a plan.

12 Agile Principles @OlgaHeismann			
<p>Satisfy the customer through early and continuous delivery of valuable software.</p>	<p>Welcome changing requirements, even late in development.</p>	<p>Deliver working software frequently.</p>	<p>Business people and developers must work together.</p>
<p>Build projects around motivated individuals. Give them the support they need. Trust them.</p>	<p>The most efficient and effective method of conveying information is face-to-face conversation.</p>	<p>Working software is the primary measure of progress.</p>	<p>The sponsors, developers, and users should be able to maintain a constant pace indefinitely.</p>
<p>Continuous attention to technical excellence and good design.</p>	<p>Simplicity – the art of maximizing the amount of work not done – is essential.</p>	<p>The best architectures, requirements, and designs emerge from self-organizing teams.</p>	<p>The team reflects on how to become more effective and adjusts its behavior accordingly.</p>

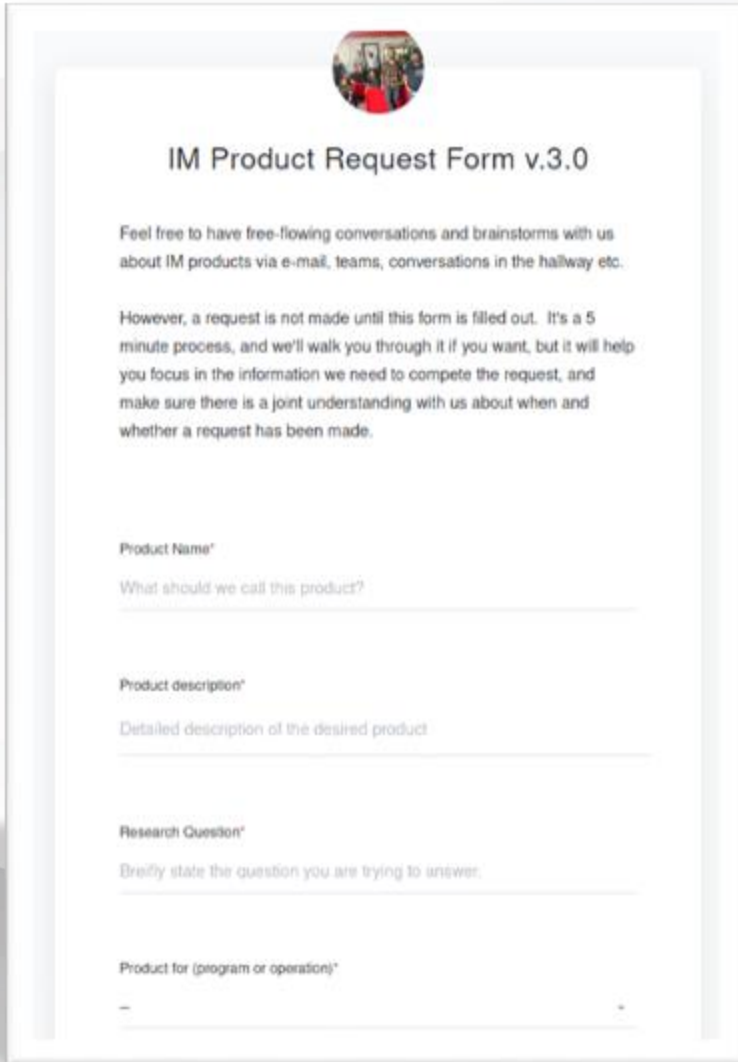
Spirit of Consensus:

The best decisions include a diversity of opinions

The best teams include a diversity of backgrounds and skillsets

Speak up if you disagree!

Product Request Pipeline



IM Product Request Form v.3.0

Feel free to have free-flowing conversations and brainstorm with us about IM products via e-mail, teams, conversations in the hallway etc.

However, a request is not made until this form is filled out. It's a 5 minute process, and we'll walk you through it if you want, but it will help you focus in the information we need to complete the request, and make sure there is a joint understanding with us about when and whether a request has been made.

Product Name*
What should we call this product?

Product description*
Detailed description of the desired product

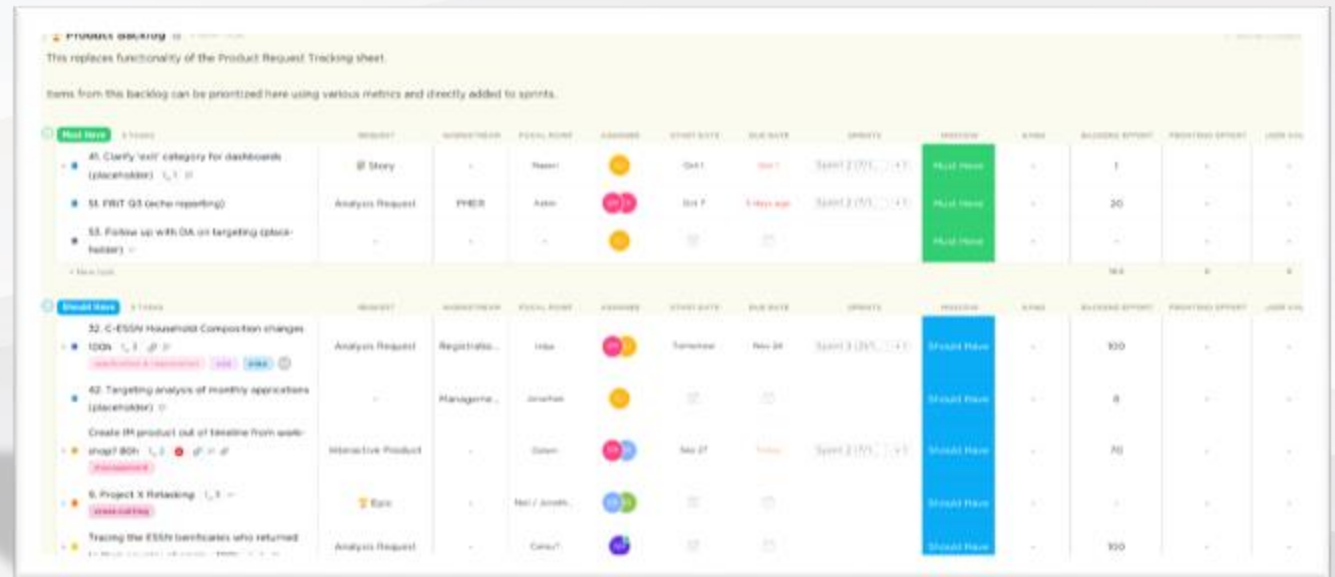
Research Question*
Briefly state the question you are trying to answer.

Product for (program or operation)*

[Product Request Form](#)

Product Request Form:

- Important as an enabler – not barrier
- Joint understanding request had been made
- Integrated into project management software for prioritization of backlog



This replaces functionality of the Product Request Tracking sheet.

Items from the backlog can be prioritized here using various metrics and directly added to sprints.

Item	Request	Workstream	Priority	Assigned	Start Date	Due Date	Priority	Progress	Value	Backlog Effort	Priority Effort	Link
Must Have 3 items												
41. Clarify 'exit' category for dashboards (placeholder)	Story	-	None	Yellow	Oct 1	Nov 1	High	100%	1	-	-	
51. FRIT Q3 (extra reporting)	Analysis Request	FRIT	None	Red	Oct 7	Nov 1	High	100%	20	-	-	
55. Follow up with DA on targeting (placeholder)	-	-	-	Yellow	-	-	High	100%	-	-	-	
Should Have 3 items												
32. C-ESM Household Composition changes	Analysis Request	Registration	Info	Yellow	Tomorrow	Nov 24	High	100%	100	-	-	
42 Targeting analysis of monthly applications (placeholder)	-	Management	Analysis	Yellow	-	-	High	100%	8	-	-	
Create IM product out of baseline from workshop 80h	Internal Product	-	Other	Red	Nov 27	Nov 27	High	100%	70	-	-	
6. Project X Retasking	Task	-	Not / Assign	Green	-	-	High	100%	-	-	-	
Tracing the ESM beneficiaries who returned	Analysis Request	-	Other	Purple	-	-	High	100%	100	-	-	

[Product Request Tracking and Prioritization \(clickup\)](#)

Key Successes: Informed Decision Making



Reporting
Technical unit responsible for internal, external, donor and reporting to stakeholders.



External Communication
Responsible for the programme promotion and the continuity of the external funds by triggering public perception.



Coordination
Taking an active role in relevant coordination mechanisms such as sectoral meetings and events, meeting follow-up and co-chairing the ESSN Task Force Meetings.



MCC/KPI DASHBOARD



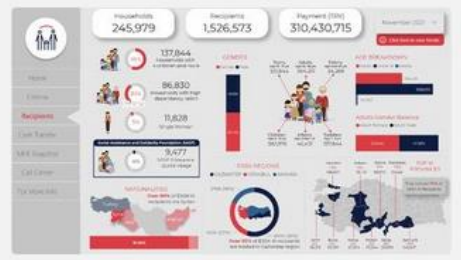
Click on the image to open the Product Request Form



Classic Recipients Dashboard (Classic Version)



Livelihood Dashboard



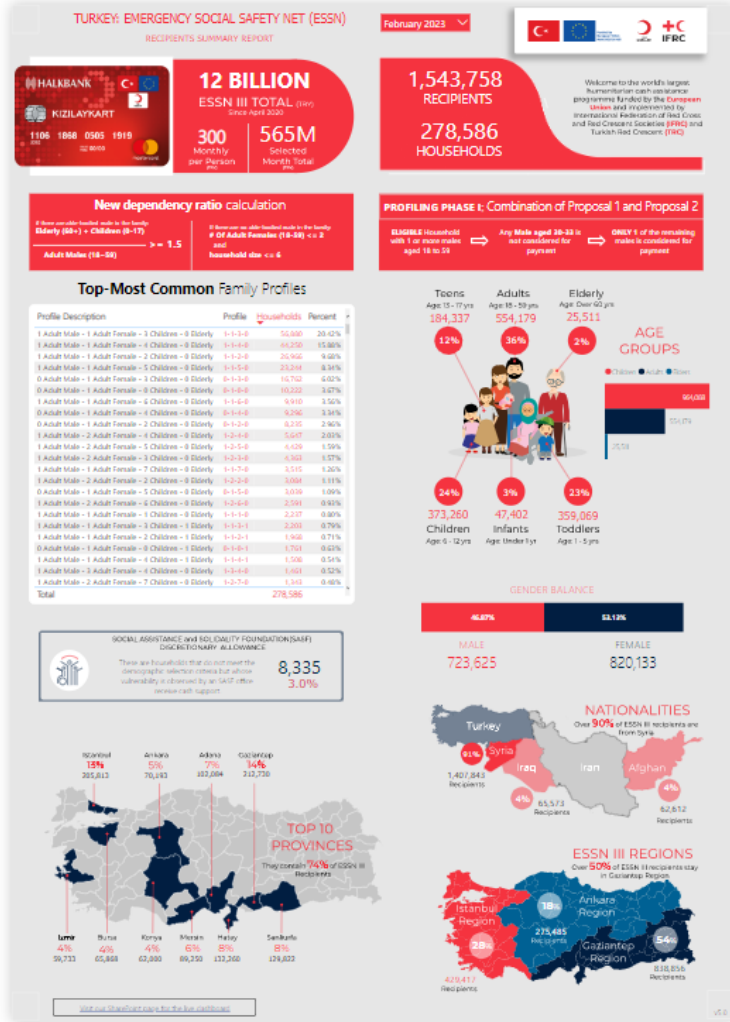
RECIPIENTS DASHBOARD



CALL CENTER DASHBOARD



GENDER DASHBOARD



[Dashboards Menu](#) (12 dashboards)

[Visualization overview](#)

