

The Consultative Group on International Agricultural Research (CGIAR)

Consultancy on Common Administrative, Financial and Research Support Services in the new Consortium of the CGIAR Centres

Key Findings and Recommendations ALLIANCE DRAFT v7.0

CGIAR Shared Services Key Findings and Recommendations

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Summary Findings & Recommendations

1. Executive Summary

NOTE: this document represents draft findings and recommendations as of 22 October 2009. A more complete paper, including cost and benefit analyses and final detailed recommendations, will be presented to the Alliance by 10 November 2009.

Accenture Development Partnerships (ADP) performed a shared service evaluation across the CGIAR starting in August 2009. During the course of the project, ADP interviewed over 200 CGIAR employees across all 15 Centres, visited 13 CGIAR locations across 5 continents, gathered financial data from all Centres and engaged with key leadership across the Alliance Office, corporate services and research. Leveraging leading practices from Accenture's shared service practice and relevant experiences across the non-profit sector, ADP has found significant opportunities for shared services to improve the current operations of the CGIAR as well as to improve the position of the CGIAR for future opportunities.

ADP developed a target operating model covering the use of shared services across all Centre functions and recommended seven key opportunities to focus preliminary shared service activities. The seven key shared service opportunity areas are: 1. Develop and Expand Research Support Services, 2. Standardised Ways of Working, 3. Rationalise Back-office Systems, 4. Share HR Functions, 5. Procurement and Leveraged Buying, 6. Share IT, and 7. Share / Rationalize Physical Facilities and Facility Support. The target operating model and key opportunities were reviewed by a broad cross-section of finance, IT and research leadership, and general consensus was achieved. Across the seven opportunities, ADP developed business cases, implementation roadmaps and location strategies to allow the CGIAR to effectively prioritize shared service efforts and to help align shared services with other CGIAR strategic initiatives.

Our terms of reference were not to recommend a disposition of current shared service activities, including System Office Units and AIARC. However, these activities are recognized in the report below as current shared functions and need to be considered as part of the transition activities once the shared service strategy is finalized.

2. Project Context

2.1. Project Objective & Timeline

As part of Phase II of designing the Consortium, Accenture Development Partnerships (ADP) was engaged by the Alliance to undertake a review and analysis of the opportunities for common administrative, financial and research support services.

The agreed objectives of the Shared Services consultancy are:

- 1. Identify the needs, at Consortium level, for shared financial, administrative and research support services over the coming few years, in particular for supporting the Consortium level research agenda
- 2. Review and assess the current arrangements of shared services at the System level, including drawing lessons from our previous experiences at the System level
- 3. Assess the current costs and benefits of the individual provision by each Centre of financial and administrative services to its research programmes and scientists
- 4. Assess the current costs and benefits of the individual provision by each Centre of research support functions to its research programmes and scientists
- 5. Propose the most effective and efficient options to:
 - a. Increase the quality and effectiveness of all these services so they provide enhanced support to staff, programmes and the Consortium in general
 - b. Increase the efficiency of the provision of these services, to strengthen delivery systems and impact of the Consortium research agenda through appropriate shared delivery mechanisms, including the possibility to outsource some of these services and functions. This will include a list of the services best provided in a shared manner, those that should continue to be provided at Centre level and those that should be outsourced. It will also provide indicative staging and sequencing of transitions from current arrangements to shared or outsourced services.
 - c. Locate geographically those shared services that are not outsourced.

While our findings are ultimately delivered to the Consortium Planning Team (CPT), the ADP team consulted with a Shared Services Reference Group, with representation from seven Centres and the Alliance, on a weekly basis for project operational assistance and directional guidance.

Milestone dates for this consultancy include:

• 4-5 August 2009 – project launch with Centre representatives in Rome, Italy

- 4-5 October 2009 initial findings presented to extended ADE Finance and Science community (including representatives from HR, Challenge Programs and AIARC) in Cali, Colombia
- 15 October 2009 initial draft of findings and recommendations presented to the Alliance for review
- 29 October 2009 presentation of recommendations and business case to Alliance Board and Alliance Executive meeting in Rome, Italy
- 10 November 2009 final recommendations due

2.2. Site Visits & Interviews

Over a period of approximately seven weeks, the ADP consultancy team conducted over 220 interviews across 12 countries with CGIAR stakeholders, including:

- Discussions with representatives from all 15 Centres
- Visits to 11 Centre headquarters (two joint visits)
- Visit to a regional location (Kampala, Uganda) with five Centres
- Meetings with CGIAR Secretariat, Challenge Programs, System Office Units and AIARC

The team also distributed a survey and received financial, organization, technology and priority preference data from all 15 Centres.

In early October, the ADP team held working sessions with the Centre IT Managers and with the extended ADE Finance and Science community to review findings and confirm initial recommendations.

3. Case for Change

3.1. Context

In 2007, the CGIAR launched a change initiative to increase the effectiveness and efficiency of the CGIAR. The proposed reform includes the creation of (1) a new legally structured Consortium of the CGIAR-sponsored Centres, managed by a Consortium Office and (2) a Fund, managed by donors. These two pillars are linked through four bridging mechanisms; a Strategy and Results Framework (SRF), Performance Agreements for Mega Programs, a Monitoring and Evaluation Framework and an Independent Science and Partnership Council.

As part of its objective to move toward a more effective Consortium, the Alliance decided to evaluate the opportunities to share common financial, administrative and research support functions across the Alliance of the CGIAR-supported Centres.

3.2. Case for Change - Detail

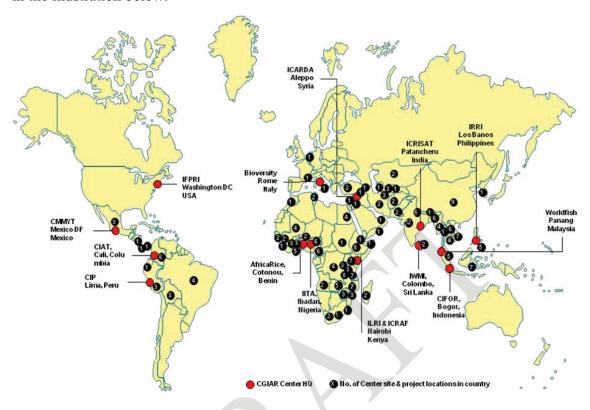
Shared services provide an opportunity for the new Consortium to increase its competitive advantage in agricultural research by more effectively leveraging the scale and competencies of the Centres. Shared services should allow the Consortium to collectively develop new capabilities that the Centres cannot afford to develop individually. Shared services also will allow the Consortium to increase the total research base without a proportional growth in overhead and back-office support. This should provide a compelling case for donors to increase investments in the CGIAR.

Shared services also represent a key enabler for the reform effort. Common processes and improved service levels across Centres will allow the new Consortium to deliver on larger programs that require increased coordination across Centres. While there are currently examples of significant collaboration across Centres, they still operate as 15 separate entities. The geographic evolution of the Centres has also created opportunities to improve efficiencies in common country locations and in sharing physical space.

Across the 15 Centres there is significant overlap in research, financial and administrative activities, supported by a complex technology and process landscape that could be leveraged more effectively. Implementing standard processes, tools and enabling systems can increase sharing of information within and across Centres and improve staff productivity. Efficiency opportunities across the Centres are highlighted by the complexity of the overall infrastructure:

- 253 different Centre locations (headquarters and regional) in 80 countries, including 28 sites with multiple Centres
- 10 different project management systems, 6 of which are in-house, 3 Centres using CIAT
- 8 different financial management systems
- 10 different HR management systems, 6 Centres are using a common platform (HR4U) with Centre-specific customizations
- 15 different data management systems, 6 Centres report using MS products (Centres often using more than 1 data management tool)
- 15 procurement functions with duplicated vendor contracts

A geographical view of Centre presence – including HQ, regional and project sites – is shown in the illustration below.



Source: CGIAR Centre Data Collection and publicly-available information

3.3. Processes

Shared services can be used to drive standard policies, processes and tools across important Centre support functions. This can lead to significant efficiency gains and increase the time spent by Consortium resources on more strategic functions and core research activities. A few examples include:

- Research creating common research services can improve the efficiency of research and laboratory support services (which may not be fully utilized today) and in research data being more effectively shared across Centres.
- Grant and Project Management Centres using common templates, indicators/metrics and
 processes for managing grants and projects can result in more efficient management of the
 overall research pipeline with higher percentages of winning proposals and greater focus on
 high-priority opportunities.

- *HR* by standardizing the management of salaries, benefits and entitlements for internationally recruited staff (IRS) and nationally recruited staff (NRS) within countries, the consortium can more effectively utilize resources across Centres and can more effectively offer HR services across multiple Centres.
- *Procurement* the Consortium can realize gains by leveraging the most mature procurement processes across the Centres and by leveraging the best negotiated purchasing agreements. For example, one Centre, IITA, recently purchased a purchasing agent in the UK, now called IITA Limited.
- *Finance* common processes and systems can reduce time in finance spent working on manual processes, reconciliation and reporting.
- *Information and Collaboration* standards for collecting, managing and disseminating information can increase collaboration within and across Centres, and also reduce the risk of losing data and institutional knowledge
- *Information Technology* shared services in IT can drive improved specialization and increased services. Efficiency gains can potentially free up IT personnel to focus on strategic uses of technology to help drive the future research agenda instead of tactical IT support within a specific Centre.

3.4. Spending

The details of spending and allocation of resources across the Centres can help identify where shared services may have the largest impact. As expected in a research organization, more than half of Centre spending is dedicated to direct research and research support activities. A few key observations highlight potential opportunities for savings.

