TTRC DIGITAL TRANSFORMATION STRATEGY PLAN 2022-2026

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List of Terms, Acronyms and Abbreviations

TTRC	Trinidad and Tobago Red Cross Society	**IFRC**	International Federation of Red Cross and Red Crescent Societies.
LAN	Local Area network	**Open Source**	Free use of software on a network without a license
EOL	End of Life	**NS**	National Society
WAN	Wide Area Network	**NAS**	Network Attached Storage
ERP	Enterprise Resource Planning	**DMS**	Database Management System
Firewall	A network security device	**SharePoint**	A website-based collaboration system
UPS	Uninterrupted Power Supply	**IP Camera**	A type of digital video camera that receives control data and sends image data via an IP network
VPN	Virtual Private Network	**Managed Support Services**	The practice of outsourcing the responsibility for maintaining, and anticipating the need for, a range of processes and functions to improve operations and reduce expenses
Bandwidth	The maximum rate of data transfer across a given path	**CHF**	Swiss franc
DHCP	Dynamic Host Configuration Protocol	**DNS**	Domain Name Services
Digital Transformation	Digital Transformation is the deliberate and ongoing digital evolution Of a company, business model, idea process, or methodology, both Strategically and tactically		

Address from the President

The Digital Transformation of the Trinidad and Tobago Red Cross Society

Digital transformation presents a major opportunity for improving our humanitarian service delivery at TTRCS. It also represents a disruptive and incremental shift that will allow us to pursue new ways of approaching our work - transforming current practices to ones that facilitate more robust utilization of data analytics, digital technology and services – deployed by trained, confident professionals, in service of people in need.

Our Digital Transformation Strategy outlined in the following pages, articulates our plans for the development and implementation of a new digital standard and practices that improve speed, quality, relevance, accessibility, the sustainability of our humanitarian mandate and our accountability - in line with our 7 fundamental principles.

As we embark on this transformation, we recognize that it will be an ongoing journey rather than a specific destination that has people - our staff, volunteers and those we serve - at the center of the process.

Ms. Jill Debourg,

President, Trinidad and Tobago Red Cross Society.

We will continue to move towards a more data-driven, decision-making culture, with Integrated information security built-in as an overarching element of humanitarian protection, ensuring compliance with our movement's 'do-no-harm' principle. This human-centered, data-driven approach and design process means all staff and volunteers must be trained in data and digital tools.

Better, more timely information supports increased transparency and the trust of the communities we serve while allowing us to develop new ways to engage with them. It also strengthens our negotiating power and generates increased trust with donors and private sector supporters.

We believe we are ready and able to rise to this challenge of digitally transforming the TTRCS to better face the future. We are committed to empowering staff with the technology, tools, resources and professional development that promote learning and engagement, flexibility, and creativity for improved productivity and efficiency.

This commitment extends to empowering our volunteers and members, providing resources and learning opportunities for them to be engaged in supporting communities through innovation supported by technology.

Through this process, there will be many lessons learned which we will use to pivot where needed and strengthen our processes. We will also draw on the strong organizational culture of helping each other within the Red Cross, Red Crescent Network.

1.0 About Trinidad & Tobago Red Cross

Who we are:

The TTRCS is a non-profit humanitarian organization that focuses its resources on providing communities with disaster preparedness and quality programmes, designed to empower the most vulnerable in our society. We provide services and support to communities throughout the country, through our Headquarters and three branches situated in Port of Spain, San Fernando and Scarborough, Tobago

Our Mandate:

TTRCS's Mission is to mobilize the power of humanity through volunteerism and by being a beacon of hope that supports and connects people to regain control of their lives. Our Vision is to create a nation where present and future generations are empowered, resilient and self-reliant, and this powers our mandate to carry out humanitarian efforts that impact and protect vulnerable communities and save lives.

Shared values:

"Mission-Based, People Focused, Community Driven"

Our International Network:

TTRCS is part of the International Federation of Red Cross and Red Crescent (IFRC) movement, which comprises 192 national societies and is recognized as the world's largest humanitarian network, with a mission to prevent and alleviate human suffering wherever it may be found.

With a long history and international reputation for professional and rapid response during health emergencies and disasters, the TTRCS can draw on this global network to mobilize or further enrich its expertise, resources and best practice in applying the highest standards in its work locally and in its role as an auxiliary in the humanitarian field to the Government of Trinidad and Tobago.

2.0 Background and Introduction

The International Federation of Red Cross and Red Cross Crescent Societies with192 members Red Cross and Red Crescent NS have stated that the need for a successful and large-scale **Digital Transformation** is urgent.

The IFRC further stated that the Digital Divide remains a persistent and significant challenge at international, national and local levels, but also presents an opportunity for improving humanitarian service delivery

TTRC Overarching Goals for digital transformation

- Deploy technology, tools, resources and professional development that promote learning and engagement, improved productivity and efficiency to support decision making
- Capture data in a central repository for ongoing data analytics, reporting and digital development
- Empower volunteers and members by providing resources and learning opportunities through innovation and technology enablement
- Digitalize services to beneficiaries to support the delivery of aid to the most vulnerable in society
- The utilization and mobilization of business services and resources to develop financial stability for the national society

3.0 Link with IFRC Digital Transformation Strategy

To successfully complete the Digital Transformation journey, the following **three enablers** are woven through our Digital Transformation Strategy:

- Emphasizing that people are at the centre of the process
- Energizing our network to share capabilities and knowledge between NS
- Improving TTRC capacity for interoperability and common data standards

As there are clear actions required to secure digital transformation, these enablers are supported by **two main pillars:**

- A **maturity model** that provides strategic direction to NS, encourages ownership of Digital Transformation at the NS level and measures progress
- An **organizing model** that leverages existing capabilities in the TTRC and promotes the establishment of an accelerator team

3.1 The Maturity Model

The diagram below illustrates the three steps of the Maturity Model. Step 1 sets up the fundamental availability of basic IT infrastructure, digital applications, network systems and basic skills training. Step 2 advances to improve effectiveness in humanitarian services and efficiency in supportive capabilities and Step 3 encourages new ways of delivering humanitarian assistance by centralizing digital and data tools.

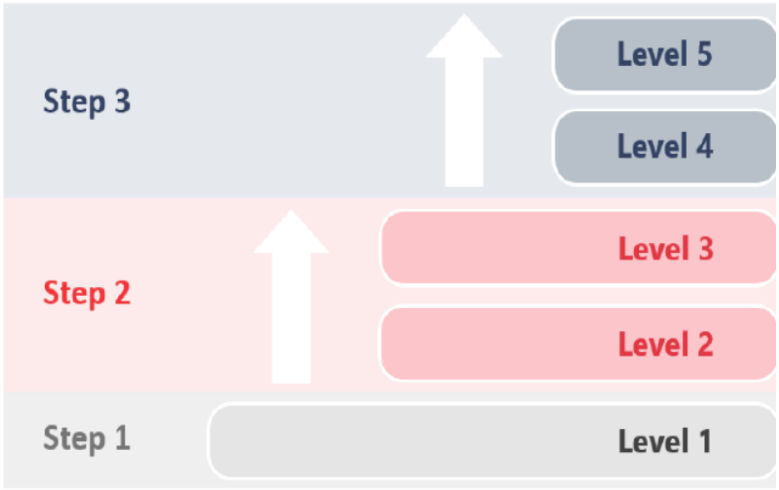

Figure 3.1 progress in digital maturity

Table 3.1 –TTRC digital maturity over 5 years

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	Step-1	Step 2	Step 2	Step 3	Step 3
	Level 1	Level 2	Level 3	Level 4	Level 5
People	Leadership & management are change champions for digital transformations	Leadership actively supports the implementation of a digital strategy.	Leadership continues to support the implementation of a digital strategy	Leadership uses data and digital to continually optimize humanitarian services.	Leadership uses data and digital for all humanitarian services
	Staff and volunteers are trained on the importance of data and the use of digital technology. Digital experts are outsourced Digital Services are provided to the public	Data and digital experts are actively recruited. There is data and digital awareness in the workplace .most employees and some volunteers are trained on data literacy The public access services on online platforms	There is 90% data and digital awareness in the workplace. All employees and volunteers are trained in data literacy.IT Staff are hired on a full or part-time basis to support digital services	Staff and volunteers have a vital and accelerating role in digital transformation. Recruitment and selection are focused on optimizing digital capabilities	Staff and volunteers use digital technology in all services.
Process	The use of communications is via duplex transmission	Communication channels are used to capture feedback on a daily bases	A fixed budget is implemented for the support and operations of digital Services	Operations and digital are fully integrated and the organization is agile	Data-driven decision making is becoming the norm
	Data from humanitarian services is captured digitally	Digital improvements activities are ongoing in improving the delivery of humanitarian services	Operations are structurally monitored and data insights lead to improved humanitarian outcomes	TTRC provides professional, reliable and scalable digital services to the IFRC Network	New digital business models generate a new income stream for the TTRC
	Departments perform data entry into digital systems	The operations and activities are reviewed to determine the gaps to improve digital services			