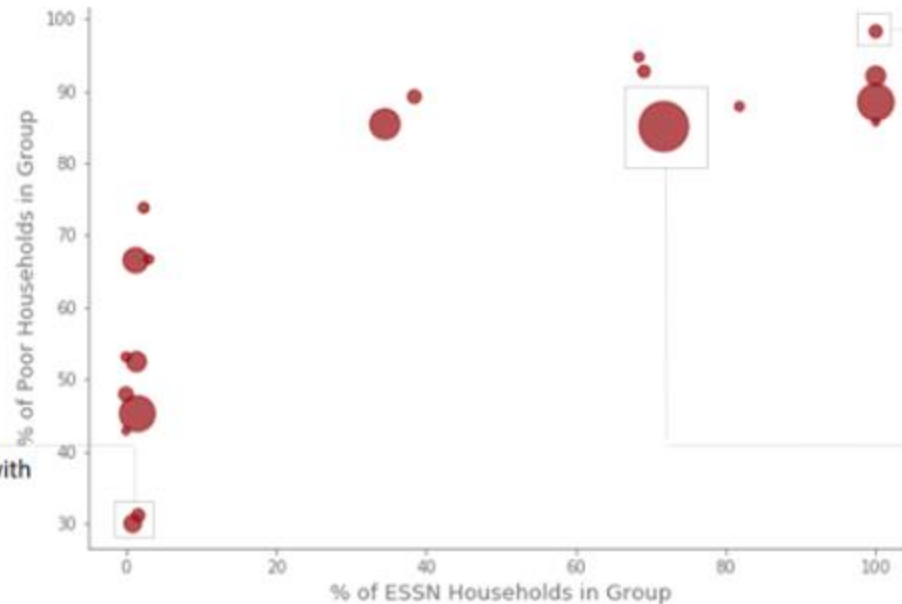
Key Successes: Informed Decision Making

Targeting studies:

Reduction scenario – Intro Family Composition Groups



Least Poor Group
Male main applicant households with only 2 adults and one children*
% of ESSN HH: 0.9%
% of Poor HH: 20%
% of all categories : 3.3%



Most Poor Group
Single female with 3+ children*
% of ESSN HH in group: 100%
% of Poor HH: 98.3%
% of all categories: 1.7%

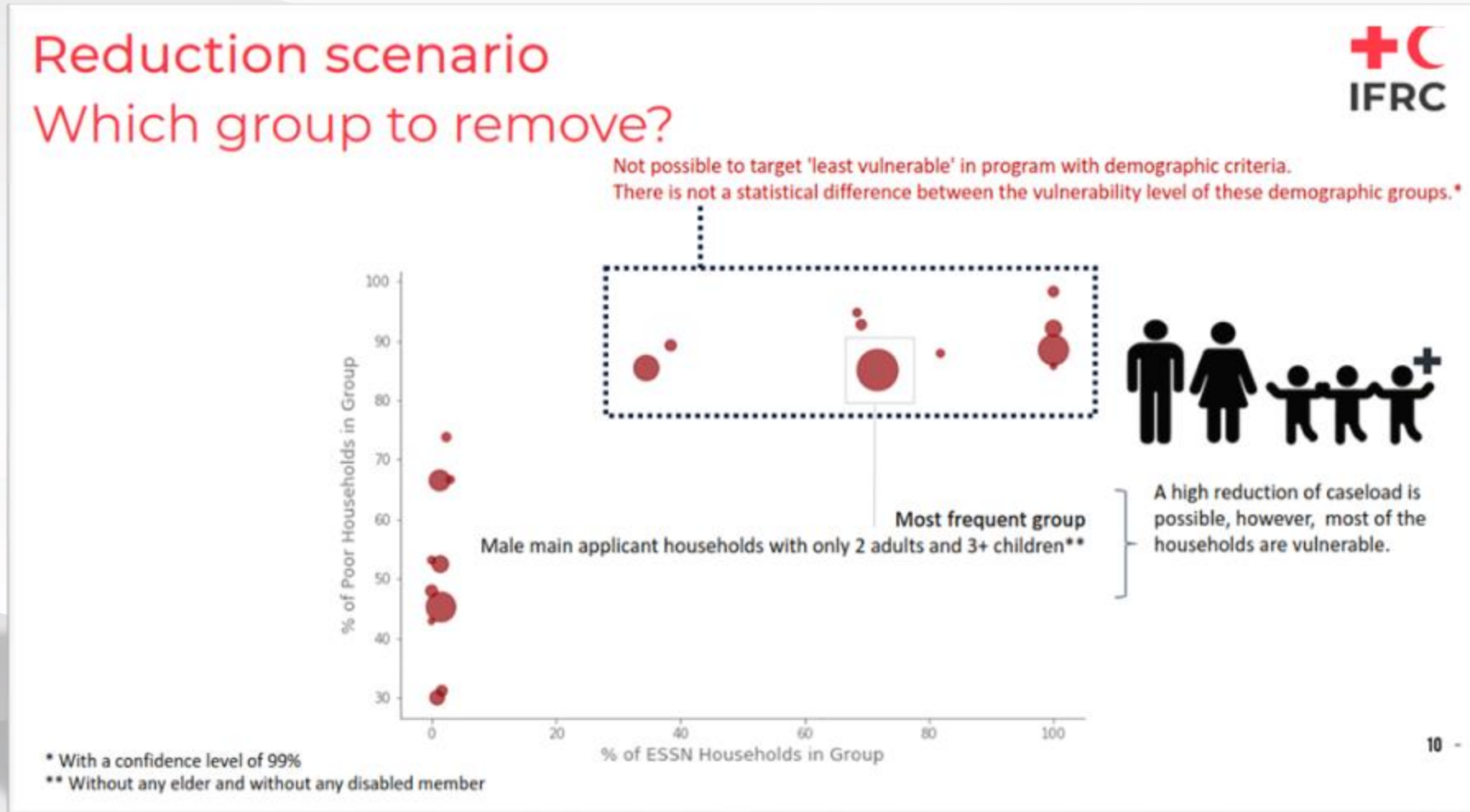


Most Frequent Group
Male main applicant households with only 2 adults and 3+ children*
% of ESSN HH: 71.7%
% of Poor HH: 85.1%
% of all categories: 26.9%

* Without any elder and without any disabled member

Key Successes: Informed Decision Making

Targeting studies:



Key Successes: Informed Decision Making

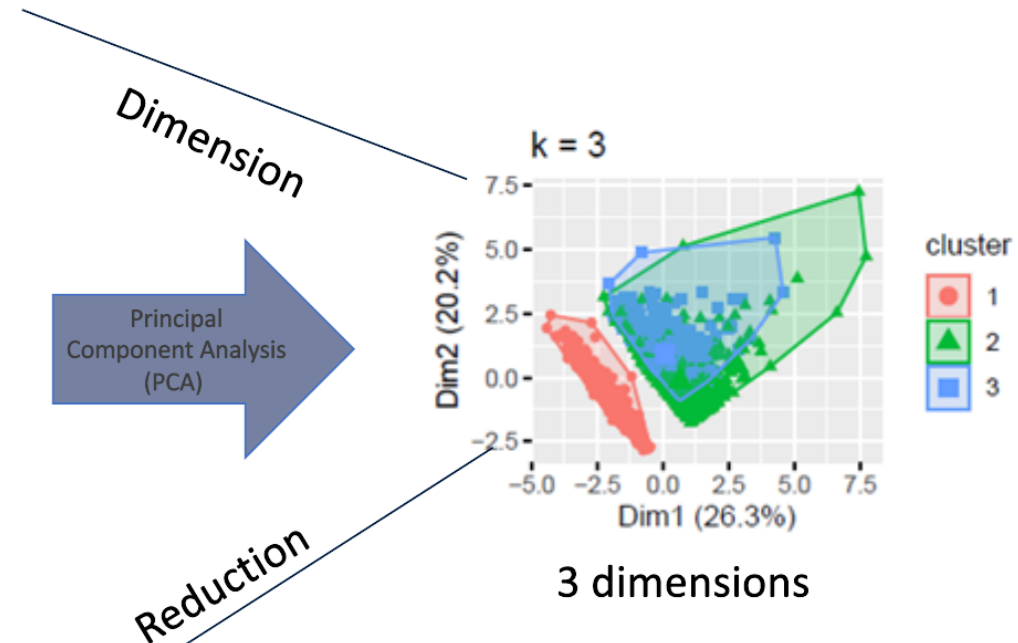
Targeting studies: Gender Adjusted Dependency Ratio

Analysis produced by TRC M&E in consultation with IFRC and recommendation evaluated against proxy means testing approach by Development Analytics.

Independent variables:

- Number of individual in household
- Number of working individuals
- Gender of head of household
- Women 18 to 59
- Dependency ratio
- Reduced coping strategy index (rCSI)
- Livelihood coping strategy index (LCSI)
- Share of rent without including remittances
- Households above Minimum Expenditure Basket

9 dimensions



Previous Criteria:

- 4+ Children
- Dependency Ratio > 1.5
- Women living alone

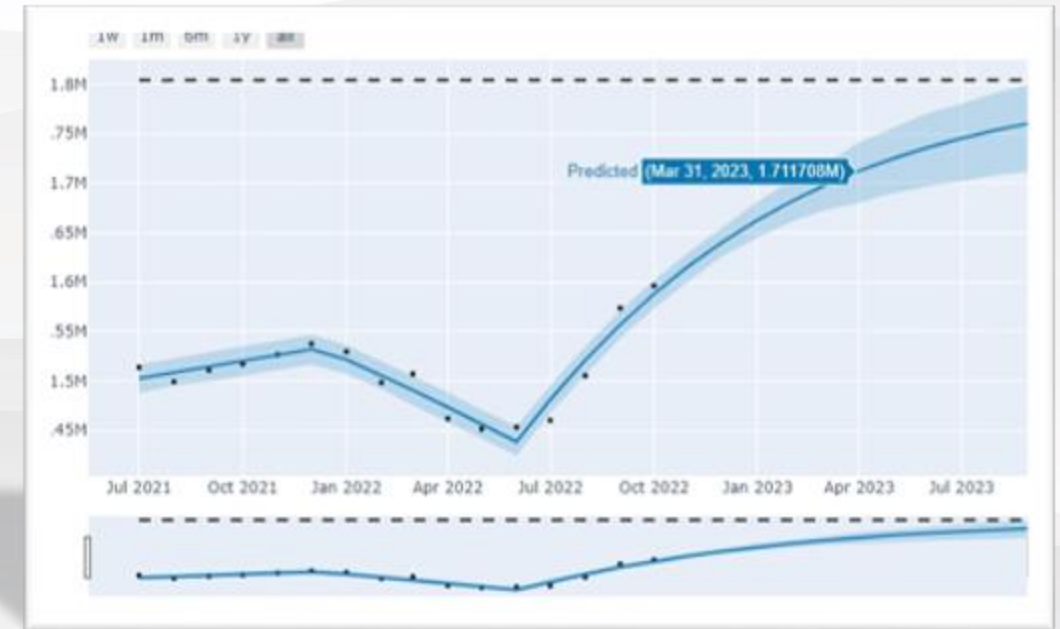
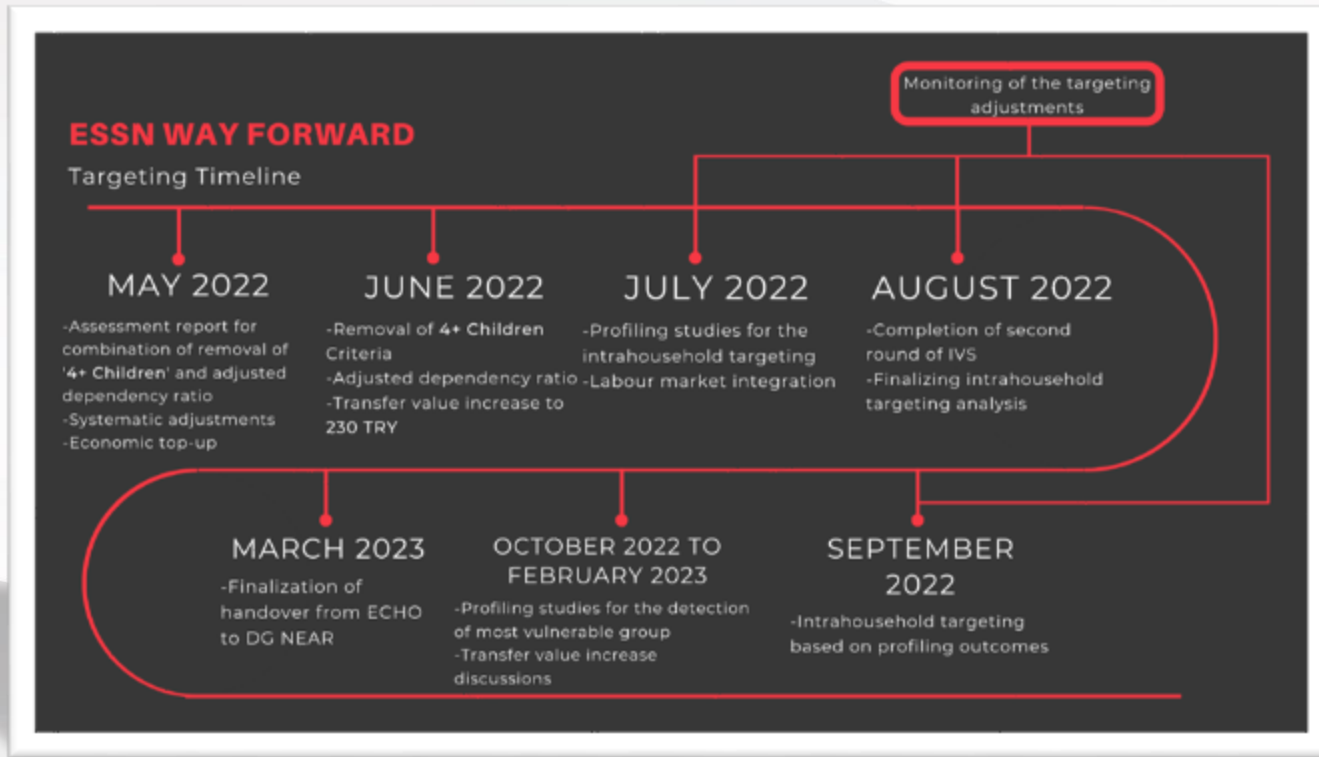


