WFP Corporate Information Technology Strategy

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WFP
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World Food Programme

Contents

CIO Forward – Creating the Digital Business Engine

The global challenges are many: from regional instability to natural disasters; from urbanization to climate change; from donor transparency demands to flexible financing requirements; from 100% voluntary funding to competing with corporate giants for lower transaction costs. And in this age of "Everyone's IT", we confront these challenges with digital innovations and technology solutions created beyond the centralized confines of the IT Division. Today, technology is owned, managed, maintained, and consumed by everyone.

This is not a threat to the IT Division, but an opportunity for WFP. The opportunity lies in establishing value-adding technology partnerships with WFP's operating businesses --- where technology innovation and its benefits are delivered and experienced most rapidly. Capitalizing on these opportunities calls for IT to collaborate more effectively with WFP operating units, as well as with other agencies, governments, service providers, and global beneficiaries as well.

Our vision is IT as the Digital Business Engine (DBE) of the World Food Programme, providing the business with multi-pronged and resilient technical capabilities able to respond with the immediate agility required in conflict zones on the one hand, and with the longer-term stability to cope with natural disasters on the other. Achieving this DBE Vision calls for focus on two critical priorities:

- *Enabling business-driven technology:* transitioning from central control of technology to providing tools and systems for direct business exploration and utilization of its potential

- *Leveraging a global digital ecosystem:* building a fabric of highly-capable and mutually-supportive digital relationships with country-level management, operating partners, technical providers, international agencies, and local organizations.

My role as CIO is to drive this digital agenda. Our strategy is to establish the relationships, build the platforms, and add the value that comes from orchestrating and absorbing innovation at scale. We will accomplish this by:

1. *Improving WFP efficiency* to release resources needed to build the Digital Business Engine: leveraging offshoring and outsourcing practices for activities to be performed by others, and consolidating and decommissioning systems that are duplicative or no longer useful.

2. *Developing the WFP Enterprise Architecture and Roadmap* so business units and field offices can see -- and contribute to -- the direction of WFP technology.

3. *Incorporating new digital technologies,* such as social, mobile, analytics and cloud into operations, while ensuring tools and resources are sustainable, cost effective, and interoperable.

4. *Applying bimodal implementation,* supporting rapid progress where innovation needs to be accelerated and applied quickly, and proceeding more deliberately where appropriate.

5. *Cultivating a more business-savvy, technically up-to-date, diverse IT workforce* that is field-focused, productive, and willing to challenge convention.

Working with the business, we will be developing companion documents that bring this strategy to life. Realizing the Digital Business Engine vision will strengthen every facet of WFP's impressive capabilities.

As CIO, I look forward to collaborating with the business and with all of our stakeholders in using information technology to extend our impact as the leading humanitarian agency in the world.

--Enrica Porcari
Chief Information Officer and Director of IT

Preface

How to read this document

The **table** on the next page provides a summary of the IT strategic statements that respond directly to the business goals and needed capabilities. This information is provided in more detail in the Demand section.

The **Demand** section identifies the *business goals* for the next five years, together with the *business capabilities* needed to achieve those goals. These goals and capabilities are the driver for IT's strategic response, defined through broad *IT contributions*. This section is most relevant to all audiences in WFP.

The next section, **Control** defines the vision for the governance, financial and performance mechanisms needed to manage and make decisions in and about IT. This section is most relevant to WFP management and the governing bodies accountable for IT in WFP.

The third section, **Supply**, describes the future state of the major operational IT elements (services, applications, infrastructure, skills and sourcing) so that the IT contributions can be achieved over the next five years. This section is most relevant for operational IT staff in both the division and the functional network.

The final section, **Risks**, recognizes the high-level risks that could impede the implementation of this strategy.

As this is a living document, it will be reviewed annually, after each Executive Board (November), and updated in line with major changes to the way WFP does business. The most recent version will be published to the IT website on WFPGo.

Strategic Roadmap

A second document, the strategic plan and roadmap, will define the IT divisional programmes and projects that need to be undertaken over the next five years to incrementally deliver the elements presented in this strategy. While the strategy defines *what* IT will do, the strategic plan and roadmap will define *how* IT will do it. It will also map the needed skills and talent to these strategic programmes as well as identify the minimum resources needed for "keeping the lights on" and ensuring business continuity. Investment cases for each of these programmes will be developed, identifying the costs of change and the expected benefits. Finally, annual work plans will be formulated to further break down the IT division programmes to unit-level initiatives and assignments.

Sequence and content of WFP IT planning

IT Strategy *(this document)*	IT Strategic Plan and Roadmap	Annual IT work plans
• Vision for IT	• Strategy detail	• Strategy adjustments based on changing business priorities
• Business demand	• Enterprise architecture (EA)	
• IT Supply	• Solicitation of stakeholder input	• Unit work plans
• Control		• Budget detail
• Sourcing	• Final EA	
• Risks	• Implementation roadmap	

1. Demand

This table provides an at-a-glance view of the IT strategic statements that respond directly to the business goals and needed capabilities. More detail on the *business context, business goals*, *business capabilities* and *IT contributions* is provided in the section that follows.

Digital platform	
Business needs to:	Enable new digital processes in cash-based and other transfers and beneficiary management. Broker information services to the entire humanitarian and development system.
IT will:	*Lead* WFP in positioning SCOPE as the ultimate service for beneficiary information management to WFP and external partners for coordinated improvement of digital aid.

Emergency preparedness and response	
Business needs to:	Uphold and strengthen WFP's comparative advantage in delivering food assistance during simultaneous emergencies. Build up the resilience of affected populations.
IT will:	*Continue to lead* the ETC cluster by strengthening and leveraging WFP's role in brokering partnerships and services, and restoring rapid communications in emergencies. *Support* the business in early delivery of food assistance through its strengthened ability to respond to emergencies with a fast and trained response capacity. *Partner* with the business to quickly scale up digital aid in emergencies by provisioning SCOPE resources for fast cash-based interventions.

Core solutions	
Business needs to:	Gain efficiencies and transparency in existing business processes around financial management, supply chain management and stakeholder relationship management.
IT will:	*Support* business agility by implementing and transforming of its corporate solutions. *Partner* with the business to broker cloud-based solutions that manage the security, compliance and risk impacts to the Organization and its reputation. *Partner* with the business to manage integration and interoperability with internal and external systems. *Support* business intelligence and analytics as well as big data analysis by enhancing WFP's technologies that enable the business to draw conclusions, identify trends and analyse relationships in its data.

Enable countries	
Business needs to:	Leverage global learning together with knowledge and technology sharing to enable countries to achieve the sustainable development goals as well as implement long-lasting food security and nutrition solutions to end hunger.
IT will:	*Support* country offices in developing solutions that are agile, adaptable, interoperable and reusable. *Partner* with the business upfront to enable the successful transfer of innovation initiatives to operations and scale them across the Organization, rather than harvest them downstream. *Partner* with governments and national disaster authorities in capacity building to prepare local IT resources for emergency management.

Overall effectiveness	
Business needs to:	Improve financing, funding and reporting to donors on country office portfolios and operations by transforming WFP into an information-enabled business.
IT will:	*Partner* with the business to strengthen data governance for improving the quality of the WFP's data so that it enables evidence-based decision making and transparency to donors.

Keeping the Lights On
IT will always enable business continuity by guaranteeing, through active management of service level agreements, the availability of core systems that support mission-critical business processes. It will also adhere to the IT Disaster Recovery Plan and keep it updated in line with the Business Continuity Plan.

1.1 Business Context

1.1.1 The World Food Programme (WFP) operates in 80 countries where it has deep field presence and local knowledge and relationships. It relies on its people to work around the world, especially in difficult conditions with high risk to security and safety. Simultaneous emergencies, an increase in terrorism threats, and complex long-term regional instability is the "new normal" for WFP.

