

THE DIGITAL MATURITY FRAMEWORK

Version 0.31, Date: 2021-02-09

The digital maturity framework aims to measure the ability of Red Cross National Societies for continuous improvement of its humanitarian operations through application of data analytics and digital technology.

After considering multiple assessment framework methodologies, it was decided to adopt the CMMI-approach. This is a maturity model approach that is well-suited, because it gives an assessment of the status quo, while also providing strategy formulating guidance.

The maturity framework consists of two parts, scoring domains on the vertical axis and maturity levels on the horizontal axis. Sections below explain what these are and how to use the framework.

Other measurement frameworks exist within IFRC that relate to Data & Digital. The Digital Divide Initiative has produced ... and the ICT Health Check was developed. A data readiness framework was developed. [need to add how these relate, which one is still relevant, merging?]

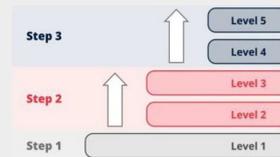
[The full research behind the development of this Digital Maturity Framework for national societies can be found here](#)

MATURITY STEPS AND LEVELS

There are three main steps in the model:

1. Fundamental IT in place and functional (level 0-1)
2. Leadership driving digital services, increasing capability in systems (level 2-3)
3. Digital services at the heart of the culture, recognised expertise in the application of emerging technologies. (level 3-4)

Level 0 in the extended maturity framework defines the conditions that would need to met by the national society to start their digital journey. This starting point is the willingness of leadership to start exploring DT in the organization, and at least somewhere at the operational level there is enthusiasm



DOMAINS AND THEMES

There are three main domains in the framework, with each several themes:

- People (Leadership and Culture, Human Resources and Data Literacy)
- Process (Engagement, Organisational structure and internal collaboration, Partnerships and Service Delivery, Data Protection and Responsibility, Resource Mobilisation)
- Technology (Data, Digital)

CHARACTERISTICS

For each theme and maturity level combination, there is a description and a list of characteristics of what a typical national society would have in place.

HOW TO USE - SCOPE AND CONTEXT

The Maturity model was developed to be part of the IFRC Digital Strategy, which has the scope on national society domestic humanitarian assistance programs.

This Maturity framework attempts to be an 80% version that each national society will have to contextualize. One essential part of this is the constraints that might exist in a national context, such as legal or forceful limitations in using digital technology and to collect and use public data. Also the wording of the themes, levels, descriptions and characteristics might have to be edited, to be recognizable for key stakeholders in the national society.

HOW TO USE - AMBITION (TO-BE)

The Maturity Framework is first used to set an ambition based on an impact statement of the national society in its multi-year strategy: where does the national society want to be in the future (e.g. 5 years)? On each theme, the ambition is translated to a maturity level that the national society will aim to reach. Since there are inter-dependencies between the themes within one maturity level, the National Society should aim for reaching e.g. Level 2 on all themes, before moving to Level 3.

HOW TO USE - CURRENT SITUATION (AS-IS)

After setting the ambition, the National Society assesses where it is, by speaking with all the experts in house. This as-is state is assessed for all combinations of maturity levels and themes. In most cases the maturity of the as-is does not fit within one maturity level. The NS could be more mature on one theme than on another.

HOW TO USE - FORMULATING THE DIGITAL STRATEGY

The AS-IS and the TO-BE are inputs to the national society digital strategy, multi-year plan and annual plans. It should be more clear now to the national societies on what themes to invest and which ones to rest.



	HAS BEEN MET OR IS IN PLACE
	WORK IN PROGRESS AND NOT YET COMPLETED
	NOT BEEN WORKED ON

STEP 1 Beginner		STEP 2 Competent		STEP 3 Expert	
The first step sets up the fundamentals – leadership creates a high-level vision on Data and Digital, a multi-disciplinary digital teams are starting to form. At technology we focus on getting basic IT available and functioning internet and telecommunications.		The second step advances to improve effectiveness in humanitarian services. We advance in digital and data literacy, we see multidisciplinary digital and data teams that deliver operational and humanitarian impact and share data across the whole organization for self-service insight analysis.		The third step pushes into new ways of humanitarian aid enabled by digital tools to quickly react on humanitarian needs, we have all staff and volunteers trained in data and digital tools, and leadership optimizes humanitarian aid continuously. We make data driven decisions and have a completely flexible and scalable IT/Data infrastructure to build new human centered solutions.	
Level 1 - Basic		level 2 - Structural exploration		level 3 - Professional practices	
Projects are generally unpredictable, incidental and ad hoc, but there is intention of starting a Data and Digital		Ensured that data & digital projects are structurally started and executed		Practices are clearly established well known and outlined in standard working procedures	
				level 4 - Digital expert	
				Operation is optimised. The organisation defines and uses KPIs for managing processes	
				level 5 - Future proof	
				National society continually adapts to humanitarian needs and is able to sustain or expand its services	