- Staff costs represent approximately 50% of the total spending of the Centres. This is driven by the core research mission of the Consortium relying on scientists and research support. It highlights the importance of strong HR services and capabilities to manage talent and resourcing effectively across the Consortium via standard and shared services.
- Project management represents approximately 20% of the total spending across Centres. This includes heavy project management responsibilities of scientists and research leadership plus the administrative functions responsible for project management, grants management, financial management and reporting. Representing over \$100M in annual spending, this is an area where shared services can free up resources across the Consortium to focus on core research or to pursue additional projects. Some of this high spend on project management has been driven by a trend towards smaller grants and project, which require proportionally more overhead to manage.

- In total, the Centres spend less than 2% of revenue on information technology (IT). The global industry average is approximately 4%, showing a general underinvestment in this key support function. Scientific research is increasingly becoming a computer-based activity, so the ability of the Consortium to offer leading IT services and support is critical to the overall mission. In addition, the wide geographical coverage of the Centres increases the need for strong communications and connectivity within and between locations.
- Collectively the Centres spend almost \$50M on facilities and facilities support across 253
 different Centre locations. This includes almost \$9M in non-HQ locations where there are
 often multiple Centres in the same city or site. This area is generally recognized as an
 opportunity to improve utilization across Centres, and shared services provide a general
 framework to drive this improvement.

3.5. Alignment of Shared Services with the Consortium Design

Shared services are intended to improve the capabilities and efficiency of the Centres as well as supporting the operation of the Centres as part of the new Consortium. While shared services can provide significant benefit to the Centres independently of the Consortium design, several aspects of the Consortium design will help to drive the priorities, structure and adoption of shared services. Recommendations for how to align shared services to the Consortium design fall within three main areas: a. Consortium Constitution and Organization, b. Strategic Results Framework and Mega Programs, and c. Monitoring and Evaluation Framework. These are detailed below.

a. Consortium Constitution and Organization

The Consortium Constitution provides governance support for shared services that will be used to help drive adoption and cross-Centre alignment. The governance model for shared services needs to reflect the right balance between top-down and bottom-up, collaborative approaches. In previous shared service experiences across the CG, collaborative approaches have been most effective. This is partly due to the independent nature of the Centres, and the new Consortium organization will create new governance opportunities with a Consortium focus on shared services.

Our initial recommended governance model is to have shared services governed by a combined group represented by the Consortium and by the Centres. We also recommend that the Consortium should align to the shared service operating model and have Centres adopt specific shared services over a timeframe where they can manage the required change, investments and most risks based on their situation.

The Consortium design contains a few key functional units related to shared services. First, there is a dotted-line shared service function reporting to the Consortium CEO. This function will evolve over time, but initially would be responsible for driving the overall shared service strategy. The other functional units currently identified as part of the Consortium design that are closely linked to shared services are: Finance and Administration (F&A) and Strategic HR & Change Management (SHR&CM). Both of these are linked to shared service functions in our proposed Centre Operating Model. The F&A functional unit will provide guidance for common finance and reporting processes as part of the Project Management and Finance shared services. The SHR&CM functional unit will drive cross-Centre strategies, policies and process decisions that will support the proposed HR shared service model.

b. Strategic Results Framework and Mega Programs

Mega Programs are a key element of the new Consortium design, and will involve large, long-term research efforts that will draw resources from across multiple Centres as well as from research partners. The Mega Programs will be significantly enabled by shared services, especially in project management, common systems and HR areas. In the area of project management, shared services will enable Mega Programs to leverage common processes. Mega Programs will need a consistent set of HR policies, processes and services to ensure resources can be identified and managed effectively across Centres. During the design of shared services, it will be important to incorporate the needs of Mega Programs to ensure services are designed for the future state, not only on the current needs.

c. Monitoring and Evaluation (M&E) Framework

The CGIAR will implement a new M&E framework that will cover the traditional area of measuring research results, and it will also expand to include the managerial, governance and financial performance of programs and Centres. This Framework will be enabled by shared services by providing standard processes across functions like HR, reporting and project management. The performance of the Consortium and individual Centres will also be more easily managed under the proposed Shared Service Operating Model, as more of the core functions will be managed via standard service offerings with service-level agreements.

3.6. Lessons Learned from Previous Experiences

As mentioned above, there are examples today of sharing and collaboration between Centres. Some services are provided across multiple Centres, including Internal Audit, leveraged procurement of IT software and publications, and payroll, insurance and retirement (via AIARC). Other services are provided more locally within a single country or region, such as

shared IT and library services in Nairobi, Kenya (ICRAF/ILRI), shared biotechnology services, shared support services in Kampala, Uganda, shared office space, etc.

There have also been examples of previous attempts to share services between Centres (locally, regionally or globally) that were not as successful. Successful shared services and previous attempts at sharing services across the Centres provide valuable lessons and help form critical success factors for sharing services in the new Consortium, including:

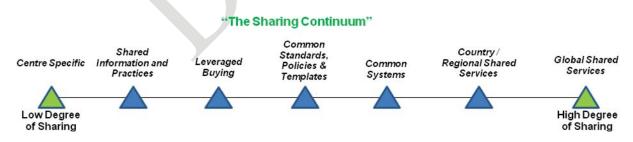
- Executive Leadership strong top-down direction and guidance is needed to ensure that priorities are clearly set and decisions enforced.
- *Vision and Roadmap* a clear, common strategy and plan to achieve results needs to be agreed and communicated.
- Outcomes objectives and measurements of success need to be defined early and monitored regularly.
- *Commitment and Sponsorship* leadership, budget and resource commitment from key stakeholders (Consortium, Centres, Donors) needs to be obtained early to ensure buy-in and longer-term support.
- *Dedicated Resources* need dedicated, full time resources to implement and manage shared services as a separate initiative.
- *Value Proposition* a clear and compelling business case for each service needs to be defined and understood at all levels of the organization.
- Business and Geographic Considerations differences in Centre research focus and geographical locations need to be factored into shared services, including quality of connectivity and use of different research services. Also need to balance services between "lowest common availability" and complexity.
- *Implementation Change* bias toward incremental change (pilot and roll-out), while progressively increasing new and shared services to increase adoption and minimize impact of change.
- *Cultural Change* need to consider cultural and personnel differences and actively manage change impacts across the Consortium.
- Capacity Building need to build and maintain skills and capabilities within the Consortium to sustain and grow shared services.

4. Recommendations

Based on our interviews with CGIAR stakeholders, analysis of Centre data and our global experience with Shared Services, we find that there are significant opportunities for the Consortium to better enable research and achieve greater efficiencies by sharing services across the CGIAR Centres. By leveraging the scale and knowledge of Centres and implementing leading practices and policies, the Consortium will be able to:

- Improve the effectiveness and quality of research by allowing Centres to focus more time and resources on core research activities
- Increase collaboration and knowledge sharing within and across Centres through the introduction of standards and collaboration tools
- Increase productivity and efficiencies of research support, administrative and financial services through use of industry leading practices and tools
- Improve the ability of the CG system to quickly scale and respond to potential increases in funding and introduction of cross-Centre mega-programmes
- Reduce redundancies in spending, technologies and resources by sharing common backoffice and research support services

The sections below outline specific areas for services to be shared across Centres. Because there are multiple ways in which Centres can collaborate to achieve the benefits listed above, we have listed opportunities against a continuum of sharing. Throughout this report, we will identify opportunities for Centre administrative, financial and research support functions to increase their efficiency and effectiveness across these different levels of sharing.



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It is important to note that there are several examples of services being shared across Centres today, which can also be mapped along the above continuum. A few notable examples include:

 Shared Information and Practices – IT Managers Working Group, Contacts Database, Gene Mapping

- Leveraged Buying Software Licenses, Publications
- Common Standards, Policies & Templates Financial Guideline Series 1-6
- *Common Systems / Platforms* (same vendor/system used, but not shared application or function) HR4U, Oracle, SAP
- Country / Regional Shared Services (shared within a single country or region) Nairobi Biotech Platform (BECA), ILRI/ICRAF IT Services
- *Global Shared Service* (shared across multiple centres and regions) Payroll, Pension, Insurance (via AIARC), Internal Audit, Knowledge Management (ICT-KM), Gender and Diversity, Intellectual Property (CAS-IP)

Existing shared services and previous attempts to share/harmonize services were evaluated for their effectiveness and adoption. Where possible, our recommendations look to leverage and scale existing, successful services (shared or Centre-specific).

4.1. Operating Model – Overview

While core missions, research agendas and objectives differ across the 15 Centres, their core functions are very similar. An operating model is intended to describe the key functions of a particular business or organization with the intent of illustrating interacting relationships. The model is intended to be broken down into mutually exclusive, collectively exhaustive subfunctions that make each individual function operate.

Leveraging Accenture and industry leading models, we developed a *CGIAR Centre Operating Model* to define the primary functions of each Centre and help illustrate opportunities to share services.