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	Step-1	Step 2	Step 2	Step 3	Step 3
	Level 1	Level 2	Level 3	Level 4	Level 5
Technology	Implementation of standard IT resources • Install or upgrade Computer Hardware • Install or upgrade computer software applications • Install basic network hardware for security, internet and remote connectivity • Install or upgrade existing ISP WAN links • Implement or renew existing cloud services such as email, storage • Update current website • Install physical security systems for access controls. monitoring and surveillance	Data is captured in a central repository and data analytic tools are used to create dashboards for decision making Software applications are used in most departments of TTRC	There is central \digital & data IT infrastructure and systems are in place with audit trail capabilities to support accountability in Finance, Support Unit, Business Unit and Programs Unit	Data is used in the majority of operational, tactical and strategic decisions Digital applications and customize or develop internally	Central IT infrastructure is scalable to meet the demands of TTRC humanitarian and business services Information security strategy is standard and integrated into all areas of the TTRC ICT infrastructure

3.2 Organizing Model

The IFRC stated the digital transformation is a major undertaking. "*It cannot be understated that bringing transformative change effectively and efficiently is a complicated process for any institution. The distributed and federated character of the IFRC presents challenges, such as the need for greater standardization of global systems and data structure while not eroding local choice or leveraging private sector partners and humanitarian institutions while maintaining the network's comparative advantages. To address these challenges, the Digital Transformation Strategy includes an 'organizing model' to leverage existing strengths across the IFRC*".

The role of the accelerator team is significant and includes managing the maturity model, developing digital services, developing financial mechanisms and managing cultural changes for digital transformation. The team comprised of the following persons

- Jill De Bourg, President
- Stephan Kishore, Crisis Management Coordinator
- Augustus Forde, First Aid and Ambulance Coordinator
- Magella Moreau, Communications and CEA Officer
- Portia Singh, Finance Officer
- Hazel Carter-Strachan –Advisor Organization Development, IFRC

Table 3.2 identifies a person's roles and responsibilities to accomplish the digital transformation goals of TTRC plotted using the legend/key below

Roles	**President**	**Crisis Management Coordinator**	**First Aid and Ambulance Coordinator**	**Communications and CEA Officer**	**Finance Officer**	**Advisor, organization development, IFRC**
Action/Task						
General oversight of all areas	AR					C
Liaison between the IFRC and NS	I					R
Program implementation e.g. assessment of beneficiaries	I	R				
Populate client data for business units	I		R			
Promotion and marketing of services	I			R		
Oversight of budget and spending	I	R			AR	

Table 3.2 Trinidad Accelerator Team Responsibility Assignment Matrix (RACI)

Legend	
I	Informed
C	Consulted
A	Accountable
R	Responsible

4.0 Vulnerability Assessment and Current State of ICT in Trinidad and Tobago Red Cross

The IFRC 2021 Digital Transformation quickscan report was done to assess the current state of the Trinidad and Tobago Red Cross digital maturity. The report aimed to measure the ability of a Red Cross/Red Crescent National Society for continuous improvement of its humanitarian operations through the application of data analytics and digital technology.

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

- People: Leadership and Culture, Human Resources and Data Literacy
- Process: Engagement, Organizational structure and internal collaboration, Partnerships and Service Delivery, Data Protection and Responsibility, Resource Mobilization
- Technology: Data, Digital

The current state of TTRC digital transformation maturity is at **Step 1**. The following were also the main points for improvement towards digital transformation.

- Development of a digital strategy
- The collection of specific data for the digital focal point
- Development of data responsibility policy and advisement on data protection regulations

The tables below identify the current state of the TTRC environment and steps required under the three-domain areas of people, process and technology.

Table 4.1

DOMAIN-PEOPLE

CURRENT STEP	GOALS
THEME 1 –LEADERSHIP AND CULTURE	
Leadership and management are interested in digital transformation. However, there is no digital strategy yet. Digital Transformation will become part of their next strategic plan	Develop a digital strategy plan.
In times of crisis, Data and Digital is still on the agenda but are not a priority. The Trinidad and Tobago RC collects information for reporting purposes during a crisis. moreover, online	Make sure that in times of crises response data analytics and digital development are ongoing.

DOMAIN-PEOPLE

CURRENT STEP	GOALS
THEME 1 –LEADERSHIP AND CULTURE	
surveys are being undertaken to collect data island-wide. Furthermore, within TTRCS assessments are currently digitalized, and we use KOBO to collect all the data. They have 13 cellphones and 5 tablets	
There is no specific data and digital focal point. Digital transformation falls within the objective of the different program coordinators.	Ensure that one member of the leadership team, who has a quantitative background is leading the Digital Transformation process.
Leadership themselves reviews data products to make decisions when provided with (reactive) from time to time.	Ensure that leadership leads by example and asks for data-driven reports (proactive).
THEME 2 –HUMAN RESOURCES AND DATA LITERACY	
Staff and volunteers do not share a common definition of data and digital. There is no data literacy training yet. It is something that has to be clarified and defined so that we have a common understanding among all. We can perceive that all understand but we need to ensure they understand	Ensure that there is data and digital awareness in the workplace. Regular basic data literacy training for volunteers, and more professional data literacy training for staff.
There is no HR department. There is no clear idea about what skills and profiles are necessary for Data and Digital. The Trinidad and Tobago RC is interested in onboarding a person with the necessary skills, but currently, there is limited staff. In the current situation, all staff is more, or less involved in all projects.	Establish what human resources are lacking and create a strategy to acquire the necessary technical profiles.
There are some staff with basic IT skills but not sufficient to drive data and digital within the TTRCS	Establish digital teams: hire staff and volunteers specifically for digital skills. Focus on hiring additional staff and volunteers or educating current staff and volunteers to fill pre-established knowledge gaps.

Table 4.2

DOMAIN-PROCESS

CURRENT STEP	GOALS
THEME 3 –ENGAGEMENT	
Mainstream social media is used to send one-way updates from the Red Cross. The TTRCS collects feedback and people can provide messaging. We have targeted feedback via surveys	Start engaging in dialogues with the volunteers and people in need happen on an ad hoc basis.
Digital communication is seen as an asset and is outsourced to create visual impact in reaching audiences, beneficiaries. TTRCS has a communication strategy and involves traditional and online communication but requires improvement	