Domain Theme Topics

People	Domain	Theme	Topics	STEP 1 Beginner		STEP 2 Competent		STEP 3 Expert		
				Level 1 - Basic	level 2 - Structural exploration	level 3 - Professional practices	level 4 - Digital expert	level 5 - Future proof		
Leadership and Culture	Leadership and Culture			Summary	Leaderships formulates why a digital transformation is needed and has set the high level ambition for the organization.	Leadership is educated on the enablers and barriers of Digital Transformation and expectations are well managed. Leadership understands that for Digital Transformation to happen, it should be a priority. Leadership knows where the organization is on its digital transformation (as-is) and a start has been made on a written strategy for Digital Transformation.	Digital Transformation is a long term priority for the national society and the Digital Strategy is in place. Leadership uses data for decision making. Internal and external stakeholders are managed; they are aligned on strategy and operate accordingly. Leadership is an advocate of Digital Transformation and promotes the use of data and digital in the organisation and provides a podium for best practices.	Leadership monitors the implementation of Digital Transformation via defined KPIs.	Leadership understand the full potential of Data and Digital and uses it to optimise humanitarian response.	
				Digital Strategy	High level ambition on Data and Digital formulated	A digital strategy development process has started. All parts of the national society are aligned on why a Data and Digital has to happen and there is a willingness to change	Digital strategy is in place and integrated in the multi-year strategy of the national society.	Clear digital vision and strategy underpinned with budget and seniority is steering organisational strategy	The national society is fully able to optimise by stimulating incremental and disruptive change, while maintaining adaptability towards the long term strategy	
				Digital and Data Culture	In times of crisis, Data and Digital still tends to drop off the agenda. Opportunities of using data and digital are recognized, but not widely acknowledged in the organization	In times of crisis, Data and Digital is still on the agenda, but is not a priority. The mindset towards the use of data and digital is understood and obstacles known. A cultural change plan is part of the digital strategy development process.	The cultural change plan is carried out, leading to an innovative culture that encourages experimenting with data and digital. Also in times of crises and response data analytics and digital development are ongoing. Leadership & Management think how digital service can be integrated in operations	The collective mindset is changed; Data and Digital is viewed as an opportunity to increase agility in disaster Management. Analytics awareness in the workplace	The use of analytics and data is in the company's DNA (people think in terms of data)	
				Leadership Data Capabilities	A data and digital champion is stepping up to initiate the Digital Transformation process of the national society.	One member of the leadership team, who has a quantitative background is leading the Digital Transformation process.	Digital leadership training in place and delivered. Management team and middle management have participated.	At leadership level there is one member primarily responsible for delivering the digital strategy	Leadership provides strategy support to other national society leaders	
				Leadership asking data questions	Leadership themselves reviews data products to make decisions, when provided with (reactive)	Leadership leads by example and asks for data driven reports (proactive)	Leadership uses reports based on data to make decisions and requests monitoring of the impact of those decisions, also using data.	Leadership requests data and information for policy-making and strategy development	Leadership is using data and digital trends for future planning and strategy development	
	Human Resources and Data Literacy				Summary	The HR department has an idea about what skills and profiles are necessary for Data and Digital. Some individual staff members or volunteers in the National Society have required skills. Staff and volunteers share a common definition of data and digital.	It is clear what human resources is lacking and there is a strategy to acquire the necessary profiles. There is data and digital awareness in the workplace.	Establishing digital teams: staff and volunteers hired specifically for digital skills. Additional staff and volunteers are hired or current staff and volunteers are educated to fill pre-established knowledge gaps.	HR quality is monitored through established KPIs, staff and volunteers have a vital and accelerating role in D&D transformation	Recruitment and selection is focused on optimising digital capabilities.
					Technical experts	Different data and digital roles and the required skillset are understood	Data team lead role filled	Human centered design experts available	A data engineer is available	An Machine Learning engineer is available
						Geospatial expert role filled	Data analyst role filled	Analytics translator appointed tasked to identify business value cases and translate operational needs into digital requirements	A data steward is appointed per business unit, who oversees data access and sharing	An optimization expert is available
						Information Manager role filled	Adoption specialist role to supporting end users to onboard in new digital systems	All HQ departments and districts offices have a digital advocate (information manager)	A data scientist role filled	
					Recruitment	IT manager and IT support roles filled	A small group of volunteers to contribute to the data and digital work	A more substantial group of volunteers and students with a diverse set of skills and expertise	Targets and valuation on digital developments and Analytics	
Data Literacy	Seeing data analytics as a subject area: existing staff assigned to data and digital roles from other functions	Skill gaps are clear and technical profiles created by HR	Ability to assess skills and competencies of data experts	Regular basic data literacy trainings for volunteers, and more professional data literacy trainings for staff	Access to DS training program for digital teams (including talent Management)	a digital traineeship program is initiated (in partnership) to attract and retain top tech talent				
	Staff share a common definition of data and digital.	Basic data literacy training is available and majority of staff are trained	The majority of volunteers have practical experience working with digital tools and understanding data							
Legal	Limited data literacy outside of data specialists	All staff have practical experience working with digital tools and understanding data		Top level legal support is accessible from privacy experts on high risk digital innovation initiatives						
	A legal officer is available, this person might not be specialized in data protection regulation.	A legal officer is available to advice on national data protection regulation requirements	A data protection officer is hired that keeps a registry of all data processing systems and data sharing.							

