Concept Note

CCI 2: Systems Integration and IT-Enabled Efficiencies

Amount	Breakdown	Timeframe
USD 5 million	70%: Integration layer for corporate systems and strengthening link between resources and results. 30%: Simplification and automation of WFP's core business processes.	1 year (2019)

Background and Context

1. WFP's transformation into a digital leader in the humanitarian sphere is one of the main priorities of the Executive Director and is the focus of the CCI on Cash and the Digital Platform. Complementing this effort is the necessity for WFP to optimize its existing operating processes and business models through digitization, and this is the focus on this CCI. As compared to the private sector, the UN system has been slower to make the investment, although the desire for more visibility on results, efficiencies for greater impact, UN Reform and changing donor expectations, are making this a priority. WFP needs to further transition to a modern, data-driven and productive workplace, particularly at the country office level, where operational efficiency and better use of data are essential for our stakeholders such as national governments, partners, beneficiaries and donors. The organization is at risk of being reactive and overburdened with transactional activities, hindering WFP's ability to quickly recruit and on-board staff or procure essential services in a timely manner. Furthermore, many internal processes are on disparate systems or remain offline, hindering WFP's ability to pull reports and data to support planning, decision-making and reporting. Such hurdles can be overcome with today's digital technological. To accelerate digital optimization, this CCI will provide supplemental funding on a one-time basis, while the functional requirements to improve WFP's existing operating processes and business models will be covered through budgeted PSA resources in 2019.

System/Data Integration

2. As an organization, we lack an integrated view of our key data assets which leads to laborious, manual processes to reconcile disparate data sets, and prevents employees from efficiently planning and identifying trends and opportunities. In Malawi, for example, it takes a full day of work for a Logistics Officer to create a Consolidated Distribution Plan. It currently involves a cumbersome manual process to bring data from different systems together to plan the type of food to be transported, the mode of transportation and its routing, limiting the Country Office's ability to respond quickly to operational needs.

3. To advance its digital optimization, the organization needs to invest in more effective data management practices. A key step is to invest in an integration layer that consumes and makes available data from key corporate systems and unites it through the creation of a corporate ontology (set of agreed and defined corporate data labels and map used by all functions). Illustrating this concept is the work recently completed with WFP's Supply Chain Division. After careful integration of over 20 data sets, for the first time in its history WFP now has a commodities table that provides all critical information (stock levels, vendors, distribution, nutrition) regardless of the source system. This enables a more intelligent use of our data

around commodities. WFP aims to replicate this approach across the entire WFP corporate data universe, with particular attention to monitoring data.

4. This new data approach and resulting assets will also immediately start powering two flagship data products, the CSP Data Portal for member states and the internal WFP Dashboard for management, while providing the necessary platform to accelerate system inter-operability. As the integration layer evolves during 2019, it will also give us the ability to better link resources to results at the planning and reporting stages by intuitively combining data from COMET, WINGS and our budget planning tool.

Automation

5. WFP still processes many paper forms, particularly in the field, ranging from HR to procurement approvals. This stream of work will entail digitalization of offline finance, administrative and HR processes as well as automation of repetitive tasks to accelerate WFP's movement towards a paperless office.

6. The Self-Service Platform, launched in 2015, has already processed more than 80,000 online requests, mostly global processes related to international staff. The benefits so far in terms of staff productivity, process integrity and cost savings are evident, with an estimated savings of 20-30 minutes of staff time per request. However, WFP can still make significant progress in this direction, with a greater focus on impacting field processes.

7. WFP is in the early stages of a multi-year journey. Together with other funding, including PSA, this one-time investment in 2019 will give WFP better visibility on how to move to the next level in data and automation. Figure I shows the breakdown of the CCI allocation by main deliverable[1]. A full roadmap and funding requirements will be clearer by mid-2019 when the diagnosis and initial deliverables are available to better understand the longer-term needs and course of action for WFP digital optimization.