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The Centre Operating Model is divided into ten core functions:

Plan – functions to plan the strategic direction, research portfolio, organization and operations of the Centre

- 1. Strategy and Planning
- 2. Plan Human Resources
- 3. Plan Finance

Research – functions to conduct and support research, manage grants and projects and enable sharing of information within and across Centres

- 4. Research Functions
- 5. Grant and Project Management
- 6. Knowledge Management, Collaboration & Communication

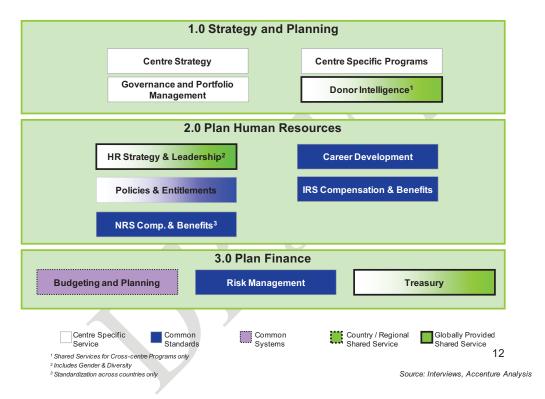
Manage – functions to operate the day-to-day activities of the Centre

- 7. Finance and Administration
- 8. Operations
- 9. Manage Human Resources
- 10. Facilities

4.2. Operating Model – Plan

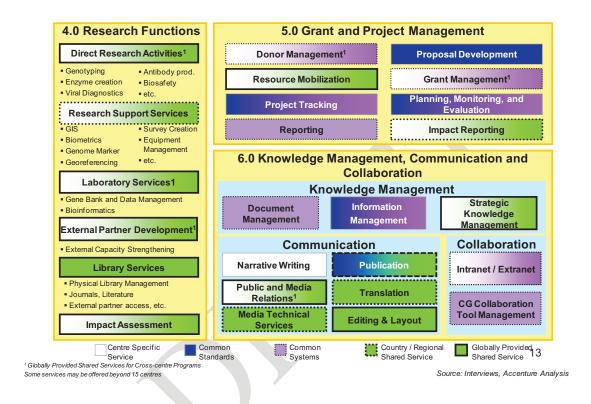
Within the Plan capability, we found opportunities to standardize or harmonize policies and a few opportunities to share common systems or services.

Functions that we felt would primary stay specific to each Centre (though will have synergies with the Strategic Results Framework and Mega Programs) include Centre Strategy, Centre Specific Programs and Governance and Portfolio Management. Some aspects of Donor Intelligence (related to Centre-specific funding), HR Strategy & Leadership, HR Policies & Entitlements and Treasury may also remain specific to an organization. An area where the Centres can benefit from more commonality is with the Plan Human Resources functions.



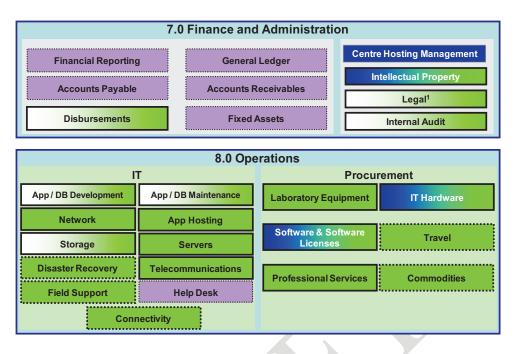
4.3. Operating Model – Research

Shared services can be used across several Research Functions to increase the level and quality of research support services. Several direct research and research support services can be shared regionally or globally, especially those that are provided by third parties today, providing researchers with greater and more updated resources. Standardization and automation of grant and project management services will increase efficiencies and allow researchers to focus more of their time on core research activities.

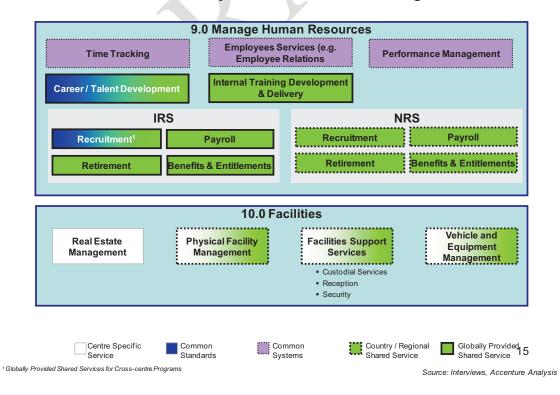


4.4. Operating Model – Manage

Within the Finance and Administration function, common systems could help better standardize and automate core finance activities, allowing finance staff to focus more time on strategic financial management priorities. Country, regional and global shared service opportunities exist for many of the Centre core support functions like legal, intellectual property and internal audit. For current shared services, like internal audit, the Consortium can look to expand services where appropriate and leverage the existing model to develop new services.



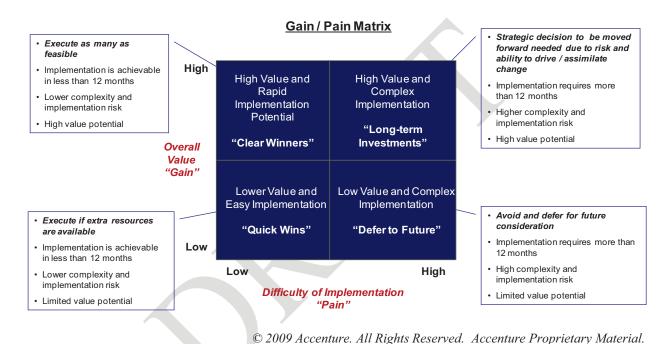
The Human Resources function provides opportunities to increase standardization, automation and sharing of services. Some HR functions may be provided globally (e.g. payroll for international staff), while others can be shared within a country (e.g. recruitment of national staff). With over 250 locations in 80 countries, including 28 sites with multiple centres, opportunities to share physical facilities and facility support services within a country/region can lead to increased collaboration, improved services and cost savings.



4.5. Shared Services Criteria

Opportunities for shared services across the Consortium are measured against a set of defined Gain (overall value) and Pain (cost/difficulty) criteria. Opportunities with a high level of value (qualitative and quantitative) and a relatively low level of risk and implementation difficulty are more attractive to implement earlier. Some opportunities that are more difficult to implement, but promise high returns, may be better considered for longer-term investments.

The functional areas highlighted in the CGIAR Operating Model above were rated against this matrix to help define those opportunities to start the implementation of shared services within the Consortium.



4.6. High Priority Opportunities

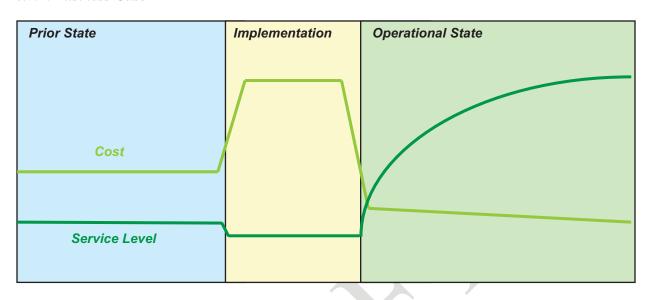
Seven high priority opportunities have been identified for shared services across the Consortium. These priorities were determined to have the highest gain potential for the Consortium and the Centres. The tick marks below show a preliminary, relative benefit impact for each opportunity. Specific benefits (qualitative and quantitative) will be provided in the detailed analysis and recommendations.

Opportunity Area	Increase / Improve Services	Increase Efficiency I Reduce Costs	Enable Future
Develop and expand research support services (e.g. biometrics, library services, GIS, etc)	44	✓	44
Standardize ways of working (i.e. project lifecycle management and accounting, costing and pricing)	44	44	111
Rationalize back-office systems (e.g. common project management and financial information system)	4 4	444	///
Share HR function (e.g. strategy, harmonized policies and benefits/entitlements, etc)	4	✓	44
Procurement / leveraged buying (e.g. travel, software, computers, research equipment)	4	11	√
Share IT function (e.g. development, support, etc)	44	44	✓
Share / rationalize physical facilities and facility support (security, reception, local HR/finance/admin/etc) – e.g. Kampala, New Delhi, Addis Ababa, etc	11	V V V	√√

Source: Accenture Experience and Analysis, 2009

4.7. Shared Services Business Case and Roadmap

4.7.1. Business Case



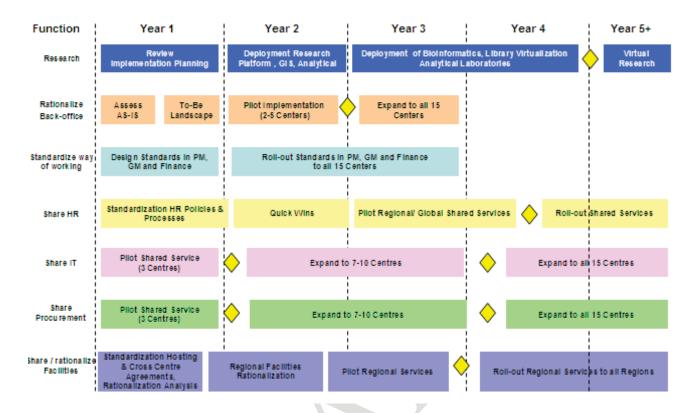
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Typical hurdles of shared services implementations include:

- Large implementation cost and disruption requires significant payoff to justify
- Organizations generally take on significant risk

4.7.2 Roadmap

The 5 year high level road map below captures the implementation schedule for the identified opportunities. Understanding that there are related dependencies between the various opportunities, this road map is intended to provide a duration view, illustrating the approximate time for implementation. Milestones (portrayed with yellow diamonds) are placed along various points of the implementation journey to serve as review points for both project dependencies and strategic alignment with Consortium objectives.



Source: Accenture Experience and Analysis, 2009

5. Overview of High Priority Opportunities

Below are overviews of the seven opportunities identified as high-priority for the implementation of shared services across the Consortium.

5.1. Develop and Expand Research Support Services

Seven primary Research and Research Support priorities resulted from the initial analysis of the Shared Services assessment project. While these priorities are not completely exhaustive of the Research function, they are believed to be of primary importance for delivering the Consortium reform objectives.

While each opportunity is unique, all seven share two common themes: (1) to further advance both operational and financial efficiency through strategic alignment within Research functions. Understanding that at present, a high degree of collaboration amongst scientists and certain functional capabilities exist; (2) to create a more formally unified and aligned Research construct, thereby helping to pave a path for future Consortium objectives. As Mega Programs are deployed, a large degree of coordination between the Consortium, Centre level support services and researchers is inherently required; to facilitate this accelerated collaboration model, function modifications will naturally need to occur. The opportunities identified will require detailed assessment to define the most appropriate operating models for each that are expected to unlock small net cost savings, and deliver significant operational and capacity based benefit.