1.1.2 WFP supports food security and nutrition plans at local, national and regional levels, and it delivers food assistance for the poorest and most vulnerable populations globally. Three-quarters of the world's hungry live in rural areas and depend on agriculture to survive.[1]

1.1.3 Seventy-three percent of the world's poorest live in middle-income countries like Brazil, China, India, Indonesia, and Mexico. They suffer from the negative impacts of poor nutrition brought by dietary changes associated with rising economic inequalities, shifting demographics, and urbanization.[2] By 2050, the world's urban population will increase from 3.6 to 6.3 billion.[3] The needs of the poorest people in these areas will require a shift in WFP's approach to food security.

1.1.4 There are opportunities in these middle-income countries for sharing knowledge, technology, and lessons learned on sustainable development in areas such as nutrition programmes and safety net management. Successful country-led strategies can be leveraged and adapted to other countries through, e.g., South-South Cooperation.[4]

1.1.5 The Sustainable Development Goals (SDGs) are reshaping international response to many of the major global issues related to WFP's work, e.g., ending hunger, ensuring healthy lives, promoting growth and work, and achieving peace. These issues affect all countries, and how WFP manages humanitarian response will impact how effectively countries can achieve the SDGs.[5]

1.1.6 WFP partners with other UN agencies, NGOs, government organizations, civil society and private sector for complementary skills and capacities, especially in logistics, food security and emergency telecommunications. There are increasingly more state and non-state actors, partners and stakeholders assisting host governments, leading to challenges and opportunities in coordinating approaches and in mitigating the risks of fragmentation and duplication of effort.

1.1.7 WFP is a 100% voluntarily-funded organization. The recent economic crisis has yielded increasing demands and expectations by donors and stakeholders on transparency, accountability and value for money,[i] especially as WFP shifts from food aid to food assistance.[6]

1.1.8 Finally, as emerging technologies play a larger part in the humanitarian sector, the shift to delivering digital assistance is creating opportunities for innovation and collaboration as well as driving more competition for resources and digital leadership.

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[i] Value for Money: "Getting the best results for our beneficiaries by using our resources wisely. It isn't just looking for the lowest cost. It means finding the right balance between efficiency, effectiveness and economy." (WFP, 2015)

1.2 Business Success

1.2.1   WFP's mission is to end world hunger. Sustainable Development Goal (SDG) 2 is dedicated to zero hunger, and WFP fully supports SDG 17 for global partnerships in pursuit of all global goals. The Organization's strategic objectives articulate how the Organization will achieve the broad vision of zero hunger by 2030.[7]

1.2.2   To achieve WFP's strategic objectives, the business units and field offices of WFP have identified the following goals (i.e., what success looks like) over the next five years.

Emergency Preparedness and Response

1.2.3   Furthering its position as global humanitarian leader, WFP will support five concurrent Level 3 emergencies. WFP will continue in its lead role of the ETC and create an environment for emergency response which allows both humanitarian responders and affected populations to have a seamless, resilient and principled communications experience to facilitate the delivery of humanitarian aid.[8] As a result, local communities will cope more effectively with the impact of a disaster and recover more quickly with timely access to information and digital assistance.

Digital Platform

1.2.4   WFP will achieve 100% digital registration for all of its beneficiaries and 40% of them will have access to more innovative, flexible and digital food assistance options through increasingly more cash-based and digital transfers, even in environments where customary international payment mechanisms may not be available.

Core Solutions

1.2.5   WFP will deliver higher-quality, nutritious foods and other commodities at a lower cost more quickly and effectively by covering the entire process of end-to-end planning, procuring and delivering assistance.

Enabling Countries

1.2.6   Middle-income countries (MICs) will achieve more of their nutrition targets and sustainable development goals through knowledge sharing and proven technology exchange facilitated by WFP through its global presence, reach and influence.

1.2.7   Countries in fragile settings will achieve greater food security and nutrition through programmes that build resilience as well as focus on longer-term development success.

Overall Effectiveness

1.2.8   WFP will meet more of its operational requirement through increased and more predictable funding and a flexible financing framework, demonstrating value to its donors through evidence-based decision making and performance-informed budgeting.[9]

1.3 Business Capabilities

1.3.1   To achieve these goals, WFP needs to further develop the following business capabilities:

Emergency Preparedness and Response

1.3.2   To remain at the forefront in the "new normal" of emergencies, WFP will strengthen its ability to respond to emergencies with a fast and trained response capacity while also enhancing preparedness activities that enable affected populations to quickly recover. WFP will build on existing emergency management mechanisms and partner with humanitarian, government, private sector organizations and local communities. Recognising that access to communications is a vital need and that disaster-affected communities can play a pivotal role in emergencies, WFP will for the first time engage directly in "Communications with Communities" (CwC), filling an existing gap in the overall coordination of this sector.

Digital Platform

1.3.3   WFP will efficiently manage beneficiaries and their information in order to effectively deliver more digital assistance through an innovative digital platform. By also allowing interoperability with external systems managed by governments, private sector, institutions such as banks, and other humanitarian agencies, WFP will further digitalize its business and reach more beneficiaries through sustainable, inclusive and collaborative means. Finally, WFP will be able to broker information services to the entire humanitarian and development sectors.

Core Solutions

1.3.4   Virtual supply chain management (SCM) will enable WFP to virtualize transactions and encourage collaborative relationships along the value chain, improve information flow both upstream and downstream, and gain beneficiary insight for targeting their needs and assistance. It will allow WFP to leverage market intelligence for strategic procurement, improve food quality, reduce lead time, and connect more smallholder farmers with commercial supply lines.

1.3.5   WFP also needs to improve its capabilities in stakeholder relationship management (CRM solutions) to build and maintain its stakeholder relationships with donors, vendors, partners and beneficiaries so that it can make informed decisions about them through analytics.

Enabling Countries

1.3.6   As MICs are increasingly able to finance their own social protection strategies, WFP will take on more of an advisory role to country safety net and nutrition programmes as well as facilitate government partnerships with the development sector. WFP will leverage its global presence to share innovative technology solutions, knowledge, and lessons learned on, e.g., consumption, diet and medical conditions, with other regions.

1.3.7   To address the nutrition and food security issues together with the development needs of the most food-insecure areas, WFP will strengthen its programme management to design country-specific solutions that engage communities. It will also leverage its partnerships to ensure collaboration delivers long-term results.[10]

Overall Effectiveness

1.3.8   To obtain more funding in general and more multilateral funding in particular, WFP needs to demonstrate programmes deliver expected outcomes through evidence-based decision making and a redesigned financial framework. Informed decision making, quality reporting and transparency will depend on WFP's ability to access and interpret information based on consistent, trusted data.

1.3.9   In developing the above business capabilities, it is recognized that IT's role will be a partner in some cases and a service provider in others. At the end of the next section (IT Contribution), IT's role in the business is clarified along four dimensions: IT as global service provider, as the business, as engine room, and Everyone's IT.

1.4 IT Contribution

1.4.1   IT will align its people, processes and technology to the aforementioned business capabilities. IT will either lead, partner or support the business through a multi-modal approach as follows:

Emergency Preparedness and Response

1.4.2   WFP will leverage its lead role of the ETC to seek out opportunities for coordinated humanitarian aid. WFP IT will build up local response capabilities and disaster resilience by partnering with governments, national disaster management agencies and locally-based organizations. Emergency response communities, including affected populations, will have access to vital communications services. IT will strengthen its ability to respond to emergencies with a fast and trained response capacity. A portfolio of emergency IT solutions will be kept up to date to enable the rapid delivery of digital aid and support the safety and security of humanitarian staff. IT will also build on successful solutions and proven technologies deployed during emergencies to support countries' transitions to early recovery and ongoing development.

Digital Platform

1.4.3   The IT Division will implement SCOPE as the official platform for beneficiary information and cash-based and digital transfers.[11] It will be scalable to support the business in registering WFP's entire beneficiary population. The platform, and the big data sets it contains, will be offered both within WFP and to partners, governments and the larger humanitarian community for the specific use in delivering and improving the quality of humanitarian aid. As such, WFP IT will also implement privacy and security measures to guarantee the confidentiality, integrity and availability of such data.