Engagement	Summary	Recognition that digital communication channels are valuable to reach volunteers and people in need. Only structured feedback is collected from people in need.	Digital communication channels are actively used to expand and protect the Red Cross brand. User feedback leads to improvements in programs and operations.	Insights are extracted from digital communication channels. Community management also in place online and feedback is captured to improve operations.	Proactive listening and analysis enables the national society to influence societal topics and use user insights to improve its own services.	An open dialogue between people in need, donors, volunteers and staff leads to new humanitarian services that are highly valued and impactful.
	Communication	Isolated projects to use digital communication	Digital communication channels are recognized as an asset to reach people	Community management online	A wider dialogue with other relevant audiences	A thought leader online and actively influencing societal topics
	Type of content and channels	Limited knowledge of different channels	Various digital channels are used to reach people in need and volunteers	Content is tailored to various channels to reach people in need and volunteers	Advanced use of web, products, online content including video and audio	-
	Type of Interaction	Use of mainstream social media to send volunteers and people in need sporadic updates from the Red Cross (one-way dialogue)	Mostly one-way dialogue with a growing list of people following the Red Cross channels	Dialogues with the volunteers and people in need happen on an ad hoc basis	Consistent engagement, a true dialogue with the volunteers and people in need	Volunteers, donors, staff and people in need are enabled to communicate directly with each other in a community. They can provide direct feedback in humanitarian programs to steer for optimal impact (as they are happening)
		Volunteers are engaged through newsletters, intranet	Volunteers are enabled to communicate digitally with each other and with staff	Have engagement teams in place to respond to multi-channel messages from volunteers and people in need	Digital communication tools (internal community tooling, internal dashboards) are in place to support this communication	Digital communication tools (online community tooling, self-service dashboards) are in place to support this multi-way communication
	Understanding needs	Needs are understood through structured surveys and community sessions (mainly offline)	Data on needs of people can also be collected remotely, by using digital communication channels where possible	Needs are understood through a human centered design process, leading to richer insights of feasibility, viability and desirability of new (digital) products and services	New products and services are co-designed and user-tested with end-users	End-users come with ready to implement ideas that suit their needs
	Collecting feedback	Feedback data is collected from people in need only in structured way	Feedback data is analysed and leads to improvements to programs and operations	Feedback data is continuously provided by and collected from end-users and is going into a human centered design process to design new products and services.	Provide retrospective feedback in humanitarian programs to improve for future events.	User insights are continuously captured through analytics from data collected through digital services of the national society.
	Human Centered Design (HCD)	Sometimes a product or service is tested, but this doesn't influence the product or service development.	There is no standard approach for using user insights. Every department does this differently. Some teams apply HCD, others don't.	There is an HCD team dedicated to research. Insights are used to optimize humanitarian services and for experiments for new services	The entire national society uses the same HCD process. There are clear methods, tools and dedicated resources	Because the national society truly understands its stakeholders and the people in need, opportunities are recognized and it's known how to react to their humanitarian needs
	Measuring communication effectiveness	No metrics are collected	Metrics focus on volume of messages, scalable messaging platforms are used to increase reach	Beyond volume, also insights from content and context are extracted from digital channels	Metrics are used to steer and change content and communication approach	Metrics are used to automatically optimize content and communication approach
Organisational structure and internal collaboration	Summary	Current roles and responsibilities of departments are clear, but departments work in silos; there is little interaction between departments. Ad hoc knowledge sharing.	Digital experts understand the needs and gaps of the operations teams (business) and actively aids in solving these problems together.	A central team of experts is in place and an official analytics process with agile principles is established.	Products, services and IT are managed to act together, to stimulate integration. Digital is part of investment discussions and can show effectiveness of Data and Digital for humanitarian operations.	Operations and Digital are fully integrated, also financially, and IT infra, digital capacities and organisation is agile to adjust.