New Criteria:

- Gender Adjusted Dependency Ratio > 1.5

Key Successes: Informed Decision Making

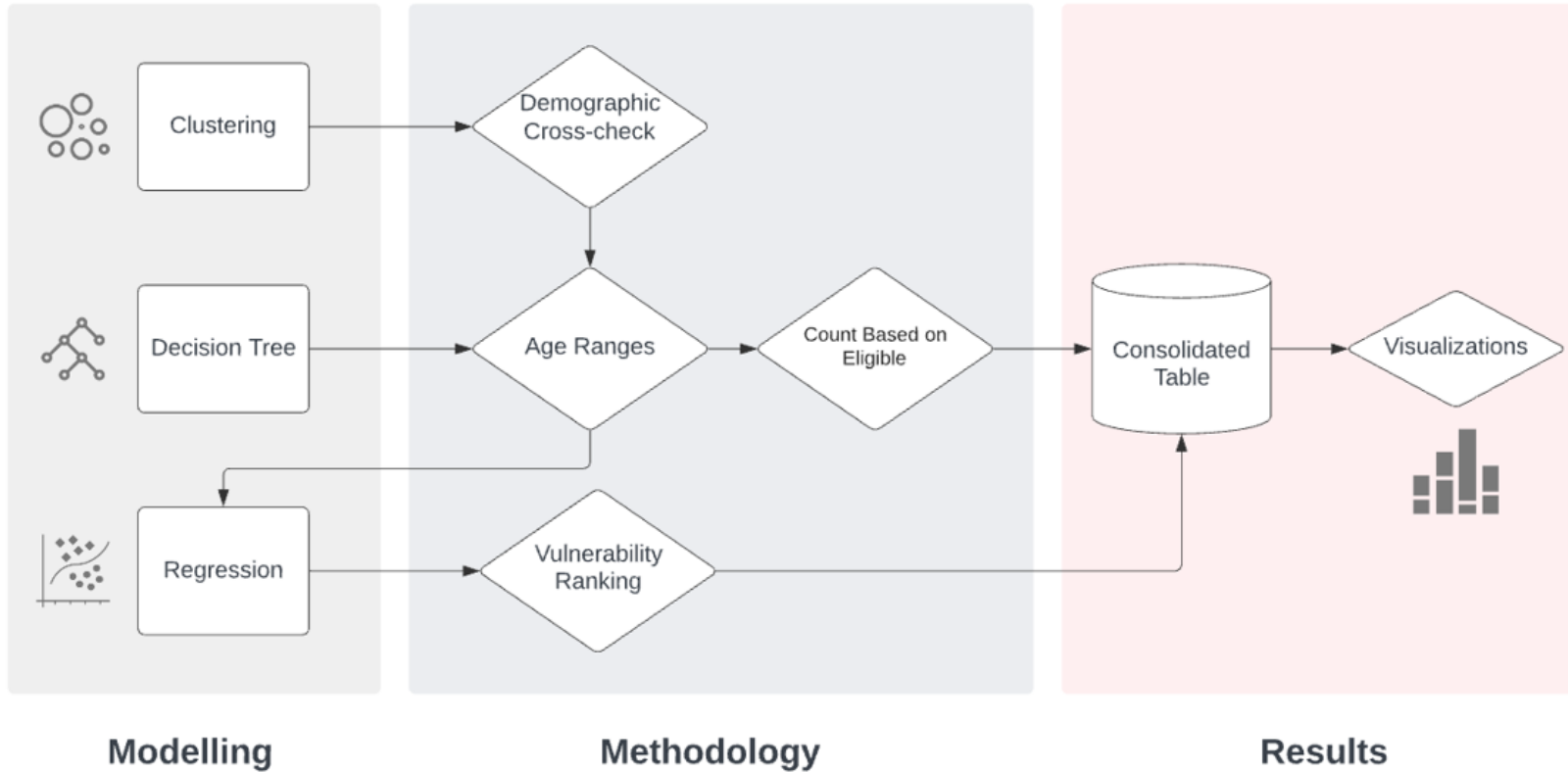
Targeting studies: Horizontal Expansion



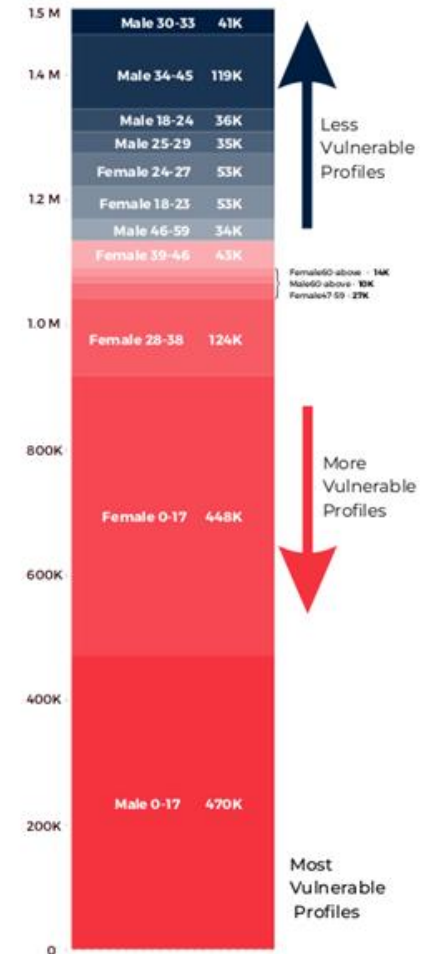
Key Successes: Informed Decision Making

Targeting studies: Intrahousehold Targeting

Validated by recommendations in Development Analytics Report.
Extra analysis capacity provided via framework agreement with Data Friendly Space

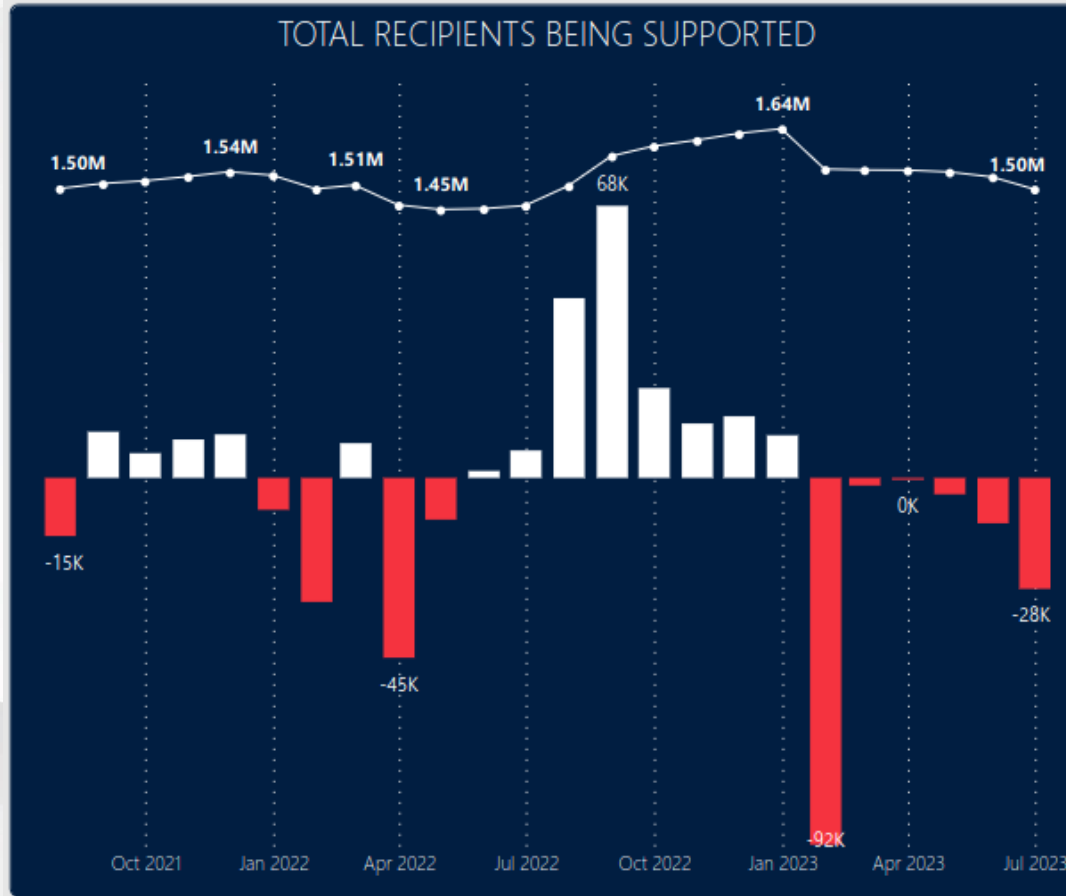


Profiles Divided by **Age** and **Gender**
Ranked by **Vulnerability**

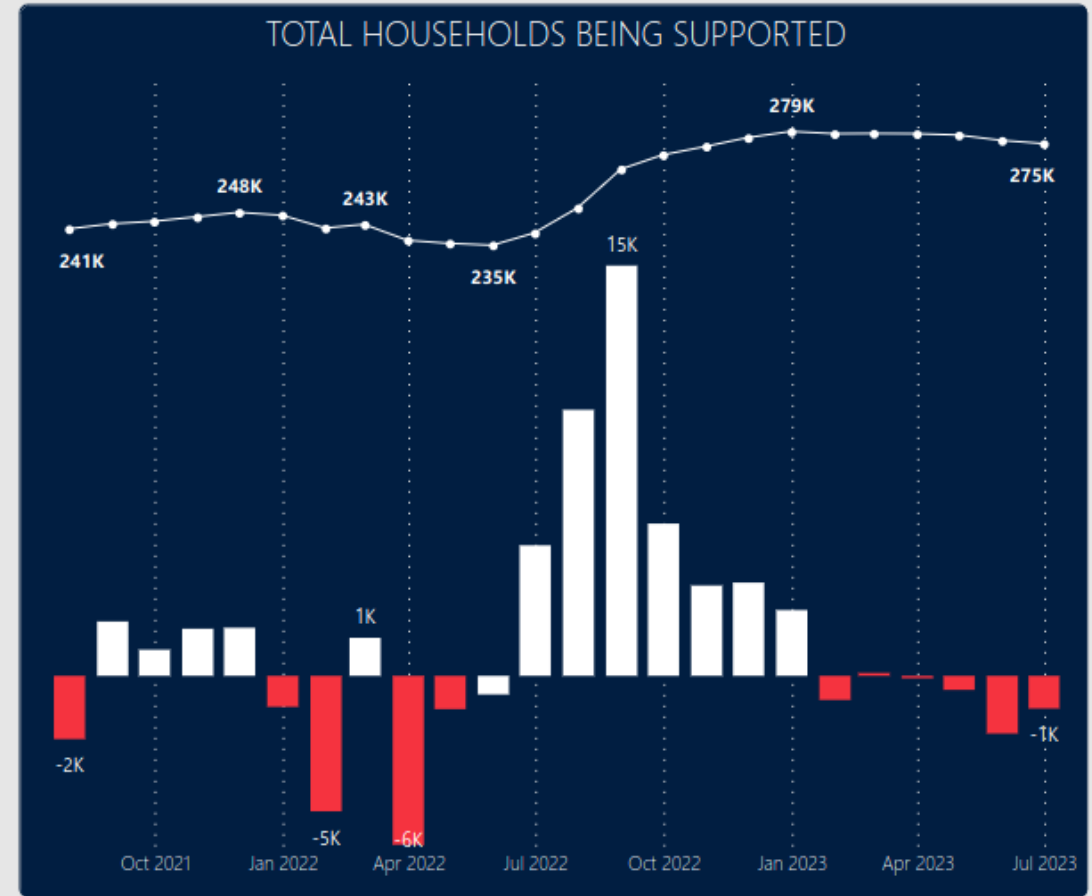


Key Successes: Informed Decision Making

Targeting studies: Intrahousehold Targeting



Individual Recipients



Households

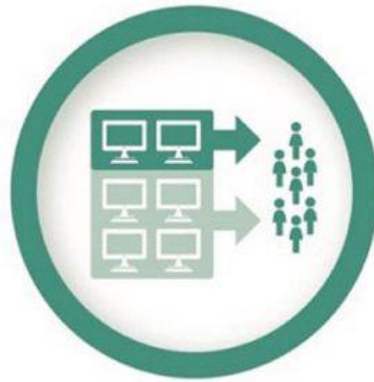
Key Successes: Shock Responsiveness

Oxford Policy Management (OPM) Framework:



Design Tweaks

Adjusting the design of routine social protection interventions



Piggybacking

Use an existing programme's infrastructure



Vertical Expansion

Temporarily increase the value or duration of benefit for existing recipients



Horizontal Expansion

Temporarily increase the number of recipients in an existing programme



Alignment

Align with other current or planned interventions

Shocks:

- **Covid-19**
- **Inflation Crisis**
- **2023 Earthquake**

Responses:

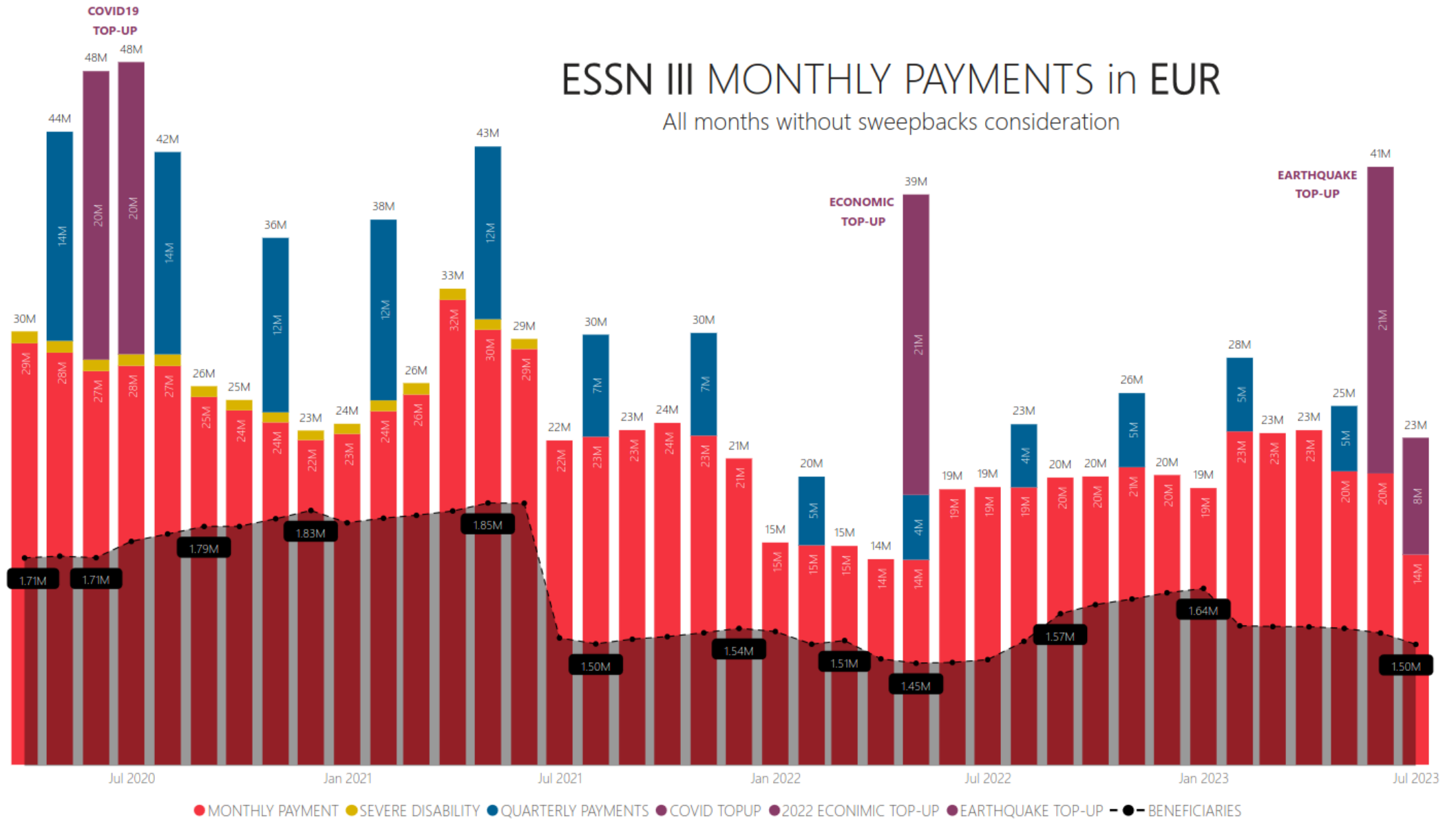
- **Thematic Top-ups**
- **Criteria Adjustment**
- **Adapted program to serve host population**
- **Supplemented vulnerable populations through existing social assistance lists in EQ effected areas**
- **Supplemented gov. payments to people with damaged buildings**

Key Successes: Shock Responsiveness

Top Ups:

ESSN III MONTHLY PAYMENTS in EUR

All months without sweepbacks consideration

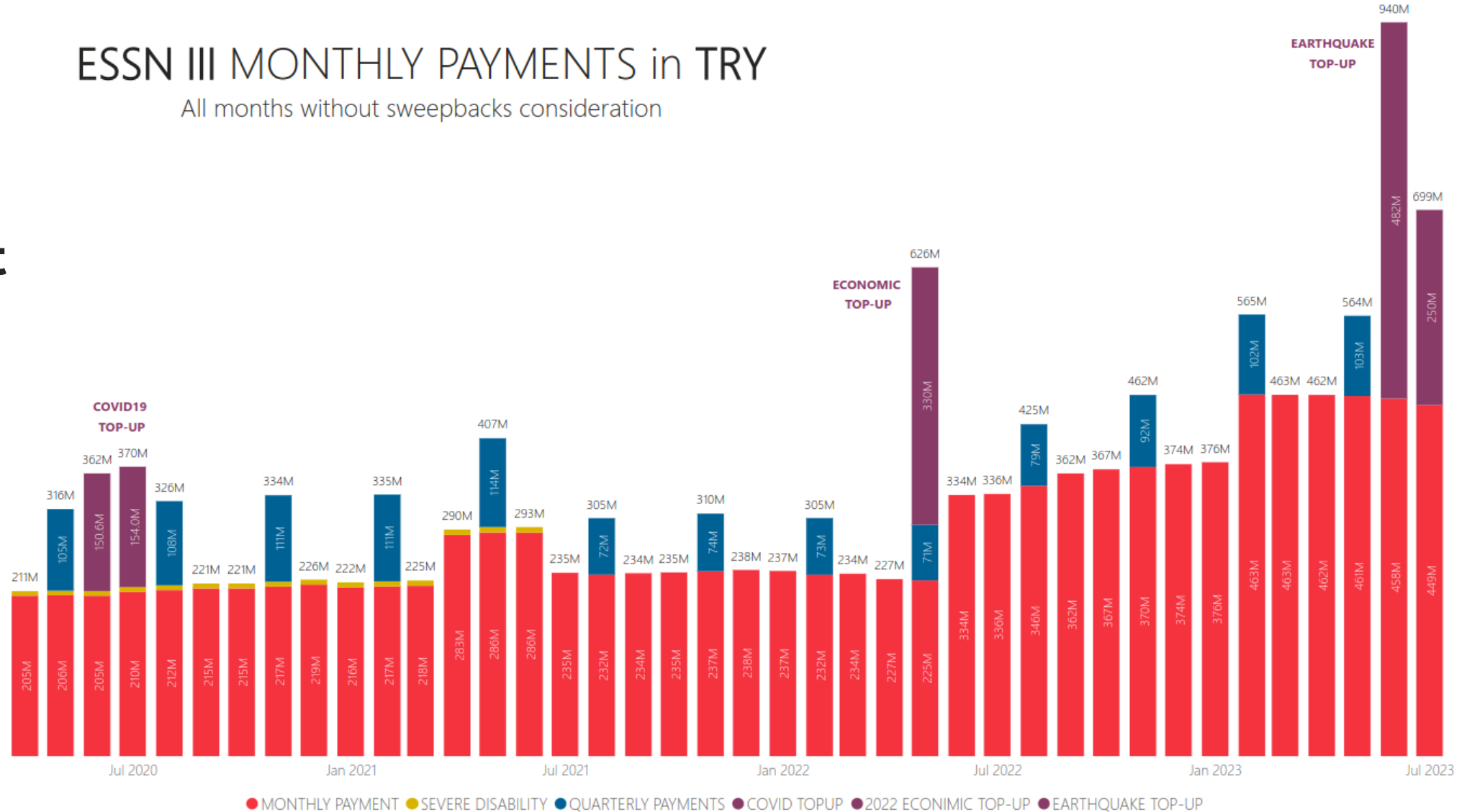


Key Successes: Shock Responsiveness

Transfer value adjustment (based on MEB):

ESSN III MONTHLY PAYMENTS in TRY

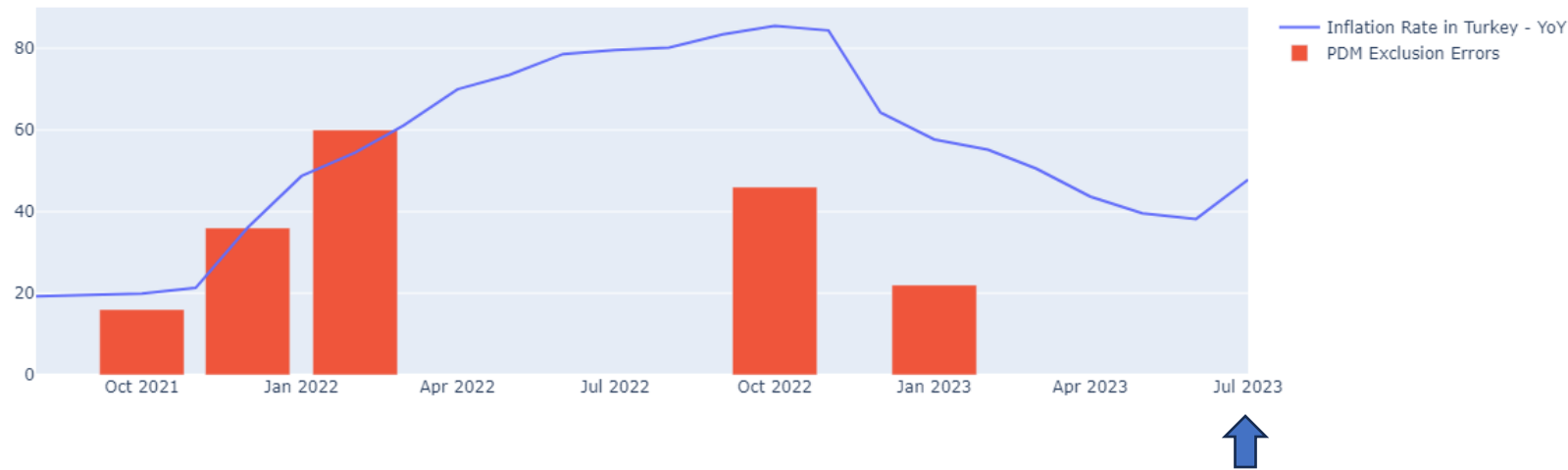
All months without sweepbacks consideration



Key Successes: Shock Responsiveness

Horizontal Expansion/Shock Recovery:

Year over year inflation v. Exclusion Error



Final Exclusion Error (July 2023) 18%

- 14% final exclusion error using investigatory individual based error calculation and accounting for intrahousehold targeting

PDM 17	Inclusion Error	Exclusion Error
HH level calculation	0,21547	0,17683
Individual level calculation	0,20651	0,10458
Logic 1: Count each alternative profiles (below) as ineligible		
Male30-36 (removal list)	0,20986	0,14338
Male30-45 (hypothetical)	0,20854	0,19264
Male18-59 (hypothetical)	0,20850	0,26754

SDR PRODUCTS



Thematic Reports



Bi-Weekly DFS Reports



Visuals and Maps

Key Successes: DEEP / SDR Process

Coordination Briefings:

Displacement outside of earthquake-affected provinces

More than 1.1 million people (mostly Turkish citizens) have evacuated from the provinces most affected by the earthquakes and registered with the governorships and district governships of different Turkish provinces [1]. OCHA reports this figure as 1.9 million [2].