Core Solutions

1.4.4   IT will support the transformation of its corporate systems (e.g., CRM, SCM, WINGS-ERP) to keep up with the changing needs of the Organization. It will seek out value-for-money opportunities with cloud-based solutions, carefully considering the security, compliance and risk impacts to the Organization. It will provide integration of internal and external systems through web services and flexible interfaces, resulting in business process optimization and business agility.

1.4.5   IT will deploy business intelligence and analytics technologies including self-service and collaborative tools that enable the business to produce reports, dashboards and visual analyses. It will provide technologies for big data analysis techniques for drawing conclusions on beneficiary behaviour patterns stored in WFP's beneficiary management platform. IT will also facilitate access to external data sets. All this aims to give WFP access to real-time and historical data from multiple sources and cross-functional areas so it can identify trends and analyse relationships for evidence-based decision making.

Enabling Countries

1.4.6   IT will update its governance and management framework for systems development to meet fast-emerging business requirements. It will enable the environment for developing agile systems for easier handover to host governments; systems adaptable to country office needs; systems interoperable with partners; and systems built on standards for corporate reuse. Development processes will also ensure successful initiatives from the Innovation Accelerator or the "Shadow" can be easily on-boarded.

Overall Effectiveness

1.4.7   IT will transform WFP into an information-enabled business. It will partner with the business to design and develop data-driven insights and solutions, and strengthen WFP's data governance framework in line with the UN system data revolution programme.[12] Trusted information based on quality data (i.e., confidentiality, integrity, availability) will enable WFP to manage operations more effectively and efficiently and to confidently report on performance to donors. WFP will also articulate an open data[ii] strategy when it is ready to do so.

[ii] Through open data, WFP will be able to provide the public with financial and operational data stored in platforms like COMET and SPRING, e.g., the output/outcome results and links to Strategic Objectives, targeted beneficiaries and distributed resources through food and C&V transfer modalities (metric tons/USD/assistance days/rations), and narrative descriptions on partnership and operational contexts in reaching objectives.

IT's Role in the Business

1.4.8 The IT contributions described above are summarized here and, as an alternative view, organized into the following four dimensions that describe the role of IT in business success.

1.4.9 **IT as Broker and Engineer**: The IT engine room delivers IT capabilities at market-competitive prices. It monitors technology and market developments, optimizes IT assets, sources and manages vendors, delivers ongoing cost improvement, and seeks new ways to deliver the same IT capabilities for less. In this role, IT will:
- *Support* the business in early delivery of food assistance through its strengthened ability to respond to emergencies with a fast and trained response capacity.
- *Partner* with the business to broker cloud-based solutions that manage the security, compliance and risk impacts to the Organization and its reputation.
- *Partner* with the business to manage integration and interoperability with internal and external systems.

1.4.10 **IT as Integrator and Optimizer**: The IT global service provider delivers IT services and enterprise business processes. It adopts a marketing perspective, leverages its internal position, delivers competitive services, and increases business value. In this role, IT will:
- *Continue to lead* the ETC cluster by strengthening and leveraging WFP's role in brokering partnerships and services, and restoring rapid communications in emergencies.
- *Partner* with governments and national disaster authorities in capacity building to prepare local IT resources for emergency management.

1.4.11 **IT as Explorer and Pioneer**: IT as the business is about differentiation. Information is the product and is inseparable from the product. IT innovates within the value chain. In this role, IT will:
- *Lead* WFP in positioning SCOPE as the ultimate service for beneficiary information management to WFP and external partners for coordinated improvement of digital aid.
- *Partner* with the business to quickly scale up digital aid in emergencies by provisioning SCOPE resources for fast cash-based interventions.
- *Partner* with the business upfront to enable the successful transfer of innovation initiatives to operations and scale them across the Organization, rather than harvest them downstream.

1.4.12 **IT as Enabler and Conductor**: In Everyone's IT, information and technology are used by business leaders and individual employees to innovate and collaborate. In this role, IT will:
- *Support* business agility by implementing and transforming of its corporate solutions.
- *Partner* with the business to strengthen data governance for improving the quality of the WFP's data so that it enables evidence-based decision making and transparency to donors.
- *Support* business intelligence and analytics as well as big data analysis by enhancing WFP's technologies that enable the business to draw conclusions, identify trends and analyse relationships in its data.
- *Support* country offices in developing solutions that are agile, adaptable, interoperable and reusable.

2. Control

2.1 IT Principles

2.1.1   The high-level principles below will guide day-to-day IT decision making at WFP:

1. Employ bimodal IT, both accelerated and customary technology deployment approaches.
2. Employ "Reuse before Buy" and "Buy before Build" principles.
3. Follow the Principles for Digital Development: Design with the user; Understand the existing ecosystem; Design for scale; Build for sustainability; Be data driven; Use open standards, open data, open source, open innovation; Reuse and improve; Address privacy and security; Be collaborative.
4. Use cloud where it is cost effective and the risks and impacts to WFP are mitigated and managed.
5. Solutions will always consider the mobile user.
6. Data is an asset that has value to the enterprise and is managed accordingly: Data is to be available and accessible, as long as it is not confidential.
7. IT-enabled investments are managed as a portfolio of investments and through their full economic life cycle.
8. Development of applications used across the enterprise is preferred over the development of similar or duplicative applications, which are only provided to a single unit.
9. All WFP systems to be used in field offices must deliver acceptable performance over low-bandwidth and high-latency connections.
10. WFP will deploy only proven and thoroughly-tested mission-critical technologies for delivering aid and assistance at scale.
11. Technology patterns are minimized to ensure greater harmonization and interoperability and to reduce the cost of maintaining multiple processing environments.
12. Contribute to sustainable development and climate neutrality (Green IT).[13]

2.2 IT Governance

2.2.1   Information technology has become integral to the business, and there are significant opportunities, costs and risks associated with it that need to be managed at the enterprise level. The governance of enterprise IT (GEIT) improves business performance by managing the benefits realization, risk optimization, and resource optimization of information and information technology. It is driven primarily by the demand for stakeholder value, financial transparency, and effective management of enterprise risk.