	Collaboration between departments	Knowledge of operations and its challenges siloed in operational teams	Multi-disciplinary teams within and spanning departments are established (including data and digital experts)	Agile principles for digital development has been adopted by multi-disciplinary teams (including say no / stop) -> fail fast	The development of new humanitarian services as a whole is done in an agile-way, and includes the data & digital team.	Fully agile structure to make best use of data and digital and high flexibility towards humanitarian crises
	Initiating Digital Innovation	IT projects are launched, but these are not initiated by the operations teams.	Project with digital components emerge ad-hoc from the operations teams and success is based on personal motivation and with network	There is a process to start digital or data analytics project. Business case driven data and digital projects are created (goal is expressed in impact).	New data and digital services are actively developed and used to make humanitarian services more efficient and cost effective. Financial needs for data and digital advocated by service/product owners. Active central portfolio management	The development and improvement of new services is now ongoing business and not project driven anymore.
	Data & digital teams	Data and digital experts are placed within departments, but don't collaborate with one another	Data and digital experts know where to find one another and collaborate on an ad hoc basis	Data and digital Center of Excellence is established, bringing experts together as one team. Team lead is approached to deliver services internally	Deployment of data science teams in accordance with operational goals. Data and digital team actively sought out from all parts of the national society	
Partnerships and Service Delivery	Summary	Some engagement with digital hubs in the IFRC Network and/or with private service providers to access digital services for domestic operations.	Structural engagement with digital service providers and knowledge hubs for domestic operations.	Actively engaging with external digital partners on behalf of the IFRC Network for international operations.	Providing digital services to other members of the IFRC Network on the national societies own strong digital capabilities.	Provides professional, reliable and scalable digital services to the IFRC Network.
	Support from and to the IFRC Network	A clear understanding of what data and digital capacities could be built in-house and what capacities to find elsewhere. Has explored existing service offering in the IFRC network.	Framework agreements in place with digital hubs in the IFRC network for receiving digital services support and has started to engage at a project level.	Data analytics and digital development are increasingly happening in-house and external support needed only for very specialised services	Provides the first digital services to other members of the IFRC network. Has started to develop a sustainable operating model to deliver digital services. Has legal agreements in place to facilitate this process	Has framework agreements in place with several members of the IFRC Network for delivering services. Has a sustainable operating model in place to deliver digital services. Has a digital service delivery track record that has been highly valued by the network
	Procurement	Able to negotiate discounts on individual licenses and hardware	Able to do the procurement of data and digital products and services. In-house digital experts are involved in setting requirements and reviewing bids	Participating in a global IFRC led global requirements setting and procurement or development process to find scalable and affordable common solutions for all national societies	Has identified key common digital gaps and addresses these in the IFRC Network to initiate a global procurement or development process	
	Tech sector	Working with private service providers on ad hoc basis	A structured conversation with in-country tech sector on country specific digital support	Able to lead a partnership engagement process on behalf of the IFRC Network with external partners	There is a strong connection between the national society and a RC3 (Red Cross Red Crescent Research Centers).	RC digital experts are co-leading national data and digital working groups with government and other NGOs
	Knowledge sector	Ad hoc collaboration with universities. Sometimes students graduate or interns work in the National Society	Partnership with local university or digital consultancy to be supported on change management and cultural aspects of Data and Digital	Research partnerships formed to move towards evidence based digital development	RC digital experts are co-leading national data and digital working groups with government and other NGOs	