Figure I. CCI 2 Systems Integration & IT-Enabled Efficiencies.

Initiative	Benefit	Total
Further development of an integration layer for WFP's corporate systems	Enhanced business efficiency, decision making, scalability, and reduced development costs	$2.00M
Strengthening the linkages between resources and results in WFP's systems for improved decision making	Ability to uncover insights from diverse and complex large-scale data sets. Improved decision making	$0.40M
Updates to the Member State CSP Data Portal	Increased transparency and accountability toward Member States	$0.60M
Continued development of a dashboard for WFP management	Informed decision making and understanding of complex corporate data	$0.40M
Development of roll-out of some IT-enabled initiatives that will improve the efficiency of WFP's operations and support services	Increased operational efficiency, through support services tracking, automation and simplification of manual processes	$1.60M

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[1] Based on further consideration of priorities, some funding has been shifted between budget lines when compared to paragraph 284, figure IV.5 in the Management Plan (2019-2021).

Priority Areas and Deliverables

Develop an integration layer for WFP's corporate systems and strengthen the links between resources and results to inform decision-making and increase transparency (USD 3.4 million)

Deliverable #1: Further develop an integration layer for WFP's corporate systems

Problem
Data to enable the business to make decisions holistically is spread across multiple IT systems. There is a need to create a layer across these systems (i.e. 'data lake') so that users can more efficiently draw upon data for decision-making and reporting. A corporate data map is required to help WFP move away from system-specific reporting and coalesce data around key business entities. This will enable richer and more timely reporting. The further development of such an integration layer for WFP's corporate systems such as COMET, WINGS, LESS, SCOPE, GEMS and SPRING will also help to address concerns expressed by the Joint Inspection Unit and high- and medium-risk internal audit observations.[2]

Goal
A platform that unites data from existing and new systems, allowing WFP to run its operations efficiently and effectively. Staff will be able to leverage governed and integrated data to improve decision-making capabilities, optimize a business process, or develop a sustainable way to measure key performance indicators that are part of WFP's Corporate Results Framework.

CCI deliverables by December 2019
1) "Data lake" containing raw data from key corporate systems;
2) Established governance process involving functional owners (data stewards/owners);
3) Corporate data map (ontology) that aligns raw data to business entities;
4) Tool for users to access, analyse and collaborate around data;
5) Programming interface to access data (API) and enable system integration; and
6) Diagnostic, gap analysis to inform subsequent investments and workplans.

KPIs
#1: Availability of (high priority) subset of raw system data in the platform
#2: Availability of Corporate Data Catalogue with single source governed data assets and corporate ontology governance process
#3: Single source governed data available to other systems through a programming interface (API) manager to enable system-to-system data services

Stakeholders benefitting from CCI: include a wide range of employees at CO, RB, and HQ levels (users of WINGS, COMET, LESS, SCOPE, GEMS, SPRING).

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[2] The Annual Report of the Office of the Inspector General for 2017, and a series of Internal Audits have resulted in recommendations highlighting the risks of lack of data governance and lack of consistent data management practices. This CCI aims to build the foundation to break down these data silos and expose data in a governed manner.

Deliverable #2: Strengthen the linkages between resources and results for improved decision making.

Problem
Under the IRM, WFP is committed to linking resources to results, which requires adjusting tools, processes and systems for planning, budgeting and reporting on programme results and management deliverables. As a result of the revision of business requirements, work is ongoing to update the supporting IT systems (COMET, TAGETIK, WINGS). In addition, planning, budgeting and reporting on management deliverables through the annual performance plans needs to be automated at CO, RB and HQ levels.

Goal
Budget planning and implementation figures will be clearly linked to programme results in plans, budgets and annual reports. These data will be built atop the single source "data lake" and shown on internal and external dashboards (see Deliverables #3 and #4). For management deliverables by function, these will be linked to budget allocations and expenditures, which are automated at CO, RB and HQ levels.