2.2.2   The envisaged GEIT framework within WFP is shown in Figure 1.[14]

Figure 1: Governance and Management of Enterprise IT at WFP by 2020
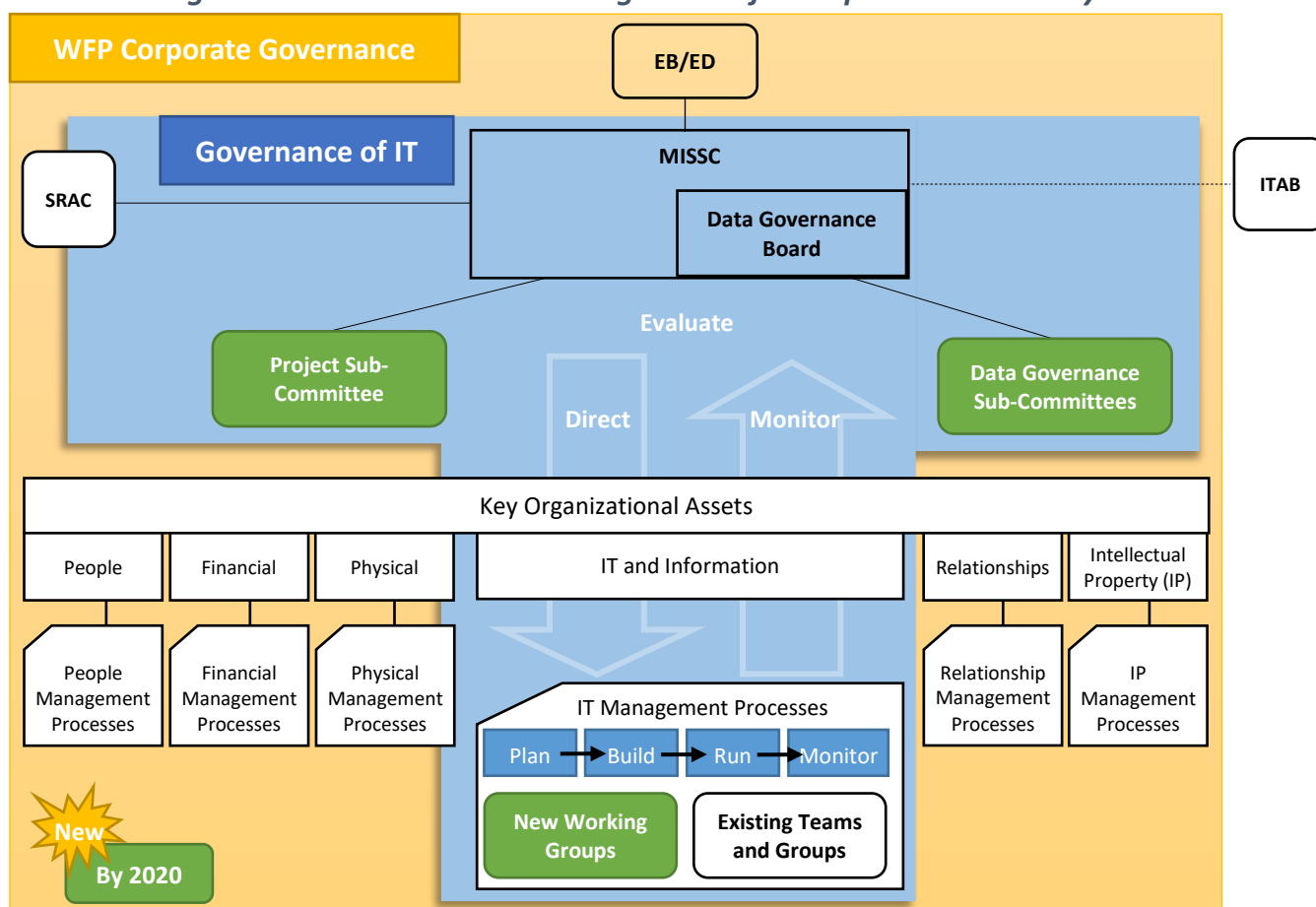
Adapted from Weill and Ross (2004) and Juiz and Toomey (2015).

2.2.3   The expected value from investments and risk appetite of the Organization are set at the highest levels, by the Executive Director and the Executive Board who represent WFP's stakeholders. The main bodies governing IT evaluate major activities and investments, monitor performance and provide strategic direction for the daily management of IT and its processes.

2.2.4   There are shared challenges and opportunities that can be leveraged so that IT can be governed more effectively, improving overall organizational performance. Figure 1 above illustrates areas where changes to the governance framework will provide more value for WFP, including data governance, innovation, shadow IT, decision making and portfolio management.

Decision Making (IT-enabled investments)

2.2.5   ***Investment decisions (direct)***: The MISSC and SRAC will streamline investment decisions, attaching them to the financial resources available. The investment threshold for IT-enabled initiatives will also

be lowered in line with the SRAC to USD 150K, and total cost of ownership (TCO) for the IT component will be reviewed.

2.2.6   ***Ongoing projects (monitor)***: The MISSC will monitor project performance through aggregate reporting at the portfolio level. It will have continuous access to real-time portfolio dashboards, eliminating the need for individual reporting and freeing up time for more strategic activities.

2.2.7   ***Closed projects (evaluate)***: Evaluation criteria for closed projects will be defined and used more rigorously to accurately assess benefits realized and value delivered.

IT Project Portfolio Management

2.2.8   A target portfolio mix of IT investments (enhancements, upgrades, innovation, etc.) will enable proactive demand management and the prioritization of projects based on value, need and risk as well as resources. An IT Project Portfolio Sub-Committee will make recommendations for prioritization within the IT portfolio and oversee portfolio management and reporting. It is a value-add function that will ensure initiatives submitted to the MISSC for investment decision are considered within the portfolio of ongoing projects and with those in the pipeline. A portfolio approach will improve project performance (number of projects on time, on budget) and internal customer satisfaction.

Enabling Innovation

2.2.9   ***Bimodal IT***: There is a need for clearer guidance that allows agile approaches to be used as an alternative to traditional methodologies, especially for non-core systems. IT will define a new bimodal approach to solutions development, providing a flexible framework that does not stifle innovation. It will rely on traditional approaches when developing systems with a low rate of change, where processes are highly standardized, well-established, and subject to a high level of compliance (e.g., core systems). And it will rely on agile approaches for systems of differentiation and innovation that have shorter life-cycles and require frequent reconfiguration based on changing requirements.

2.2.10   IT will always be consulted and informed on innovation to ensure scalability and integration requirements will be met at the earliest stages. Innovation initiatives will need to go through a more rigorous governance review only after proof-of-concept for corporate use.

Shadow IT

2.2.11   ***Everyone's IT***: There is an opportunity to influence, not control, field solutions development to ensure scalability and long-term benefits to the Organization, without hindering local need and innovation. There is also an opportunity to leverage successful local solutions for reuse in other areas. To facilitate innovation and IT exchange between country offices and with governments, partners, and other UN agencies, the IT Division will shift towards "Everyone's IT".[iii] Initiatives originating in the field, and small/medium initiatives in HQ, will meet local and organizational needs through better guidance. To leverage shadow IT, rather than control it, RITOs and BRMs will collaborate more and partner with their business counterparts to exchange knowledge, technology, and learning.

Strengthened data governance

2.2.12   Good data management and good quality data are dependent upon a shared responsibility between the business and IT. As such, the Organization's approach to governing its data shall be made as follows:
*   ***Data Governance Board:*** This organizational-level board chaired by the CIO will ensure the enabling policies, processes and structures are in in place for managing WFP's data governance framework. In addition to master data management, the scope of the framework will include metadata, big data, and open data, data privacy, data security, and ethical use of data.

[iii] Everyone's IT is defined not by formal control but rather by encouragement and coordination of information and technology within and beyond the enterprise, potentially in parallel with or outside of a formal IT organization. Everyone's IT becomes the common language for communicating, exchanging information and working across businesses. (Gartner, 2012)

- *Data governance sub-committees*: Sub-committees will be designed around the major domains of data (e.g., beneficiary information, finance, open data, etc.) composed of relevant data owners, data stewards, representatives of established information management functions and IT stakeholders. They will support the Data Governance Board in resolving issues within their domains, directing and monitoring implementation, including drafting appropriate policies, and communicating decisions.
- *Data integration working group*: This group is composed of Key Business Users, application owners and IT working together to ensure practical interoperability across systems.

Governance by Decision Domain

2.2.13 Decision-making authority for each IT domain can be seen below in Table 1: RACI matrix on IT and IT-related activities. Most strategic IT decisions are taken by the Management Information Systems Steering Committee (MISSC) as the main IT governance board, with final approval by the ED. However, there are many areas where decisions must be taken at the levels closest to the business to enable the more bimodal approach, e.g. innovation.

Table 1: RACI matrix on IT and IT-related activities

	Primary Governance	Secondary Governance			Tertiary Governance				Management	
	ED/EB	SRAC	MISSC	Data Governance Board	CIO	BCISS WG	BRMs & RITOs	ITAB	IT	Business
IT Strategy	I		A		R		C	C	C I	C I
Enterprise Architecture			A		R		C	C	C I	I
Data Management				C I	A	C		C	A R	A R
Investment Criteria & Prioritization (core)		I	A		R		C	C	I	I
Investment Criteria & Prioritization (innovation)			C I		C I				C I	A R
IT-related business risks (security, GRC, data privacy, etc.)	I		A	C	R	R	C	C	R I	R I
IT projects			I		A		C I	C	R	
IT-enabled business projects (< US$ 150K)					C		C I	C	R	A
IT-enabled business projects (≥ US$ 150K)	I	I	A		R		C	C	C	R

2.3 IT Financial Management

Sources of Funding for the IT Division

2.3.1 **Programme Support and Administrative (PSA) budget**:[iv] The IT Division receives funding annually from the PSA budget to cover hardware, software, staffing, and services, and it supplies the predicable base for IT services and staff. It is determined through the annual Management Plan process, based on the needs of the Organization and projected level of PSA funding for the next year.