PMEAL & Decision Making	Summary	Monitoring at project level with limited overview of the full extent of operations.	Monitoring core operations and able to have a good operational overview.	Decision makers start to express data needs, which leads to more structural data collection to generate operational insights that lead to decisions to improve humanitarian outcomes.	Data-driven decision-making becoming the norm. Shared data creates an organisational overview and better understanding of end-users, problems and opportunities.	Decision makers are comfortable to use machine generated outputs to support their decisions.
	Primary data collection	Data is not regularly collected or the collected data can be insufficient for current purpose. No predetermined data collection methodology (i.e. standard templates and surveys). Data still sometimes collected on paper.	Data is only collected for a single purpose (and not representative), therefore of limited use for future programming or other uses. There is a standard data collection methodology, but this often changed or is not always followed.	Key data is collected that is needed for current and future programs. There is a standard data collection methodology, which is regularly used and has been standardized to fit needs of multiple users (i.e. across departments or external partners)	Operationally relevant data is also measured through the use of digital applications by staff and volunteers. Data sharing with People in Need also increasingly through digital channels and applications.	
	Secondary data and collaborations	Information from written reports by other organizations are used to understand the context.	Secondary datasets are explored, analyzed and used in information products. Participates in national working groups with external partners where common operational datasets are exchanged and collaborated on.	Use of secondary data to complement primary data and reduce the need for primary data collection. Data sharing guided by the data responsibility policy.	Secondary data is fully integrated with primary data. Leads the national collaboration of a few common operational datasets critical to the operations	External partners are willing to prioritize the National Societies' data needs and data is shared with the Red Cross even if it has high (commercial) value.
	Needs assessment	Humanitarian needs are understood at a local level, through surveys, interviews and focus groups	Data collection and mapping are additionally used to make needs assessment more reliable and comparable.	Both secondary and primary data are used to get a good understanding of vulnerability, hazard exposure and coping capacity. Risk data is used to prioritize humanitarian action.	Strong direct engagement with people in need leads to rich insights in existing and new vulnerabilities, which results in timely adaptation of humanitarian programs	Data analytics supports future scanning to identify upcoming humanitarian needs
	Monitoring	Mobile data collection used to monitor projects in survey form	Ability to report on humanitarian outputs (what have we done)	Ability to report on humanitarian outcomes rather than outputs for digital services (what have we achieved)	Ability to report on humanitarian outcomes for the whole portfolio	The value proposition towards people in need is monitored
	Reporting	Manual analyses and (written) reporting, mainly to meet donor requirements	Standalone project or service dashboards with individual KPIs. Data analysis and visualization are used to improve the quality of reports to donors and stakeholders	Dashboards and other monitoring products accessible in a (virtual) emergency operations center	Enriched, timely and reliable central view of needs and vulnerabilities in the country	
	Decision making	Decisions are sometimes based on data analytics insights from other organizations, but not yet from internal data.	Analytics insights are presented by experts to decision makers. With some effort data and insights feed into internal decision making (reactive)	Management and operational teams proactively request data to support decision making. Insights of analytics are understood and implemented in humanitarian operations	Management uses KPIs to monitor effectiveness of digital investments. Analytics insights are immediately translated into actions. Forecasts are used to anticipate programs and operations	Strategic decisions are done based on scenario's, which are supported by prescriptive analytics
Data Protection and Responsibility	Summary	Understanding of legal context of Data and Digital and identify what difficulties need to be solved.	Legal compliance of data protection through a small group of experts	All systems, applications and working methods are monitored for privacy and security issues	Data responsibility and consideration of ethical concerns taken into account during data analysis and digital development	All systems, applications and processes are private by design
	Policy	Data protection law is known, but not translated to a policy for the national society	Data protection policy exists and there is a process to handle any issues. Privacy policy in place on all external facing websites and apps.	Data responsibility policy, which includes ethical considerations, is introduced across the organisation, training materials make this accessible to all staff and volunteers.	Data responsibility policy fully integrated into the project cycle of the national society	Clear positioning regarding data ethics
	Data sharing	Data sharing requests are handled ad hoc by individuals	Data sharing requests are handled by a legal officer and signed off by MT.	Data protection officer oversees all data sharing. A data sharing agreement and NDA are available too agree sign with external partners. Data processing register exists and this includes what data is shared with whom	An open data policy exists and public data is released on an open data portal.	
	Compliance	Legal compliance is demonstrated by specialists and limited awareness with data analysts.	Most important systems have been tested against the data protection policy	Data compliance is part of business processes. Digital systems managing personal identifiable information enforce data protection restrictions and enable setting access restrictions to need-to-know basis	Data compliance is demonstrated automatically instead of manually (automated controls). Data pipelines are in place to minimize and aggregate sensitive data, to use by analysts	Able to do a data protection impact assessment in-house. Privacy by design is used in every new digital development effort
Resource Mobilisation	Summary	Limited core budgets for Digital	Donor start to contribute financially to resource Data and Digital of the national society, but still largely aid-tied.	Structural digital innovation budgets available through new private donor propositions and winning digital innovation grants	Digital service delivery by the national society is providing cost-recovery	New digital business models generate a new income stream for the national society
	Business model	Management understands that resources are needed for Data and Digital. Minimal core (IT) budgets are used to keep the current infrastructure operational	There are proactive investments in Data and Digital. Digital transformation (digital and data analytics) resources are budgeted in the annual budget. This includes investments in People, Process and Technology	All digital investments actively contribute towards Data and Digital strategy. Internal flexible funding is used to accelerate data and digital research and development	Digital transformation is partly funded through the service delivery to other partners	The cost-recovery of data and digital infrastructure is embedded in the humanitarian services, by using humanitarian business model thinking from the start
	Fundraising	Individual small donations for data and digital work.	Individual large donations that help the national society to leap forward with using data and digital	New private donor propositions emerge for the tech sector, such as digital professional volunteering / grant combinations	Corporate support groups are formed to support the digital transformation of the national society, which comes with high level strategic support and grants	Able to scale through business models of private sector partners using win-win models
	Humanitarian grants	The National Society asks its partner network to include Data and Digital budgets in (project) contributions from humanitarian donors	Project proposals to humanitarian donors include data and digital activities in the core budget (not as overhead), allowing for more systematic investments in digital services development	National society is able to apply for and win innovation grants with donors to fuel the digital innovation process	Structural engagement of humanitarian donors on the support to digital humanitarian services that are driven by data & digital	Humanitarian donors routing large funds through data and digital services because of their efficiency, impact and scale.