Estimated number of people who have moved to different provinces of Türkiye



Legend

- Heavily-affected provinces*
- No data on population movement
- 154,801 - 225,454
- 28,037 - 154,560
- 17,401 - 28,036
- 7,323 - 17,400
- 0 - 7,322

Data source is official province, and reported updated as of 1 March 2023.

* Elazığ is also considered a heavily-affected province but it is accepting thousands of people fleeing the provinces in the north.



Sheltering of displaced people within earthquake-affected provinces



332 TENT CITIES [1]

NUMBER OF TENTS
360,167

NUMBER OF PEOPLE IN TENTS (WITHIN TENT CITIES)
1,440,668

189 CONTAINER CITIES [1]

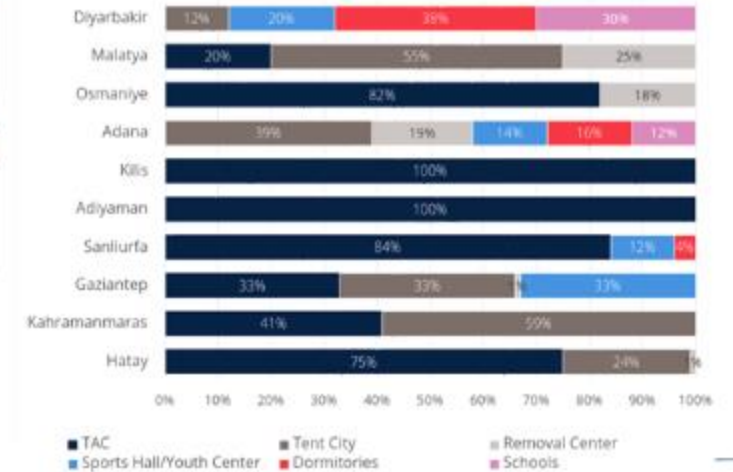


NUMBER OF CONTAINERS
6,698*

NUMBER OF PEOPLE IN CONTAINERS (WITHIN CONTAINER CITIES)
34,120

* AFAD reports that the infrastructure work and installation of 90,914 containers continues [1].

Percent of displaced population by type of temporary accommodation they are utilizing [2]



- TAC
- Sports Hall/Youth Center
- Tent City
- Dormitories
- Removal Center
- Schools



IFRC IM & Operations Briefing Process

Established framework to enable Turkiye Earthquake operational response



Product Request and feedback

HEOps requests regular morning briefings based on SDR and analysis products – provides regular feedback on utility for operation

Delivery

IM team lead receives briefing deck in the morning delivers situation briefing at start of every coordination meeting and Joint Task Force



Data Collection and Analysis

IM Qualitative Analysis team produce secondary data reviews and situation briefs released publicly through joint DEEP activation with DFS



Synthesis and Reporting

Reports handed over to **SIMS Coordinator** to synthesize together with visualizations and other available info to produce briefing deck for operations coordination meeting during «night shift»

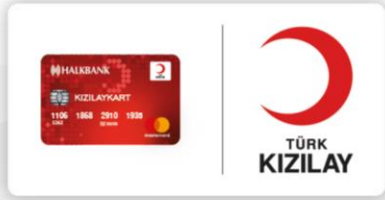


Funded by
the European Union



#CardLoadedWithGoodness

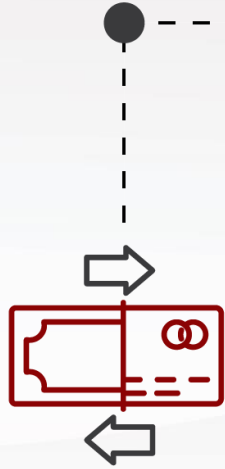
KIZILAYKART CASH SYSTEMS



- **IM Framework**
 - KIZILAYKART Cash Systems
 - Data Management
- **Lessons Learned**
- **Türk Kızılay & IFRC Collaboration**



IM FRAMEWORK



CASH SYSTEM

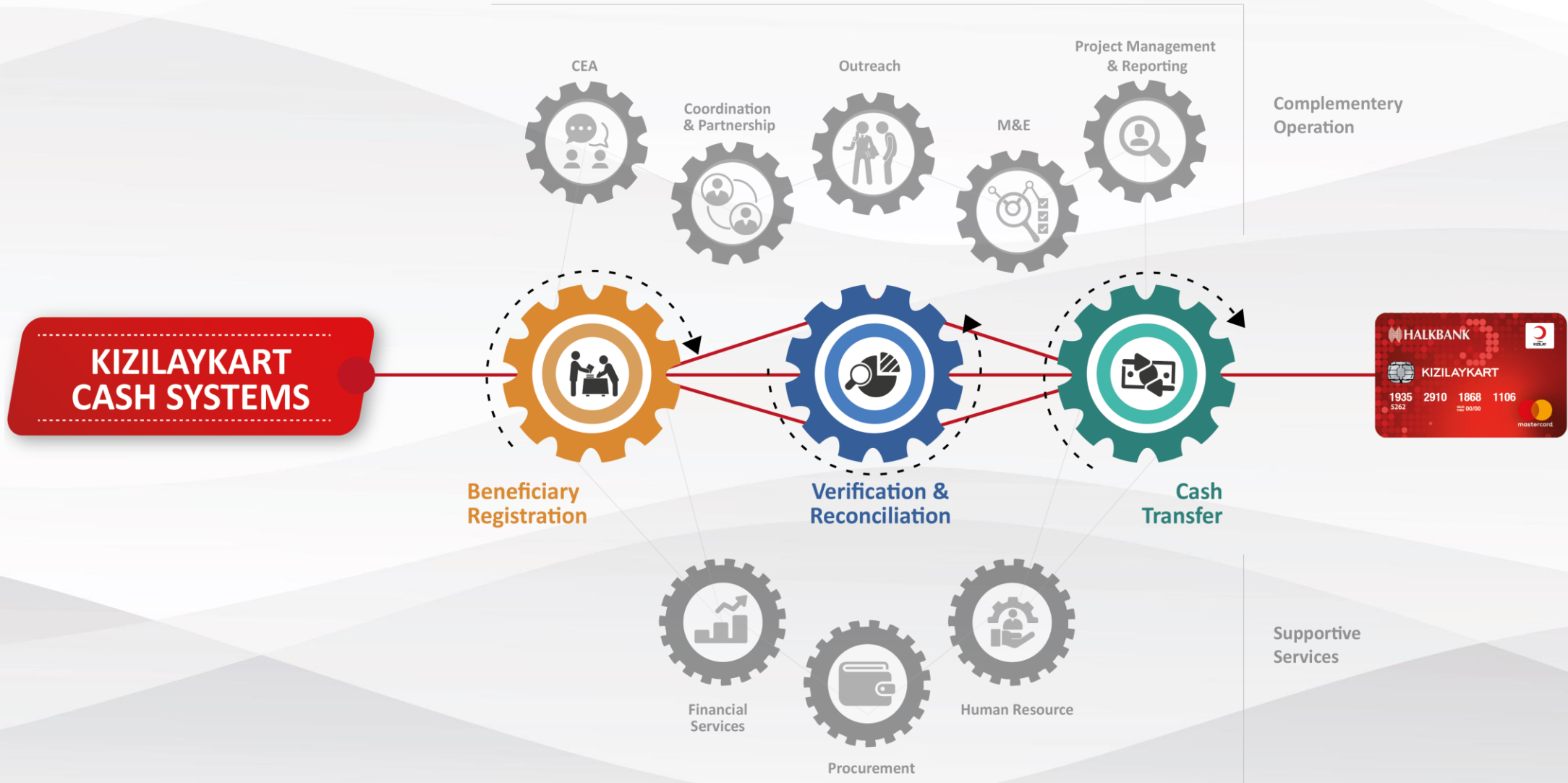
KIZILAYKART Cash System Structure
System Overview