2.3.2 **IT Per Capita Model**:[v] The IT Per Capita Model It is a method of shifting global IT costs away from the PSA to a more appropriate funding source. This funding model covers recurring costs of services that are used across WFP, are centrally managed and provide a standard solution. The Per Capita annual unit cost is calculated and charged to each office or business unit on a quarterly basis using the average number of Active Directory users in those areas.[15] The IT Division has been able to reduce the per-capita charge each year since its inception while increasing the level and number of services. It also continues to reduce the costs spent on IT across the Organization.

2.3.3 **IT Special Account**: The final source of funding is derived from IT-enabled initiatives sponsored by the business and funded through a cost recovery model. The funds are placed in the IT Special Account, which recognizes the ongoing nature of projects over multiple years and the need to maintain resource continuity, i.e., project staff and developers. The IT Division will maintain a portfolio of projects under development or in the pipeline. The funding for these projects indicates the level of potential future funding, which influences future staffing plans.

Improvements and Changes to IT Financial Management

2.3.4 **Financial Framework Review (FFR)**: The FFR will embed administrative overhead costs across programmes rather than according to specific cost lines. It is a shift away from projects and towards country portfolios. IT will need to align its systems and processes to the changes introduced by the FFR to increase cost transparency.

2.3.5 **Economies of scale**: IT will continue to leverage the WFP economies of scale with vendors in contract negotiations and partner with other UN/NGOs to obtain the best possible unit costs. The IT Division will maintain the partnership with other UN organizations and NGOs or private sector for the delivery of services at a lower cost or on a donation basis, which has been particularly effective in the Emergency Telecommunications field.

2.3.6 **UN Common Services:** In line with SDG 17, which focuses on enhancing global partnerships for sustainable development, the UN system continually strives to implement new processes to make UN Organisations more cost effective. Many of these initiatives involve the delivery of common services. Whether the common service is an IT service (e.g. Global VSAT network) or an IT-enabled business service (e.g. single ERP), WFP's IT Division will assume a lead role in the planning and implementation of the initiative. As the world's largest humanitarian organization with a global footprint, it is WFP's responsibility to drive cost savings within the UN system by expanding its reach of services (see 3.1.3).

2.3.7 **Value for Money:** The full investment lifecycle will be managed to include both estimated costs and actual spend on capital investment as well as ongoing maintenance, support, and decommissioning. IT will evolve its internal accounting and financial planning to meet Value for Money communication goals by showing back reallocated costs, benchmarked services and total lifecycle costs. IT will also show cumulative tracking of business returns on IT investments. This will enable the joint identification of areas where more investment could bring potential added value and, alternatively, where services are delivering little value and should be retired.

[iv] This funding is intended to cover the recurring costs of implemented services as well as the staffing levels required to maintain the IT services as well as supply management control of new initiatives.

[v] IT Per Capita was implemented in 2013 and aligns to the International Public Sector Accounting Standards (IPSAS) implemented by the UN system. The services to be included in the IT per-capita catalogue and the level of funding required are approved by the Executive Management Group (EMG). The Per Capita report is submitted to the EMG on an annual basis.

2.4 IT Metrics

2.4.1 The IT Division will measure IT organizational performance using a combination of the following metrics. In addition to the following metrics, IT will introduce new quantitative and qualitative measures over the next five years with the aim of increasing accountability and ensuring IT efficiencies, effectiveness and appropriateness.

2.4.2 **End-User Satisfaction**: How satisfied end users are with IT services, from the WFP Survey on End-User Satisfaction with IT Services.

2.4.3 **System Owner Satisfaction**: How satisfied management and business users are with IT systems and services.

2.4.4 **IT Staff Engagement**: The percentage of staff trained and competent in applying new technologies. Maps to the Staff Engagement score measuring how much staff are motivated to contribute to WFP's overall success from the WFP Global Staff Survey. The percentage of the recommendations arising from the Global Staff Survey will also serve as an indicator of IT success in promoting an engaged workforce supported by capable leaders.

2.4.5 **IT Spend by Employee**: Bi-annual benchmark across Government and International Organizations sector, from Gartner.

2.4.6 **IT Spend by Run vs Change**: Bi-annual benchmark across Government and International Organizations sector, from Gartner.

2.4.7 **Emergencies**: The time during which the telecommunication systems are restored and functional, and the percentage of the participating organisations reporting satisfaction with the services provided.

2.4.8 **SCOPE**: Time to register beneficiaries. The number of the existing SCOPE sites supported and the time during which a new fully functional site is established. Failure rate: number of times service falls offline and interrupts a distribution.

2.4.9 **Innovation and Development**: Success rate of new products implemented measured by pass rate from user-acceptance testing and by compliance rate with organizational standards.

2.4.10 **Services**: Services will be measured through Service Level Agreements (SLAs) as defined in the Service Catalogues.

2.4.11 **Security**: Security will be measured through compliance to security policies, e.g., number of critical vulnerabilities. Furthermore, as we manage more sensitive information, the Value at Risk (VaR) should also be determined; that is, the potential monetary loss that may occur on assets with missing or inadequate security controls.

Communication of Performance

2.4.12 In addition to communicating these metrics through the APR, IT will also provide communication and feedback channels on its performance and key achievements as well as changes and updates to the portfolio through the website and targeted events.

2.4.13 Regular communication and feedback will guide planning and operations.

3. Supply

3.1 IT Services and Processes

3.1.1   Figure 2 below is a view of the envisaged IT service portfolio by 2020. A new domain will be added with services that will be provided to beneficiaries. It is likely that these services will be co-owned and/or co-managed by both IT and the business.

Figure 2: IT Service Portfolio by 2020

3.1.2   The service portfolio contains pipeline services, active services via service catalogues, and retired services. Pipeline services are future services that are not yet available to customers. Active services are published in a catalogue and belong to a service domain. Retired services are those that are being phased out or are no longer available.

3.1.3   Descriptions of WFP's service domains along with the services arranged by service group are listed in a separate IT Service Portfolio 2020 document. This document highlights the existing services in 2015 and the new services to be added by 2020. The new services planned for implementation by 2020 are pipeline services. Retired Services should be determined based on an IT Service Portfolio Roadmap, to be defined.

3.1.4   Key new services that will be included in the service portfolio by 2020 will come from SCOPE, the ETC and MDCA. IT-Business collaboration will be critical to their success in improving business processes around cash-based transfers, emergency operations, and monitoring and evaluation and reporting. Global partner services will be enhanced with common services in line with SDG 17 (see 2.3.7).

SCOPE

3.1.5   SCOPE is WFP's digital beneficiary and transfer management platform that supports the WFP programme intervention cycle from beginning to end. It is a solution used for beneficiary registration, intervention setup, distribution planning, entitlement transfers and distribution reporting. SCOPE will support all WFP transfer modalities, whether in-kind or cash-based transfers, for a variety of project activities.

3.1.6   SCOPE has enabled WFP countries to complement general food distribution with digital cash or other appropriate delivery mechanisms. As each country has specific needs, the IT Division, through its

regional and country office IT experts and with the support of a dedicated SCOPE team, will provide technical advisory and on-boarding services to help countries conceptualize and plan the transition of their transfers from manual on to a single digital platform. To complement the technical functionalities of the platform, IT will provide ancillary services such as support for beneficiary registration, a shared biometric de-duplication service, point-of-service (POS) infrastructure management, card design and production services, train-the-trainer (ToT) training for beneficiaries, retailers and cooperating partners, and communications support services.

Emergency Telecommunications Cluster (ETC) Services to Affected Communities

3.1.7 The ETC will shift from bringing rapid connectivity to the humanitarian community in times of disaster to serving affected populations and governments with IT solutions for preparedness, resilience and response. Information and communications technology is changing the way communities are affected by, and can respond to, disasters. The ETC network of partnerships will work to ensure that in times of crisis affected people can communicate faster and more effectively. It will engage technology services providers at global, regional and national levels to facilitate rapid restoration of communications services.