Technology

Data	Summary	Some data is collected for project purposes, mainly for assessments.	Data is collected with a specific goal in mind by staff and volunteers. Data sources are identified and meet the needs of the national society.	Data is seen as a valuable asset and being managed. Data is collected structurally. Data quality is sufficient. Data standards adhere to IFRC wide standards. National societies actively participates in national information management working groups.	Data quality and data standards are monitored and active adjustments are made if necessary. Data is used in the majority of operational, tactical and strategic decisions.	Data collection and analysis is used to continually improve the national society. The National society is a leader on the use of data.
	Primary data collection	Data is not regularly collected or collected data can be insufficient for current purpose. No predetermined data collection methodology (i.e. standard templates and surveys). Data still sometimes collected on paper.	Data is only collected for a single purpose (and not representative), therefore of limited use for future programming or other uses. There is a standard data collection methodology, but this often changes or is not always followed.	Key data collected that is needed for current and future programs. There is a standard data collection methodology, which is regularly used and has been standardized to fit needs of multiple users (i.e. across departments or external partners)	Operationally relevant data is also measured through the use of digital applications by staff and volunteers. Data sharing with People in Need also increasingly through digital channels and applications.	
	Secondary data and collaborations	Information from written reports by other organizations are used to understand the context.	Secondary datasets are explored, analyzed and used in information products. Participates in national working groups with external partners where common operational datasets are exchanged and collaborated on.	Use of secondary data to complement primary data and reduce the need for primary data collection. Data sharing guided by the data responsibility policy.	Secondary data is fully integrated with primary data. Leads the national collaboration of a few common operational datasets critical to the operations	External partners are willing to prioritize the National Societies' data needs and data is shared with the Red Cross even if it has high (commercial) value.
	Data quality	Unclearities about data quality, general assumption it's not very good. Data is cleaned in an ad hoc manner	Data quality known. Meta data has been defined. Data preparation and processing in place for a few key datasets.	Metadata is available for each dataset. Costs of low data quality are known. The acceptance and trust of central data is high. Uniform processes, roles and responsibilities with regard to data quality.	High data quality is improved by rigorous use of information management systems, high quality data entry and monitoring of data quality.	
	Data accessibility	Data is stored in files on shared file drives	Key data is stored in separate databases, other data still on shared file drives	Centralized data warehouse containing key datasets. Speed of data access increases	Data warehouses contains all relevant data. Speed of data retrieval is measured. There is an data catalogue and algorithm library	Interactive data catalog is used and maintained on a daily basis
	Analysis approach	Use of descriptive analytics (looking back)	Use diagnostic / explorative analytics (causal analysis)	Use of predictive analytics (forecasting)	Use of prescriptive analytics (decision support)	Leads new analytics trends
	Models	Able to analyze data and build reports summarizing the data. Using spreadsheet tools for analysis.	Able to build and validate simple analytics models. Local version management of scripts developed by analysts.	Able to deploy analytics models in a structured and repeatable way. Standard process for version management of code / scripts / models in a shared repository. Data analysts collaborate on models in a structured process (e.g. scrum)	Central model maintenance and deployment process. Data Analytics models are peer-reviewed by internal and external experts. Models are well documented and reusable.	Model sharing with other national societies creates learning culture.
	Common data model and interoperability	Minimal agreed data standards	Data standards and specifications defined for common operational datasets	National society data model interoperable with Common Data model of the IFRC Network. Data model aligned with all core systems and databases. Master data model is synchronized manually with	Master data changes are automatically federated in the data warehouse. Data exchange between IFRC and national society happening frequently through application programming interface	
Digital	Summary	A basic IT infrastructure is present throughout the National Society, but many processes are still manual and paper based.	Off the shelf digital applications are used for intended purposes. Some custom digital applications for specific humanitarian services are created. Some efforts have been taken to automate manual processes	The scalable IT and data analytics infrastructure is established.	Custom applications are developed in-house to increase efficiency. New digital-enabled humanitarian services are developed with custom digital applications. KPI monitoring dashboards are developed for quality control. Beneficiary opinion steer direction of Data and Digital and national society.	There is a central IT and data infrastructure that is a solid basis for digital development and flexibly adapts to needs of national society.