Current Challenges

The implementation and operation of the seven opportunities, briefly described below, will require significant change on behalf of the Consortium. While the Centres are well accustomed to collaborating and sharing various services, the processes and requirements associated with delivering large scale research shared services is new. Understanding the complex nature of the Consortium (i.e., commodities, geography, required research capabilities etc.), defining a service that can be easily operated, as to not detract from Centre's core missions, and provide benefit to all involved parties may be challenging.

Recommendations

Library Virtualization (aka Digital Library)

- Operational alignment and possible consolidation of physical library facilities
- Strategic journal and materials purchasing (does not imply that all purchased materials will be made available to entire audience- copyright restrictions)
- 'Digitalization' of library materials- offered to all Centres
- Transition selected physical library materials to local universities
- Requires the construction of a consistent IT Library platform

• Sharing Continuum placement: Global shared service

Common Research Platforms

- Alignment of Consortium around 2 primary platforms 'Upstream' and 'Downstream' Research
- Creation of hub centres that support the effective delivery of platforms
- Strategic positioning (geography and commodity) of capabilities
- Sharing Continuum placement: Global shared service

Bioinformatics

- Creation of leadership structure manage/redesign organization/staffing pyramid
- Strategic investment and positioning of bioinformatics capabilities: geographic, commodity and functional capability perspective
- Focus on scale efficiencies (asset utilization) and investment prioritization
- Sharing Continuum placement: Global shared service

Biometrics Advisory Service

- Development of a shared, world-class biometrics capability, both required technology and talent
- More appropriate and efficient experimental designs
- Focus on maximizing the effective analysis of collected data
- Focus is on service improvements, less on cost savings
- Sharing Continuum placement: Global shared service

Analytical Laboratory Services

- Focus on scale efficiencies (asset utilization) of in-house capabilities
- Consortium wide decision of what to maintain in- house vs. source externally
- Assessment of service demand (and nature of demand) with centre capability capacity
- Sharing Continuum placement: Global shared service

Geographic Information Services (GIS)

- Assessment of capability need at centres- 11 Centres reported spend in 2008
- Consistent, cross CG approach to GIS technology replacement and strategy
- Sharing Continuum placement: Country/Regional Shared Services

Virtual Research

- Pairing scientist skills with project roles that exist across the CG (compared to staffing solely within a particular centre)- ex., MPs, Challenge Programs
- Consortium wide approach to skill development and skill demand management

- Successful deployment requires a consortium wide HR IT system (for posting roles, scientist information etc.), consistent policies and practices for travelling staff
- Sharing Continuum placement: Global shared service

Summary of Opportunity Benefits

Initial analysis and assumptions of the priorities show opportunity for savings through cost avoidance and operational efficiencies as well as a general advancement of capability offerings. As mentioned earlier, a significant amount of collaboration and sharing already exists in this area, however most services remain Centre owned, operated and consumed (a natural result of commodity focus) and could be consolidated into Consortium wide offerings.

The cost savings and avoidance benefits stem largely from the alignment of capability offerings that collectively have a critical mass of spend across the Centres. Through this alignment and consolidation, the Consortium can finance and operate particular capabilities that are well positioned for global or regional sharing. Strategic review of capital investment schedules, existing assets and associated cost structures, will provide the source from which financial benefit can be realized

Operational efficiencies will be realized through the design of centrally managed capabilities and assets. This structure will allow the Consortium to concentrate assets, operational spend and offering capacity in an attempt to reduce the individual unit costs. Financial savings for the capabilities are expected to result from a consolidated asset infrastructure, labour supply and maintenance costs. Non- operating cost benefits may also be realized through the reduction of required administration (i.e., Centre management time spent on support service oversight).

Capability advancement benefits are expected to result from a general improvement in service offerings consumed by researchers, scientists and program/project managers. While Centres are currently developing world- class capabilities in house, and offering these services to other Centres, there exists a defined benefit in collaboratively assessing the process of deciding which Centre or third party is best equipped to design, build and operate the capability. The Research and Research Support opportunities seek to build on the existing models, leveraging past CG successes and failures, in an effort to increase operational transparency and capability offering quality.

To realize these benefits, the Consortium must collectively agree on the operating and governance model design of each shared service offering. This agreement on design will be paired with equally important M&E responsibilities that will guide the service offering through its existence. Similar to the Central Internal Audit function's governance model, the model for the Research and Research Support services should also be jointly managed by all participating Centres.

5.2. Standardize Ways of Working (Project / Grant Management)

One common theme and outcome across all Centre visits is the current inconsistent usage of standards and the fragmented approach used across the Centres in the area of Project and Grant Management, as well as in Finance. The "standardized ways of working" opportunity area was defined to address this inconsistency and increase effectiveness of the project and grant management functions.

The findings in this opportunity area are based on the interviews conducted at the Centres reflecting the current state of the Centre functions. However, the below recommendations take into account the other ongoing initiatives of designing the new Consortium and complement the recommendation of a standardized Performance Management Process in the New CGIAR for Mega Programs and system wide operations.

This opportunity recommends the development of best practices and the implementation of standards and templates in the following sub functional areas:

- Project Management
- Donor & Grant Management
- Proposal Development & Pipeline Management
- Planning, Monitoring, and Evaluation
- Reporting
- Financial Reporting & General Ledger

While additional sub functional areas of Finance may be included at a later stage, the above defined areas offer the potential for a quick realization of improved service capabilities, enhanced strategic Centre alignment supporting increased collaboration requirements and financial benefits by having limited implementation costs and risks to roll-out across the Centres.

Recommendations

To overcome the current challenges across the Centres and functions, we recommend the implementation of a standardized Project Lifecycle Management and Grants Coordination approach by leveraging best practices, standards and templates across Centres. The opportunity areas identified below outline our recommendation for standardizing the way of working across the Centres:

Project Management

Project Management activities currently require a high degree of effort for both Research and Project administrative personnel. Most Centres use their own methodology and templates for

project estimating, milestones and dependencies tracking, project review methods and resource allocation. Furthermore, centres apply various costing techniques to track and apply costs to projects. The full allocation of project costs to projects (i.e. full cost recovery) and the alignment of project plans to activities (i.e. activity based costing) is standard in other industries. This initiative should be used to roll-out these methods across the Centres. In order to improve the efficiency of Project Management and to enable the Centres to manage Mega Programs, we recommend implementing:

- Common standards and templates for project plans, milestone tracking and budget allocation / tracking
- Common standards for allocating resources to projects and assessing project dependencies
- Standards for allocation of project costs (following CG Financial Guidelines)

Donor and Grant Management

The envisioned design of the new Consortium proposes the Consortium to be responsible for Donor interface and reporting of Mega Programs, increasing the need for standards in measurement and reporting. In addition, each Centre will increase its Donor and Grants Management capabilities by implementing standards, sharing best practices, templates and lessons learnt. We recommend the following to be implemented:

- Standards and best practices on the coordination of donor relationship and the tracking of opportunities to be shared across the Centres
- Standards for the tracking of the donor source and the internal fund allocation reporting to projects
- Best practices and standards on pipeline prioritization on which donor opportunities to be moved forward in the instance of there being limited resources, time, etc.
- Reporting to donors can only be standardized to a certain extent as different donors pose
 different requirements on reporting to the Centres. However, a Consortium standard in
 donor reporting could improve the position of a single Centre during the negotiation
 process with donors regarding reporting standards and requirements

Proposal Development & Pipeline Management

Proposals are developed in cooperation with Researchers and assigned administrative support personnel to acquire restricted and unrestricted funds. Currently each Centre has developed its own methodology on how to develop proposals and use its own templates. The effort to develop proposals is currently highly manual effort-intense for both administrative and research personnel. In addition, pipeline management including the

prioritization of projects is conducted on the Centre level leaving out the potential to leverage resources and funds across the Centres.

Common standards and shared best practices should be implemented to (1) support the envisioned common development and prioritization of proposals on a Consortium level for Mega Programs and (2) to increase the efficiency of Centre proposal development. In turn, this could improve the success rate of proposals, for those both managed cross-Centre and within Centres. We recommend implementing the following:

- Common standards on the proposal structure and the method of developing proposals
- Standardized proposal templates
- Shared best practices and lessons learnt on proposal development and pipeline management across Centres to improve success rate
- Coordination of common cross-Centre proposal development and pipeline management for mega programs

Planning, Monitoring and Evaluation

Currently, the Centres do not have a common approach to plan, monitor and evaluate research projects. Our recommendation aligns well with the proposed implementation of the M&E Framework for Mega Programs, defining the Consortium to be responsible for establishing and managing a harmonized and accurate performance monitoring system for its Member Centres and their programs. It also sees the opportunity to implement the following outside the Mega Programs:

- Common templates of project plans and monitoring reports
- Common standards and shared best practices to enable the harmonized development of project plans, providing standardized project reports and evaluations
- Harmonize project monitoring and evaluation between System and Centre level
- Standards for allocation of project costs (following CG Financial Guidelines)

Reporting

Project reporting internally to the CGIAR executive committees as well as reporting to external stakeholders should be standardized across the Centres. Currently, the Centres voiced in the interviews that this activity is very time consuming due to the usage of different reporting standards across the Centres. In line with the recommendation on the design of the Consortium and the implementation of reporting standards for Mega Programs, we see the opportunities as follows:

• Common standards and templates to harmonize Centre specific project reporting

- Harmonize Centre and System level reporting linking project reporting standards with Medium Term Planning standards of the system
- Standardized and integrated reporting across mega programs to stakeholders while ensuring flexibility to respond to differing reporting requirements

Financial Reporting & General Ledger

The integration of Financial Reporting and Accounting Services with Project Management information and services is one goal of the initiative. The procedures and methodologies for preparing Centre Reports and General Ledger Accounting vary between the Centres and reduce the transparency on system level. Although reporting and accounting requirements depend on specific country legislation and sometimes the nature of the Centre, the opportunity exists in implementing

- Common accounting and reporting standards to align Centre specific and cross Centre financial reporting (e.g. harmonized or aligned Chart of Accounts, common allocation and accounting standards)
- Common reporting templates to support the set-up of reports and ensure cross Centre comparison

Summary of Opportunity Benefits

The recommendation will yield the following benefits:

- 1. Increase the efficiency through standardized work processes and templates leading to reduced time spend on administering projects and grants by Researchers and Administrators and increased quality of services provided.
- 2. Ensure System wide consistency, transparency and collaboration
- 3. Improve the ability to scale up Project and Donor Management services to enable Centres to manage and coordinate future Mega Programs
- 4. Enhance the decision making capability and increase the success rate of proposals through integrated Donor Management and Project Coordination

5.3. Rationalize Back-office Systems

Rationalizing back-office systems and a possible implementation of a common system in the area of Grant and Project Management, Finance and HR has been identified as a key priority area. The Centres have a highly fragmented technology system landscape that impedes the

integration of functional areas such as Grant and Project Management, Finance and HR as well as collaboration across Centres.