CCI deliverables by December 2019
1. Resources to results value chain defined to facilitate planning, budgeting and reporting on programme results (specific deliverables to be confirmed when workplan endorsed); and
2. Automated annual performance planning process at CO, RB and HQ levels.

KPIs to measure achievement of CCI deliverable
#1: Targets achieved in approved resources to results workplan for 2019
#2: Automated annual performance plan process in place for 2020 for COs, RBs and HQ

Stakeholders benefitting from CCI: CDs, RDs, division directors, EB, donors

Deliverable #3: Update the Member State CSP Data Portal.

Problem
WFP and other UN agencies have committed to making data more widely and publicly available. The member state CSP Data Portal is a key strategic external tool to meet this commitment. The beta version currently gives member states access to programme, financial and performance-related information on Executive Board-approved Country Strategic Plans and Interim Country Strategic Plans. Information published on the Portal is taken from multiple sources including: approved CSPs and I/CSPs, Annual Country Reports, Country Operations Management Plans, and COMET.

A cross-functional CSP Data Portal Working Group is in place to improve the Portal's functionality and systems integration, capturing feedback from staff and the membership to inform future releases. The CCI funding will support further improvements to the Portal, including improvements to the user experience. This will draw upon the single-source governed data from the 'data lake'.

Goal
CSP Data Portal is an improved platform presenting planning, expenditure and results information to WFP's Member States in a modern and accessible format.

CCI deliverables by December 2019
1. Add 17 new CSP countries
2. Add Multi-Country Strategic Plans
3. Display additional contribution and expenditure information
4. Integrate COMP prior to CSP approval
5. Implement agreed enhancements
6. Replace Management Plan website for 2020 MP

KPIs to measure achievement of CCI deliverable
#1 New agreed data points implemented on time
#2 Agreed features available

Stakeholders benefitting from CCI: CDs, Member States

Deliverable #4: Further develop a dashboard for WFP management.

Problem
In 2018, an inter-departmental team overseen by the Chief of Staff built on IN/FO to provide greater internal visibility and consistency to WFP's operational data. Currently, data quality is inconsistent and will be addressed through integration with the data lake. A mobile application version will also be developed for ease of use for on-the-go users. Continued development of the WFP Dashboard for management is essential for WFP staff and management to make informed decisions based on reliable, accessible data.

Goal
The WFP Dashboard for management, as a primary internal performance reporting tool for the organization, will contain critical data points across all functions. This single internal platform, including a mobile application, will provide timely, reliable management (KPI) and operational data to managers at country, regional and HQ levels.

CCI deliverables by December 2019

1. Data validation by 14 Country Office
2. Beta global release
3. Mobile version rolled out
4. Production release to all COs
5. Inclusion of 25 CRF management indicators (TBC - requires additional scoping)

KPIs to measure achievement of CCI deliverable
#1 New agreed data points implemented on time
#2 Agreed features available

Stakeholders benefitting from CCI: CO, RB and HQ managers

Continued simplification and automation of WFP's core business processes (USD 1.6 million)

Deliverable #5: Develop and roll-out IT-enabled initiatives that will improve the efficiency of WFP's operations and support services

A. Global Service Management Tool

Problem
From booking a local driver to fixing the air conditioning, there is a need to automate service requests. There are many service management and ticketing systems (both bought and built) across WFP that have different interfaces, are duplicative, or are outmoded. WFP staff, especially in the field, have no point of contact or visibility, leading to frustration and impaired efficiency when performing what should be simple administrative tasks.

Goal
The aim is to establish a single, modern service management tool that will also automate processes at the CO level. All service management and ticketing systems across WFP will be consolidated into one platform which will be used to manage service requests and delivery for global (i.e. available to all staff), functional (e.g. HR, Admin, SCOPE, etc.), and local (e.g. regional, country, HQ, etc.) processes across the entire breadth of WFP's operations. This will help improve performance of service providers, and increase satisfaction and productivity for staff members.