DOMAIN-PROCESS

CURRENT STEP	GOALS
Needs are understood through structured surveys and community sessions. We are community-driven and all interventions designed are done through surveys, focus groups and interaction with the community to tell where their most urgent needs are. Data collection is mostly online except for focus	Start understanding needs through a human-centered design process, leading to richer insights of feasibility, viability and desirability of new (digital) products and services.
Feedback data is analyzed and leads to improvements to the program and operations. Feedback is analyzed and provided in reports	Collect feedback data continuously from end-users and use a human-centered design process to design new products and services.
THEME 4 –ORGANISATIONAL STRUCTURE AND INTERNAL COLLABORATION	
The current roles and responsibilities of departments are clear, but departments work in silos there is little interaction between departments Ad hoc knowledge sharing Roles are still a work in progress and departments have a better understanding of their roles and functions It is a strong work in progress to move from silos to integration to get them at the optimum stage We need to restructure departments to get that cross functioning and working together we are not quite there yet	Ensure that (digital) experts understand the needs and gaps of the operations teams (business) and actively aid in solving these problems together.
THEME 5 –PARTNERSHIPS AND SERVICE DELIVERY	
The Trinidad and Tobago RC has explored existing service offerings in the IFRC network and has a clear understanding of what data and digital capacities could be built in-house. Hazel from the IFRC is assisting the Trinidad and Tobago RC with implementing online learning TTRCS is in the process of developing a Moodle site to offer courses online TTRCS will be used as a pilot for others in the delegation to follow	Set up framework agreements with digital hubs in the IFRC network for receiving digital services support and start to engage at a project level.
NS has explored existing service offerings in the IFRC network and has a clear understanding of what data and digital capacities could build a house from a disaster perspective we look at bigger NS and generate a Wish list Moving from paper to electronic, We have tried to digitalize as much as possible from Admin and Finance perspective The LMS and looking at where it could go DT is very expensive and while we achieved some goals (server eg we need further advancement in DT both people equipment and software We need funding to get us to where we need to be	Framework agreements are in place with digital hubs in the IFRC network for receiving digital services support and NS has started to engage at a project level Seek to establish partnerships with universities to get traction in data and digital
THEME 6 –PMEAL AND DECISION MAKING	
Operations are structurally monitored, and data insights lead to improved humanitarian outcomes This is the way that TTRCS has set up The whole M&E Framework is applied using the outcomes to attract funding It is their basic standard and approach	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

DOMAIN-PROCESS

CURRENT STEP	GOALS
THEME 7 –DATA RESPONSIBILITY	
There is no data responsibility policy yet and there is no one in the house to advise on data protection regulation as of now.	Make sure a Data Responsibility Policy is on the way and there is a process to handle any issues. Set up a privacy policy on all external-facing websites and apps.
THEME 8 –RESOURCE MOBILIZATION	
There is a limited core budget for data and digital used to keep the current infrastructure operational. Which is more Focused on hardware than software? There is no innovation budget.	Have digital innovation and core budgets are available and make sure that donors are supportive.

Table 4.3

DOMAIN-TECH

CURRENT STEP	GOALS
THEME 9 –DATA	
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 It depends on the requirements of the donors the format may be changed based on that NS can analyze data and build reports summarizing the data Using spreadsheets and tools for analysis	Collect key data that is needed for current and future programs. Set up a standard data collection methodology that is standardized to fit the needs of multiple users (i.e., across departments or external partners).
Secondary datasets are explored, analyzed and used in information products if there is a need to do so.	Use secondary data to complement primary data and reduce the need for primary data collection.
Key data is stored in separate databases; other data is still stored on shared file drives. Some data is also stored on the server.	Set up a centralized data warehouse containing key datasets to increase the speed of data access.
There are no minimal agreed data standards yet.	Define data standards and specifications for common operational datasets
Descriptive analytics (looking back) is used by the TTRCS. For example, Finance data is used for diagnostic and predictive understanding of potential needs.	Start using diagnostic analytics (causal analysis) and predictive analytics (forecasting).
The Trinidad and Tobago RC can analyze data and build reports summarizing the data. Using spreadsheet tools for analysis, such as Excel.	Start looking into building and validating simple analytics models. Local version management of scripts developed by analysts.
THEME 10 –DIGITAL	
The Trinidad and Tobago RC has basic IT (hardware and software) and there is the functional use of digital tools by end-users. Infrastructure investments are based on short-term orientation (<1 year). There is no budget for the software, however, software investments can sometimes be attached to a project that the TTRC is doing.	Supplement basic software (Off the shelf digital applications) with custom applications for specific humanitarian services. Base infrastructure investments on medium-term orientation (2 years).

DOMAIN-TECH

CURRENT STEP	GOALS
There is reliable internet is relatively stable with some good and bad days both at headquarters and at the branches	Ensure that there is good internet connectivity at Headquarters and Branch level.
Volunteers can self-apply, edit their 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
Beneficiary registration happens through web forms, but they cannot self-register. Self-registration must be validated and verified	Set up beneficiary management that facilitates the identification, registration, validation and inclusion testing of beneficiaries.
We have no Developers in-house and no development operations set up for deployment of applications	Some people that know how to code are building some standalone quick-fix solutions. Develops? manually deploy apps to servers.
There is little information security awareness. There is an antivirus and passwords are on all devices.	Make sure that IT has strong information security knowledge, and staff has information security awareness through training and security updates.

4.1 TTRC ICT Asset List

The TTRC utilizes computer technology for most tasks with standalone and disparate systems to perform daily operations in their business and delivery humanitarian services. This does not allow interoperability, integration, collaboration and timely sharing of information and resources. Therefore the need to change the current state is essential for digital transformation.

The following table outlines the current ICT assets list at TTRC

Table 4.4: Current ICT Asset Listing of TTRC

ASSET	UNDER WARRANTY	SUPPORTED	EOL	CLOUD/ SUBSCRIPTION	OWN/MANAGE BY TTRC	OPEN / CLOSE SOURCE
Server	No	Yes	Yes		Yes	
Desktop	No	Yes	Yes		Yes	
Laptops	No	Yes	Yes		Yes	
Printers	No	Yes	Yes			
Network Switch	No	Yes	No		Yes	
Wireless AP	No	Yes	Yes		Yes	
IP PBX	No	Yes	Yes		Yes	
IP Phones	No	Yes			Yes	
Internet Link		Yes			No	
Productivity tools		Yes		Yes	No	

ASSET	UNDER WARRANTY	SUPPORTED	EOL	CLOUD/ SUBSCRIPTION	OWN/MANAGE BY TTRC	OPEN / CLOSE SOURCE
Accounting Application		Yes		No	Yes	No
Email		Yes		Yes	No	
Web site hosting		Yes		Yes	No	
Assessment Software		Yes		Yes	No	Yes
Members Registration software		Yes		Yes	No	No

4.2 Network Infrastructure

The network system is limited and currently is not entirely connected to allow greater expandability and scalability of network resources. There is some level of support by an external contractor; however, network maintenance and operations support are not available to allow network domain services such as DHCP, DNS and backup services.

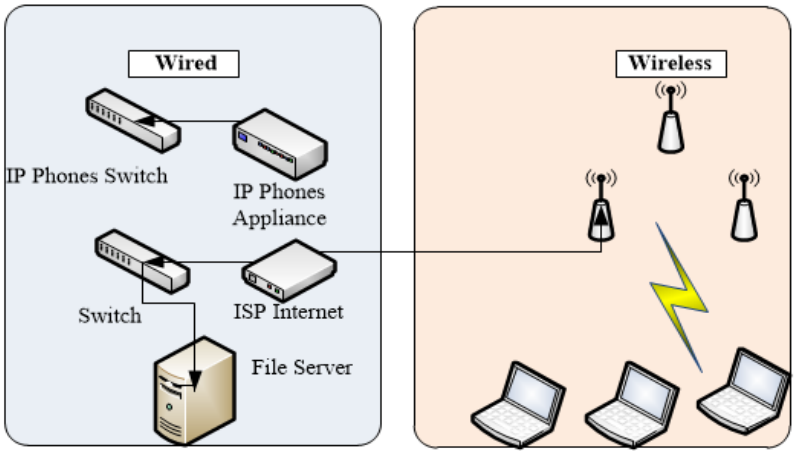

Figure 4.1: Logical Diagram of TTRC ICT structure

4.3 Software Architecture

The software utilized within the TTRC organization is divided into two areas which are cloud-based and network-based. The software services currently used are

- Sage Peachtree for accounting –network based
- Office 365 productivity tools (Word, Excel) –cloud-based

- Kobo assessment tool for data collection and surveys–cloud-based
- Better Impact to handle volunteers and member registration –cloud-based