	Infrastructure	Basic IT (hardware and software) and sustainable at all levels of the organization. Functional use of digital tools by end-users. Infrastructure investments based on short-term orientation (<1 year)	Basic software is supplemented with custom applications. Infrastructure investments based on medium-term orientation (2 years)	Ad hoc use of cloud platforms to allow for more scalable infrastructure. Databases for all digital applications directly accessible. Infrastructure investments become strategic, based on long term orientation (5 years)	Use of distributed computing environments for high volume processing tasks	Flexible architecture such as hybrid cloud and / or 'containerized'
	Connectivity	Internet connectivity at headquarters and district offices	Internet connectivity at branche level and all staff are connected to the internet at minimum on their mobile	Majority of volunteers has access to mobile internet and direct access through calls and chat is possible	High bandwidth connectivity enables direct engagement with volunteers and beneficiaries, through video	
	Remote working	Staff and volunteers are bound to their office to collaborate and perform critical tasks. No remote access to core systems	Remote working is facilitated through an online collaboration environment for meetings, file sharing and chat. Staff have laptops and smartphones to work remotely. A central active directory with single sign on in place	All core applications are hosted in the cloud for remote workers. Hardly any hindrance to the daily operation. Laptops are encrypted and access to core systems is secure. Online collaboration environment used by most (also volunteers).	High team engagement online, effectiveness of work is higher than in the office. Collaboration with global experts in the IFRC Network is normal practice	Due to highly effective online collaboration the organization is able to recruit experts globally into the core of the organization. Seamless integration of remote experts and field teams in operations
	Volunteer Management System	Volunteer registrations through a digital form	A volunteer management system is in place that allows editing of data based on roles, and generates some basic statistics	Volunteers can self apply, edit their own data, sign up for activities and access key information. Assignment to activities is based on training and sector membership.	A full mobile first experience for volunteers. Assignment to activities is competency and skill based.	Algorithm support planning system ensures the right volunteer, at the right time, available to work on activities
	Beneficiary Management System	Beneficiary registration through mobile data collection or web-forms	A beneficiary management system is in place that facilitates the identification, registration, validation and inclusion testing of beneficiaries	Beneficiaries can self register or unregister for support, provide proofs of identity and vulnerability and access key information about the humanitarian program	A multi-channel and mobile-first experience for beneficiaries. Direct engagement between beneficiary and volunteers through mobile	AI supported interactions through chatbots support volunteers and staff to deliver more scalable services to beneficiaries
	Disaster Information Management System	Situational reports are written by operational teams and shared with internal stakeholders.	Situational updates come in from field team leaders structurally through a mobile based reporting system into a central database. Warehousing capacity is included	Field teams have access to a system to get situational context and they provide structured data that gives decision makers at all levels insight into the situation. Up-to-date overview of warehouse capacities.	All assets (people, vehicles, warehouses, cash) are monitored and a live overview is available of the NS operational capacity versus the needs	Algorithms supports the forecasting of operational gaps and surpluses, leading to better preparedness and planning.
	Software Development	No developers. No DevOps setup for deployment of applications	Some people that know how to code are building some standalone quick-fix solutions. Develops manually deploy apps to servers.	Ability to design and implement digital services/products for non-core local specific systems and apps. Manual-to-production deployment process (DevOps) for in-house digital development in a central cloud environment	Central and complete digital application and services catalog. Semi-automated deployment of sand-box environments (fast up and down)	Organised continuous integration and production process (continuous releasing)
	Adoption	New tools and systems are introduced with manuals, but users are not trained	A support team is in place to answer questions directly from end-users. Regular instruction trainings	Adoption is facilitated by videos and walkthroughs of the application through a centralized platform.	Migration to new applications is relatively effortless. Interactive contextual support to the end-users from within the digital application	Continuous improvements of data and digital services with quick feedback from end-users
	Security	Information security awareness within IT	IT has a strong Information Security knowledge, staff have information security awareness	IT has formal information security positions; staff receive regular information security updates. Volunteers also have security awareness. A central point for data breaches is available and a process is set to handle and report these	Information risk assessment framework; decisions are taken with risks documented and taken into account. The IT security organisation is independent from IT, reports to the organisation's management. Users participate in mandatory information security	Information security strategy in place. Regular information security testing is performed