CCI deliverables by December 2019
1. Procure Service Management tool (RFP, evaluation, PO, etc.)
2. Develop global service catalogue
3. Capture process engineering and requirements
4. Design and deploy initial solution
5. Continuous solution design and deployment

KPIs to measure achievement of CCI deliverable
#1 Retirement of select legacy platforms
#2 Agreed processes standardized and rolled out in select countries/regions
#3 Adoption of new platform by end users

Stakeholders benefitting from CCI: Primary client groups are HR, Administration, Supply Chain, and IT units in charge of service provisions. Beneficiaries include WFP staff at all levels who use HR, Administration and IT services, as well as external partners who access our common services.

B. Digitizing paper forms & manual processes - *WFP Self-Service*

Problem
Despite efforts to digitise forms and workflows, WFP staff must still print, sign and scan important HR, Administrative and Supply Chain documents. WFP has the technology in place to digitise these forms (WSS, O365, e-signature). WFP Self-Service (WSS) was originally an HR-driven initiative to digitise the most important HR processes. Currently 25 forms have been digitised into WSS with positive feedback from users. WFP needs to continue driving this operational efficiency by automating and simplifying manual business processes across the organisation. With a Service Management tool rolled out

globally, the WFP Self-Service (WSS) will see further efficiencies as it is integrated into the new tool, bringing together service requests with form initiation and ticket creation for better service tracking.

Goal
WFP provides a seamless and personalised employee experience by making WSS the single point of entry for automated forms and workflows across functions.

CCI deliverable by December 2019
1. Mapping exercise to identify processes to automate
2. My WFP Area allowing employees to manage work-related personal requests
3. Integration with Service Management Tool
4. Software Development Kit – enable HQ and Field to build their own forms
5. New forms developed

KPIs to measure achievement of CCI deliverable
#1:15 digital forms added to WSS (# TBD)

Stakeholders benefitting from CCI: All WFP staff.

C. **Robotic Process Automation (RPA) – Machine Learning assessment**

Problem
WFP has not moved financial services to shared service centers to achieve cost-savings and greater efficiencies, but is well-positioned to take advantage of the next evolution of efficiency gains through Robotic Process Automation. The Finance Division and TEC have identified options for advanced technologies that have potential to simplify repetitive tasks, remove risk of human errors and improve overall efficiencies in operations. There are significant opportunities to use the simplest forms of Artificial Intelligence (i.e. Robotic Process Automation) to support this effort.

Goal
A feasibility study will be undertaken, investigating the potential and level of effort required to deploy technology to simplify repetitive mundane financial tasks. Depending on the results, TEC will investigate deploying machine learning algorithms on top of WFP's data lake to further identify patterns for optimisation.

CCI deliverable by December 2019
1. Feasibility assessment for use of robotic process automation in finance.
2. Where the opportunity arises, technology will be piloted to automate some initial tasks.

KPIs to measure achievement of CCI deliverable
#1: Assessment with recommendations for next steps
#2: Processes identified in a roadmap
#3: Potential pilot conducted with learnings to support recommendations for WFP and inputs to the broader UN reform of back office services led by the Business Innovations Group.

Stakeholders benefitting from CCI: Finance Officers at CO, RB and HQ levels, and the UN Business Innovations Group.

Conclusion

While this one-year CCI is considered part of an accelerated discovery phase, it commits WFP to tangible and impactful deliverables during 2019. Through short sprints to test and learn with rapid iterations, WFP will develop a longer-term plan that is relevant to the changing needs of the organization. This plan will become clearer by mid-2019, leading to greater focus and alignment of resources across the organization. This will lead to an acceleration of future initiatives. It is anticipated that additional one-time acceleration funding, together with reprioritized or additional recurring funding through the PSA budget will be required to continue to support WFP's digital optimization journey.