4.4 Branch Interconnectivity

The TTRC has a head office and three (3) branch locations that are located in Port of Spain, San Fernando and Tobago. Presently the northern branch is on the same compound as head office and is connected via a LAN. The other remote sites are disconnected and are not able to share and collaborate resources over a network infrastructure. Email is the primary method of communication between locations

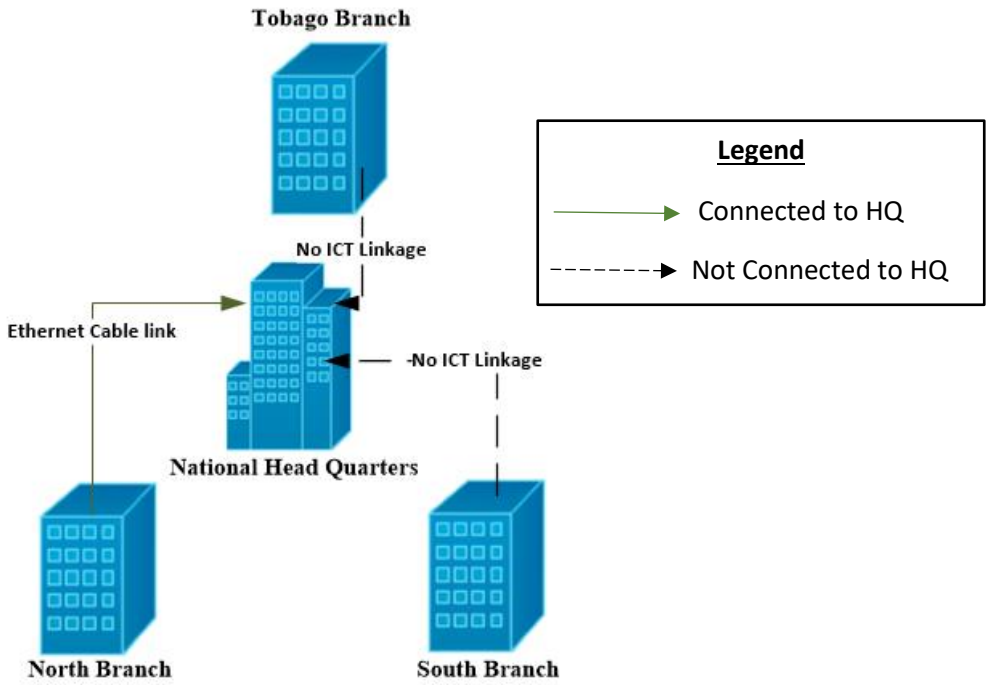

Figure 4.2: Logical diagram of TTRC interconnectivity between Head Quarters and 3 Branches

5.0 Services Provided by the National Society and Digitalization of Operations

The mission of TTRC is to improve the lives of vulnerable people by mobilizing the power of humanity and its vision is to strive through voluntary action for a world of empowered communities better able to address human suffering and crisis with hope, respect for dignity and a concern for equity. This is achieved through services such as

Humanitarian Services

- Disaster Preparedness Training
- Enhancing community resilience
- Disaster response
- Support to Migrants and Migrations Advocacy
- Primary Health Care at the Clinic
- Psychosocial Support
- HIV and AIDS educations and awareness
- Youth Red Cross

Business Services

- First Aid Training
- Ambulance Services
- Kitchen Services

5.1 Roadmap for Digitization of Services

To digitize the services of TTRC an ICT readiness needs assessment is required and the various core and supporting platforms need to be in place to accommodate the change. Change Management is also critical and involves championing the reasons for the change from the Accelerator team and others.

To meet the goals of digitization of the services an ICT Readiness assessment would be required to be undertaken in the following areas.

- ICT Hardware
- Software and Information System
- ICT Infrastructure
- People and Human resources

Figure 5.1 identifies four fundamental areas of ICT that are required to build a strong and reliable infrastructure. These areas are essential and demonstrate readiness for digital transformation within an organization. In addition, Figure 5.2 illustrates the roadmap for technology implementations derived from the readiness assessment over 5 years.