3.1.8 The ETC will focus on services in three key areas: coordinating technology channels for community connectivity; advocating with service providers, governments, donors and response leadership for faster, wider-reaching and better-funded IT solutions for communities; and deploying physical technology solutions for community use. In doing so, it will serve to fill an existing gap in overall coordination of Communication with Communities (CwC) in disaster response, strengthen humanitarian accountability and empower communities to take greater charge of their own responses to disasters.

Mobile Data Collection and Analytics (MDCA) Platform

3.1.9 The MDCA Platform will enable centralized management of corporate indicators gathered through general data collection, thus enhancing quality of assessments, checklists and surveys as well as consistency across the Organization. The system will be used by WFP worldwide and will expose interfaces to integrate with SCOPE, COMET and mVAM / remote surveys. It will offer the best of breed features, such as reusable survey modules, goal-driven survey design, supports multiple mobile platforms, embeds analytical features, supports multiple languages, and supports online and offline capabilities through a flexible and secure environment. The Bangkok Competence Centre will offer on-boarding, deployment of new analytical modules, and second-level support. In addition, the open-source platform will be available to cooperating partners, other UN agencies and government institutions.

Approach to managing the Service Portfolio

3.1.10 By 2020, a roadmap for managing the service portfolio will have been defined and continuously updated. An architecture approach will be implemented for managing the relationships and interdependencies between the services within the portfolio. A tool for managing the services themselves will be implemented in order to track service performance. The ITIL framework should continue to be referenced when managing IT services at WFP.

3.1.11 Currently, only the Client/End-User Services Catalogue is published. Over the timeframe of this strategy, the service entries will be published to the intranet and maintained and managed regularly by the service owners, who are responsible for the services themselves. A new service design function will work with service owners to ensure service descriptions are easy to find and up-to-date. Catalogues for each of the other service domains will also be published.

3.2 Applications and Information

3.2.1 Considering the level of business process integration and standardization in WFP's operating model, the architecture will be managed according to the goals of agility, efficiency, effectiveness and durability.

3.2.2 To reduce technology patterns, increase reuse, and ensure business alignment, the IT Division will augment the architecture function in order to identify architectural building blocks, continuously manage the application landscape, and define associated roadmaps.

3.2.3 A centrally coordinated information architecture will embed activities into projects to guarantee that business processes, data models, data dictionaries, taxonomies and reporting glossaries are defined and kept up to date, so that data is managed and has unequivocal meaning.

Enterprise Resource Planning

3.2.4 Exploit the FFR, BPR and other simplification initiatives to transfer non-differentiating, customized WINGS (WFP's ERP) functionality to best-practice implementations through a common UN platform or cloud offering.

3.2.5 Explore the business opportunities offered by in-memory computing presented by capabilities such as real-time predictive analytics from transactions and set the roadmap for the ERP transition to this by 2022.

Reporting and Analytics

3.2.6 To enable analysis and consumption of data from multiple end-points (applications, dashboards, self-service reporting and mobile) and enrich analysis with heterogeneous data sources, IT will use standard APIs and other data virtualization methods, in addition to reviewing the toolset for the production of reports.

3.2.7 Expand the Enterprise Data Warehouse scope to cover all key operational corporate systems, with particular emphasis on COMET and SCOPE, and extend it by means of data federation to include external sources and insight from Big Data techniques.

3.2.8 As WFP publishes open data to meet the International Aid Transparency Initiative (IATI) requirements, it will extend the breadth of the proprietary data it publishes. The data will be available on the wfp.org website, IATI and other data aggregators. Regardless, we believe that all data should be treated and exposed as if it were open data to strengthen and drive the cycle of data quality and transparency, with secure access and use through confidentiality and consent management solutions.

Integration

3.2.9 Integration will be strengthened as a means to improve execution of business processes, simplify user experience, enable mobile applications, extend the functionality of WINGS and boost agility. Software will be organized in units that are self-contained and that exclude functional overlap and redundancies. The introduction of service-oriented principles and data abstraction technologies will also be essential to connect cloud Software-as-a-Service solutions and permit interoperability with implementing partners systems. All of these combined will provide a set of core services available for business-led software development and aimed at improving its quality.

Legacy

3.2.10 All remaining Lotus Notes, Oracle and SharePoint-based applications will be decommissioned by the end of 2017 freeing up maintenance and hosting resources. As part of an agile response, savings will be shifted to value-added activities and reinvested into new technologies that achieve organizational excellence.

3.3 Infrastructure and Operations

3.3.1   The architecture of infrastructure and operations at WFP can be seen in Figure 3.

Figure 3: Architecture of Infrastructure and Operations

Adapted from The Open Group Architecture Forum (TOGAF).
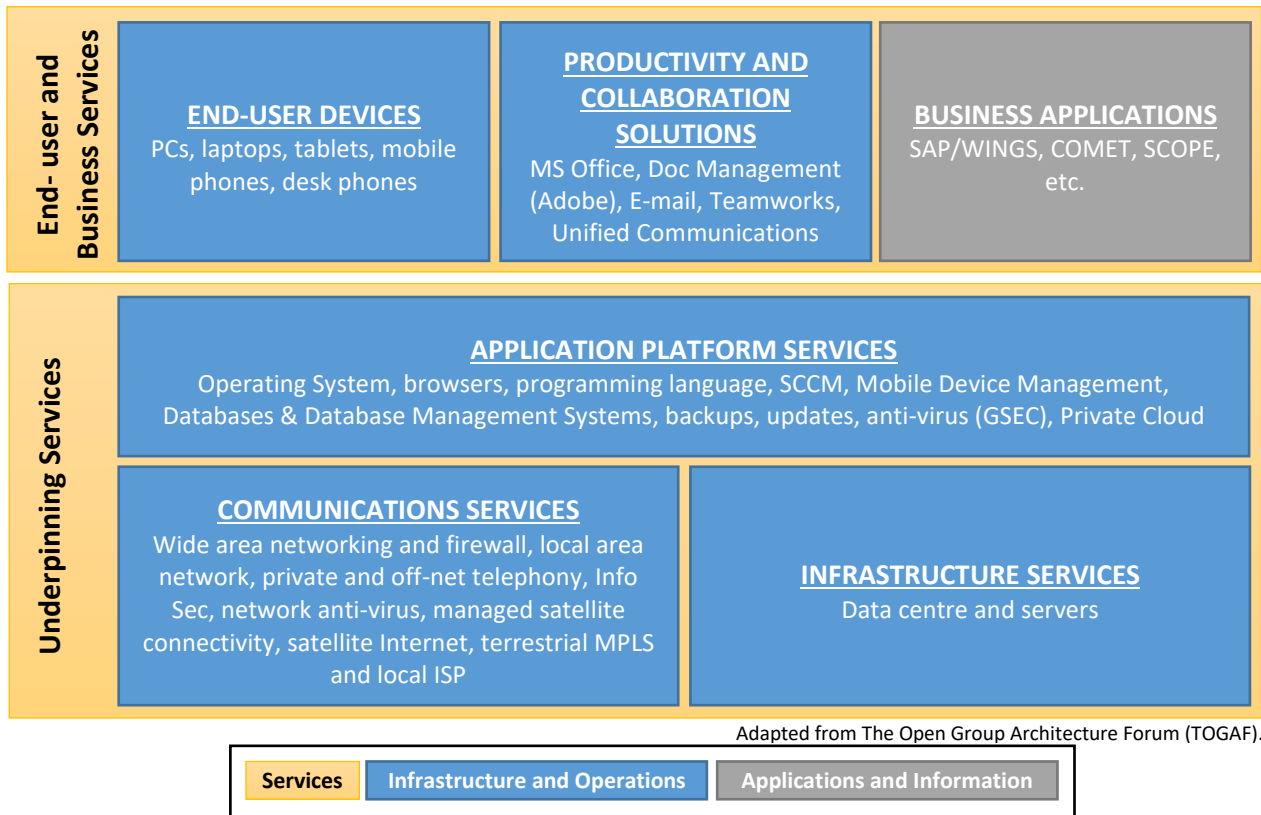
3.3.2   To enable greater business agility and mobility over the next five years, more of the architectural components below will be cloud-based and more services will be globally managed. IT will take advantage of cloud services based on clear financial benefits, risk optimization and delivery of equal or better service quality. The cost savings achieved as a result will be reinvested in continual service improvements. IT will also pursue opportunities in sustainable environmentally-friendly solutions for its offices in the field.