DATA MANAGEMENT

Big Data Analysis
(CEA, Coordination & Partnership M&E, Reporting)
System Tools

Process

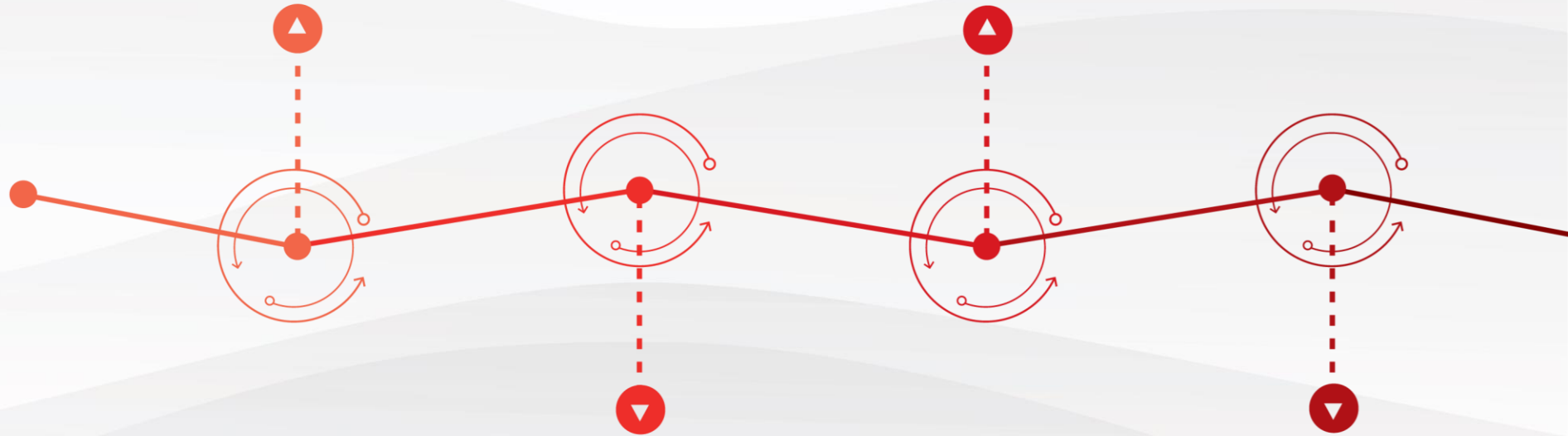


Milestone



IM System
Developed

Case Management
System



Integration Management
Panel

Changes in
Programme Criteria

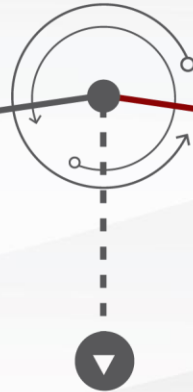
Changes in Transfer Value



Adaptation of the System to Programmatic Changes



Seperation of ESN and C-ESN Projects from each other

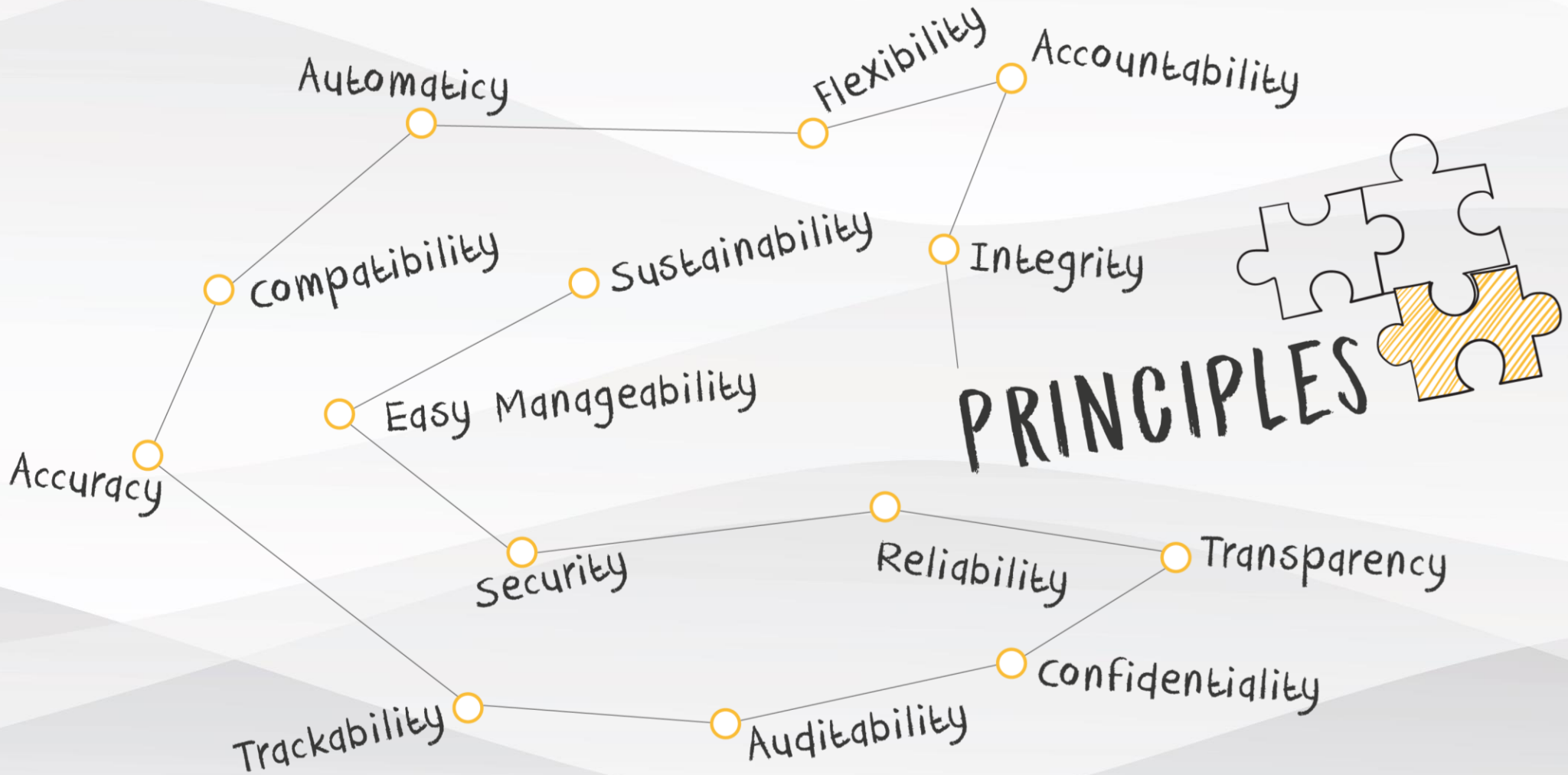


Emerging of New Payment Modality



Cardless Payment Method; during EQ Process

Principles and Standards



In-House Systems



Integration Management Panel



- Ensuring data sharing integration with Ministries, stakeholders and financial service provider
- Ensuring that all payment stages are carried out automatically
- Ensuring payments are made through CRM and FI modules integrated with the SAP system
- Ensuring information security

Information Management System

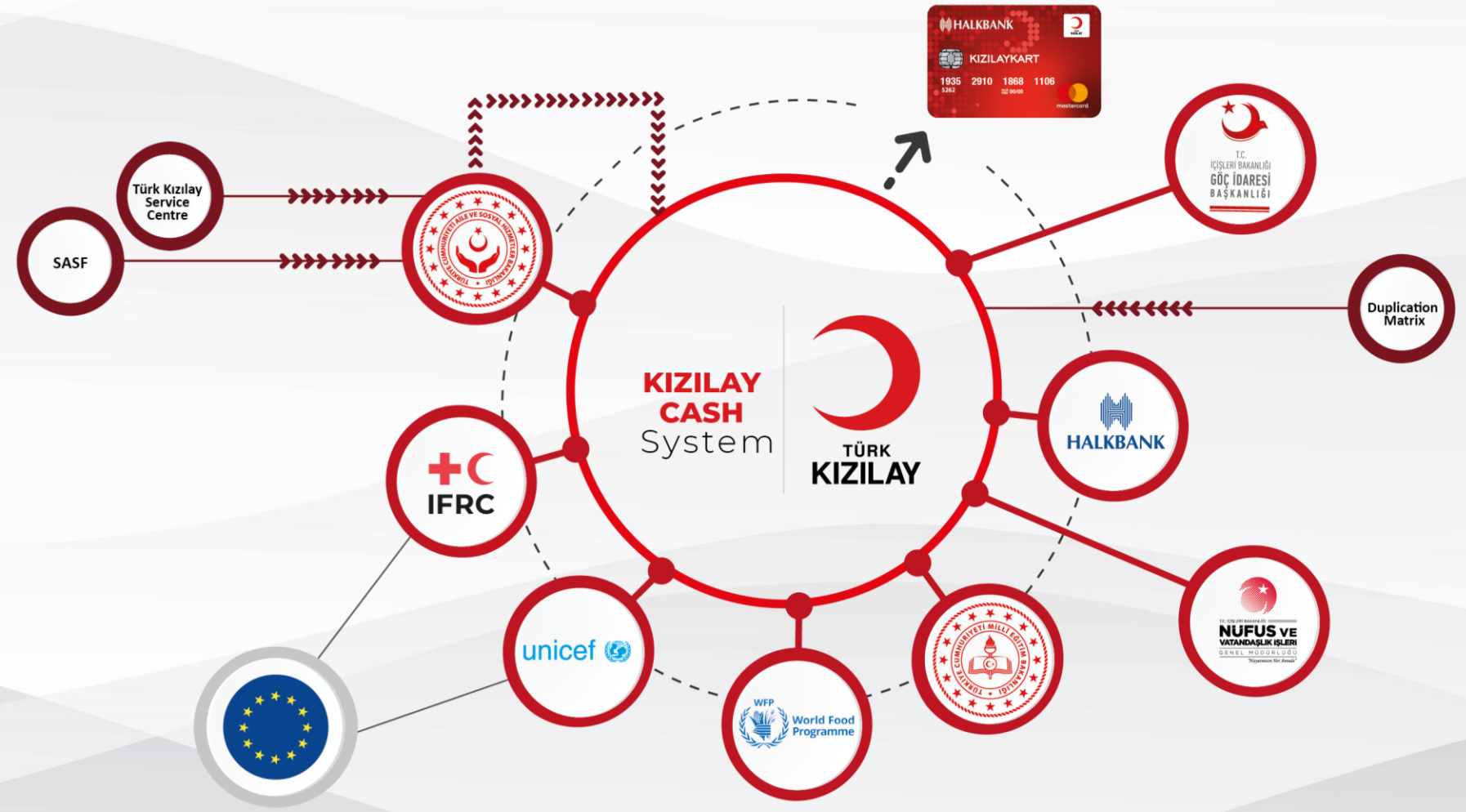


- Use as information sharing and inquiry mechanism
- Managing the call center module
- Managing SMS processes
- Enabling M&E teams data collection processes such as PDM, PAB

Case Management System



- Follow-up of individuals who have access issues and / or protection risks
- Currently used for case management and enabling to consider the individuals' needs



ESSN Payment Structure



Validations
Verifications



Cross Checked

Criteria Controls & Discrepancy Report

Türk Kızılay

Cash Systems

IFRC

Partners

MoFSS

SASF

Türk Kızılay Service Centre

HALKBANK

Reporting Platform

Data Storage

- Raw Data Received and Archived
- Masked and Anonamized Data Shared

Secure Integration (sFTP) Webservice

Reporting Purposes

Integrations

Secure Integration (sFTP)

SAP Transferred Information Though sFTP

Reporting Purposes

Case Management System (CMS)



Identification

Protection, livelihoods cases and outreach issues are identified during field activities or via other sources.



Developed by TRC's IT Directorate (*web-based*)

Registration

Identified protection, livelihoods cases and outreach issues are registered into the CMS.



Recording and tracking platform for outreach issues, protection cases, field visits and outbound calls

Referral

Registered protection, livelihoods cases are referred to Türk Kızılay CBMP while outreach issues are referred to relevant focal points through CMS. Also, about cases, daily communication is conducted.



Allows referrals to be made directly to the related programmes

Follow Up

The follow up process is conducted on CMS by monitoring the status of the case at any time.



Jointly used by two Coordinatorship internally:

- KIZILAYKART Cash Based Assistance Programmes
- Community Based Migration Programmes

Structure of Case Management System



Data loss is prevented



Personal data is protected

Activities can be recorded and analyzed regularly



Case statuses are monitored any time

Coordination among Türk Kızılay units are enhanced



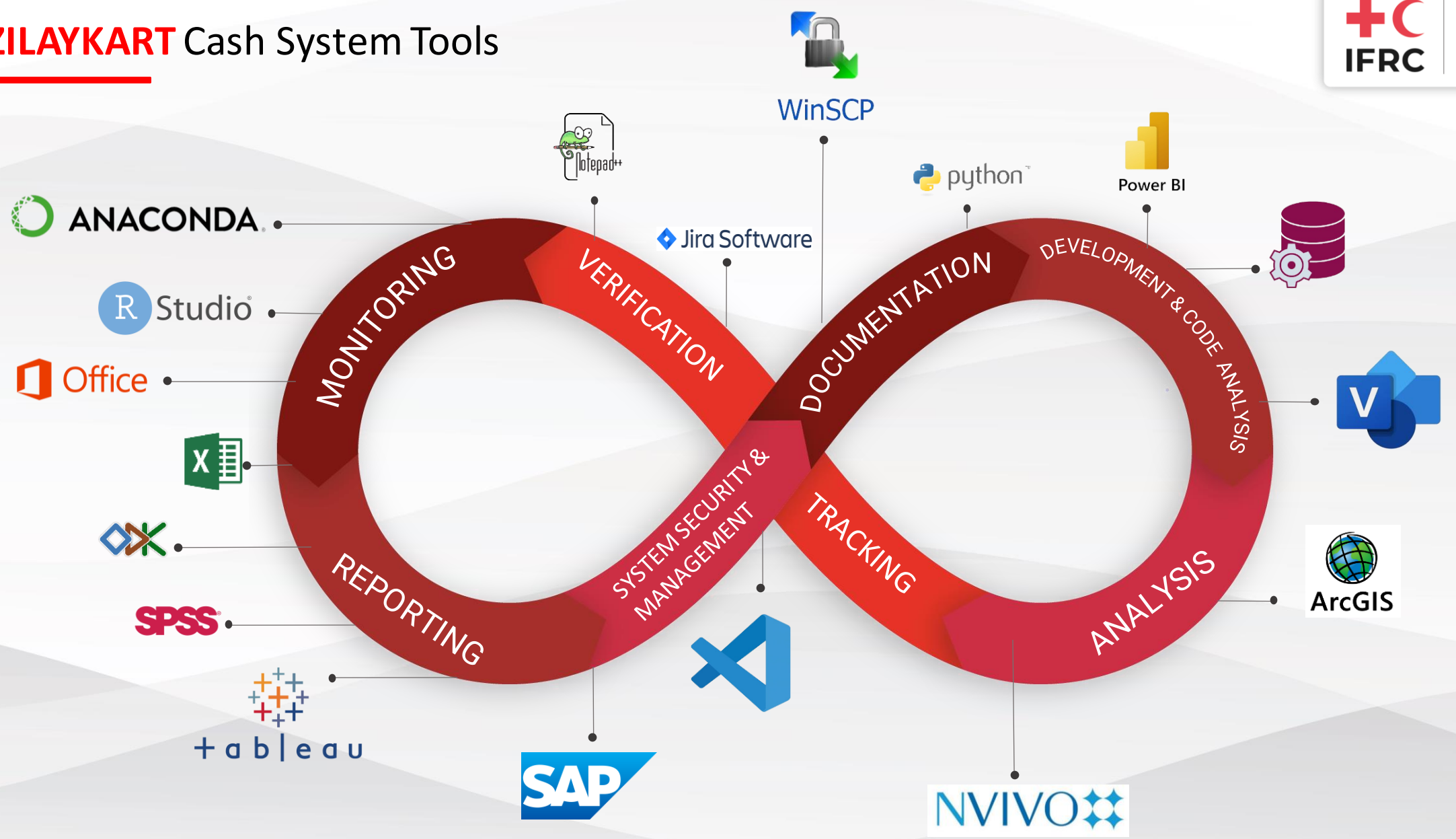
Accountability to the donor & affected population is ensured