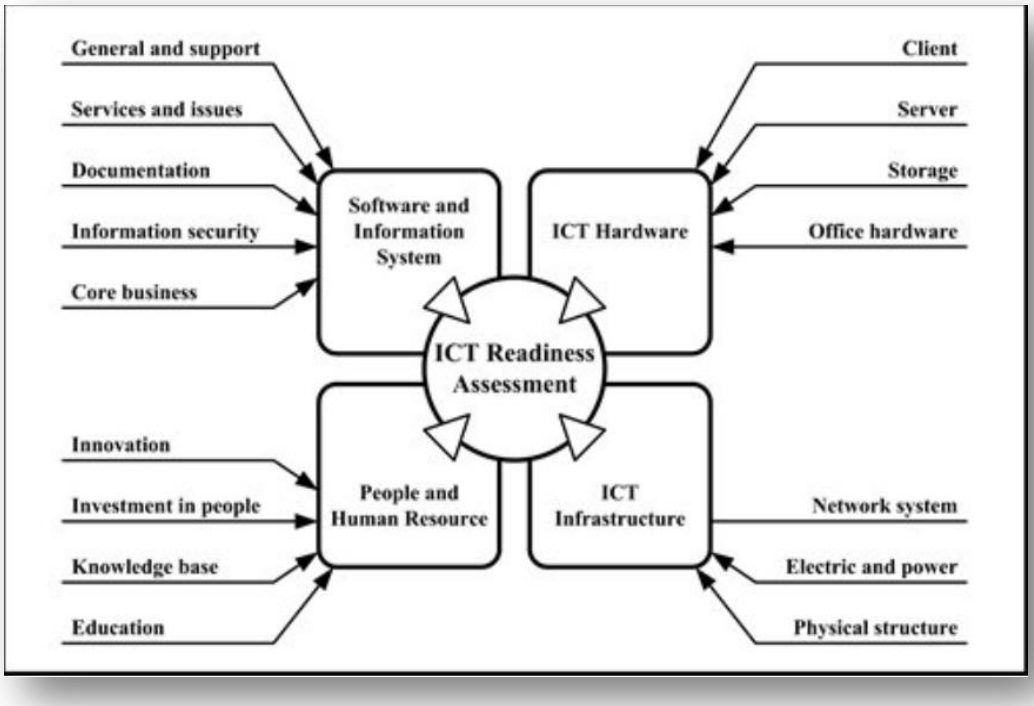

Figure 5.1 ICT Readiness Assessment Mapping

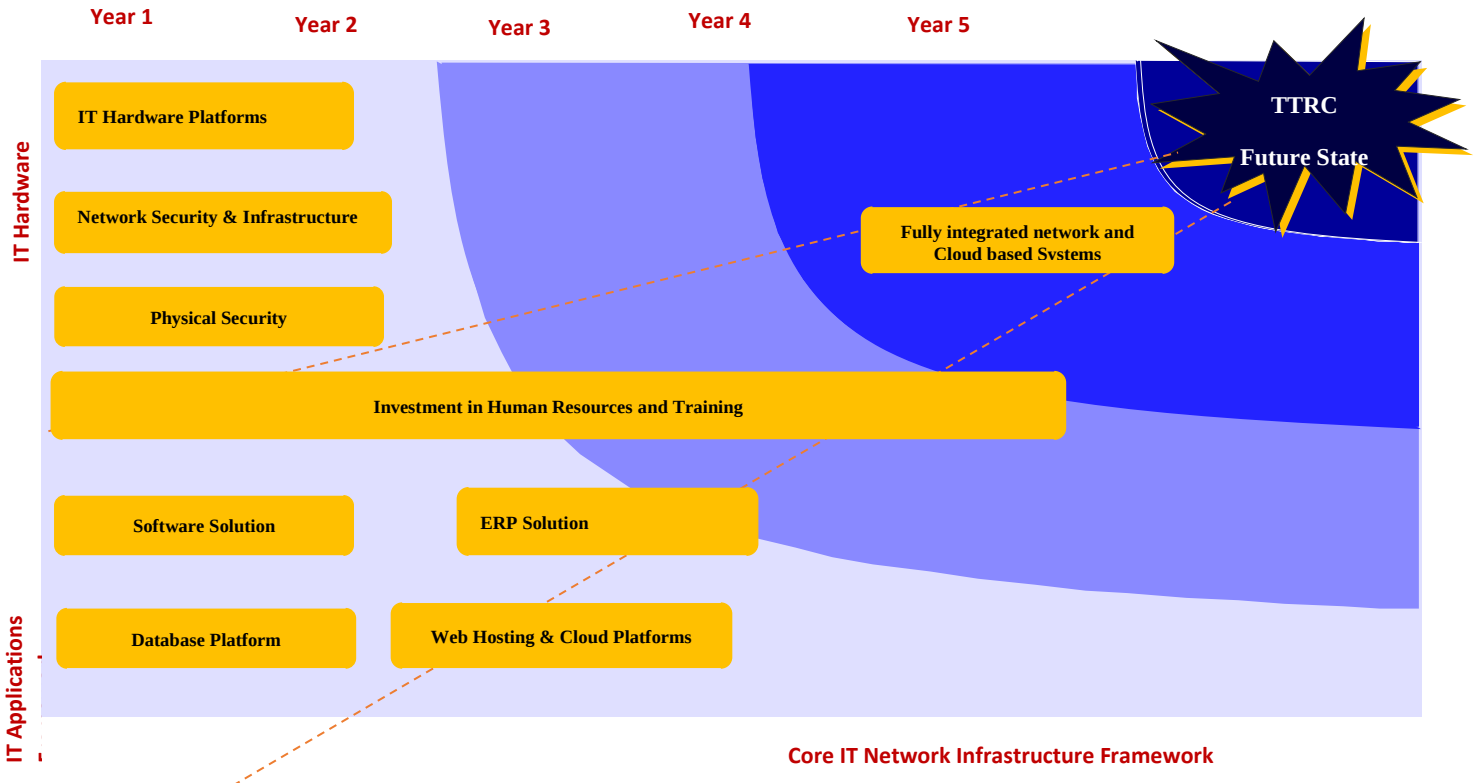

Figure 5.2 Technology Implementations Duration

6.0 Local Challenges, Strategic Priorities and Value Cases

Some of the local challenges that presently exist in transforming the TTRC digital initiatives include

1. Lack of internal ICT support
2. Long-term sustainable funding
3. Data literacy and technology adoption challenges for volunteers and communities
4. Implementing change management in the adoption of new technology
5. Enhance ICT knowledge capacity amongst staff members

Other challenges are based on the TTRC ability to use technology in its humanitarian efforts and provide timely support to communities and emergencies such as responding to medical services and natural disasters.

6.1 Digital Transformation Value Cases

Digital transformation value cases are those initiatives that have an impact on the transformation of our business and how we provide services to the most vulnerable people in our society. The five strategic priorities of the IFRC are as follows:

- Climate and environmental crises
- Evolving crises and disasters
- Growing gaps in health and well-being
- Migration and identity
- Values, power and inclusion

Digital Transformation value cases will focus on the above areas as well as within the core information technology infrastructure of the TTRCS. To provide effective and efficient services to the most vulnerable people in our society institutional transformation is critical. Our information management systems must be updated and/or changed to ensure that we can provide service to vulnerable people. The value cases we build are categorized into six areas and will be implemented over five years. Value cases will be developed within the five areas identified in the bullets above and the six areas will be our ICT infrastructure. As TTRCS undergoes digital transformation our human resource management, volunteer management, information management, inventory management and other systems must be changed to

ensure that the services we provide result in the realization of individuals and communities that thrive. TTRCS commits to the Agenda for Renewal and ensuring that we are trusted by the communities we serve. To build trust TTRCS intends to reach the most vulnerable by sustaining and upgrading our ICT infrastructure and digitalizing our services for a broader reach and sustainable outcomes.

6.1.1 Value Case I: Climate Change and Environmental Crises

Description: Artificial Intelligence Predictions

Climate change is harming sea levels, the forest, rising temperatures and serious impacts on the world's water system through more flooding and droughts. Recently the governments around the world meet in COP 26 in the United Nations Climate Change Conference 2021, in Glasgow, the United Kingdom of Great Britain and Northern Ireland, on Sunday, 31 October 2021, at the Scottish Event Campus.

All countries need to reduce their emissions and the outcome agreement of the conference saw countries agreeing to report their progress towards more actions on implementing climate initiatives as a goal within the next year. The TTRC can use existing digital technology such as artificial intelligence to create supply/demand predictions and identify patterns that might be missed via traditional analysis methods. This can help communities, government and the entire country by information and awareness when carrying out various missions.

Artificial Intelligence (AI) is a system algorithm that allows computers to perform tasks without explicitly being programmed to do so.

6.1.2 Value Case II: Evolving Crisis and Disasters

Description: An Enterprise system that provides Assessments, distribution, Accounting and location tracking in humanitarian relief and support

Disaster preparedness is one of the most requested areas in training for the TTRC.In all countries, disaster management is essential since it prepares persons by giving them the necessary information and skills to respond to natural disasters within their communities. In Trinidad & Tobago flash flooding, landslides and strong winds are regular events that occur

every year in various parts of the country and causes several damages to people's life, animals and property.

There are first responders such as the Trinidad and Tobago Defence Force (TTDF) and the Ministry of Works and Transport municipal corporations who help with the evacuation. However, to provide relief TTRC can utilize enterprise systems to collect data in the field with mobile devices updating backend systems that enable assessments, distribution, accounting and timely delivery of resources to those who require urgent assistance and relief. A real-world example is the Rapid Data Management System (RDMS) developed by Global Relief Technologies Limited.

High-performance Trimble Nomad **handheld** devices running Global Relief Technologies **RDMS** software provides a total Enterprise Mobile Field-Data Workflow Solution which achieves significant operational cost savings, simplifies work processes, and provides the capability to easily capture critically needed "structured" and "accurate" field-data that is vital to successful operational decision making and performance. (**See appendix B**)

6.1.3 Value Case III: Growing Gaps in Health and Well Being

Description: Ambulance Intelligent Service

The TTRCS owns eight (8) ambulances, and the provision of service can be enhanced through digitalization. At this juncture, the TTRCS must develop an Ambulance Services Operation Framework as the fleet is growing and will continue to grow based on the demand for services. Ambulance transport is an essential emergency service provided by the TTRCS and the community expects high availability, responsiveness, and pre-hospital care.

Ambulance routing decisions using geospatial data will calculate routes and response times based on routing and traffic data. This will ensure that our ambulances take the least possible time to reach a patient and then arrive at the hospital. Utilization of rich location data can when calling emergency numbers, emergency and incident data from apps, connected cars, and security services. This would result in better response times, improved efficiency, and a better-prepared response team. With location data, our ambulance service will be equipped to identify the exact location and cut downtime to reach the seeker of care. This would therefore make a significant difference between life and death

A **geographical information System** (GIS) is a computer system that helps users to collect, process, edit, store, manage, share, analyze, model and visualize large volumes of datasets to understand spatial relationships, patterns and trends and make educated sound decisions. (**See appendix B**)

6.1.4 Value Case IV: Migration and Identity

Description: Telehealth Service

To support the growing migrant population in Trinidad and Tobago there is a need to establish fifty (50) community-based surveillance monitors in communities across the twin-island republic to monitor for any future outbreaks of Covid-19 and any other issues that affect the migrant population. Often migrant status causes fear of utilizing the public health system and using a Telehealth System TTRCS will be able to procure and apply innovative technologies which are becoming more accessible, telehealth will provide migrants with access to health services even in the most remote locations. CBS Monitors are volunteers in the migrant community that are focal points who function as liaisons between the community and the National Society. TTRCS will train and empower these volunteers to identify issues of concern within the community. These volunteers will be deployed using a mobile app to relay information to the national society in real-time where alerts can be sent to promote timely interventions if and when required for the migrant community.