3.3.3   IT will work to maintain systems availability to ensure that all business operations and processes stay up and running. It will deliver and support the technologies that facilitate working in global, real-time teams across distances and that provide access to systems regardless of location. To maintain and improve IT operational excellence, the IT Division will continue to seek out further cost efficiencies and quality improvements through the following principles and approaches in its infrastructure and operations.

End-User Devices

3.3.4   Provisioning of end-user devices will follow as per defined standards, which are updated annually. Bring-your-own-device (BYOD) policies will be improved to allow for the secure management of personally-owned devices.

Productivity and Collaboration Solutions

3.3.5   WFP will migrate more of its productivity and collaboration tools to web-based Software as a Service (SaaS). It will enable users to work from anywhere and from any computer with a

modern web browser and from any device, enabling greater business mobility and agility. Significant cost savings are expected.

3.3.6   Unified Communication (UC) will allow users to communicate internally and externally using real-time communications, and it includes integration with non-real time communications. UC is a set of products that provides a consistent unified user-interface and user-experience across multiple devices and media-types.

Application Platform Services

3.3.7   WFP will continually explore feasibility of and implement private cloud solutions and services to host and process confidential and/or sensitive data, and it will work with UN partners (e.g. UNICC) to do so.

3.3.8   IT will reduce costs through a more global mobile telephony service provider, where possible, that offers secure, reliable and cheaper roaming call rates and services. A global Mobile Device Management (MDM) solution will allow seamless mobile device operation with corporate IT services and reduce IT security-related risks with particular attention to personally-owned devices.

3.3.9   There will be more automatic administration of software and hardware devices worldwide. The IT Division will also implement dashboards and a global telephone billing system to move towards a transparent and exact costing model and to automate the evaluation and payments of outsourced services (see 2.3.2).

3.3.10 Single sign-on services will be provided for all corporate applications and systems, and there will be one source/repository for authentication. Extending the identity of WFP users to the extranet and accepting identities from other UN agencies and partners to WFP's ecosystem will also be addressed.

Communication Services

3.3.11 IT will pursue cost savings and improved services for the global network by re-negotiating the terms and conditions of contracts with current suppliers as well as by leveraging RFPs with new vendors.

3.3.12 With more than 300 locations dependent only on satellite connectivity, the IT Division will take advantage of new and proven technologies and services, e.g., utilizing services on higher frequency satellite bands (i.e., KA satellite spectrum) that allow wider bandwidth at lower costs.

3.3.13 A re-design of security communication services will take advantage of new digital technologies and the need for remote management and location services.

Infrastructure Services

3.3.14 IT will take advantage of infrastructure cloud services (IaaS) based on clear financial benefits, risk optimization and delivery of equal or better service quality. IaaS can offer an affordable and scalable way to add technological resources as necessary, without the setup and hardware costs typically associated with expanding the Organization's IT infrastructure. A more centrally-managed infrastructure will also provide greater security and enhanced resource management. However, due consideration must be given to locations where bandwidth continues to be a limitation.

3.4 People and Skills

3.4.1   According to the People Strategy, WFP must "do more, for more people, with less". WFP must optimize its current workforce so that it can respond to the increasing number of simultaneous emergencies and maintain its comparative advantage in its ability to mobilize. WFP will retain more of its workforce through better talent management.[16]

3.4.2   In alignment with the WFP People Strategy, the IT Division will strive for the highest performance of its staff by the full integration of the performance management process for all contract types and linked closely to learning and development to close gaps in skills and performance.

3.4.3   The IT Function will be positioned to deliver on its vision and a corresponding commitment to grow and develop its staff through coaching, open dialogue, feedback conversations and learning opportunities. Network-enabled communities for sharing information will be the norm, providing diverse, cross-functional groups to solve problems.

3.4.4   The IT Function will develop a new leadership culture, defined by the key values and behaviours that the IT Function will live by (trust, vision, team spirit, user centric) and will help leaders develop a stronger performance management mindset.

Gender, Diversity and Inclusion

3.4.5   The IT Division will actively and conscientiously ensure that any necessary skills acquisition will be fully guided by principles of equality with respect to gender and diversity. It will also foster an internal programme to support a better gender and diversity balance in management of IT, including representation on our senior management team before 2020.

Global Learning and Development

3.4.6   IT is continually evolving and innovating. To keep pace with changes staff must continuously enhance their skills. We will implement a Global IT Learning and Capability Development Strategy by 2020 that augments staff skills and performance through cost-efficient means. We foresee that this will require us to heavily rely primarily on e-Learning and virtual training. We will champion a balanced approach to learning and development, regardless of contract type, aligning the needs of the Organization with a greater gender and diversity balance and the career paths of staff.

3.4.7   The strategy will focus on improving the capabilities of the IT workforce across the functional network in both their specific functions and in gaining a broader understanding of business change and information management.

3.4.8   Additionally, the development of partnerships and mentorships will foster peer learning and professional development. Mechanisms will be in place to support non-TDY short-term (max three weeks) temporary assignments of staff to other areas in IT and to facilitate knowledge exchange and personal development (e.g. stretch assignments).

Skills Acquisition

3.4.9   With new technologies and concepts emerging at an exponential rate, WFP IT must take a more holistic and realistic approach to technology skills acquisition. Core skills, as defined by the IT Capability Framework, should remain generic, whereas as specific technology skills may be transient. This requires that IT management adopt an agile and flexible approach to identifying new skills and obtaining the appropriate resources. The key elements of skills acquisition are:

    a.   Actively support staff in the acquisition of functional and core capabilities and skills through the continual development of the IT Career Framework and corresponding learning journeys.

b. Identify new core skills such as User Experience, Customer Experience, Vendor management, analytics/data science, DevOps, change management and emergency IT management.

c. Develop training programmes that enhance the IT workforce's ability to support the business e.g. CBT/SCOPE training.

d. Identify emerging technologies, anticipating their deployment in WFP and identifying new skills and/or resources required.

e. Support management in the selection of human resources with the correct skills and the appropriate contract types (see next paragraph).

f. Key skills on differentiating business processes or capabilities, e.g. talent and knowledge on COMET or SCOPE, will be retained in house to avoid vendor lock-in and maintain solution stability.

g. For core IT capabilities, IT will either develop internally or rely on a trusted network of development partners.

3.4.10 Figure 4: Future Approach to Sourcing IT Skills below represents the skills that should remain in-house and those skills that can be outsourced, bringing the IT Division cost effectiveness. With more cloud-based solutions (IaaS, PaaS and SaaS) and a need to partner with the business more strategically, non-differentiating skills will be outsourced; those skills that support and develop WFP's core capabilities will be maintained in-house. See also 3.5 Sourcing for further details on sourcing principles.