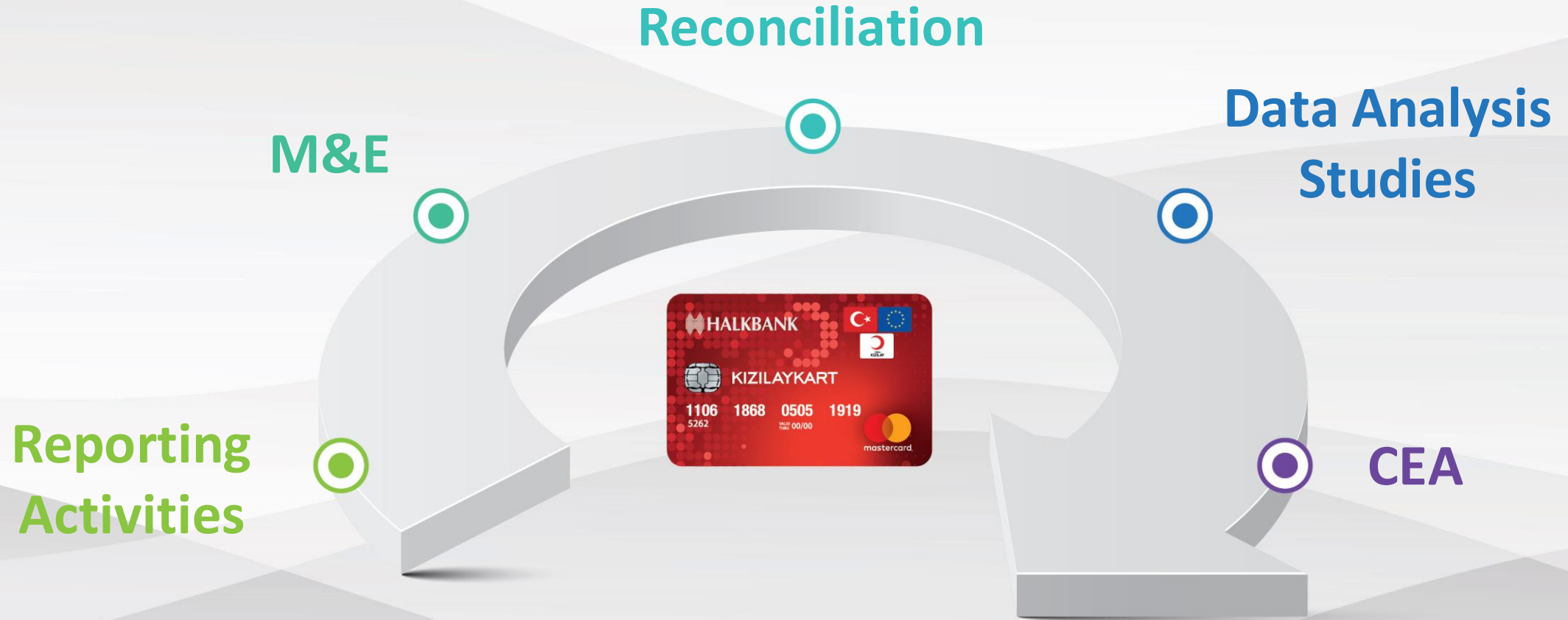




DATA MANAGEMENT

KIZILAYKART Cash System Tools

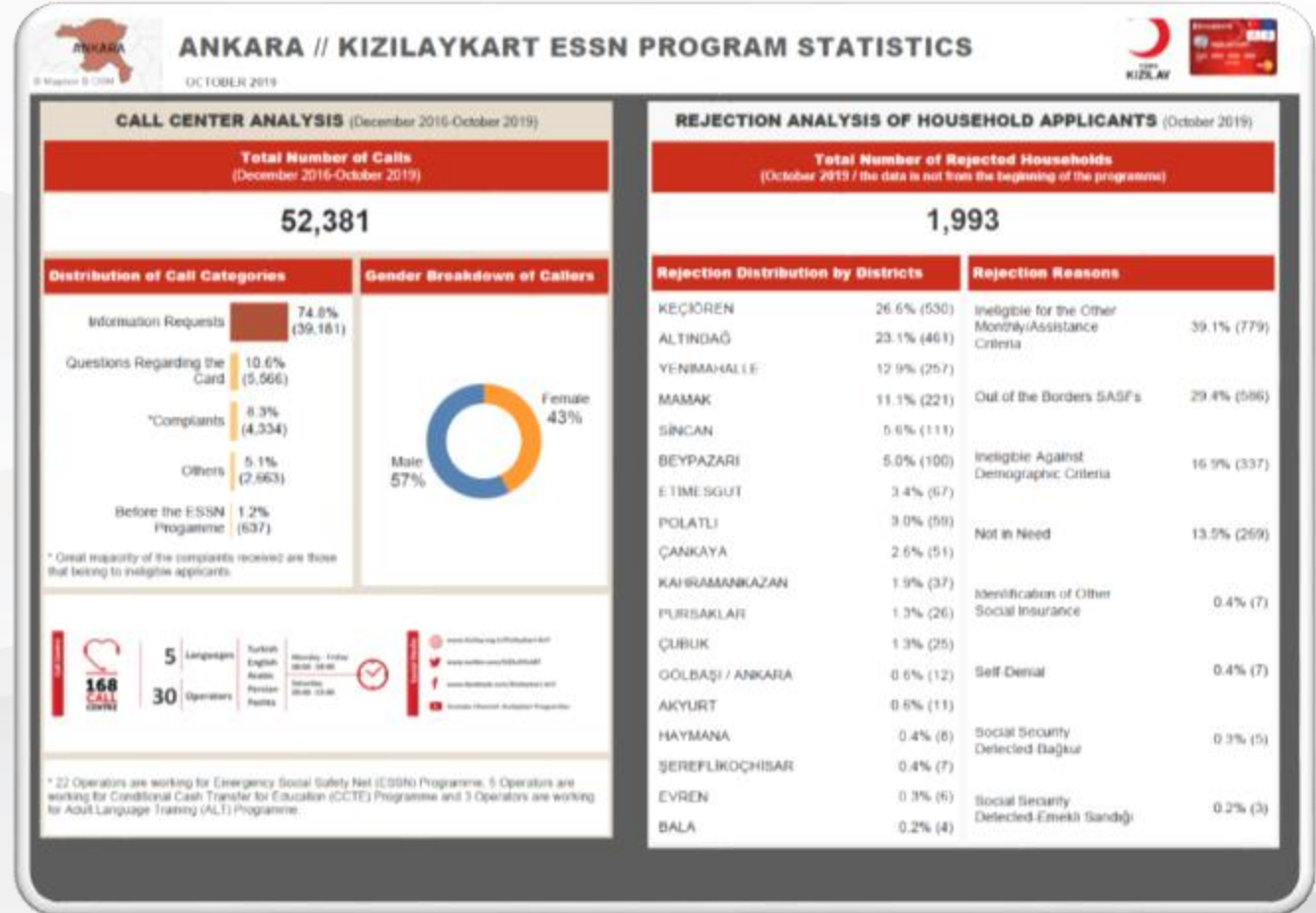




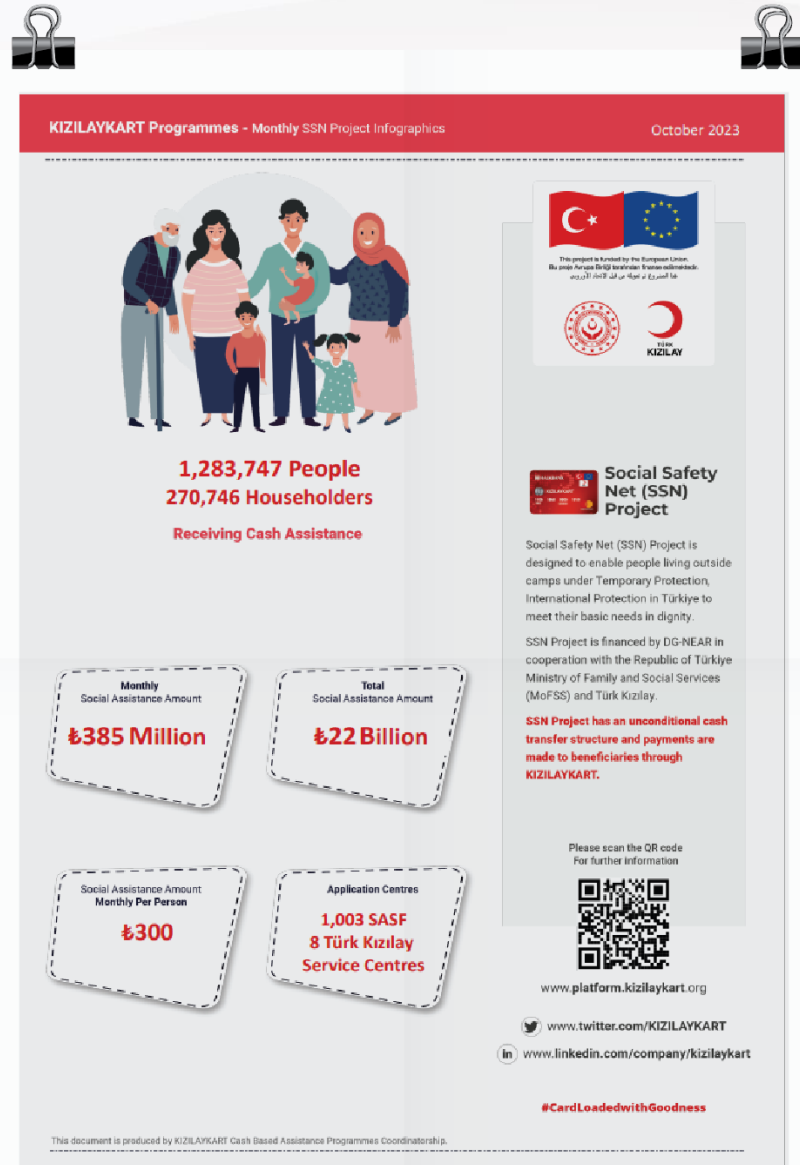
Reporting



- Streamlined Processes
- Resource Optimization
- Data-driven Decision-Making
- Improved Workflow
- Accountability to Stakeholders



Reporting



Monitoring & Evaluation



- Grounding Decisions in Empirical Evidence
- Monitoring and Maintaining Programme Quality
- Real-time Decision-Making based on M&E Findings
- Tracking Progress towards Programme Goals