The rationalization of back-office system encompasses the same sub functional areas as the standardization initiative outlined above:

- Donor & Grant Management
- Proposal Development
- Planning, Monitoring, and Evaluation
- Reporting
- Financial Reporting & General Ledger

Currently the Centres have implemented 8 different systems in Finance, have developed inhouse developed Project Management Systems and use 10 different HR systems, most of which are operated differently at each Centre.

A number of Centres have already outlined the current challenges and started a One Common System (OCS) initiative in which they analyzed the current state and defined requirements for the first participating Centres. The recommendation below acknowledges and complements the outcome of the OCS initiative and proposes to leverage the already conducted work as much as possible.

The two opportunities (standardize way of working and rationalize back-office systems) are closely linked but not necessarily dependent on each other. However, it is recommended to standardize processes before rationalizing systems or even implement a common system across Centres and functional areas.

Recommendations

Based on the current challenges and the input received during the site visits and the data gathering exercise, a common system for project management, proposal development, project reporting, pipeline management, resource mobilization, budget tracking and full cost allocation should be roll-out throughout the System and interfaces should be provided to the existing HR applications. A common system promises the most benefit in terms of efficiency gains, integration of support functions and in shifting admin work from the Researchers to administrative personnel. It is also a prerequisite for the Centres to participate in Mega Programs.

An initiative should be started to assess in detail current redundant back-office systems and to analyze the possible implementation of a common system across Centres and Functions. Within this assessment phase, the work provided by the OCS initiative can be leveraged as much as possible. However, even though 10 Centres expressed their commitment in implementing a

common system, not all Centres participated in the initiative and it is important that all Centres' current state assessment and requirements are included. In case an insufficient number of Centres will join the initiative, back-office systems should be rationalized independent of the implementation of a common system across functions and Centres.

Based on Accenture's experience in implementing similar cross functional system, the implementation of the system is estimated to have a timeframe of around 3 years. Therefore, it is recommended to instantly continue with the initiative as many Centres already committed to this initiative and a common system is a prerequisite for the implementation of Shared Services and the implementation of Mega Programs.

The future system landscape should be implemented in a phased approach. Due to the high implementation effort and the related costs a first group of Centres that is willing to take the effort and the related risk should conduct a first Pilot. Also those Centres should be considered as part of this group which have old systems in place and were planning to implement new system anyway or who have committed to go forward immediately. After stabilizing the system and implementing quick improvements another group of Centres should be migrated to the new system landscape. If necessary a third wave of Centres could be considered to roll-out the future landscape at a later stage.

Summary of Opportunity Benefits

The following outlines the benefit of rationalizing back-office systems and the implementation of a common system:

- 1. A common system solution enabling improved seamless business processes within Project, Financial and Grant Management Services and offers the options to integrate further components (e.g. HR)
- 2. Rationalization of back-office systems across Centres improving the collaboration between CG Centres and enabling the implementation of Mega Programs
- 3. Rationalized application landscape with cross Centre licenses and maintenance support reducing duplicated support services and per unit software and maintenance cost, and supporting the Centres to connect with remote sites
- 4. Aligned and integrated solutions enable the integration of external partners into Centre system landscape

5.4. Share HR Function

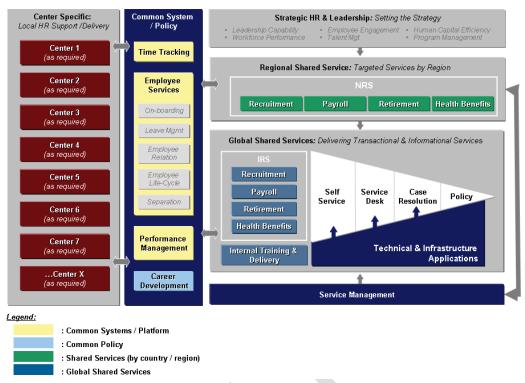
There are currently efforts being made among select Centres to share Human Resources (HR) services. These are steps in the right direction and these efforts should be further leveraged. With the growth agenda for the Consortium for the next few years, the Centres need to further

collaborate and share HR services at both regional and global levels. A shared HR function will help enable the Consortium to leverage its scale, eliminate redundancy and provide better services across all Centres.

Current State	Future State
Operate autonomously with limited coordination across Centres	Operate with consistent, transparent policies and procedures across Centres
Distinct and fragmented HR systems for each Centre (11 HR systems across 15	Common HR systems to encourage assess and sharing of employees data
 Centres) Some evidence of process best practices in certain Centres, but no leverage of these at global level 	 Global leverage of best practices across Centres at global level Strategic human capital strategy (specifically in the area of talent
Lack of strategic human capital strategy to attract and retain the best talent	management) which are aligned to CG vision
Lack of strategic HR initiatives across Centres	Strategic HR supporting cross Centres in collaboration with Centre leadership and HR teams.

Recommendations

The recommended approach for sharing services within HR is to provide regional and globally shared HR functions. Common processes and systems will facilitate the implementation of a global function, enabling the CG to effectively take advantage of its size and position as a global consortium.



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Local HR Support / Delivery – Performs selected services at local level when required. For example, recruiters (reduced headcount) are present at Centres with heavy recruitment volumes. These FTEs are an extension of the 'back office' operations, although they reside in business operations.

Common Systems / Policy – HR policies / processes should be streamlined to ensure effective and efficient services. Benefits and Entitlement should be harmonized at country / regional level to support mobility of resources at during the launching of Mega Programs. This will also facilitate the implementation of regional / global shared services at the later stage of implementation.

Regional / Global Shared Services – Transactional activities like recruitment, payroll, retirement and health benefits can be shared across the region / globally. Shared services will allow employees to quickly obtain answers and complete transactions while preserving access to skilled HR professionals for more difficult questions. The basic premise of the model is that the needs of HR customers should be met using the cost effective means while maintaining high quality service.

Strategic HR and Leadership – Establishes People Strategy at CG level to support business objectives. Plan and execute cross Centre strategic HR initiatives (with Centre leadership and local HR teams) to increase efficiencies through common standards and policies in key HR areas: Career Progression, Recruitment, Payroll, Benefits and Performance Management.

Service Management – An effective Service Management Framework defines the approach, responsibilities and tools employed by the shared services Centre to deliver and manage services and ensure the joint ownership of end-to-end process performance

Critical success factors for HR Shared Services:

- Vision Clearly defined and communicated shared services objectives
- Brand Develop and position a Shared Services brand to advertise its services and benefits
- Governance Create a framework with defined accountabilities for executive leaders to guide/monitor the delivery of Shared Services
- Knowledge Establish a knowledge base for Shared Services to guarantee accurate information is provided to requestors
- Business Case Determine the benefits that Shared Services will deliver to the organization and monitor with Senior HR leaders on an ongoing basis
- Talent Recruit and select qualified resources, internally and externally, to resume the potions in shared services
- Change Management Create a multi-dimensional change management plan to gain acceptance and build awareness of the new model
- Service Levels Define and measure key performance metrics and hold Shared Services Centre accountable for targets

Summary of Opportunity Benefits

Shared HR services will generate significant improvement in internal customer satisfaction, productivity and quality. Centres will receive more HR service offerings, leverage on common technology and leading practices whilst improving overall performance in research.

- Standardized HR Process and Policies Harmonized policies and evolve to a 'standard CG model' over time
- Reduced HR spend Shared HR services will reduce HR spend and eliminate duplicated effort at respective Centres
- Increase efficiency Increase efficiency and satisfaction of internal employees
- Improved collaboration Standardized HR policies will allow improved collaboration across Centres and geographies

5.5. Procurement / Leveraged Buying

Across the Centres there are a wide range of interaction between Centres for procurement, ranging from jointly planned and executed purchasing to ad-hoc and individual Centre purchasing. Where sharing and leveraged buying is currently in place the CG Centres have experienced substantial discounts. Examples of current sharing today are:

• Software Purchasing

- Software License / Maintenance / Contract Expiry dates are tracked to facilitate greater centralized purchasing in the future
- Microsoft products: 14 CG Centres have Academic or Charity status in their local countries. CIAT has obtained a Microsoft Campus Agreement that the CG is formally trying to extend for all Centres
- o Antivirus software purchased through IRRI
- Jointly procured Google Earth Pro licensing
- o Environmental Systems Research Institute (ESRI) agreements

Training

 Centres have collaborated to jointly purchase external training modules, including GIS technology, ESRI, and other instructor-led technical training exercises

Publications

o Centres have jointly purchased access to commonly used scientific publications

As the Consortium is implemented and charged with ensuring operational efficiency across all Centres, there exists further opportunities to increase collaboration and share procurement of commonly purchased goods. Such items include:

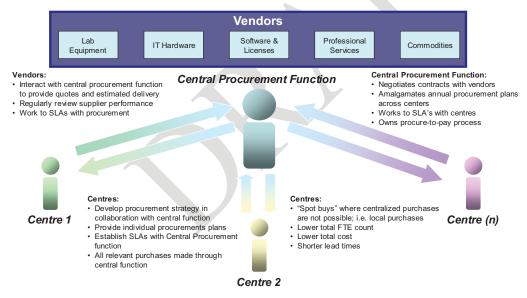
- Laboratory equipment e.g., centrifuges, cold storage, microscopes
- IT Hardware e.g., servers, laptops / desktops, printers, peripherals
- Software & Software Licenses e.g., various pieces of software and the rights distribute to multiple users
- Travel e.g., airfare, hotel, rental cars
- Professional Services e.g., external audit, financial advisory services
- Commodities e.g., petrol, furnishings, office equipment

Today, there is a large willingness to increase sharing in procurement to further experience the savings associated with leveraged buying, as are realized today in the above examples of sharing.