Telehealth is the use of digital information and communication technologies, such as computers and mobile devices, to access health care services remotely and manage your health care. These are technologies that may use from home or the doctor used to improve or support health services

6.1.5 Value Case V: Values Power and Inclusion

Description: Learning Management System

Promoting awareness of issues about values power and inclusion is important to the TTRCS. Through our Learning Management System (LMS) TTRCS will engage in the following

- Provide Sexual and Gender-Based Violence training and resources, build internal and external coordination and advocacy

- Improve TTRCS capacity and coordination to protect children during emergencies by training our staff, volunteers, partners, allies, and the business community. This will sensitize key stakeholders in becoming engaged in the protection of children, especially during emergencies.
- Promote attention on trafficking in persons
- Preventing and Responding to Sexual Exploitation and Abuse and disability inclusion
- Adopting Prevention and Response to Sexual Exploitation and Abuse policies and encouraging sensitization to these issues as core topics of learning within our LMS
- Providing gender and diversity training to workplaces in our community and becoming a beacon of the inclusivity message

An **LMS** is a multiuser software application, usually accessed through a web browser. It helps organizations manage training events, self-paced courses, and blended learning programs. It provides automation that replaces rigorous and expensive manual work, saves time, and enables you to organize your content, data and learners. It tracks and reports on training activity and results.

6.1.6 Value Case VI: TTRCS ICT Infrastructure

Description: Information and Communication Technologies platform

For TTRCS to provide and improve on its current humanitarian and business services the ICT systems must be updated and robust to allow communication and interoperability with branches utilizing open source and/or proprietary technologies.

Information and communication technology (ICT) includes the internet, wireless networks, cell phones, computers, software, middleware, video conferencing. Social networking and other media applications and services.

7.0 Actualizing the Plan: Multi-Year Strategy 2022-2026

To fulfill the goals outlined from the current state assessment and move the TTRC` to an organization with high data literacy, standard ICT infrastructure and digital tools. The necessary ICT equipment is required to be set up, configured and operationalized, while ICT personnel internally or managed services monitor and support the infrastructure. Table 7.1 identifies the strategic priorities of the IFRC for digital transformation and the technologies that can be used to solve the different value cases.

Table 7.1 – ICT Initiative Duration

	STEP 1	STEP 2		STEP 3	
ICT INITIATIVES for VALUE CASES	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
1. Climate and Environmental Crises • Artificial Intelligence					
2. Evolving Crises and Disasters • Enterprise Management System					
3. Growing Gaps in Health and Well-being • Ambulance GIS Mapping System					
4. Migration and Identity • Telehealth System					
5. Values, Power and Inclusion • Learning Management System (LMS)					
6. TTRC Core IT Infrastructure Framework					
A. ICT Hardware					
• Upgrade Desktop and Laptops computers					
• Upgrade printer					
• Upgrade IP Phones					
• Install projector in training rooms					
• Install television for Branch viewing					
• Purchase tablets for fieldwork					
• Smartphones for data connectivity					
• Install Servers for domain design					
• Install desktop UPS					
• Removable Tape Backup					
B. Software and Information System					
• Install office 365 solution (Word, Excel, Email, PowerPoint, SharePoint, Microsoft Teams)					
• Install antivirus server and client endpoint solution					
• Install antimalware solution					
• Implement ERP for core business services					

	STEP 1	STEP 2		STEP 3	
ICT INITIATIVES for VALUE CASES	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
• Implement information security policies • Install DMS for data collection • Define backup and restore procedures • Determine critical data for backup					
• Implementation of document management and collaboration solution for information gathering and sharing (e.g. SharePoint in the cloud)					
C. ICT Core Infrastructure • Secure physical access control for servers/switch room • Upgrade network with two servers (primary and backup) • Install wireless access points at all branches • Test network installation • Install access controls or locks at all server rooms .cabinets • Install network IP cameras for surveillance and monitoring • Install firewall for network security					
• Install network UPS for backup and redundancy					
• Design network domain					
• Assess bandwidth capacity for required needs • Setup VPN connectivity to the site • Install NAS for a daily backup					
D. People and Human Resources • Managed Support Services • Train staff and volunteers in data literacy					
• Hire an ICT Support technician					
• Hire Software Analyst /developer					

7.1 KPI for TTRC Digital QuickScan Report Improvements

As indicated earlier in the ICT current state the quickscan report identified the areas for digital improvement which can be used for humanitarian operations utilizing the application of data analytics and digital technology. To measure the success of technology over five years, table 7.2 outlines key performance indicators (KPI) for monitoring and evaluating the improvement in service and delivery by the various technology being implemented.

Table 7.2 – KPI Maturity and Adoption of Digital Technology 5 Year Period

		MEASURE	TARGET	SOURCE	FREQUENCY
DOMAIN- PEOPLE	Leadership and Culture	# of data driven reports receive	Step # 2	QuickScan report	Monthly
	Human resources and Data literacy	# of staff Trained # of volunteers trained # of person with technical skills hired	Step # 2	QuickScan report	Monthly
DOMAIN -PROCESS	Engagement	# of new digital services # of feedback received	Step # 2 Step # 1	QuickScan report	Monthly
	Organisation structure & internal collaboration	# of new solution to solve business needs	Step # 2	QuickScan report	Monthly
	Partnership & Service Delivery	# of framework agreements Started	Step 2	QuickScan report	Monthly
	PMEAL & decision making	# of data-driven reports generated	Step 3	QuickScan report	Monthly
	Data responsibility	# of data issues receive # privacy policy setup on websites and apps	Step 2	QuickScan report	Monthly
	Resource mobilization	# of digital innovation	Step 2	QuickScan report	Monthly
DOMAIN –TECHNOLOGY	Data	# of data standards defined % of data collected by digital technology % data warehouse completed # of external partners exchanging data through digital technology # of diagnostic analytics & predictive reports	Step 2	QuickScan report	Monthly
	Digital	# of digital applications # of custom applications	Step 2	QuickScan report	Monthly

		MEASURE	TARGET	SOURCE	FREQUENCY
		% increase in bandwidth capacity # of volunteers using mobile technology for assignments # of beneficiary receive, identify registered & validated through digital technology # of apps develop internally # staff train in information security awareness			

8.0 Log Framework

Table 8.1 log framework identifies the objectives and KPI for the five (5) TTRC overarching goals for digital transformation.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
1. Deploy technology, tools, resources and professional development that promote learning and engagement, improved productivity and efficiency to support decision making			
Outcome 1 **Technology systems are acquired and staff use them for organizational services**	**No. of departments connected through technology**	**Financial and implementation reports**	**Availability of financial and human resources**
Output 1.1 ICT operational technology procured	No of ICT systems procured No of the departments engaged in using new technology	Invoice from supplier	Availability of financial and human resources
Output 1.2 Staff training on the proper use of the technology procured	No of staff trained Usability ratio Improvement in operational efficiency % reduction in working in silos	Research Report Implementation plans Implementation reports	Availability of financial and human resources

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Output 1.3 Branches, headquarters and staff connected through technology	% improvement in communication between headquarters and branches % improvement of connectivity between staff in different departments	Surveys System reports	Monthly fees are paid for interconnectivity between sites
Outcome 1.2 **Professional Development for staff executed**	**Training plan completed and approved**	**Approved training plan**	**Availability of financial and human resources**
Output 1.2.1 Digital Transformation Needs Analysis Conducted	Training Curriculum completed No of the training programs developed No of staff and volunteers attend DT training	Training Curriculum	Availability of financial and human resources
Outcome 1.3 Increased capacity for operational efficiency delivering services in humanitarian action	**Training plan completed and approved**	**Approved training plan**	**Availability of financial and human resources**
Output 1.3.1 Increased efficiency in data management and reporting	No of staff, partners and volunteers trained Policies developed to support protection in humanitarian action	Training reports	Availability of staff volunteers and partners to attend training
Output 1.3.2	Staff Requisition Approved Recruitment of Staff	Approved organization structure	Availability of budget for

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Recruitment of relevant staff to drive digital transformation agenda	Available staffing budget	Recruitment and Selection Reports	execution
Output 1.3.3 Branches, headquarters and staff connected through technology	% improvement in communication between headquarters and branches % improvement of connectivity between staff in different departments	Surveys System reports	Headquarters and branches are connected via technology