IVS 2

Monitoring & Evaluation

FGD During COVID Adaptation



PDM 16

Monitoring & Evaluation

MEB Study During EQ Period



KII Study During EQ Period

Monitoring & Evaluation



EQ Response of ESSN

Reconciliation



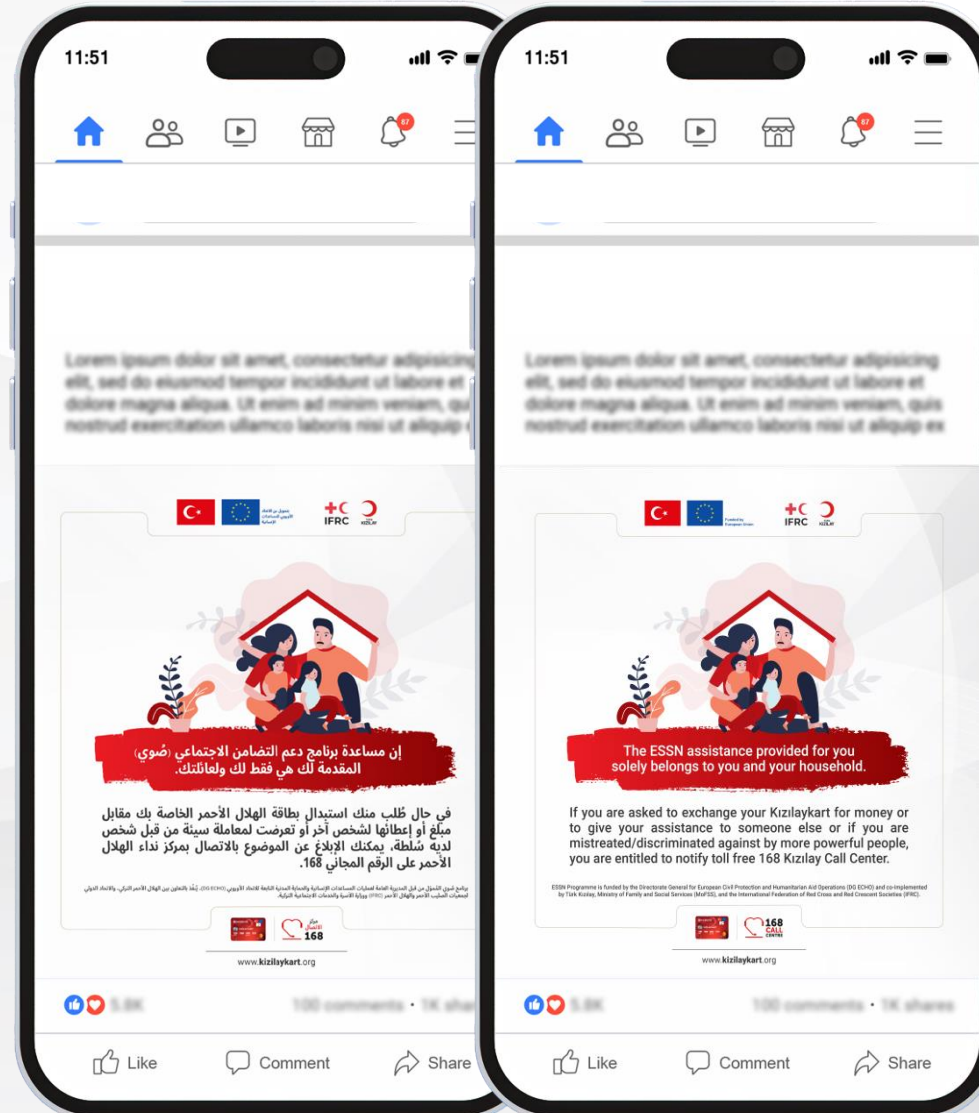
ESN Joint Reconciliation Report
April 2023

	Results	
	IFRC	TÜRK KIZILAY
1- Payment to Non-Beneficiaries		
2- Confirmed transfer to eligible beneficiaries		
3- Verification of transfer amount		
4- Identification of uncollected funds		
5- Verification of dormant accounts		
6- Account balance abnormality		
7- Duplicate ID		
8- Card activity abnormality		
9- Review of bank statement		
10- Accounts with negative balances		



- Reliable Data
- Accountability
- Precise Reporting
- Eliminating Errors
- Negotiations

- Integration of Community in Programme
- Responsive to Community Needs
- Two-way Communication
- Continuous Improvement based on Feedback



Facebook Interface in Different Languages

CEA



Satisfaction Survey July 23'

Data Analysis Studies

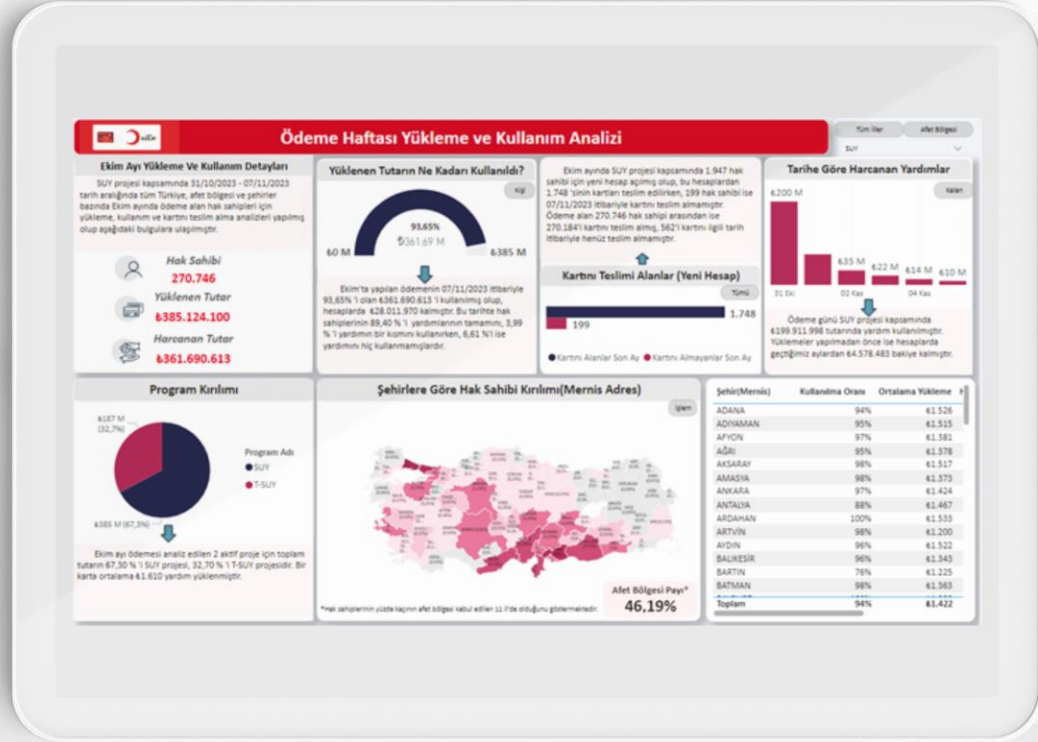
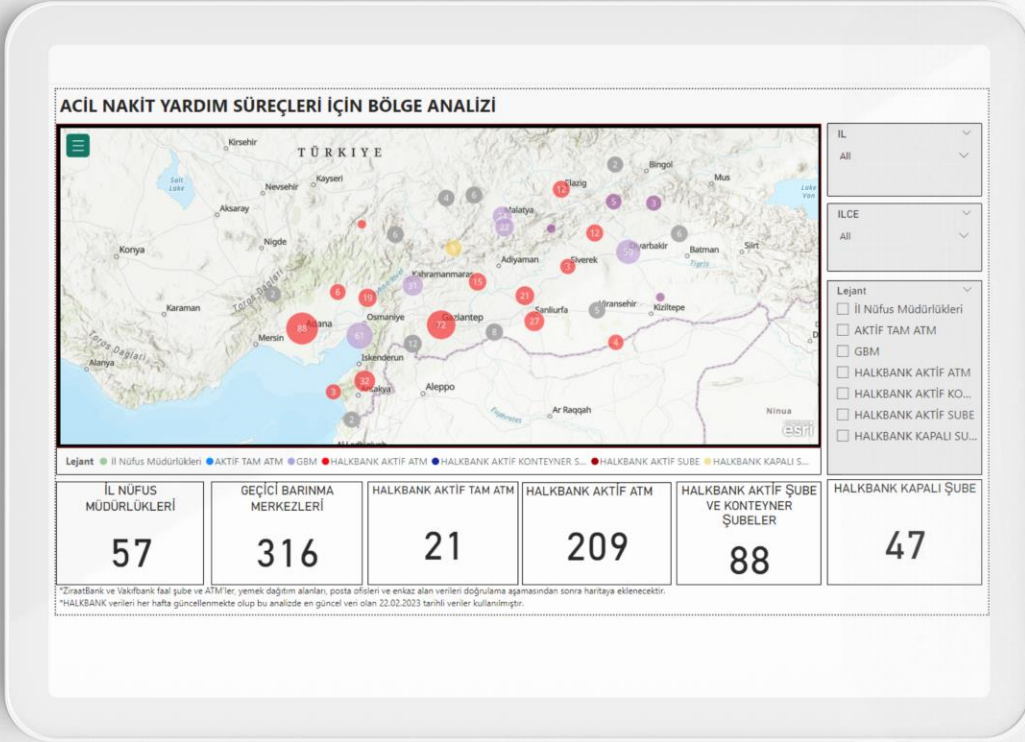


- Operational Efficiency
- Innovation and Research
- Resource Optimization
- Verification and Validation
- Accuracy
- Speed of Response



Transaction Analyses on EQ 23'

Data Analysis Studies



Dashboards on Payment Process

FACTS



42 Million

SMS sent
equivalent to **50%**
of Türkiye's
population



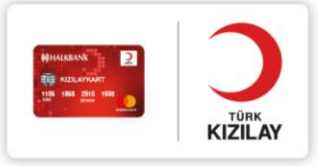
1,8 Million

'Welcome to the TRC Call Center,
how can we help you' has been said
approximately 1.8 million times
since 2016



55 People

Among recipients, there are 55 people
who have been receiving payments
without deduction **for 6 years, 11
months and 301 days** since the
beginning of the project



169 Million

worked with 169 million rows
of data

**30 Different
Software**

were used



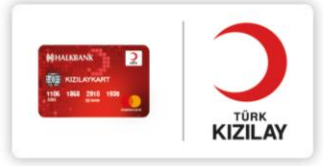
58.000 People

who could fit in a large football stadium were referred to FSP



880.000 Card

were distributed and delivered a card to one of the households 17 times in total



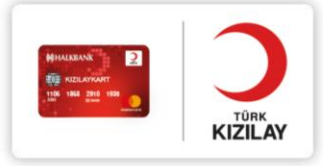
The province that has received the highest cash assistance so far is Gaziantep, Şahinbey District

As a result of IVS studies, it was found that one household moved **20 times**

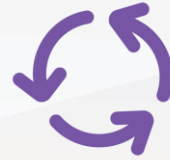


45 Million €

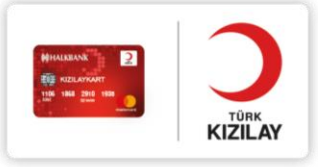
Within the scope of the ESSN project, a total of 45M Euro support was provided to earthquake provinces



180 Minutes
longest FGD Activity
duration

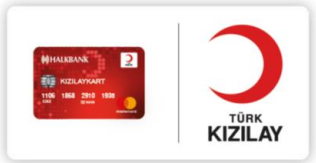


95% of
recipients spent
the assistance in
the first five
days.



Oldest ESSN
beneficiary is **111**
years old.

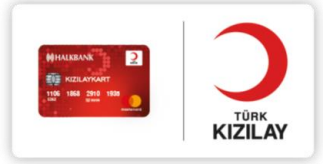




Most
Commonly
Used Names



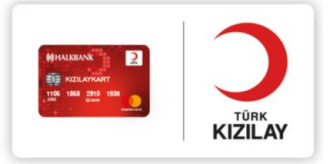
Learnings



Highlights

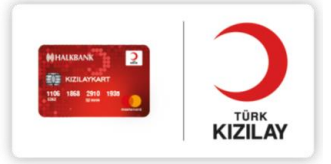
- **Integration system collaborates with governmental and non-governmental institutions for efficient program implementation**
- **Core principles include a "people-centred approach," ensuring transparency, efficiency, and adaptability**
- **Data team proximity to leadership for data driven decisions**
- **Acknowledging IM and Data Analysis as integral (interdisciplinary Collaboration)**
- **Cash prepared system to meet needs by reaching people in need at the right time**

Learnings



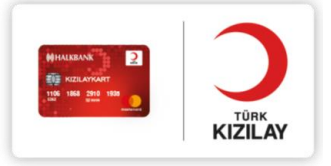
Achievements

- Shock-responsive capacity in data management
- Adoption of localized approach as a rapid response for specific needs
- Positioning within both the existing social protection scheme and the humanitarian scheme
- Enhancing coordination with different institutions
- Developing/using new payment modalities according to context



- **Holistic Approach: Combine data sources – embrace comprehensive evidence based strategy**
- **Utilize flexible tools (R/Python/PowerBi) and training**
- **Establish Culture of Quality Assurance / Results Assurance**
- **Intrahousehold targeting for controlling caseload while improving coverage – Measure with individual based metric**
- **Private Sector Engagement: Partnerships with 3rd party data service providers**
- **Agile Management Principles for rapidly shifting programmatic priorities**

Türk Kızılay & IFRC Collaboration



Cash Transfer

Data verification
and Sweepback
Process

M&E

Convenience of data requests and Cross Checks
Targeting and Profiling studies
MEB & GAP Analysis and Dashboards
Data analysis Methods
Inclusion and Exclusion Error Cross-checks
Data collection processes in the field



Reconciliation

Cross-checking reports
Analysis of extra-ordinary abnormality
numbers

CEA

Analysis of Satisfaction Surveys
Mainstreaming CEA through
Capacity Enhancement