Recommendations

The appropriate method to share services within procurement is to provide a globally shared procurement function. Joint purchasing allows the consortium to leverage its scale and buying power, while common processes, standards and systems facilitate the implementation of a lean and efficient global function. The function would be a hybrid of global purchasing managed by the Consortium for some goods, while others will be procured from a regional or individual Centre function. The global function would focus on providing laboratory equipment, IT hardware (where vendors allow global procurement), software & software licenses (where vendors allow global procurement), and some professional services contracts. The regional function would provide travel and commodity goods. Individual Centres would retain the ability to purchase small items (e.g., office stationary, local goods), certain professional services contracts, and other 'spot buys' while leveraging best practices as advised by the Consortium. Also, there needs to be further analysis to determine what specific goods must be locally sourced to prevent items from being "stuck at the dock."

For the global shared service functions, the central function, individual Centres, and vendors play important roles in the procurement process.



Source: Accenture Analysis, 2009

Central Function	Individual Centres	Vendors
Assemble Centre procurement plans	 Develop multi year procurement 	 Provide quotes and estimates to
to one large annual plan	strategy and annual procurement	central function
 Finance-governed, accounts- 	plan	 Managed to SLAs
payable focused, shared services	 Establish SLAs with central function 	
operations whose mission is to	 Most purchases through central 	
handle transactions	function, but handle 'spot buys'	
 Negotiate pricing and shipping 	where centralized purchase is not	
contracts with vendors to Centre	feasible	

specifications • Handle contract management	
Handle contract management	

Notes:

- 1. The regional function within procurement will operate under a similar framework as above, though it will be regionally operated
- 2. The nature of the professional service contracts will determine its purchase location; research related contracts are often directly related to the type of research (e.g., economic expertise)

Summary of Opportunity Benefits

Creating a global shared service for procurement would yield both quantitative and qualitative benefits, as identified below:

- **Reduced procurement spend**: Spend reduction achieved through leveraged buying and fewer transactions of greater volume. There will also be a reduced cost per unit via leveraged buying enabling scalable procurement function to meet future CG growth projections.
- Improved procurement performance: A common supplier database will enable the procurement personnel to make better purchasing decisions. Sharing best practices and existing agreements will reduce lead times and provide a more predictable distribution of goods. Informed purchase decisions will lead towards reduced spend and maximum value contracts, allowing for a strategic approach to sourcing.
- Increased range of vendors per good: Amalgamating suppliers across the Consortium will expand the portfolio of vendors for each good; furthermore a larger portfolio of vendors facilitates competition between vendors, building in house supplier relationship management expertise
- Increase employee productivity: Specialists are able to train member's procurement teams and increase overall skill level, while spending less time in researching new vendors or analyzing supplier KPIs. Core function time will be regained through streamlining contract administration and tendering processes. Decreased lead times for goods procured will enable service customers to have access to their materials faster and thus enable them to perform their jobs more effectively.
- Common Standards: Common purchasing will yield common standards as the benefits to the Consortium and / or system take precedence. Common standards yield an integrated technology environment and thus facilitate an easier change process in the event of new technology introductions as the system evolves.

Though there are benefits associated with sharing, there are also corresponding challenges and risks that must be understood and accounted for to achieve successful implementation:

- Varying Process Maturity Today, procurement processes vary in maturity; future process design will leverage both industry and Centre best practices.
- Systems Upgrade / Implementation The technology environment may require upgrades to supplier databases, portals, and provide a link between finance and procurement processes.
- Current Vendor Preferences Must take efforts to balance existing preferences while ensuring cost effective goods are procured.

5.6. Share Information Technology

The Information Technology (IT) function at CGIAR Centres is more than a "processing" utility, as is common in other industries. Knowledge generation for innovative research occurs using IT in effect as a laboratory tool. As such, many Centres provide a common set of IT services at varying service levels, working collaboratively when possible.

Having recognized industry trends and the advantages of moving towards shared services, IT managers have had an increased focus on ways to collaborate. Examples of sharing today include:

- Common purchasing for software licensing and IT services, some common scientific systems, and adoption of some common policies
- Campuses in close proximity, as in the case of ILRI and ICRAF in Nairobi, Kenya, have also adopted a common IT function to support both Centres.
- The Information and Communications Technology and Knowledge Management (ICT-KM) Program was established to position the CG as an internationally distributed and unified organization, enabling CGIAR staff, regardless of their location, to collaborate in science, using high capacity computing and communication.

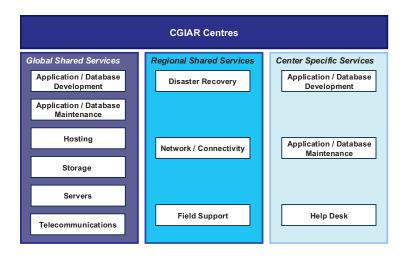
As the focus moves towards the direction of increased cross-Centre collaboration in support of Mega Programs, the Consortium is faced with the opportunity to capitalize on previous successes in sharing IT services by expanding the range of services offered. Centres are quite willing to share IT services where there will be cost or service advantages in doing so, and while it makes sense to share some services, others must be kept Centre specific to ensure minimal service interruption, acceptable performance, and cost effectiveness of the research functions. The primary IT services offered today include:

• Application / Database Development & Maintenance – The design, creation of new applications or databases, and the on-going support and enhancements required to maintain

- application or database functionality. Includes gathering requirements, functional design, testing and rollout services
- Network / Connectivity Providing LAN / WAN services and all activities associated with planning and management of the network
- Application Hosting Running an application on external servers
- Storage The ability to store data and information on external hardware, i.e. servers
- Servers Activities associated with server maintenance, capacity analysis, planning, installation, performance monitoring, enhancements, and retirement / disposal
- Disaster Recovery The service of providing business continuity, data and network recovery in the event of a major disaster
- Telecommunications Administering telecommunications services, including installation, maintenance, and asset management
- Field Support Complex IT support for major issues
- Help Desk Basic IT support services for day to day issues, e.g., password

Recommendations

The figure below illustrates an IT Service Delivery Framework to illustrate how IT services will be delivered, either shared globally or regionally, or provided at each Centre. Global shared services will be provided from a centralized function in order to minimise costs while still delivering effective services and incorporate centralized strategy formulation, governance, and financial management. Regionally provided services will also be subject to regional strategy formulation, governance and financial planning and the service itself will be administered in a regional fashion; each region also sets its own standards and select systems. Centre specific services will be administered 'as-is' so as to retain the flexibility and service levels currently provided to meet the current and future demands.



Source: Accenture Analysis, 2009

Since a shared service is a transaction oriented function, both the centralized function and individual Centres have responsibilities.

Service	Central or Regional IT Function Role(s)	Individual Centre Role(s)	Sample SLA
App / DB Development & Maintenance	 Design functional requirements Analyse system design requirements Build and test application / enhancements Complete required documentation 	Gather business requirements / enhancement requirements Design training materials and train workforce Retain in-Centre capability to deploy custom applications and DBs	Percent On-Time Percent On-Budget
Application Hosting	Assign Webmaster Monitor and measure web traffic	Choose application and set performance expectations Retain in-Centre capability to maintain custom applications and DBs	Application Availability
Storage	Provide and monitor storage capabilities Provide backup / restore	Agree upon data governance standards Upload and download data at user discretion	System Availability Time to Restore
Servers	 Install, configure, manage, and retire servers Manage capacity Monitor user performance 	Upload and download data at user discretion	Time to Provision Speed to Access
Telecom	Acquire, install, manage and maintain telecommunications infrastructure Monitor performance and remediate issues Perform required changes to telecommunications environment	Identify telecommunications requirements	System AvailabilityTime to Provision
Disaster Recovery	Disaster recovery planning and management Building disaster recovery infrastructure Disaster recovery network management and testing	Define end user recovery services, including costs associated with connectivity and support	Time to recover systems in the event of disaster

Service	Central or Regional IT Function Role(s)	Individual Centre Role(s)	Sample SLA
Network / Connectivity	 Installation and providing LAN / WAN services Capacity analysis Performance monitoring and network management Network operations 	Determine network needs	Percent time availableCost to serve
Field Support	Apply patches to end user devices and infrastructure Provide network support, server support, and other support activities as necessary in the field (i.e. beyond the scope of what is typically provided by desk side support personnel in primary locations)	Establish SLAs	 Percent of issues resolved in one day Time to deploy emergency patches

Summary of Opportunity Benefits

Sharing the above set of services yields substantial quantitative and qualitative benefits, including:

- Reduced Cost Administering global services will reduce costs in areas of application development and maintenance, hosting, servers, storage, telecommunications, support and connectivity. Hardware consolidation will result in higher utilization of assets and provide a higher return on investment.
- New Services / Service Improvement By leveraging existing best practices and focusing improvement efforts in certain areas, new and improved services will be offered, increasing productivity of administrative and research staff across the Consortium and Centres.
- Increased Efficiency Standardizing processes and delivering a global or regional service increases efficiency and utilization of resources, enabling the ability for IT to meet growth projections. Other benefits include reduced down-time for applications and hardware, improved end-user issue resolution, and improved end-user productivity.
- Improved Collaboration A user-oriented IT architecture yields improved collaboration across Centres and geographies, allowing for increased sharing of information and reducing research time on publication searches for materials.