Figure 4: Future Approach to Sourcing IT Skills
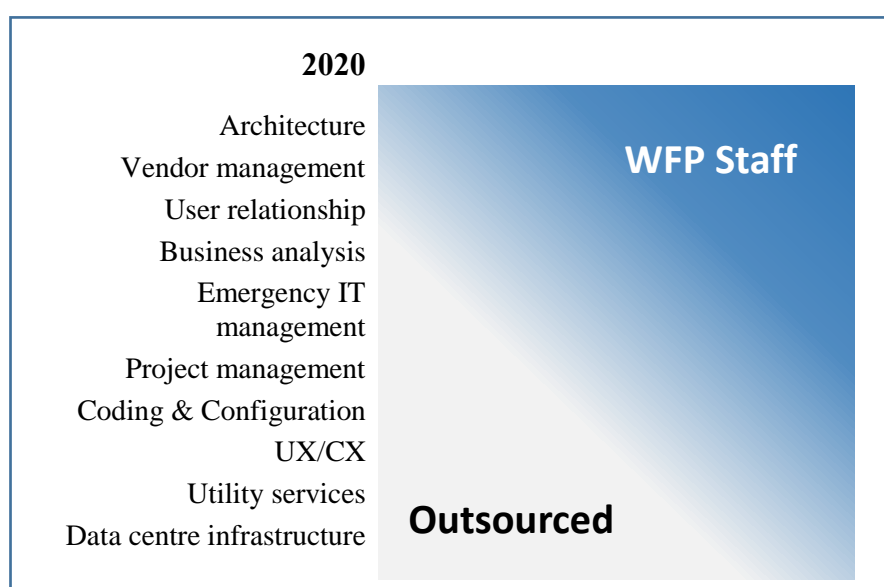
Innovation

3.4.11 Advancement and progress are the very nature of IT. We will partner with INCA and others to create a digital opportunity network. We will identify innovative uses of emerging technology and explore opportunities for ensuring that they support WFP's programmatic needs. IT will rotate key staff in and out of the Innovation Centre and other areas to observe key business processes and take an active part in discussions. Collaboration and IT involvement on innovation will facilitate rapid realization after proof-of-concept through agile development, implementation, production and integration support.

3.5 Sourcing

3.5.1 Sourcing decisions in IT will take into account the organization's strategic objectives, core capabilities, market direction and volatility, delivery options, and management processes as well as cost effectiveness. To achieve cost effectiveness, IT will pursue right-sourcing, or a combination of insourcing and outsourcing based on the following principles. See also Figure 4: Future Approach to Sourcing IT Skills for a view of the current and future approach to sourcing IT skills.

3.5.2 Vendor management will be centralized. Supplier management and vendor performance capabilities will need to be developed.

3.5.3 IT will broker cloud services for the Organization to ensure security, duplication and risks are managed and controlled.

3.5.4 Partnerships with key suppliers such as UNICC will be actively managed, possibly through a technical forum, to ensure evolution of their service offering as well as to influence the consortium.

3.5.5 Key skills on differentiating business processes or capabilities, e.g. talent and knowledge on COMET or SCOPE, will be retained in house to avoid vendor lock-in and maintain solution stability.

3.5.6 For core IT capabilities, IT will either develop internally or rely on a trusted network of development partners.

3.5.7 All development that is non-differentiating will be outsourced where it is cost-efficient.

3.5.8 ERP core processes that are standardized to the industry will be migrated to SaaS cloud solutions.

3.5.9 Architecture is a capability that will always be insourced.

3.5.10 The network will be procured and managed centrally with multiple vendors to achieve greater flexibility.

3.5.11 Central infrastructure and per-capita services will continue to be outsourced.

3.5.12 When possible, mobile telephony will be sourced globally with one provider to take advantage of cost savings, single billing, global roaming, predictable costs, and centralized support.

3.5.13 Cost-savings opportunities will be evaluated for alternative application hosting strategies, such as cloud IaaS, PaaS and SaaS.

3.5.14 For non-SAP application development and maintenance, existing internal capacity will be augmented through LTAs.

3.5.15 For innovation and R&D, IT will tap into communities and leverage partnerships.

3.5.16 Staff with highly volatile skills that require complex retraining/updates will be sourced externally.

3.5.17 New digital marketplace platforms will be leveraged for sourcing freelance competencies from the external market.

4. Risks

4.1 The following are high-level risks that could potentially impede implementation of the IT strategy. Mitigating actions are also identified that would reduce the likelihood and probability of these risks occurring. The risk scoring and risk response that follow are based on WFP's risk management scoring methodology as well as the risk response definitions defined in WFP's Enterprise Risk Management Policy.[17]

	Risks	Like-lihood	Impact	Serious-ness	Risk Response	Mitigating Actions
4.2	SCOPE: • Scalability: Inability to register entire beneficiary population due to issues in scalability and capacity of the system. • Data Management: Leak of beneficiary personal data and inconsistent and unreliable data due to poor data governance.	5	4	20 (High)	Control	Review the architecture for scalability, ensure proper resource management and roll-out planning. Effective data governance implementation and personal data protection policies and compliance check. Limit data residing in unsecured premises.
4.3	Limited connectivity: new services may place additional demand on the existing communication infrastructure.	4	4	16 (High)	Control	Strengthening of network traffic analysis, tighter capacity management and mainstreaming of compression technologies. Design and implement systems with low bandwidth-high latency constraints in mind.
4.4	ETC: Disruption by natural or human disasters that impede setting up partnerships for emergency response or that impede execution of a partnership agreement (e.g., partners were less willing to enter Ebola regions).	2	2	4 (Low)	Accept	Current mitigating actions are sufficient. ETC has a list of high-risk countries in which these partnerships and agreements must be built up first. Partnerships will also be built up with local agencies and service providers. Finally, WFP is always a partner of last resort.
4.5	Capability to acquire new skills on the market and retain qualified staff, due to staff rotation in and out of IT every 3-4 years, for the implementation of the strategy	4	3	12 (Med)	Accept	Prioritize execution of people and skill portion of the strategy in the strategic plan. Staff rotation is an organization-wide mandatory requirement, and underperformance is

						being addressed at the organizational level.
4.6	IT-Business Partnership: Continued systems integration issues and business process failures/inefficiencies due to silo approaches.	5	4	20 (High)	Control	IT introducing new Business Transformation Officer roles to work closely with the business in the field. Reinstatement of IT architecture and active involvement of the business in governance areas where shared responsibility is critical to success (data governance, enterprise IT governance).
4.7	Shared Services Centre: The timing of the implementation of a shared services centre for IT can impact efficient operations if the on-boarding and training of new local staff takes place while implementing strategic corporate initiatives (eg. FFR).	1	5	5 (Low)	Accept	Prioritize the functions to be transferred to an eventual shared service centre in order to minimize the impact on large corporate initiatives.
4.8	Duplication of effort with INC due to lack of clear roles	2	2	4 (Low)	Control	Together with INC, define and socialize guidelines for development that ensure communication/partnership, scalability and interoperability.

Glossary

API: Application Programme Interface; a set of routine definitions, protocols, and tools for building software and applications.

BPR: Business Process Review

BRM: Business Relationship Manager

BYOD: bring your own device

COMET: Country Office Tool for Managing Effectively, a system to design, implement and monitor WFP's projects.

CRM: customer relationship management; also stakeholder relationship management.

CwC: Communications with Communities

ERP: enterprise resource planning

ETC: Emergency Telecommunications Cluster

FFR: Financial Framework Review

GEIT: governance of enterprise IT

IaaS: infrastructure as a service, cloud-based infrastructure

IATI: International Aid Transparency Initiative

ITIL: Information Technology Infrastructure Library; a set of best practices for IT service management that focuses on aligning IT services with the needs of the business.

MDCA: Mobile Data Collection and Analytics Platform

MDM: master data management

MIC: middle income country

MISSC: Management Information Systems Steering Committee; WFP's enterprise IT governance board.

mVAM: mobile Vulnerability Analysis and Mapping; a mobile solution for food security monitoring.

NGO: non-governmental organization

PaaS: Platform as a service, cloud-based platforms.

RACI: responsible, accountable, consulted, informed; usually as part of a responsibility assignment matrix.

RITO: Regional IT Officer

SaaS: software as a service, cloud-based software.

SCM: supply chain management

SCOPE: formerly System for Cash Operations, but no longer an acronym; WFP's beneficiary and transfer management platform.

SDG: Sustainable Development Goal

SRAC: Strategic Resource Allocation Committee; provides oversight on resource allocations activities.

TCO: total cost of ownership

VSAT: inter-agency satellite services

WINGS: WFP Information Network and Global Systems; represents a number of systems which are integrated with our Enterprise Resource Planning (ERP

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