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
2. Capture data in a central repository for ongoing data analytics, reporting and digital development			
Outcome 2.1. Centralized repository for data storage and computing resources accessible by all	**ICT Backend Implementation**	**Systems Service Operations**	**Finance availability and specialized staff acquisition**
Output 2.1.1 Implementation of a database management system	ICT hardware platform procure for implementation of DMS	License of DMS	The system is procured and implemented
Output 2.1.2 Recruitment of software analysis/developer to manipulate data	Staff position Approved Recruitment of Staff Available staffing budget	Approved organization structure Recruitment and Selection Reports	Availability of budget for execution
Output 2.1.3 Data reports can be accessed from all branch locations	% increase in connections to a database	System and database logs	Log review documented
Outcome 2.2 Data can be accessed and shared easily through standard reports	**ICT Backend Implementation**	**Systems Service Operations**	**Finance availability and specialized staff acquisition**
Output 2.2.1 Staff have the end-user devices with remote connectivity	No of staff and volunteers accessing reports through a browser or network shared % increase in bandwidth capacity	End users devices configured for accessibility System reports accessible System Log reports	Resource availability

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	# of mobile data device for field access	VPN connectivity logs	
Output 2.2.2 The reporting services are implemented to allow standard reports to be generated	% increase in browser activity % increase in database activity	The system can be accessed through a browser or a business intelligence dashboard	System up 24/7
Output 2.2.3 Reports are used to impact the delivery of services provided to communities	Improvement efficiency in the delivery of humanitarian services % increase in a report requested	report templates installed	Custom templated are built into the system
Outcome 2.3 Data can be protected from one location	**Security controls are mandatory in the system**	**Security access control program**	**Security was designed into the system**
Output 2.3.1 Security controls are implemented	The system requires validation from the user	The user is authenticated by the system	System is available
Output 2.3.2 Username and password are used to the access system	The system requires a user to have credentials to access the system	The user is provided with access and assigned permission	User is added to the domain network system The user has an email address

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	% improvement in the integrity		
Output 2.3.3 Security features such as two-factor authentication are implemented	The system requires a user to enter additional info to allow accessibility	User credentials have to be entered with a code	The user has provided the info and set up two-factor authentication

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
3. Empower volunteers and members by providing resources and learning opportunities through innovation and technology enablement			
Outcome 3.1 The provision of digital tools to deliver services	**Proprietary and non-propriety Technology**	**Technology deployment**	**Technology acquisition**
Output 3.1.1 A combination of technologies are used for different purposes	# of proprietary systems acquired # of non-proprietary systems acquired	Technology is used to carry services to the communities	Technology acquisition
Output 3.1.2 Technology is user friendly and easily adopted	% increase feedback on technology use % reduction in technical challenges	Staff and volunteers use technology in their daily operations	Technology acquisition
Output 3.1.3 There is compatibility with systems	There is a high level of integration between systems % reduction in ICT support needed	System requirements and compatibility is checked at the requirement stage	Technology acquisition
Outcome 3.2 Staff and volunteers are trained to use digital technology	**Proprietary and non-propriety Technology**	**Technology deployment**	**Technology acquisition**
Output 3.2.1	Use of technology is widely used	All humanitarian and business	Training is part of technology

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Training increase the usage of technology	throughout the organization # of person trained # of the training session	operations have technology usage	contract
Output 3.2.2 Power users are developed to train new staff and volunteers	# of super users trained	Training is done by internal staff	Identification of person for the role
Output 3.2.3 A support system is developed for all technology tools and systems	# of help desk tickets generated	Help desk report	Vendor and internal ICT support are available
Outcome 3 Training is on-going	**Proprietary and non-propriety Technology**	**Technology deployment**	**Technology acquisition**
Output 3.3.1 Training documentation is available for continuous learning	Knowledge base completed	Access to online training materials	Cloud base solution implemented
Output 3.3.2 Training can be accessed from any location	# of participants accessing training in different locations	Remote access	Cloud base solution implemented
Output 3.3.3 Training is updated when new updates to the system are implemented	Major Improvement in the functionality of the system	Portal accessed	Systems updates are automated

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
4. Digitalize services to beneficiaries to support the delivery of aid to the most vulnerable in society			
Outcome 4.1 Digital value cases identified to ensure that the global challenges are addressed through digital transformation	**Technology systems identified to address value cases challenges**	**Digital transformation plan/strategy**	**Digital transformation plan/strategy implemented and financial availability**
Output 4.1.1 Digital Value cases are resourced and budgeted	#digital value cases identified	Digital transformation plan/strategy	Digital transformation plan/strategy implemented and financial availability
Output 4.1.2 Digital value cases are implemented	# digital interventions addressing climate change # digital interventions addressing values power and inclusion # digital interventions addressing crises and disasters # digital value cases addressing health and wellness # other digital value cases	reports	Financial availability
Output 4.1.3 Beneficiaries have received support through the implementation of value cases	#people reached	Beneficiary reports	Digital transformation plan/strategy implemented
Outcome 4.2	**Beneficiary Usability Ratio**	**System Activity Logs**	**Technology implementation**

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Beneficiary management system implemented, and accessibility improved			**for beneficiaries**
Output 4.2.1 Beneficiary can request aid through an online portal	# of online applications	Online application report	Online platform implemented
Output 4.2.2 Mobile app access is developed	Accessibility of major mobile platforms	Downloaded app on mobile platform	Resources to develop an app
Output 4.2.3 Online kiosk can be made able to a beneficiary without end-user devices	# of kiosk installed	Install and make accessible to beneficiaries	Budget available
Outcome 4.3 Beneficiary management system is used to capture data and generate analytics to develop programs to help beneficiaries improve their standard of living.	**# of analytics generated**	**Analytics Reporting**	**Technology implementation for beneficiaries**
Output 4.3.1 Beneficiary can also request skill-based training	# of skill-based training request # of developed programs	Reports	System implementation
Output 4.3.2 Beneficiary can help to become self-sustainable	# of person trained A beneficiary can access basic amenities without support	Periodic reporting	System implementation

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
5. The utilization and mobilization of business services & resources to develop financial stability for the national society			
Outcome 5.1 First aid training services are available with the use of technology	**The training program is accessible online**	**Request for Training**	**Training program implemented**
Output 5.1.1 Request for training can be accessed through an online portal	# of request for training received	Online reports	Online System availability
Output 5.1.2 A national society mobile access app is develop	Training is accessible on mobile devices	Backend reports	Mobile app development and available
Output 5.1.3 Persons develop skills in the use of first aid techniques and are certified	# of persons trained and certified # of payments	Training reports Finance report	Training methods are changes based on a global pandemic
Outcome 5.2 The ambulance service is fully utilized and engaged daily	**Ambulance Transportation System**	**Transportation schedule**	**Ambulance Procurement/Availability**
Output 5.2.1 Request for medical transportation services	# of requests received	Transportation reports	The ambulance is in working condition
Output 5.2.2 Request for ambulance services can be made online or via the national society mobile app	Online and mobile system reports	System activity logs	Online and mobile systems are developed
Output 5.2.3 The ambulance service is linked to local hospitals, patients care homes and other medical facilities	# of requests made from hospitals, patients care homes and other medical facilities	Finance report	Accessibility is easy made using current technologies
Outcome 5.3 The deployment and implementation of	**Kitchen services Open**	**Kitchen Daily Services**	**Kitchen resources available**

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
kitchen services to provide daily meals to the public			
Output 5.3.1 Daily meal services are ordered or purchased at the kitchen	# orders received # daily purchases	Order reports Invoice generated	The kitchen is adequate staff
Output 5.3.2 Orders can be made online or via the national society app	# of online and mobile orders	System order logs Online payments report	The kitchen is adequate staff
Output 5.3.3 Package meals can be delivered to various medical and home care facilities	# of delivery # of medical and home care facilities request	Order reports Invoice generated Linx transactions reports	Delivery drivers available