5.7. Share / Rationalize Physical Facilities and Facility Support

Current facility services include safety & security, housing, transport, physical facilities (buildings, auditoriums, labs and schools), storage, food & catering, installations, architecture, utilities, maintenance (electricians etc.) and site operation management. Many HQ Centres have a robust offering of facility services and are essentially self sufficient in this area. Facility services are largely delivered by in-house capacities although some Centres use external providers for limited facility services. For example, ICRAF out sources mail room functions while IRRI uses third parties for food and janitorial services.

The Consortium is also uniquely positioned as many facility sites are located in low cost locations. As such, typical Shared Service savings gained from moving to a low cost location will not have the same implication for the Consortium.

It is important to note that, as in other areas across the Consortium, some sharing is already taking place between Centres with success. Large sites host scientists from other Centres providing housing, transportation and other valuable facility services. For example, IRRI has temporary housing on site for employees working in the Philippines short term while ICRISAT provides vehicle transport for visitors and scientists. These elicit positive reactions because employees feel that in addition to receiving a valuable service they feel more comfortable and safe being picked up by a familiar face or working with their colleagues to arrange housing. This cross sharing of facilities is a move in the right direction and should continue to be leveraged.

Recommendations

One common theme that resulted from the site visits was that facility duplication occurs largely in the areas of office space, infrastructure and support staff (reception, security etc.). As a result, a major opportunity has emerged to increase efficiency and reduce costs by *rationalizing facilities & facility support*. This includes opportunities to close redundant sites and consolidate support services within sites that are already consolidated. It is unlikely that major facility savings will be realized from closing any HQ locations; however, savings are possible in the regional sites.

The value of rationalizing facilities and facility support becomes more apparent when Mega Programs are factored in. Mega Programs, as currently outlined, imply greater sharing, not only of resources but also of facilities. A system wide approach and flexibility to leverage existing facilities can help drive Mega Program scalability, efficiency and success.

A significant opportunity also exists to save on multiple negotiations of country host agreements. Under a single Consortium wide host agreement, individual Centres could expect a simpler, more transparent, consistent way of operating in countries. This can in turn help relieve

some of the administrative burden and cost involved in negotiating complex, ever changing host agreements. For the Consortium as a whole, a common standard in this area could lead to more focused and streamlined facility operations.

Additionally, greater facility sharing around specific technologies (Biotech labs etc.) can help the Consortium to improve spend utilization and also foster a more collaborative environment, bringing together researchers from across the Centres more effectively. At the system level, increased technology sharing and infrastructure can help researchers gain greater access to a broad set of capabilities which may not be currently offered at their Centre (Example: Genotyping). In addition to research related facilities, housing facilities and related support can offer great value to hosted scientists.

Finally, there are opportunities in facilities to create common standards and processes, improve capacity utilization and hazardous waste & equipment disposal.

Site Consolidation

The CGIAR has approximately 253 site locations (including Centre headquarters). The table below highlights how these sites are distributed geographically and potential consolidation gains in facilities in the different regions.

The estimated number of sites to be consolidated is based on an initial review of sites that appear to be geographically co-located and meet other criteria described below. To arrive at the range estimate of potential sites to be consolidated (18-36), HQ and regional site data was first collected from the 15 HQ Centres. From this data, a location matrix was created to understand where overlap exists. The range below assumes 20-40% of *overlapping* sites could be closed. It is important to note that the pool of potential sites for consolidation is based on approximately 88 sites across 28 locations where overlap exists, and not the complete set of 253 research sites.

Region	Total # of Sites (Including Centre HQs)	# of Potential Sites to be Consolidated (Estimate)
North America	4	0
Central America	3	0
South America	18	1-2
Africa	112	10- 20
Europe	7	0

Middle East	12	0 – 1
Asia	94	7 – 13
Oceania (Australia, Guinea)	3	0
Total(s)		18 - 36 (7% - 14% of Total Sites)

Criteria used to identify potential redundant sites:

- Site Location sites that are co-located or close in proximity to one another provide additional incentive to rationalize facility operations; coordination and logistics are simplified.
- Presence in Country there may be incentives for keeping a particular site open i.e. strong alignment with government or national research.
- Size of Centre larger Centres will offer greater savings opportunities.
- Degree of Current Hosting / Sharing sites with little or no sharing may be good candidates; the impact of closing a site that is hosting other Centres may be more significant.
- Cost of Current Facility Operations –sites with high facility spend may stand to benefit from hosted services.
- Research Imperative the need for a site to undertake research.

Summary of Opportunity Benefits

Key benefits include:

- Improved facility services across regional staff system wide approach leads to more focused and streamlined facility operation, common standards and processes reinforce a consistent way of doing business.
- Cost reduction in Facilities & Personnel rationalization of facility and facility support allows the Consortium to save by reducing duplication across sites (rent, telecom etc.)
- Eliminate redundant negotiation Consortium wide host agreements provide harmonized costing and pricing, savings from elimination of custom agreements and increased transparency.

- Enable programs to operate across Centres in regions leverage low cost Centres, develop regional hubs that can deliver 'follow the sun' services (i.e. around the clock).
- Faster ramp up of new research programs in region increased facility sharing facilitates greater staff movement, faster on boarding process and increased capabilities increase potential to win additional proposals.

Location Strategy

To position the CG for realizing cost savings, enable a structure for future growth / scalability and drive organizational efficiency, a coordinated and strategic location strategy is required. This section introduces key Location Selection Criteria, Location Strategies and Location Recommendations. The location recommendations highlight those Centres which are best positioned to become regional or global host Centres for Shared Services. It is important to note that while there are potential opportunities to consolidate some sites, many sites are mainly driven by specific research needs that require a specific climate, soil composition, or other geographical needs.

Location Selection Criteria

The following criteria can be used to help guide recommendations on which locations are best positioned to offer the breadth of Shared Services (regionally or globally) outlined in this document. These criteria attempt to balance the most suitable locations for effectiveness, reliability, stability and potential costs.

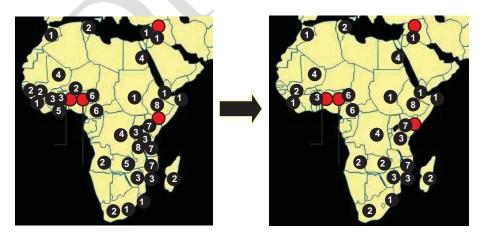
Cost Criteria	Suitability Criteria	
Labor	Availability of skilled, low-cost labor	
Lease / Occupancy – rental amount	Existing services (either by Centre or third party)	
	Ex. Research platforms.	
Taxes	Proximity to field sites	
Wage inflation	Degree of current facility sharing / support	
International staff	Language Availability (English)	
Telecom & Power	Security	
Support and equipment maintenance	Technology & Communications - Availability and quality of connectivity / bandwidth	

Transport (Roads, proximity to airport)
Incentives
Government; favorable Host Country Agreements
Potential for additional donor support / funding (for delivery Centres in otherwise non- competitive markets)

Location Strategies

- (1) Centre-Provided certain services will be retained at current locations and will be provided with in house capacity. These services will not fall under the umbrella of Regional or Global Shared Services. Examples include Real Estate Management, Portfolio Management, Narrative Writing, Centre Strategies and Centre Specific programs.
- (2) Regional Shared Services regional support is consolidated within a logical geographic area to provide a higher level of service to underserved Centres or projects (e.g. IT and research/lab services). A principal goal is to consolidate the number of facility operations in order to limit duplication and streamline operations.

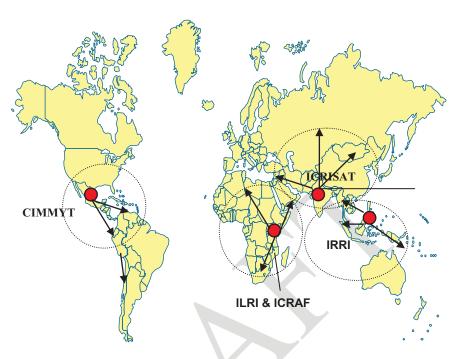
ILLUSTRATIVE EXAMPLE ONLY



(3) Global Shared Services – 3 to 4 large regional hubs provide 'Follow the Sun' style services (i.e. services / tasks are passed between sites that are time zones apart. This enables the organization to increase responsiveness and work around the clock).

Examples include: Network, Connectivity, Library Services, Disaster Recovery / Business Continuity etc.

ILLUSTRATIVE EXAMPLE ONLY



Both Regional and Global Shared Services strategies provide CGIAR with the opportunity to decrease the cost of operations in the long term and achieve greater organizational efficiency. Other benefits of consolidating (co-location of sites) and providing services out of regional hubs include:

- Leverage economies of scale
- Enable standardization
- Optimize cross-learning opportunities
- Simplify implementation and support of enabling technologies
- Potential to cross-train staff as activities grow in scale
- Greater sharing and collaboration across Centres

Location Recommendations - Regional Hubs

For many organizations, the decision to offer Shared Services in a green vs. brown field location can be a challenging one. However, one advantage the CGIAR has is that it is uniquely positioned with operations in many low cost locations. Therefore, a clear case exists for

leveraging existing CG Centre headquarters to offer Shared Services; answering the question of where to host these services requires further exploration and analysis.