	STEP 1 Beginner	STEP 2 Competent		STEP 3 Expert	
	Level 1	Level 2	Level 3	Level 4	Level 5
 <p>People</p>	<p>Leadership and management is open to digital transformation. It is clear which data and digital skills are lacking. There is a basic data literacy with some of the staff and volunteers.</p>	<p>Leadership actively supports the implementation of a digital strategy. Data and digital experts are actively recruited. There is data and digital awareness in the workplace. Most of the employees and some of the volunteers are trained on data literacy.</p>	<p>Leadership uses data and digital to continually optimize the humanitarian services. Staff and volunteers have a vital and accelerating role in digital transformation. Recruitment and selection is focused on optimising digital capabilities.</p>		
 <p>Process</p>	<p>Digital communication is fragmented and mostly one-way. Data and digital experts underutilized when designing humanitarian services. For some digital projects collaboration is sought with service providers. Monitoring at project level, but limited overview across all humanitarian services. Limited core budget for data and digital. Compliant with basics of data protection regulation</p>	<p>Digital communication channels are used to capture feedback to improve operations. A data and digital team understand the needs and gaps of the operations and actively supports improving the humanitarian services. Receiving and sharing insights with the IFRC Network and private sector. Operations are structurally monitored and data insights lead to improved humanitarian outcomes. Data protection standards embedded and monitored in systems and processes. Digital innovation and core budgets available and donors supportive.</p>	<p>Proactive listening and analysis enables the national society to influence societal topics and services are highly valued and impactful. Operations and Digital are fully integrated and organisation is agile. Provides professional, reliable and scalable digital services to the IFRC Network. Data-driven decision-making becoming the norm. Data responsibility and consideration of ethical concerns taken into account. New digital business models generate a new income stream for the national society</p>		
 <p>Tech</p>	<p>Some data is collected for project purposes, mainly for assessments. A basic IT infrastructure is present throughout the National Society, but many processes are still manual and paper based.</p>	<p>Data is collected with a specific goal in mind by staff and volunteers. Data quality is sufficient. Data sources are identified and meet the needs of the national society. Off the shelf digital applications are used for intended purposes. Some custom digital applications for specific humanitarian services are created. No more paper based processes.</p>	<p>Data is used in the majority of operational, tactical and strategic decisions. Data quality and data standards are monitored. New digital-enabled humanitarian services are developed with custom digital applications.</p>		

DATE	VERSION	CHANGELOG
30-9-2020	0.10	Initial version based on Digital Maturity research and with inputs of IFRC Digital Transformation Strategy process
29-10-2020	0.20	Improved the horizontal alignment by adding topics and having each topic at different levels of maturity. Improved vertical scanning, by ensuring dependencies between people, technology and process are in the same or earlier levels.
23-11-2020	0.30	Vertical scanning improved, aligning main summaries with topics per level. Added Human centered design maturity levels
9-2-2021	0.31	Aligned simplified maturity framework to extended framework. Some improvements to topic summaries.