9.0 Budget

An Estimated budget breakdown is outlined in the tables below from year 1-year 5. The budget is based on the implementation of technology each year as stated in the actualized plan in table 7.1

Year One Estimated Fiscal Considerations for Year One: 2022

Hardware, Software, Digital Training, Website, Digital Marketing

Item	Destination	Est Quantity	Estimated Cost in CHF
Upgrade Desktop	Head Quarters & all Branches	12	14,394.00
Laptops	Head Quarters & all Branches	21	18,396.00
IP Phones	Head Quarters & all Branches	33	15,134.00
Projector	Head Quarters & all Branches	4	4313.00
Television	Head Quarters & all Branches	4	3935.00
Tablet	Head Quarters & all Branches	6	4334.00
Server	Head Quarters	2	11,876.00
Desktop UPS	Head Quarters & all Branches	12	1051.00
Office 365 solution (yearly subscription)	Head Quarters & all Branches	33	7151.00
Learning Management System Annually	Head Quarters & all Branches	1	2000.00
Antivirus End Point solution (yearly subscription)	Head Quarters & all Branches	33	1544.00
Database management software	Head Quarters	1	2326.00
Switch	Head Quarters	2	2217.00
Firewall (5 yesr License)	Head Quarters	1	2718.00
Wireless Access	Head Quarters & all Branches	6	202.00
Network setup Configuration and Domain Services	Head Quarters	1	2695.00
Internet Link 300 MB (yearly fee)	Head Quarters	1	1169.00
Internet Link 100 MB per branch (yearly fee)	Branches	2	2337.00
Security Access Controls	Head Quarters & all Branches	4	270.00
8 IP Cameras and NVR System	Head Quarters	1	1173.00
NAS (network Area Storage	Head Quarters	1	992.00
Managed Support	Head Quarters	1	13,477.00

Item	Destination	Est Quantity	Estimated Cost in CHF
Services (yearly fee)			
Staff & volunteer Training	Head Quarters & all Branches	TBD	6739.00

Year two Estimated Fiscal Considerations for Year Two: 2023

Item	Destination	Est Quantity	Estimated Cost in CHF
Office 365 solution (yearly subscription	Head Quarters & all Branches	33	7151.00
Antivirus End Point solution (I year subscription)	Head Quarters & all Branches	33	1544.00
Staff & volunteer Training	Head Quarters & all Branches	TBD	6739.00
Managed Support Services	Head Quarters	TBD	10,107.00
ICT Technician (annual cost)	Head Quarters	1	16,173.00
Flood Warning System (Alerts, gauges, and sensors)	Communities	TBD	$135.00

Year Three Estimated Fiscal Considerations for Year Three: 2024

Item	Destination	Est Quantity	Estimated Cost in CHF
Staff & Volunteer Training	Head Quarters & all Branches	TBD	6739.00
Office 365 solution (yearly subscription	Head Quarters & all Branches	33	7151.00
Antivirus End Point solution (I year subscription)	Head Quarters & all Branches	33	1544.00
ERP Solution (Yearly fee)	Head Quarters	1	21,024.00
Managed Support Services	Head Quarters	1	10,107.00
Hire Software Analyst /developer annually	Head Quarters	1	21,833.00
Ambulance GIS Mapping System (yearly subscription fee)	Head Quarters & all Branches	1	Request for quote required

Year Four Estimated Fiscal Considerations for Year Four: 2025

Item	Destination	Est Quantity	Estimated Cost in CHF
Staff & Volunteer Training	Head Quarters & all Branches	1	6739.00
Office 365 solution (yearly subscription	Head Quarters & all Branches	33	7151.00
Antivirus End Point solution (I year subscription)	Head Quarters & all Branches	33	1544.00
Managed Support Services	Head Quarters	1	10,107.00
Telehealth System	Head Quarters	1	Request for quote required

Year Five Estimated Fiscal Considerations for Year Five: 2026

Item	Destination	Est Quantity	Estimated Cost in CHF
Staff & Volunteer Training	Head Quarters & all Branches	1	6739.00
Office 365 solution (yearly subscription	Head Quarters & all Branches	33	7151.00
Antivirus End Point solution (I year subscription)	Head Quarters & all Branches	33	1544.00
Managed Support Services	Head Quarters	1	10,107.00
Artificial Intelligence (Yearly subscription)	Head Quarters	1	6,709.00

10.0 Conclusion

There are many opportunities for digitization and the TTRC is at a place where it can impact communities and the most vulnerable people in society. Covid-19 has provided several challenges in reaching and interacting with people in the traditional people caring way.

However, the time for change is now and using digital technologies and tools can improve efficiency, accountability, collaboration and allow TTRC to cover a wider geographical scope by full filling its mandate of providing humanitarian and business services to society.

11.0 Appendix A- a sample list of TTRC Desktop and Laptop specifications

DEPARTMENT	USER	USERNAME	PROCESSOR	RAM	HDD	OS	ANTI-VIRUS	MAKE	FORM FACTOR	YEAR BOUGHT
CRISIS MANAGEMENT	STEPHAN KISHORE	DISASTER	AMD E2-9000 1.8GHZ	4GB	1TB	WIN 10 HOME	DEFENDER	HP	DESKTOP	2019
CRISIS MANAGEMENT	DEREK HUTCHINSON	TTRCS MIGRATION 2	INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2019
CRISIS MANAGEMENT	JULIO PEREIRA	TTRCS MIGRATION 3	INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2019
CRISIS MANAGEMENT	ALEJANDRA MENDEZ	TTRCS MIGRATION 1	INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2019
CRISIS MANAGEMENT	CARYSSE BAIRD	TTRCS MIGRATION 4	INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2019
CRISIS MANAGEMENT	RAYANTHONY WARNER	TTRCS HEALTH		4GB	512GB	WIN 10 PRO	DEFENDER	LENOVO	LAPTOP	2014
CRISIS MANAGEMENT	LAPTOP 1	CRISIS1	INTEL I3 1.8 GHZ	4GB	512 GB	WIN 10 HOME	DEFENDER	DELL	LAPTOP	2021
CRISIS MANAGEMENT	LAPTOP 2	CRISIS2	INTEL I3 1.8 GHZ	4GB	512 GB	WIN 10 HOME	DEFENDER	DELL	LAPTOP	2021
CRISIS MANAGEMENT	LAPTOP 3	CRISIS3	INTEL I3 1.8 GHZ	4GB	512 GB	WIN 10 HOME	DEFENDER	DELL	LAPTOP	2021
CRISIS MANAGEMENT	LAPTOP 4	CRISIS4	INTEL I5 3.0 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	LENOVO	LAPTOP	2021
CRISIS MANAGEMENT	LAPTOP 5	CRISIS5	INTEL I5 3.0 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	LENOVO	LAPTOP	2021
RCCC	RCCC	RCCC	INTEL I5 3.0 GHZ	4GB	1TB	WIN 10 PRO	DEFENDER	LENOVO	LAPTOP	2018
EXECUTIVE	PRESIDENT	president	INTEL I5 3.0 GHZ	4GB	1TB	WIN 10 PRO	DEFENDER	LENOVO	LAPTOP	2018
FIRST AID	AUGUSTUS FORDE	TTRCHQ-FA-COOR	INTEL I5 3.2 GHZ	8GB	1TB	WIN 10 PRO	DEFENDER	HP	DESKTOP	2017
FIRST AID	ANDREA THOMAS MOSES	TTRCSHQ-FIRSTAID	INTEL I5 3.2 GHZ	4GB	512GB	WIN 10 PRO	DEFENDER	DELL	DESKTOP	2017
FIRST AID	INSTRUCTORS HQ 1		INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2017
FIRST AID	INSTRUCTORS HQ 2		INTEL I5 2.3 GHZ	8GB	1TB	WIN 10 HOME	DEFENDER	HP	LAPTOP	2017

12.0 Appendix B-screenshots of value case solutions

Figure 12.1 Total Enterprise Mobile Field-Data Workflow Solution

Figure 12.2 A GIS mapping software tools that help with traffic routes