Using valuable data and insight gained from site visits across the CG as well as objective location selection criteria, certain Centres begin to emerge as potential host Centres.

The table below summarizes Centre HQs with significant potential to become Shared Services hubs. The four distinct regions (Central & South America, Asia, South East Asia and Africa) are grouped accordingly with like colors representing the same region.

Centre HQ(s)	Location		Region to be Serviced	Advantages
CIMMYT	El Batan, Mexico	CIAT	Central America, South America	Low cost; Spanish language skills; potential to service Central and South America.
ICRISAT	Hyderabad, India	IRRI	Asia	Economies of scale; low cost; availability of skilled labor.
IRRI	Los Banos, Philippines	CIMMYT	S. East Asia	Low cost labor; strong government relations; international status; large campus.
WorldFish	Penang, Malaysia		S. East Asia	History of Shared Service operations in Malaysia; availability of skilled labor.
ILRI, ICRAF	Nairobi, Kenya		Africa	Co-located Centres; history of shared initiatives; potential opportunity to secure additional donor funding; existing technology platform (BECA) which services eastern and central Africa; large campus; low-cost NRS labor.

Service Providers

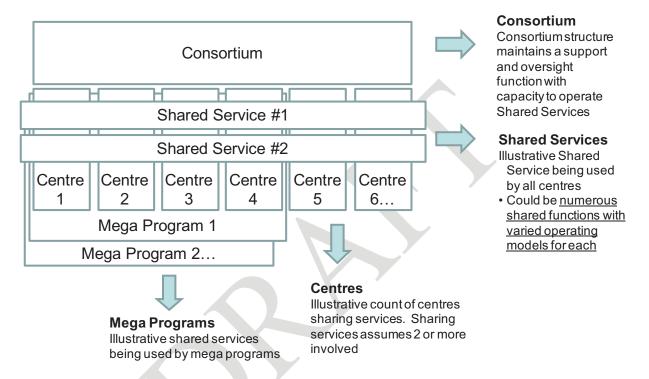
Shared Services will either be provided either by a Centre, the Consortium or by a third party. Initially, these services will be provided largely through Centres (regional hubs) or through the Consortium. Other services, specifically those that are highly commoditized (Procurement, IT etc.) and have a clear end to end process (with limited hand-offs), may be suited for third parties after critical mass is reached.

6. Implementation Recommendations

6.1. Governance

The effective governance of CGIAR shared services across the Consortium is critical to ensuring successful implementation, adoption and long-term use of shared services.

Governance Illustration and description



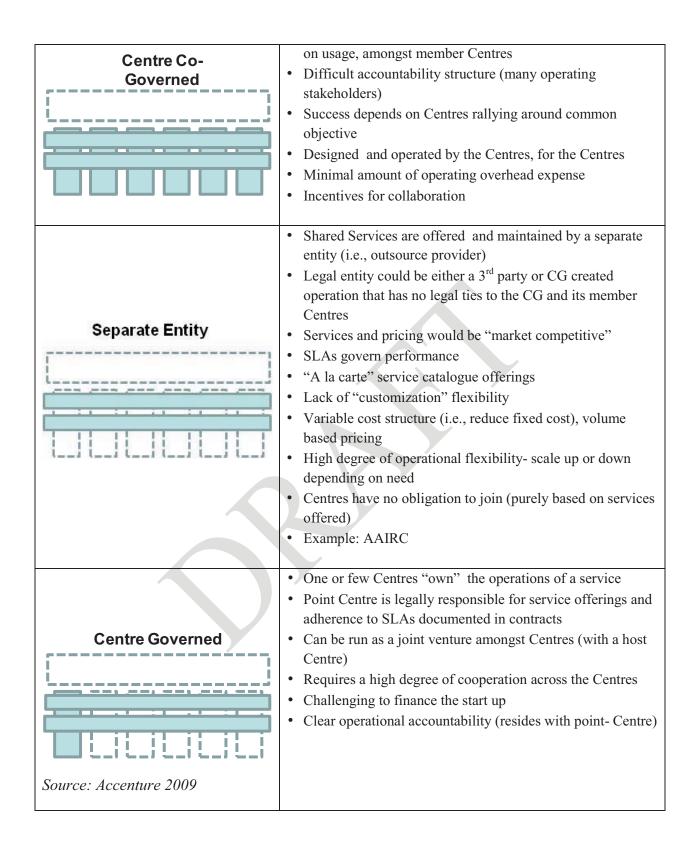
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The model above is an illustrative framework used to describe the various high-level options the CG has when discussing various governance models for proposed shared services. While not designed to be completely exhaustive, the above structure captures the primary stakeholders involved in a shared services offering; the Consortium/Alliance, involved and uninvolved Centres and the shared service offering itself.

The above illustration is used in the table below to model various options for governance of CGIAR shared services.

Governance Model Options

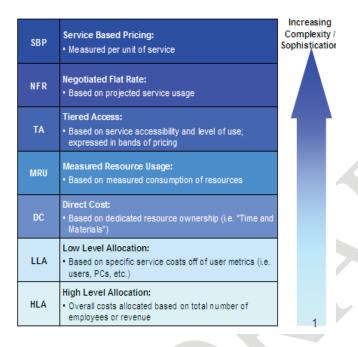
Model	Description		
	Selected Model- Most likely scenario		
Hybrid- Consortium/Centre S fir S B a P	 Centres and Consortium jointly fund and operate the start up of the services Start up costs are distributed across a larger base of "investors" Shared Service "council" and leadership with representation from all Centres Shared Service technical advisory / working groups for each major function Balanced and potentially complex structure (shared accountability) Provides incentives to collaborate across Centres and with Consortium 		
Consortium Governed	 Services are operated and delivered by a centralized CG unit (i.e., Consortium) Consortium has ultimate control over Shared Service operation Service levels are defined by customers and priced accordingly 3rd Party/Vendor type relationship with Centre Simplified accountability structure Would require management to oversee operations (increase in cost base) Challenge: how much influence can/should the Consortium have over whether or not Centres participate Challenge: Centres have no "skin in the game" and easy to push back 		
	 Services are jointly owned and operated by involved Centres (i.e., services offered, pricing, SLAs etc.) Shared Service offering unit has management and governance structure in place Joint venture between start- up Centres No involvement from the Consortium, completely Centre led Chargeback models are constructed to distribute cost based 		



6.2. Chargeback

Chargeback defines how Centres or other consumers of shared services will be "charged" for their use of services. Selecting an appropriate chargeback model or models is very important to ensure costs are properly recovered in a "fair" and agreed-upon manner.

The service chargeback models below vary in complexity, sophistication, perceived fairness, and require different types of data to determine pricing.



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Different chargeback models might be used for different services and may also be evolved / changed as more services are implemented.

Companies use *more complex* models of chargeback when:

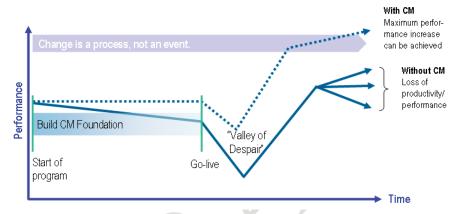
- Financial data is accurate and available
- Services are documented in a widely available Service Catalog
- Systems support easy tracking of usage
- Ad-hoc decision making in service usage is prevalent
- Many organizations utilize the shared service, increasing the desire for fairness in pricing and usage

Companies use *less complex models* of chargeback when:

- It is difficult to measure cost of services
- Forecasting is strong
- Systems are common
- Usage between organizations is relatively similar
- Agreement can be reached on overhead pricing

6.3. Change Management

Change Management is the effective management of change to help the Consortium inform, involve and prepare all stakeholders for the implementation of new and shared services.

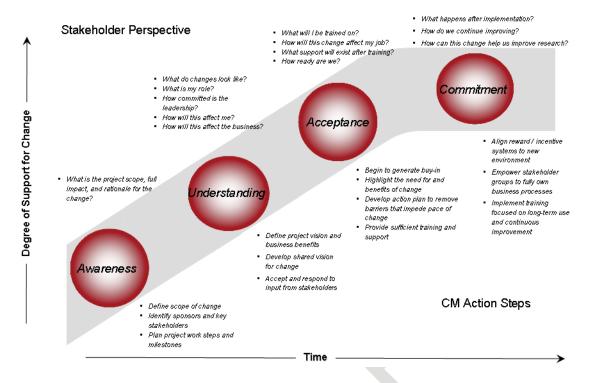


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With effective Change Management tools and techniques the time spent in the 'Valley of Despair' can be minimized, thus increasing adoption and decreasing productivity loss. Change Management has to lay the foundation for a productive use of the processes and system, thus minimizing the implications of deployment.

A holistic approach to change management is needed to help ensure that CG Centres committed to the new service.

Shared Services Commitment Curve:



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Key Elements to Manage Change

Initial Assessment

- Stakeholder Analysis List of Stakeholders critical to success of the initiative and their role within the organization
- Change Readiness Assessment Assess high level readiness of the organization and build change plan to address those areas with key focus
- Change Impact Assessment Assess high level impact of process and organisational changes on the organization and correlate impacts within the change management plan to overcome change barriers

Change Management

- Communications Communicate, communicate and communicate
- Organisational Readiness Evaluate organisation readiness on a periodic basis to understand potential risk and issues
- Sponsorship and Executive Alignment Obtain support and commitment from senior leadership team to ensure alignment with overall vision and strategy

- Training and Knowledge Transfer Provide training for new processes / systems to enable employees to perform their roles
- Organisational Impact and Job/ Role Description Understand and address impact to organization / individuals

Desired Outcomes

- Employees aligned with defined vision
- Senior Leadership team working together to maintain the new business processes
- Entire organisation committed to work towards making the new processes work
- Employees able to execute new processes within their role
- Effective Change Network Organization
- Training materials and on-going performance support